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ASSOCIATED BRITISH PORTS

HILL & SMITH COMPOUND OFFICE DEVELOPMENT

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (CEMP)

FEBRUARY 2025

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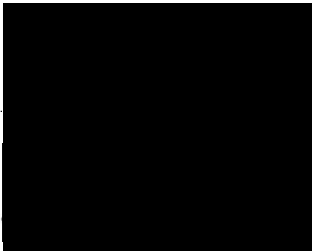
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PREPARED BY:

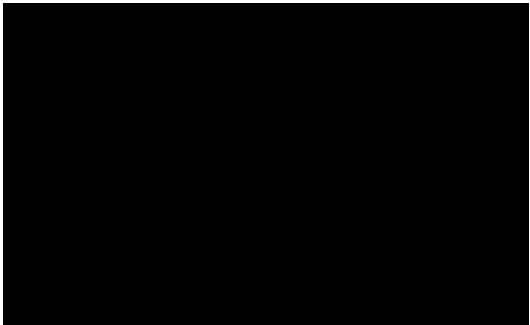
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Appendix 1	– Proposed Development Plan
Appendix 2	– Proposed Drainage Layout
Drawing 1	– Site Location Plan (Ref. CA13057-007).

1 INTRODUCTION AND PROJECT DETAILS

1.1 Project Description

- 1.1.1 Wardell Armstrong LLP (WA LLP) has been instructed by Associated British Ports ('the Client') to prepare a Construction Environmental Management Plan (CEMP) which relates solely to the works proposed as part of the demolition of existing container offices and construction of new portacabin offices and associated works at the Hill & Smith Site at Alexandra Docks, Newport.
- 1.1.2 The Site (the Proposed Development) is located on land off Tom Lewis Way at the Alexandra Docks in Newport, NP20 2WF. The Site is 0.163 Ha and centred at Ordnance Survey Grid Reference E 331173/ N 184616, shown below in Figure 1.1 and **Drawing CA13057-007**.

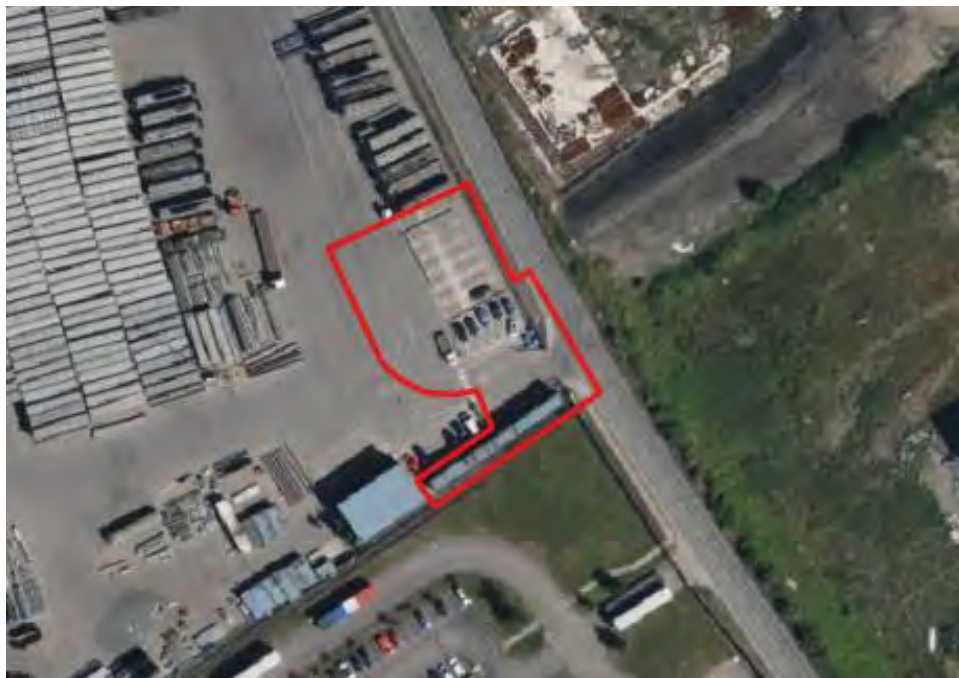


Figure 1.1 Site Location

- 1.1.3 The proposed use of the Site includes removal of the existing storage container offices and construction of a new compound office development consisting of a two-storey portacabin.
- 1.1.4 The Proposed Development drawings, at the time of writing this report, include the use of pad foundations for the portacabin structure.

1.1.5 In addition to the office spaces, as part of the overall development, removal, regrading, and reconstruction of existing Dense Bituminous Macadam (DBM), construction of new unbound paving and a new permeable paving, installation of sustainable drainage features, and provision of parking spaces is also proposed.

1.2 Purpose of the Construction Environmental Management Plan

1.2.1 Under the extant planning permission, a Construction Environmental Management Plan is required to be prepared and submitted to Newport City Council (the Council) for approval for each phase of the development. This Construction Environmental Management Plan includes the following:

- Construction methods: Details of materials, how waste generated will be managed.
- General Site Management: Details of the construction programme including timetable, details of Site clearance; details of Site construction drainage, containments areas, and any watercourse or surface drain.
- Biodiversity Management: Details of tree and hedgerow protection; invasive species management; species and habitats protection, avoidance, and mitigation measures.
- Pollution Prevention: Details demonstrating how relevant Guidelines for Pollution Prevention and best practice will be implemented, including details of emergency spill procedures and incident response plan.
- Details of the persons and bodies responsible for activities associated with the Construction Environmental Management Plan and emergency contact details.

1.2.2 This Construction Environmental Management Plan has been prepared in outline with available information at the time of writing this report, to identify the measures that will be implemented to mitigate against any significant environmental impacts of the construction works. It establishes the contract-specific information and requirements with which all Contractors should comply.

1.2.3 The successful management of construction-related environmental issues during the works will be delivered through the development and implementation of the Construction Environmental Management Plan.

- 1.2.4 The level of detail provided by this document will allow it to be formally assessed by the Council and approved to allow for construction activities to commence without delay.
- 1.2.5 The document also informs consultees and other stakeholders about the relevant Construction Environmental Management Plan requirements for the works.
- 1.2.6 The Construction Environmental Management Plan will be a live working document, subject to constant updating as the works are progressed. Each section is to be reviewed and updated as and when necessary and is subject to review dependent on phasing and project iteration, as well as supporting documents composed by the Principal Contractor regarding site-specific management upon project setup.
- 1.2.7 Once this Construction Environmental Management Plan is approved by the Council, any changes to the approach outlined within this document must be reviewed with all other relevant stakeholders. This process must be undertaken prior to carrying out any amended procedures.
- 1.2.8 An Environmental Aspects and Impacts Register should also be utilised alongside this document whilst undertaking the works. This will be used by the Principal Contractor to:
- Record all sensitive environmental features that have the potential to be affected by the works associated with the Proposed Development.
 - Assess the severity of each impact on the relevant feature.
- 1.2.9 This should be updated regularly where new aspects and impacts come to light. The project will also follow the Natural Resources Wales supported 'Guidance for Pollution Prevention, (here after referred as GPP), to align the work with industrial best practice for construction.
- 1.2.10 The Principal Contractor will utilise the GPP5¹: Works and maintenance in or near water, and GPP6²: Working on construction and demolition sites.

¹<https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/gpp-5-works-and-maintenance-in-or-near-water/>

²<https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/gpp-6-working-on-construction-and-demolition-sites/>

-
- 1.2.11 The site-specific mitigation measures contained within this document have been developed by WA LLP, support by information submitted with the planning application and provided by the project team as a whole.
- 1.2.12 The Construction Environmental Management Plan will be adopted by the Principal Contractor under the conditions of their contract with the Client in compliance with the pre-commencement requirements of the Council, however, the document may need amendment upon commencement dependent on operational or construction changes.

2 CONSTRUCTION METHODS

2.1 Development Description and Wider Site Setting

- 2.1.1 The Site is currently used as offices/welfare facilities for Hill & Smith Infrastructure, car parking, a wagon storage area, recycling bins, and open hardstanding area used for vehicle/machine movement. The Site is covered by DBM hardstanding.

2.2 Development Layout

- 2.2.1 The Proposed Development Plan is presented in **Appendix 1**. All construction is to take place within the red stie boundary as shown in **Appendix 1**.

2.3 Scope of Works and Build Programme

- 2.3.1 The provisional construction programme for the development has been outlined. The works are estimated to last 6 months starting in April 2025.

- 2.3.2 The Proposed Development work can be summarised as follows:

Site Clearance Works including:

- Removal of existing portacabins.
- Removal of part of the hardstanding.
- Cut and Fill.

General site works:

- Installation of two storey portacabins offices and amenities buildings with pad foundations.
- Regrade and construction of hardstanding.
- Parking bays.
- Unbounded pavement.
- Permeable paving.
- Swale and drainage system.
- Installation of package sewage plant.

For each of the main activities above, specific materials, equipment and method used to achieve the specified requirements will be included in the Principal Contractor's Method Statements.

The Construction Environmental Management Plan will be adopted by the Principal Contractor under the conditions of their contract with the Client and submitted to the Council.

- 2.3.3 The construction and operational access to the Site is proposed to be achieved via a removed fence panel off of Tom Lewis Way along the eastern boundary of the site. The exact position is to be confirmed prior to the construction works. The proposed Site access is shown below in Figure 2.2.



Figure 2.2 Site Access via Tom Lewis Way

3 GENERAL SITE MANAGEMENT AND BASIC CEMP REQUIREMENTS

3.1 Legal Requirements

3.1.1 There will be a procedure for identifying legal requirements applicable to the works as well as other requirements (i.e., contractual). Compliance will be periodically evaluated during audits.

3.1.2 The following sources can be used to ensure that site management is aware of the legal and other environmental obligations:

- Industry bodies.
- Specialist publications.
- Specialist waste disposal contractors.
- Natural Resources Wales (NRW).
- The Local Authority.
- Existing Risk Assessments and Site Surveys.

3.1.3 This section stipulates that measures must be taken to contain pollutants on Site, and ensure that no unacceptable impact will occur to people, amenities, properties, and the natural environment from:

- Pollution of land, surface water, ground water and the air.
- Land contamination.
- Hazardous substances.
- Land stability.
- Noise, vibration, dust, odour nuisance and light pollution.
- Any other identified risk to public health and safety.

3.1.4 This project will take appropriate precautions in ensuring compliance with EnW4 policy, and guidelines of GPP5 (Works and maintenance in or near water) such as using Sustainable urban Drainage Systems (SuDS) and appropriate water quality improvement measures by ensuring that any development taking place treats surface and foul water in an appropriate manner.

- 3.1.5 The project will also follow the GPP6' (issued 1st April 2023) which is to be used as a best practice document for wastewater, water, energy, waste, incident control, spill management and chemical containment and storage.
- 3.1.6 GPP6 will be used as a guideline and will support site control and management of potential sources of pollution during construction activities.
- 3.1.7 The risk of effects of dust emissions on ecological receptors has been considered with reference to guidance in the Institute of Air Quality Management's (IAQM) Guidance on "The Assessment of Dust from Demolition and Construction."

3.2 Planning

- 3.2.1 There will be a procedure to identify significant environmental aspects related to the works and outline mitigation measures that are required to reduce the risk of environmental impact arising from that aspect. Aspects include the use of water, fuel, or emissions, so may include any changes to Site operations or identified areas that could have an environmental impact.
- 3.2.2 As a result of the assessment of environmental aspects, all significant impacts will be identified, and measurable objectives/mitigation set against them to reduce the impact of operation and service provision.

3.3 Contractor Responsibilities

- 3.3.1 The Principal Contractor will be responsible for safeguarding the environment and for mitigating the effects of the works by implementing the general environmental requirements outlined in the contract documentation and the specific requirements of the Construction Environmental Management Plan.
- 3.3.2 This Construction Environmental Management Plan describes how construction activities will be undertaken and managed in accordance with legislative requirements and construction industry best practice.
- 3.3.3 This Construction Environmental Management Plan is to be reviewed and further developed by the Principal Contractor to reflect mitigation measures and conditions as construction progresses.
- 3.3.4 All documentation in relation to the environmental management of the works will be maintained by the Principal Contractor and be available to the Client (or the Client's Representative).

- 3.3.5 Principal Contractor has in place a robust Environmental Management System, which ensures compliance with best environmental practices during construction.
- 3.3.6 The performance of the Principal Contractor in meeting environmental objectives and targets of the Construction Environmental Management Plan and in achieving effective environmental management will be subject to on-going review.
- 3.3.7 The Principal Contractor must assess risks arising from the construction works. The Management of Health and Safety at Work Regulations 1999 require that employers (and the self-employed) must undertake a suitable and sufficient risk assessment.
- 3.3.8 Risk assessments of potentially damaging construction activities will be undertaken by the Principal Contractor. Risk assessments will be a key control measure for identified hazards at the Site.
- 3.3.9 Practical measures (both physical measures and sensitive working practices) must be considered and implemented to avoid or reduce impacts during construction. In line with Health and Safety Executive (HSE) guidance, all practicable steps must be taken to prevent danger to any person at the Site.

3.4 Communication

- 3.4.1 The Principal Contractor is required to manage the environmental impacts of all suppliers that provide services in relation to the works.
- 3.4.2 All correspondence between members of the project team relating to environmental issues will be written/emailed/confirmed via Confirmation of Verbal Instruction (CVI).
- 3.4.3 The environmental responsibilities of suppliers working with/ for the Principal Contractor will be managed, monitored, and reported through the application of Method Statements.
- 3.4.4 The Principal Contractor will cooperate fully with arrangements for auditing suppliers' safety and environmental procedures.
- 3.4.5 The Environmental Manager/Co-ordinator will advise the Site Manager on external communication with regulatory bodies, the public, and any other external stakeholders on environmental matters.
- 3.4.6 Key business information, performance against targets and effectiveness of the Method Statements is communicated to the Management Team at periodic meetings.

Communication with operatives is normally conducted during toolbox talks or daily task briefings.

- 3.4.7 Communication with the Client regarding environmental impacts will take place during fortnightly progress meetings and recorded via minutes and progress reports which can include results of monitoring, incidents, complaints, progress, and status of license applications etc. Performance against the environmental objectives and targets can be reviewed at these meetings.
- 3.4.8 A full contact list containing names, job titles and contact numbers will be produced and maintained. On site communication will be provided by use of radios and/or mobile telephone where use is permitted. This will be amended once further details are available for subcontractors, including the Ecological Clerk of Works.
- 3.4.9 The Site Manager will be responsible for receiving, recording, and responding to external complaints. A Complaints Log will be maintained and reviewed regularly to identify any changes to management procedures or operational controls to mitigate causes of complaints wherever possible. All complaints will be recorded in the Considerate Constructor Site file.

