



Land at Berth 31 Port of Barry

Wood Processing Facility

Environmental Statement

Non Technical Summary

20th June 2024



Notice

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Location Plan

Site Layout

1 Introduction

- 1.1 This document is the Non-Technical Summary of the Environmental Statement (ES) for the change of use to wood recycling application prepared on behalf of the applicant, South West Wood Products Ltd.
- 1.2 The Non-Technical Summary (NTS) is a stand-alone document. It provides a brief summary of the development and the findings and mitigations arising from the assessment of the likelihood of significant impact from the proposals.
- 1.3 The proposals have been shaped by an iterative process based upon the specific characteristics of the site, the proposed use including the operator's experience in wood recycling, the requirements of other regulator controls including Permitting and the specialist technical assessments of the EIA work.
- 1.4 The proposal is for a change of use to a wood processing facility. Ancillary to the change of use are existing elements of site infrastructure such as including weighbridge, offices, stores, substation, and pile retention structures, lighting and water tank.

2 The Site and Development Proposals

Site and Surroundings

- 2.1 The proposed site is part of the Port of Barry estate. The site has an area of 4.25ha. It is within an industrial area, and situated outside of the settlement boundary of Barry as defined in the Unitary Development Plan. At the time of writing SWWP are in the process of commencing operations on the site under Permitted Development rights associated with the use of the siter as a dock. Those operations cover the same area, involve the same processes and are unlimited in terms of tonnages or operational hours
- 2.2 The site is bounded to the north east by the access road to other parts of the Docks and industries located within the Docks, to the south east of the site is the dock itself. Outside the site, but adjacent on the northwest boundary is a substantial earth bank that also extends around the south west boundary.
- 2.3 Access will be from Wimborne Road, a private Dock road that marks the north east boundary. The dock railway falls within the site.
- 2.4 The site does not fall within any landscape, national or international conservation or heritage. Sully Island component of the Severn Estuary (Wales) Ramsar and Special Protection Area is within 3.6 km of the site. There are two SSSI within 2km but both are designated for geological rather than ecological reasons. (Bendrick Rock and Barry Island). The nearest non statutory conservation site is a Site of Importance for Nature Conservation (SINC) known as the Cadoxton Wetlands. This is an area of restored wetland comprising tall herb, scattered scrub and grassland habitat, together with two small lakes and a reedbed.
- 2.5 In terms of heritage designations, the former Dock Offices to the north-east of Number 2 Dock (Grade II* listing) , the former Customs House and Mercantile Marine Office at the southern end of Dock View Road (Grade II listing) and Cadoxton Court, off Gladstone Road, 500m north-west of the site (Grade II listing) are those in proximity to the site.

Development Proposals

- 2.6 The proposal is for a change of use to a wood processing facility. The planning statement sets out the details of why planning is required in a move away from the existing operations carried out under Permitted Development rights. Ancillary to the change of use are existing elements of site

infrastructure such as including weighbridge, offices, stores, substation, and pile retention structures (“maltese crosses”), lighting and water tank.

