PRELIMINARY ECOLOGICAL APPRAISAL

Land South of Rover Way, Cardiff

Prepared for: Harsco Metals Group Limited

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CONTENTS

DOCUMENT REFERENCES

TABLES

FIGURES

APPENDICES

Drawing 1: Phase 1 Habitat Survey
Drawing 2: Location Plan of Designated Wildlife Sites
Drawing 3: Development Proposals Plan

Executive Summary

A Preliminary Ecological Appraisal (PEA) has been undertaken to inform the ecological appraisal and planning process in respect of the proposed development of an asphalt batching plant at a metals recycling facility to the south of Rover Way, Cardiff. The proposed development would involve the removal of existing concrete hard-standing, its replacement with a superior concrete foundation, and the installation of the asphalt batching plant.

This report assesses the potential for direct and indirect ecological impact to occur, within the context of the scope of the PEA, and is based upon details of the development proposals provided to SLR Consulting Ltd (SLR) by Harsco Metals Group Limited. A plan of the development proposals is included with this report (Drawing 3). It is understood that whilst minor amendments to these proposals are possible, the fundamental elements such as land-take, footprint, and overall layout should not vary significantly.

The development footprint comprises habitats of no significant ecological or biodiversity importance, dominated by hard-standing, with pools of ephemeral standing water. The proposed development is considered to have no direct significant negative impacts on biodiversity or ecology.

However, the Severn Estuary is located approximately 230m to the east and south of the application site. The Severn Estuary supports numerous statutory wildlife designations, including Special Protection Area, Special Area of Conservation, Ramsar, and Site of Special Scientific Interest. The construction and operation of the proposed development could potentially have significant negative indirect impacts on the Severn Estuary through construction and/or operational noise or air quality impacts, for example, construction noise disturbing overwintering waterfowl. These potential impacts should be investigated through specialist acoustic and air quality impact assessments, and the findings used to determine the potential impact of the proposed development on the qualifying features of the Severn Estuary wildlife sites. Should negative impacts be identified, then a programme of appropriate mitigation to eliminate or minimise any negative impact should be devised.

As the Severn Estuary supports international level designated wildlife sites that are afforded protection under the Habitats Regulations, and the potential for negative impact has been identified, it will be necessary to complete a shadow Habitats Regulations Assessment to enable the competent authority to undertake an Appropriate Assessment.

Appropriate and proportionate recommendations for ecological enhancement have been made with respect to ensuring the proposed development is compliant with national and local planning policy and best practice.

1.0 Introduction

In March 2019, Harsco Metals Group commissioned SLR Consulting Limited (SLR) to undertake a Preliminary Ecological Appraisal (PEA)[1] of a proposed development site on land to the south of Rover Way, Cardiff, CF24 5XG. The application site covers approximately 1.15 hectares (ha) and is centred on Ordnance Survey Grid Reference ST 21485 76274. The application site and survey boundaries can be seen on Drawing 1.

A PEA has been requested to inform the scoping and planning process in respect of any potential ecological impacts or constraints from the proposed development of an asphalt processing and batching plant at the application site. Further details of the proposed development are provided below in Section 1.1.

Within the context of the scope of a PEA, this report assesses the potential for ecological impact to occur as a result of the proposed development and identifies any additional specialist studies that may be required to enable the extent and significance of any identified potential impacts to be determined.

The report is produced based upon details of the development proposals provided to SLR by the client. The concept development proposals can be seen in Drawing 3. It is understood that whilst minor amendments to these proposals are possible, the fundamental elements such as land-take, footprint, and overall layout should not vary significantly.

This report provides details of the findings of a desk top study and an extended Phase 1 Habitat Survey undertaken at the application site in March 2019.

1.1 Details of Proposed Development

Details of the proposed development can be found in the planning statement. However, in summary the application relates to the installation of an Asphalt Batching Plant with associated infrastructure and works. Drawing 3 shows the proposed plant. The proposed Asphalt Batching Plant and associated materials storage area will be in keeping with the existing use of the Celsa Steel site and its designation within the Cardiff Local Development Plan (allocation EC1.3). The proposed Asphalt Batching Plant will fall within a Class B2 (General Industrial) use as defined within the Town and Country Planning (Use Classes) Order 1987 (as amended).

The plant will be located within the central confines of the red line site area, with an area to the west utilised for vehicular access, fill and departure via entry and exit weighbridges. Within the eastern confines of the site, there will be a total of five bunded materials storage bays located along the northern and southern boundaries, thereby leaving a central area for the manoeuvring of vehicles.

There is an existing concrete pad on site and this will be utilised as part of the proposals. This will be upgraded where necessary to support the weight of the Asphalt Batching Plant, weighbridges and associated HGVs. The plant will also be anchored to this pad by way of minor piles and anchor points (*i.e*. tensile cables to a fixed point).

1.2 Study Area

The study area comprises all the land within the construction footprint of the proposed development[2] and a minimum of a 30m radius from the site boundary where this was accessible.

The desk top data study sought records for species within 1km of the application site and designated wildlife a sites within 10km. In light of the development proposals and the character of the surrounding landscape it was considered that there was a negligible risk of any significant impacts to these receptors arising beyond these respective ranges.

[2] As defined by the "red line" boundary provided to SLR by the client.

1.3 Scope of Ecological Works

SLR was instructed to undertake:

- a baseline desk study, including obtaining data from local biological records holders;
- an extended Phase 1 Habitat Survey including:
    - recording and mapping of habitat types and predominant species present;
    - conduct a risk assessment for the potential presence of other legally protected or otherwise notable species (bats, reptiles etc.);
    - conduct a ground-based external assessment of any buildings and trees for potential bat roosting features (PRF); and
    - conduct a survey for invasive plant species (Japanese knotweed etc.)
- to identify the requirement for any further species or habitat-specific surveys that may be required in order to ensure compliance with wildlife legislation, planning policy or to fully categorise the potential for ecological impact on valuable ecological receptors; and
- to make recommendations for mitigation and ecological enhancement in accordance with planning policy.

1.4 Purpose of this Report

This report presents the findings of the Preliminary Ecological Appraisal.

The report seeks to:

- establish the baseline conditions and determine the importance of ecological features present (or those that could be present), as far as is possible;
- to identify potential ecological constraints to the proposed development and make initial recommendations to avoid potentially significant effects on important ecological features, where possible;
- to identify potential requirements for mitigation, where possible, including mitigation measures that will be required and those that may be required (depending on results of further surveys or final scheme design);
- to identify any additional studies that may be required to complete the above;
- to identify opportunities for biodiversity enhancements as part of the project in line with planning policy and best practice; and
- to demonstrate the compliance of the proposals in relation to planning policies relevant to biodiversity and nature conservation.

2.0 Relevant Legislation and Planning Policy

2.1 Legislation

A summary of legislation relevant to (onshore) biodiversity in England and Wales is provided below. Note that the summary provided here is intended for general guidance only and the original legislation should be consulted for definitive information.

2.1.1 Conservation of Habitats and Species Regulations 2017

The Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations) consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments. The Regulations transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), into national law. Under the Habitats Regulations it is an offence to deliberately capture, kill or disturb wild animals listed under Schedule 2 of the Regulations. It is also an offence to damage or destroy a breeding site or resting place of such an animal (even if the animal is not present at the time).

