

P Fields, Land at Port Talbot Steelworks: Conceptual Drainage Strategy

Final

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This report describes work commissioned by Natalie Young, on behalf of Tata Steel UK Ltd, by an instruction dated 7th March 2024. Charlotte Lickman and Faye Tomalin of JBA Consulting carried out this work.

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1 Introduction

1.1 Terms of Reference

JBA Consulting were commissioned by Tata Steel UK Ltd to prepare a conceptual surface water drainage strategy. The conceptual drainage strategy shall be used to support a planning application for the site and is to be submitted to the SuDS Approval Body (SAB) for pre-application consultation.

1.2 Site Description

The Land at Port Talbot Steelworks site is located south of Port Talbot, bound to the south-west by the Bristol Channel, and to the east by Margam and the M4. The Network Rail Swansea to London mainline is located near to the east of the site. The town of Port Talbot Docks is located to the north of the site, with the Margam Moors and undeveloped fields located to the south. The Steelworks is approximately 5.8KM from north to south and 1.9KM from east to west.

The site consists of existing land which is brownfield in nature and used as a hardstanding storage area to support the current production of steel.

Table 1-1 below provides a summary of the key site details and the site location shown within Figure 1-1.

Table 1-1 Site summary

Site name	P Fields, Tata Steel, Port Talbot
Site area	2.70 ha
Existing land use	Brownfield industrial space
Purpose of development	Concrete slab for site compound and industrial use
Local Planning Authority	Neath Port Talbot Council
Lead Local Flood Authority	Neath Port Talbot Council



Figure 1-1 Site Location

1.3 Proposed Development

Development proposals are for a concrete slab for the site compound to support essential industrial uses associated with the operation of the steelworks.

Tata Steel is currently in the process of decommissioning large-scale assets relating to its ongoing closure of the Port Talbot heavy end configuration. This involves a significant amount of physical work requiring extensive laydown spaces. It will use a significant proportion of the existing laydown and compound areas to the northern part of the Port Talbot site. The decommissioning includes the sinter plant, 2 no. blast furnaces, coke ovens, power plant and ancillary infrastructure.

Tata Steel also has a number of critical maintenance projects, which need to be carried out relating to existing and ongoing operational assets in the central area of the site. Some of these will also require laydown and compound areas. These include maintenance projects within the cold mill and hot mill, and essential site infrastructure.

Tata Steel is already repurposing some of the existing hardstanding in the central section of the Port Talbot site for laydown and compound areas in order to facilitate parts of these projects, but it is necessary to create an additional laydown and compound area in the central section of the site in order for these projects to be carried out at the appropriate time. The hardstanding area will be circa 27,000² in the P Fields.

Development proposal plans are contained in Appendix A.

1.4 Existing site topography

Natural Resources Wales (NRW) 1m LiDAR has been used to illustrate the topography of the site, as shown in Figure 1-2. The site is relatively flat, with lowest levels in the east of the site at approximately 5.33m AOD. A localised area of high ground is located to the north west of the site, which has a maximum ground level of approximately 11.31m AOD. This is likely to be an area associated with existing material storage.