3.5 Environmental Induction, Awareness, Information and Training

- 3.5.1 The raising of environmental awareness is seen as a crucial element in the appreciation and implementation of the Construction Environmental Management Plan.
- 3.5.2 A general environmental induction will be developed to introduce all Site personnel to the environmental issues associated with the Site, important environmental controls, energy saving, and general emergency procedures as part of a wider Site induction. A full register of induction attendance will be maintained on Site.
- 3.5.3 All staff will be suitably trained and competent for their roles and have received environmental awareness training to ensure their competence in carrying out their duties on the project. Due to the limited scale of construction on this project the overarching level of environmental risk is not considered to be significant.
- 3.5.4 Where required, specialist training relating to certain environmental aspects will be developed and delivered to key members of the Site team throughout the project.

- 3.5.5 All training records will be maintained and filed on Site. The records will include the content of any courses or training (including induction and toolbox training information), record of attendance and schedule of review.
- 3.5.6 Task-specific toolbox talks and Method Statement briefings on environmental issues relating to the works will be conducted as the works progress. A full register of toolbox talks and/or Method Statement briefing attendance will be maintained on Site.
- 3.5.7 Evaluation of any sub-contractors will be conducted initially through assessment of the approved supplier/sub-contractor questionnaire prior to appointment to conduct any sub-contracted works. The Client and Principal Contractor will undertake this evaluation and include review of quality and environmental credentials. CVs of all specialist staff would be submitted for approval.
- 3.5.8 All activities that may have an impact on the environment will be controlled by the implementation of procedures and Method Statements.
- 3.5.9 Competency requirements for specific activities will be described in relevant Method Statements. All staff and operatives involved will be briefed on the Method Statement before each activity commences.

3.6 Security

- 3.6.1 The Principal Contractor will secure the Site perimeter using suitable fencing which will be erected as soon as access is available and before any work commences. This will be installed as part of the enabling works phase.
- 3.6.2 The necessity for on-site security, and the assessment of the appropriate level of protection and security is the responsibility of the Principal Contractor.

3.7 Construction Energy Use

- 3.7.1 The Site will aim to reduce energy use during construction, achieving this through the BS EN ISO 14001:2015 standard employed to monitor, track and list improvements during the construction setup.
- 3.7.2 The predominant sources of energy use on the development area are anticipated to be from plant machinery (diesel usage), hand tool and fixed plant, concrete manufacture, as well as delivery and collection of construction materials/ wastes.

- 3.7.3 Due to the uncertainty surrounding the delivery of loads into Site and the exact volume of plant machinery required, it is not currently possible to ascertain the total energy use in the construction of the Proposed Development.
- 3.7.4 However, sustainable options for procurement will be considered throughout by the Principal Contractor, such as Sub-Contractor commitment to energy reduction, the use of electric plant, soil reuse from local sites to save delivery emissions, reused furniture where possible for hut and cabin fitting, as well as other options that would in turn reduce waste generation and energy consumption.
- 3.7.5 Sub-Contractors and Site visitors will undertake a Site induction, which will include measures on reducing energy use and waste minimisation whilst on Site.

4 SITE WASTE MANAGEMENT

4.1 Waste Generation

- 4.1.1 This outline assessment of Site waste management is provided to show how waste management and associated materials management on Site will be undertaken, but this may be subject to amendment dependent on project phasing and progress.
- 4.1.2 The Site is anticipated to yield a negligible volume of waste during construction and demolition. Considering the nature of the development activities it is not anticipated that waste volumes yielded by the work will be significant upon local receptors (waste facility capacity) from demolition and construction activities.
- 4.1.3 Major waste streams anticipated from the Site include predominantly Construction and Demolition wastes, made up of DBM hardstanding, stone, rubble and subsoil and portacabins. Following the waste hierarchy, the existing portacabins will be removed in one piece, without the need for them to be demolished on Site, where they will then either be refurbished or recycled. If they must be demolished on Site, the waste will be sent to a suitable disposal facility. However, it is not anticipated that a significant amount of waste will be generated from this activity.
- 4.1.4 Apart from cabin removal, hardstanding and materials associated with earth work, minor, but noteworthy waste streams are likely to include, construction-grade wood, plaster, composites and metals, Commercial and Industrial wastes (such as residual waste and recyclates generated by Site visitors and contractors), and WEEE wastes (from construction tools/ equipment).
- 4.1.5 The waste facilities in the area have sufficient and plentiful capacity for anticipated Construction and Demolition wastes, secondary Commercial and Industrial wastes yielded, as well as capacity for any hazardous wastes (i.e. WEEE, plaster) yielded through the construction process at the Site.
- 4.1.6 The Contractor will have a valid Waste Carriers Licence if transporting waste and will ensure that an appropriate Duty of Care process is followed in accordance with NRW legislation.
- 4.1.7 This Construction Environmental Management Plan will manage Site waste generated through the construction phase in accordance with the principles in the waste hierarchy (*Figure 4.1*), using the following phased approach: reducing the amount of

waste generated, encouraging re-use/recycling waste where possible, and finally removing remaining waste to an appropriate management facility.

4.1.8 All the above phases will include the prevention of contamination, and that wastes are segregated and separated so that recovery and reuse can be maximised throughout the hierarchy by using appropriate waste containers and treatment methods.

4.1.9 The Waste Hierarchy is presented below:

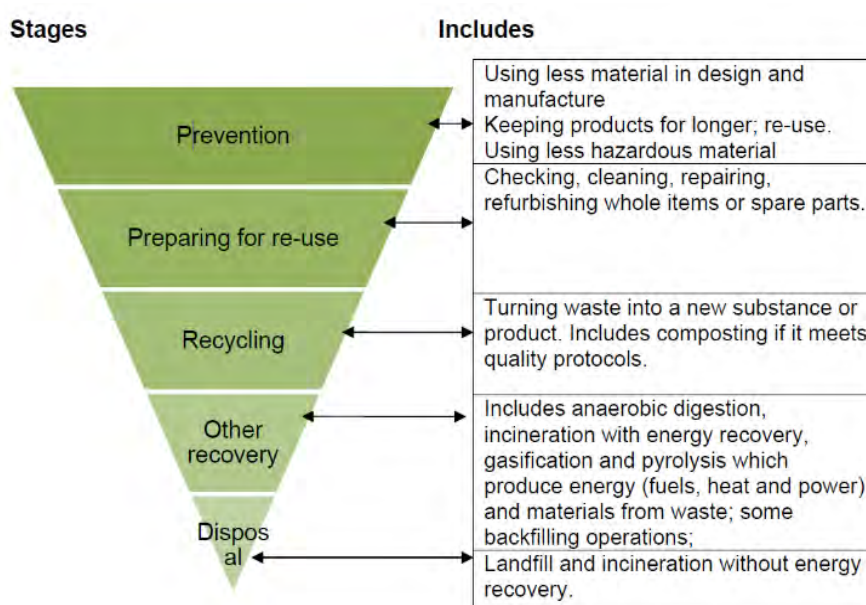


Figure 4.1 Waste Hierarchy

4.1.10 Optimising materials for recycling and re-use on Site will include:

- Designing the construction Site for effective material storage and segregation.
- Establishing recovery targets and recording the volume of materials re-used on Site.

4.1.11 This Construction Environmental Management Plan also takes into consideration any waste management protocol, such as re-using any construction and excavation waste onsite wherever possible. Potential secondary uses for construction waste, include aggregate in building construction, reuse of portacabins, landscaping, and road construction.

4.1.12 Waste arisings will be further identified and quantified in the detailed design stage and through management plans developed for the construction and operation of the Proposed Development.

4.1.13 Waste management responsibility will be allocated on Site and will include monitoring the flow of inputs and outputs to the development at a high-level. This will include the transport of construction/excavation waste to the points of disposal/recovery and the quantities of waste materials diverted from landfill.

4.1.14 Waste avoidance and management measures to be considered and applied (where suitable) will include:

- Purchasing materials to the agreed design specification, to the required quantities and to the correct dimensions in order to avoid wastage and storage problems.
- Take-back agreements with material suppliers to ensure that surplus materials are returned and offered for use at other development Sites, as appropriate.
- Deliveries to be scheduled so that storage space requirements are minimised and managed efficiently, whilst reducing risk of potential material damage and/or deterioration.
- Material storage areas will be secure, weatherproof and with clearly identified segregation of incoming products and different waste streams.
- Identification of, and discussion with local providers of, construction waste recycling capacity (and waste streams requiring specialist treatment) prior to works commencement.
- The suitable location of skips, and relevant sizing to works undertaken to minimize transport movements and ensure maximum efficiency to reduce carbon emissions and improve efficiency.
- Copies of Waste Transfer Notes and relevant paperwork to waste generation and onward transport will be kept by the Principal Contractor.
- Appropriate washout and containment measures for concrete, soils, and other materials to prevent contamination in water courses, drainage and to maximise containment to a suitable off-site location.

5 BIODIVERSITY MANAGEMENT PLAN

5.1 Introduction

- 5.1.1 A site-specific ecological assessment (EcIA) has been undertaken by WA LLP to review the likely impacts of the Proposed Development on ecology.
- 5.1.2 The EcIA report provides the overarching mitigation strategy for the Site during demolition, construction, and operation phases. EcIA also supports implementation of national biodiversity strategies and national planning policies for safeguarding biodiversity and supporting the delivery of sustainable development.
- 5.1.3 In line with the requirements of the Planning Policy Wales (PPW) (2024) and British Standard 42020:2013, a Site-specific statement on biodiversity enhancement and green infrastructure has also been provided in the EcIA.
- 5.1.4 This chapter of the Construction Environmental Management Plan describes the ecological features which have the potential to be affected by the works and sets out the mitigation measures to ensure these are retained and protected as an outline, prior to further risk assessment and method statement creation.

5.2 Background

- 5.2.1 The potential for adverse impacts on habitats and species during demolition and construction arises largely from disturbance (i.e., noise, vibration, light, dust, adverse water quality and human presence), the presence of construction equipment (and associated security fencing/gates) and habitat loss due to de-vegetation and creating Site access and work compounds.
- 5.2.2 The potential for adverse impacts will be minimised as far as possible through the application of good practice techniques, adherence to well-designed Method Statements managed through the Construction Environmental Management Plan, and implementation and compliance monitoring of relevant ecological mitigation measures.

5.3 Basic Requirements

- 5.3.1 The Principal Contractor will incorporate the specific requirements of all recommended ecological mitigation and enhancement measures, including those detailed in the EcIA. These reports must be reviewed in detail prior to any construction phase on Site.

5.4 Baseline Conditions and Nature Conservation Evaluation

- 5.4.1 An EP1 Habitat Survey of the application Site was undertaken on 27th June 2024 by Wardell Armstrong. Habitats have been mapped and classified according to vegetation type broadly in line with relevant ecological standard methods.
- 5.4.2 In summary, the EclA has concluded that as the application Site is composed of hardstanding and existing double staked container offices, it is of negligible ecological value.
- 5.4.3 If the application Site continues to be used and maintained as an industrial area, then the application Site will continue to be of low ecological value.
- 5.4.4 There are several habitats, fauna, and designated sites outside of the Site boundary and in close proximity that have nature conservation value, and consideration should be given to these during construction and demolition.
- 5.4.5 EclA details habitat protection measures in line with the ‘mitigation hierarchy’ to avoid, mitigate, compensate, and enhance habitat protection. Given the nature of the Site location, the assessment of effects has been carried out for both Statutory Designated Sites and Non-statutory Nature Conservation Designations to identify the potential ecological receptors.
- 5.4.6 The following sections describe nature conservation value, potential impacts, and the mitigation measures on the qualifying features of each site.

5.5 Nature Conservation Designations

- 5.5.1 There are a few statutory designated sites located approximately 450m south of the Site at its closest point. Among these are the Severn Estuary SPA, SAC, Ramsar, and SSSI & River Usk SAC and River Usk (Lower Usk) SSSI. Details of these and associated habitats are detailed in the EclA.

5.6 Habitats

- 5.6.1 The EclA reports that the Site is composed entirely of hardstanding and surrounded by 2m high metal palisade fencing along the southern and eastern, boundaries. Along the eastern fence, plants such as buddleia, (*Buddleja davidii*) and traveller’s joy (*Clematis vitalba*) were recorded, and on the southern fence, bramble (*Rubus fruticosus*) and common nettle (*Urtica dioica*) are found growing sparsely and sporadically outside the Site along the boundary fence.

5.6.2 The desk study revealed 144 records of Japanese knotweed (*Reynoutria japonica*) within 2km of the Site. However, no other strands of Japanese knotweed or other non-native invasive species were identified within the Site or within 7m of the Site.

5.6.3 In the event that Japanese Knotweed, or any other unidentified ecological contamination or hazard is discovered on Site, the Site emergency response plan will be consulted.

5.7 Fauna Species

5.7.1 Otters, bats, and birds have been identified as qualifying features for impact assessment in relation to the Proposed Development. The rationale for inclusion of these species for the further assessment is described in the EcIA.

5.7.2 The EP1 Habitat Survey did not record suitable habitat for otters within the Site, however the adjacent River Ebbw corridor located approximately 140m to the west, provides potential suitable habitat. Construction phase impacts will be expected in relation to the reduced water quality in Afon Ebbw River SINC even though there will be no direct loss of SINC habitat.

5.7.3 As there will be no loss of riparian otter habitat to construct the Proposed Development there will be no significant adverse effects on otter using the River Usk SAC from habitat loss.

5.7.4 In addition, construction and demolition impacts on bats and breeding birds have also been discussed. Even if there will be no vegetation removal on Site, the construction works can disturb breeding birds which could potentially be nesting within adjacent retained habitats.

5.7.5 No suitable habitat or buildings were recorded within the Site for bats for roosting, foraging, or commuting. The River Ebbw corridor however, outside the Site to the west, offers opportunities for foraging and commuting bats.

5.7.6 The River Ebbw corridor will not be directly affected by the development proposals and will continue to provide foraging habitat for bats. No significant adverse effects on foraging/commuting bats from disturbance impacts are therefore anticipated.

5.8 Construction Phase effects and Mitigation measures

5.8.1 The Proposed Development Site lies outside of the boundary of designations specified in section 5.5, however given their locations, and hydraulic connectivity, there is

potential for effects to the qualifying features of the designations by increasing noise, vibration, light, air quality and dust emission levels and reducing water quality through contamination during construction.

Disturbance (Noise and Vibration)

- 5.8.2 It is expected that the sudden high levels of noise, in particular from DBM breaking operations, have the potential to cause disturbance to the birds using the Severn Estuary.
- 5.8.3 No piling activities are proposed but there will be some construction noise generated to excavate the foundations for the new portacabin office and SUDs which may have slight impact on water birds.
- 5.8.4 The excavation works will not be any louder than the general noise levels associated with the movement of items around the storage yard and the wider port activities. In addition, as there are significant building structures located between the proposed construction area and the SPA, it is considered that there will be no significant adverse effect on water birds due to these buildings providing a noise barrier to the works.
- 5.8.5 Underwater noise and vibration caused by construction activities has the potential to disturb fish species and otter which could adversely affect their migration. However, as the excavations activities are limited, and no works will be undertaken adjacent to the watercourse, there will be no significant adverse effect on these species from noise or vibration during construction of the development.