2.1.2 Wildlife & Countryside Act 1981

The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way (CRoW) Act 2000 and the Natural Environment and Rural Communities (NERC) Act 2006, consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the Conservation of Wild Birds (Birds Directive), making it an offence to:

- Intentionally kill, injure or take any wild bird or their eggs or nests (with certain exceptions) and disturb any bird species listed under Schedule 1 to the Act, or its dependent young while it is nesting;
- Intentionally kill, injure or take any wild animal listed under Schedule 5 to the Act;
- intentionally or recklessly damage, destroy or obstruct any place used for shelter or protection by any wild animal listed under Schedule 5 to the Act;
- intentionally or recklessly disturb certain Schedule 5 animal species while they occupy a place used for shelter or protection;
- Pick or uproot any wild plant listed under Schedule 8 of the Act; or
- Plant or cause to grow in the wild any plant species listed under Schedule 9 of the Act.

2.1.3 Protection of Badgers Act 1992

The Protection of Badgers Act 1992 makes it illegal to kill, injure or take a badger or to intentionally or recklessly interfere with a badger sett. Sett interference includes disturbing badgers whilst they are occupying a sett or obstructing access to it.

2.1.4 Natural Environment & Rural Communities (NERC) Act 2006

Section 40 of the NERC Act 2006 places a duty on public authorities to have regard to the purpose of conserving biodiversity to have due regard for biodiversity and nature conservation during the course of their operations. Public authorities include government departments, local authorities and statutory undertakers.

Section 42 of the Act requires the publication of a list of habitats and species publish which are of principal importance for the purpose of conserving biodiversity. The Section 42 list is used to guide authorities in implementing their duty to have regard to the conservation of biodiversity.

Note that Sections 40 and 42 were superseded in Wales by the Environment (Wales) Act 2016 (see below).

2.1.5 Environment (Wales) Act 2016

The Environment (Wales) Act puts in place the legislation needed to plan and manage Wales' natural resources in a more proactive, sustainable and joined-up way. Part 1 Section 6 of the Act introduces a new biodiversity duty, which replaces and enhances the biodiversity duties set out in the NERC Act 2006 and requires public authorities to seek to maintain and enhance biodiversity in the exercise of their functions and in so doing promote the resilience of ecosystems.

Section 7 of the Act lists living organisms and types of habitat in Wales, considered to be of key significance to sustain and improve biodiversity in relation to Wales.

2.2 Relevant Planning Policy

2.2.1 National Planning Policy (Wales)

Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government. The primary objective of PPW is to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales. Section 6.4 of PPW relates to biodiversity and ecological networks.

Paragraph 6.4.3 of PPW states that:

"The planning system has a key role to play in helping to reverse the decline in biodiversity and increasing the resilience of ecosystems, at various scales, by ensuring appropriate mechanisms are in place to both protect against loss and to secure enhancement."

It goes on to state that:

"Development plan strategies, policies and development proposals must consider the need to:

- *support the conservation of biodiversity, in particular the conservation of wildlife and habitats;*
- *ensure action in Wales contributes to meeting international responsibilities and obligations for biodiversity and habitats;*
- *ensure statutorily and non-statutorily designated sites are properly protected and managed;*
- *safeguard protected and priority species and existing biodiversity assets from impacts which directly affect their nature conservation interests and compromise the resilience of ecological networks and the components which underpin them, such as water and soil, including peat; and*
- *secure enhancement of and improvements to ecosystem resilience by improving diversity, condition, extent and connectivity of ecological networks."*

Section 6.4 goes on to set out policy in respect of:

- The Biodiversity and Resilience of Ecosystems Duty, as set out in Section 6 of the Environment (Wales) Act 2016;
- Designated Sites, including:
    - Sites of Special Scientific Interest;
    - Special Protection Areas, Special Areas of Conservation and Ramsar Sites;
    - Proposed Special Areas of Conservation, Special Protection Areas and Ramsar sites; and
    - Non-statutory Designations.

- Protected Species; and
- Trees, Woodlands and Hedgerows.

PPW is supplemented by a series of Technical Advice Notes (TANs), Welsh Government Circulars, and policy clarification letters, which together with PPW provide the national planning policy framework for Wales. TAN 5 deals with Nature Conservation and Planning and states in paragraph 2.4:

"When considering policies and proposals in local development plans and when deciding planning applications that may affect nature conservation, local planning authorities should:

- *Pay particular attention to the principles of sustainable development, including respect for environmental limits, applying the precautionary principle, using scientific knowledge to aid decision making and taking account of the full range of costs and benefits in a long term perspective;*
- *Contribute to the protection and improvement of the environment, so as to improve the quality of life and protect local and global ecosystems, seeking to avoid irreversible harmful effects on the natural environment;*
- *Promote the conservation and enhancement of statutorily designated areas and undeveloped coast;*
- *Ensure that appropriate weight is attached to designated sites of international, national and local importance;*
- *Protect wildlife and natural features in the wider environment, with appropriate weight attached to priority habitats and species in Biodiversity Action Plans;*
- *Ensure that all material considerations are taken into account and decisions are informed by adequate information about the potential effects of development on nature conservation;*
- *Ensure that the range and population of protected species is sustained;*
- *Adopt a step-wise approach to avoid harm to nature conservation, minimise unavoidable harm by mitigation measures, offset residual harm by compensation measures and look for new opportunities to enhance nature conservation; where there may be significant harmful effects local planning authorities will need to be satisfied that any reasonable alternative sites that would result in less or no harm have been fully considered."*

2.2.2 Local

The Cardiff Adopted Local Development Plan, 2016

The Cardiff Adopted Local Development Plan (2016) policies of relevance to ecology and biodiversity at the application site. Key policies provide overarching guidelines that are supplemented by more detailed and specific policies:

Key Policy 5 Good Quality and Sustainable Design states that all new development will be required to be of a high quality, sustainable design and make a positive contribution to the creation of distinctive communities, part of which includes ensuring high levels of environmental sustainability and low impact.

Key Policy 16 Green Infrastructure states that proposed developments should demonstrate how green infrastructure has been considered and integrated into the proposals and that the development does not result in a loss of green infrastructure.

Environmental Policy 5: Designated Sites

This policy states that:

'Development will not be permitted that would cause unacceptable harm to sites of international or national nature conservation importance.

Development proposals that would affect locally designated sites of nature conservation and geological importance should maintain or enhance the nature conservation and/or geological importance of the designation. Where this is not the case and the need for the development outweighs the conservation importance of the site, it should be demonstrated that there is no satisfactory alternative location for the development which avoids nature conservation impacts, and compensation measures designed to ensure that there is no reduction in the overall nature conservation value of the area or feature.'

Environmental Policy 6: Ecological Networks and Features of Importance for Biodiversity

This policy states that:

'Development will only be permitted if it does not cause unacceptable harm

to:

i. *Landscape features of importance for wild flora and fauna, including wildlife corridors and 'stepping stones' which enable the dispersal and functioning of protected and priority species;*
ii. *Networks of importance for landscape or nature conservation.*

Particular priority will be given to the protection, enlargement, connectivity and management of the overall nature of semi natural habitats. Where this is not the case and the need for the development outweighs the nature conservation importance of the site, it should be demonstrated that there is no satisfactory alternative location for the development and compensatory provision will be made of comparable ecological value to that lost as a result of the development.'

Environmental Policy 7: Priority Habitats and Species

This policy states that:

'Development proposals that would have a significant adverse effect on the continued viability of habitats and species which are legally protected or which are identified as priorities in the UK or Local Biodiversity Action Plan

will only be permitted where:

i. *The need for development outweighs the nature conservation importance of the site;*
ii. *The developer demonstrates that there is no satisfactory alternative location for the development which avoids nature conservation impacts;*
and
iii. *Effective mitigation measures are provided by the developer.*

Where harm is unavoidable it should be minimised by effective mitigation to ensure that there is no reduction in the overall nature conservation value of the area. Where this is not possible compensation measures designed to conserve, enhance, manage and, where appropriate, restore natural habitats and species should be provided.'