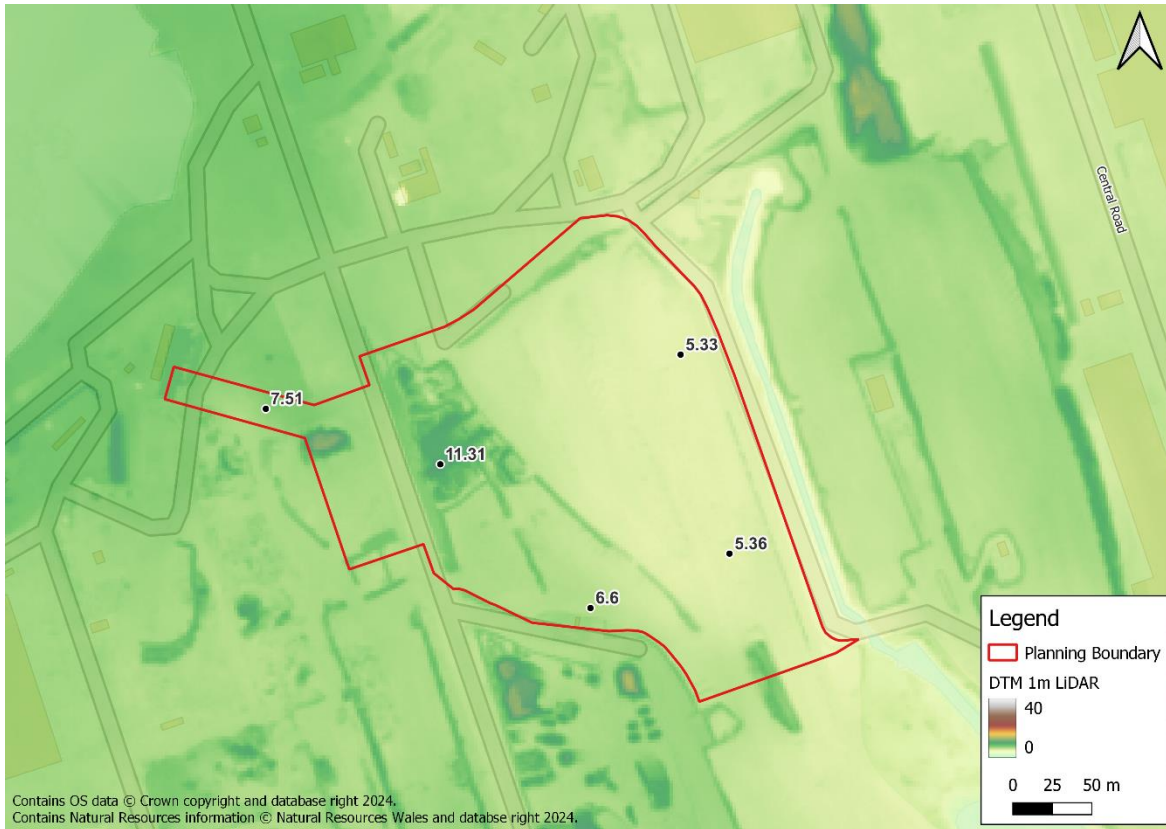


Figure 1-2 1m LiDAR DTM

1.5 Site geology and hydrogeology

The site's geology has been assessed using the British Geological Survey GeoIndex¹. The majority of the site's underlying bedrock geology is South Wales Middle Coal Measures Formation comprised of mudstone, siltstone, and sandstone. Superficial geology at the site is comprised of Tidal Flat deposits made up of clay, silt, and sand. However, due to the site's current use, most of the site will in fact be made ground generated during the steel process, such as slag.

A Phase 1 Desktop Study, undertaken by RSKGeoScience, has been provided to support this study and is contained in Appendix B. The Desktop Study supports the above findings.

¹ <https://mapapps2.bgs.ac.uk/geoindex/home.html>

The soils have been assessed on the Cranfield University Soilscape viewer² and shown to be loamy and clayey soils of coastal flats with naturally high groundwater.

² <https://www.landis.org.uk/soilscales/>

2 Flood Risk Summary

2.1 Development Advice Map

The Development Advice Map (DAM) is used to trigger different planning actions based on a precautionary assessment of fluvial and tidal flood risk. Figure 2-1 indicates that the site is mostly located within DAM Zone B. This zone is defined as areas known to have been flooded in the past evidenced by sedimentary deposits. Zone B indicates areas which are generally suitable for most forms of development and there is no requirement for the application of the Justification Test, and therefore a Flood Consequences Assessment for the site is not applicable.

A small area in the west of the site is located within Zone A, which represents areas that are considered to be at little or no flood risk.

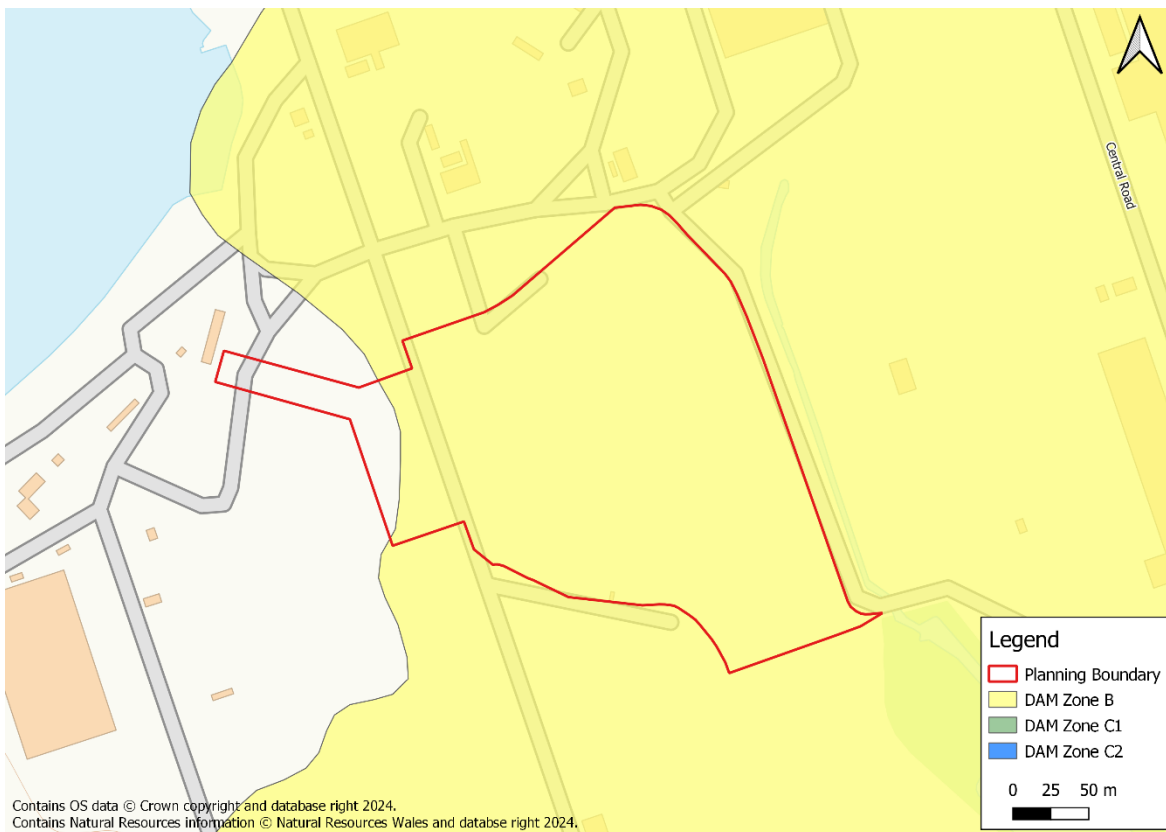


Figure 2-1 Development Advice Map

2.2 Summary of Surface Water Flood Risk

Surface water flooding occurs when rain falling on saturated grounds flow overland, following the local topography. Surface water flooding and subsequent overland flow can therefore pose a risk to both the development site and the surrounding land. The overland flow may originate from the site itself or adjoining at a higher elevation from which flow migrates onto the development.

The NRW Flood Risk Assessment Wales (FRAW) flood risk from Surface Water and Small Watercourses mapping shows that the proposed development site is generally at very low risk, as shown in Figure 2-2.

There are some small areas within in the site boundary which are shown to be at low risk of surface water flooding. Low risk indicates between a 0.1% - 1% AEP (1 in 1000 to 1 in 100) chance of flooding in any given year.