- 2.7 The “maltese crosses” are made up of separate and moveable large concrete blocks and can configured as operational requirements dictate, they form storage walls for the wood as well as dust barriers, noise attenuation and control surface water.
- 2.8 The processing operations involve the sizing of the waste to meet set specifications dependant on the product being made. The machinery and plant involved in processing operations includes loading shovels, excavators, screeners, shredder, trommel and eddy current. The main processing plant is shredding equipment, which includes magnets to remove any metals (e.g. nails) that may be in the wood. Mobile screens also form part of the processing operations grading the wood by size. The other main elements of plant are the machines used to load the processing plant and move material about site, loading shovels and 360-degree excavators.
- 2.9 For the purposes of assessment a maximum annual tonnage is proposed of 250,000 tonnes. The wood will arrive at site in HGVs, but around 125,000 tonnes of the wood product will leave via a ship from the docks, being loaded direct from Berth 31.
- 2.10 The nature of the facilities supplied, the modes of transport (shipping being dependant on tides), the volumes required to be processed at times to meet demand and the established industrial location of the site mean that it will be potentially operational 24hrs per day and 7 days per week but this is likely to happen only on limited occasions. Processing will be restricted to 0700- 2300.
- 2.11 The majority of the site will be used for wood storage and for most of the time there will be limited activity other than the periodic movement of the wood. Moveable concrete blocks as noted above may be used to allow the flexible arrangement and rearrangement of site operations for example assisting with defining and containing some storage piles or site activities such as the processing area or processed wood storage.
- 2.12 SWWP effectively process wood to order and typically keep only limited amounts of processed wood on site at any one time. The reason for this is that processed wood can be influenced by changes in moisture levels over long storage periods and fall out of product specification. It is also good practice to minimise storage of processed wood for other reasons such as fire prevention which is strictly controlled by environmental permitting. A Fire Prevention and Mitigation Plan (FPMP) details storage arrangements to minimise the likelihood of fire incidents.

- 2.13 The information in the rest of this non-technical summary sets out the contributions from the range of technical specialists that have worked together on assessing the potential for likely significant impacts from the development, any cumulative issues and where necessary identifying design changes to mitigate or specifying other mitigation measures, management and monitoring.

3 Air Quality

3.1 In relation to the Development Proposals, 'Air Quality' relates to:

- Pollutants from vehicle traffic (particularly HGVs); and
- Dust (from wood import, processing and storage activities).

3.2 Dust arising from wood processing operations has the potential to reduce amenity in the local community and damage sensitive ecological receptors due to visible wood dust and wood dust soiling / deposition. The larger wood dust particles are typically referred to as 'deposited' or 'disamenity' dust. These impacts may therefore be related to health and amenity as well as potential impacts at sites of ecological interest.

3.3 The air quality assessment method is based on that advised by the Institute of Air Quality management (IAQM) and is in accordance with the requirements of the EIA Regulations and PPW. This approach is based on consideration of Source → Pathway → Receptor to evaluate the risk of dust impacts and effects which incorporates the following elements:

- Description of site characteristics and baseline conditions;
- Estimation of dust impact risk; and
- Estimation of magnitude if likely effect.

3.4 With regard to dust, fugitive wood dust emissions occur when wood particles are disturbed and released by physical activities (i.e. loading, tipping, wood shredding / processing and transport). Stronger winds across fine material, or material of low density such as wood dust, can cause windblown dust emissions, often regarded as those dry days with wind greater than 5 m/s.

3.5 Rainfall data for the local area of the Site has been obtained from the Met Office records with 1991 – 2020 mapped averages across the UK. The annual average number of days where the rate of rainfall exceeds 1mm is 159 days per year (43.5% of the year). Data for the Cardiff station provides a similar figure of 153 days where the rate of rainfall exceeds 1mm (58% 'dry' days per year). The closest observation station to the extension area is located at Cardiff (Rhoose) Airport. The majority of winds are from the west with winds from these sectors (250°–310°) occurring for 35.4% of the year. On this basis, locations to the east of the site have the highest potential for dust impacts, which is the direction away from residents to the north of the Port of Barry.