Disturbance (Lighting)

- 5.8.6 Increased light levels during the construction phase will have the potential to temporarily adversely disturb wintering birds if the construction works are undertaken during hours of darkness between November and February and if lighting is not directed away from the western boundary.

Disturbance (Dust)

- 5.8.7 There is potential that construction activities, particularly relating to surface drainage systems, could generate elevated levels of dust beyond the Site boundary and directly affect flora and habitats within the International and National designations by covering vegetation and reducing the plants' ability to photosynthesise. However, these activities will be small in scale and localised.

- 5.8.8 Based on the distance and the scale of type of development, it is considered that there will be no significant adverse effect on the features of the habitats and supporting fauna within the International and National designations from dust emissions.

Water Quality

- 5.8.9 Impacts on aquatic life has also been considered in relation to the construction effects on water quality. Due to the proximity of the Severn Estuary designated sites, oils, DBM, concrete, paints, and solvents could accidentally enter the marine environment during construction activities, resulting in a reduction in water quality. This would result in a short term significant adverse effect on the habitat condition of the designations from reduced water quality. In addition, fish, foraging birds and otters using the habitats of the designated sites could subsequently be adversely affected from the uptake of contaminants resulting in short term significant adverse effects on these species.

5.9 Mitigation for Construction Phase Effects

Measures to Minimise Disturbance (Noise and Vibration)

- 5.9.1 Whilst no significant adverse effect to birds and fish using the International and National designations from noise and vibration has been identified, measures will be implemented by the application of best working practices to reduce noise and vibration emissions. To reduce the impact of noise, operational adjustments will be made to avoid sensitive times of the day. As such, only a temporary impact from noise and vibration will be experienced in the vicinity, mainly generated by intermittent vehicle operation.
- 5.9.2 In the event that the noise level exceeds the permissible limits of heavy goods vehicles and machinery, vehicles will be reviewed and replaced with quieter models where applicable. Vehicles will also be routinely maintained to minimise noise from wear and tear or malfunction.
- 5.9.3 The following measures will be adopted to reduce noise and vibration during the works:
- The quietest plant feasibly available will be selected for works on Site, or where possible existing plant modified to reduce noise. Manufacturers often have attenuation kits for their equipment.

- All equipment will be properly maintained and switched off/throttled down to the minimum required when not in use, so no unnecessary noise is caused.
- All access roads will be kept clean and maintained in a good state of repair to avoid unwanted rattle and “body slap” from vehicles.
- Any reversing alarms fitted to vehicles will be minimised as far as is reasonably practicable and subject to maintaining Site safety. This could involve automatic alarm volume setting relative to Site ambient noise levels; and/or manoeuvring vehicles in a circular manner to avoid the use of reversing alarms.
- Any plant which is required to operate outside of general construction hours will be surrounded by an acoustic enclosure or portable screen.
- Site layout should locate the noisiest stationary plant as far as is practicable from critical receivers and allow mobile plant to enter and exit Site in a forward direction except where space limitations do not allow this.
- The construction operatives at the Site will be made aware of noise control requirements and trained to employ appropriate techniques to keep Site noise to a minimum including;
 - i) The proper use and maintenance of equipment.
 - ii) The positioning onsite of machinery to limit emissions to critical neighbouring receivers and Site personnel.
 - iii) The avoidance of unnecessary noise when carrying out manual operations and when operating plant.
 - iv) The protection of persons against excessive noise.

Measures to Minimise Disturbance (Lighting)

- 5.9.4 During the construction phase, security lighting will be kept to a minimum and directed away from the river corridor.
- 5.9.5 The Principal Contractor must take into consideration the type of work activities being undertaken, and therefore the level of lighting that will be required whilst in keeping with the ecological requirements.

- 5.9.6 The lighting design will minimise the impacts of light spillage on adjacent retained habitats through the attachment of directional hoods to lights. Non-essential lighting will be fitted with automatic cut-off switches.
- 5.9.7 Lighting will be positioned and directed so as not to unnecessarily intrude on adjacent buildings and land uses, ecological receptors and structures used by protected species, nor to cause distraction or confusion to passing motorists, river users or navigation lights for air or water traffic.
- 5.9.8 Other construction phase lighting will be restricted to working hours and will avoid disturbance on adjacent sensitive ecological receptors.

Measures to Minimise Disturbance (Dust)

- 5.9.9 A Dust Mitigation Plan, as outlined in Section 9 will be implemented for the Proposed Development Site. Incorporation of measures outlined in the Dust Mitigation Plan will minimise the potential impact on ecological receptors.

Measures to Mitigate Impacts on Water Quality

- 5.9.10 Implementation of mitigation measures outlined in the Water and Wastewater Management Plan will reduce the potential water contamination and associated impacts on ecology.

5.10 Other Ecological Mitigation Measures

- 5.10.1 Undertaking the construction and demolition of buildings outside of the bird breeding season (i.e. outside of March to August inclusive) will be considered as the first mitigation measure. If this is not possible then buildings will be checked by a suitably qualified ecologist 24 hours in advance of demolition for the presence of occupied nests. If any nests are found, works will cease, and an ecologist consulted for further advice.
- 5.10.2 Should there be any changes to the proposed works, the mitigation measures within this Construction Environmental Management Plan will be reviewed further in relation to any amendment of the scope. Further mitigation measures will be added to the Construction Environmental Management Plan as necessary.

6 GEOLOGICAL CONDITIONS ASSESSMENT

6.1 Background

6.1.1 This section considers the potential significant effects from ground conditions and potentially from contaminated ground during the construction of the Proposed Development. It considers potential effects from contamination and ground conditions on human health and the environment including the effects of potentially contaminated ground or groundwater.

6.2 Site conditions

6.2.1 The works have the potential to affect geology and soils as a result of:

- The exposure of new geological strata and the potential for increased erosion.
- Altering the hydrogeology of an area.
- Impacts on features which are, themselves, of particular scientific/geological/ecological interest.

6.2.2 As such, a Desk Study and Preliminary Risk Assessment report (ref. CA13057-003, dated November 2024) and a Site Investigation has been undertaken to ascertain this risk prior to development.

6.2.3 The Desk Study report has identified that the entire Site is underlain by superficial Tidal Flat deposits and Mercia Mudstone. The Tidal Flat deposits are classified as a superficial unproductive aquifer and the Mercia Mudstone is classified as a bedrock Secondary B aquifer.

6.2.4 The Desk Study review has identified that there is a potential of contamination associated with the historical industrial, dockyard, and landfill use of the Site and surrounding Site.

6.2.5 A review of all available desk study information indicates that there is a potential low to moderate risk to potential future human health, controlled waters, and built environment receptors based on former and current uses of the Site and the surrounding area.

6.3 Site Investigation Summary

6.3.1 A phase of intrusive site investigation works was progressed on 4th December 2024 and comprised 3no. windowless sampler boreholes.

- 6.3.2 The locations of the exploratory holes were designed to consider the proposed development layout, the findings of the Phase 1 desk study, location of existing utilities and infrastructure, and the available working area at the time of the investigatory works.
- 6.3.3 All exploratory locations were scanned and cleared of underground utilities using a combination of a Ground Penetrating Radar (GPR) survey, Cable Avoidance Tool (CAT), and hand-dug inspection pits to approximately 1.20m below ground level (mbgl).
- 6.3.4 The 3no. windowless sampling boreholes (WS01, WS02 & WS04) to a maximum depth of 6.0mbgl and Standard Penetration Testing within each borehole.
- WS01 - progressed to 4.0mbgl.
 - WS02 - progressed to 6.0mbgl.
 - WS04 - progressed to 3.0mbgl (terminated early due to encountering potential asbestos containing material (ACM)).
- 6.3.5 All three windowless sampling boreholes were installed with a single 50mm ground gas-groundwater monitoring well in order to allow for the identification of ground gas generation and determining the groundwater level.
- 6.3.6 A total of 7no. soil samples were collected and scheduled for a suite of geo-environmental testing; and 5no. bulk samples were collected and scheduled for geotechnical testing.
- 6.3.7 The general site conditions comprised Made Ground and superficial Alluvium deposits. The depths and thicknesses of the observed strata are shown in Table 6.1 below.

Table 6-1 - Summary of encountered ground conditions.

Strata	Exploratory hole locations	Min. depth to top of strata (mbgl)	Max. depth to base strata (mbgl)	Max. thickness (m)
Made Ground	All	Ground Level	4.0mbgl	4.0m
Alluvium	WS01 & WS02	3.70mbgl	4.0mbgl	2.0m

- 6.3.8 The Made Ground was recorded as varying layers of cohesive silt and clay and granular sand and gravel deposits.
- The cohesive Made Ground deposits were predominantly recorded as firm sandy silt and soft to firm slightly sandy and slightly gravelly clay.

- The granular Made Ground deposits were predominantly recorded as slightly silty gravelly sand with low cobble content within the top 2.0m of the borehole or sandy angular to subrounded fine to coarse gravels.
- The gravel and cobble content comprised of sandstone, shale, concrete, clinker, slag, wood, plastic fragments, metal fragments, and brick fragments.

6.3.9 The superficial deposits were predominantly recorded as very soft to firm slightly sandy gravelly clay, very soft slightly sandy clay, and very soft sandy slightly gravelly silt. The gravel content predominantly comprised angular to subrounded fine to medium gravels of sandstone and slate.

6.3.10 No visual or malodorous evidence of contamination was identified during the site investigation works. However, WS04 was terminated at 4.0mbgl due to suspected asbestos containing material (tile fragment) present within the Made Ground.

6.3.11 The groundwater strikes recorded during the ground investigation works are presented below in Table 6.2.

Table 6-2 - Summary of groundwater levels record during site investigation works.

Exploratory Hole	Depth to Groundwater
WS01	1.35mbgl
WS02	1.50mbgl
WS04	1.30mbgl

6.3.12 The 7no. soil samples scheduled for geo-environmental testing returned no concentrations exceeding available generic assessment criteria for commercial end use.

6.3.13 One soil sample returned a positive ID for amosite & chrysotile asbestos in the form of loose fibres within borehole WS01 (0.3m-1.0mbgl). Subsequent asbestos quantification testing resulted in a composition of 0.004%.

7 HYDROLOGY, HYDROGEOLOGY, WATER MANAGEMENT PLAN

7.1 Background

- 7.1.1 Construction activities (especially earthworks) may result in both direct and indirect impacts on the water quality, flooding, drainage, and the hydrogeology of the local area.
- 7.1.2 In line with GPP6, a Water and Wastewater Management Plan will be considered throughout construction to ensure that impacts to the local environment are appropriately mitigated and prevented, considering the water treatment hierarchy as shown in *Figure 7.1*.
- 7.1.3 This plan is provided as an outline assessment of how water, wastewater and other associated containment measures will be undertaken, but this may be subject to amendment dependent on project phasing and progress.



Figure 7.1 Water Treatment Hierarchy³

- 7.1.4 A Site-specific desk based hydrological assessment has been carried out as part of Desk Study and Preliminary Risk Assessment to review the likely impacts of the Proposed Development on the hydrology and hydrogeology, including required mitigation.

³ Figure referenced from: Guidance for Pollution Prevention, Working at construction and demolition sites: GPP 6. Published April 2023, available at: <https://www.netregs.org.uk/media/tsybv2y3/gpp6-working-on-construction-and-demolition-sites.pdf>

7.1.5 A site-specific drainage management plan (Appendix 2) has been prepared by Wardell Armstrong LLP by applying principles of Sustainable Drainage systems (SuDs) and is attached in **Appendix 2**.

7.1.6 The potential effects on the following were studied within the report:

- Flood risk.
- Hydrology.
- Hydrogeology.
- Surface water and groundwater flow.
- Water quality; pollution and sedimentation.
- Water resources.

7.1.7 Potential receptors are likely to include:

- Shallow groundwater within the superficial deposits.
- Deeper groundwater within the solid bedrock geology (Secondary B bedrock aquifer).
- Unproductive Aquifer – Superficial Deposits.
- Afon Ebwy (Ebbw River).
- Alexandra Dock located southeast of the Site.

7.2 Site Conditions

7.2.1 According to the Desk Study report, OS MasterMap water network dataset provided in the Groundsure report has not identified any water network features within the Site boundary. The Groundsure report and aerial imagery, however, identified the following water networks within 250m of the Site:

- Afon Ebwy (Ebbw River) located 129m – 170m west/southwest of the Site (tidal river or stream at ground level).
- Alexandra Dock located 165m southeast of the Site.

7.2.2 The Groundsure report indicates that Site is located within the “Usk” surface water body catchment (ID: GB530905415404), managed under the WFD. The surface water

body catchment was classified in 2019 with overall rating of “Moderate”, a “Good” chemical rating, and “Moderate” ecological rating.

7.2.3 The Desk Study report did not identify any active surface water abstraction licences or potable abstractions located on or within 250m of the Site. There are also no records of groundwater abstraction licenses or source protection zones associated with the Site or the land within a 250m radius of the Site.

7.2.4 The bedrock beneath the Site is designated as a Secondary ‘B’ aquifer. Secondary ‘B’ Aquifers are mainly lower permeability layers that may store and yield limited amounts of groundwater through characteristics like thin cracks (called fissures) and openings or eroded layers.

7.3 General Hydrological Risks

7.3.1 Risks to the water environment and control measures are set out in Table 7-1.

Table 7-1 General Hydrological Risks and Management

Issue	Requirements
Earthworks, excavation and digging	Run-off from earthworks, excavation and digging activities will be appropriately managed.
Completed earthworks	Stabilise surfaces and/or re-vegetate as soon as possible.
Storage mounds/ Use of construction materials	Cover with correctly secured tarpaulins. Soil stockpiles /materials to be located away from watercourses and welfare facilities. Minimise storage time for excavated soil. High risk activities to be undertaken on gravelled areas away from watercourses e.g., concrete batching. Avoid use of wet concrete in and around watercourses If sewage from welfare facilities and site toilets is stored on site; it will be collected and disposed of by a sub-contractor approved by the principal contractor. Sewage at construction phase will drain to a cesspit/effluent tank, from where it will be collected and disposed of by a registered waste carrier (will be verified with the NRW).