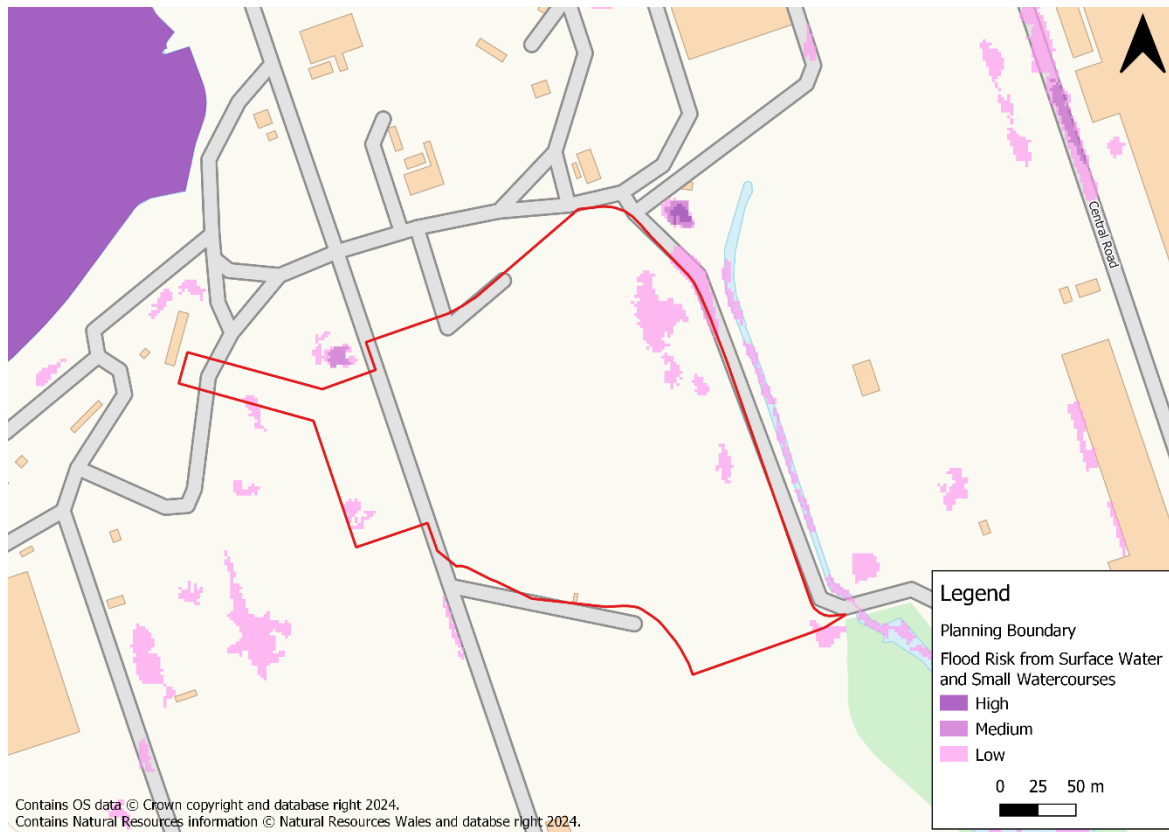


Figure 2-2 FRAW Surface Water and Small Watercourses

2.3 Summary of Fluvial Flood Risk

The proposed development site is shown to be at very low risk of flooding from rivers, according to NRW's Flood Risk Assessment Wales (FRAW) mapping, as shown in Figure 2-3. This means that there is a less than 0.1% AEP (1 in 1000) chance of fluvial flooding in any given year.

