ADELPHI LTD

Newport Docks, Newport, Wales

Fire Prevention and Mitigation Plan

Document Reference: 2234/FPMP

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Land & Mineral Management

Notice

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Document Control

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Drawings

Reference	Title
C002	Permit Plan

Appendices

Foreword

This document provides Adelphi Limited's (Adelphi) bespoke Fire Prevention and Mitigation Plan (FPMP) for their proposed metal storage operation at East Way Road, Newport Docks, Newport, NP20 2WE. The FPMP is part of a suite of management documents for the metal storage operations to ensure they comply with environmental legislation and ensure appropriate mitigation and prevention of any pollution or harm arising from the operations.

This FPMP has been prepared taking into account the constraints of the site and its surroundings together with consideration of various fire guidance documents including those from Natural Resources Wales (NRW). The FPMP also takes account of experience from other metal operations which already have bespoke fire plans developed working collaboratively with various agencies including local fire and rescue services.

The FPMP deals with the practicalities of the storage requirements to maintain a viable waste metal storage operation whilst meeting the objectives:

- minimise the likelihood of a fire happening.
- mitigate the effects of a fire on the community and the environment.
- minimise the resources of third parties required during a fire.
- Reduce clean-up and remediation costs.

1 Overview

Operator and Permit

1.1 The operator is Adelphi Limited (Adelphi) who run a network of metal operations at dockside locations across the UK.

1.2 The activities will take place under environmental permit no TBC issued by NRW.

Permitted Activities

1.3 The site activities are the storage of furnace ready metal wastes, prior to shipping to recycling facilities.

1.4 The permitted waste types to be accepted are non-hazardous ferrous and non ferrous wastes, see Appendix A.

Site Location

1.5 The site address is:

East Way Road, Newport Docks, Newport, NP20 2WE

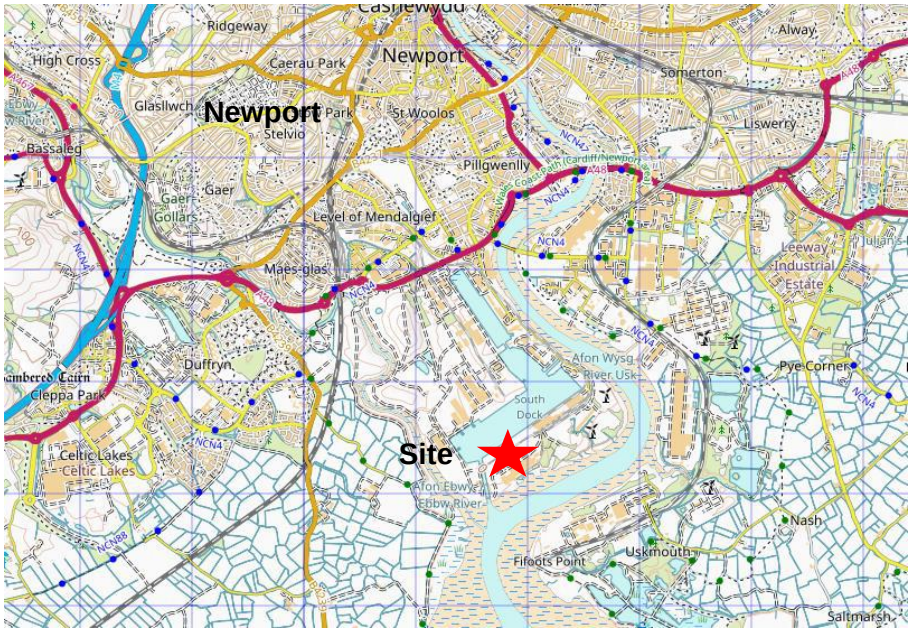
Centre of Site Grid Reference: ST 31852 84393
Centre of Site What3Words: actor.post.tribes

Main Access Grid Reference: ST 31867 84270
Main Access What3Words: moral.plank.goat

Site Context

1.6 The site is located in the Newport Docks complex to the south of Newport, see Figure 1. Access to the site is via an internal dock road, East Way Road, to the main dock entrance (a security controlled entrance) on the A48. The site area is circa 4.6ha.

Figure 1: Site Location (nts)



Sensitive Receptors

1.7 Details of sensitive receptors are provided in Appendix B. There are no residential properties, schools or playing fields lie within 1km of the site.

1.8 The immediate surroundings are workplaces within the dock complex and are the main receptors. They typically involve heavy industrial uses and storage activities associated with the port. Immediately to the west, on the other side of the dock entrance, is Larfarge Readymix and to the east of the site there are areas of open storage. Saica board manufacturing lies to the south of the site. Immediately to the north is an expanse of dock waters circa 275m wide. Outside the confines of the dock the only human receptor is the Uskmouth Power Station workplace which is over 700m south on the opposite bank of the River Usk.

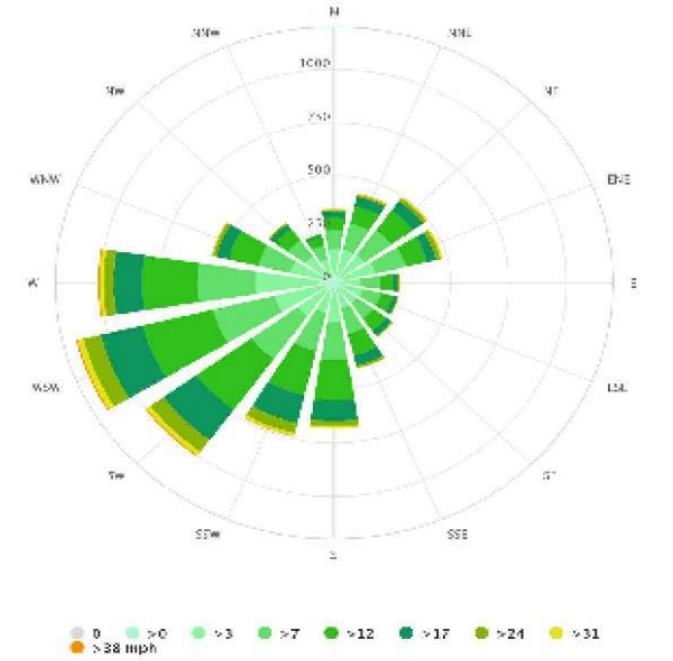
1.9 In terms of infrastructure within the dock complex are roadways and rail tracks. To the west over 500m away on the opposite bank of the River Ebbw is a track and public right of way along the river bank edge. There are no main roads or railway lines within 1km of the site. A number of wind turbines are found east of the site approximately 850m away.

1.10 Environmental receptors within 1km of the site include the waterbodies of docks to the north and east then the River Ebbw to the west with the River Usk to the south, with the Ebbw and Usk joining together as they enter the Severn Estuary. The River Usk is the closest just over 200m to the south and is designated as both a Site of Special Scientific Interest (SSSI) and a

Special Area of Conservation (SAC). The Severn Estuary is found further south, 230m away to the west at its closest to the site, and is a SSSI, SAC and RAMSAR site. The Newport Wetlands National Nature Reserve (NNR), at its closest point is approximately 500m to the south on the opposite bank of the River Usk. To the west on the opposite bank of the River Ebbw lies the Gwent Levels/St Brides SSSI 550m away. Part of the River Ebbw is a locally designated conservation site 425m to the west.

1.11 The wind direction, as shown in Figure 2, in the area is primarily from the west to south west.

Figure 2: Wind Rose Newport Docks (1km west of site)



Combustion Products

1.12 Table 1 outlines the potential combustion products generated from a fire incident.

Table 1: Potential Combustion Products from Fire Incident

Combustion Product	Possible pathway to receptors
Fire waters	Surface waters: however overall contained drainage system will ensure impacts do not extend beyond permit boundary
Burnt Material	None: immobile, so no impacts beyond site boundaries
Steam	Air: Very quickly dissipates in atmosphere, no impacts anticipated beyond site boundary

Gases	Air: Very quickly dissipates in atmosphere, no impacts anticipated beyond site boundary
Thermal Radiation	Air: Very quickly dissipates in atmosphere, no impacts anticipated beyond site boundary
Smoke	Air: Scope to be blown off site onto adjacent land/receptors. Will dissipate in atmosphere and time limited to incident with no permanent impacts. Any community receptors downwind would be notified of the need to close windows during an incident and stay indoors.)
Dust/ash	Air: Scope to be blown off site onto adjacent land/receptors and cause soiling when it settles the settling of this airborne. Any community receptors downwind would be notified of the need to close windows during an incident and stay indoors. Firefighting techniques would include the spraying of smoke with water to bring down particles in the air and reduce escape off site.
Soot	

1.13 From table 1 the combustion products with the potential to impact the local receptors are smoke, dust/ash and soot. The impact is dependent on the duration of an event therefore minimising the duration of an incident is the priority. How the receptors are impacted is also dependant on weather conditions i.e. smoke, dust/ash and soot are all dependant on wind to mobilise off site and as the distance from the site increases the impacts will reduce. Noting the prevailing winds and that the closest nearest receptor is a dockside area used for coal storage it is not considered that there would be significant impacts from combustions products on this receptor.

Site Layout Details

1.14 The permit plan is attached, Drawing No C002. This includes details of the general site layout. The site drainage arrangements are detailed in the drawings in Appendix C.

Site Access and Alternative Emergency Access

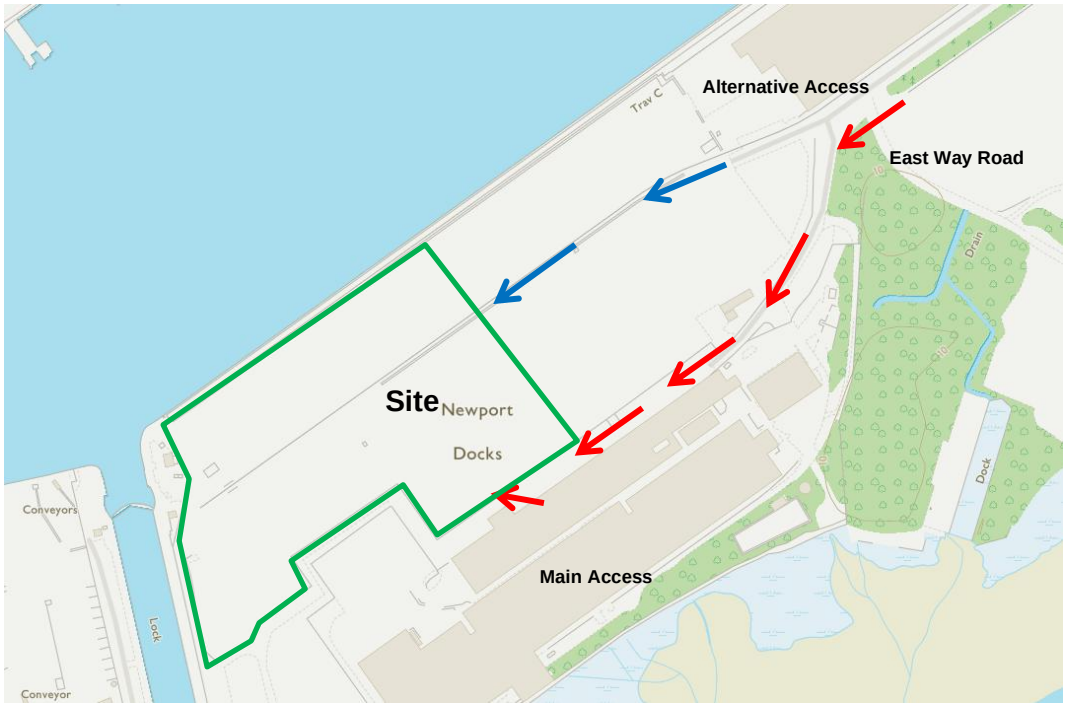
1.15 The primary approach route to the site is from East Way Road to the east. The site has a main access point at the south east corner of the site and can also be accessed further to the north through the gates at the rail tracks as the alternative emergency access, see Figure 3 red and blue arrows respectively. All the roads leading to the site and the site accesses themselves are of a sufficient size to accommodate large emergency vehicles.

1.16 The main access and alternative access will be kept clear at all times from any storage operations to ensure full access and unobstructed circulation of emergency vehicles. The

majority of the site is an open yard area with a level surface and so the site is fully accessible to all vehicles including emergency vehicles.

1.17 The alternative access would only be used in an extreme situation e.g. when smoke prevented access from the main access (which is assessed as unlikely).

Figure 3: Emergency Access Routes



Contact details

1.18 Site contact details together with emergency contacts and neighbouring businesses are provided in Appendix D.

Off Site Emergency Pack

1.19 An off-site emergency information pack will be held at the Dock Entrance offices and a further emergency information pack will be held at the site offices located at the site entrance.

2 Waste Material, Product and Process

Permitted Activities

2.1 The site activities involve the storage of waste metals prior to export (via ship) from site to an appropriate recycling facility.

R13 Storage of wastes pending recovery operations

2.2 The waste types accepted at the site are non-hazardous waste metals (ferrous and non-ferrous), see Appendix A.

2.3 The site will handle a <1,000,000 tonnes per annum. The maximum amount of material received to site will not exceed 5,000t/day.

