



Document title:

ALEXANDRA DOCK, NEWPORT
51021-BUR-XX-XX-T-C-0001
PLANNING APPLICATION – DRAINAGE STATEMENT

Document tracking:

Rev:	Description:	Issued by:	Date:	Checked:
P1.0	FOR REVIEW & COMMENT	SB	24/04/26	AJ

1.0 SITE LOCATION & EXISTING DRAINAGE ARRANGEMENTS

1.1	Site name	Alexandra Dock
1.2	Proposed Works	The proposed works comprise the construction of a new 33/11kV electrical substation including a switch room building, transformer infrastructure, storage-yard hardstanding, connection to the private ABP road network and associated drainage infrastructure within the Alexandra Docks complex, Newport.
1.3	Description of existing drainage arrangements for the site and any adjacent land that drains onto the site.	The existing site is understood to drain to the private surface water drainage network serving the Associated British Ports (ABP) Alexandra Docks complex. Given the historic industrial use of the site and the presence of extensive hardstanding areas, it is considered likely that surface water runoff currently enters this private drainage system which ultimately conveys flows through the dock drainage infrastructure. The nearest dock outfall is approximately 31m west of the site and it is understood that the system is currently unrestricted with no attenuation or flow controls being identified on-site.
1.4	Construction area of proposed development (m2)	The construction area of the proposed development is approximately 0.29 hectares. The development comprises a new electrical substation compound including a switch room building (~128m ²), transformer infrastructure, access areas and storage-yard hardstanding.

2.0 DETAILS OF HOW SURFACE WATER IS TO BE MANAGED & DISCHARGED

2.1	General Compliance	As the construction area of proposed development exceeds 100m², compliance with the Welsh Government's Statutory Standards for Sustainable Drainage Systems will be required. A Pre-SAB application will be submitted to Newport County Council (NCC) SAB authority for approval during the outline design stage. A Full-SAB approval will be required from NCC SAB authority prior to commencement of works on site. A FCA has been undertaken for the site. The national Flood Map for Planning (FMfP) for rivers and sea held by NRW indicates the substation site lies within Flood Zone 3. The surface water drainage system will be designed such that no flooding occurs for 1 in 30 year return period + 40% climate change. For storm events exceeding the 1 in 30 year return period + 40%, flooded volumes (if any) will flow overland toward the surrounding carriageway and existing ABP highway drainage. Peak discharge rates from the substation will be limited to the greenfield runoff rate (GRR) Q_{bar} for the site (0.9l/s).
Priority Level 1 – Surface water runoff is collected for use		
2.2	Will surface water be collected for use?	No.

2.3	If yes, what form will that rainwater harvesting take?	N/A
2.4	If no, why not?	No opportunity for Rainwater Harvesting (RWH) has been identified to date. The proposed substation unit (~128 square meters) will be fundamentally unmanned, with no requirement for rainwater reuse.
Priority Level 2 – Surface water runoff is infiltrated to ground		
2.5	Will surface water be infiltrated to ground?	No
2.6	If yes, what infiltration features are proposed?	N/A
2.7	If yes, please provide evidence that use of infiltration is viable, e.g. BRE365 complaint testing.	N/A
2.8	If no, why not?	Infiltration testing was undertaken but failed to achieve the required drawdown during BRE365 testing. This is attributed to the low permeability tidal flat clay deposits underlying the site.
Priority Level 3 – Surface water runoff is discharged to a surface water body i.e. watercourse		
2.9	Will surface water be discharged to a surface water body?	No
2.10	If yes, please provide details of your proposed discharge location	N/A
2.11	If yes, and a connection across third party land is proposed, please provide evidence that permission for the proposed works has been obtained from the landowner	N/A
2.12	If no, why not?	The development does not propose discharge to a surface water body such as the River Usk or North Dock. Although these water bodies are located adjacent to the site, they form part of the operational Associated British Ports dock infrastructure and are tidal in nature. Direct discharge would require additional third-party consents, environmental permitting