Issue	Requirements
Wastewater Disposal	Any solid or liquid waste which cannot be used on site will be recycled or disposed of off-site, via a registered carrier to a relevant site as applicable: a) A licensed landfill site; or b) A licensed transfer station; or c) A licensed recycling/sewage treatment facility; or d) An exempt site. The tanks within portable toilet facilities (if any) will be emptied regularly. Sewage from portable facilities will be disposed by a registered waste carrier (a copy of their Waste Carriers Licence will be provided to and verified by the NRW) These details will be included in relation to the Principal Contractor's Pollution Strategy Documents (where portable toilets are located within the strategy area). Waste transfer tickets for all movements of sewage / foul water will be retained on site and kept on records.
Soil preservation	Access tracks to be formed pre-construction to minimise soil disturbance, generation of sediments and compaction - potential for water run-off intensification. Construction vehicles to use trackways for site access and minimise disturbance of the main areas of the site.
Mixing and granular materials	The use of pre-mixed plasters and masonry compounds is recommended. The mixing of concrete or bentonite slurries will take place in designated and approved areas.
Materials Storage	All waste produced during the works must be stored in designated areas and isolated from surface drains. All fuel, oil and chemical storage tanks and drums must be stored on an impervious base within an oil tight bund. Use of bunded pallets for storage of plant.
Water, which has come into contact with contaminated material	Contaminated land assessment of the site will be referred to and complied with, and all arisings to be disposed of in accordance with regulatory body advice or to the satisfaction of water and sewerage supplier.
Non-compliance with permits Sub-standard treatment facilities	Maintain a full record of inspections, maintenance and measures required to ensure compliance with consents and permits. Offtaker treatment facilities to be regularly inspected and properly maintained by sub-contractors. Monitoring plan to ensure compliance likely to include: • Water quality monitoring. • Regular inspection of drains/watercourses.

Issue	Requirements
Vandalism resulting in a pollution incident	Construction area to be adequately protected from intruders.
Suspended solids reaching water bodies	Where appropriate cut-off ditches will be used at the edge of the work site.
Drainage/Sediment Risks	Identification and protection of existing drainage. Temporary drainage to be designed with suitable sediment, oil and fuel control to prevent sediments/pollutants entering the field boundary drainage system. Groundwaters pumped from excavations to be passed through sediment traps prior to discharge.
Vehicle Maintenance Spills & Leaks	Use of well-maintained vehicles only and maintenance works should be undertaken within designated areas, away from watercourses/identified drains.
Accidental Spillage	Details of emergency procedures in case of accidental spillage/release of fuels/chemicals to be disseminated at induction and readily available for reference. To include instruction on use of spill kits and contact details of specialist clean-up companies and details of which regulators to be informed in case of an incident.
Completion of Construction Activities - The completion of construction activities and site demobilisation carry significant risk of causing water pollution.	
Laying of surface courses on hardstanding will effectively mean that drainage systems become unoperational	Ensure that pollutants do not become mobilised via operational drains.
Paints and treatment products	Ensure pollutants do not become mobilised via operational drains-sealing drain covers where relevant in line with spills procedures.
Topsoil stored on finished hardstanding	Other sites/locations for such activities or control measures to be put in place.
Washing of finished surfaces	Conducted in such a manner that pollution does not reach surface water outfalls.
Demobilisation	
Removal of storage facilities and plant	Measures to ensure that open ground is not exposed to erosion and formation of gullies.

Issue	Requirements
Contaminants liberated from plant wash-down	Appropriate control measures such as the management of wastewater and other arisings.
Decommissioning fuel storage areas, septic tanks, decontamination units and mess facilities	To follow pollution prevention measures, appropriate spacing in line with COSHH and CDG 2009 regulations

7.4 Flooding

7.4.1 Natural Resources Wales (NRW) interactive Flood Risk Map viewer maintains flood maps based on ground level, predicted flood levels, information on flood defences and local knowledge. The flood maps show the predicted likelihood of flooding in an area in the context of current land use.

7.4.2 In accordance with Natural Resources Wales Development (NRW) Advice Map, the application Site is located within Zone B; areas known to have flooded before.

7.4.3 The Site is almost entirely inside of Flood Risk Zone A, with small local areas of flood risk within the Site boundary located within Flood Risk Zone B. However, the condition statement issued by the Newport City Council on 12/08/2024 states: *“However, at this location the Flood Map for Planning (FMfP) is the best available information on flood risk. The FMfP identifies the application site to be at risk of flooding and partially within Flood Zone 2 Sea. The proposed buildings appear to be outside the area at flood risk although all access/egress is affected by flooding”*.

7.4.4 As such, it can be assumed that a base level of access risk from flooding may affect the wider site due to this classification.

Rivers and Coastal Flooding

7.4.5 The Groundsure report indicated that the Site is not at risk of river and coastal flooding and is not located within a Flood Zone.

Surface Water Flooding

7.4.6 The Groundsure report records that the highest risk of surface flooding within the Site boundary is a 1 in 30 years return period at a depth greater than 0.1m to 0.3m.

Groundwater Flooding

7.4.7 The Groundsure report records that the Site is of negligible risk of groundwater flooding.

Flood Defences

- 7.4.8 The Groundsure report has not identified any records of historical flood event, flood defences, or areas benefiting from flood defences within the Site boundary. However, it records an area benefiting from flood defences and a record of a flood defence 237m west of the Site pertaining to the Afon Ebwy (Ebbw River).
- 7.4.9 Apart from the surface water management measure as specified in 5.2, which will serve as flood control measures, the construction Site manager will be responsible for signing up to the NRW Flood Warnings Direct service to receive and disseminate flood warnings as well as agree the relevant response.
- 7.4.10 Example responses for the three levels of warnings have been specified follow:
- On receipt of a Flood Alert: Contractors to be prepared for a potential flood event, understand the likely cause, times and durations (if known) and remain up-to-date with weather forecasts, and look out for further messages.
 - On receipt of a Flood Warning: As per a Flood Alert but also, contractors make preparations to cease work in FMfP Zone 2 in case the event escalates. Only return to normal service once the Flood Warning has been removed.
 - On receipt of an NRW Severe Flood Warning: Cease work in FMfP Zone 2. Only return to normal service once the Flood Warning has been removed.

7.5 Surface Water and Foul Water Management during Construction

Surface Water

- 7.5.1 During construction, surface water will be managed through developing appropriate drainage as part of the initial project start up to manage sheet-flow drainage that is anticipated from the construction of roadways and structures on the Site.
- 7.5.2 The nature of the works means that treatment for surface water discharge will not be required at the Site. It is anticipated that the only generated flows are from surface runoff and will not require treatment, beyond the containment of silt/dirt.
- 7.5.3 Mitigation measures during construction comprise measures to prevent runoff carrying sedimentation or construction materials into local watercourses via Swale. Surface water will be prevented from entering excavations also.

- 7.5.4 Surface water run-off will be controlled with drainage channels with perforated pipe network across the Site. Water will be entered into a swale that will be constructed at the northwest boundary of the Site.
- 7.5.5 The swale will be designed and constructed in accordance with Part 17 CIRIA C753 SuDs Manual V6. Swale will be sown with species rich meadow seed mix suitable for seasonally wet soils, such as Emorsgate Seeds EM8 Meadow Mixture for Wetlands, or similar and approved. Permeable paving will be designed and constructed in accordance with Part 20 CIRIA C753 SuDs Manual V6.
- 7.5.6 These measures will ensure that flooding on Site is avoided, by channelling and dispersing water whilst encouraging infiltration.

Foul Water

- 7.5.7 The existing Package Sewage Treatment plant on site will be modified to meet the capacity of the foul water generated from showers, toilets and canteen areas. Treated effluent from the plant will be discharged in compliance with NRW and other national environmental discharge conditions.
- 7.5.8 The Principal Contractor will ensure water management measures are in place, pertaining to surface water and foul water during the construction of the Site.
- 7.5.9 All personnel onsite will be made aware of all of the below standard good practice measures and will be instructed to implement them through Site inductions.

8 POLLUTION PREVENTION

8.1 Background

8.1.1 This section has been prepared in line with the PP5: works and maintenance in or near water. Pollution prevention with regards to Waste Management and Invasive Non-Native Species are addressed in Sections 4 and 5 respectively.

8.2 Silt

8.2.1 Table 8-1 provides guidance for managing silty water which can arise from excavations, exposed ground, stockpiles, plant, and wheel washing and site roads. Adequate provision will be made for dealing with silty water within site-working plans.

Table 8-1 Potential Sources of Silt and Control Measures

Issue	Requirements
Water containing silt	No silty water will be pumped directly into a river, stream or surface water drain but, where possible disposed of to a cesspit/effluent tank (or foul sewer with the prior agreement of the appropriate authority).
Water entering excavations	Use cut-off ditches to prevent entry of surface water and well point dewatering or cut-off walls for groundwater. The corner of the excavation can be used as a pump sump. Do not allow personnel or plant to disturb water in excavations.
Exposed soil and material stockpiles	Minimise the amount of exposed ground and soil stockpiles. Covering stockpiles and constructing silt fences from a suitable geotextile may be useful in reducing silt levels in run-off water.
Dusts and mud from roads	Site roads/access tracks to be regularly brushed or scraped and kept free from dust and mud deposits.
Wheel washes and plant washing facilities	Constructed securely with no overflow, the effluent contained for proper treatment and disposal in accordance with regulatory body guidelines.
Discharging to watercourse of any pumped clean water from dewatering or over pumping operations	Care will be taken when using powerful pumping equipment as disturbance/erosion of receiving water body (i.e., riverbed and bank) could occur, producing silty water.

8.3 Concrete and Cement

8.3.1 Where onsite concrete production is to be utilised (most likely in the construction of temporary compound areas, foundations and the installation of gates), careful initial siting of concrete mixing facilities is vital. A settlement and recirculation system for

water re-use will be considered. At no point will concrete or cement derived products enter a water body or drain. This is specifically relevant for the construction of the substation compound. Table 8-2 below details management procedures for concrete and cement, which will be managed through a local containment system specific to concrete creation.

Table 8-2 Managing Concrete and Cement

Potential Pollution Source	Control Measures
Washing out and cleaning of concrete batching plant or ready-mix lorries	Carried out in a contained area as far from watercourses as practical – referred to as the wash-down area. All wash-down areas to be signposted. All plants contaminated with concrete to be cleaned in designated wash-down areas. Washout will not be allowed to flow into any drain or watercourse.
Concrete spills during site transportation	Loads managed to avoid spillages – select load dependant on vehicle, slump of concrete and prevalent ground conditions.
Silane (trialkoxo isobutyl silane) is used to protect concrete structures against chlorides	Silane is highly damaging to the aquatic environment and rigorous containment measures will be implemented especially considering the proximity of the minor watercourses.

8.4 Wastewater

8.4.1 Liquid wastes pertaining to run-off from material storage areas and from wet methods of preparation should never be released directly into surface waters or surface waters drains without prior approval from the relevant regulatory bodies.

8.4.2 Table 8-3 details associated risks and management of wastewater from construction materials and methods.

Table 8-3 Wastewater Control Measures

Potential Pollution Source	Control Measures
Surface washing	The most efficient method of containing generated waters is by a vacuum attached to the spray nozzle.
Wastewater used for pressure washing	To be contained and the resultant waste managed.

Dewatered from conduits / ducts may be contaminated with silt, oil, or other substances	To be contained and the resultant waste managed.
Uncontrolled releases and spillages	Implementation of the site emergency response plan

8.5 Pollutant Containment

8.5.1 Water pollution will be minimised and controlled through Method Statements and risk assessments of construction activities which will follow construction industry best practice guidance such as those described in GPP6.

8.5.2 Most pollution incidents are avoidable. Careful planning of construction/excavation operations, responsible waste management and suitable anti-pollution measures reduce the risk of spillage, along with simple precautions to deal with any potential spillages. The costs of cleaning up a pollution incident can be very high, and the consequences of a prosecution for environmental offences are likely to be serious. Any work carried out in or near watercourses or over the underlying aquifers will be regarded as high risk.

8.5.3 All personnel onsite will be made aware of all of the best practice measures and will be instructed to implement them.

Plant and Spill Containment

8.5.4 Containment measures to ensure spill control will be implemented for Site plant vehicles. All plant will be well maintained to limit leakage from engines or hydraulic systems. Pumps and other similar equipment will be placed on drip trays with refuelling undertaken following strict procedures for spill control.

8.5.5 This includes the following:

- Refueling of vehicles and other plant to only be carried out within a designated area or, where that is not possible, under the supervision of a suitably qualified and trained Site foreman. All refuelling, oiling, and greasing will take place above drip trays or on an impermeable surface which provides protection to ground and away from drains. Vehicles will not be left unattended during refuelling.
- Only well-maintained equipment and vehicles to be permitted on Site. The earthworks contractor/plant and equipment contractor will provide inspection certificates of the plant/equipment's suitability and will regularly inspect and

check plant and vehicles throughout the project to ensure that they remain fit for purpose.

- Any item of plant that leaks fuel or oil onto any surface will be considered unfit for use and will be repaired immediately or removed from Site.
- Any spillages of contaminating liquids or other materials will be reported to the Site Manager immediately. Stocks of oil absorbent materials will be kept onsite to deal with small spillages.
- Appropriate bunding will be used for any fuel or chemical container on Site, ensuring containment at source to prevent spillage.
- All wash down of vehicles and equipment will take place in designated areas and wash water will be prevented from passing untreated into watercourses and will comply with best guidance and available information (i.e., archived Pollution Prevention Guidance 13 (PPG13)).
- Drip trays will be placed below static mechanical plant.
- A spill kit is to be made available on-site and appropriate to the volume of fuel stored at any given point.

Vehicle/Fuel Containment

- 8.5.6 All fuels will be stored in fully bunded fuel tanks within the Site compound area and the plant storage area. Fully bunded mobile fuel bowsers will be utilised to distribute fuel to plant working on Site. A designated fuelling area will be set up where plant will be re-fuelled.
- 8.5.1 Fuel/oil spillage kits will be available at both re-fuelling areas and within each item of operational plant. All plant operators will be fully trained on the emergency application of these kits should an accidental spillage occur.
- 8.5.2 Weigh load indicators are fitted to HGVs to prevent overloading. Fuel tankers and roll on-off bins cannot operate when overloaded. Vehicles such as flatbed trucks, trailers or low loaders cannot be fitted with weight loaders.
- 8.5.3 Prior to commencing the works, the Principal Contractor will utilise the most appropriate methods to minimise mud and debris from Site being deposited onto public highways in line with the dust management measures implemented (i.e., a

temporary wheel wash facility) that is considerate of the Drainage measures of the Construction Environmental Management Plan.

Chemicals and Material Storage for Spill Containment

- 8.5.4 Chemicals and other construction materials will be stored and contained in areas where they will not be easily mobilised to reach water courses. Procedures for the use of specific materials will be developed to reduce the risk of accidental release and ensure that water quality is appropriately protected, using bunds to ensure containment and separating chemicals appropriately on-site using Guidance for Pollution Prevention principles.
- 8.5.5 A combination of material characterisation and removal, where appropriate, prior to stockpiling and construction control measures would be employed on Site in order to ensure that the risk to off-site receptors is minimised as far as is practicable.
- 8.5.6 Adequate access arrangements will be made to provide suitable entry to a material storage compound, with chemicals, oils and fuels stored on an appropriate bund.
- 8.5.7 All hazardous materials will be used, stored, and transported in a safe manner. All personnel and contractors involved with hazardous materials handling will be made aware of the associated environmental hazards and risks and will be appropriately trained in routine activities and emergency actions/responses.
- 8.5.8 An up-to-date list of any hazardous materials onsite will be prepared, specifying their location. The Environmental Manager/Co-ordinator will regularly review this.
- 8.5.9 All hazardous materials will be kept in adequate conditions of containment, within controlled areas and securely protected from contact by non-authorised personnel, including trespassers and vandals. The quantities of hazardous material stored at any one time will be minimised.
- 8.5.10 Control of Substances Hazardous to Health (COSHH) assessments will be held onsite for all hazardous materials. These give advice on the type of storage required for the chemicals, i.e., bunded areas, and storage of flammable products in locked cabinets to prevent reactivity and containment in the event of a leak/spill.
- 8.5.11 Storage bottles or tanks containing or transporting hazardous materials will be above ground and will have leakage/spill identification and controls in place. Leaking or empty drums or other containers will be removed from the Site immediately.