- 3.6 To the west and north of the site, the nearest residential properties are located at Cadoxton. In the absence of a specific distance threshold for wood dust, 200m has also been taken as a screening distance for site emissions (i.e. dust from processing and storage of wood). This is consistent with the guidance relating to dust sources such as construction and demolition. Development approved under application ref 2020/00775/OUT (Former sidings, off Ffordd y Mileniwm) have the future potential to be impacted by both wood dust and air pollution. These receptors are approximately 200m from the site boundary, but approximately 380m from the wood processing area which will be located towards the south of the site.
- 3.7 The nearest non statutory conservation site is a Site of Importance for Nature Conservation (SINC) known as the Cadoxton Wetlands at approximately 130m from the site. This is an area of restored wetland comprising tall herb, scattered scrub and grassland habitat, together with two small lakes and a reedbed. The Cadoxton River SINC is a canalised river at approximately 190m from the site. There are no other sites within 400m.
- 3.8 In terms of traffic movements, the IAQM screening threshold is not exceeded in any year for any of road links used by vehicles associated with the Berth 31 development where annual average receptors (e.g. residences are present). As none of the roads in the network meet the EPUK / IAQM (or DMRB) screening criteria, then the impact of the proposals can be considered to be 'neutral' in terms of local air quality and no further air quality assessment is required. The impacts are 'Not Significant'.
- 3.9 In terms of PM₁₀ impacts, the IAQM guidance states that if the PM₁₀ background concentration is less than 17µg/m³ it is considered unlikely that any process contribution from the site would lead to an exceedance of the annual objective. On the basis of the background concentration (2024) predicted to be a maximum of 12.4 µg/m³, further assessment of the potential process contribution from the proposed operations has not been undertaken.
- 3.10 The exposure would also be below the benchmark value of 28µg/m³, the value provided in DEFRA LAQM.TG(22) as an indication of the relationship between annual mean concentrations and the risk of the daily PM₁₀ objective being exceeded. On this basis, the impact on the 24-hour AQO is also considered to be 'not significant'.

- 3.11 The IAQM assessment has identified that for all receptors, the magnitude of effect from dust emissions from the Development Proposals would be 'Negligible'. As such the impacts to air on human receptors from the proposed use would be 'not significant'.
- 3.12 As described above, the only sites within 400m of the site are the SINCs Cadoxton Wetlands and Cadoxton River SINC. Local sites may be regarded as 'low sensitivity' receptors in some cases, particularly those locations with a local designation where the features may be affected by dust deposition (i.e. with dust sensitive features). There is no evidence that these sites are in any way sensitive to deposition of wood dusts. The wood dusts will not be acidic or alkaline (as opposed to cement dusts, for example) and the sites are wetland habitats / rivers so and dusts would be wetted.
- 3.13 The outcome of the IAQM dust assessment for the Development Proposals has predicted a 'Negligible' effect at all receptor locations subject to basic (standard) mitigation measures such as sheeting of vehicles when on the wider highways network.
- 3.14 Designed in measures that form the working scheme that have been taken into account within the assessment include the following:
- Location of processing area (away from receptors);
 - sheeting of vehicles to and from site;
 - Misting sprays when processing wood in dry conditions;
 - Good housekeeping (reduction of dusty materials on surfaces).
- 3.15 A Dust Management and Mitigation scheme will be finalised and will be adopted prior to works being commenced for the Berth 31 Development. This will be focussed on the mitigation of impacts to control dust emissions. Furthermore, the site will be regulated by National Resources Wales for issues including dust.
- 3.16 In conclusion,:
- There is considered to be a low likelihood of an exceedance of the AQO's for PM10 and PM2.5 given the low background concentrations. Site workers would be protected by HSE requirements.
 - Results from the disamenity (deposited) dust assessment indicate that the likely effects at considered human receptors would be 'not significant' at all receptor locations.

- The impacts on ecological sites and heritage sites would also be 'not significant' due to the absence of sensitive sites close to the proposed Berth 31 development.
- The assessment of vehicular emissions has not identified any adverse impacts associated with the Development Proposals on the basis that there would not be significant additional HDV movements above the daily HDV movement IAQM / EPUK screening threshold.

3.17 Taking into account the proposed dust control measures, the likelihood of any adverse effects on surrounding receptors associated with the Development Proposals is considered to be 'Not Significant'.

3.18 For the above reasons it is considered that the Development Proposals will not conflict with Planning Policy Wales or Local Planning Policy such as LDP Policy MD7 or SP8, MD2 and MD20.