Waste Acceptance

2.4 All waste arriving at the site is subject to the waste acceptance procedures operated by Adelphi.

Initial Acceptance: Documentation, Visual Inspection and Metal Testing

2.5 Documentation is checked on arrival to ensure an appropriate Duty of Care waste transfer note has been completed and the metal complies with the Grading Manual, see Appendix E. All loads entering the site are automatically monitored for radiation with a vehicle radiation detection system located at the weighbridge. A further check is made either by magnet or X-Ray fluorescence analyzer to confirm the metal type. If the initial check and documentation confirm the material is allowed under the Permit it is then directed to unload to an appropriate storage pile.

2.6 If the material is not permitted or the inspection shows that it contains foreign bodies/un-permitted materials or if there is a suspicion of chemical contamination, mixed loads, excess amounts of fines or other contaminants such as battery materials, the load is refused and not accepted at the site. Site operatives will inform carriers if their material does not comply with the Permit conditions and that it will not be accepted. The carrier will be advised of a nearby suitable facility which can accept the material. A record of any load refused is made in the Site Diary.

2.7 The visual inspection is also to assess if there are any signs of the waste 'heating' with steam or smoke. Where the load appears to be heated, before it is accepted to be unloaded it is checked either visually or by an infra red temperature gun. Loads with elevated temperatures

will be directed to the quarantine area for unloading and will be subject to the cooling procedures at the quarantine area. Full details of loads directed to the quarantine area for cooling will be recorded.

2.8 The initial inspection includes taking a photographic record of the load.

Secondary Inspection

2.9 Following the initial acceptance, if there is a concern that the waste may be mixed the waste will be tipped into one of the temporary storage bays adjacent to the weighbridges for a secondary inspection by site operatives. If any material is found not to be within the terms of the Permit site operatives will, if appropriate, direct that the material be reloaded and removed from site as soon as possible to a suitably licensed facility. If the non-permitted waste cannot be readily reloaded it will be kept in isolation in the temporary storage bay until the non-conforming material has been removed from site, normally within 24 hours.

Rejection of Loads

2.10 If at any stage of the acceptance procedures the load is found to contain non permitted material it will be rejected and removed from site, reloaded back onto the vehicle it arrived in, where possible, to be transported off site. Where it is not possible to reload the non-conforming materials, they will be transferred to a temporary storage bay for non-conforming materials. Site operatives will make arrangements for the removal of non-conforming material from the temporary storage bay to an appropriated licensed facility and arrangements made by the site operative to ensure its removal from site. If the material has the potential to cause a statutory nuisance it will be removed as soon as possible from site i.e. within 24 hrs.

2.11 If the non-permitted wastes are hazardous NRW will be notified and a course of action agreed. Site operatives will record in the Site Diary all actions involving non-conforming materials. If a source/supplier of waste is repeatedly bringing non-conforming materials to site then further investigation of the source of the waste will take place. If appropriate, specific acceptance requirements will be issued to the supplier to ensure that non-conforming materials are not brought onto site or materials will not be accepted onto site from that source/supplier. Where a supplier continues to bring non-conforming materials to site, the contract with that supplier will be terminated.

2.12 Details of rejected loads will be kept in the Site Diary and management will be informed at the end of each working day.

Information Records

2.13 The following is recorded for each load of waste which includes the relevant Dut of Care information requirements:

- The date and time of the delivery.
- The name and address of the waste producer.
- The detailed description of the waste including type, quantity and EWC codes.
- How the waste is contained e.g., loose, container type.
- The carriers name and address.
- Driver's name, signature and vehicle registration number.
- Signature or initials of person(s) producing/carrying/accepting/inspecting the waste.
- Additional handling details/notes made after the inspection of the load.
- SIC code of the premises which produced the waste (where relevant.)
- Waste hierarchy declaration.
- Information on any previous treatment of the waste e.g., mechanical or manual.
- Location the load is directed to for unloading.

2.14 The site records are forwarded each week to the Operator's offices at Shenley and are available for inspection by NRW with reasonable notice. Alternatively information can be supplied on request. Commercial information will be regarded as confidential. Within one month of the end of each quarter details of the waste movements are forwarded to NRW on the appropriate form.

No Acceptance of Waste

2.15 In addition to the general waste acceptance procedures outlined above material will not be accepted onto site in the following conditions:

- Insufficient storage capacity;
- Extreme weather conditions; or
- Abnormal site conditions preventing normal operations e.g. critical infrastructure failure, a fire incident.

2.16 Details of such events will be recorded in the Site Diary.

Suppliers

2.17 All suppliers are made aware in advance of the waste that can be accepted at the site to ensure any waste metal brought to site complies with the correct waste types and is free from contaminants which would include combustible material or batteries, an example of a supplier contract letter is provided in Appendix F. Typically prior to materials being accepted from a new supplier they are visited by Adelphi representatives to ensure that their waste meets the waste acceptance criteria for at the site.

Waste Acceptance: Incompatible/hot loads

2.18 The visual acceptance inspection is also to assess if there appears to be mixed loads which may pose a combustion risk or if there are any signs of the waste 'heating' such as steam or smoke. Where the load appears to be heated, before it is accepted to be unloaded it is checked by an infra red temperature gun to establish if the temperature of the load is elevated. Where there are elevated temperatures loads will not be accepted however if for safety reasons a heated load needs immediate attention the material will be directed to the quarantine area for unloading and will be subject to the cooling procedures at the quarantine area. Full details of loads directed to the quarantine area for cooling will be recorded.

Waste Acceptance: Permitted Waste

2.19 The maximum of amount of waste accepted onto the site is 5,000 tonnes a day with a typical average day of 2-1,000tonnes. The waste accepted onto site is sourced primarily from manufacturing operations as offcuts etc and has not been subject to extensive periods of storage prior to arrival at site. Typically metal waste accepted at the site has been subject to minimal, if any, treatment.

Waste Treatment: Processing

2.20 No processing operations are proposed.

Waste Storage

2.21 The waste is stored outside in an extensive open compound and in loose form. No storage of mixed waste takes place, with waste acceptance procedures design to avoid any contamination of mixed metals or grades. The nature of the waste does not give rise to dust and/or debris being blown around the site.

Metals

2.22 The waste metals accepted to site, are typically delivered in bulk containers or articulated vehicles and are loose in the following forms;

- Turnings
- Steel pipe (new production wastage)
- Heavy melting steel galvanised and non-galvanised
- Iron plate
- Other ferrous and non ferrous metals
- High value metals

2.23 The precise configuration of storage piles will vary reflecting operational needs but storage of waste will be confined to limited locations across the site where it will be stored in accordance with the storage dimensions and durations outlined in this FPMP.

2.24 The metals accepted to site have already been pre-sorted into metal types, where appropriate these will have been sheared, and are clean with contaminants removed and ready for recycling.

Storage Times

2.25 No waste will be stored for longer than 3 months. Stock rotation will be covered later in this plan. Storage times of <3 months for combustible wastes are in line with NRW guidance.

2.26 Typical storage times for waste are less than 1 month, with the majority of waste transported from site within 1-2 weeks dependant on shipping. No wastes are stored over 3 months, in line with NRW guidance.

Storage Pile Sizes

2.27 Waste will be stored in piles sizes taking account of NRW FPMP guidance, assessment of combustion risk and the operational need and practicality of running the metal storage operation. The maximum pile sizes are detailed in table 2 overleaf. It should be noted that the majority of storage at the site comprises separated grades metal materials (ferrous such as steel and cast iron and non ferrous such as aluminium etc) such as uncontaminated scrap

metal material from manufacturing operations such as 'production run' off cuts or cast iron borings and also HMS heavy metal steels[1] which are assessed as having a low combustion risk.

Table 2: Waste Pile Sizes

Waste Type	Max Pile Volume m³	Pile Footprint (metres)	Tonnage	Typical Storage Duration	Maximum, Storage Duration	Monitoring regime
Metal Turnings	640	20x8	3200	1 month	3 months	Continuous visual monitoring & daily thermal camera check
Bay F Quarantine*	480	12x10	4,500	1 week	1 month	Continuous visual monitoring
Quarantine area	12x10		Kept clear, continuous monitoring when in use			

Waste Type	Pile Footprint (metres)	Typical Storage Duration	Maximum, Storage Duration	Monitoring regime
Production Wastage Steel	20.5x53.5	1 month	3 months	Continuous visual monitoring
Iron Plate	20.5x53.5	1 month	3 months	Continuous visual monitoring
Cast Iron	20.5x53.5	1 month	3 months	Continuous visual monitoring
Heavy Melting Metal	20.5x53.5	1 month	3 months	Continuous visual monitoring
High Value Metals	20.5x53.5	1 month	3 months	Continuous visual monitoring
Bays A-E	23x10	1 month	3 months	Continuous visual monitoring

* Bay F represents a quarantine bay and is unlikely to ever be at its maximum possible storage

Shaded wastes are assessed as a very low combustion risk

2.28 The maximum height pile height for metal turnings and bay storage is 4m.

[1] HMS accepted to site is only 'clean' material which has been sourced from merchants who have already graded the metal and can include metals which has been sheared but does not include the likes of fragmentiser waste or metals from ELV facilities or small appliances such as fridges see Appendix E for Grading Manual example.

2.29 The site layout is shown on Plan No. C002 although the pile locations for metal types, bar the turnings pile location, may vary with prevailing commercial conditions.

Pile Size Justification

2.30 The NRW's Fire Prevention & Mitigation Plan Guidance Note 16, is not a statutory requirement but guidance setting out what the NRW sees as the minimum appropriate measures that should be put in place at sites to prevent fires. The NRW FPMP guidance notes a maximum width of 20m (10m for bays) and a guidance figure of 4m on heights.

2.31 Whilst metals are listing as a combustible material in the NRW FPMP guidance the nature of the majority of metal waste accepted at this facility, bar the metals turnings, represent a very low combustion risk for a number of reasons. Full provision of the handling of the metal turnings in accordance with NRW guidance has been made however noting the very low combustion risk of other metals to be stored it is not considered that the size guidance is appropriate for this storage. NRW has accepted this at and is acknowledged by NRW at other metals facilities. The high combustion temperatures is one of the main reasons, materials such as wood and plastics have a figure of around 200°C whereas metals start at 660°C for aluminium, rising to 1200°C for cast iron and 1375°C for stainless steel.

2.32 The combustible risk does increase if there is mixed material or dust/fine powders. To ensure the material at Adelphi's facility represents a low combustion risk the following will be adhered to ensure the low risk position is maintained:

- The metals will be stored in separate piles i.e. there will be no mixing of different metal types.
- No fine particles or powders will be accepted to site
- Strict acceptance criteria will be applied to ensure that the waste received is single stream and is free from any contaminants

Storage Quantity

2.33 The maximum amount of metal waste storage for turnings will not exceed 3,200 tonnes.

Separation Distances

2.34 There will be a minimum separation distance around the turnings storage will be 10m to the long sides of the stacks in accordance with NRW guidance. The distance between the low combustion risk piles will be 8m, which it is noted is above the separation of the Environment Agency's Fire Prevention Guidance which has a fixed figure of 6m.

Storage Bays

2.35 The storage of turnings will take place in a bay with contained drainage. The size of the bay will be of 10m x 8m with 5m high walls and will be located on the western side of the site. The walls of the bay are not fire walls and appropriate separation distances will be maintained around the bay.

2.36 There will also be a series of bays on the eastern side of the site adjacent to the weighbridges which are to store high value metals and provide temporary holding bays for potentially mixed materials or rejected loads prior to their removal from site. The smallest will be for rejected loads and this material will be stored typically for only a matters of days.

2.37 The bays at the stie entrance will be constructed from concrete lego blocks which will be fire resistant, see Appendix G.

Waste Treatment: Stock Rotation

2.38 Full records are kept of all waste accepted and its storage location on the site. As waste is accepted at the site it is directed to an appropriate area for unloading.

2.39 Records are kept of when each storage pile of combustible waste is cleared with the planned pile removal is based on the oldest pile being removed first. Storage pile details are recorded on an excel sheet covering the location, type of material, date of clearance, any temperature monitoring and any associated hot spot remediation works. These records are kept at the weighbridge office, up dated and reviewed by the site manager on a daily basis.

Recording of Storage Piles Durations

2.40 A schematic layout of all storage piles is maintained in the site office on a white board which identifies each pile with a unique reference number. Details recorded for each pile include the date that storage commenced, the ‘out by’ date and the maximum storage period. Tonnages are also recorded for each pile to ensure storage limits are not exceeded. At the end of each week a photograph is taken of the white board and kept as part of the site records.

3 Preventing Fires

3.1 To prevent fires all practical measures will be taken to remove ignition sources, operate a robust acceptance/inspection regime and prevent self-ignition by controlling pile sizes, stock rotation and restricting storage times.