Environmental Policy 8: Trees, woodlands and hedgerows

This policy states that:

'Development will not be permitted that would cause unacceptable harm to trees, woodlands and hedgerows of significant public amenity, natural or cultural heritage value, or that contribute significantly to mitigating the effects of climate change.'

3.0 Methodology

3.1 Desk Study

In March 2019, a desk study was undertaken for the site. The desk study included a review of the following sources of information:

- www.magic.defra.gov.uk for statutory designated sites, UK Priority Habitats and Ancient Woodland;
- https://www.cardiff.gov.uk/ENG/resident/Planning/Planning-Policy/Pages/default.aspx for local planning policies and site designations;
- South East Wales Biodiversity Records Centre (SEWBReC, the local biological records centre) data request for protected and notable species records and non-statutory designated wildlife sites within 2km, and statutory designated wildlife sites within 10km, in accordance with Environment Agency guidance; and
- The Cardiff planning portal was also searched for recent planning applications close to the application site and any relevant ecological information was reviewed.

3.2 Extended Phase 1 Habitat Survey

The Study Area was subject to survey on 20th March 2019 using methodology based on the Phase 1 Habitat Survey methodology[3], extended to include preliminary checks and surveys for notable, protected or rare species of both flora and fauna, and modified to suit smaller scale urban sites, in accordance with published guidance. Particular features of interest were recorded on the field map using target notes, the locations of which are shown in Drawing 1 together with the survey extents.

A Phase 1 Habitat Survey provides an inventory of the basic habitat types present and allows identification of areas of greater potential which may require more detailed botanical survey. This level of survey includes the documentation of habitats to a recognised standard, but also includes the recording of field evidence indicating the presence or potential presence of species that could constitute a material consideration in planning terms, such as protected or notable plant or faunal species. Notes of principle habitat types, supported by photographs, were recorded.

Whilst not a full botanical or protected species survey, the Extended Phase 1 method of survey enables experienced ecologists to obtain an understanding of the ecology of a site such that it is possible either:

- to confirm the conservation significance of the site and assess the potential for impacts on habitats or species likely to represent a material consideration in planning terms, or
- to establish the scope and extent of any additional specialist ecological surveys that will be required before such confirmation can be made.

In addition, the presence of plant species included within Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) was searched for during the survey. Plants included within the schedule are considered derogated pest species that are pernicious or injurious, such as Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*) and giant hogweed (*Heracleum mantegazzianum*). It is an offence under the Act to plant or cause the spread of these species in the wild.

[3] Joint Nature Conservation Committee (2010) *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit* (Revised reprint). Joint Nature Conservancy Council, Peterborough.

3.3 Personnel

The extended Phase 1 Habitat survey was undertaken on the 20th March 2019 by Jula Humphries, Project Ecologist. Jula has over a year's experience at conducting fieldwork and producing reports for baseline ecological surveys and is considered to be suitably qualified to undertake the work completed.

Survey design, management and reporting has been subject to review by Martyn Macefield, an Associate Consultant at SLR. Martyn has over seventeen years' experience in ecological consultancy and the production of ecological appraisal and ecological impact assessment reports. He is a full Member of the Chartered Institute of Ecology and Environmental Management.

3.4 Collation of Baseline Data – Constraints

Desk study data is unlikely to be exhaustive, especially in respect of species, and is intended mainly to set a context for the study. It is therefore possible that protected species not identified during the data search occur within the vicinity of the site.

The extended Phase 1 survey was undertaken in March, which is considered to be an acceptable time for conducting vegetation surveys to the degree required for Phase 1 Habitat survey. It is considered that sufficient data was collected to enable the characterisations of the habitats to the degree required to support a Preliminary Ecological Appraisal.

The survey did not seek to identify all plant species within the study area and as such, this report does not provide an exhaustive list of flora found within the study area. However, it is considered that the survey results are representative of the habitats and flora within the survey site and include the dominant and characteristic species.

Whilst access was possible to all areas within the proposed construction footprint, it was not possible to access land immediately outside the construction footprint to the south, within the adjacent moto-cross race track. Viewpoints across this area were taken from the site boundary, where possible, and these were supplemented through review of an ecological appraisal report by Sturgess Ecology[4], produced in 2017 and available in the public domain. It is therefore considered that the restriction of access to the land immediately outside the southern construction boundary has not significantly constrained the findings of this report.

With respect to the surveys for protected species, the investigation was based upon the suitability of habitats and field signs. The lack of evidence of a protected species does not necessarily preclude their colonising the site at a later date. An ecological study provides only a "snapshot" of the conditions prevailing at the time of survey.

Additional survey of the application site is considered highly unlikely to materially alter the conclusion of this report, or the recommendations made.

[4] Sturgess Ecology (August 2017) Ecology Survey, Land at Rover Way, Cardiff. Sturgess Ecology, 12 Lon Ysgubor, Cardiff, CF14 6SG.

4.0 Ecological Baseline

This section provides a general overview of the existing ecological baseline conditions within the proposed development site and the area immediately surrounding it.

4.1 Designated Sites for Nature Conservation

A data search for statutorily designated sites within 10km of the application site, and non-statutorily designated wildlife sites within 1km of the application site, was conducted and the results are summarised below.

4.1.1 Statutory Designated Sites

The application site itself does not support any statutory designated sites for nature conservation.

The Severn Estuary is located approximately 230m to the south and east of the application site boundary. At this location the Severn Estuary supports multiple overlapping statutory wildlife site designations including:

- Special Area of Protection (SPA) (Site reference UK9015022);
- Special Area of Conservation (SAC) (Site reference UK0013030);
- Ramsar (Site reference UK11081); and
- Site of Special Scientific Interest (SSSI).

The boundaries of these sites in relation to the application site can be seen in Drawing 2. Whilst there is no risk of direct negative impact on these designated sites, the potential for indirect impacts exists, for example from construction or operational noise, or emissions from the proposed asphalt batching plant. Descriptions of each of the statutory designated wildlife sites are provided below:

The Severn Estuary SPA UK9015022

The Severn Estuary SPA covers approximately 25,000 ha and is described on the JNCC website as follows:

"The Severn Estuary is located between Wales and England in south-west Britain. It is a large estuary with extensive intertidal mud-flats and sand-flats, rocky platforms and islands. Saltmarsh fringes the coast backed by grazing marsh with freshwater ditches and occasional brackish ditches. The seabed is rock and gravel with sub-tidal sandbanks. The estuary's classic funnel shape, unique in the UK, is a factor causing the Severn to have the second- highest tidal range in the world (after the Bay of Fundy in Canada). This tidal regime results in plant and animal communities typical of the extreme physical conditions of liquid mud and tide- swept sand and rock. The species-poor invertebrate community includes high densities of ragworms, lugworms and other invertebrates forming an important food source for passage and wintering waders. A further consequence of the large tidal range is an extensive intertidal zone, one of the largest in the UK. The site is of importance during the spring and autumn migration periods for waders moving up the west coast of Britain, as well as in winter for large numbers of waterbirds, especially swans, ducks and waders."

The SPA qualifying features include the following populations of European importance:

- Overwintering Bewick's Swans: 280 individuals, representing at least 4.0% of the wintering population in Great Britain (5 year peak mean 1991/2 - 1995/6);
- Overwintering Curlew: 3,903 individuals representing at least 1.1% of the wintering Europe - breeding population (5 year peak mean 1991/2 - 1995/6);
- Overwintering Dunlin: 44,624 individuals representing at least 3.2% of the wintering Northern Siberia/Europe/Western Africa population (5 year peak mean 1991/2 - 1995/6);

- Overwintering Pintail: 599 individuals representing at least 1.0% of the wintering North-western Europe population (5 year peak mean 1991/2 - 1995/6);
- Overwintering Redshank: 2,330 individuals representing at least 1.6% of the wintering Eastern Atlantic - wintering population (5 year peak mean 1991/2 - 1995/6);
- Overwintering Shelduck: 3,330 individuals representing at least 1.1% of the wintering North-western Europe population (5 year peak mean 1991/2 - 1995/6); and
- Ringed Plover, on passage: 655 individuals representing at least 1.3% of the Europe/Northern Africa - wintering population (5 year peak mean 1991/2 - 1995/6).