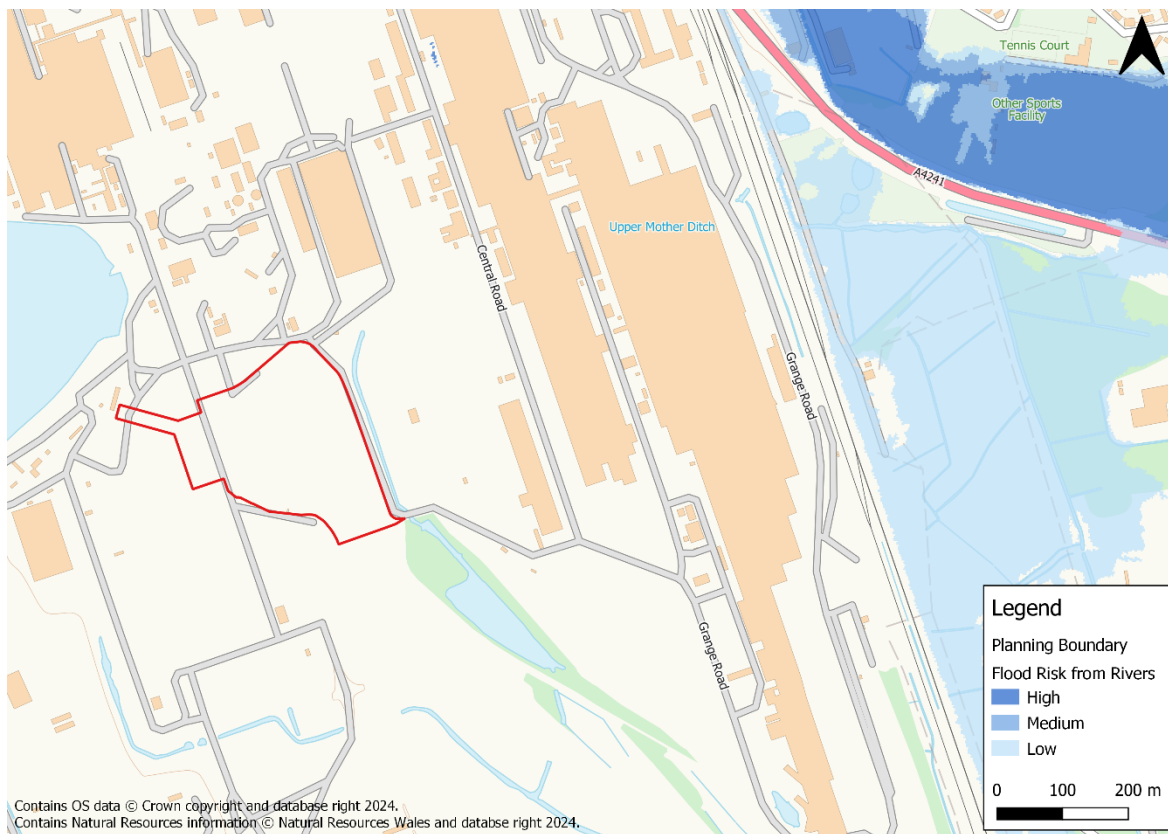


Figure 2-3 FRAW Rivers

2.4 Summary of Tidal Flood Risk

The site is at very low risk of flooding from the sea according to NRW's FRAW mapping, as shown in Figure 2-4. This means that there is a less than 0.1% AEP (1 in 1000) chance of flooding in any given year.



Figure 2-4 FRAW Sea

3 Existing Surface Water Drainage

3.1 Existing Surface Water Regime and Nearby Watercourses

The wider Steelworks site has a complex existing drainage network, comprised of a number of watercourses, and an extensive piped drainage network to manage surface water runoff, foul drainage, and process water. These systems are outlined in Figure 3-1.

The Lower Mother Ditch flows in a northerly direction near to the eastern boundary of the site, as shown in Figure 3-2. The Lower Mother Ditch is associated with the reen network of Margam Moors and flows towards 'Point B', which is a Tata Steel owned structure that culverts surface water towards the Abbey Pumphouse. The Abbey Pumphouse directs surface water to the short-sea outfall into the Bristol Channel. When water levels across the moors are high, water within the Lower Mother Ditch is pumped from Point B to the pumphouse in order to manage flood risk.

Surface water from the south-western extent of the Tata Steel site, drains within the process system towards the Nautilus building. Various pumped systems from across the site converge at the Nautilus building, which contains the main and final effluent treatment plant for the wider Tata Steel site. This system is also known as the 'canal tanks'. From the Nautilus building and systems, surface water is discharged directly to the Bristol Channel via the Long Sea Outfall.

The River Kenfig, an NRW Main River, is located south of the proposed development site.

