EPS MR LTD ENVIRONMENTAL PERMIT VARIATION

UPDATED ENVIRONMENTAL RISK ASSESSMENT

Report Number 1815r1v2d1018

Commissioned by

EPS Materials Recovery Limited
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Table of Contents

List of Tables

List of Figures

List of Appendices

1 INTRODUCTION

1.1 Scope of Report

In 2016, Geotechnology Ltd was commissioned by EPS MR Ltd to prepare a Permit Variation application for their scrap metal export facility at Swansea Docks (see Figures 1 and 2). The variation enabled EPS MR to move from a Standard Rules Environmental Permit to a bespoke Environmental Permit (Permit No. EPR/JB3135RA). As part of the variation process EPS MR informed NRW that waste coded 19 12 12 would potentially be accepted in the future. To accommodate this request in the new Permit, NRW included Improvement Condition 1 in the bespoke permit as follows:

Improvement programme requirements		
Reference	**Requirement**	**Date**
IPC1	The operator shall update the sites environmental management system and site specific risk assessment with information regarding the acceptance, storage and treatment of waste coded as 19 12 12. These shall be submitted to Natural Resources Wales for written approval.	Within 1 month of permit issue

Since issue of the Permit the commercial opportunity relating to potentially accepting 19 12 12 did not advance as rapidly as originally anticipated. As a consequence, the timeframe for completing IPC1 has been extended by NRW.

Now that the commercial opportunity is available EPS MR wish to demonstrate to NRW that the proposed waste stream can be appropriately managed in a way that does not pollute the environment. In this context, this focussed update of the Environmental Risk Assessment evaluates the potential risks posed to the environment by the proposed acceptance and processing of waste coded 19 12 12.

To ensure that the findings of the risk assessment are embedded in day-to-day operation, the current Environmental Management System (EMS) will also be updated.

Prior to the processing of any 19 12 12 at the site significant infrastructure improvements are required including the construction of a new building and approval is also required from NRW. Ahead of this, the machinery that will be used to process the 19 12 12 will first be used to process metal wastes already listed on the Permit.

2 SITE SETTING

2.1 Current Site Use and Access

The current site is located south of Kings Dock, Swansea at Ordnance Survey Grid Reference SN 6807 9265. Its location is shown on Figure 1 and in the aerial photograph provided in Appendix 1.

2.2 Current Surrounding Land Use

The site is located within the Port of Swansea just southeast of the city centre and forms part of Dockland. The surrounding Quaysides are used by a range of business including several waste operations. The waste operations include temporary storage of RDF for export, inert and non-hazardous soil transfer, glass recycling, wood export and a dry dock for dismantling end of life ships. Other (non-waste) commercial operations include coal and cement handling, and fertiliser production and handling. In addition to these fixed position activities, births in Kings Dock are also used to take delivery of a range of varied goods. Queens Dock, to the south, is solely used for the farming of mussels.

Several rail tracks traverse the area surrounding the site and a landing stage and jetties extend into Queens Dock to the south.

Swansea City Centre is located 2km to the northwest of the site and the River Tawe enters Swansea Bay through a barrage system some 1.5km west of the site. Extensive residential and commercial redevelopment of the formers docks area to the west of the site is ongoing.

The A483 traverses west-east some 0.5km north of the site.

The nearest residential housing is situated 0.5km north of the site in the Port Tennant area of Swansea.

2.3 Environmental Setting

2.3.1 Superficial Deposits and Geology

The site is underlain by thick marine beach deposits which have largely obscured the solid geology beneath. The geological sheet records data from a number of boreholes in the vicinity of the site which have encountered made ground overlying thick sequences of clay, sand and gravel with some peat bands to in excess of 84 feet. Some 1.2km northwest of the site at Dan-y-Graig Engine Sheds, a grey sandstone with underlying mudstone, coal and seatearth beds were encountered at 76 feet depth which are likely to be strata belonging to the Middle Coal Measures, Carboniferous in Age.

The area to the north of the site is indicated to lie within a fault bounded block between the Swansea Valley Fault to the west and the Pwll Mawr Fault to the east. The proven east-west trending Tormynydd coal seam crops some 850m north of the site which is shown to have been accessed via an adit. The strata in this area are dipping northwards at around 40^0 and the area to the north of this seam exhibits many coal seams, several of which are known to have been worked.

South of the Tormynydd coal seam and in the vicinity of the site there is very little information shown on the Geological Sheet with regard to the solid geology and mining. It is considered unlikely, however, that coal mining would have taken place beneath the site due to accessibility constraints, the large thicknesses of superficial cover and the historical site use as a port facility.

2.3.2 Surface Water

The site lies between the catchments of the River Tawe to the West and the River Neath to the East. The site is southwest of Crymlyn Bog.

The Port Tennant Canal which traverses east-northeast to west-southwest terminates some 570m northeast of the site.

There are no River Quality Biology or Chemistry Sampling points within either of the above watercourses within 1km of the site although the River Quality in the Port Tennant Canal 820m northeast of the site was recorded as GQA River Quality E in 2000.

The directly adjacent Kings Dock and adjoining Docks are part of the Tawe Transitional Waterbody (GB541005900900). The Queens Docks, which is connected to Kings Dock, is a Shellfish Water Protected Area (SWPA). The 2015 Water Framework Directive Overall Waterbody Status for the Tawe Transitional Water is Moderate with Moderate Ecological Potential (driven by a failures for Zn) and at Good Chemical Status. The objectives for this waterbody are to achieve Good Overall Waterbody Status by 2027, Good Ecological Potential by 2027 and Good Chemical Status by 2015.

Swansea Bay coastal waterbody is downstream of TTW and includes Swansea Bay East SWPA, Swansea Bay West SWPA and Swansea Bay South SWPA. The 2015 WFD Overall Waterbody Status is Moderate with Moderate Ecological Potential and Failed Chemical Status. The objectives for this waterbody are to achieve Good Overall Waterbody Status by 2027, Good Ecological Potential by 2021 and Good Chemical Status by 2027.

Queens Dock is designated a Bivalve Mollusc Production Area as Thomas Shellfish farm Rope Grown Mussels. This area is currently classified as Long Term Class B.

Monitoring of water quality, and other parameters, in the TTW and the BMPA, is undertaken by a range of organisations including NRW, the Port Health Authority, CEFAS and Thomas Shellfish.

2.3.3 Flood Potential

The site lies within Flood Zone 2 which means that the site is at risk of Extreme Flooding from Rivers or Sea without Defences.

2.3.4 Hydrogeology

The site is not located in a groundwater protection zone.

The site is located in the Western Wales River Basin. Locally, the EA refers to the groundwater body as the Swansea Carboniferous Coal Measures (Waterbody ID GB41002G201000).

The area within which the site is located is considered to have poor groundwater quality and to be a minor aquifer. Unlike principal aquifers which offer significant groundwater resources and which need to be managed through abstraction licensing within a Catchment Abstraction Management Strategy (CAMS), minor aquifers also have significant resources but with hydraulic properties which limit over-exploitation. Minor secondary aquifers would not normally warrant special consideration for CAMS but may still support important abstractions and dependent ecosystems which may be subject to risks associated with pollution pressures.