3.2 The following paragraphs detail measures to combat common causes of fire and ignition sources.

Plant and Equipment

3.3 The plant and equipment used at this site is detailed in table 3.

Table 3: Plant and Equipment

Plant/Equipment	Fire Prevention	Inspection
Loading Shovel (x2)	Portable Hand Held Fire Extinguisher	Daily Inspection sheet
Material Handler (x7)	Portable Hand Held Fire Extinguisher	Daily Inspection sheet
Skid Steer Loader	Portable Hand Held Fire Extinguisher	Daily Inspection sheet
Dump Truck	Portable Hand Held Fire Extinguisher	Daily Inspection sheet
Pump	Portable Hand Held Fire Extinguisher	Daily Inspection sheet
Fire Engine	Portable Hand Held Fire Extinguisher	Daily Inspection sheet
Compressor	Portable Hand Held Fire Extinguisher	Daily Inspection sheet
Diesel Bowser	Portable Hand Held Fire Extinguisher	Daily Inspection sheet

3.4 The frequency of servicing complies with manufacturer's servicing recommendations. Any defects are recorded and actioned appropriately with full records of all inspection and maintenance works kept by the operator at the site office.

Electrical and Exposed Cables

3.5 A schedule is maintained for the regular inspection and maintenance by a certified electrician of all electrical works on site covering all buildings and plant. Records of inspections and maintenance works are kept by the site operator. There are no electrical installations within 6m of a storage stack of combustible waste and no electrical equipment will operate near a storage stack on a temporary basis without the permission of the site manager.

Naked lights and Smoking

3.6 The site has a strict no smoking policy across the site with smoking only permitted in designated areas away from combustible metal storage piles, see plan C002 for location.

3.7 No naked lights are permitted on site.

Heat and Spark Prevention/Detection

3.8 All plant exhaust systems have silencers (mufflers) fitted and these are blown out at the end of the working day.

3.9 The loading shovels do not have rubber strips fitted as rubber stripping is not a robust material for the shovel edges either against the waste type (metals) or on hard ground surfaces such as the surface at Coal Terminal, as it damages easily and is so rendered ineffective in a very short period of time. However plant operatives are briefed to watch for any sparks and should a fire start as a result of a spark this would be instantly detected by the plant operator and, as this would be only a small surface fire, it would be readily extinguished by the hand fire extinguisher held in the plant cab.

Gas Bottles and other Flammable Substances

3.10 All gas bottles are kept in lockable cage container see plan C002, away from the combustible waste storage areas. Other substances such as oils and grease necessary for maintenance works are kept in the stores building. The routine site inspection includes these storage areas.

3.11 Diesel for use on site is kept in a double bunded fuel tank (capacity 10,000litres), see plan C002, which is separate from the waste storage areas. Fuelling typically occurs at the end of a working shift. Refuelling is by a mobile diesel bowser with plant removed from the working area and away from any storage areas.

Fire Watch

3.12 All site employees are briefed to remain vigilant across the site for signs of heating or fires throughout the working shift and to specifically check of any signs at the start and end of any breaks or shifts or if moving to new working areas. All staff will have hand held radios to provide an immediate alert on discovering a fire.

3.13 The daily site inspection, as detailed previously includes surveillance for any signs of heating (which includes use of a hand held thermal heat detector) or fires. At the end of the working, an hour after all machinery and plant has been turned off, a further site inspect will be undertaken by the responsible site operative to check for any signs of heating or fires.

Parking of Plant

3.14 At the end of the working day all plant is parked away from storage areas with a minimum distance of 10m from any combustible storage piles, see drawing no. C002.

Automatic Fire Detection Systems

3.15 Most of the site plant and equipment has automatic fire detection and extinguishing systems as previously detailed. These are subject to regular maintenance and testing in accordance with manufacturer's specification to ensure they are fully functional at all times. When an automatic system is activated the plant will cease operation immediately and if safe to do so will be moved from the operational area or storage area as applicable. The affected plant will only return to operational use when a complete inspection confirms it is in a suitable condition to do so which includes the full operation of the automatic fire detection system.

3.16 The site has full CCTV coverage with 35 cameras including ANPR and thermal cameras, see details in Appendix H. The cameras provide remote live streaming access and additional monitoring to assist the detection of fires outside working hours with automatic notification to the operator and dock security for appropriate actions.

Hot Works

3.17 Hot works will only take place on site under a strict 'hot works permit' which will be issued by the site management when an appropriate risk assessment of the works has been made. The permit system ensures any hot works are well away from any areas of combustible materials. The procedures include provision for cooldown/1 hour fire watch after completion of the works.

Industrial Heaters

3.18 There will be no industrial heaters on site.

Exhausts and other Hot Machinery

3.19 All machinery, including exhausts will be constantly monitored whilst in use by the operative. Mobile plant will be moved away from combustible material after use and parking for mobile plant is as shown on plan no. C002. All machinery will be rechecked an hour after the finish of works to check the plant has cooled. Checks will be recorded in the site diary.

Open Burning

3.20 There is no open burning permitted on site. The policies of the wider Dock complex include prohibiting fires, so there is no possibility of any open burning within 500m of the site boundaries.

Incompatible Materials

3.21 There is no possibility of any reaction between incompatible materials as the only material stored on site is waste metal with the operation of strict waste acceptance procedures to avoid any wastes being accepted with contaminated material and to ensure the correct classification of metals with no mixing of different grades/types of metal wastes.

Neighbouring Site Activities

3.22 The immediate neighbouring properties are detailed in Appendix B with the site surrounded by other dock industries with a variety of other storage operations including open yard storage and an aggregates waste operation.

Hot Loads Deposited on Site

3.23 The waste acceptance procedures outlined in the management system and this FPMP are designed to ensure no hot loads are accepted to site with every load received inspected by a site operative. No loads will be deposited without a site operative being in attendance. Inspections for hot loads have been previously detailed.

Self-Heating /Self-Combustion

3.24 The biggest risk self combustion risk comes from foreign materials such as plastics, wood, oils or grease. The waste acceptance procedures are designed to avoid these materials being present in the waste. Potentially self combustion can also occur with mixing of waste types, again the waste acceptance procedures are designed to avoid this.

Monitoring

Staff Inspections

3.25 There is daily monitoring of all storage piles on site done by means of visual inspections conducted at the start and end of the working day.

Signs of Heating

3.26 In addition to the automatic alerts all site staff will be trained in how to recognise visible signs of pile heating by identifying;

- Smoke
- Steam:- to understand the difference between evaporation due to the warming of the sun on dew, for example and steam originating deeper in the stack.
- Smell
- Discolouration with charring/blackening/ darkening of the material
- Fire/ flames/glowing embers
- Anything else unusual i.e. collapses in the centre of piles, disruption of the stacks/piles, signs of unauthorised activity.
- Signs of antisocial behaviour including litter, wilful damage, graffiti, smoking materials.

3.27 If any of the above signs are spotted in a pile the operative or security staff must immediately notify site managed to assess and implement 'hot spot actions'.

Hot Spot Actions

3.28 All site staff will be trained on 'Hot Spot' actions from identification of a hot spot to its management. On identifying signs of heating, or when an automatic heating alert is received[2], an assessment will be made by the site manager of the relevant stockpile to identify the extent of the hot spot and enable an informed decision as to the remedial actions to be taken to cool the material by the most effective method in as short a time as possible and generating the minimum amount of residues.

3.29 All operations in the vicinity of a hot spot will cease and plant will be removed from the vicinity until the hot spot has been assessed and then appropriately remediated so there is no fire risk. Where deemed necessary the affected area will be isolated from the rest of the pile and/or other piles moved away.

3.30 The preference is to cool material in situ and to use techniques that will produce minimal residues where this can be done safely without increasing fire risk. The methods to cool a hot spot in situ include use of water, turning (rotating) the pile, smothering with inert material or

[2] Detection from thermal cameras.

spreading of the material by site operatives using a large shovel or material handler to remove material from affected area, either spreading it in the quarantine area or on adjacent ground where it does not compromise minimum separation distances.

3.31 Material will be considered to have cooled when the material is no longer steaming/smoking and no longer warm, as confirmed by a hand held infra red heat gun. At this point the cooling actions to cease.

3.32 If the cooling actions are not successful such that a hot spot develops into a combustion incident the fire trained site operatives will tackle the fire as detailed in the section 4. Should they be unable to safely tackle the fire, then the fire service will be called.

Hot Spot Recording and Monitoring

3.33 Full records will be kept of each hot spot incident, detailing its initial identification to final full remediation. A regular full review of all hot spot incidents will be undertaken by the Site Manager to establish the effectiveness of the FPMP and management system.

Contingency Arrangements: Storage and Emergency

3.34 The operator has other alternative metal storage sites at Garstang and Seaham in Durham which can be used to divert incoming waste to in circumstances that Coal Terminal cannot accept waste either due to site closure during a fire incident or when the site has reached its storage limits.

Seasonality

3.35 The waste metal is very much a commodity and the market does not suffer from seasonal fluctuation in demand or with the arisings (supply) of metal wastes throughout the year with a relatively consistent level of activity across the calendar year.

Arson/Vandalism

Security

3.36 The site is remote from public areas situated in a private dock complex which has controlled security access. Members of the public are not allowed general access the dock complex. The site itself is securely enclosed by substantial concrete and steel fencing. The dock complex is subject to regular security patrols 24hours a day.

3.37 Notwithstanding the 24hours dock security there is a system of 30 CCTV cameras on site affording living streaming access and provision for motion activation to provide instant

notification alerts of any unauthorised presence on site out of hours so that the site will be under surveillance 24hours a day. The system has the additional benefit of allowing instant assessment for the instigation of appropriate action to be taken in the event of unauthorised access or an incident

3.38 No members of the public are allowed on site. Gates to the site are only open during working hours to receive waste. The gates are located close to the weighbridge office allowing surveillance of all movements in and out of the site.

Leaks and spillages of oils and fuels

3.39 All plant and machinery is regularly maintained and inspected. Any deflects such as fluid leaks are dealt with immediately and any machine leaking oil or fuel will not be used until repaired are affected. Any leaks of oils or fuel will be immediately dealt with and contaminated materials removed off site to an appropriate disposal facility. Spill kits are kept on site and any spillage/leak incidents will be fully recorded in the site diary.

Ignition Sources

3.40 Operations on site are designed to keep storage piles and sources of ignition separate. The FPMP deals with the management of various ignition sources under separate headings, table 4 provides a summary of ignition sources and how they are managed at Coal Terminal.

Table 4: Summary of Ignition Sources and their Management

Source of Ignition	Prevention/Management
Arson/Vandalism	Site Security measures including out of hours 24hr dock security and 24 hr CCTV and secure site boundaries.
Self Combustion	Storage times do not exceed NRW guidance. Waste acceptance procedures are designed to avoid foreign materials/contaminants in the waste as well as ensuring no mixing of different metal grades/types.
Plant or equipment failure	Regular full inspection of plant and maintenance beyond manufacturer's specification.
Electrical faults	Regular electrical inspections/testing undertaken. No electrics in vicinity of storage areas.
Naked lights	None allowed on site, restricted area for smoking for staff provided away from storage areas.
Discarded smoking materials	No fires allowed on site.

Hot works	Hot works only undertaken with 'hot works' permit with appropriate risk assessment
Industrial heaters	None used on site.
Hot exhausts/plant engines	Hot plant subject to continual monitoring in course of working operations. Dust and dirt is removed at the end of each working day using an air compressor and then the plant is check an hour later to ensure it has cooled down.
Open burning (on site or adjacent land)	No fires allowed on site. No burning takes places on surrounding land
Damaged or exposed electrical cables	Regular electrical inspections/testing undertaken. No electrics in vicinity of storage areas.
Reactions between incompatible materials	Single waste stream not subject to chemical reactions. Waste acceptance procedures ensure no non-permitted/incompatible material is accepted at the site.
Neighbouring sites activities	Largely surrounded by dock areas and uses posing little fire risk.
Sparks from Buckets	Site operatives to watch for sparks and initiate procedures if a spark starts a fire.
Hot loads	Monitoring for hot loads takes place as loads arrive at site with protocol to manage material.

4 Firefighting

Firefighting – General

4.1 Firefighting will be undertaken by site staff when safe to do so. On discovering a fire during the working day all members of staff are instructed in the following procedures:

1. Raise the alarm
2. Inform the TCM or on site senior staff – the TCM will immediately:
    - Assess the scale, location and intensity of the fire
    - Bring into effect and fire-fighting actions to be immediately and safely be brought into action on the affected area
    - Call the Fire Service if required
    - Inform Dock Security
    - Direct staff for fire fighting purposes (see point 5)

On hearing the alarm staff are instructed to:

3. Evacuate the site including, where safe to do so, shutting down plant and machinery and moving away from the metal piles
4. Remain on site to assist with any fire fighting only if directed by the TCM (this will only apply to suitably fire fighting trained staff)
5. Notify by mobile phone Head Office to make arrangements for divert any incoming wastes (responsibility of weighbridge operator)
6. Return to site only when the TCM directs it is safe to do so

4.2 Out of hours there will be no operations or movement of plant and machinery with plant parked away from the metal piles. Out of hours the CCTV system provides for visual surveillance and detection of fires. Notification of motion on site will generate an automatic alert to nominated out of hours staff and the docks security guards. And on reviewing the CCTV live stream the following actions will be taken as appropriate:

1. Raise the alarm
2. Contact TCM/out of hours contact and notify to attend site.
3. Assess the scale, location and intensity of the fire
4. Bring into effect and fire-fighting actions to be immediately and safely be brought into action on the affected area
5. Call the Fire Service if required
6. Inform Dock Security
7. Inform Head Office

4.3 In the event of a fire during the working day all site operations will cease, no waste will be accepted to the site and all machines not used in firefighting in the affected area must be switched off and moved to a safe location. Operations at the site will not recommence until it is safe to do so without risk to the environment. Similarly in the event of a fire outside normal operating times the site will not reopen until it is safe to do so without risk to the environment.