The estuary also regularly supports at least 20,000 waterfowl which meets the SPA qualifying criterion of being a wetland of international importance. This is summarised as follows:

'Over winter, the area regularly supports 93,986 individual waterfowl (5 year peak mean 1991/2 - 1995/6) including: gadwall, shelduck, pintail, dunlin, curlew, redshank, Bewick's Swan, wigeon, lapwing, teal, mallard, shoveler, pochard, tufted duck, grey plover, white-fronted goose and whimbrel.'

The Severn Estuary SAC UK0013030

The Severn Estuary SAC is described as extending to 73,715.40 ha, '*lying on the south west coast of Britain at the mouth of four major rivers (the Severn, Wye, Usk, and Avon). The immense tidal range (the second highest in the world) and classic funnel shape make the Severn Estuary unique in Britain and very rare worldwide. This tidal range creates strong tidal streams and high turbidity, producing communities characteristic of the extreme physical conditions of liquid mud and tide-swept sand and rocks. The Estuary includes a wide diversity of habitats including Sandbanks which are slightly covered by sea water all the time, Mudflats and sandflats not covered by sea water at low tide, Atlantic salt meadows, and Reefs, which are identified as Annex I habitat types in their own right'.*

The qualifying habitats and features for the SAC are listed as follows:

Qualifying habitats: The site is designated under Article 4(4) of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:

- Estuaries;
- Sandbanks which are slightly covered by sea water all the time (Subtidal sandbanks);
- Mudflats and sandflats not covered by seawater at low tide (Intertidal mudflats and sandflats);
- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*); and
- Reefs.

Qualifying species: The site is designated under Article 4(4) of the Directive (92/43/EEC) as it hosts the following species listed in Annex II:

- Sea Lamprey (*Petromyzon marinus*);
- River Lamprey (*Lampetra fluviatilis*); and
- Twaite Shad (*Alosa fallax*).

The Severn Estuary Ramsar site UK11081

The Severn Estuary is designated as a Ramsar site under the International Convention on Wetlands of International Importance, particularly for its importance as waterfowl habitat. Qualifying features for designation include:

- Criterion 1 - Immense tidal range, the second largest in the world, which affects both the physical environment and the biological communities;
- Criterion 3 - The presence of unusual estuarine communities, with reduced species diversity and high productivity;
- Criterion 4 - Important for the run of migratory fish, including salmon, sea trout, sea lamprey, river lamprey, allis shad, twaite shad and eel;
- Criterion 8 - The fish assemblage of the whole estuarine and river system is one of the most diverse in Britain, with over 110 species recorded;
- Criterion 6 - regularly supports 1% or more of the individuals in a population of one species or subspecies of waterbird (i.e. internationally important), including: Bewick's swan, European white-fronted goose, dunlin, redshank, shelduck and gadwall;
- Criterion 6 - Regularly supporting internationally important populations of ringed plover (spring/autumn), Eurasian teal (winter), northern pintail (winter), and lesser black-backed gull (breeding);
- Criterion 5 – Supports an assemblage of international importance. The 1998/9 to 2002/3 five year peak mean was 70,919 waterfowl; and
- Nationally important wintering populations of: wigeon, teal, pintail, pochard, tufted duck, ringed plover, grey plover, curlew and spotted redshank. Also, nationally important breeding population of lesser black-backed gull.

Severn Estuary SSSI

The Severn Estuary SSSI covers approximately 15,000 ha of foreshore and intertidal habitat and forms a network which includes the Upper Severn Estuary SSSI and Bridgewater Bay SSSI. The features for which the SSSI has been designated are captured by the protections listed above for the SPA, SAC and Ramsar designations.

4.1.2 Non-statutory Sites for Nature Conservation

The application site itself does not support any non-statutory designation for nature conservation.

Two non-statutory designated Sites of Importance for Nature Conservation (SINCs) occur within a 1km radius of the site, and these are described within Table 1 below. Descriptions have been taken from data provided by South-East Wales Biodiversity Records Centre (SEWBREC).

Table 1:
Non-statutory designated sites within a 1km radius of the Application Site

Name	Grade	Description	Distance and Direction from the Site
Pengam Moors	Site of Importance for Nature Conservation (SINC)	Pengam Moors SINC occupies the former site of Cardiff airport, and later the Rover Car Works. Following demolition, the site has reverted to saline, marshy conditions. It includes a network of drainage channels with good emergent aquatic vegetation. It also includes areas of bare ground and scrub. The SINC supports a number of locally rare plants including sea clover, brackish water	Approximately 400m to the north of the site.

Name	Grade	Description	Distance and Direction from the Site
		crowfoot and water whorl-grass. It is also considered important for water fowl and wintering birds of prey.	
Tidal Sidings	Site of Importance for Nature Conservation (SINC)	Tidal Sidings supports a mix of flower-rich neutral and calcareous grassland and scrub.	Approximately 850m to the south - west of the site.

4.2 Site Habitats

The application site and survey area are located in the south-east of Cardiff, within an area historically dominated by heavy industry. The application site lies entirely within an actively used metal recycling facility. To the north and west of the metal recycling facility lies Rover Way, beyond which lies the Celsa Manufacturing industrial works; to the east of the wider site lies a moto-cross motorbiking track built on a former waste tip, beyond which lies the Severn Estuary, and to the south of the metals recycling facility lies a Tide Fields Road and a large water treatment works. The surrounding landscape character is predominantly industrial

The application site extends to approximately 1.15 hectares (ha). The boundaries of the application site and survey area can be seen in Drawing 1, together with the results of the Phase 1 Habitat survey. The application site is dominated by hard-standing with two large pools of ephemeral standing water.

The wider survey area outside the application site, which extended into the surrounding metal recycling facility, is also dominated by hard-standing, with small industrial facility buildings and small areas of semi-improved grassland, dense scrub with scattered trees, and tall weedy vegetation.

All the habitats within the application site boundary will require clearance to permit development.

A short description of each habitat type within the application site is provided below.

4.2.1 Hard-standing

The application site is dominated by hard-standing, as is the wider metals recycling facility (Target Note 1, Drawing 1). The southern section of the survey area, including the proposed construction footprint comprises concrete slabs (Photograph 1). Some of these are cracked and partially broken in places, and it is understood that the hard-standing would require replacement to form a new foundation suitable for the proposed asphalt plant. The northern section of the survey area is not paved but comprises hard-packed ground with some aggregate (Photograph 2).

Photo 1: A photo of the southern section of the site, showing the concrete hard-standing within the application area (image adjusted for contrast).

Photo 2: A photo of the northern section of the site, outside the application site showing the informally paved surfaced (image adjusted for contrast).

The hard-standing within the application site is predominantly sound but where cracks and degraded areas are present, or debris has accumulated, some of these have been colonised by opportunistic plant species forming patches of tall weedy vegetation (Target Note 3) (Photograph 3). This is particularly prevalent along the site margins. Species recorded included: fescue sp. (*Festuca sp.*), Cock's-foot (*Dactylis glomerata*), mouse-ear

hawkweed (*Pilosella officinarum*), dandelion (*Taraxacum officinale*) and common feather moss (*Eurhynchium praelongum*). The southern boundary of the application has developed a strip of weeds and moss occupying approximately 60m^2, where debris has accumulated.