4 Noise

- 4.1 The noise and vibration chapter of this Environmental Impact Assessment (EIA) addresses the potential noise and vibration effects of the of the proposed change of use in terms of the closest noise sensitive receptors. Operational noise associated with the proposed wood processing facility has the potential to cause impact on existing residential dwellings to the south-west of the site and also at the site to the north at Ffordd y Mileniwm which has outline planning consent for housing.
- 4.2 Background noise surveys and detailed acoustic modelling of the proposals have been undertaken. The assessment has been undertaken with consideration to all relevant and up to date government policies and industry standards. Noise generated by the proposal is known from comparable operations and library information.
- 4.3 The modelling has demonstrated that that the noise impact of the proposals, when context is taken into account will be low. A noise management plan has been produced to ensure that the environmental noise emission from the site is as low as possible at all times.

5 Surface Water and Flood Risk

- 5.1 The marine and hydrological regimes within the application area and its immediate locale have been assessed with reference to information held by the BGS, Natural Resources Wales, the Lead Local Flood Authority and others, and the consideration of site specific investigations and reports.
- 5.2 A Flood Consequences Assessment has been completed which confirms the application area to be partially affected by tidal flooding. The principal environmental effects identified for the proposed development comprise potential increased risk of tidal and surface water flooding and detrimental impacts to water quality.
- 5.3 The potential impacts of the proposed development on the marine and hydrological environments have been identified and assessed, and where appropriate, mitigation measures have been accommodated into the design to reduce identified risks to flood risk and / or water quality at the site and within downstream receptors throughout the anticipated development lifetime, in accordance with TAN-15.
- 5.4 Management measures are proposed to further reduce those identified residual risks to / from flooding and water quality which cannot be borne out by design. All aspects of development would be undertaken in accordance with best practice guidance.
- 5.5 With respect to the marine and hydrological environments, including consideration of flood risk and water quality, and accounting for the proposed mitigation measures, no significant residual impacts would arise from the proposed development.

6 Landscape and Visual

- 6.1 The 4.25ha planning application area occupies part of the Barry Docks estate. Although vacant, until recently it was in use in part as a metals recycling facility and in part as a wood recycling facility. The site is accessed off Wimborne Road, which is the main access to the docks and which links directly to Fford y Mileniwm, the town of Barry's eastern bypass and distributor road. The site is bounded on the northwest and southwest by an existing wooded screen bund, up to 8m in height, and on the southeast by the open dock.
- 6.2 Most of the setting to the Site area is urban, predominantly industrial, with various dockside operations and other industrial operations together with large areas of open, unused land and the open water of the docks. The extensive area of residential built form lies on rising ground to the north. The landscape of the development proposal site is judged to be of low value and the surrounding landscape of the study area to be low to medium value.
- 6.3 The sensitivity of the Barry townscape character is judged to be low and the magnitude of change during operations and into the foreseeable future is medium in scale and mostly permanent. The overall landscape effect on character is judged to be negligible adverse at all stages.
- 6.4 The effects on the fabric of the landscape and on rights of way within the setting are also assessed. The sensitivity of these aspects is judged to be medium/low and the magnitude of change is medium in scale and mostly permanent. The overall effect on the landscape fabric and rights of way is also judged to be negligible adverse at all stages. No cumulative landscape effects are predicted.
- 6.5 19 viewpoints are assessed to determine the visibility of the works from prominent locations, mostly on higher ground. 12 viewpoints are chosen looking in towards the Site and 7 looking outwards to check the extents of visibility. Visual effects of the development are predicted to range from minor to negligible adverse at all stages.

- 6.6 No adverse visual effects are predicted to be significant at any stage due to: the wooded bund located around much of the northern perimeter of the site, the industrial setting that diminishes receptor sensitivity and the small degree of visual change to what is already an industrial port-side yard. A minor adverse level of additional visual effect may be experienced for new residents in upper storeys of a nearby consented, yet unbuilt housing development. No cumulative visual effects are predicted.