4.4 Contingency arrangements for the diversion of waste will be activated to redirect any incoming wastes to the other facilities as discussed previously.

4.5 Should the emergency services be called out the Site Manager will be responsible for liaising with them on their arrival.

4.6 Out of hours, staff and mangers will be on call to attend the site to enable plant and machinery to be used in assisting the fire service.

Fire Fighting - Fire Service

4.7 Fighting a major fire would be undertaken by the local fire service because of the safety risks to the staff. The South Wales Fire and Rescue Service will be invited to train at the Coal Terminal Dock site to become familiar with the site layout. The fire service will use their own high volume pumps and hose equipment for firefighting but will be able to use Adelphi personnel and equipment to help in the movement of material to assist firefighting.

4.8 The nearest 'wholetime' fire station is Duffryn Station which is 3.2miles away, at a travel time of 8 minutes. There are two further fire stations also in relatively close proximity to the site,

Maindee and Malpas both of which are also wholetime and are 3.8miles/13minutes and 4.8miles/16minutes away respectively.

Fire Fighting –Strategies

4.9 The main strategy for firefighting deployed by Adelphi is to use the fire engine on the site of the combustion event and with other site plant separate unburnt material from the affected pile to reduce available 'fuel' and minimise the burn time. Therefore should a fire start in one part of a pile on-site equipment (loading shovels/material handlers) will be used to move material from the affected pile to the quarantine area where this does not present an increased risk of combustion. In all cases of a significant fire the plant will only be operated by site staff under the supervision of the fire service with a joint dynamic risk assessment taking account of all prevailing conditions and factors.

4.10 The mobile plant which will be used to assist with firefighting during an incident will have been adapted to be able to operate in heated conditions. The plant will have a fire retardant hydraulics as opposed to convention rubber hydraulics to allow the plant to operate in a heated environment, with a fully enclosed cab for the drivers.

Fire Fighting – Initial Response

4.11 The initial response on the outbreak of a fire will be to deploy a fire engine with the mobilisation of additional plant to be used in firefighting (i.e. to assist moving material as appropriate).

Fire Engine

4.12 A fire tender is kept on site for fire fighting purposes, see Appendix I for the appliance specification. The fire tender is an airport appliance which is a high specification fire engine appropriate for use at the site. The fire tender is subject to a maintenance and inspection regime and testing on a weekly basis to ensure that it is fully operational. Fire fighting staff are trained in its effective operation in the event of an incident.

Firefighting – Movement of Material

4.13 As mentioned above, material will be moved to a safe distance from the fire, to a location where its temporary storage does not compromise access for firefighting purposes or give risk to potential pollution risk. The plant on site can move material rapidly with loading shovels and material handlers. For safety reasons, no burning material will be moved across the site. After a fire, burnt material may be removed to the quarantine area if appropriate.

Controlled Burn

4.14 Adelphi Commodities Products do not propose to use 'controlled burn' as a firefighting technique at Coal Terminal as the FPMP provides extensive measures in its firefighting strategy to swiftly extinguish any fire. A controlled burn would only take place with prior agreement with the NRW, Fire Service and Public Health Wales.

Firefighting Equipment

4.15 Fire extinguishers and/or automatic fire suppression systems are provided on each item of mobile plant as detailed previously. The location of the firefighting equipment is shown on the accompanying plan C002, with the majority of the fire stores kept in the container stores and readily accessible at all times.

4.16 Fire extinguishers are situated strategically around the site. All fire extinguishers are checked and serviced annually by a certified third party company. Fire extinguishers are present in all mobile plant.

4.17 The on-site firefighting equipment includes:

- Fire engine
- Loading shovels
- Material Handlers
- Steer skid Loader
- Fire Extinguishers: Water spread strategically around the site.
- Pump
- Hoses
- PPE

4.18 Where appropriate the firefighting equipment will be fitted with couplings etc that allows these to be used with Fire Service equipment. The fire engine is able to pump water directly from the docks. All firefighting equipment is subject to a regular inspection and maintenance regime to ensure it is fully operational and ready for use at any time.

4.19 When an inspection identifies any repair or maintenance work required for the effective operation of the equipment this will be undertaken as a matter of priority. All firefighting equipment shall be inspected following its use to ensure it is fully operational and effective. Records are kept of all inspections and maintenance works.

Water Supply

Water Requirement – NRW Guidance

4.20 NRW provides a 'rough guide' of water requirements that 300m^3 of combustible material will need a water supply of 2,000 litres a minute for a minimum of 3 hours, which equates to 1,200ltrs per 1m^3 (or 1.2m^3 of water to 1m^3 of combustible material). At the Coal Terminal with the turnings pile 640m^3 this would give a water requirement of 768m^3.

Onsite Water Storage

4.21 A water tanks on site will have a capacity of 100,000 litres (total 100cubic metres). The tanks provide the first source for firefighting waters.

Mains Water

4.22 There is a mains water supply at the site. The mains water will be used to ensure the storage tanks are topped up but it is not anticipated this would be used directly for firefighting purposes.

Dock Waters

4.23 The water in the docks is fresh water and available for use in firefighting. This has been confirmed by the docks and is the main source of water to be used for any major fire incident in the dock complex. The area of open water in the docks is over 50ha and in effect is a limitless supply of water and ensures comply with NRW guidance would not result in any noticeable change to dock water levels. Therefore there is no shortage of waters for firefighting on the availability of dock waters alone however there are other onsite sources of water as detailed below.

Containment of Firewater

4.24 Fire water run off will be contained on the impermeable site surfacing which has a shallow fall and provides a total containment capacity of over 1000m^3 which is more than sufficient to accommodate the water volume identified in para 4.19. The drainage system has a treatment system for site waters into which the site drain via a penstock valve. One of the first actions in the event of a fire will be to close this penstock valve and ensure all fire waters are retained on site.

4.25 Adelphi aims to reduce the water used, and so the containment requirements as well as the requirement for disposal of any contaminated firewaters, by a variety of good firefighting techniques including:

i. Recirculation of fire water were possible;

ii. Training in correct use of water when firefighting (spray not drenching); and,

iii. Absorption/evaporation losses

4.26 Notwithstanding the above the water containment is adequate to accommodate the water requirements for the largest combustible waste storage pile and therefore complies with NRW guidance.

Quarantine Area

4.27 Quarantine provision for the site is identified on plan C002. The quarantine area is a bare area of ground which is kept clear. There is a 6m separation around the other boundaries of quarantine area which will be kept completely clear. Excluding the surrounding separation distances, the quarantine area has a footprint of 120m^2. This exceeds the requirements of NRW guidance which requires a quarantine area able to accommodate 50% of the largest pile which at the Coal Terminal is 80m^2 – half of 160m^2.

4.28 The area is to be used to hold materials removed from a storage pile during an incident, also for the cooling heated materials from hot loads directed to the quarantine area or to hold burnt material after a fire. Burning material will not be moved into the quarantine area because of the unacceptable risk to staff and potential ignition to other storage areas.

4.29 When the area is used to cool heated material, initially material will be tipped onto the ground and spread over the ground. An assessment will be made of how to cool the material. Options to cool the material include simply spreading out the material or the application of water via a mister or hose/bowser.

4.30 If heated material has been deposited in the quarantine area there will be on going monitoring throughout the working day of the cooling operations and material temperature. At the end of the working day a final assessment will be made and appropriate actions undertaken to ensure that no material is left outside working hours in a condition that might lead to self-combustion.

4.31 Once the material has been cooled sufficiently a further assessment will be made as to the suitability of the cooled material for processing. If it is no longer fit for purpose it will be disposed of at an appropriately permitted site, currently the nearest disposal facility is the Docksway Landfill. If the material is suitable for use it will be returned to an appropriate storage area.

4.32 Full records will be maintained of materials brought to the quarantine area including the cooling treatment, monitoring and final removal.

Combustion Products

4.33 Table 1 outlines the potential combustion products from fire incident. All staff FPMP training will include how to apply water to a fire to effectively fight the fire and minimise the generation of combustion products.

Disposal of Fire Residues

4.34 Burnt material will not be suitable for recycling will be removed from site to an appropriately permitted disposal site.

4.35 The used fire waters will be contained within the site as previously detailed. After a fire incident absorbent matting will be used to remove any contaminated materials on the surface of the waters such as oils or floating debris. The used matting will be disposed to an appropriate facility. The quality of the used fire waters will then be assessed as to its possible reuse, treatment or disposal such that it does not pose any environmental risk. The results of testing will be actioned including, as appropriate, the removal of the waters for treatment/disposal off site at an appropriate facility. If the latter the intention would be to do this within 2 days using a registered competent contractor.

4.36 Currently the nearest disposal facility able to accept the burnt materials, used equipment (matting) and used fire waters is the Docksway Landfill.

Reporting

4.37 All fire incidents will be fully recorded, including investigation of the cause of the incident and any actions implemented. Full details will be provided to the NRW.

Review

4.38 The contents of the FPMP will be kept under regular review by management. Notwithstanding the regular review, at not more than two yearly intervals, the FPMP will also be reviewed in response to changes in operational activities, new legislative requirements and any relevant site incidents.

Training

4.39 All staff are fully trained in fire procedures which includes up-date training and routine fire drills. Fire training forms part of the site induction training before staff can commence

working on site. All nominated 'firefighting' operatives will have specific practical training at the site using the firefighting equipment and following procedures of the FPMP.

4.40 Refresher training and a full mock site incident exercise will take place at least once a year. Management will review the need to increase the frequency of fire training and exercises in response to staff turnover, changed site practises and any incidents or near misses. As per the management system, full records are kept of all training events.

Communication

4.41 An up-to-date FPMP will be kept in the site office available for inspection by all members of staff. An 'off site' copy of the FPMP will also be kept at the Docks Security entrance so in an emergency situation NRW and the local fire service can readily access the document to assist in dealing with an incident.

4.42 Visitors to the site will be made aware of the fire prevention and fighting procedures to ensure they understand their responsibilities.

4.43 In terms of communication during an incident when a fire incident occurs the Site Manager will immediately contact the docks security and give consideration to directly notifying any human receptor locations which are downwind of the prevailing wind at the time of the incident. When the Fire Service is involved with an incident their advice will be sought on who to contact and how the communication will be undertaken.