Photo 3: A photo of the ruderal and grass margin at the southern side of the southern section.

4.2.2 Ephemeral Standing Water

At the time of survey, two large pools of ephemeral standing water occupied approximately 5,000m^2 of the application site (Target Note 2). The pools are irregular in shape (Photograph 4), very turbid, support no aquatic or emergent vegetation, are considered likely to dry out completely in periods of dry weather. No aquatic invertebrates were observed. The depth of the pools could not be directly assessed due to the turbidity of the water, but whilst a few gulls were observed loafing on the surface of the water they are anticipated to only be a few centimetres deep, and anecdotal evidence from site staff indicates that they form only following periods of heavy rainfall.

A Habitat Suitability Index (HSI) appraisal for great crested newts was undertaken of the pools and indicated that the score was 0.23, which is categorised as low.

Photograph 4: Looking at the southern section of the site from the north (image adjusted for contrast).

4.2.3 Semi-improved grassland

Lying outside the application area, in the north of the wider survey area and adjacent to Rover Way, is a strip of species-poor semi-improved grassland (Target Note 4, Drawing 1) (Photograph 5). The sward has been tightly grazed by horses and stands at a few centimetres tall. The sward is typical of a semi-improved grassland dominated by perennial rye-grass (*Lolium perenne*), with occasional cock's-foot and abundant creeping cinquefoil (*Potentilla reptans*), ribwort plantain (*Plantago lanceolata*), and yarrow (*Achillea millefolium*), with frequent geranium species (*Geranium* spp.), infrequent dandelion and daisy (*Bellis perennis*). Frequent to locally dominant brambles (*Rubus fruticosus*) are present, spreading from adjacent areas of scrub.

Photograph 5: semi-improved grassland adjacent to Rover Way, with scrub to left of picture (image adjusted for contrast).

4.2.4 Dense scrub

Lying adjacent to Rover Way is a belt of dense scrub (Target Note 5, Drawing 1) (Photograph 5). The scrub is dominated by butterfly bush (*Buddleja davidii*) with locally frequent brambles. The scrub is unmanaged and due to the density of the butterfly bush the ground flora is sparse, predominantly comprising patches of species-poor semi-improved grassland with bare ground, mosses and leaf-litter.

The dense scrub lying immediately outside the eastern boundary of the application site boundary (Target note 6) is dominated by a mix of butterfly bush and brambles and occasional gorse (*Ulex gallii*) (Photograph 6). In amongst the dense scrub are scattered trees, including hawthorn (*Crataegus monogyna*).

Photograph 6: Buddleia scrub to the north of the survey area

Photograph 7: Scrub with scattered trees to the east of the application site

4.3 Protected and Notable Species

The following section considers the protected species/species groups that could potentially occur within the site or zone of indirect impact based on the following data:

- The field survey conducted on 20th March 2019 returning direct evidence or identifying potentially suitable habitat;
- the presence of pre-existing biological records being returned by the data search; or

- the general geographic setting of the site meaning the presence of the species is possible.

Each section identifies whether field evidence exists, background records exist, or whether (in the absence of existing records) a species could potentially occur due to the site being within the range of the species and suitable habitat being present.

4.3.1 Plants

The SEWBReC data search returned four records for notable higher plants within 1km:

- Field fleawort (*Tephroseris integrifolia*) listed on the vascular Plant Red Data List for Great Britain 2005 is listed as "endangered", located 226m south-east in 2013;
- Sea buckthorn (*Hippophae rhamnoides*), an invasive plant outside of the eastern edge of England, located 226m to the south-west in 2017, 372m to the south-west in 2014 and 379m to the south-west in 2017.
- Knapweed broomrape (*Orobranche elatior*), 226m southwest in 2013; and
- Dittander (*Lepidium latifolium*), 226m south-west in 2017.

The development footprint entirely comprises hard-standing and ephemeral standing water, and is actively traversed by plant and other vehicles. It does not offer potentially suitable habitat for any of the plant species mentioned above. The habitats within the wider survey area, outside the construction footprint, will not be directly impacted by the development proposals. They are also predominantly unsuitable to support the notable species listed above, with the exception of the scrub areas which could potentially support sea buckthorn. However, none was recorded.

No invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were recorded during the Phase 1 Habitat survey. However, Japanese knotweed is known to be present on the adjacent moto-cross site (Sturgess Ecology (2017)[4]) and precautions should be adopted to minimise the risk of spread to the application site.

4.3.2 Badger

The SEWBReC data search returned a record of badger (*Meles meles*) scat 1,221m from the site in 2013.

There were no badger field signs found within the development site or the wider survey area, including setts, foraging signs, latrines, pathways, paw prints or hairs. The habitat within the application site is also considered unsuitable for the species, either for foraging or shelter. The concrete pad that forms the application site will provide no foraging resource and is unsuitable for the excavation of setts.

4.3.3 Bats

The SEWBReC data search provided results indicating the presence of the following records for bats within 2 km of the application site:

- Common pipistrelle (*Pipistrelle pipistrellus*), Soprano pipistrelle *(Pipistrelle pygmaeus*), Nathusius pipistrelle (*Pipistrellus nathusii*) most recently recorded in 2014, 1186m to the south-west; and
- Noctule bat (*Nyctalus noctula*) most recently recorded in 2014, 1186m to the south-west.

The application site offers no potential for bat roosting. There are no buildings and no mature trees that could support potential bat roosts. The application site is also considered to off negligible potential for foraging bats. The concrete hard-standing will support no significant invertebrates, and whilst the standing water bodies may potentially support some invertebrates that could be fed upon by bats (e.g. midges or mosquitoes), the apparent ephemeral nature, lack of vegetation and poor biological water quality would suggest that this is negligible.

4.3.4 Amphibians and Reptiles

The SEWBReC data search returned no records of amphibians or reptiles within 1km of the application site. A publicly available ecological appraisal of the moto-cross site immediately to the east and south of the application site was conducted in August 2017[4], and a reptile survey was conducted of the same site in September 2017[5]. Neither survey found evidence of reptile or amphibian populations at the adjacent moto-cross site.

Amphibians

Whilst the application site does support permanent standing water, the ephemeral pools are considered highly unlikely to offer breeding habitat for amphibians, and particularly the legally protected great crested newt (*Triturus cristatus*) due to their shallow nature and because they will dry out during the breeding season.

An HSI survey of the ephemeral pools was conducted in accordance with Oldham et. al. (2000)[6]. Amongst other factors, the ephemeral nature of the pools, lack of aquatic and ephemeral vegetation, apparent low biological water quality, and very low quality surrounding terrestrial habitat (hard-standing) resulted in an HSI score of 0.23, which is considered to be 'poor' (as are all ponds with an HSI score below 0.5) (Figure 1). A study of ponds in south-east England found only 3% of ponds with a poor rating supported great crested newts[7]. The same study also considered that ponds in the Cardiff area were considered to be in a marginal location for the species and in general only half as likely to support great crested newts as those in south-east England.

Habitat Suitability Index				
				SI value
SI1.	Map location	**A/B/C**	B	0.50
SI2.	Surface area	**rectangle/ellipse/irregular**	irregular	
		length (m)		
		width (m)		
		OR estimate (m^2) if irregular	2500	
		area (m^2) =	2500	0.71
SI3.	Dessication rate	**never/rarely/sometimes/frequently**	frequently	0.10
SI4.	Water quality	**good/moderate/poor/bad**	bad	0.01
SI5.	Shade	% of margin shaded 1m from bank	0	1.00
SI6.	Waterfowl	**absent/major/minor**	minor	0.67
SI7.	Fish population	**absent/possible/minor/major**	absent	1.00
SI8.	Pond density	number of ponds within 1km	1	0.69
SI9.	Terrestrial habitat	**good/moderate/poor/isolated**	isolated	0.01
SI10.	Macrophyte cover	%	0	0.31
			HSI =	**0.23**
Use provisional HSI value if above 0.75			provisional HSI =	0.21
			Date undertaken	20.03.19

Figure 1:
HSI calculation table for the ephemeral standing water pools at the application site.