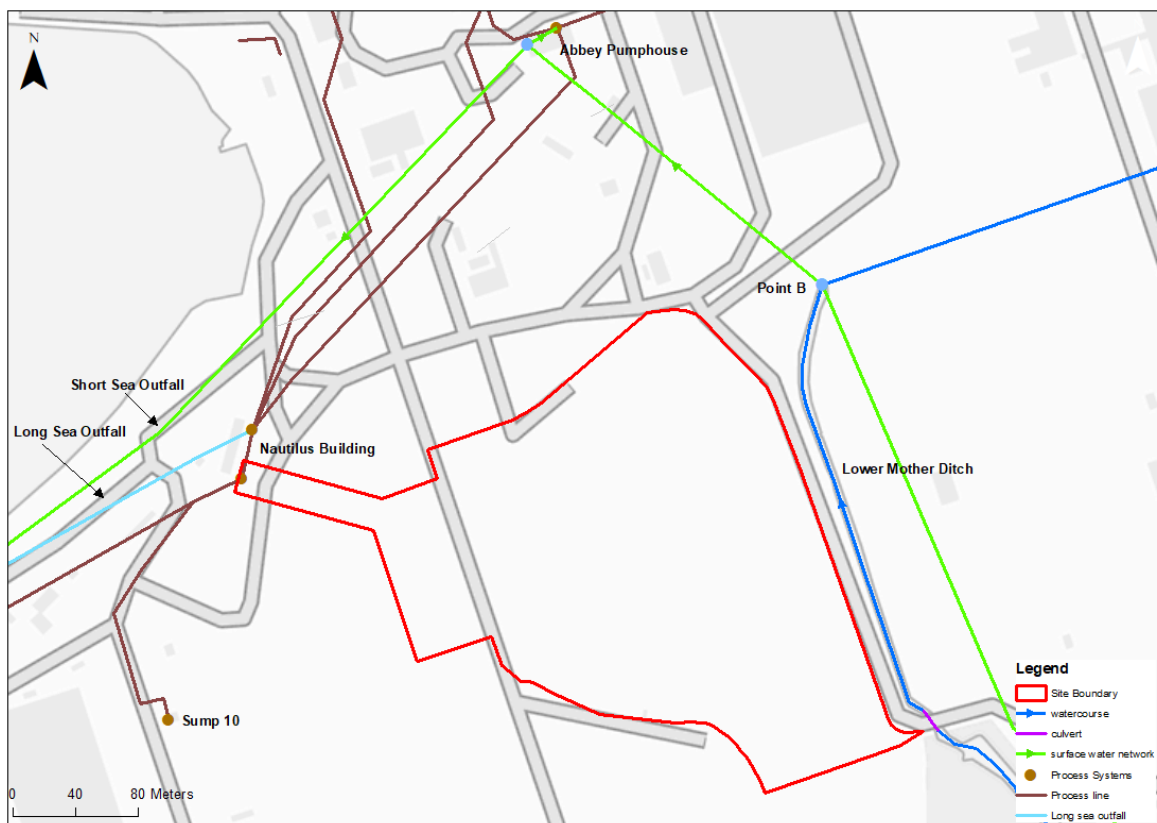


Figure 3-1 Existing Drainage Network

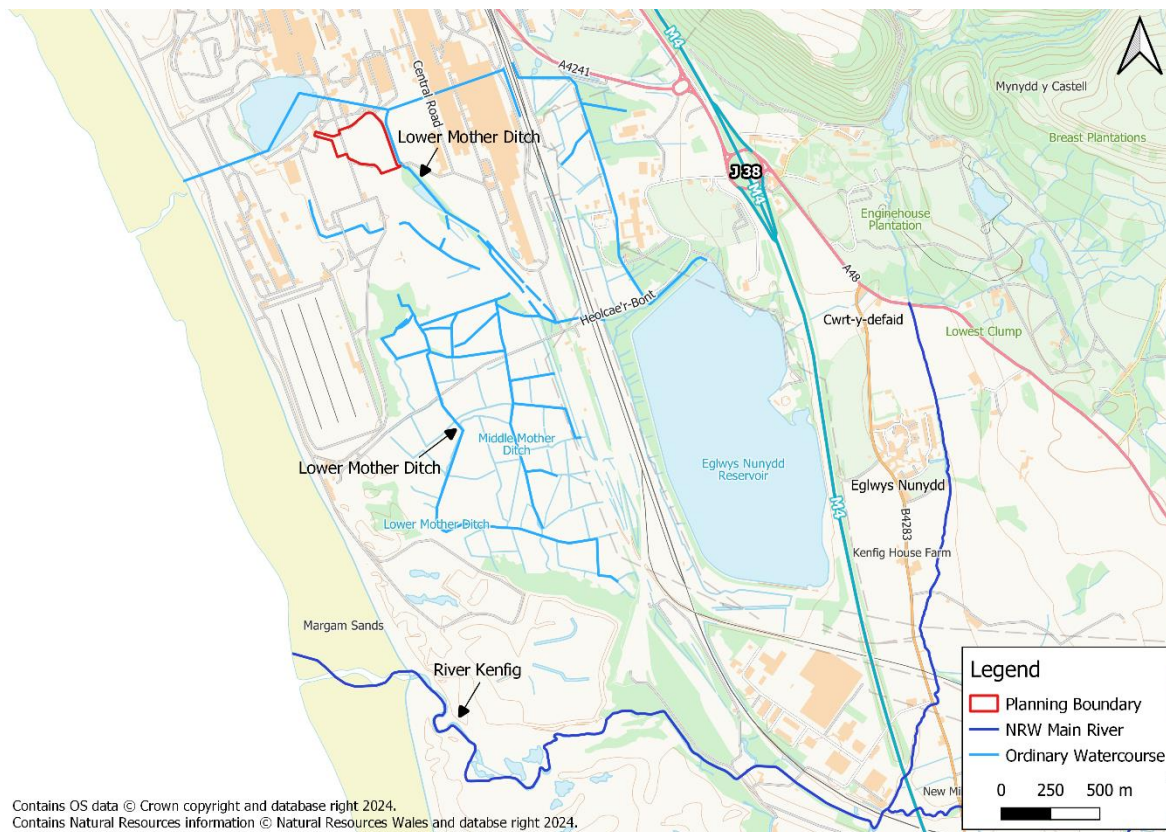


Figure 3-2 Nearby watercourses

3.2 Greenfield Runoff Rates

Table 24.1 of Ciria C753 The SuDS Manual indicates that the FEH methods (FEH Statistical and ReFH2) should be the preferred method for calculating peak Greenfield runoff rates. This is supported by Natural Resources Wales GN008: Flood Estimation: Technical Guidance and Environment Agency research by Faulkner et al which concluded that FEH methods are applicable across a range of catchment sizes and that they should be used in place of outdated methods such as IH124 and ADAS 345 where possible.

The UK SuDS Tool was used to calculate the Greenfield runoff rates for the site. Catchment descriptors for the local catchment (SAAR and BFIHOST) were extracted from the FEH Web Service. The calculated Greenfield runoff rates are shown in Table 3-1 below, and the UK SuDS calculation record is included in Appendix C.

Table 3-1 Greenfield Runoff Rates

Return Period	Specific Runoff (l/s/ha)	Peak Runoff Rate (l/s)
QBAR	2.75	7.45
30	4.91	13.26
100	6.01	16.24

3.3 Greenfield Runoff Volumes

Runoff volumes for the proposed development site were also calculated for the six-hour storm event using the FSSR16 method as shown in Equation 1 below.

Equation 1:

$$\text{Runoff Volume} = \text{Site Area} \times \text{Rainfall Depth} \times \text{Percentage Runoff}$$

The rainfall depths for a six-hour 100-year storm event were extracted from the FEH Web Service and are summarised in Table 3-2 with the calculated Greenfield Runoff Volumes.

Table 3-2 Greenfield Runoff Volumes

Return Period	6-hour rainfall runoff depth (mm)	Site Runoff Volume (m ³)
30	46.8	310
100	56.9	400

4 Surface Water Management Approach

4.1 Surface Water Drainage Proposal

A conceptual surface water drainage proposal for the site has been developed which will manage surface water runoff without increasing flood risk to other developments or impacting on water quality downstream. The development of the drainage strategy is via a number of steps where the drainage objectives and options for SuDS features are determined. Further details on the design of the drainage system will be determined once an agreement in principle has been received from the SuDS Approval Body (SAB).

The conceptual drainage strategy discusses each standard in turn and details the way in which the proposed surface water drainage strategy will comply with each standard.

4.2 Surface Water Strategy Concept

As detailed in Section 1.3, Tata Steel is currently in the process of decommissioning large-scale assets relating to its ongoing closure of the Port Talbot heavy end configuration. This involves a significant amount of physical work requiring extensive laydown spaces. Tata Steel also has a number of critical maintenance projects, which need to be carried out relating to existing and ongoing operational assets in the central area of the site. Some of these will also require laydown and compound areas. Whilst Tata Steel is already repurposing some of the existing hardstanding in the central section of the Port Talbot site for laydown and compound areas in order to facilitate parts of these projects, it is necessary to create an additional laydown and compound area in the central section of the site in order for these projects to be carried out at the appropriate time.