On the basis of available geological records, and without site specific information, the Envirocheck vulnerability map indicates that the site soils overlying the aquifer beneath the site are classified as having a high leaching potential. Soils of high leaching potential are soils that readily transmit liquid discharges because they are either shallow or susceptible to rapid by-pass flow directly to rock, gravel or groundwater.

Groundwater beneath the site is likely to exist within the coal measures bedrock. This groundwater may be in continuity with groundwater that may exist within the overlying superficial deposits, although this will depend upon local geological controls. Given the proximity of Swansea Bay to the south, it is likely that a component of tidal influence will affect the groundwater flow beneath the site.

2.3.5 Sensitive Land Uses

According to the Protected Sites and Landscapes map on the CCW website and the Sensitive Land Uses map in the Envirocheck Report, the Crymlyn Bog Site of Special Scientific Interest (SSSI Ref: 47433wwp) is located some 500m north of the centre of the site. The SSSI is designated on the basis of its biological significance. Crymlyn Bog is also classified as a Ramsar Site and a Special Area of Conservation.

The water within Queen's Dock is designated a BMPA.

2.4 Historical Land Use

Until 1918, the site was situated on the shingle beach just off the Swansea coastline. In 1918, Swansea Docks were under construction and the northern boundary of the site was traversed by railway lines with mooring posts just to the north.

By 1921, the Prince of Wales Dock and Kings Dock were constructed with associated hoisting machinery. At this time, other industrial developments included Graigola Merthyr Patent Fuel Works 630m to the southeast of the site, an Arsenic Works 420m north, Spelter Works 480m north, Wagon Works 630m to the north-northeast and Crymlyn Chemical Works some 1.5km to the northeast. Throughout this time the site was undeveloped apart from the rail link traversing the northern part of the site. By 1938, however, a warehouse is shown on the southern half of the site and is evident on the plans until 1989.

On the 1951 plan, Queens Dock is labelled and is shown extending seawards as far as the High Water Mark in Ordinary Time. Further works include an Aluminium Wire and Cable Works 400m north of the site and a Chemical Works 640m northeast of the site.

By 1979, the Arsenic works, Spelter Works and the Wagon Works are just labelled as "works" which could suggest a change in the industrial use of the buildings and the Graigola Patent Fuel works and Crymlyn Chemical Works are no longer mapped.

By 1989, the Warehouse is no longer present on the site, only the railway lines are evident. On later plans, from 1999 to 2010, the site is then shown to be occupied by a travelling crane along the quayside of Kings Dock.

In the past decade, Kings Dock has been utilised as wharfage for several different types of commodities including coal and steel and parts of the site have also been granted Permits for waste management activities.

2.5 Key Receptors

Key receptors are identified as:

- Surface water in the adjacent Dock
- Residents of new and properties

3 PROPOSED 19 12 12 OPERATION

3.1 Overview

Operations undertaken at the site include the receipt, inspection and storage of waste ferrous and non-ferrous metal, cutting, grinding, shearing and baling for recovery. The currently permitted operations may be observed as:

- Receipt, inspection and unloading of waste metal from transporter vehicles and transfer to storage;
- using on-site plant;
- Cutting, grinding and shearing of waste metal to reduce its size;
- Baling of waste metal to facilitate recovery and transport;
- Loading and transfer of baled or loose metals into articulated or hook-lift vehicles for dispatch to
- recycling facilities for recovery; and
- Loading and transfer of small volumes of residual waste into hook-lift vehicles for dispatch to recycling facilities for recovery/disposal.

EPS MR now want to erect a building that would be used for the temporary storage and processing of waste coded 19 12 12. The principle aim of the operation is to recover metals. An annual throughput of approximately 12,000 tonnes is anticipated but such tonnages will take time to achieve and in the short term some 6,000 tonnes per annum is expected.

3.2 Site Layout

Within the existing Permit boundary EPS MR propose to erect a building of sufficient size and construction to allow the temporary storage of the waste coded 19 12 12 and it's processing. Figure 2 shows the proposed location of the building. Appendix 2 contains a designers sketch of the layout.

3.3 Proposed Activities

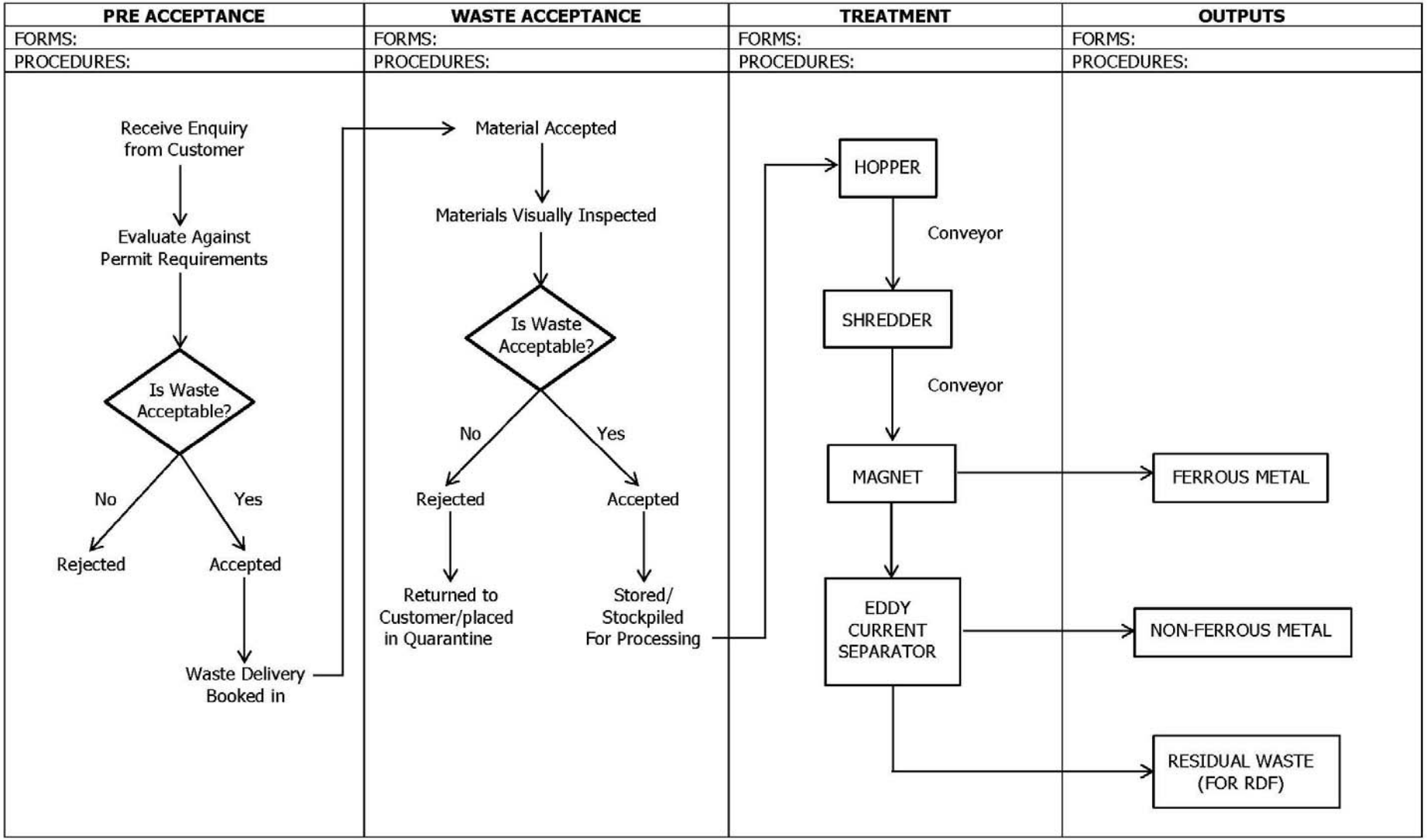
The overall process is summarised in Flowchart 3-1. Waste coded 19 12 12 would enter the site via the weighbridge. Following recording of the gross weight the waste would be directed to the waste receipt area within the new building. After tipping, the waste would be visually inspected to ensure it meets the description and waste code. Once these checks have been completed the waste would pass through the treatment process.