Reptiles

The application site does not support suitable habitat for any of the common British reptile species, as it comprises hard-standing that is actively tracked over by working plant.

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[5] Wildwood Ecology (October 2017) WWE17143 - Reptile Survey. Land Off Rover Way, Cardiff. Wildwood Ecology, Caerphilly, CF83 3GG.

[6] Oldham, R.S., Keeble, J., Swan, M.J.S, and Jeffcote, M. (2000) Evaluating the Suitability of Habitat for the Great Crested Newt (Triturus cristatus). *Herpetological Journal* 10 pp. 143-155.

[7] ARG UK (2010). *ARG UK Advice Note 5: Great Crested Newt Habitat Suitability Index*. Amphibian and Reptile Groups of the United Kingdom.

4.3.5 Birds

The application site supports no habitat suitable for nesting birds, comprising only hard-standing in active use, with no buildings, trees, scrub or other potentially exploitable vegetation. Areas of the metals recycling facility outside the application site support small areas of scrub which may potentially be exploited by nesting birds, but it is considered highly unlikely that any species of bird is reliant on the metals recycling facility for maintenance of its local population as such habitats, and better quality ones, are ubiquitous in the locality.

As described above, the Severn Estuary holds several statutory wildlife site designations, including SPA, Ramsar, SAC and SSSI. The majority of the ecological and biodiversity interest for which these designations were bestowed relates to the bird populations that the estuary supports, and in particular for the large numbers of over-wintering waterfowl and waders. Whilst the Severn Estuary will not be directly impacted by the proposed development, being located approximately 230m away to the east and south, there is the possibility that indirect impacts could occur. Potential pathways for indirect impact on the bird populations include construction or operational noise, and emissions that may affect air quality (e.g. dust or gases). These potential for these to have impacts on the bird populations for which the Severn Estuary is designated should be evaluated.

4.3.6 Invertebrates

Whilst notable invertebrate species are known to be in the vicinity (Sturgess Ecology[4]), the application site supports no suitable habitat for terrestrial invertebrate species, comprising only hard-standing that is actively trafficked by plant.

The ephemeral nature of the standing water pools within the application site, coupled with their total lack of aquatic or emergent vegetation, significantly reduce their value for aquatic invertebrates. Whilst small populations of highly mobile aquatic invertebrates could colonise these pools, the frequent drying would prevent the establishment of a stable and diverse aquatic invertebrate assemblage.

4.3.7 Other Species

The SEWBReC search returned no records for other notable species within 2km.

The application site comprises hard-standing that is actively trafficked by plant and machinery. It is considered that there is a negligible risk of populations of notable species, or significant populations of common species, being present and dependent upon the application site for maintenance of their populations.

5.0 Potential Ecological Constraints and Opportunities

5.1 Potential Ecological Constraints to Development

5.1.1 Designated Sites

The Severn Estuary is located approximately 230m to the south and east of the application site and supports a range of wildlife site designations including Ramsar, SPA, SAC and SSSI. As described above, whilst there is no significant risk of direct negative impact, potential indirect impact pathways have been identified in the form of construction or operational noise, and emissions from traffic servicing the site, and the plant itself. The significance of the impact of these potential indirect impact pathways should be investigated and, if required, mitigation suggested to eliminate the impact.

SACs and SPAs are afforded protection under the Habitats Regulations, and as a consequence the appraisal of the potential impacts should take the form of a shadow Habitats Regulations Assessment. The purpose of this document will be to provide sufficient information to the competent authority to enable an Appropriate Assessment to be made.

There are two non-statutory SINCs located within 1km of the application site; neither is considered to be at risk of significant negative impact as a result of the development proposals:

Pengam Moors SINC is located approximately 400m to the north and is predominantly designated for the vegetated habitats that have colonised the marshy habitats left behind following the demolition of the old Cardiff Airport and Rover Car Works. The presence of water fowl and wintering bird of prey populations are also noted. However, in light of the distance separating Pengam Moor from the application site, and the character of the intervening landscape (industrial with busy road etc.) It is considered highly unlikely that the proposed development will have any significant negative impact.

Tidal Sidings SINC is designated as it supports a mix of flower-rich neutral and calcareous grassland and scrub. In light of the distance separating this SINC from the application site (approximately 950m) no pathways for indirect significant negative impact have been identified (*i.e.* noise would attenuate and the majority of dust deposition occurs within 350m of a development, etc.).

5.1.2 Habitats

The habitats within the application site comprise concrete hard-standing and ephemeral water bodies with no identified significant biodiversity or ecological importance. There are considered to be no constraints arising from the habitats present with respect to the development proposals.

5.1.3 Invasive Non-Native Plant Species

No invasive non-native plant species were recorded within the application area or wider surveyed area. However, Japanese knotweed is known to be present on the adjacent moto-cross site (Sturgess Ecology (2017)[4]) and there is the potential for this to spread during earthworks. Standard precautions to avoid contamination by this invasive weed should adopted.

5.1.4 Protected and Other Notable Species

The application site comprises concrete hard-standing with ephemeral standing water with no significant intrinsic ecological or biodiversity value. No legally protected or otherwise notable species are at risk of direct impact from the development proposals. There is the possibility that legally protected species associated with the nearby Severn Estuary may be indirectly impacted by either construction or operational noise (such as birds listed on Schedule 1 of the Wildlife and Countryside Act (1981 and amendments)). Assessment of the potential

acoustic impacts on the designated sites will enable appraisal of the likely significance of this potential indirect impact pathway.

5.2 Summary of Valued Ecological Receptors

Based upon the information available to date, Table 2 provides a summary of the important ecological features identified that may potentially be significantly negatively impacted by the proposed development for which detailed assessment is required (*i.e.* all features considered to be of at least local level of importance and/or subject to legal protection), the geographical context within which each is considered to be important and their legal status.

Table 2:
Identified Valued Ecological Receptors that may be directly or indirectly impacted by the development proposals

Feature	Reason for importance	Location	Comment
Severn Estuary Wildlife Sites (Ramsar/ SPA/ SAC/ SSSI)	International and national level statutory wildlife site designations (Ramsar/ SPA/ SAC/ SSSI) predominantly for overwintering wild bird populations but also habitat importance and fish populations.	230m to the east and south of the application site.	At potential risk of indirect significant negative impact from construction and/or operational noise, and potential air quality impacts. Further acoustic and air quality study is required to determine whether significant impacts are likely, and if so, their level of significance on the qualifying features of the designated wildlife sites.

6.0 Recommendations

6.1 Recommendations for Further Work

The following additional works are recommended to ensure compliance with legislation and planning policy, and to ensure that appropriate mitigation can be designed when required:

- The potential indirect acoustic and air quality impacts of the proposed development on the nearby Severn Estuary SPA, SAC, Ramsar, and SSSI sites should be investigated and a shadow Habitats Regulations Assessment produced. Should this indicated that significant negative impacts on any of the Severn Estuary's qualifying features are considered likely at any stage of construction or operation, then appropriate mitigation should be developed to eliminate or minimise these.