8.5.12 Above ground tanks, drum storages and pipelines that contain hazardous materials will have properly designed secondary containment. The primary storage container itself will be of sufficient strength and structural integrity to ensure that in normal circumstances it is unlikely to leak or burst.

8.5.13 All hazardous materials will be used in line with manufacturers' instructions.

8.5.14 The correct quantity of chemicals will be used and, where possible, less hazardous alternatives considered. All hazardous materials will be used and stored within drip trays to prevent contamination. Drip trays underneath portable plant, such as generators, will also be used.

8.5.15 Any disposal of product or empty product containers will be in accordance with waste management legislation and related COSHH sheets.

8.6 Other Source Containment Measures

8.6.1 Further preventative source containment measures include:

- Any water that has come into contact with contaminated materials will be disposed of in accordance with the Water Resources Act 1991 and the Water Industry Act 1991 (if disposed to public sewer) to the satisfaction of regulatory bodies (e.g. NRW), sewerage provider and local authority as applicable.
- The use of water for dust suppression may also increase runoff quantities during construction and any excavation of soil could have an impact on both surface and groundwater quality. This volume is expected to be minimal, and in the event of any contamination, is to be managed on Site using appropriate dust prevention measures (as referred to in Section 9) to prevent any water contamination.
- Containers of contaminating substances will be leakproof and kept secure to prevent spills and vandalism.
- List I and List II substances (Dangerous Substances Inventory) will be restricted in use during construction.
- Where possible, carrying out regular inspections of discharges, drainage systems, collection ditches, interceptors, and watercourses to ensure that they are in good order as part of Site management.

8.6.2 The completed works as designed should present minimal risk of impacts to the hydrological environment; status quo in terms of the drainage system is to be retained

as far as possible to preserve the greenfield run-off rate, no active maintenance of the drainage system is planned in-line with current practices.

8.7 Emergency Spill Procedures

8.7.1 In the event of a spill on Site from transport, construction or other development associated activities, a site-wide emergency spill procedure will be followed.

8.7.2 The “Source, Pathway, Receptor” model will be considered, and efforts made by Site to ensure that spills are prevented from entering pathways.

8.7.3 A sufficient volume of spill kits (containing spill granules, bunds and containment equipment) will be available on the Site, and staff will be trained in how to use them effectively to ensure that materials are contained and can be safely removed from Site via a waste contractor.

8.7.4 As part of auditing, a “spill drill” will take place on Site, checking that staff members are aware of how to find, operate and contain a spill on Site using Site equipment and further measures to be taken if needed.

8.7.5 In the event of a minor spill, containment will occur using on site spill equipment and this will be removed by using a licenced waste contractor.

8.7.6 In the event of a major spill occurring that could contaminate the nearby water course or other receptors in the area beyond the capability of Site containment, NRW will be informed, and an appropriate contractor used to support the removal and containment of spilled material in order to prevent contamination.

8.7.7 Further details for spill containment are provided under 8.5 for plant, vehicle, construction material and chemical spill containment as part of the Water and Wastewater Management Plan.

8.8 Unanticipated Ground Conditions

8.8.1 A general watching brief for evidence of contamination should be undertaken during construction works. If visual/olfactory evidence of contamination is encountered, works in the area will cease and a suitably qualified and experienced environmental consultant / engineer should be contacted. The assigned environmental consultant / engineer will be responsible for liaising with Newport City Council Environmental Protection Team as appropriate throughout this protocol.

- 8.8.2 Under the direction of a suitably qualified environmental consultant/engineer, the area of concern will be examined. If required, samples of potentially contaminated material will be taken and analysed at an accredited laboratory to determine if the material meets the required criteria to be protective of human health and the environment.
- 8.8.3 Pending the laboratory results of the samples, the extent of the potential contamination will be delineated where practicable. It may be appropriate to separately stockpile arisings of potentially contaminated material on low permeability membrane to prevent leaching.
- 8.8.4 Upon receipt of the laboratory results, the results will be screened against suitable generic assessment criteria and assessed in accordance with the LCRM guidance. If concentrations above the criteria are encountered, the findings of the assessment will be used to determine the risks and the appropriate course action. If required a remediation strategy will be submitted to and approved by Newport City Council Environmental Protection Team.
- 8.8.5 Where a remediation strategy is required, a verification report for the remedial works will be produced and issued to the Newport City Council Environmental Protection Team upon completion of the works.
- 8.8.6 A competent/licensed contractor will remove asbestos containing materials and other materials and structures contaminated with asbestos fibres, if positively identified onsite.
- 8.8.7 Relevant information should be included within the Principal Contractor's, and any other relevant contractor's, Health and Safety risk assessment and method statement for the construction works. This should include instruction to maintain a watching brief during the works for evidence of contamination and measures such as appropriate use of PPE and dampening stockpiles of excavated material to prevent dust generation.

9 DUST MANAGEMENT

General Mitigation Measures

9.1.1 Linked to the Site geological assessments and drainage assessments the following mitigation measures will be employed as part of the works to protect Site users and neighbours during the construction phase from dust, in line with GPP6 recommendations.

Basic Requirements

9.1.2 Dust control may be required with regards to material movements and activities during construction, and is likely to include:

- Covering of any soil during transportation.
- Regular inspection and, if necessary, cleaning and repair of local highways and Site boundaries to check for soil/dust deposits (and removal if necessary).
- Where practical, use mobile or fixed spray units to dampen surfaces of soil as indicated by weather conditions (and containment of water/moisture from this).
- Keeping soil stockpiles or mounds away from the Site boundary and, where possible, enclosing soil stockpiles or keeping them secure sheeted.
- Ensuring that any dust containment system and vapors used are contained and prevented from going into surface run off to avoid blocking or disrupting the effectiveness of any surface water drainage systems (in tandem with Section 7.5).
- Undertaking the above measures for clean soils where excessive dust production is identified on Site (i.e., from plant movement, during excavations, etc.).

9.1.3 Site access should be controlled and restricted to prevent public access to ensure no further dust arisings can take place from non-construction operatives.

9.1.4 Site-specific risk assessments and Method Statements must also include comprehensive review of the amenities and assets of occupiers/land users on Site and any necessary mitigation measures to protect these features.

9.1.5 Services below ground serving or crossing the Site will be highlighted in detail as part of the Pre-Construction Information (PCI) package. Installation of any new utilities will also be recorded as part of the PCI process.

- 9.1.6 Off-site disposal of soils should be minimised and inert materials should be recycled for re-use onsite wherever possible.
- 9.1.7 The risk posed to Site workers involved in the construction phase by soils, dusts and vapours will be reduced to acceptable levels through standard health and safety planning. This will incorporate details on personal protection equipment (PPE) and working methodology. Based on desk-based geological assessment of the Site there is a potential for contaminated material at the Site. Workers will be informed of possible contamination sources at the Site and what safe working procedures to follow if they encounter contaminated materials.
- 9.1.8 The Health & Safety Management Plan for the works should allow for additional measures to be implemented if visibly contaminated materials are detected, or changes in working methodology occur during the works. Where necessary, advance works should be overseen by a contamination specialist, and additional health and safety mitigation measures should be incorporated into the working plan appropriately.

Incident Management Plans

- 9.1.9 The Principal Contractor will ensure that during the construction of the Site, an incident management plan will be developed and reviewed and updated throughout the construction process.
- 9.1.10 This will be undertaken in line with GPP6 recommendations, ensuring that materials are stored appropriately, reactive compounds are stored in appropriate places, as well as the availability of kits to contain spills and manage on site incidents.
- 9.1.11 Information regarding potential risks from their operations, as well as spill containment materials/spill response equipment will be clearly defined and submitted to the Principal Contractor by any Sub-Contractors. A procedure for a general response will be included in the Health and Safety Plan detailed by the Contractor; stating the chain of command and standby operatives, and clearly advised to all staff. An Environmental Manager/Co-ordinator will be appointed by the Principal Contractor.
- 9.1.12 The emergency contact details for the works will be clearly displayed at the Site where all staff can see them.

9.1.13 A list of any and all nearby residential properties, downstream abstractors and other sensitive receptors that could be affected by an environmental incident will be reviewed, compiled and maintained by the Principal Contractor.

9.1.14 The Principal Contractor will ensure any environmental impacts are communicated to the Client. It is the Client's responsibility to report any environmental concerns and respond appropriately to incidents for the remainder of the operational site (such as customers).

9.1.15 Environmental incidents will be recorded by the Principal Contractor including:

- Nature of spill/leak/incident.
- Time/date.
- Exact location.
- Type of material released.
- Approximate volume released.
- Actions taken to prevent contamination.
- Individuals reported to.
- Lessons learnt.

9.1.16 Lessons learnt will be fed back to Site staff through safety and environment briefings and used by the Environmental Manager/Co-ordinator to amend procedures and update the Construction Environmental Management Plan and Incident Response Plan accordingly.

9.1.17 Emergency procedures will be tested by the Environmental Manager/Co-ordinator and the results reported to the Project Manager. Examples of procedures include:

- The names, 24-hour contact details of and the quickest transport route to all emergency response personnel and emergency services.
- The procedures for reporting and documenting an emergency incident.
- Personnel responsibilities during an emergency incident.
- The location of onsite information on hazardous materials and spill containment materials.

9.1.18 Action plans for the following environmental incidents will be prepared as part of the Site Emergency Management Plan (or equivalent):

- Oil and fuel spillage.
- Excessive noise.
- Excessive dust.
- Water pollution.
- Amenities/utilities disruption
- Site-specific ecological constraints.

9.1.19 This will be drafted by the Principal Contractor upon allocation the Site team to the project and will be amended throughout to reflect changes to aspects throughout the project.

Monitoring

9.1.20 Environmental policies and Principal Contractor environmental objectives are to be communicated to all personnel through induction procedures, specific designated workshops, and toolbox talks. Relevant policy documents will be available to view on Site notice boards.

9.1.21 All activities that may have an impact on the environment will be controlled by the implementation of procedures and Method Statements. Each procedure and Method Statement will be reviewed by a competent person within the company or a relevant project manager to ensure that they are in line with this Plan as well as other applicable environmental requirements.

9.1.22 Compliance with the environmental management system requirements, policy, and objectives as well as compliance with the project environmental plan will be evaluated through periodic internal audits. The main monitoring tools are:

- Site visits and inspections.
- Physical monitoring (noise, vibration, and air pollution).
- Watching brief activities (i.e., ecology).
- Waste records.
- Records of material import.

- 9.1.23 Daily inspections of the expansion area will occur to ensure compliance with the Construction Environmental Management Plan, and to minimise the risk of damage to the environment. All environmental incidents will be reported to the Environmental Manager/Co-ordinator.
- 9.1.24 The Environmental Manager/Co-ordinator will undertake fortnightly inspections and complete an assessment of the works' environmental performance measured against environmental standards, relevant legislation, and the Construction Environmental Management Plan. The Environmental Manager/Coordinator will produce a fortnightly assessment detailing environmental performance and non-compliances and will inform the Project Manager of all findings.
- 9.1.25 Environmental key performance indicators applicable to the works will be measured and included in the progress reports to the client as required. The parameters measured will include energy/fuel consumption and waste generation/management.
- 9.1.26 Document control will be in accordance with the Client's Quality Management System (QMS) and copies of all environmental audit reports, consents and licences will be maintained by the Project Manager and held on Site for review at any time.
- 9.1.27 Internal and external environmental auditing and inspections will be conducted. The Principal Contractor will be responsible for investigating and addressing any non-conformance raised by the audit within an agreed time frame and ensuring that corrective and preventative actions have been fully closed out.
- 9.1.28 Internal audits will be carried out by an environmental manager or qualified auditor that is independent from the project management team. The project team will facilitate second and third-party audits carried out on behalf of the client.

10 EMERGENCIES AND INCIDENT RESPONSE

10.1 On-site Structure and Responsibility

10.1.1 The Principal Contractor's dedicated environmental specialist team (collectively known as the Contractor's Environmental Team) and any other relevant specialist whom the Contractor deems to be necessary in discharging the contract's Construction Environmental Management Plan obligations are detailed below:

- Contracts Manager: The Contracts Manager has overall responsibility for the safe and proper execution of the contract works. They will ensure the construction programme is carried out with consideration of the environment.
- Director of Safety Health and Environment (SHE): The SHE Director will visit the Site and have total responsibility for the implementation of safe systems of work. They will direct and advise staff and Site personnel in respect of safety and environmental legal requirements. This is especially important for the cut and fill exercise where large plant will be utilised and environmental considerations as well as health and safety aspects need to be prioritised.
- Site Manager: The Site Manager (SM) will be resident onsite and will be responsible for ensuring the works are completed in accordance with this plan and all applicable legislation, including being responsible for the allocation of sufficient resource to implement all Environmental Management. They will review this document at regular intervals and update when necessary, including undertaking a fortnightly review of the Construction Environmental Management Plan implementation. The SM will review environmental management reports prepared by the Project Environmental Manager, investigate incidents and non-conformances, and correct where necessary. The SM will be responsible for ensuring the adherence to all permits, authorisations and consents and will be the main point of contact with the Client (or the Client's Representative) regarding Environmental Management onsite; also ensuring any environmental instructions from the Client are carried out. The SM will ensure the Contractor's staff and sub-contractors receive appropriate training on project specific environmental issues and any task-specific risks have been effectively communicated.
- Head of Quality and Environment (HQE) (or equivalent): The HQE is responsible for the implementation of the Environmental Management System and its associated

management procedures. They will liaise closely with the project management team and advise on the delivery of environmental responsibilities.

- Project Environmental Manager (PEM)/Environmental Co-ordinator (or equivalent): The PEM's responsibilities include liaising with the project team to ensure compliance with environmental requirements as well as planning, implementing, and reporting the environmental monitoring of noise, vibration, and dust, as required. This will be completed via environmental audits and inspections. The PEM is also responsible for the dissemination of environmental information and maintaining awareness of the work force of the environmental implications of their actions including via delivering environmental training and toolbox talks. The PEM will report non-compliances to the SM and will, as far as reasonably practicable, attend any environmental incidents onsite. Incidents and non-conformances will be corrected, and preventative action implemented. The PEM will aid in reviewing the Construction Environmental Management Plan and relevant procedures including risk assessments and method statements, ensuring all environmental standards and commitments are adhered to, including carrying out the relevant/necessary environmental induction and training. Attendance at formal contract progress meetings and liaison with third-party interest groups is required.