Appendices

Appendix A – Permitted Waste Types

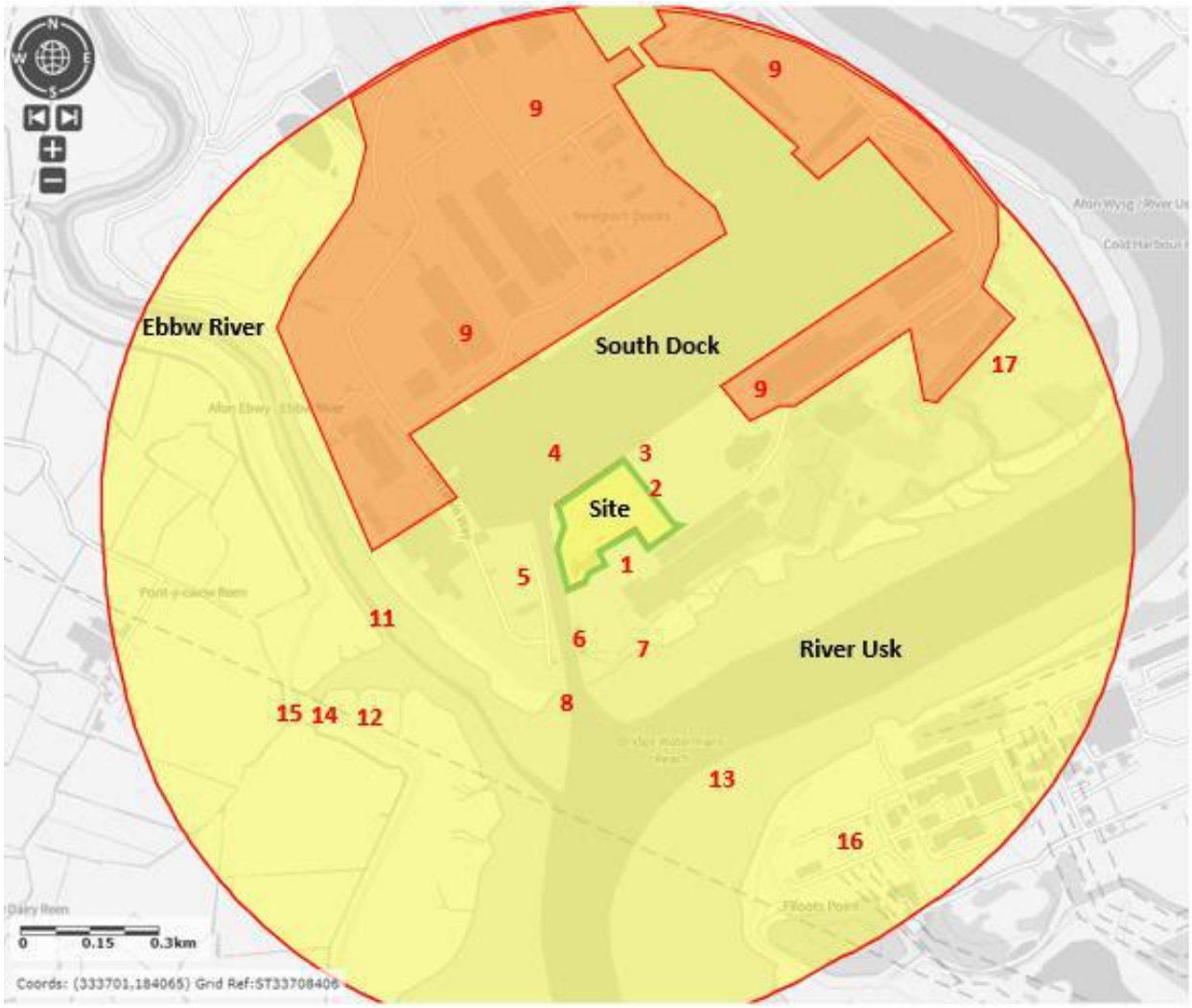
EWC Code	Description
02 01 10	Waste metal
12 01 01	Ferrous metal fillings and turnings
12 01 02	Ferrous metal excluding dust and powders
12 01 03	Non-ferrous metal filings and turnings excluding dust and powders
12 01 04	Non-ferrous metal excluding dust and powders
12 01 17	waste blasting materials other than those mentioned in 12 01 16
15 01 04	Metallic packaging
16 01 17	Ferrous metal
16 01 18	Non-ferrous metal
16 01 22	Components not otherwise specified (comprising only of depolluted metallic vehicle parts, components and engines)
16 02 14	Discarded equipment other than those mentioned in 16 02 09 to 16 02 13 (ferrous and nonferrous metal waste only)
16 02 16	Components removed from discarded equipment other than those mentioned in 16 02 15 (ferrous and non-ferrous metal waste only)
17 04 01	Copper, bronze, brass
17 04 02	Aluminium
17 04 03	Lead
17 04 04	Zinc
17 04 05	Iron and steel
17 04 06	Tin
17 04 07	Mixed metals
17 04 11	Cables other than those mentioned in 17 04 10
19 01 02	Ferrous materials removed from bottom ash
19 10 01	Iron and steel waste
19 10 02	Non-ferrous waste
19 12 02	Ferrous metal
19 12 03	Non-ferrous metal
20 01 40	Metals

Appendix B – Sensitive Receptors

Sensitive Receptors

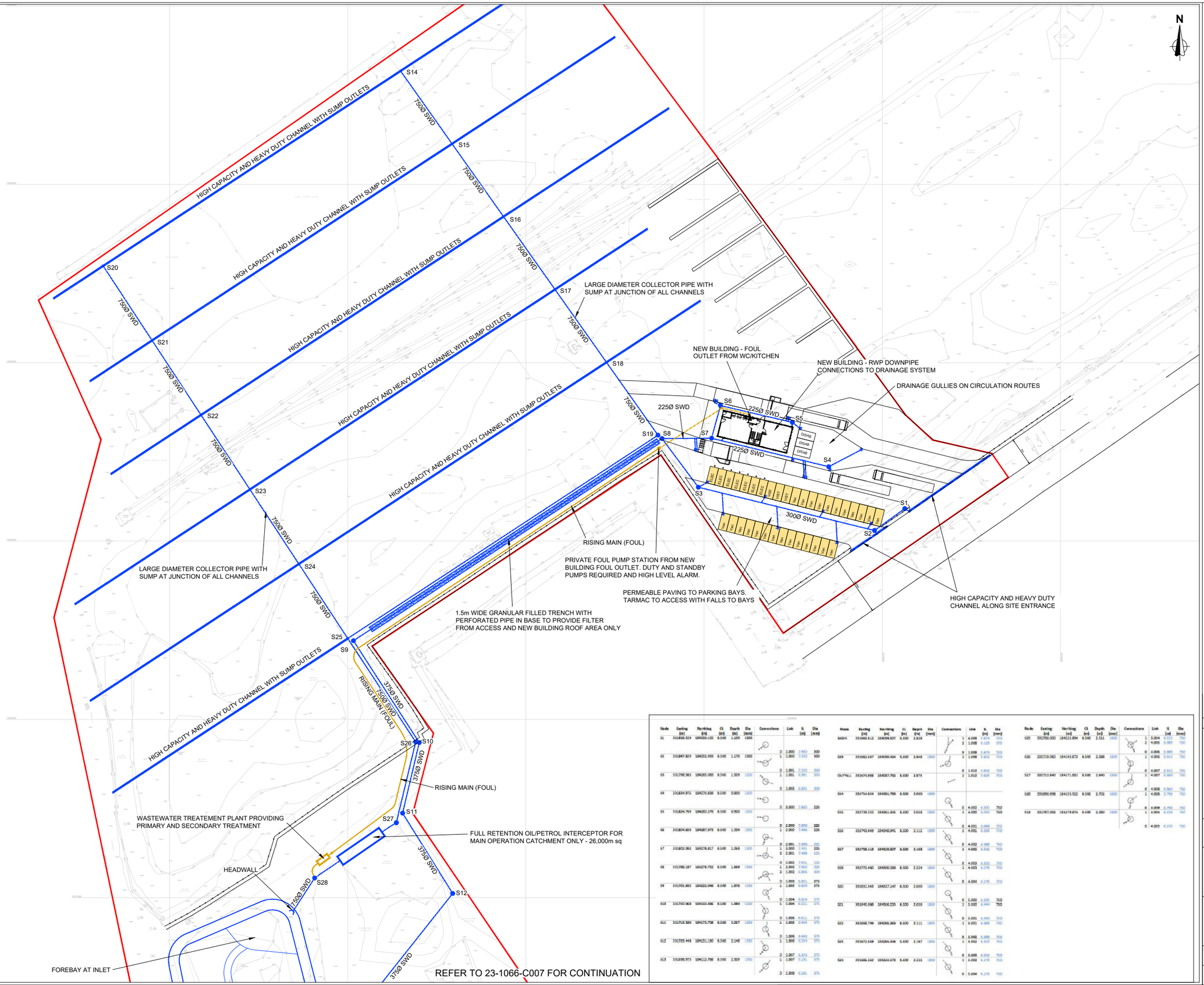
	Potential Receptor	Receptor Type	From Boundary of Permit	
			Distance	Direction
1	Saica	Industrial workplace	5m	South
2	Dock Railway Line	Private Infrastructure	5m	East
3	Coal Storage Yard	Industrial workplace	5m	East
4	Docks	Private Infrastructure & Surface waters	5m	North
5	Lafarge	Industrial workplace	60m	West
6	Pump House	Industrial workplace	90m	South
7	River Usk SAC & SSSI	Surface waters & conservation site	235m	South
8	Severn Estuary RAMSAR, SPA & SSSI	Surface waters & conservation site	235m	South
9	Various docks industries	Industrial workplaces	300-1000m	West, North & East
10	East Road	Private Infrastructure	350m	East
11	River Ebbw SINC	Surface waters & Conservation site	430m	West
12	Electricity pylons	Infrastructure	470m	South
13	Newport Wetland NNR	Conservation Site	495m	South
14	Wales Coast Path & track	Recreation & infrastructure	565m	West
15	Gwent Levels St Brides	Conservation Site	565m	West
16	Uskmouth Power Station	Infrastructure/Industrial workplace	780m	South East
17	Wind Turbines	Infrastructure	850m	East

Receptors Location Plan



*Red shading covers various dockside industrial/commercial operations

Appendix C – Drainage Details



Notes:

1. **Do not scale from this drawing. All dimensions are in metres unless noted otherwise.**
2. **Drawing to be read in conjunction with all other consultants drawings. Any discrepancies are to be reported to the engineer immediately.**
3. **Position of existing services/statutory undertakers apparatus are to be checked by the contractor prior to starting work.**

Rev	Date	Details	Drawn
C	29.01.24	PIPE DIA. ADDED.	KT
B	26.01.24	DRAINAGE REF ADDED.	KT
A	24.01.24	FIRST ISSUE	KT

K-Ten Consulting

CLIENT:
ATLAS COMMODITIES

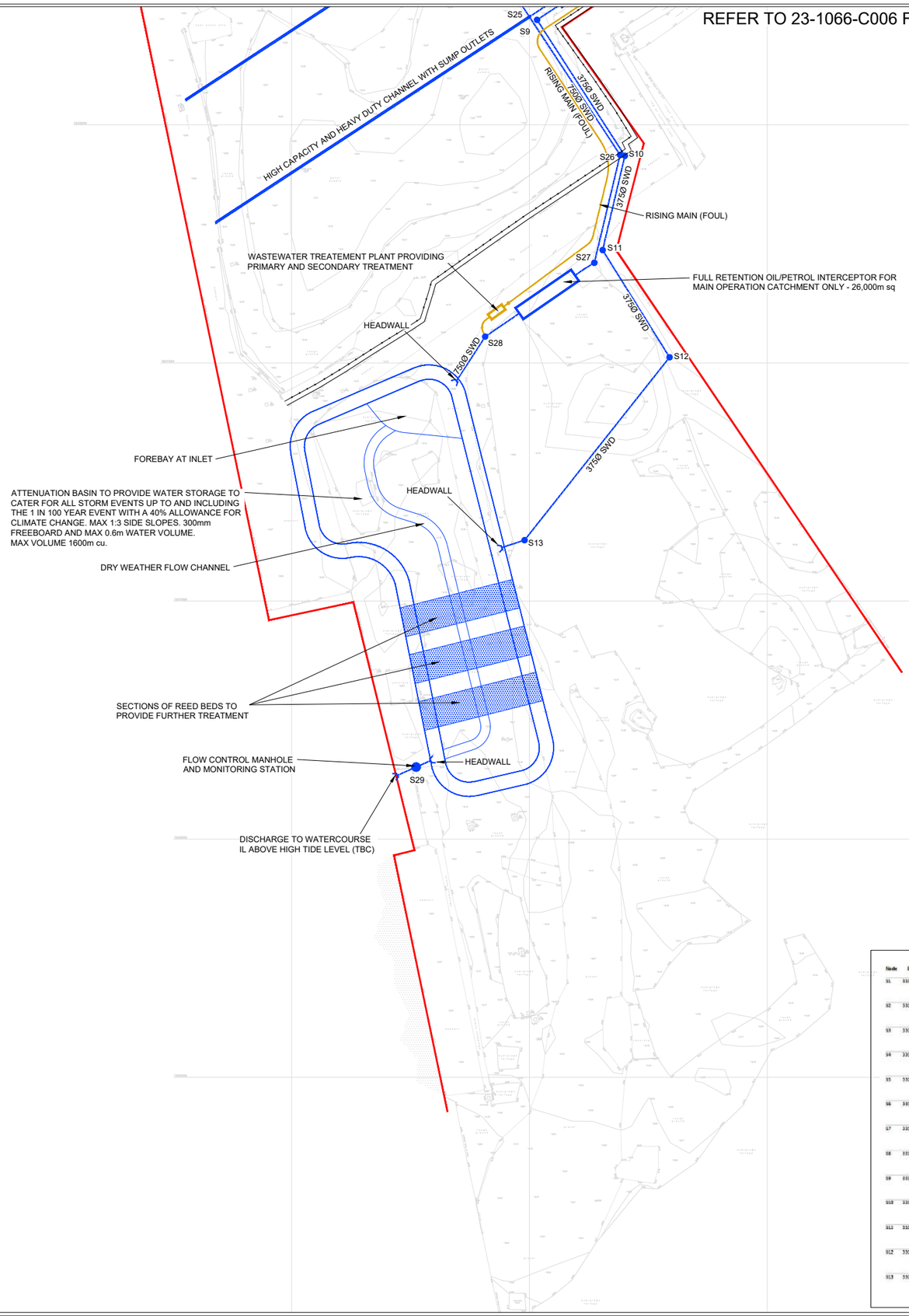
PROJECT:
ALEXANDRA DOCKS NEWPORT

TITLE:
PROPOSED DRAINAGE LAYOUT SHEET 1 OF 3

SCALE @ A1:	DATE:	DRAWN:	STATUS:
1:500	22.01.24	KT	INFORMATION

JOB NO:	DRAWING NO:	REVISION:
23-1066	C006	C

REFER TO 23-1066-C006 FOR CONTINUATION



Node	Easting (m)	Northing (m)	Cl. (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
S1	331886.519	184269.102	8.500	1.105	1500				
						0	1.000	7.437	300
S2	331847.829	184252.959	8.500	1.170	1500	1	2.000	7.330	300
						0	1.001	7.330	300
S3	331798.383	184265.083	8.500	1.509	1200	1	2.001	6.991	300
						0	1.002	6.991	300
S4	331834.973	184270.839	8.500	0.900	1200				
						0	3.000	7.890	225
S5	331824.759	184283.275	8.500	0.900	1200				
						0	2.000	7.892	225
S6	331804.603	184287.979	8.500	1.004	1200	1	2.000	7.496	225
						0	2.001	7.496	225
S7	331802.062	184278.817	8.500	1.069	1200	1	2.000	7.411	225
						2	2.001	7.449	225
S8	331788.187	184278.732	8.500	1.869	1200	0	2.002	7.411	225
						1	2.002	7.062	225
						0	2.002	6.905	300
S9	331701.801	184222.046	8.500	1.876	1200	0	1.000	6.831	375
						1	1.000	6.624	375
S10	331730.068	184592.486	8.500	1.969	1200	0	1.004	6.824	375
						1	1.004	6.611	375
S11	331715.380	184573.708	8.500	2.057	1200	0	1.006	6.611	375
						1	1.005	6.443	375
S12	331725.448	184551.130	8.500	2.145	1200	0	1.006	6.469	375
						1	1.006	6.354	375
S13	331695.573	184512.786	8.500	2.309	1200	0	1.007	6.354	375
						1	1.007	6.191	375
						0	1.008	6.191	375