6.2 Recommendations for Mitigation of Potential Impact

The following recommendations are made to mitigate sources of potential negative impacts once identified:

- A Construction Ecological Management Plan should be produced and agreed with the Local Authority. This document should cover all mitigation, compensation and enhancement measures to be included within the development proposals, from pre-construction, through construction, to the post-development management of the ecological features and enhancements.
- Whilst the application site is considered to have negligible potential value of bats, the external lighting scheme should still be designed to be bat friendly. The minimal amount of external lighting required should be used, it should be low level and directional in order to minimise light spill. Cowls and hoods should be used to minimise the amount of lighting shining upwards, and particular care should be taken to avoid increasing the amount of light pollution falling on trees and scrub outside the application site;
- Whilst Japanese knotweed and other derogated plant species are currently considered to be absent from the application site, care should be taken during demolition and construction that these species are not imported.

6.3 Recommendations for Ecological and Biodiversity Enhancement

Recommendations for viable ecological and biodiversity enhancements are constrained by the function of the application site and wider metals recycling facility. However, in order to comply with local and national planning policy requirements, and to adhere to best practice it is recommended that ecological enhancement is worked into the landscaping proposals. The list below is not exhaustive and may change depending on refinements to the proposed development design and functional requirements:

Opportunities for biodiversity enhancement include:

- If space allows, the establishment of banks of species-rich wildflower grassland, ideally south-facing. This will potentially benefit local populations of bees, including the brown-banded carder-bee (*Bombus humilis*), and other insects such as the long-winged conehead (*Conocephalus discolor*). The adjacent moto-cross site was noted to have an assemblage of aculeate hymenoptera (bees) of potentially county level importance, and introduction of species-rich wildflower grassland would provide an additional resource for this, and other, groups of invertebrates;
- Installation of bird boxes on buildings, trees and boundary fencing within the wider metals recycling facility. The number would be determined on finalisation of the development design plans, and would include boxes suitable for a range of species, including commensal species of conservation concern that can tolerate human activity such as house sparrows and starlings; and

- Inclusion of invertebrate boxes within the landscaping to provide over-wintering and nesting sites for a range of invertebrates.

7.0 Conclusions

The development footprint is dominated by habitats of negligible intrinsic ecological or biodiversity importance: hard-standing and ephemeral standing water that has apparently collected on the hard-standing after recent heavy rainfall. There is considered to be no risk of significant direct negative impacts to either ecology or biodiversity. The proposals include the removal of the existing concrete pad and its replacement with a sturdier concrete foundation upon which the asphalt batching plant will be constructed. No vegetated habitats will be lost.

However, the construction and operation of the proposed asphalt plant has the potential to indirectly negatively impact the statutorily designated wildlife sites of the Severn Estuary (SPA/SAC/Ramsar/SSSI) through noise and or air quality impacts. The potential for these to significantly impact this internationally designated wildlife site must be thoroughly investigated and, if required, a mitigation plan implemented to eliminate or minimise any identified significant negative impact.

Recommendations have been made for suitable and proportional ecological enhancements that will support known local populations of notable species of invertebrate. This is in line with planning policies and best practice seeking ecological enhancement through development.

With the implementation of appropriate ecological mitigation, compensation and enhancement into the development design and landscaping, and if required, careful design to mitigate for any potential impacts to the nearby SPA/SAC/Ramsar/SSSI, it is considered that the development proposals could result in an overall enhancement to the biodiversity and ecological value of the application site and ensure compliance with national and local planning policies.

DRAWING 1

Phase 1 Habitat Survey

Factory

ROVER WAY

Recycling Site Conveyors

N

SI

SI

SI

1

2

3

4

5

6

0 10 20 30 40m 60 80 100

Metres 1:1250

LEGEND

- APPLICATION SITE BOUNDARY
- SURVEY BOUNDARY
- HARDSTANDING
- EPHEMERAL STANDING WATER
- TALL WEEDS
- SI — SPECIES-POOR SEMI-IMPROVED GRASSLAND
- DENSE SCRUB
- SCATTERED TREES
- 1 — TARGET NOTE

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CELSA STEEL, ROVER WAY, CARDIFF

PHASE 1 HABITAT PLAN

DRAWING 1

Scale 1:1250 (A3)

Date JUNE 2019

DRAWN

416.09604.00001.27.001.0_PH1_HAB_PLAN.dwg

DRAWING 2

Designated Wildlife Site Location Plan

Willows Mixed High School
Pengam Green
MADOC ROAD
MERCIA ROAD
MEREDITH ROAD
WILLOWS AVENUE
SEAWALL ROAD
SEAWALL ROAD
7m
CG
Drain
Outfall
Factory
Factory
Factory
ROVER WAY
Pipelines
Pipelines
LC
LC
LC
Recycling Site Conveyors
Conveyor
TIDE FIELDS ROAD
ROVER WAY
Mast
Tremorfa Industrial Estate
Track
0 50 100 150 200m 300 400 500
Metres 1:5000

NOTES

DESIGNATION INFORMAITON TAKEN FROM MAGIC DEFRA WEBSITE 25.06.2019.

LEGEND

- APPLICATION SITE BOUNDARY
- RAMSAR SITE
- SPECIAL PROTECTION AREAS (SPA)
- SPECIAL AREAS OF CONSERVATION (SAC)
- SITES OF SPECIAL SCIENTIFIC IMPORTANCE (SSSI)
- SITES OF IMPORTANCE FOR NATURE CONSERVATION (SINC)

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CELSA STEEL, ROVER WAY, CARDIFF

DESIGNATIONS

DRAWING 2

Scale 1:5000 (A3)