10.1.2 All the various reports, assessments, and Method Statements relevant to the Proposed Development must be considered when reviewing environmental management requirements. All stipulations outlined within the associated documentation should be adhered to.

10.1.3 The Principal Contractor team will be health and safety trained, as well as hold relevant Environmental certification for the works taking place on Site.

10.1.4 All site-based staff have a role in following good practice and being responsible for carrying out their activities without detrimental effects on the environment. Staff should comply with systems of work and undertake tasks in accordance with their training. All site-based staff are responsible for reporting any environmental concerns and incidents to their supervisors, including suggestions for improvements.

10.1.5 The Client should ensure that all relevant environmental documentation is communicated to the Principal Contractor and their Environmental team.

10.2 Emergency Contact Details

10.2.1 The preliminary Emergency Contact details for relevant staff members are listed below in Table 10-1 and are indicative of the responsible persons on Site.

10.2.2 These contacts will be updated and checked regularly on the relevant notice board and in all relevant plans, dependent on contractor staffing and project allocation by the Client and Principal Contractor.

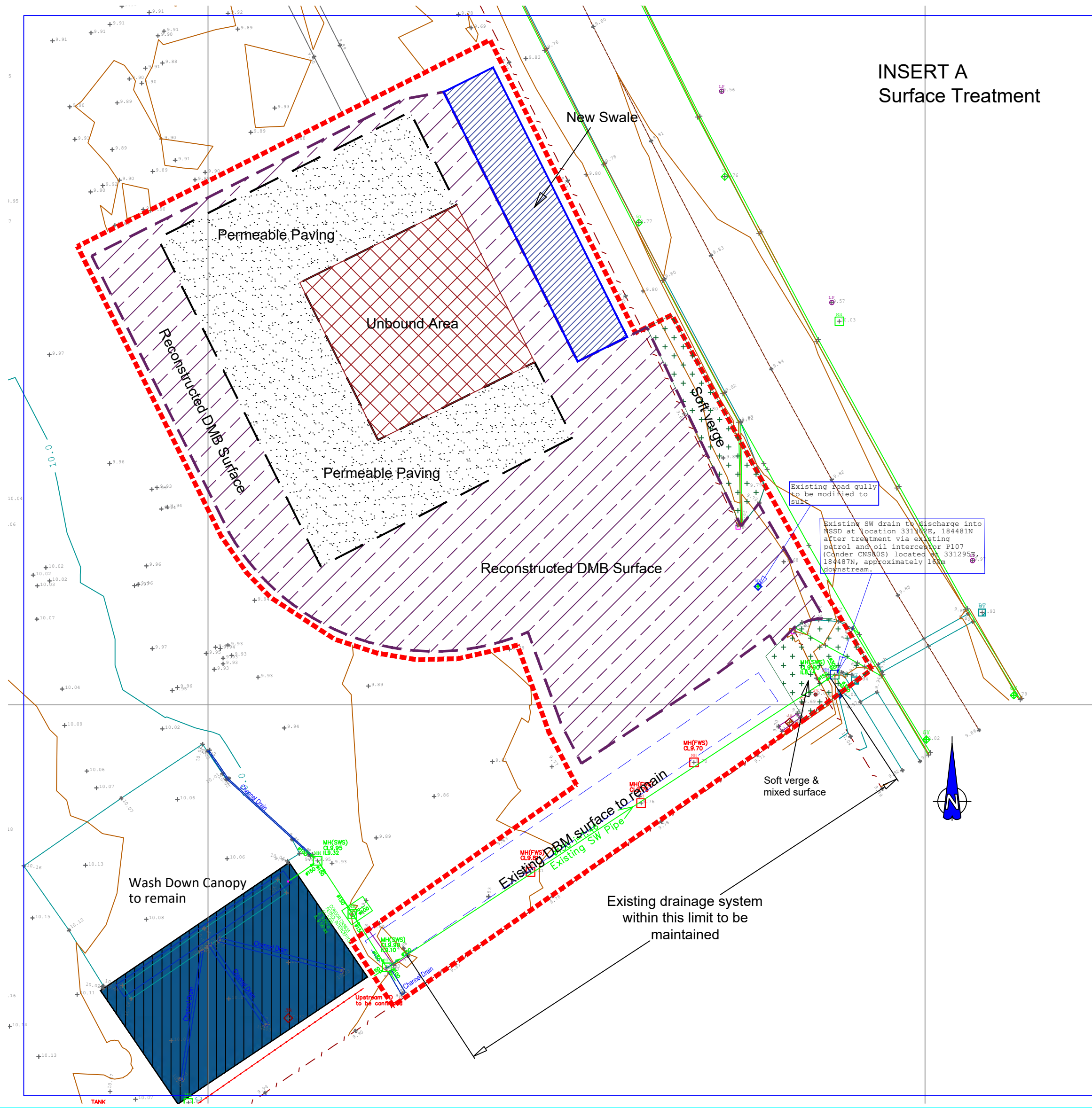
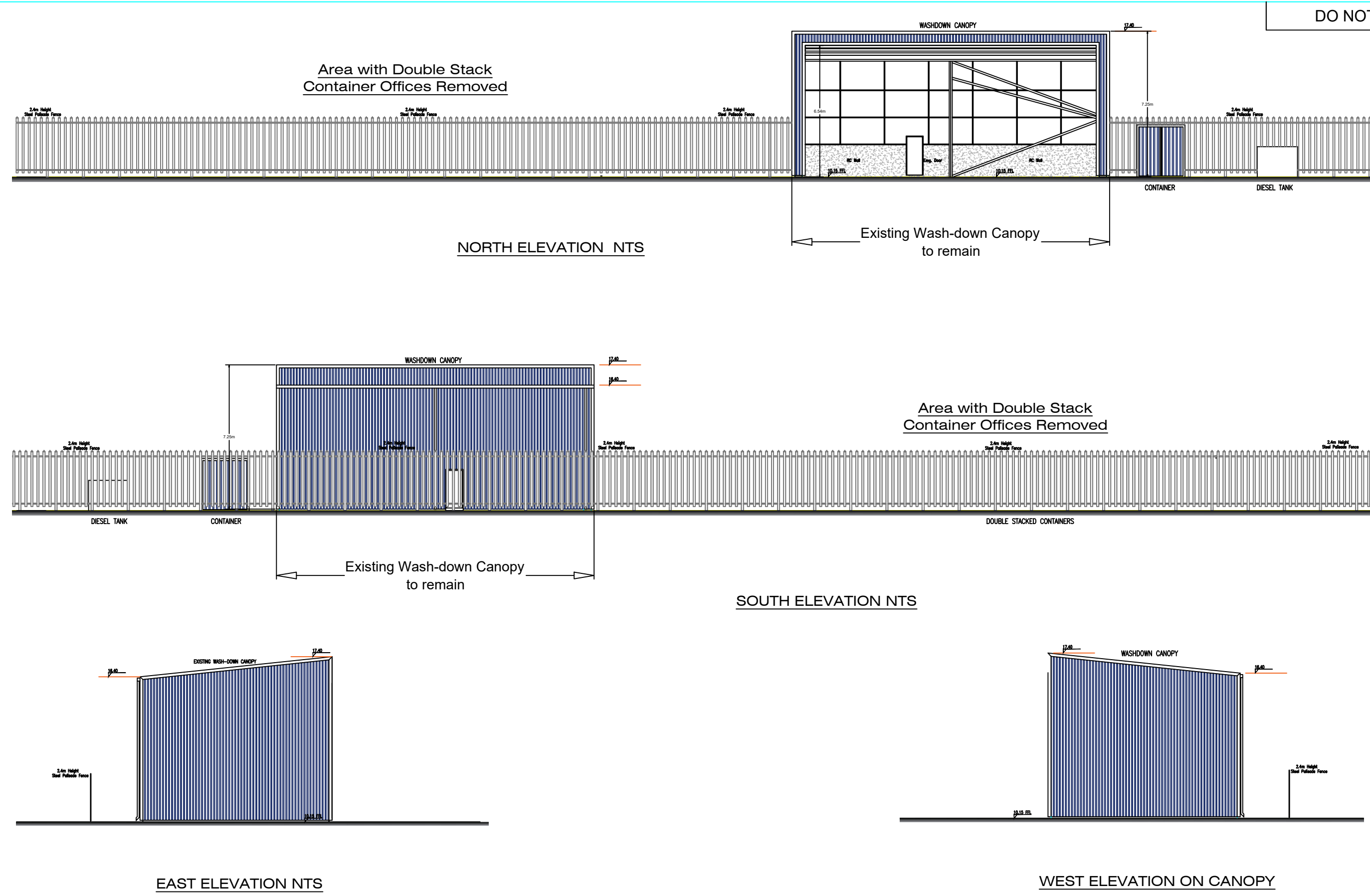
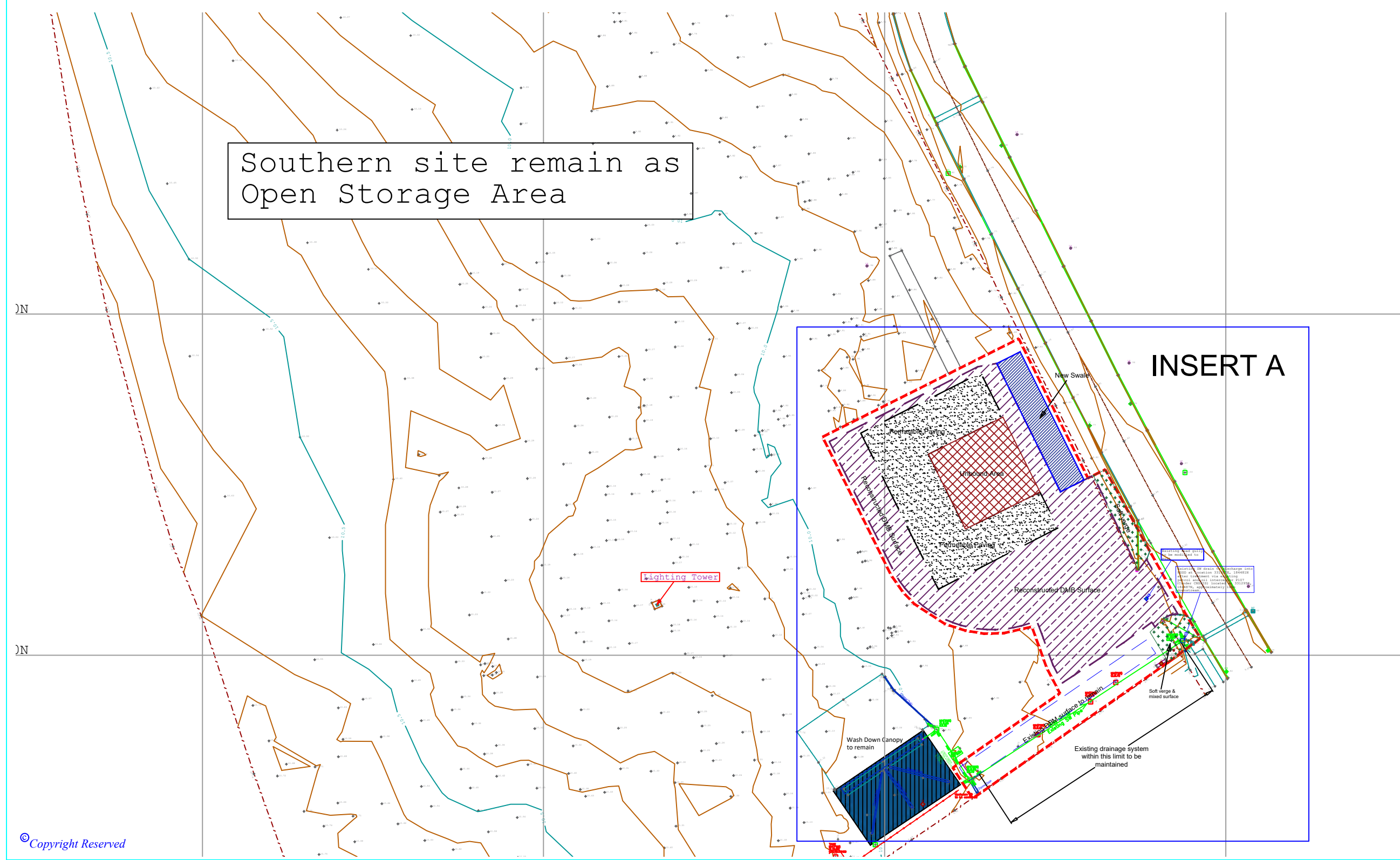
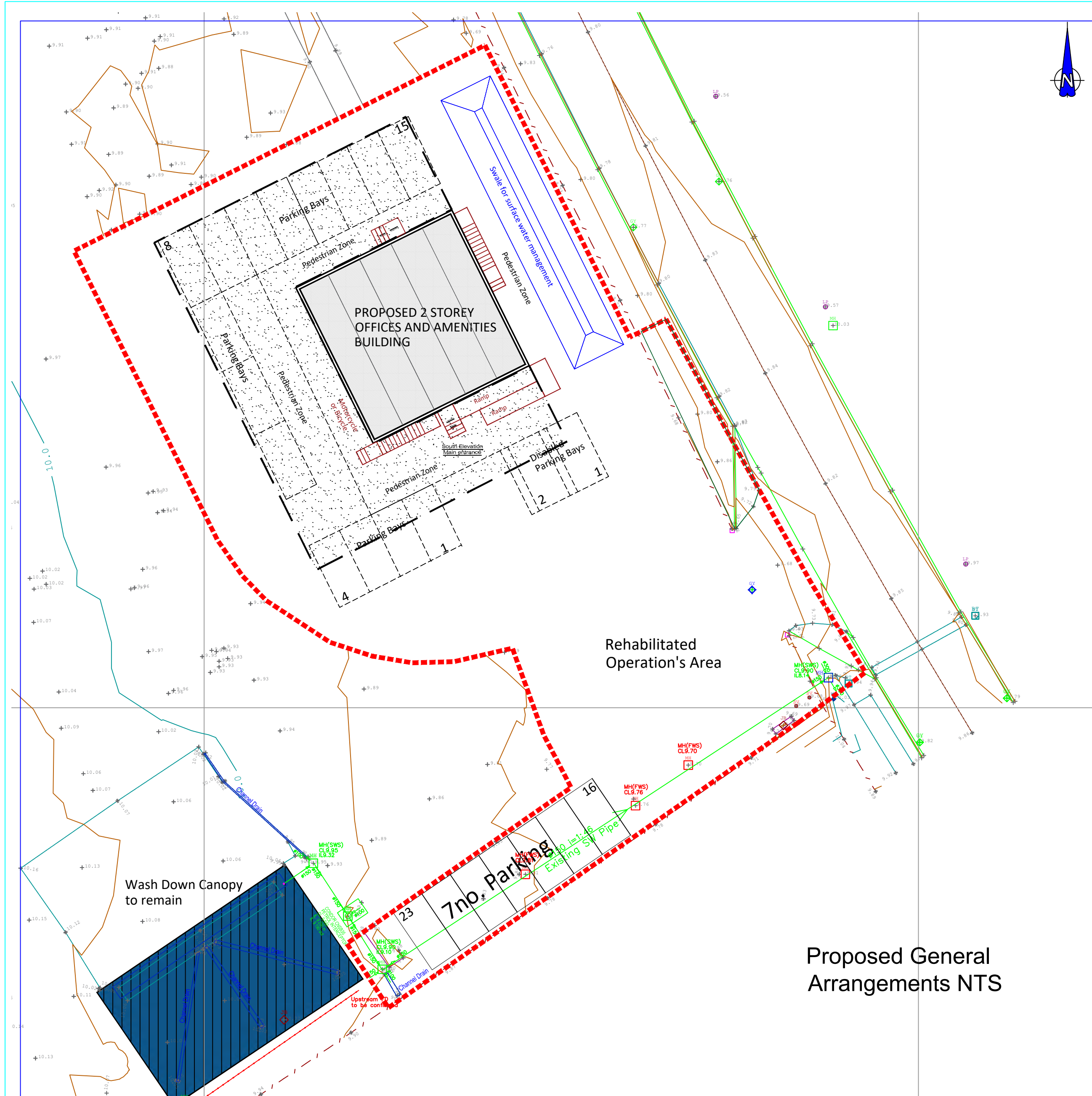
10.2.3 The named responsibilities may be subject to change, dependent on subcontractor involvement on Site.