Node	Easting (m)	Northing (m)	Cl. (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
BASIN	331688.812	184299.827	8.500	2.926		2	4.009	5.874	750
						1	1.008	6.125	375
S19	331662.247	184290.424	8.500	2.948	1200				
						0	1.009	5.874	750
						1	1.009	5.602	750
OUTFALL	331674.948	184287.782	8.500	2.976					
						0	1.010	5.602	750
						1	1.010	5.428	750
S14	331714.834	184381.788	8.500	3.000	1200				
						0	4.000	5.500	750
S16	331739.132	184263.341	8.500	3.016	1200	1	4.000	5.666	750
						0	4.001	5.666	750
S15	331743.649	184240.941	8.500	2.212	1200	2	4.001	5.288	750
						0	4.002	5.288	750
S17	331758.118	184210.527	8.500	2.268	1200	1	4.002	5.232	750
						0	4.003	5.232	750
S18	331772.490	184200.068	8.500	2.224	1200	1	4.003	5.276	750
						0	4.004	5.276	750
S20	331691.343	184327.147	8.500	2.000	1200				
						0	1.000	5.500	750
S21	331645.086	184306.233	8.500	2.056	1200	1	5.000	5.444	750
						0	1.001	5.666	750
S22	331668.799	184286.369	8.500	2.111	1200	1	5.001	5.388	750
						0	2.002	5.259	750
S24	331672.549	184261.596	8.500	2.147	1200	1	5.002	5.459	750
						0	2.003	5.333	750
S23	331686.242	184243.678	8.500	2.222	1200	1	5.003	5.278	750
						0	5.004	5.278	750

Node	Easting (m)	Northing (m)	Cl. (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
S25	331700.000	184212.894	8.500	2.521	1200	2	3.004	6.223	750
						1	4.005	5.980	750
S26	331719.060	184193.673	8.500	2.588	1200	0	4.006	5.980	750
						1	4.006	5.901	750
S27	331713.640	184171.581	8.500	2.640	1200	0	4.007	5.911	750
						1	4.007	5.860	750
S28	331650.696	184155.522	8.500	2.701	1200	0	4.008	5.367	750
						1	4.008	5.758	750
S29	331757.001	184279.676	8.500	2.280	1200	0	4.009	5.758	750
						1	4.004	6.220	750
						0	4.005	6.220	750

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1. **Do not scale from this drawing. All dimensions are in metres unless noted otherwise.**
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B	26.01.24	DRAINAGE REF ADDED. POND RESIZED	KT
A	24.01.24	FIRST ISSUE	KT

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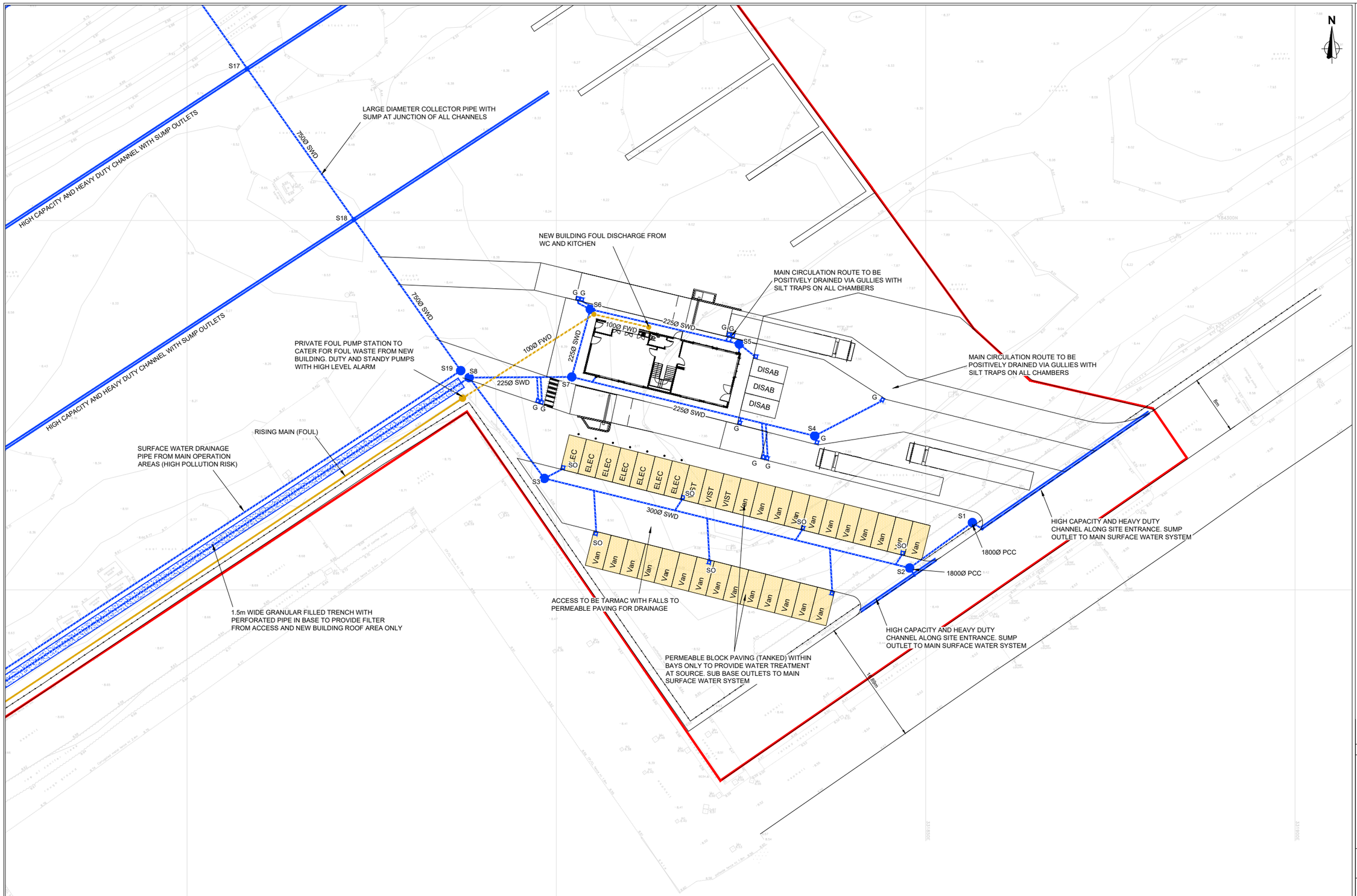
CLIENT:
ATLAS COMMODITIES

PROJECT:
ALEXANDRA DOCKS NEWPORT

TITLE:
PROPOSED DRAINAGE LAYOUT SHEET 2 OF 3

SCALE @ A1:	DATE:	DRAWN:	STATUS:
1:500	24.01.24	KT	INFORMATION

JOB NO:	DRAWING NO:	REVISION:
23-1066	C007	C



Notes:

1. **Do not scale from this drawing. All dimensions are in metres unless noted otherwise.**
2. **Drawing to be read in conjunction with all other consultants drawings. Any discrepancies are to be reported to the engineer immediately.**
3. **Position of existing services/statutory undertakers apparatus are to be checked by the contractor prior to starting work.**

Rev	Date	Details	Drawn
C	29.01.24	PIPE DIA ADDED	KT
B	26.01.24	DRAINAGE REF ADDED	KT
A	24.01.24	FIRST ISSUE	KT

K-Ten Consulting

CLIENT:
ATLAS COMMODITIES

PROJECT:
ALEXANDRA DOCKS NEWPORT

TITLE:
PROPOSED DRAINAGE LAYOUT SHEET 3 OF 3

SCALE @ A1:	DATE:	DRAWN:	STATUS:
1:250	22.01.24	KT	INFORMATION

JOB NO:	DRAWING NO:	REVISION:
23-1066	C008	C

Appendix D – Contact Information

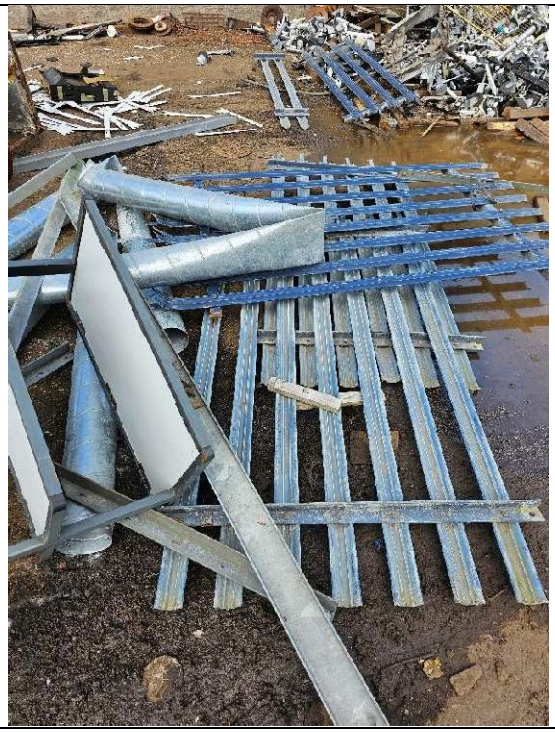
Metals Storage, Newport Docks		
Site Phone Number	TBC	
Emergency Services	999	
Police HQ Incident Room	**101**	
Local Police	Tel: 101	
Doctor	Bellevue Group Practice, Belle Vue Ln, Newport NP20 2WQ Tel:01633 256337	
A&E	Royal Gwent Hospital Cardiff Rd, Newport NP20 2UB Tel 01633 234234	
NHS Direct	**0845 4647**	
Natural Resources Wales	24hour hot line – 0300 807060 Local Office – 0300 065 3000	
Electricity Emergency	**Western Power 08006 703105**	
Water Services & Emergencies	Welsh Water 0800 052 0130	
Local Authority	Newport City Council 01633 656656	
Company Contacts Out of Hours		
Operator		
Operator (out of hours)		
Neighbour Contacts		
Associated British Ports Newport	0870 609 6699	
Saica	01635 295000	
Larfarge Readymix	029 2081 0526	

Appendix E – Example of Metal Grading Manual

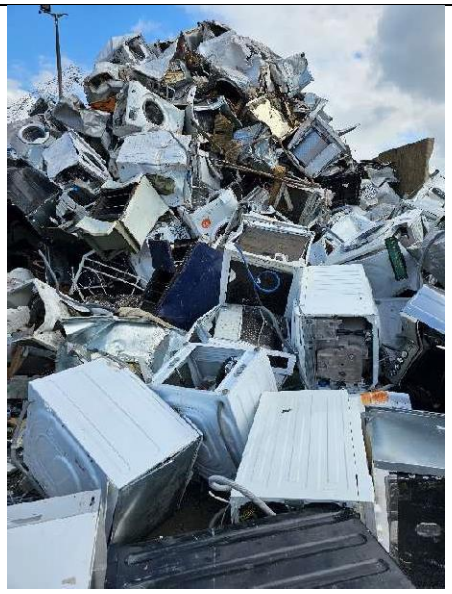
ADELPHI LTD

Ferrous

GRADE	HMS 1+2
TYPICAL PICTURE	
Grade Description	Heavy melting scrap under 5ft by 2 ft. Mixture of cast steel and rolled steel. e.g., mechanics scrap
Potential Risks. What to look out for.	Light metals should be bought as light iron. Deductions for muck and or dirt can be common.
Other Grade Names	Number 1, mechanic scrap, grade 1, grade a.