Activities EPS MR propose to use to treat the waste are summarised in Table 3-1.

Table 3-1 Scope of Proposed Activities

Description of Activities	Limits of Activities
R13: Storage of wastes pending any of the operations numbered R1 to R12 (**excluding** temporary storage, pending collection, on the site where it is produced) **R4** Recycling/reclamation of metals and metal compounds.	Treatment consisting only of sorting, separation, grading, shearing, shredding, baling, compacting, crushing, granulating and cutting of ferrous metals or alloys and non-ferrous metals into different components for recovery. Wastes shall be stored for no longer than 3 years prior to recovery.

Flowchart 3-1 Process flow chart



3.4 19 12 12 Wastes

The non-hazardous waste that EPS would process indoors would be coded 19 12 12 and would be sourced from external waste transfer stations. The waste would already have been mechanically or mechanically and biologically treated. Estimated maximum annual throughput would be 12,000 tonnes.

3.5 Residual Wastes

The waste fraction remaining after separation and recovery of the metal fractions would primarily comprise components suitable for incorporation into Refuse Derived Fuel (RDF). Alternatively, the waste would be landfilled. Either output would require temporary storage of the waste indoors before being despatched to the selected third party for recovery or disposal.

3.6 Storage

All 19 12 12 received at the site and all non-metallic residual waste will be stored inside the building. The building will be fitted with sealed drainage.

The 19 12 12 will be tipped onto the concrete floor of the new shed in an area with sealed drainage. This will enable visual inspection and loading into the hopper using a front loading shovel. At any one time the maximum amount of 19 12 12 that will be in storage will be less than 100 tonne (~90 – 120m^3). This will be routinely taken down to nothing given the small quantities to be processed. Storage times are anticipated to be less than 1 week. Given the small quantity, this will be placed in a single stockpile inside the waste reception area of the building. Manually operated overhead sprinklers will be in place throughout the building in case of fire and / or dust suppression. This system will be fed by a header tank, either filled with water from the dock or captured rainfall.

During processing, all ferrous and non-ferrous materials will be ejected from the building for outdoor storage. These materials will account for much of the waste mass. All other (non-metallic) residual waste will be ejected directly into a trailer ready for off-site recovery. Once the trailer is full it will be covered and the material transported off-site for recovery. It is anticipated that this material will therefore be in storage for less than a week or two. A separate sealed skip will be available for quarantine.

4 UPDATED RISK ASSESSMENT

The current Permit is underpinned by an Environmental Risk Assessment that was submitted to NRW as part of a Permit Variation in 2016. This focussed assessment assesses the risks associated with the acceptance and processing of waste coded 19 12 12.

In the following chapters, the influence that the proposed activity could have on the environment is evaluated.

4.1 Approach

The approach adopted to evaluate the impacts of the proposed activities is based on identifying potential exposure pathways. This approach is semi-quantitative and based on the approach advocated by NRW in generic risk assessments that accompany Standard Permit applications. The assessment, summarised as a matrix, identifies plausible pollution linkages (source-pathway-receptor relationships) and potential impacts to the local environment which could arise as a result of the proposed activities.

This approach enables:
- screening out those linkages that are insignificant and don't need detailed assessment
- assessment of potentially significant risks in more detail if needed

The approach has three stages:
- identify risks from the proposed activities
- assess the risks and check that they are acceptable
- justify appropriate measures to control identified risks, if necessary

In the assessment the following aspects have been considered:
- Odour
- Noise and vibration
- Accidents
- Fugitive emissions to air and water
- Controlled releases to air
- Controlled discharges to surface waters
- Controlled discharges to ground or groundwater

4.2 Evaluation of Impacts

The scope of the assessment is defined by the following key risk criteria:
- Permitted activity - The storage and reprocessing of waste (D15, R13, D14) and treatment consisting only of sorting, separation, screening, baling, shredding, crushing or compaction of non-hazardous waste (D9, R3, R4, R5).
- Permitted waste types - Non-hazardous only.
- Quantity of waste accepted at the facility: typically <1000 tonnes per month
- The waste shall be stored and treated inside a building
- The output of the assessment is summarised in the matrices presented below:

Table 4-1 Risk Assessment Matrix

Data and information					Judgement			Action (by permitting)	
Receptor	**Source**	**Harm**	**Pathway**	**Probability of exposure**	**Consequence**	**Magnitude of risk**	**Justification for magnitude**	**Risk management**	**Residual risk**
What is at risk? What do I wish to protect?	**What is the agent or process with potential to cause harm?**	**What are the harmful consequences if things go wrong?**	**How might the receptor come into contact with the source?**	**How likely is this contact?**	**How severe will the consequences be if this occurs?**	**What is the overall magnitude of the risk?**	**On what did I base my judgement?**	**How can I best manage the risk to reduce the magnitude?**	**What is the magnitude of the risk after management? (This residual risk will be controlled by Compliance Assessment).**
Local human population	Releases of particulate matter (dusts) and micro-organisms (bioaerosols).	Harm to human health - respiratory irritation and illness.	Air transport then inhalation	Low	Medium	**Low**	Wastes could be a source of particulate matter but all storage and processing will occur inside a building	Ensure thorough waste acceptance procedures are implemented – ensure no dusts etc are accepted Ensure all waste is stored and treated inside building	Low
Local human population/ businesses	As above	Nuisance - dust on cars, clothing etc.	Air transport then deposition	Low	Low	**Low**	Neighbours are often sensitive to dust but site is located in a commercial dock with several potential sources of dust	As above	Very Low
Local human population and businesses	Litter	Nuisance, loss of amenity and harm to animal health	Air transport then deposition	Low	Low	**Low**	Neighbours often sensitive to litter but all waste storage and processing will be inside building	As above. Any litter found will be cleared.	Very Low
Local human population and businesses	Waste, litter and mud on local roads	Nuisance, loss of amenity, road traffic accidents.	Vehicles entering and leaving site.	Medium	Low	**Low**	Neighbours and landlord may be sensitive to mud on roads but site is located in a commercial dock with other sources of mud/ litter	As above. Any litter found will be cleared.	Low
Local human population and businesses	Odour	Nuisance, loss of amenity	Air transport then inhalation.	Low	Medium	**Low**	Neighbours may be sensitive to odour but all waste will be stored and processed inside buildings. This will allow controls to be put in place as necessary.	Odour management plan will be developed if necessary. Routine odour inspections will be incorporated into EMS.	Low