		and outfall infrastructure which is disproportionate to the small drainage catchment associated with the proposed substation. Surface water will therefore be managed via the site drainage system with controlled discharge to the local drainage network.
Priority Level 4 – Surface water runoff is discharged to a surface water sewer, highway drain or another drainage system		
2.13	Will surface water be discharged to a surface water sewer, highway drain or another drainage system?	Yes
2.14	If yes, please provide details of the system into which you intend to discharge.	We will connect into the existing private ABP surface water network. It is approximately 200mm in diameter, 1.44m between EGL and Invert and runs East to West towards the Alexandra Docks and away from the river Usk.
2.15	If yes, please provide evidence of permission to discharge into that system from the owner of that system	To Whom it May Concern 3rd February 2026 Dear Sir/Madam Proposed National Grid Electricity Distribution substation development and associated surface water drainage proposals: Alexandra Docks, Newport We write in connection with the proposed National Grid Electricity Distribution (NGED) substation development and the associated surface water drainage proposals at Alexandra Docks in Newport where Burroughs are acting in their role as drainage engineer on behalf of NGED. Associated British Ports (ABP) is the owner and operator of the existing private surface water drainage infrastructure located to the south of the proposed development site. This letter is provided to support the planning and Sustainable Drainage Approval Body (SAB) application and to confirm ABP's position in respect of the proposed connection. ABP confirms that it is content in principle for the proposed surface water drainage from the NGED substation to discharge into ABP's existing private manhole situated south of the site at the following location: Grid Reference: ST 31647 85811 X (Easting): 331647 Y (Northing): 185811 ABP is satisfied for NGED, or their appointed contractors, to connect into the identified manhole as part of the proposed works, subject to the connection being designed and constructed in accordance with relevant standards and to ABP's reasonable

		technical requirements. Any necessary approvals, inspections or protective measures will be coordinated directly with ABP as the works progress. This letter is intended to confirm third party consent in principle and to assist Burroughs, NGED and the relevant approving authorities in progressing the drainage approval and planning processes in a coordinated and efficient manner. Please do not hesitate to contact us should any further clarification be required. Yours faithfully, <i>W. J. Ryan</i> Will Ryan MRTPI MCIWM Land & Planning Manager
2.16	If yes, and a new surface water sewer across third party land is proposed (e.g. to reach a surface water body), please provide evidence that permission for the proposed sewer has been obtained.	N/A
Priority Level 5 – Surface water runoff is discharged to a combined sewer		
2.17	Will surface water be discharged to a combined sewer?	No
2.18	If yes, please provide details of proposed discharge location	N/A
2.19	If yes, please provide evidence that the sewage undertaker is willing to accept a connection	N/A

3.0 PROPOSED DRAINAGE ELEMENTS & FUTURE MAINTENANCE REGIME

3.1	Proposed SuDS features description	Surface water runoff from the proposed substation compound will be managed using a Sustainable Drainage System designed to control runoff rates and provide water quality treatment. Infiltration drainage is not proposed as ground investigation and BRE365 testing confirmed very low permeability tidal flat clay deposits. The substation yard will utilise a Type 3 permeable stone build-up, which provides temporary storage within the granular sub-base and initial filtration of runoff. Surface water will be collected via carrier pipes and conveyed through a Class 1 full retention oil interceptor to provide suitable surface water treatment before discharging to the existing surface water.
3.2	Proposed Foul Drainage Description	The proposed development is an unmanned electrical substation and therefore generates minimal foul drainage. No permanent welfare facilities are proposed on site. Any foul flows associated with occasional maintenance visits will be managed via a small welfare unit connected to a sealed foul holding tank. The tank will be periodically emptied by a licensed waste contractor and disposed of at an appropriate off-site treatment facility. As a result, no foul discharge to the public sewer or local drainage network is proposed as part of the development.
3.3	Who will be responsible for future maintenance of the SuDS features?	National Grid Electricity Distribution to repair, manage and maintain the proposed SuDS features.
3.4	Drawing References	Proposed General Arrangement: 51021-BUR-XX-XX-D-C-10102_ProposedSiteLayout-S2-P1.0 Existing Drainage GA: 51021-BUR-XX-XX-D-C-10500_ExistingDrainageGA-S2-P1.0 Proposed Drainage GA: 51021-BUR-XX-XX-D-C-10501_ProposedSWDrainageGA-S3-P1.0 Proposed Drainage Details: 51021-BUR-XX-XX-D-C-10551_DrainageDetails-S2-P1.0

References

Statutory Standards for Sustainable Drainage Systems – Welsh Government

– 2018. The SuDS Manual (C753) – CIRIA – 2015.

BRE Digest 365. Soakaway Design.

Planning Policy Wales Technical Advice Note 15 (TAN15) – Development, flooding and coastal erosion – Welsh Assembly Government – March 2025.