7 Transport

- 7.1 The proposed development is expected to add an additional 154 daily vehicle movements (124 HGV and 30 cars) to the existing flows. The site has an existing access from Wimborne Road that is a private Docks Road. An analysis has been done to demonstrate that the site access and internal layout can accommodate HGV movements as shown on the Swept Path Analysis drawing.
- 7.2 A study of possible HGV routes from and to the site was carried out by the project transport consultants. The anticipated route for the transport of the wood product to and from the proposed development by HGVs have been identified. The HGVs will be routed on two main routes and both routes considered are acceptable for use by HGVs. The first (Route A) from the site to the M4 Motorway and the second from the site to the A48.
- 7.3 Route A is approximately 14 km with HGVs travelling via: Wimborne Road - Ffordd Y Mileniwm - A4055 (Cardiff Road) - A4231 (Barry Docks Link Road) - A4050 (Port Road) - A4232 and the M4. Route B is approximately 13 km with HGVs travelling via Wimborne Road - Ffordd Y Mileniwm - A4055 Harbour Road - A4050 - B4266 Pontypridd Road - A4226 and the A48.
- 7.4 The impact of the development traffic on all traffic is insignificant.
- 7.5 Road safety has also been assessed and it is concluded that there will be no material change in road safety. No mitigation measures are required in relation to the proposals. A full Traffic Impact Assessment has been prepared and forms part of the Environmental Statement.

8 Population and Human Health

- 8.1 For each environmental topic assessed in this ES it has been concluded that the impacts of the development can be controlled satisfactorily without unacceptable detriment to the local community or environment. The general population will not be unacceptably impacted and there are no health issues that would arise. Further consideration has been given using Department of Health's Screening Exercise for Health Impact Assessment and the outcome of the screening is that there is no identified likely health impact arising.
- 8.2 The use of dockside locations for similar types activities would be expected by local residents and has been on-going for many decades in various forms. The use for wood recycling, supported by this ES, is therefore not unexpected or unprecedented to the local community, the history of the site and its proposed use are similar.
- 8.3 Creating a new facility has local economic benefits which in turn benefits the wider community, enhancing local economic development. It offers employment both directly for those working in the recycling site or the transport system and indirectly in other industries in the supply chain or that support the workforce.
- 8.4 There is significant weight placed on the need to support economic growth and productivity through the planning system and planning decisions should enable the sustainable growth. New development by an established business will have a positive effect on economic growth.
- 8.5 The development proposal will ensure that a facility is provided to meet the need to recycle waste, something that is required to support the sustainable waste management options for the area.

9 Alternatives considered by the Operator

- 9.1 The consideration of alternative sites has not been an extensive factor. The end users of the product created are best served by the operations being on a dockside with access to shipping. South West Wood Products have maintained dialogue with Associated British Ports (ABP) over a period of time to establish where and when suitable sites in their portfolio would be available.
- 9.2 In terms of the development design, the constraints of the site influence primarily where the processing area is located, and the rest of the concrete surfacing required to provide woodpile storage at peak times. Alternative arrangements could have given rise to greater effects but the layout proposed has been considered to provide the optimum one for the reduction of effects.
- 9.3 The technology involved in processing the waste wood for re-use has been adopted from other successful operations and therefore will also be used here. Naturally new technologies are investigated and adopted if suitable over time.
- 9.4 In terms of alternatives to recycling wood, whilst the government and society wish to produce less waste, it is still arising and therefore waste wood need to dealt with and if it is not recycled it can only be disposed of, with landfill being the first disposal option and clearly an undesirable alternative. This facility will create a waste wood product that can either be recovered by producing energy, be recycled by use in particle board or similar or replace primary product as chipped wood for cattle bedding.