Data and information					Judgement			Action (by permitting)	
Receptor	**Source**	**Harm**	**Pathway**	**Probability of exposure**	**Consequence**	**Magnitude of risk**	**Justification for magnitude**	**Risk management**	**Residual risk**
What is at risk? What do I wish to protect?	**What is the agent or process with potential to cause harm?**	**What are the harmful consequences if things go wrong?**	**How might the receptor come into contact with the source?**	**How likely is this contact?**	**How severe will the consequences be if this occurs?**	**What is the overall magnitude of the risk?**	**On what did I base my judgement?**	**How can I best manage the risk to reduce the magnitude?**	**What is the magnitude of the risk after management? (This residual risk will be controlled by Compliance Assessment).**
Local human population and neighbours	Noise and vibration	Nuisance, loss of amenity, loss of sleep.	Noise through the air and vibration through the ground.	Low	Medium	**Low**	Neighbours are often sensitive to noise and vibration. Proposed activity will be undertaken inside a building which will limit external noise impact. Plant will be operated to minimise impact on personnel working in the building.	Noise management plan will be developed if necessary. All plant will be maintained as part of a preventative maintenance programme. Routine site inspections will be undertaken to identify potential problems.	Low
Local human population and neighbours	Scavenging animals and scavenging birds	Harm to human health - from waste carried off site and faeces. Nuisance and loss of amenity.	Air transport and over land	Low	Low	**Low**	Permitted wastes not likely to be attractive to scavenging animals and birds and all storage and processing will be indoors.	Pest control plan will be developed if necessary. Routine site inspections will be undertaken to identify potential problems.	Very low
Local human population and neighbours	Pests (e.g. flies)	Harm to human health, nuisance, loss of amenity	Air transport and over land	Low	Medium	**Low**	Permitted wastes not likely to be attractive to pests as waste has already been treated and storage time on site will be short. As all storage and processing will be indoors this will provide opportunity for identification and management of any problems.	As above	Low

Data and information					Judgement			Action (by permitting)	
Receptor	**Source**	**Harm**	**Pathway**	**Probability of exposure**	**Consequence**	**Magnitude of risk**	**Justification for magnitude**	**Risk management**	**Residual risk**
What is at risk? What do I wish to protect?	**What is the agent or process with potential to cause harm?**	**What are the harmful consequences if things go wrong?**	**How might the receptor come into contact with the source?**	**How likely is this contact?**	**How severe will the consequences be if this occurs?**	**What is the overall magnitude of the risk?**	**On what did I base my judgement?**	**How can I best manage the risk to reduce the magnitude?**	**What is the magnitude of the risk after management? (This residual risk will be controlled by Compliance Assessment).**
Local human population, neighbours and local environment	Flooding of site	If waste is washed off site it may contaminate dock water and buildings.	Flood waters	Low	Low	**Low**	Permitted waste types are non-hazardous so any waste washed off site will add to the volume of the local post-flood clean-up workload, rather than the hazard. As all storage and processing will be indoors there is limited potential for flood water to mobilise wastes.	Actions to be followed during a flood event are set out in the EMS.	Very low
Local human population (intruders)	All on-site hazards: wastes; machinery and vehicles.	Bodily injury	Direct physical contact	Low	Medium	**Low**	Permitted waste types are non-hazardous so only a medium magnitude risk is estimated. All machinery will be locked off at end of shift and inside locked building.	Site already operates a security system	Low
Local human population, neighbours and local environment	Arson and/or vandalism causing the release of polluting materials to air (smoke or fumes), water or land.	Respiratory irritation, illness and nuisance to local population. Injury to staff, firefighters or arsonists/vandals. Pollution of water or land.	Air transport of smoke. Spillages and contaminated firewater by direct run-off from site and via surface water drains and ditches.	Low	Medium	**Low**	Permitted waste types are non-hazardous so only a medium magnitude risk is estimated. Security systems are in place and all waste will be inside locked building when site is closed.	Emergency response procedures are integrated to EMS. Fire Prevention and Mitigation Plan to be updated to include 19 12 12.	Low

Data and information					Judgement			Action (by permitting)	
Receptor	**Source**	**Harm**	**Pathway**	**Probability of exposure**	**Consequence**	**Magnitude of risk**	**Justification for magnitude**	**Risk management**	**Residual risk**
What is at risk? What do I wish to protect?	**What is the agent or process with potential to cause harm?**	**What are the harmful consequences if things go wrong?**	**How might the receptor come into contact with the source?**	**How likely is this contact?**	**How severe will the consequences be if this occurs?**	**What is the overall magnitude of the risk?**	**On what did I base my judgement?**	**How can I best manage the risk to reduce the magnitude?**	**What is the magnitude of the risk after management? (This residual risk will be controlled by Compliance Assessment).**
Local human population, neighbours and local environment	Accidental fire causing the release of polluting materials to air (smoke or fumes), water or land.	Respiratory irritation, illness and nuisance to local population. Injury to staff or firefighters. Pollution of water or land.	As above.	Medium	Medium	**Medium**	Risk of accidental combustion of waste is moderate.	Emergency response procedures are integrated to EMS. Permitted activities do not include the burning of waste.	Low
Dock water	Spillage of liquids, leachate from waste, contaminated rainwater run-off from waste e.g. containing suspended solids.	Acute effects: oxygen depletion, fish kill and algal blooms	Direct run-off from site across ground surface, via surface water drains, ditches etc.	Medium	Medium	**Medium**	Permitted waste types do not include sludges or liquids so only a medium magnitude risk is estimated. There is no potential for contaminated rainwater run-off from wastes as waste will be stored inside building with sealed sump.	All liquids will be stored with secondary containment in accordance with current EMS. Building used to store and treat waste coded 19 12 12 will be provided with sealed sump.	Very low
Dock water	As above	Chronic effects: deterioration of water quality	As above. Indirect run-off via the soil layer	Low	Low	**Low**	All waste will be stored and treated inside building on impermeable surface with sealed drainage.	As above	Very Low
Groundwater	As above	Chronic effects: contamination of groundwater (probably saline), requiring treatment of water or closure of potential abstraction borehole.	Transport through soil/groundwater then extraction at borehole.	Low	Low	**Low**	All waste will be stored and treated inside building on impermeable surface with sealed drainage.	As above	Very Low

Data and information					Judgement			Action (by permitting)	
Receptor	**Source**	**Harm**	**Pathway**	**Probability of exposure**	**Consequence**	**Magnitude of risk**	**Justification for magnitude**	**Risk management**	**Residual risk**
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Local human population	Contamination of waters used for recreational purposes	Harm to human health - skin damage or gastro-intestinal illness.	Direct contact or ingestion	No pathway considered plausible			Adjacent dock water not used for recreational purposes.		
Protected sites - Crymlyn Bog SSSI	Any	Harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	Any	No pathway considered plausible			All storage and processing activity will occur inside building.		