Date JUNE 2019

416.09604.00001.27.002.0_DESIGNATIONS.dwg

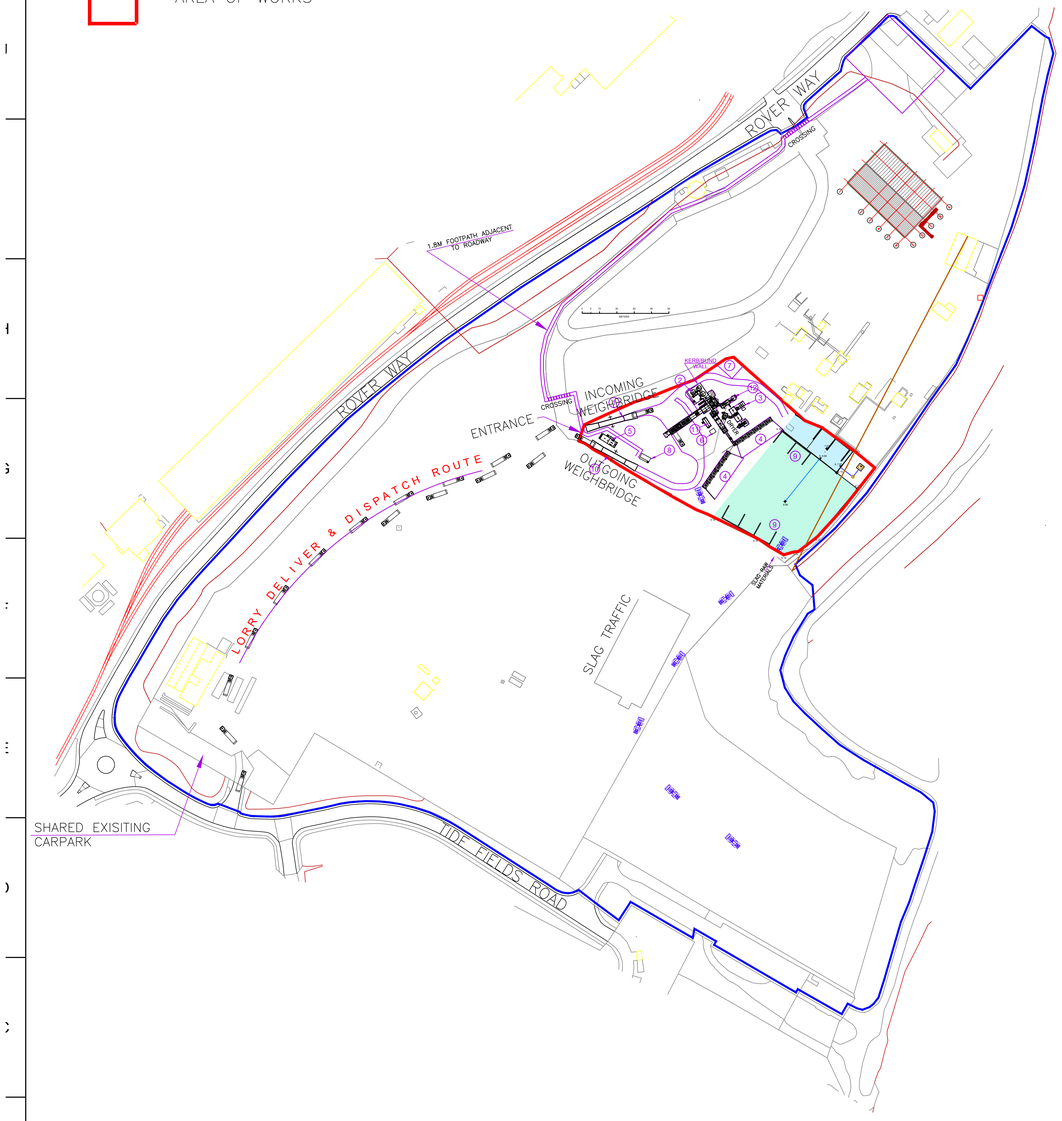
DRAWING 3

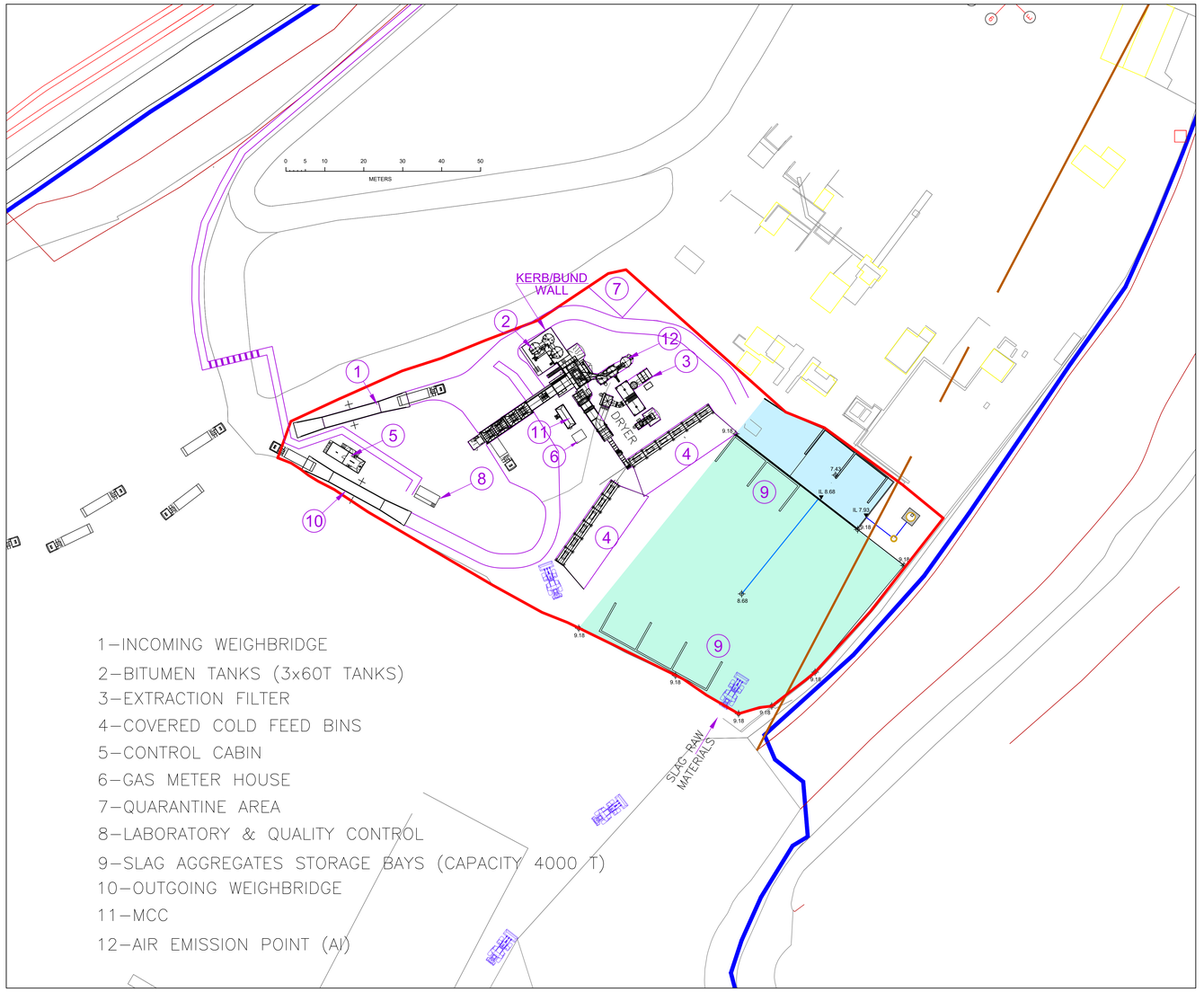
Development Proposals Plan

LEGEND

DENOTES CELSA SITE OWNERSHIP
AREA = 150,669m² (15.07ha)

AREA OF WORKS





1—INCOMING WEIGHBRIDGE
2—BITUMEN TANKS (3x60T TANKS)
3—EXTRACTION FILTER
4—COVERED COLD FEED BINS
5—CONTROL CABIN
6—GAS METER HOUSE
7—QUARANTINE AREA
8—LABORATORY & QUALITY CONTROL
9—SLAG AGGREGATES STORAGE BAYS (CAPACITY 4000 T)
10—OUTGOING WEIGHBRIDGE
11—MCC
12—AIR EMISSION POINT (AI)

ASPHALT PLANT AREA
(CIRCA 10,022 M²)
SCALE 1:500 ON A0

NOTES

1. Do not scale from this drawing
2. Dimensions are for reference only
3. Plants' components and their locations are preliminary and may change during design stage
4. This drawing is prepared, in part, based on information provided by others. While this information is believed to be reliable, Harsco Metals assume no responsibility for inaccuracies, errors or omissions that might have been incorporated into this drawing as a result of incorrect information provided to us
5. This drawing is for planning purposes only. Not to be used for construction

RevNo	Revision note	Date	Signature	Checked
2	GENERAL UPDATE FOR PLANNING	25.06.2019	AI/RM	RM
1	STREET NAMES ADDED	01.10.2018	AI	
0	RELEASED FOR DISCUSSION	26.09.2018	AI	

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VENDOR/CONSULTANT:

PROJECT: ASPHALT PRODUCTION AT CELSA CARDIFF

PROJECT No.: O1994

	NAME	SIGN	DATE
ENGR	AI		25.09.18
DRAWN	AI		26.09.18
CHKD			
APPD			

TITLE:- NEW ASPHALT PLANT AT CELSA CARDIFF. LOCATION PLAN OPTION 7.5

SCALE 1:1250

DRG. NO. O1994-00-01-07.05

SIZE A0 | REV. 2

RELEASED FOR
☐ PRELIMINARY ☑ INFORMATION ☐ APPROVAL ☐ FABRICATION ☐ CONSTRUCTION

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