10 Climate Change

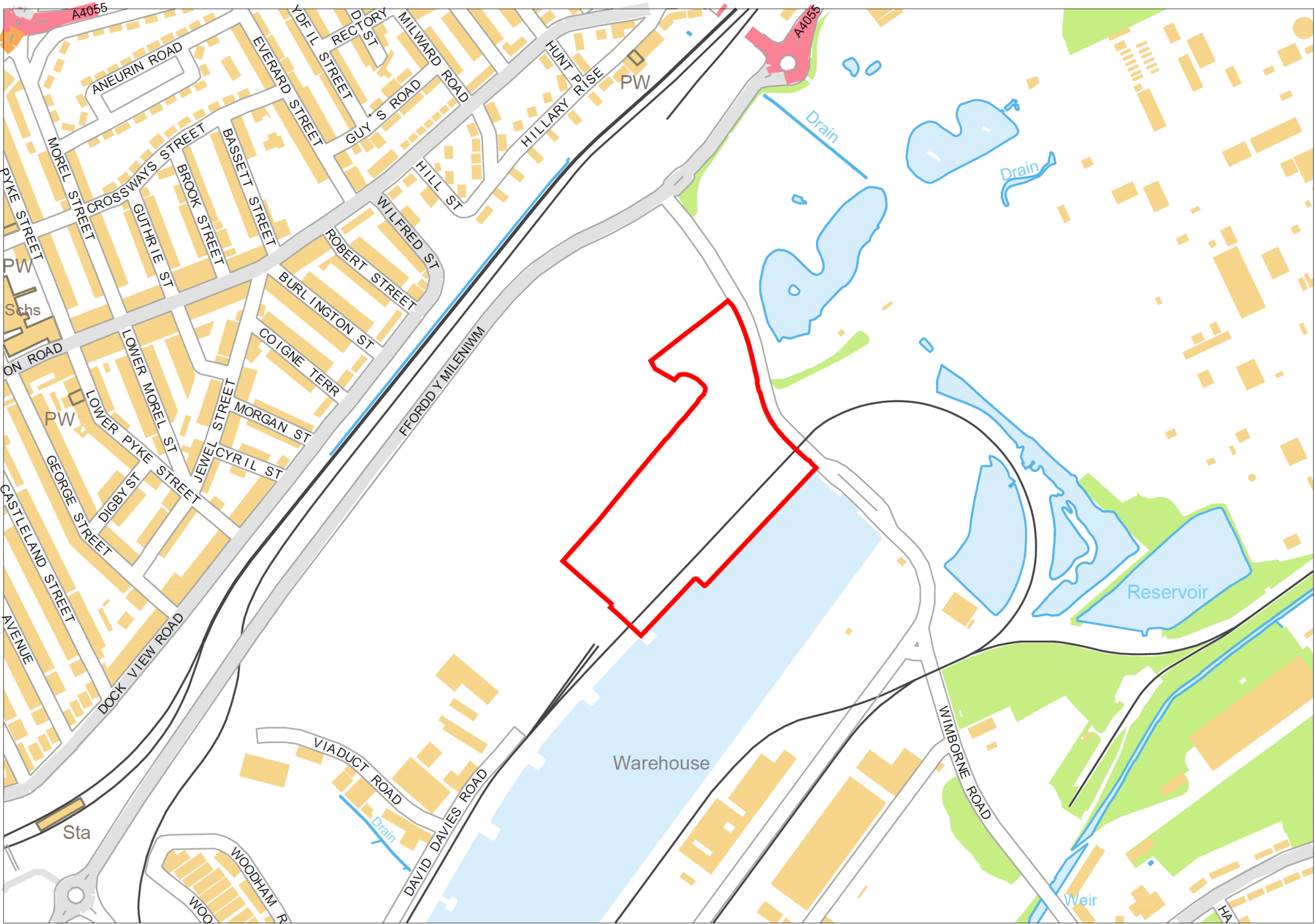
- 10.1 Recycling wood is at the core of a sustainable option for managing wood waste. It reduces global demand for wood, which helps conserve forests, which act as natural carbon sinks, absorbing carbon dioxide from the atmosphere and storing it in their biomass. Recycling also prevents the wood going to landfill where it would break down and contribute to increasing greenhouse gases.
- 10.2 In this development the recycling activities are co-located with the dock, meaning reducing handling and transportation of the wood. Bulk transport by ship is a lower CO2 transport option than HGV, therefore a better option for climate change.
- 10.3 In terms of impacts arising as a result of continuing climate change, flooding is considered to be one of the clear indications of the adverse impacts of climate change. Flooding has been considered in detail in the Flood Risk Assessment (FRA) and mitigated.
- 10.4 The FRA has considered the sources of flooding and assessed the operations in terms of flood impacts. This included the anticipated effects of climate change. Similarly the consideration of surface water management includes a climate change allowance, such that the design of the site is able to cope with potential increasing rainfalls over time.
- 10.5 Specific to this development, emissions could arise from use of the plant and machinery on site, therefore a number of measures are adopted as standard working practice, for example:
- All mobile plant operates to the latest European standards in terms of emissions (also Euro VI)
 - All processing plant will be electrically driven where feasible.
 - All plant and equipment will be regularly serviced to ensure operating as intended therefore with the lowest possible emissions.
 - No other vulnerabilities to the impacts of climate change have been considered significant in relation to the development and its location.