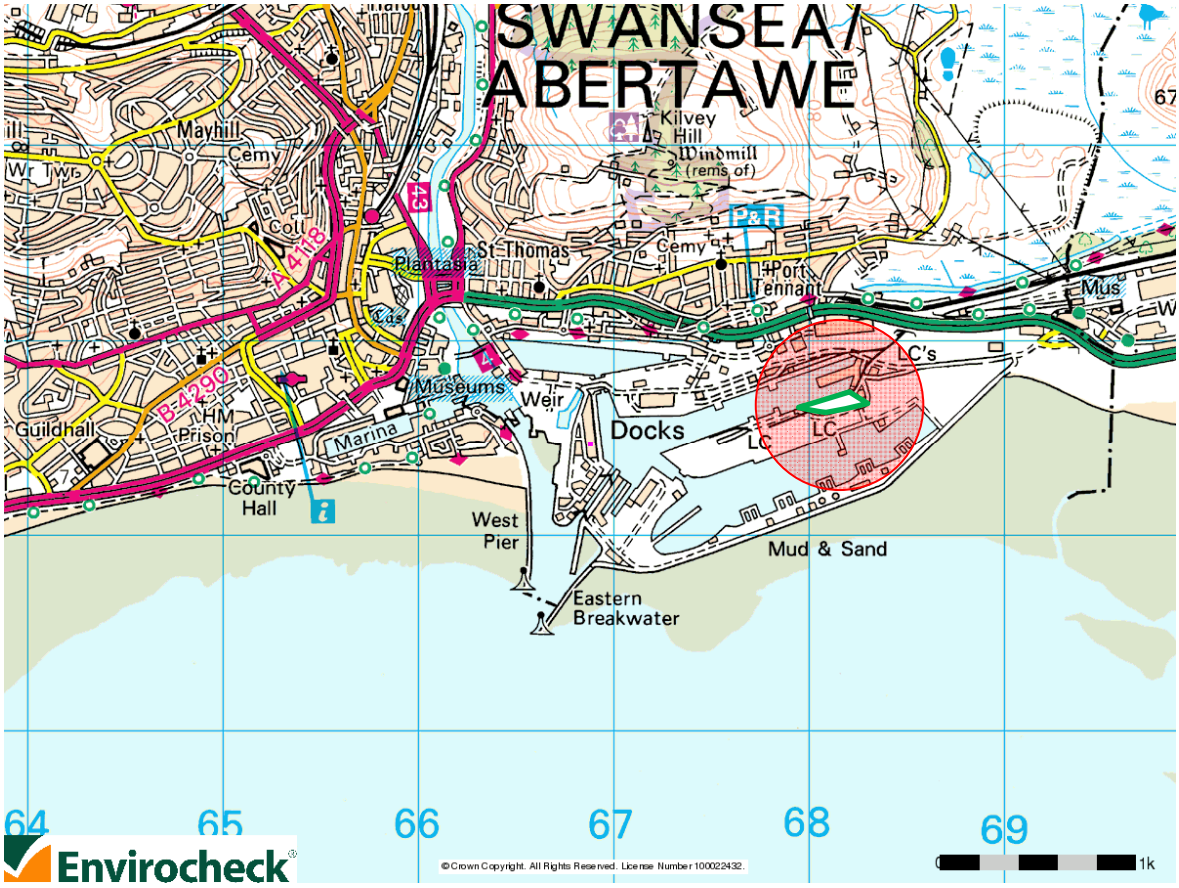
5 SUMMARY

An assessment of environmental risks associated with the treatment of waste coded 19 12 12 at the permitted EPS MR operation at King's Dock has been made.

Based on the available information and methodologies adopted, the risks to the key identified receptors, the designated BMPA in Queen's Dock and Crymlyn Bog SSSI, are considered to be low. This is primarily because the treatment of the waste will occur indoors and on an impermeable surface with sealed drainage. Mitigation measures identified in the risk assessment will be implemented through the EMS.

To ensure that the day-to-day operation of the site meets the predictions of the risk assessment the EMS and Fire Prevention and Mitigation Plan will be updated and then regularly reviewed.