The proposed development area is therefore highly industrial, with the nature of the processes on site leading to a high potential for contamination in terms of water quality (Section 4.5). There is high potential for contaminated runoff due to the unknown quantum of materials on the site at any one time, and therefore the potential for oils, TSS, dust and other contaminants needs to be carefully considered in the application. The development use results in requirements to manage the potential for contamination prior to discharge of surface water to its ultimate discharge location; the Bristol Channel.

Future development aspirations for the site are covered separately to this application and are therefore not explicitly covered within this report. However, it should be noted that the general principles for surface water drainage design for the future development aspirations have been consulted upon with the SAB and received in-principal approval to the proposals. It is important to consider the future development aspirations in context of this proposal for a concrete slab for a site compound and industrial uses associated with the operation of the steelworks, which will then ultimately be re-used to support future development. Consequently, it is considered that works should be effective, purposeful and cost-effective to minimise abortive works and unnecessary construction.

In summary, future development plans are proposed to have two main surface water systems across the site: the contaminated stream and the clean water stream. The proposed development for the P Fields area shall ultimately be part of the contaminated stream. It is therefore proposed that surface water across the proposed concrete slab shall be directed towards a piped system, discharging to the Nautilus building. At the Nautilus building, surface water shall be treated via the existing onsite effluent treatment plant, prior to being discharged to the Bristol Channel via the Long Sea Outfall. The proposed strategy is contained in Appendix D.

As a consequence of existing and proposed ground levels, along with a fixed connection point at the Nautilus building, a pumped system shall be required. It is therefore currently proposed to drain the hardstanding area via gravity to an interceptor at the downstream extent of the system, prior to pumping surface water to the Nautilus building for further treatment. Whilst pumped systems require additional maintenance and carry a risk of failure, there are a number of pumped systems across the wider Tata Steel site. Consequently, Tata Steel are well placed to manage and maintain the system. Tata Steel also accept the consequences in the event of pump failure, with flooding retained on the Tata Steel site, with no impact on third parties.

In addition to the above, the proposed connection location at the Nautilus and Sump 2 have limited capacity to receive flows. Alternative solutions and connection points have been explored to facilitate the proposed site and associated drainage infrastructure. Following a short options appraisal, it has been concluded that the most appropriate way forward is to size the piped surface water system for the 1 in 30 year rainfall event, allowing the site to flood in larger rainfall events. No surface water shall leave the site in the 1 in 100 year event, with a 40% allowance for climate change. This premise aligns with the requirements of G2.34 of the Statutory Standards for SuDS in Wales.

In order to mitigate the risk of surface water flows entering the Lower Mother Ditch in the event of pump failure and rainfall events greater than the 1 in 30 year event, measures shall be required to retain surface water within the P Fields area, to subsequently be managed appropriately. Further engineering design detail shall be provided at Full Application stage.

4.3 S1: Surface Water Runoff Destination

The Statutory Standards for SuDS in Wales address the use of surface water by the development and where it should be discharged. It has developed a destination hierarchy which sets out the preferred routes for discharge of runoff from the site:

- Priority Level 1: Surface water runoff is collected for reuse
- Priority Level 2: Surface water runoff is infiltrated to ground
- Priority Level 3: Surface water runoff is discharged to a surface water body
- Priority Level 4: Surface water runoff is discharged to a surface water sewer, highway drain, or other drainage system
- Priority Level 5: Surface water runoff is discharged to the combined sewer

Priority Level 1 is the preferred (highest) priority and 4 and 5 should only be used in exceptional circumstances. The following outlines how the proposed development adheres to the drainage hierarchy.

4.3.1 Priority Level 1 - water for reuse

Due to the nature of the proposed development as a concrete slab for construction site compound and industrial uses associated with the continued operation of the steelworks, there is no requirement for re-use of water from this area. Consequently, lower discharge priority levels have been considered.

4.3.2 Priority Level 2 - infiltration

A Desktop study has been completed for the wider site by RSKGeoScience in June 2024. The Phase One Desktop Study indicates the potential for high groundwater levels, 1-2m below the ground level. This details potential contamination risk sources and mitigation measures across the site to minimise the risk of mobilisation of contaminants.

To date, no infiltration testing has been undertaken across the site. However, as a result of the above, it is considered that infiltration shall not be a viable solution for surface water drainage. Given the risk of mobilisation of contaminants and the high groundwater levels across the site, the use of infiltration is not a suitable solution for surface water drainage. On the basis of the Phase One Desktop Study, it is assumed that no further information is required to support this conclusion for the site at detailed design stage.

Therefore, for the purpose of this report, it is assumed that infiltration is not viable.

4.3.3 Priority Level 3 - discharge to surface water body

The Lower Mother Ditch is located near to the eastern boundary of the proposed site. However, due to the high pollution hazard level assigned to the site (see Section 4.5), it is not deemed appropriate to discharge surface water directly into this waterbody.

Consequently, a new piped system shall convey surface water towards the Nautilus building, where it shall be treated prior to being discharged directly into the Bristol Channel, a tidal waterbody.

4.4 S2: Surface Water Runoff Hydraulic Control: Proposed Discharge Rate

There are typically three design storm events which should be considered when designing the surface water drainage system for managing flows and volumes:

- 1 in 1 year event, on sloping sites without basements, where surcharging above soffits of any surface water drainage pipework is not permitted.
- 1 in 30 year storm event, where surface water flooding of the site does not occur at this frequency.
- 1 in 100 year storm event, with allowances for future climate change, where runoff from the site should be controlled to Greenfield rate using SuDS

attenuation features to manage flows and volumes within the extents of the development site.