Table 10-1 Preliminary Site Emergency Contacts

Organisation	Title	Name	Contact
Client	Client Liaison	Matthew Moore	matthew.moore@abports.co.uk
Principal Contractor	Site Manager/ Company Director/ HQE /SHE Manager	Laurence Owen	Laurence@noelfitzpatrick.ltd.uk
Principal Contractor	Contract Manager	Patrick Gallagher	pat@noelfitzpatrick.ltd.uk
Principal Contractor	H&S/ Environmental Supervisor (PEM)	Anna Fitzpatrick.	anna@noelfitzpatrick.ltd.uk

Appendix 1

Proposed Development Plan



DO NOT SCALE FROM THIS DRAWING

Notes:-

- This drawing is to be read in conjunction with the following Plans:-
 - CA13057-001 Site Location and Application Boundary
 - CA13057-002 Existing Site Layout & Elevations
 - CA13057-004 Office and Amenities Building Layout and Elevations
 - CA13057-005 Proposed Drainage Layout

Application area (0.163ha)

3no. double stacked 40ft steel container offices and amenity to be removed (total floor area 160sq.m)

Existing DBM surface to be removed, regraded and reconstructed as detailed at post infrastructure installation (1196sq.m)

Area of new permeable paving (352sq.m)

Area of new unbound paving beneath new office building (150sq.m)

Area of new Swale to manage surface water runoffs from permeable surface and office building roof (81sq.m)

Area of road verge permanent reinstatement to match existing (65sq.m)

Rev	Date	By	Appr
01.07.24	PP	ES	SW

CLIENT: ABP South Wales and Shortsea

PROJECT: Alexandra Docks, Newport Hill & Smith Compound Development

DRAWING TITLE: Proposed Site General Arrangements and Elevations

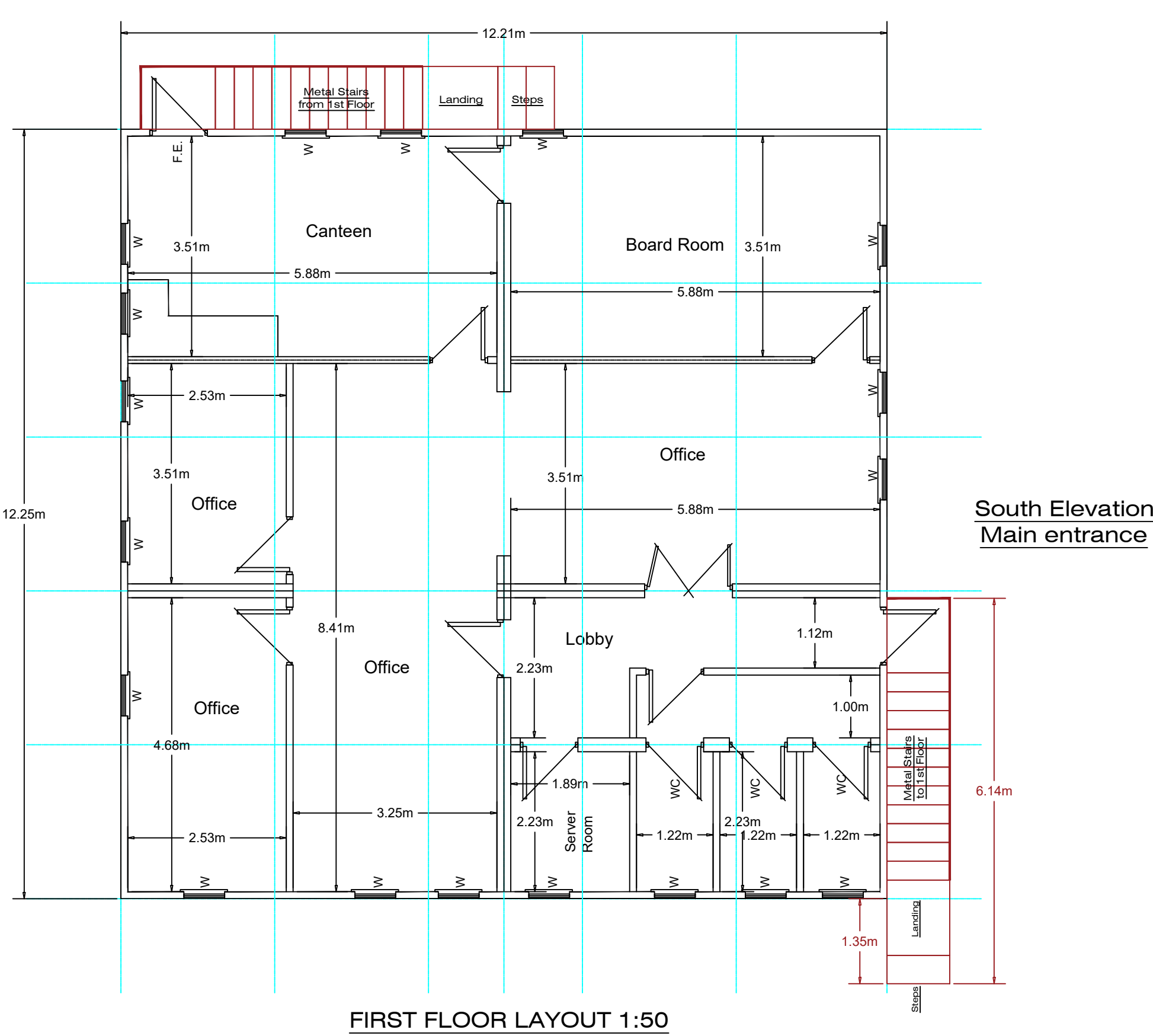
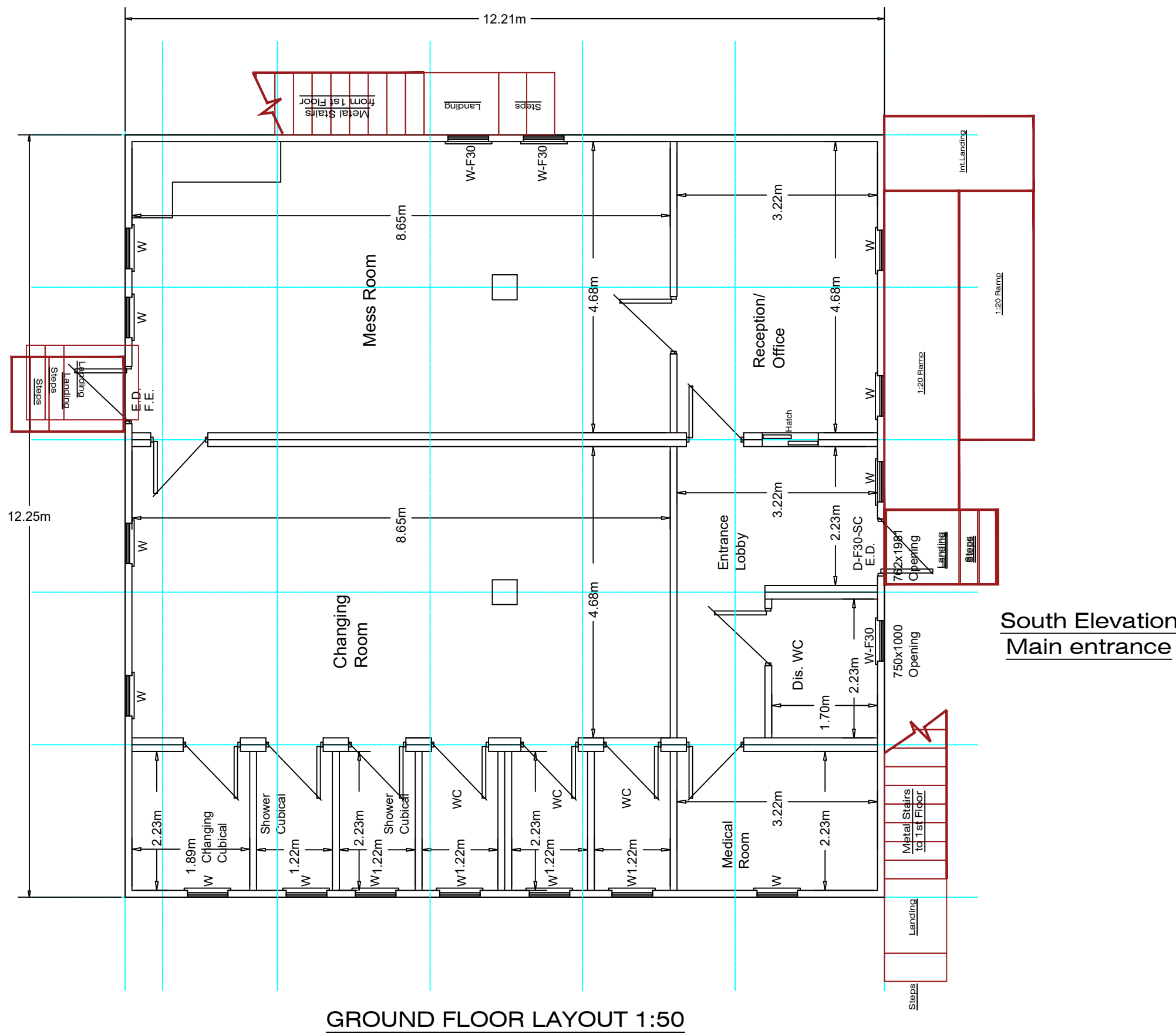
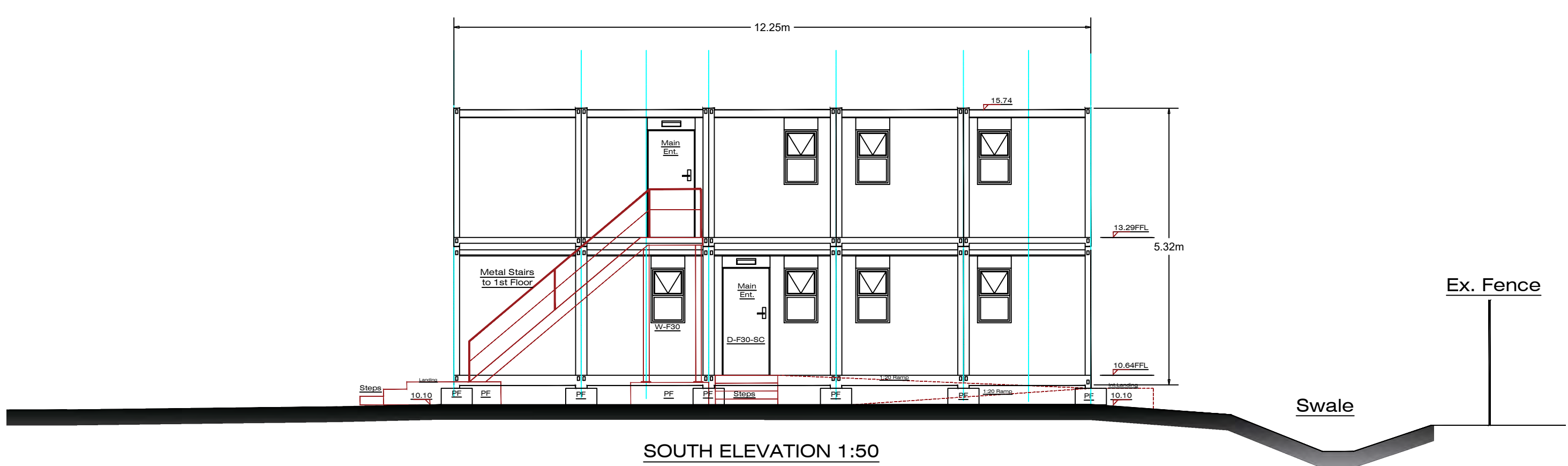
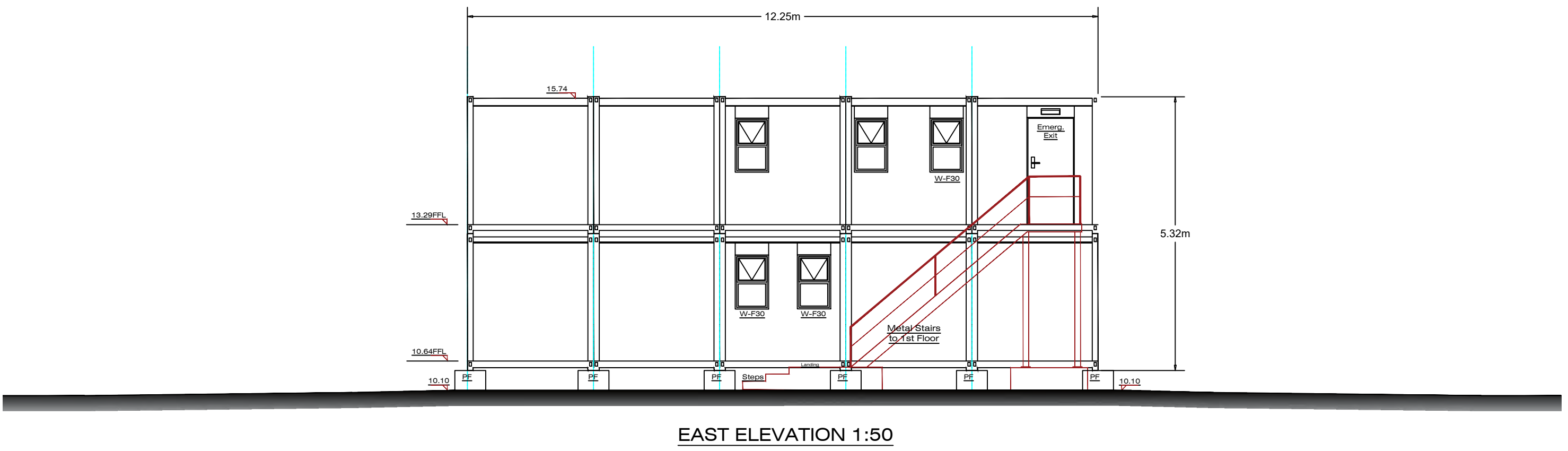
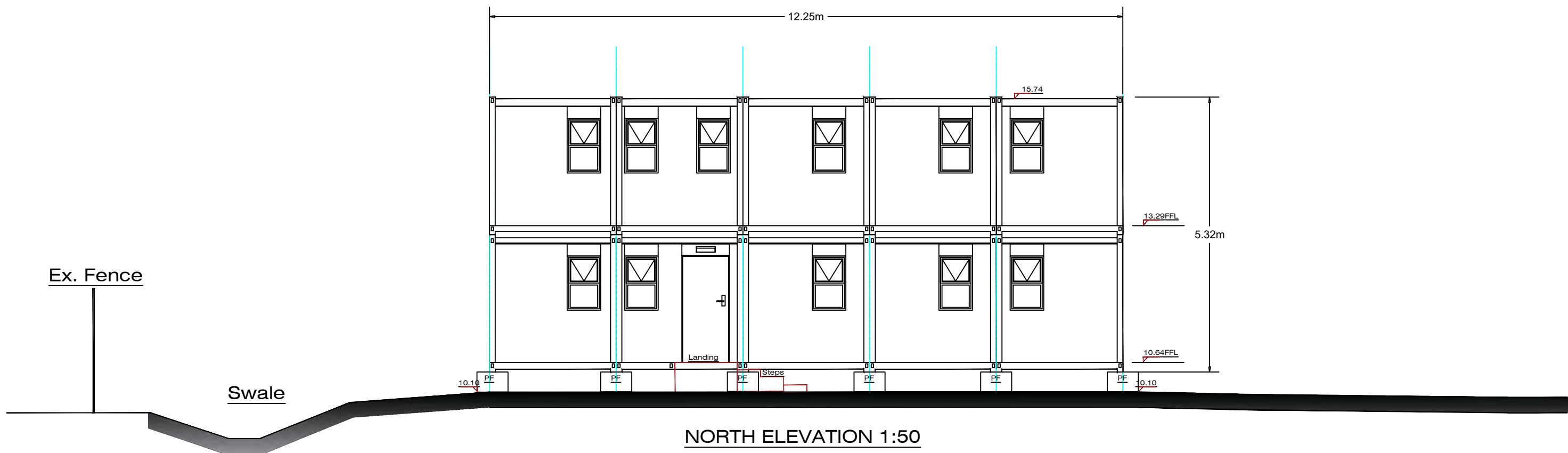
DRG No.	SCALE	DATE	REV
CA13057 - 003	As Shown	27.06.24	A