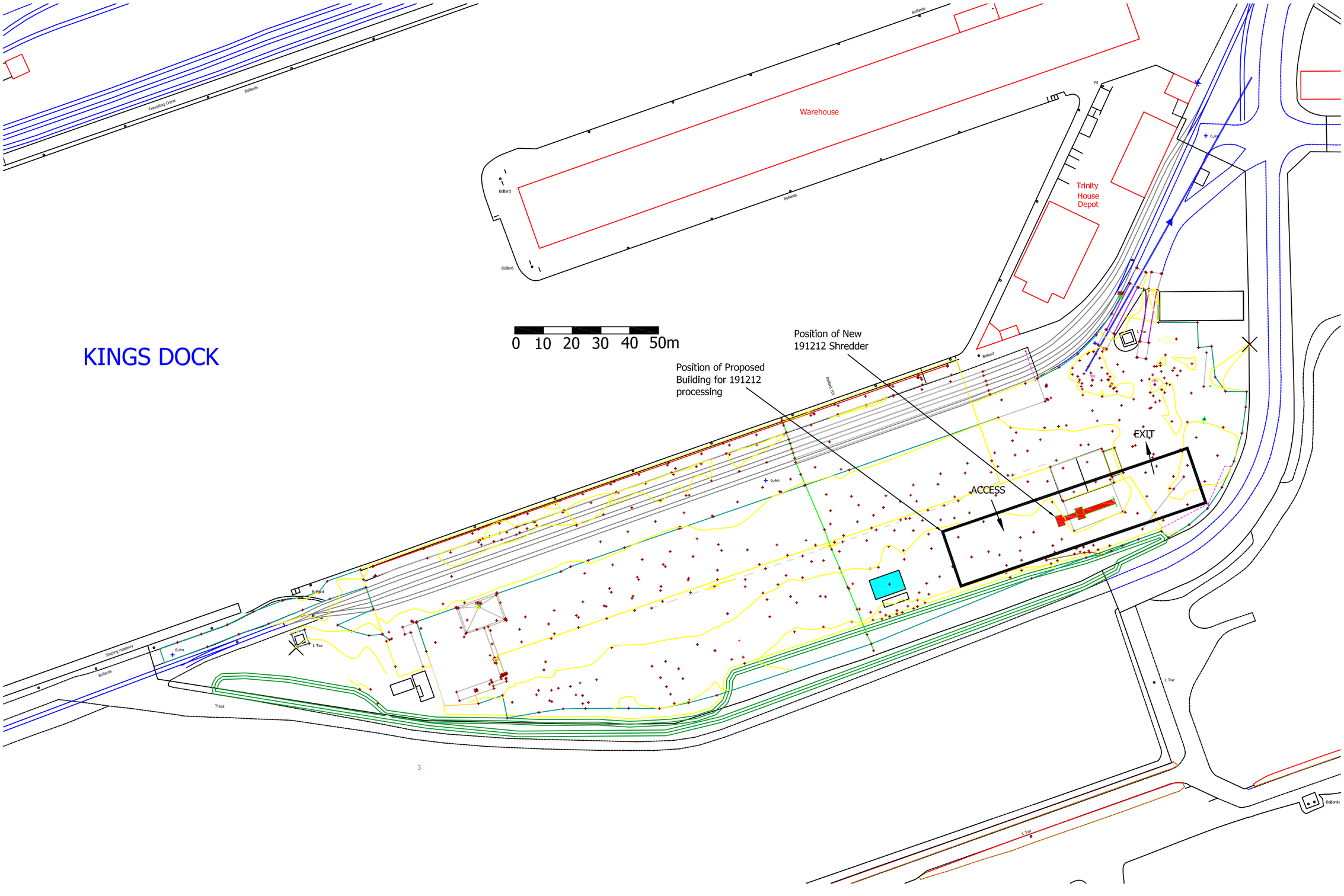
Figure 1 Site Location Plan



LEGEND

PERMIT BOUNDARY

Figure 2 Proposed New Building for 19 12 12 Treatment



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ENVIRONMENTAL
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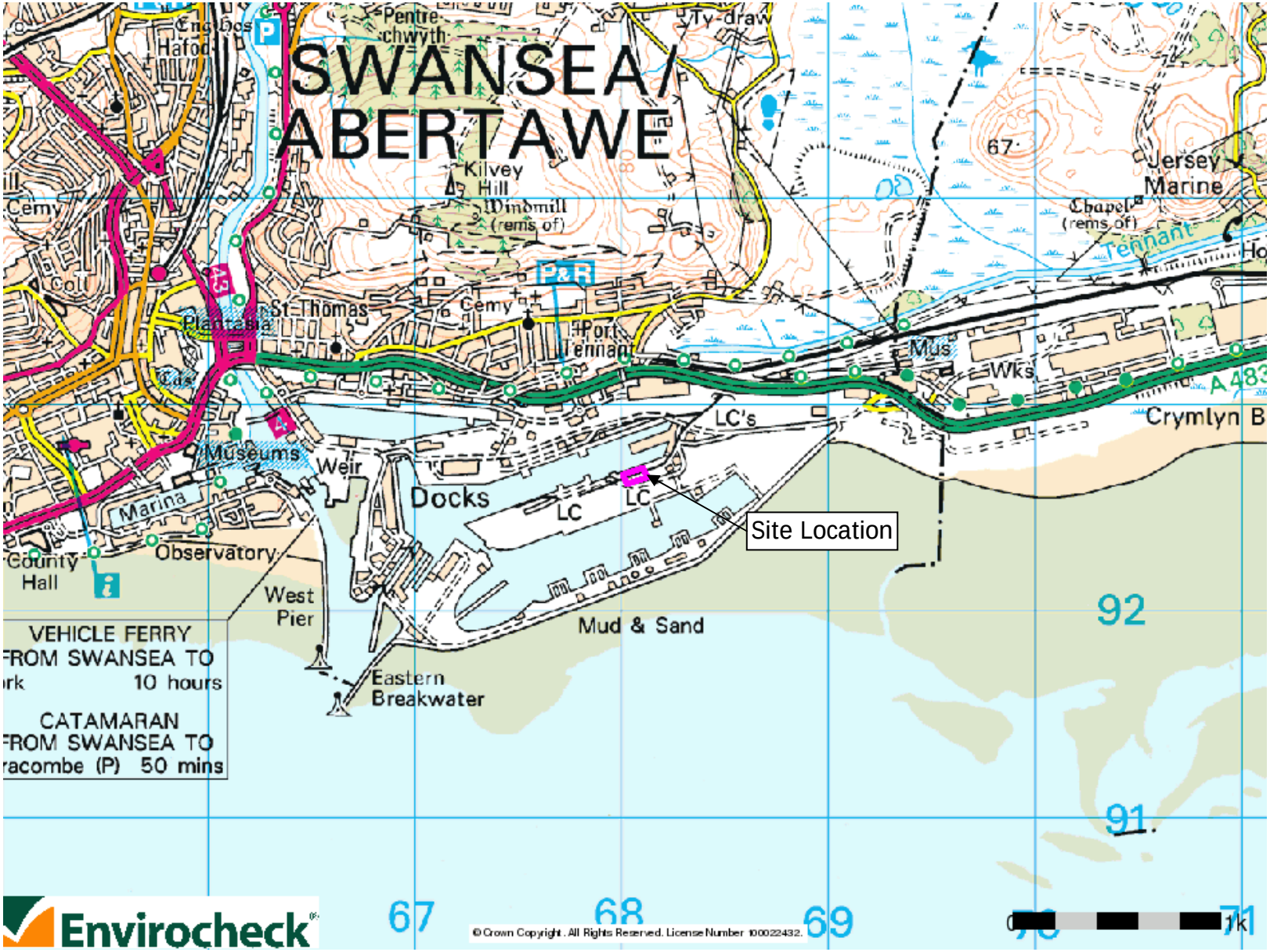
ENVIRONMENTAL
RISK ASSESSMENT