Proposals for this site are to retain the 1 in 30 year rainfall event within the surface water system, with flooding of the site in larger rainfall events occurs. This premise aligns with the requirements of G2.34 of the Statutory Standards for SuDS in Wales. At detailed design stage, the consequence of flooding (depth, duration, velocity) shall be detailed further.

4.4.1 Discharge Limits and Attenuation Volume

In accordance with G2.1 of the Statutory Standards for SuDS in Wales *"where the surface water body is unaffected by either the discharge rate or volume of runoff (e.g. and estuary, the sea, or a waterbody identified in the Local Flood Risk Management (LFRMS) as not needing hydraulic control to runoff to it), the hydraulic management control requirements are limited to the drainage service provisions for the site and adjacent areas that could be affected by performance of the system"*.

As a result, there is no requirement to limit runoff from the proposed development as a consequence of discharging surface water directly into tidal waters (the Bristol Channel) or in order to mitigate fluvial flood risk, therefore reduction to greenfield runoff rates is not particularly relevant to this site.

4.4.2 Interception of Rainfall

When rainfall takes place on greenfield sites there is, for the majority of rainfall events no runoff due to evapotranspiration or groundwater recharge. Therefore, interception mechanisms are based on runoff volume reduction using evapotranspiration and infiltration processes. Table G2.1 of the Statutory Standards for SuDS in Wales lists the interception drainage components which have assumed compliance.

Given that the proposed surface water drainage strategy intends to discharge of surface water to a tidally influenced waterbody, the need to comply with the requirements of interception is limited.

4.4.3 Exceedance Events

Extreme events exceeding the design event could occur and may result in overland flows across the site. The duration of flooding, max depth, max velocity, and route of flood flows should be established and managed. Further details of these shall be provided at detailed design stage.

The impact of exceedance flows onto adjacent land should also be considered. However, there is no land downstream of the Tata Steek UK Ltd site and therefore potential impact on third parties is limited.

4.4.4 Climate Change Impact

The Welsh Government has produced an Adapting to Climate change guidance which contains updated representative climate change allowances for Wales for peak flows. The

guidance contains indicative sensitivity ranges for peak rainfall intensity. As a non-residential site, lifetime of development is 75 years. As such the 2070-2115 estimate should be used. The recommended climate change factor for small catchments using the upper end estimate for the 2070-2115 epoch is 40%.

4.5 S3: Water Quality

To mitigate against adverse impacts on the water quality of the receiving water environment the CIRIA SuDS Manual recommends the following steps to determine the required water quality management for discharges to surface waters and groundwaters:

- Plan land use to prevent runoff and associated pollutants for most rainfall events up to 5mm in depth.
- Identify the pollution hazard level associated with the given type of development.
- Select risk assessment approach based on receiving water environment and the pollution hazard level.
- Carry out the risk assessment for each outfall considering the pollution hazard level, the status of the receiving water environment and effectiveness of the proposed SuDS techniques.

Table 4.3 of the SuDS Manual advocates the use of the 'simple index approach' to determine the appropriate level of pollution mitigation for development sites. This splits pollution into three contaminant types (Total Suspended Solids, Metals, and Hydrocarbons) and assigns a 'pollution hazard index' to each type.

The SuDS Manual suggests that the Simple Index Approach should only be considered appropriate for use in consideration of mitigation for water quality when used as part of a detailed risk assessment. When dealing with High hazard sites, the environmental regulator should be consulted for pre-permitting advice to determine the most appropriate approach to the development of design solution. However, as the proposed development site is located within the wider Tata Steel ownership boundary, the site is already subject to the requirements of an existing discharge permit. The site is served via an existing wastewater treatment system which services process water across the site to sufficient levels to permit discharge to the Bristol Channel via the long sea outfall.

The proposed development site is proposed to be classified as a High pollution hazard level due to the risk of runoff from materials high in TSS, oils, and possible other contaminants. Table 4-1 displays the Pollution hazard Indices for the site.

Table 4-1 Pollution Hazard Indices

Pollution Hazard Level	Total Suspended Solids (TSS)	Metals	Hydrocarbons
High	0.8	0.8	0.9

As a High Hazard site, it is therefore proposed to convey surface water via the contaminated stream in a piped system towards the existing on-site wastewater treatment works at the Nautilus. An interceptor is proposed at the downstream extent of the system,

prior to surface water being pumped to the Nautilus buildings. Design details of the interceptor are to be confirmed and shall be provided at Full application stage. The use of a piped system minimises the risk of cross-contaminants entering the existing watercourse network around the site.

Design levels need to be considered further prior to submission of the Full application. However, it has already been established that a pumped system shall be required due to proposed and existing ground levels on the site, and a fixed connection point at the Nautilus building. Consequences of pump failure should be considered. In order to mitigate the risk of surface water flows entering the Lower Mother Ditch in the event of pump failure, measures shall be required to retain surface water within the P Fields area, to subsequently be managed appropriately. Further information on mitigation measures shall be provided at detailed design.

4.6 S4 & S5: Amenity & Biodiversity

The proposed site use, layout constraints and water quality pollution hazard make the use of SuDS difficult. As earlier outlined, the contaminated stream is comprised of a piped system conveying surface water directly to on-site wastewater treatment systems prior to being discharged into the Bristol Channel. Therefore, amenity and biodiversity benefits are not obtained via the contaminated stream.

However, the future development aspirations should be considered. This application forms a small area of a wider (future) development site but needs to come forward immediately to support the continued operation of the steelworks. Tata is in discussion with Neath Port Talbot Council on the wider SuDS proposal across the future configuration of the steelworks, which shall maximise amenity and biodiversity benefits across the site within the clean water stream.

In addition, a number of works are being proposed to the 'Southern Fields' at the southern extent of the wider project boundary, north of the Margam Moors SSSI. Landscape works are currently being progressed on this aspect, but will be based upon the Barry Stewart & Associates Consulting Ecologists May 2008 report, contained in Appendix E.