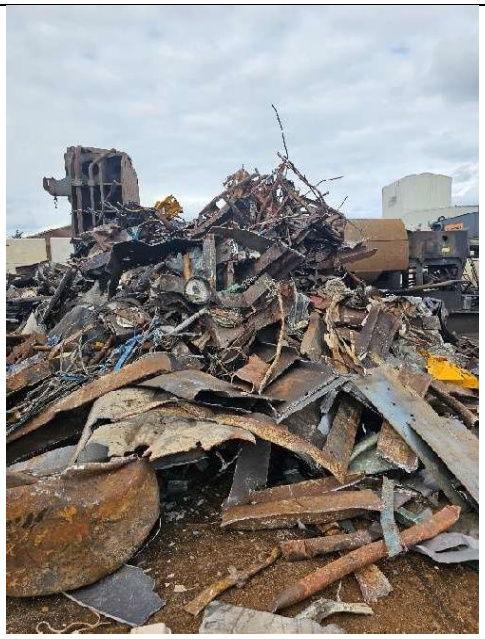
GRADE	Oversize 1+2
TYPICAL PICTURE	
Grade Description	Heavy melting scrap over 5ft by 2 ft.
Potential Risks. What to look out for.	Muck, dirt, foams, concrete.
Other Grade Names	oversize

GRADE	Light iron
TYPICAL PICTURE	
Grade Description	Lighter and generally a dirtier grade. Bicycles, tin sheets, office cabinets, shelving etc.
Potential Risks. What to look out for.	Tyres and excess dirt are very common. Concrete weights in cabinets and thin metal structures
Other Grade Names	Frag feed

GRADE	White goods no need further processing
TYPICAL PICTURE	
Grade Description	Household appliances. Washing machines Tumble dryers
Potential Risks. What to look out for.	Fridges and freezers are not to be taken under any circumstances.
Other Grade Names	

GRADE	Profile
TYPICAL PICTURE	
Grade Description	Sheets of rolled steel. Mostly comes from engineering firms not a public grade. Oversize if over 5ft.
Potential Risks. What to look out for.	Steel beams do not go with our profile. Dross from plasma cutting can be common and must be deducted for.
Other Grade Names	

GRADE	Steel cans – tin cans not as yet covered by the directive.
TYPICAL PICTURE	
Grade Description	Steel food cans have reduced price to light iron due to waste.
Potential Risks. What to look out for.	Water and excess dirt.
Other Grade Names	Tin cans

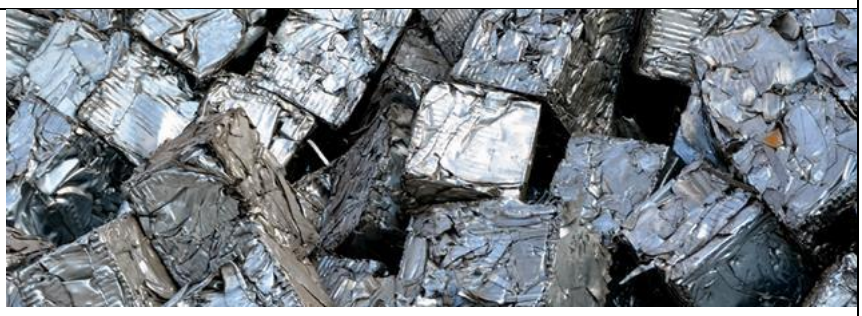
GRADE	OA1
TYPICAL PICTURE	
Grade Description	Heavy scrap no galvanised and no cast steel. Steel beams, rebar, rail track. Not a public grade. Oversize over 5 ft.
Potential Risks. What to look out for.	Must have the highest level of quality and as little dirt as possible. Concrete is common on some of this scrap. Most scrutinised grade when shipping
Other Grade Names	Bonus

GRADE	Swarf no oil residue
TYPICAL PICTURE	
Grade Description	Clean steel swarf. Should be free of excess oil.
Potential Risks. What to look out for.	Any deleterious material.
Other Grade Names	Turnings Lathe Swarf

GRADE	Manganese Steel
TYPICAL PICTURE	
Grade Description	High manganese steel often (though not always) non-magnetic. High wear parts in heavy industry. Manganese content differs by grade and sales are agreed with customers ahead of sale.
Potential Risks. What to look out for.	Any deleterious material.
Other Grade Names	Mang

GRADE	Plate Iron
TYPICAL PICTURE	
Grade Description	Heavy iron usually from a disaster melt poured straight onto ground when no processing available.
Potential Risks. What to look out for.	Any deleterious material.
Other Grade Names	Pig Plates Pig iron

GRADE	3a&b
TYPICAL PICTURE	
Grade Description	Should be free from dirt, free non-ferrous metals and foreign material and exclude excessive moisture, introduced loose cast iron, incinerator material, grindings, swarf, turnings and borings. 3a – less than 150mm in any direction 3b – less than 200mm in any direction
Potential Risks. What to look out for.	Any deleterious material.
Other Grade Names	Frag

GRADE	4a&c
TYPICAL PICTURE	
Grade Description	Should be tightly baled and free from loose material and all coated, tinned, enamelled and deleterious material. May include galvanised steel (although the proportion may be limited by joint agreement). 4a – less than 3mm thick material 4c – less than 6mm thick material
Potential Risks. What to look out for.	Any deleterious material.
Other Grade Names	NP Bales New Production Bales

GRADE	4f
TYPICAL PICTURE	
Grade Description	New Production Steel Strip and/or Wire Bobbins: May include a proportion of coated material. Must exclude tin-coated ferrous material and copper-washed wire. Must be securely fastened.
Potential Risks. What to look out for.	Any deleterious material.
Other Grade Names	Bobbins

GRADE	4G
TYPICAL PICTURE	
Grade Description	New Production Compressed Detinned Steel Sheet Bales: Should be tightly baled and free from loose material. Size: <0.02%
Potential Risks. What to look out for.	Any deleterious material.
Other Grade Names	Mang

GRADE	5a
TYPICAL PICTURE	
Grade Description	Compressed Old Light Steel: Should be free from tin coated and non-metallic material. Should not include: heavy iron and steel; wire ropes; wire; sealed containers; fuel tanks; dangerous, inflammable, toxic or tin coated materials. Should also exclude loose or free dirt and tyres.
Potential Risks. What to look out for.	Any deleterious material.
Other Grade Names	Light logs Car Logs Loose Bale

GRADE	6b
TYPICAL PICTURE	
Grade Description	Loose Incinerated – Steel arisings in loose form: Should consist predominantly of tin-coated steel cans processed through an incinerating plant and magnetically separated following incineration.
Potential Risks. What to look out for.	Any deleterious material.
Other Grade Names	Incin Incenerated Burnt

GRADE	6f
TYPICAL PICTURE	
Grade Description	Clean Steel Cans – Loose: Should comprise steel from food, drinks and domestic aerosol cans, collected from the public e.g. by can banks and door-to-door (kerbside) collection schemes. Cans should be free from excessive contamination by other materials.
Potential Risks. What to look out for.	Any deleterious material.
Other Grade Names	Cans Tin Cans

GRADE	11a
TYPICAL PICTURE	
Grade Description	Clean Cast Iron or Malleable Iron Borings and Drillings: Should be free from steel turnings, scale, lumps and excessive oil.
Potential Risks. What to look out for.	Any deleterious material.
Other Grade Names	Borings Cast Iron Borings

GRADE	12a
TYPICAL PICTURE	
Grade Description	Should exclude forging flashings and stampings. May include tube and hollow section with a wall thickness ≥6mm and a maximum overall outside diameter or wall to wall outside measurement of 50mm.
Potential Risks. What to look out for.	Any deleterious material.
Other Grade Names	

GRADE	12b
TYPICAL PICTURE	
Grade Description	New Production Profiles: Should exclude forging flashings and stampings, old production material, rebar, alloy bar and crop billet ends. Predominantly 6mm thick in sizes ≤1.50m x 0.60m x 0.60m
Potential Risks. What to look out for.	Any deleterious material.
Other Grade Names	Profile

GRADE	12d
TYPICAL PICTURE	
Grade Description	New Production Clean Shovellable Steel: May include new factory sheet clippings, punchings and stampings.
Potential Risks. What to look out for.	Any deleterious material.
Other Grade Names	Punchings Sovellings

GRADE	13a
TYPICAL PICTURE	
Grade Description	Old Steel Rails: Should be free of all attachments, including cast iron chairs and rail clips (railway smalls). Must not include conductor rail or rail scrap arising from high manganese switches and crossings. Size: ≤1.50m in length
Potential Risks. What to look out for.	Any deleterious material.
Other Grade Names	Rail Track

GRADE	Heavy Chip
TYPICAL PICTURE	
Grade Description	Heavy swarf-like material that is significantly denser than normal swarf.
Potential Risks. What to look out for.	Any deleterious material.
Other Grade Names	Skelp

Quality Control – Unacceptable Wastes

- **Orphaned gas cylinders**
- **Pressure vessels/ sealed vessels /LPG tanks**
- **Non-metallic items**

(e.g. – Dirt/Wood/ rags/ tyres/ general rubbish)

- **Radioactive materials**
- **Asbestos**

- **Liquids**

(such as poisons, chemicals and corrosives)

- **Beer kegs or branded cables from unauthorised sources**

- **Explosives**
- **Sharps/ Biohazards**

- **Lithium Ion Batteries**

Control of Unacceptable Wastes

NB.

- All nonconforming material must be highlighted immediately to Charge Hand, Supervisor and Operations Controller.
- All knocks must be recorded on weighbridge docket.
- All hazardous material must be segregated and photographed.
- Photos must be added to Yard Group Chat so that information can be fed back to customer by Snr Mgm Team

Appendix F – Example of Suppliers Contract

Supplier Name
Supplier Address

. Thursday, 22 February 2024

PURCHASE CONTRACT NUMBER 000874

ATLAS COMMODITIES LIMITED, HERTFORDSHIRE, UK, as Buyers, confirm having purchased, and **SUPPLIER NAME,** as Sellers, confirm having sold the material as described below in accordance with the following terms and conditions:

QUANTITY: 500 MT Plus / Minus 10% (in Seller's option).

QUALITY: HMS

PRICE: …. / MT (GB Pounds Two hundred and Eighty 00/100 per metric tonne)

DELIVERY: DAP ATLAS COMMODITIES LTS, NEWPORT DOCKS, UK.
(INCOTERMS 2020)

SHIPMENT: Either bulkers and / or by prior mutual agreement, 20ft DV containers, which will be delivered to site by arrangement with the Buyer. In the event of intention to load material in 20ft DV containers, Buyers to arrange for on-site loading equipment to be present. Any such incurred costs for account of Buyer.

Cargo is to be loaded loose in bulkers in any event latest by end of January 2023 (in Buyer's option) with a minimum average of 27 MT cargo per bulk carrier truck / 20ft DV container.

In the event the minimum weight of 27 MT not met, then dead freight charges to be for the account of Seller.

The delivery and loading schedule to be mutually agreed and same subject to logistical constraint of the Liner Container Service, but within the latest shipment date

PERN Will be claimed by Atlas Commodities Ltd.

PAYMENT: By telegraphic transfer to Seller's nominated bank account 14 days after receipt of invoice.

DOCUMENTS:

- Commercial invoice
- Copy of original computerised weighbridge tickets.

+44 (0) 2039 974 815
enquiries@atlascommodities.co.uk
www.atlascommodities.co.uk

QUALITY: Material is to be strictly free from any deleterious materials including any dust, dirt or other non- metallic contamination.

The Buyer has the right to check the product complies with the specification and tolerances and reserves the right to make a claim if the quality of the material presented for loading at the load point is found to be different from the contractual specification.

All grades shall be free of dirt, non-ferrous metals or foreign materials of any kind. It is not intended to preclude the accidental inclusion of negligible amounts where it can be shown that this amount is unavoidable in the customary preparation and handling of the particular grades involved, and because of that, the Buyer shall permit a dirt, non ferrous material or foreign material content of 2.00% maximum. Any quantity exceeding this amount shall be penalized and reimbursed to the Buyer at the EXW value of the cargo.

Cargo is to be strictly free from any radioactive contamination, sealed cylinders that may cause an explosion in a furnace or any kind of explosive, ordnance or munitions whether live or dead.

In case any such harmful material is found in the container on arrival Buyer to hold Seller responsible for all liability and costs associated with the return of the cargo including any storage costs and or the safe disposal of such material.

WEIGHT: The cargo weight at the loading point will be measured on the suppliers own certified and calibrated weighbridge. The weight will be cross referenced with the end user received weights

SPECIAL CONDITIONS:

1) It is an essential condition of the Contract that a duly signed copy of the Contract, duly initialled on each page, by the Sellers is to be returned and received by the Buyers latest by **17:00 UK Time, Monday 16th January 2024** attached and emailed to nicole@atlascommodities.co.uk.

The signed scanned copy of the contract shall be considered as the original.

Where dates and times are mentioned, time is the essence of the contract.

In the event that the Buyers fail to comply with the essential conditions of the Contract as aforesaid and / or in the event the Buyers fail to comply with dates and times where time is of the essence of the Contract as aforesaid, the Sellers shall have the right, at their sole discretion and without written notice to the Buyers, to terminate the Contract with immediate effect and to claim damages from the Buyers.

2) In the event that contractual terms and conditions are not fully complied with, then Sellers have the right to deem this contract subject to their final re-confirmation.

3) This contract will be covered by the provision of INCOTERMS 2020.

4) In accordance with Regulation (EC) no 1013/2006, if the shipment or recovery of the goods cannot be completed as intended or the shipment of the goods is illegal, we (or, where we are not in a position to do so, you) shall be required to:

(I) Take back the goods or ensure recovery of the goods in an alternative way; and
(II) Provide, if necessary, for storage of the goods in the meantime.