Appendix 1
Site Location Plans
Report Number 1815r1v1d1018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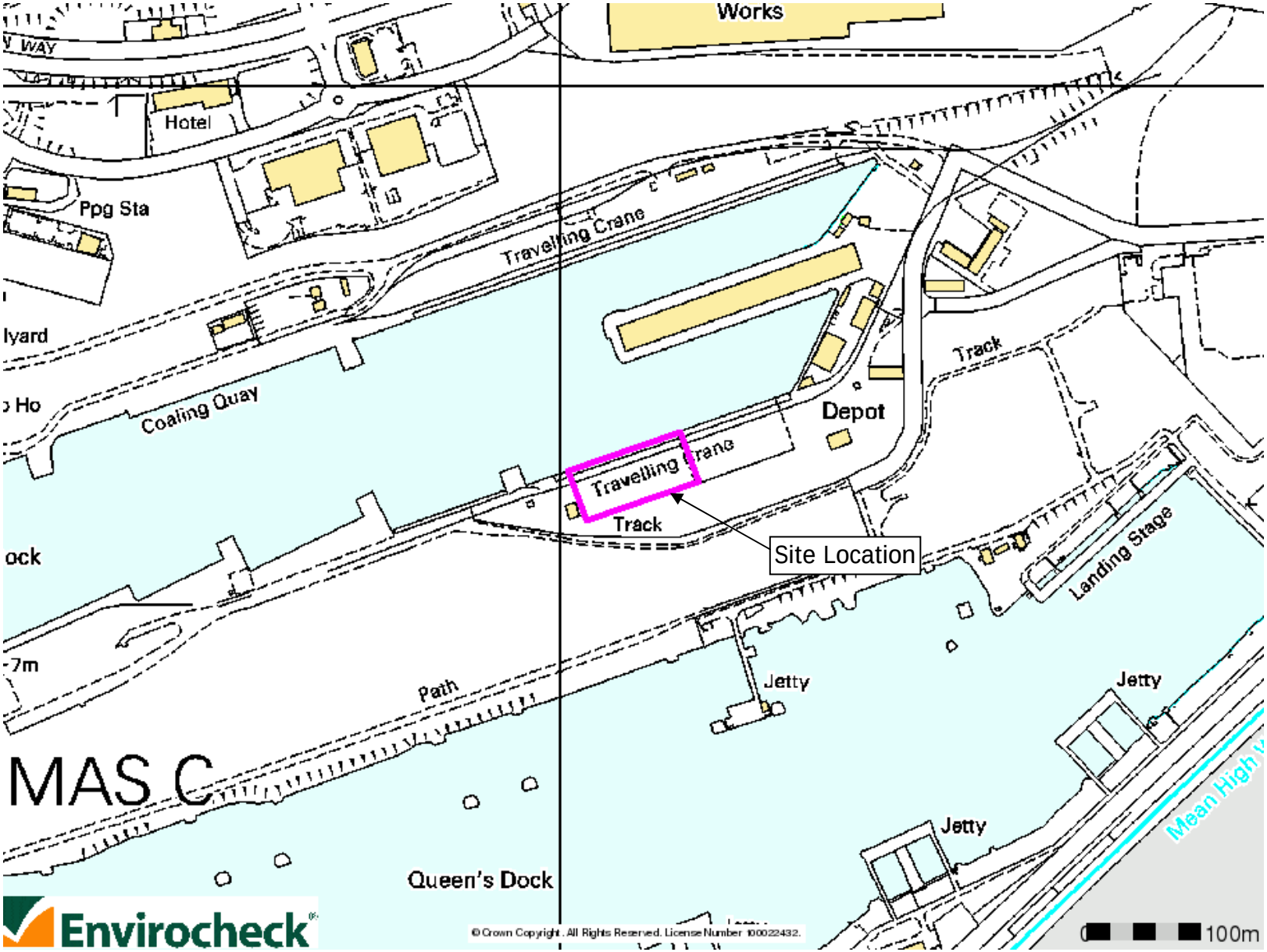
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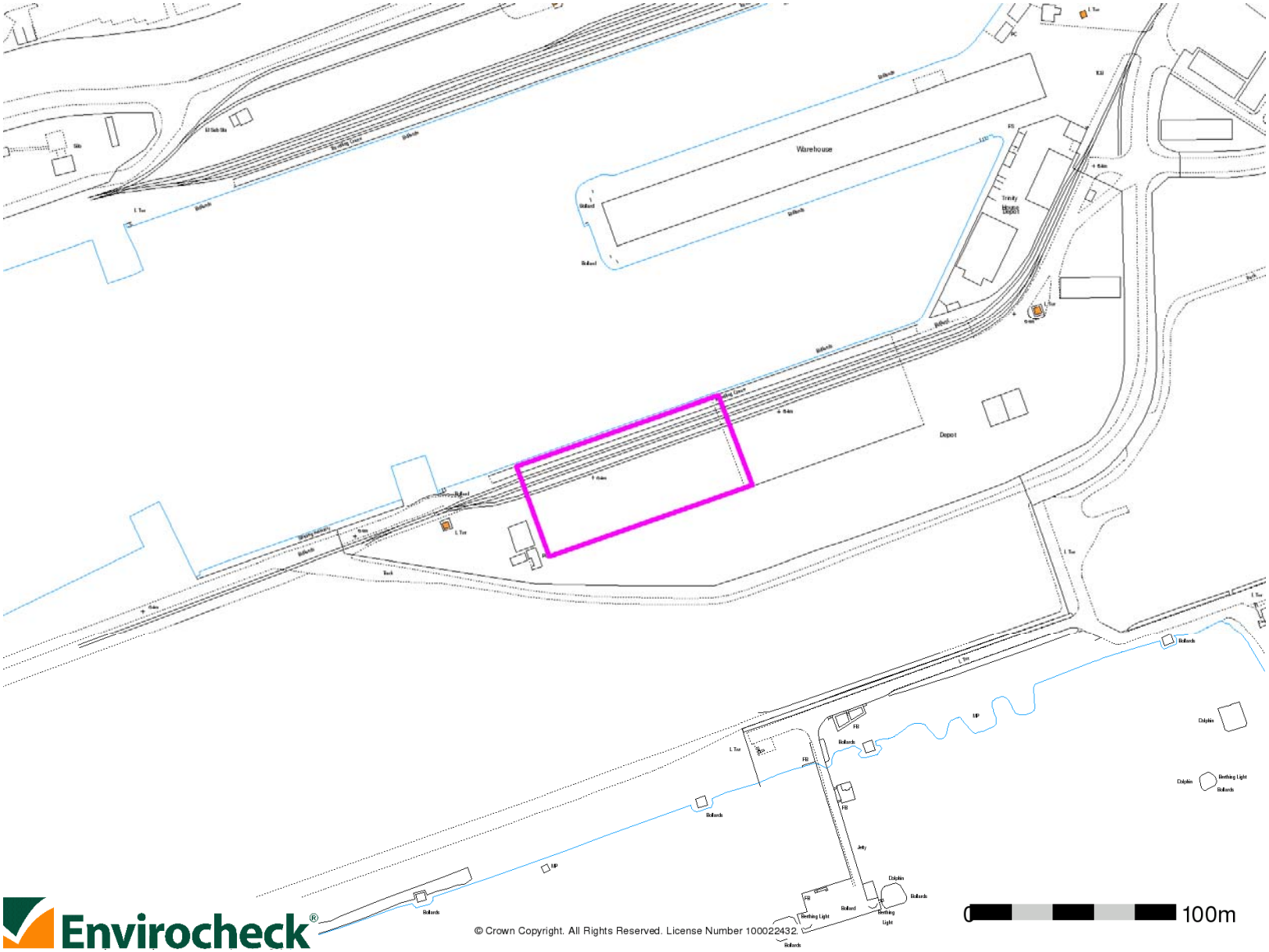
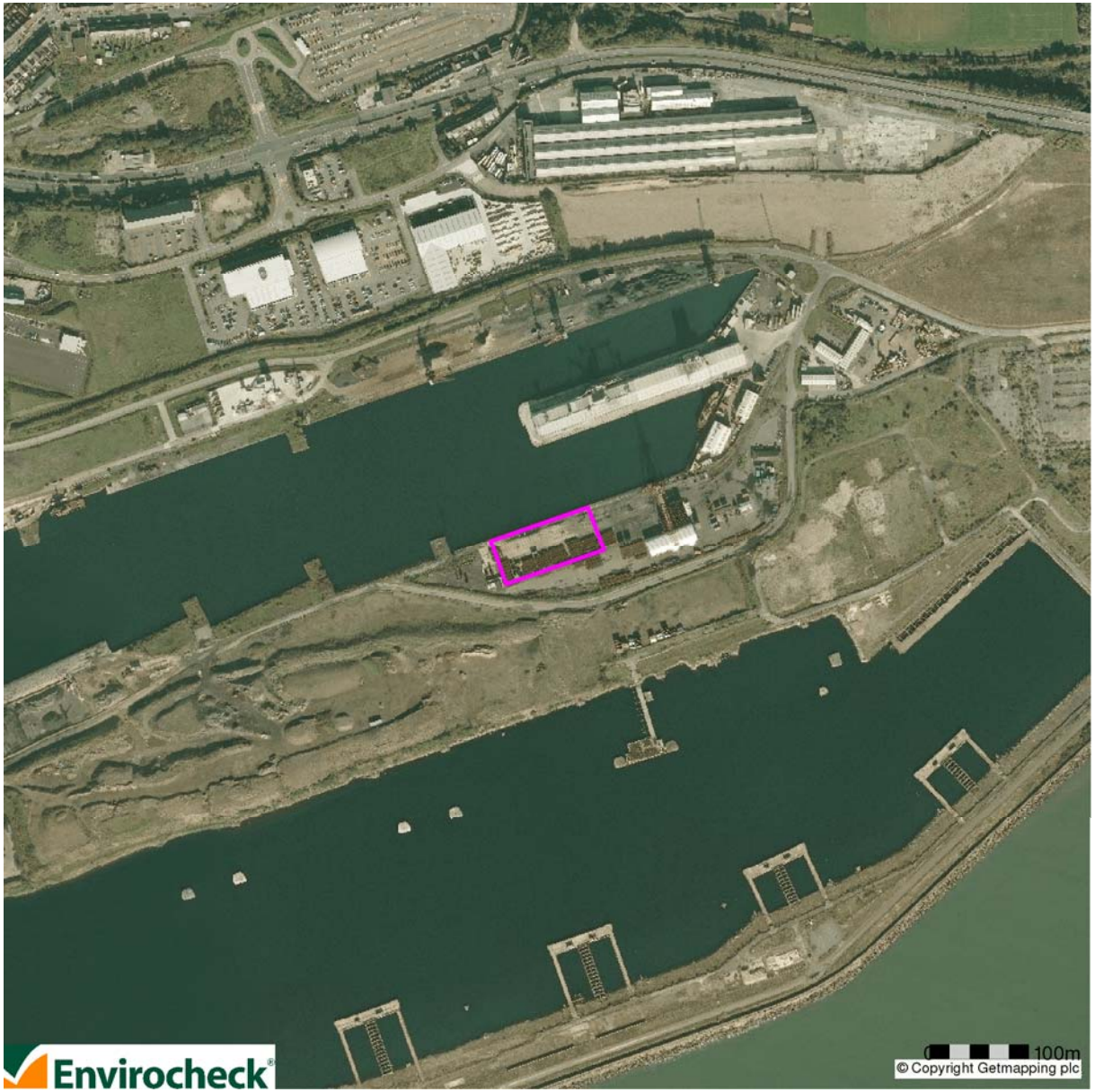
Envirocheck