4.7 S6: Design for Construction, Maintenance, and Structural Integrity

The national SuDS standards state that components must be designed to ensure structural integrity of the drainage system and any adjacent structures under anticipated loading conditions over the design life of the development, taking into account the requirement for reasonable levels of maintenance. The detailed design will include a maintenance plan and associated costs for the development site.

4.7.1 Health and Safety

Under the Construction (Design and Management) Regulations 2015 (CDM 2015) it is the designer's duty to:

- Eliminate foreseeable health and safety risks to anyone affected by the project.
- Take steps to reduce or control any risks that cannot be eliminated.
- Communicate, cooperate, and coordinate with the client, other designers and contractors involved in the project so that designs are compatible, and health and safety risks are accounted for during the project and beyond.

The potential significant hazards and risks associated with the construction, operation, and maintenance of the proposed surface water drainage system have been identified during the design process. The information on the identified hazards and potential mitigation measures of the risks presented by the hazards is summarised in the 'Designer's Risk Assessment' included in Appendix F.

4.7.2 Construction Surface Water Management

During construction of the proposed development, surface water runoff shall need to be managed carefully to mitigate and minimise the risk of silt laden runoff (or other contaminants) entering the drainage system and ultimately, the Severn Estuary. At this stage of the project, a Framework Construction Environmental Management Plan (FCEMP) is still in preparation and shall be submitted with future planning submission to outline the measures that shall be in place to manage surface water during the construction phase. A full Detailed Construction and Environmental Management Plan (DCEMP) shall be submitted with the full SAB application.

The following guidance documents should be referred to in the preparation of the CEMP.

- GPP1 Understanding your environmental responsibilities - good environment practices
- GPP2 Above ground oil storage
- GPP5 Works and maintenance in or near water
- GPP6 Working on construction and demolition sites
- GPP8 Safe storage and disposal of used oils
- GPP13 Vehicle washing and cleaning
- GPP 21 Pollution incident response planning
- GPP22 Dealing with spills
- Ciria C742 Environmental Good Practice on Site

4.7.3 Adoption and Maintenance

The proposed development site is possessed by a single landowner and uses a private network. Therefore, the proposed development site shall be retained within the land ownership and will not be adoptable.

During the detailed design phase, a detailed maintenance plan shall be developed to demonstrate the maintenance required to ensure that the proposed drainage system functions to optimal capacity in perpetuity.

The proposed drainage system requires approval from the SAB. A previous iteration of this strategy has received pre-application consultation comments, contained in Appendix G.

5 Conclusions

JBA Consulting were commissioned by Tata Steel UK Ltd to prepare a conceptual surface water drainage strategy. The conceptual drainage strategy shall be used to support a planning application for the site and is to be submitted to the SuDS Approval Body (SAB) for pre-application consultation.

Development proposals are for a temporary concrete slab for the site compound and industrial uses associated operation of the steelworks. The hardstanding area will be circa 37,000m² in the P Fields.

The proposed development site is highly industrial due to its current production of steel. Consequently, due to the risk of water contamination, the management of surface water shall need to reflect the industrial setting.

Consideration has been given to the potential of contamination of the existing surface water system. The future aspirations for the steelworks drainage system is proposed to have two main surface water systems across the site, comprised of the contaminated stream and the clean water stream. The proposed development for the P Fields area shall ultimately be part of the contaminated stream. Surface water shall be directed within a piped system to the onsite wastewater treatment works, prior to being discharged into the Bristol Channel.

The proposed site use and layout constraints makes the use of SuDS difficult. As earlier outlined, the contaminated stream is comprised of a piped system conveying surface water directly to on-site wastewater treatment systems prior to being discharged into the Bristol Channel. Therefore, amenity and biodiversity benefits are not obtained via the contaminated stream. However, discussions are ongoing with the Council on wider configuration of the steelworks site. This will maximise amenity and biodiversity benefits across the site through the use of SuDS features via the clean water stream.

As the site shall retain in single ownership, long term management and maintenance shall be undertaken by Tata Steel UK Ltd, and the system shall not be offered for adoption by the SAB.

A Proposed Development Plans

 Fibre Reinforced Concrete Hardstanding
for laydown of scrap material
 Mesh Reinforced Concrete Hardstanding
for laydown of scrap material

P04	Scale Created	24/10/2002
P03	Updates following NPT Comments	12/09/2002
P02	Handstarting update following Client Comments	05/08/2002
P01	Revised Boundary following Client Comments	01/08/2002
P00	Initial Issue	19/07/2002
REV	DESCRIPTION DRAWN BY CHECKED BY APPROVED BY	DATE
RIBA PLAN OF WORK WORKSTAGE	LEVEL OF MODEL DEFINITION (LoD)	
Stage 3 - Spatial Coordination	LoD 3 - Approximate Model	
PURPOSE OF ISSUE - SUITABLE FOR ...	STATUS or SUITABILITY	
Planning Submission	Status S2 - Delivery Team Information	

PURPOSE OF ISSUE - SUITABLE FOR ...	STATUS or SUITABILITY
Planning Submission	Status S2 - Delivery Team Information



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CLIENT
Tata Steel UK Ltd.

PROJECT TITLE
EAF PROJECT, PORT TALBOT

DRAWING TITLE
P Fields - Proposed Site Plan

PROJECT No 20007	SCALE @ A0 As indicated																		
DRAWING No 8612182.200 +4220514 95 24 0070800	REVISION																		
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DO NOT SCALE	Any discrepancy or query concerning this drawing should be referred to the Architect Copyright © LAWRY LIMITED Registered Office: Greenmeadow Spire, 1 Oak Gables, Conyngham, CA90FF 0F15 1AA Rev. Cn. No. 37767033 VMT Fm No. 114 24 0070800																		