ATLAS COMMODITIES

GENERAL TERMS & CONDITIONS:

1. This contract shall constitute the entire binding agreement between Buyer and Seller; no terms or conditions other than those stated herein and no agreement or understanding, oral or written, in any way purporting to modify these terms and conditions shall be binding on Buyer or Seller unless agreed to in writing.

2. Force Majeure: Buyer shall not be liable or responsible to Seller nor Seller to Buyer, for any delay or failure in performance due to a force majeure occurrence, where such a force majeure occurrence is strictly defined as and limited to strikes, acts of God, governmental restrictions (including prohibition on import or export), enemy action, civil commotion, fire, unavoidable casualty, or any other cause of the type or kind specifically stated as aforesaid which is beyond Buyer's or Seller's reasonable control, notwithstanding whether such cause of delay or failure is operative at the time of making the contract.

   Any delay or failure in performance by Buyer or Seller by reason of price variations in the ferrous scrap market shall not constitute a force majeure occurrence for the purposes of this contract. If a force majeure occurrence as defined above exceeds thirty (30) days, the party not claiming excuse under this provision may cancel the quantity involved.

3. Arbitration. Any controversy or claim or dispute that arises out of or in connection with this contract, or the breach thereof, including any question regarding its existence, validity or termination, shall be referred to and finally resolved by arbitration in the London Court of International Arbitration (LCIA) under the LCIA Rules.

   The seat, or legal place, of arbitration shall be London. The number of arbitrators shall be three. The arbitrators shall issue a reasoned award in writing. Judgment upon the award rendered by the arbitrators may be entered into any court having jurisdiction thereof.

4. This contract shall be governed by English Law and shall be subject to the non-exclusive jurisdiction of the English Court.

PLEASE SEE OVERLEAF FOR SIGNATORIES

FOR BUYERS:

ATLAS COMMODITIES LIMITED

Date: **22 February 2024**

Accepted:

Name: Harry Seale

Position: Director

FOR SELLERS:

Date:

Accepted:

Name:

Position:

+44 (0) 2039 974 815
enquiries@atlascommodities.co.uk
www.atlascommodities.co.uk

Appendix G – Concrete Block Details

Appendix G – Concrete Block Details

Solid Dense Blocks

Block mm	Loadbearing wall		Non-Loadbearing Wall	
	No Finish	VG plaster	No Finish	VG plaster
90	1 hours	2 hours	1.5 hours	3 hours
100	2 hours	4 hours	2 hours	4 hours
140	2 hours	4 hours	3 hours	6 hours

http://www.thomasarmstrong.co.uk/downloads/Concrete%20Blocks%20Brochure%20-%20November%202016%201.pdf

Fire Resistance Periods of Concrete Masonry Walls

Aggregate Type	Minimum Equivalent Thickness for Fire Resistance Rating in. (mm)[1,2]						
	½ hr	¾ hr	1 hr	1½ hr	2 hr	3 hr	4 hr
Calcareous or siliceous gravel (other than limestone)	2.0 (51)	2.4 (61)	2.8 (71)	3.6 (91)	4.2 (107)	5.3 (135)	6.2 (157)
Limestone, cinders, or air-cooled slag	1.9 (48)	2.3 (58)	2.7 (69)	3.4 (86)	4.0 (102)	5.0 (127)	5.9 (150)
Expanded clay, expanded shale or expanded slate	1.8 (46)	2.2 (56)	2.6 (66)	3.3 (84)	3.6 (91)	4.4 (112)	5.1 (130)
Expanded slag or pumice	1.5 (38)	1.9 (48)	2.1 (53)	2.7 (69)	3.2 (81)	4.0 (102)	4.7 (119)

1. Fire resistance periods between the hourly fire resistance rating listed shall be determined by linear interpolation based on the equivalent thickness value of the concrete masonry assembly.
2. Minimum required equivalent thickness corresponding to the fire resistance rating for units made with a combination of aggregates shall be determined by linear interpolation based on the percent by dry-rodded volume of each aggregate used in manufacturing the units.

http://www.gobrick.com/portals/25/docs/technical%20notes/tn16.pdf
Fire Resistance of Brick Masonry, 2008 Brick Industry Association, Reston, Virginia

Fire Resistance Periods of Normal-Weight Concrete Panels

Aggregate Type	Minimum Equivalent Thickness for Fire Resistance Rating, in. (mm)				
	1 hr	1½ hr	2 hr	3 hr	4 hr
Siliceous	3.5 (89)	4.3 (109)	5.0 (127)	6.2 (157)	7.0 (178)
Carbonate	3.2 (81)	4.0 (102)	4.6 (117)	5.7 (145)	6.6 (168)
Semi-lightweight	2.7 (69)	3.3 (84)	3.8 (97)	4.6 (117)	5.4 137)
Lightweight	2.5 (64)	3.1 (79)	3.6 (91)	4.4 (112)	5.1 (130)

http://www.gobrick.com/portals/25/docs/technical%20notes/tn16.pdf
Fire Resistance of Brick Masonry, 2008 Brick Industry Association, Reston, Virginia

Appendix H – CCTV Details

Appendix H – CCTV Details

Project	CCTV Newport Docks
Site Contact	Tom Lack
Contractors	Twisted Pair Technologies Ltd / Guard Tech Ltd / Reboot Systems Ltd
Site Location	https://earth.google.com/web/@51.55387699,-2.9843632,9.28343317a,431.16796724d,35y,323.51880023h,0t,0r
Date	24th August 2023
Revision	1.0

General Description

Comprehensive CCTV system including redundant recording, remote access, thermal cameras & ANPR. Systems to be linked via redundant fibre optic ring around the site to pick up all camera locations.

Require remote operation of entry gate via phone App. Access control on gate via fob and keypad.

Camera Count 35

8MP Bullet	19 – 2 Existing on Post 5
8MP Turret camera	3
PTZ 8MP 36x Zoom	2 – 1 Existing on Post 5
ANPR 7 Line	2
ANPR TCM	1
Thermal Cameras	8

We will also cost the feasibility of an automated drone system to fly a predetermined path over the site on a schedule and send the live video back to the recorder.

Thermal Camera – 8

To detect fires in early stages along the edges of the metal piles.

Exact locations to be confirmed. We may need additional mounting points to ensure decent coverage of the stock piles.

Weighbridge Control Equipment

1x 64 Channel M Series NVR 2x 8 TB Hard disks for storage

1x HikCentral server with 2x 8TB storage – Acts as a redundant recording server and controls all linkage actions, operator auditing and access to the CCTV system as well as remote connections

Link of weighbridge systems to the cameras to provide video overlay of recorded weights onto the video feed. Note we will need to check weighbridge data connections to ensure this is possible.

Area Site Entry Exit – Cameras 3

1x ANPR Camera

1x 8MP PTZ with Auto tracking

1x 8MP Static camera

Area Weighbridge – Cameras 9

4x 8MP 4K Bullet Cameras 2 over each weighbridge to review what had been loaded / unloaded

2x ANPR cameras to read front number plates Hik 7 Line Camera

2x 8MP Turret Low level camera with audio at driver level to record interactions with driver and weighbridge operator.

1x 8MP Turret Internal camera to review weighbridge screen and operator with audio

Area Lighting Columns P1 – Cameras 2

2x 8MP 4k Cameras mounted on lighting column

1x WIFI Access Point

Area Lighting Columns P2 – Cameras 2

2x 8MP 4k Cameras mounted on lighting column

1x WIFI Access Point

Area Lighting Columns P3 – Cameras 2

2x 8MP 4k Cameras mounted on lighting column

1x WIFI Access Point

Area Lighting Columns P4 – Cameras 2

2x 8MP 4k Cameras mounted on lighting column

1x WIFI Access Point

Area Lighting Columns P5 – 3 Cameras (Existing)

2x 8MP 4k Cameras mounted on lighting column

1x PTZ Camera

1x WIFI Access Point

Area Lighting Columns P6 – Cameras 2

2x 8MP 4k Cameras mounted on lighting column

1x WIFI Access Point


P5
P3
P4
P6
P2
P1

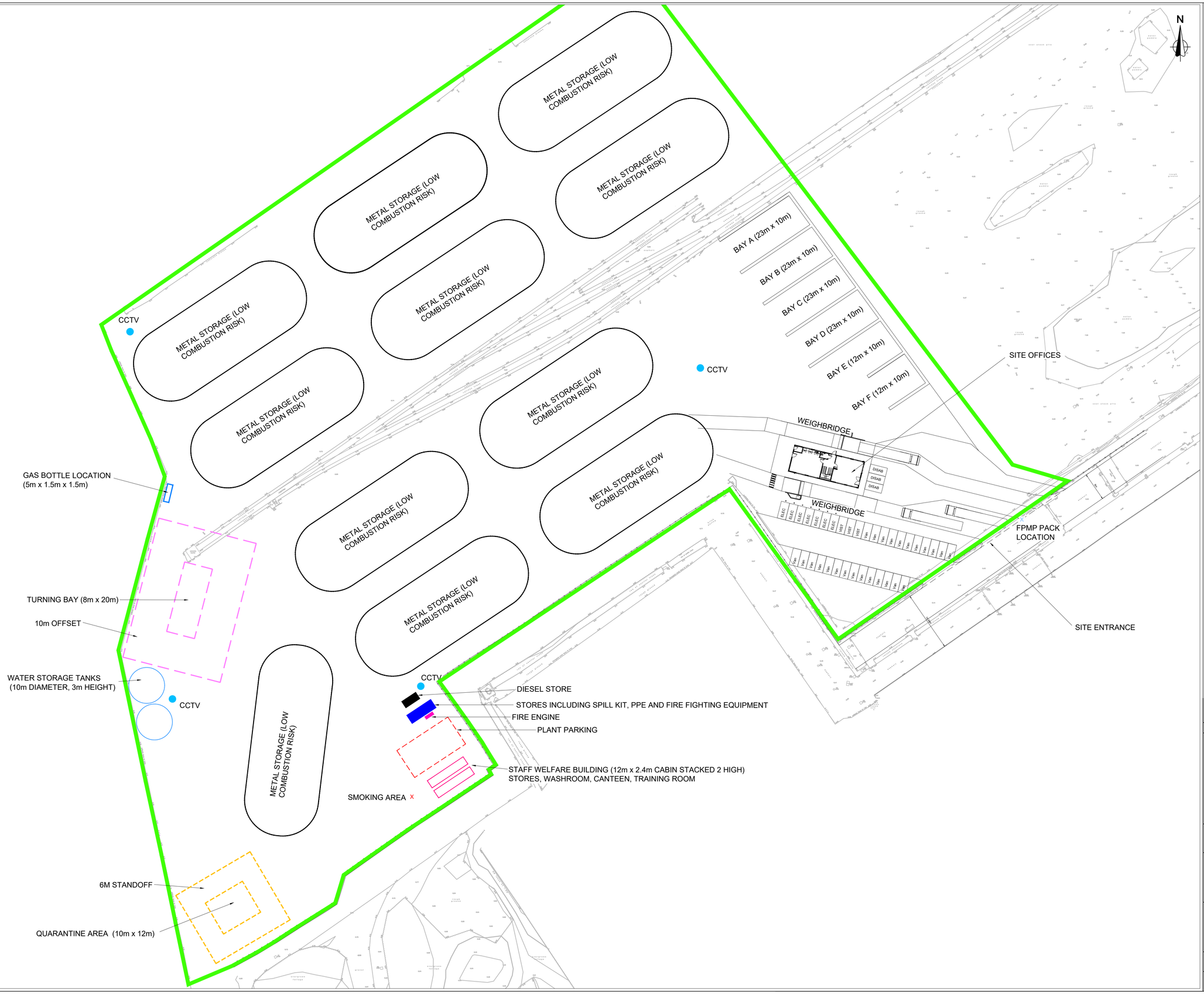
Appendix I – Fire Engine Specification

Cobra 1

- Year of Build 1998
- 10,000 litre Water Capacity
- 1,280 litre Foam Capacity
- 5250 LPM Pump Output
- 5000 LPM Monitor Output
- 540 LPM Bumper Turret
- Detroit 8V92
- 585 BHP
- Alison HT750DRD
- 5 Speed Auto
- 6x6
- 4 Man crew cab

Drawings

Drawing– Permit Plan Drawing C002



Notes:

1. **Do not scale from this drawing. All dimensions are in metres unless noted otherwise.**
2. **Drawing to be read in conjunction with all other consultants drawings. Any discrepancies are to be reported to the engineer immediately.**
3. **Position of existing services/statutory undertakers apparatus are to be checked by the contractor prior to starting work.**

Rev	Date	Details	Drawn
C	15.08.24	PILE INFORMATION ADDED	KT
B	23.02.24	REVISED IN ACCORDANCE WITH CLIENT'S COMMENTS	JT
A	19.02.24	FIRST ISSUE	JT

K-Ten Consulting

CLIENT:
ATLAS COMMODITIES

PROJECT:
ALEXANDRA DOCKS NEWPORT

TITLE:
PERMIT PLAN

SCALE @ A1:	DATE:	DRAWN:	STATUS:
1:500	19.02.24	JT	INFORMATION

JOB NO:	DRAWING NO:	REVISION:
23-1066	C002	C