Envirocheck®


Envirocheck
100m
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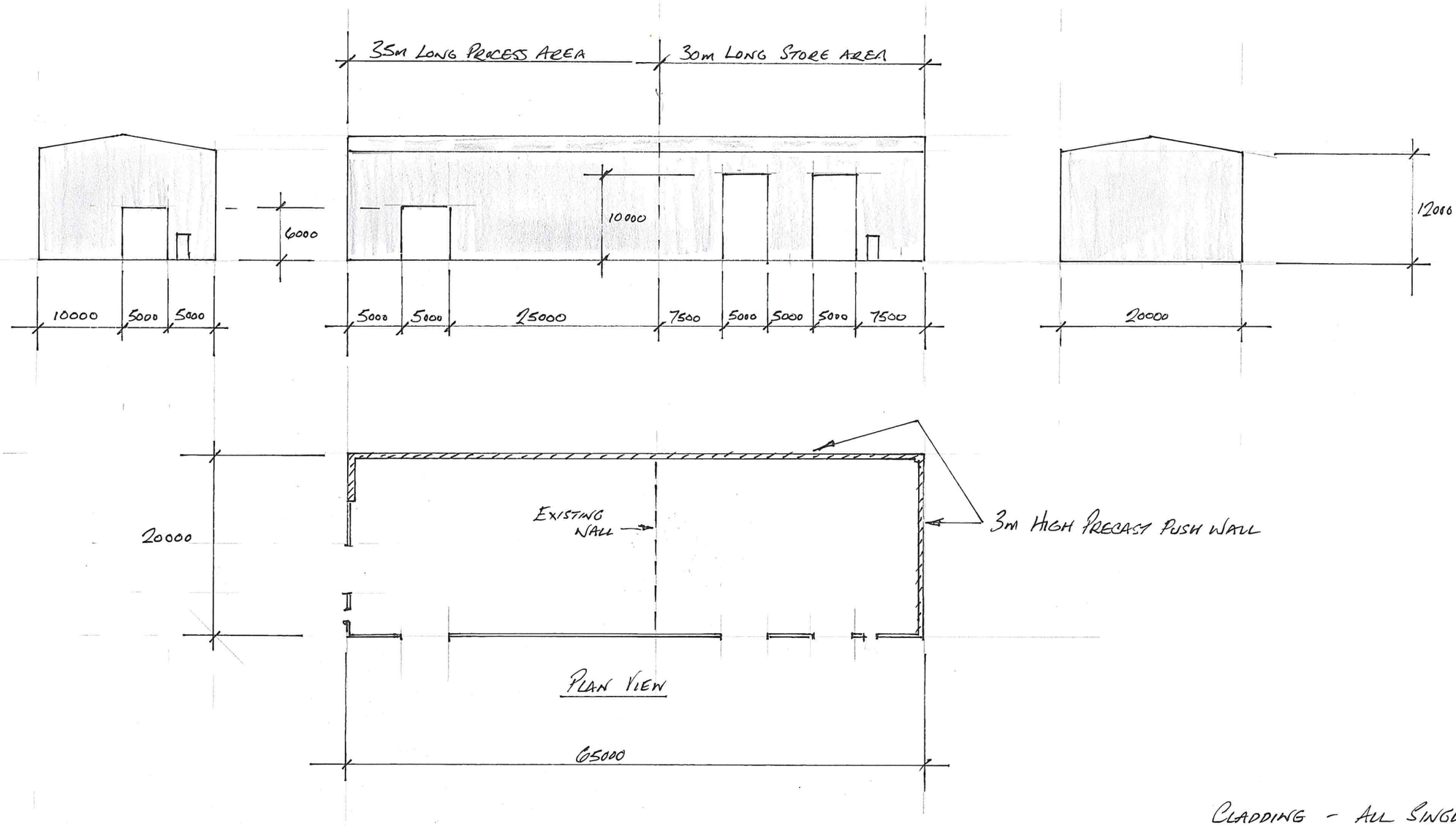
EPS MR LTD
ENVIRONMENTAL
PERMIT VARIATION

UPDATED
ENVIRONMENTAL
RISK ASSESSMENT

Appendix 2
Layout of Proposed Building

Report Number 1815r1v1d1018



CLADDING - ALL SINGLE SKIN
.7 FOR ROOF
.5 FOR SIDES
10% ROOF IN TRANSLUCENT.

ALL DOORS - GALVANISED ROLLER SHUTTERS
EXCEPT 2N° PERSONNEL DOORS

PRELIMINARY SKETCH

EPS - SWANSEA DOCK

DATE : 25-7-2018

DRAWN BY : SRSHARP

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