11 Conclusion

11.1 The Environmental Impact Assessment presented in the Environmental Statement is a comprehensive assessment produced by independent, specialist technical consultants to examine the likely and significant impacts of the proposal to utilise Berth 31 as a wood recycling facility with export by HGV and by ship. Where necessary the ES proposes the appropriate mitigation, both through site layout and in the form of dust and noise management plans. When the mitigation is considered the overall impacts can be summarised:

- Results from the disamenity (deposited) dust assessment indicate that the likely effects at considered human receptors, ecological and heritage sites would be 'not significant'. at all receptor locations. The assessment of vehicular emissions has not identified any adverse impacts.
- The modelling has demonstrated that the noise impact of the proposals, when context and mitigation is taken into account will be low.
- Water management related to the proposed development is considered to be sufficient to reduce the potential for significant negative effects on as containment is proposed. Consideration and mitigation has also been included with respect to the risk of flooding from the dock.. The proposal does not pose a risk to flooding from the dock.
- The overall landscape effect on character is judged to be negligible adverse at all stages. The overall effect on the landscape fabric and rights of way is also judged to be negligible adverse, but no cumulative landscape effects are predicted. Visual effects of the development are predicted to range from minor to negligible adverse. No cumulative visual effects are predicted.
- The impact of the development traffic on all traffic is insignificant. Road safety has also been assessed and it is concluded that there will be no material change in road safety.

The overall conclusion of the assessment of environmental impact is that there is no likelihood of unacceptable significant negative environmental impact from the use of Berth 31 in the way proposed. All developments give rise to some degree of environmental effects; however, the requirement of national and local planning policy is to ensure that effects are minimised and maintained within a



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0 100 200
SCALE BAR = 200M

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Notes:
1. This drawing should only be used for its original intended purpose.
2. Critical dimensions, levels, clearances etc. should be checked on site before construction work commences.
3. Dimensions in metres unless otherwise stated.