Drawn By	Checked By	Approved By
PP	SJ	SW

wardell armstrong

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BOLTON LEEDS
CARDIFF LONDON
CARLISLE MANCHESTER
EDINBURGH NEWCASTLE UPON TYNE



GENERAL:

1. All dimensions are in millimetres. All levels are in metres.
3. All structural elements, foundation pads and DCB walls are indicative only.
4. The design, installation and commissioning of the modular offices and amenities building to be responsibility of the specialist modular offices Contractor.
5. External finishes and trim colour to be determined in due course to meet with Hill & Smith's requirement.
6. W-F30 denote window with 30 minutes fire resistance construction.
7. D-F30-SC denote door with 30 minutes fire resistance construction, self-closing.

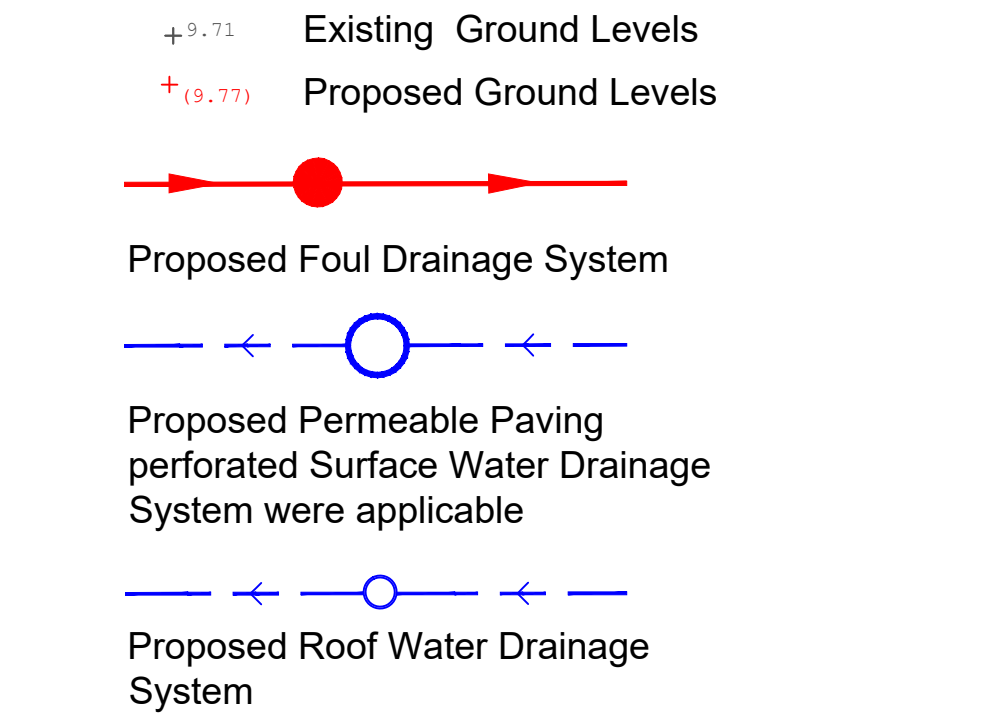
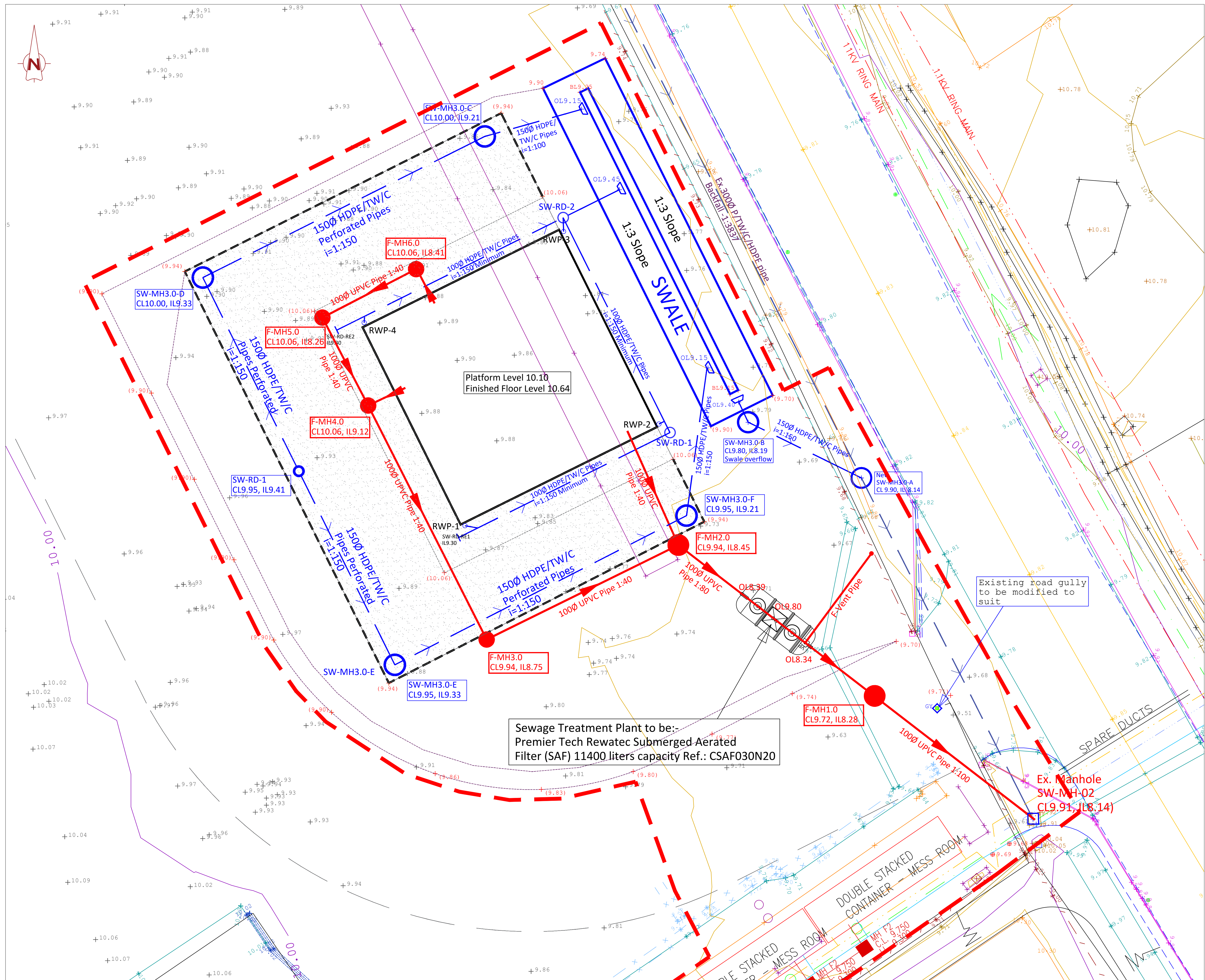
Notes:-

1. This drawing is to be read in conjunction with the following Plans:-
 - CA13057-001 Site Location and Application Boundary
 - CA13057-002 Existing Site Layout & Elevations
 - CA13057-003 Proposed Site General Arrangement and Elevations
 - CA13057-005 Proposed Drainage Layout

A	Planning Application Issue				01.07.24	PP	SI	SW
REVISION		DETAILS			DATE	DRAWN	CHECKED	APPROVED
CLIENT								
ABP South Wales and Shortsea								
PROJECT								
Alexandra Docks, Newport Hill & Smith Compound Development								
DRAWING TITLE								
Office & Amenities Building Layout and Elevations								
DRG No.					REV			
CA13057- 004					A			
DRG SIZE		SCALE		DATE				
A1		As Shown		27.06.24				
DRAWN BY		CHECKED BY		APPROVED BY				
PP		SJ		SW				
 wardell armstrong					STONE ON TRENT TEL 01782 276700 WWW.WARDELLARMSTRONG.COM ☐ BIRMINGHAM ☐ GLASGOW ☐ BOLTON ☐ LEEDS ☐ CARDIFF ☐ LONDON ☐ CARLISLE ☐ MANCHESTER ☐ EDINBURGH ☐ NEWCASTLE UPON TYNE			

Appendix 2

Proposed Drainage Plan



- NOTES:-
- Swale to be designed and constructed in accordance with Part 17 CIRIA C753 SuDs Manual V6. Swale to be sown with species rich meadow seed mix suitable for seasonally wet soils, such as Emorsgate Seeds EM8 Meadow Mixture for Wetlands, or similar and approved
 - Permeable Paving to be designed and constructed in accordance with Part 20 CIRIA C753 SuDs Manual V6.
 - Drainage systems to be designed and constructed in accordance with 'Sewers for Adoption 8th Edition 2018.
 - Package Sewage Treatment plant to have the following performance parameters:-

Discharge Standard (95% ile)
20mg/l BOD5
30MG/L SS
20MG/L NH3-N

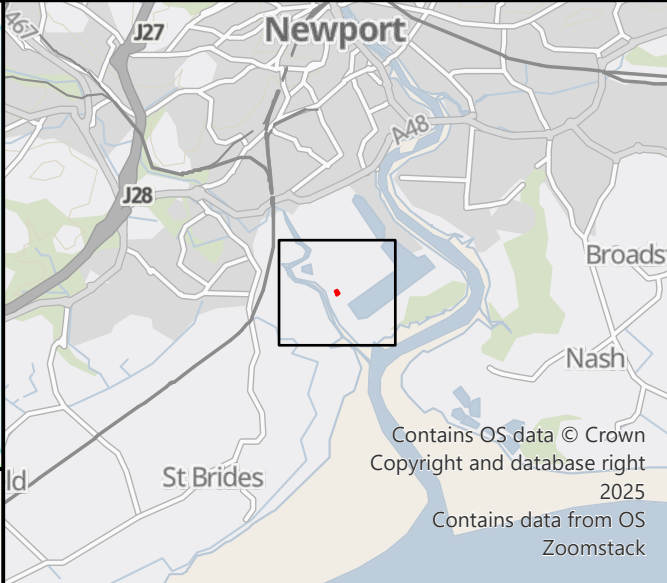
Design maximum population 30no.
Dry Weather Flow (DWF) 6cu.m/day
Peak Flow Max. for 10 minutes 0.21L/S

- This drawing is to be read in conjunction with the following Plans:-
- CA13057-001 Site Location and Application Boundary
 - CA13057-002 Existing Site Layout & Elevations
 - CA13057-003 Proposed Site General Arrangement and Elevations
 - CA13057-004 Office & Amenities Building Layout and Elevations

A	Planning application issue	01.07.24	PP	SJ	SW
REVISION	DETAILS	DATE	ISSUED	CHANGED	APPROVED
CLIENT	ABP South Wales and Shortsea				
PROJECT	Alexandra Docks, Newport Hill & Smith Compound Office Development				
DRAWING TITLE	Proposed Drainage Layout				
DRG No.	CA13057 - 005	REV	A		
DRG SIZE	A1	SCALE	1:100	DATE	28.06.24
DRAWN BY	PP	CHECKED BY	SJ	APPROVED BY	SW
wardell armstrong					
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Drawing 1

CA13057-007 Site Location Plan



KEY

Approximate Site Boundary

Notes:

Boundaries are indicative. Aerial imagery shown for context purposes only.

Site Boundary approxiamtely digitised from georeferenced plan "Site Location and Planning Application Boundary" PDF produced by Wardell Armstrong.

A	FIRST ISSUE	24/02/25	CP	ZD	LP
REVISION	DETAILS	DATE	DRAWN	CHKD	APPD

CLIENT

ASSOCIATED BRITISH PORTS

PROJECT

HILL & SMITH COMPOUND OFFICE DEVELOPMENT

DRAWING TITLE

SITE LOCATION PLAN

DRG No.	CA13057-007	REV	A	SUIT. CODE	---
DRG SIZE	A3	SCALE	1:5,000	DATE	24/02/2025
DRAWN BY	BL	CHECKED BY	ZD	APPROVED BY	LP



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