Application boundary



Revision	Comment	Date
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 South West Wood Products Ltd Unit A4 Pacific Road, Compass Business Park, Cardiff CF24 5HL		
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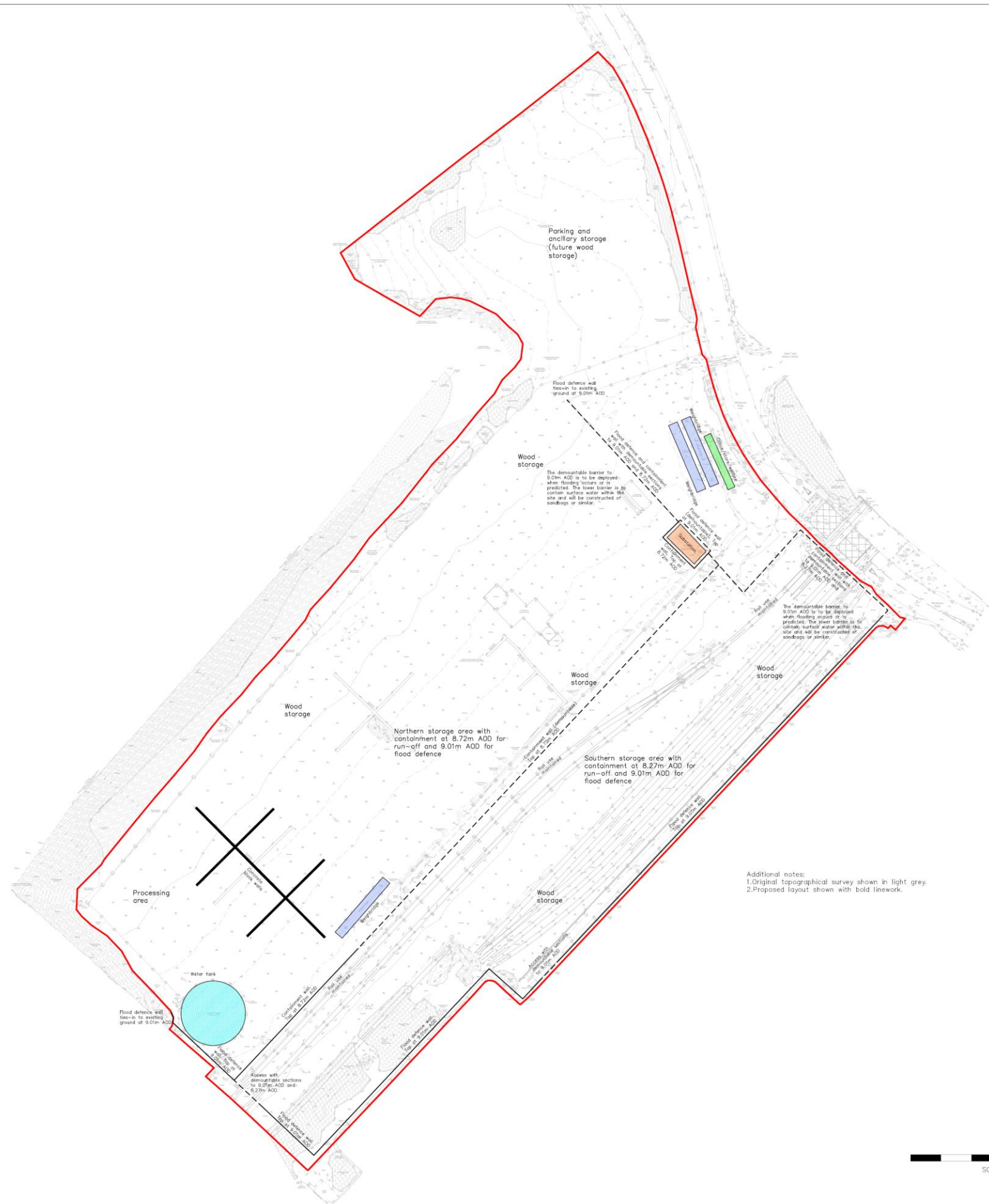
Project BARRY DOCK WOOD DEPOT		
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Drawing Title LOCATION PLAN		
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Drawn Date 22/06/24	Surveyed Date
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Scale 1:2500	(AT A1)
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Drawing Number LMM/072/05	Rev —
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3. Dimensions in metres unless otherwise stated.

Application boundary



Additional notes:
1. Original topographical survey shown in light grey.
2. Proposed layout shown with bold linework.

SCALE BAR = 70M

Revision Comment Date
B Flood defence wall added 18 Aug 2024
A Block walls amended 02 May 2024

South West Wood Products Ltd
Unit A4 Pacific Road, Compass Business Park, Cardiff CF24 5NL

Project
BARRY DOCK
WOOD DEPOT

Drawing Title
SITE LAYOUT

Drawn Date 28/04/24 Surveyed Date

Scale 1:500 (AT A0)

Drawing Number LMM/072/02 Rev B