

- **Form B2, Question 5a Provide a plan or plans for the site:** Please provide one simple site plan with the following included:

A series of individual plans have been provided as Appendix A within the Permit application supporting information. They have been provided as individual plans due to the complexity of the information presented. Each plan contains the necessary scale information. The following provides an explanation of the drawings included in the application.

If required, Sweco can provide further drawings, however this will require additional drafting. Your precise requirements would best be confirmed on a call.

- a. *Whole site boundary reasonably accurate and in acceptable format and clearly identified, within this site boundary include the installation boundary.*

Sweco CAD Technicians are currently compiling a single summary plan which will contain the following:

- Green Line Boundary (permitted installation)
- Red Line Boundary
- Buildings
- Interceptors and route to public sewer
- Fuel delivery tanks

A Site Location Plan showing full site boundary is presented within the application supporting information document (page 113) (drawing reference: SLO1X0-SWE-EX-XX-DR-C-0100).

Additionally, an 'external areas drainage plan' is provided within the application (drawing reference SLO1X0-SWE-EX-XX-DR-C-0501).

The revised drawing we intend to send will be simplistic and we recommend that the more detailed drawings are viewed in conjunction with this summary plan.

- b. *Site layout.*

Site layout drawings are provided in the Application supporting information document. Permit Installation and Emissions Points (drawing reference LON1X0-SBR-A1-00-DR Y-0100). General arrangement drawings for the ground floor, first floor and second floor are also provided (drawing refs LON1X0-SBR-AZ-00-DR-A-1000 to 1002).

- c. *Emission points clearly shown, including the connection (a line) from the data centre drainage to the existing public sewer.*

A site drainage plan is provided on page 122 of the application supporting information document (drawing reference: SLO1X0-SWE-EX-XX-DR-C-0501). This drawing includes details relating to storm water/surface water and foul drainage systems. The location of air emissions points and surface water emission points in relation to the green line boundary (permitted installation) are provided on Drawing LON1X0_SBR_A1_00_DR-Y_0100 (Permit Installation and Emissions Points).

- d. *Identification of other geographic features (roads, rivers etc.).*

Sweco Response: A Site Location Plan showing full site boundary is presented within the application supporting information document (page 113) (drawing reference: SLO1X0-SWE-EX-XX-DR-C-0100). This plan identifies roads and surface water courses in proximity to the site.

- e. *Scale indicator.*

Each plan submitted in support of the Permit application supporting information provides the necessary scale information.

f. *Site surfacing identified.*

An additional drawing (reference SL01X0-SWE-EX-XX-DR-L-0001-P04) Landscape General Arrangement Plan is enclosed. This drawing shows the external hard and soft landscaping features including pathways, paving, access roads and areas of planting. The accompanying drawings SLO1X0-SWE-EX-XX-DR-L-0002-P03 and SL01X0-SWE-EX-XX-DR-L-0003-P03 provide additional detail and a key to the illustrated features.

g. *Fuel storage areas, tanks, interceptors and pumping stations identified.*

h. *Fuel delivery areas identified.*

The fuel fill point cabinet and receiver fuel point is labelled on the 'General Arrangement Facility A Ground Floor' Drawing (ref LON1X0-SBR-AZ-00-DR-A-1000). This is provided as page 115 of the Permit application supporting information.

Fuel storage is via 'belly tanks' which are located beneath the generators, which are marked on this 'General Arrangement Facility A Ground Floor' drawing.

The arrangement for Facility B is identical to that shown on the 'General Arrangement Facility A Ground Floor' Plans.

- **Form B2, Question 5a Provide a plan or plans for the site:** *Your existing site plans identify a grey water and pumping station. Please confirm what this is used for. Is it part of the installation?*

The grey water and pumping station features are part of the site-wide drainage system. The function is to allow re-cycling of certain wastewater streams (for example from waste sink and utility water generally from showers and bathrooms) for collection and re-direction to flush toilets. This waste forms part of the foul sewer discharge. This is not subject to the environmental permit and is not included within the application.

- **Form B2, Question 5b Site condition/ baseline report:** *The following aspects required by our guidance were not provided in the site condition/ baseline report:*
 - a. *A copy of the supporting information regarding baseline soil and groundwater reference data referred to in the Site Condition Report Section 2.7.1.*

The following supporting information is enclosed:

- BGCL Former Akzonobel Site- Slough. Remediation Scheme for Contamination. December 2019.
- BGCL Former Akzonobel Site-Slough. Remediation Completion and MMP Verification Report. February 2021.
- Slough Borough Council Application for Approval of Details Reserved by Condition. Amended Decision Notice 1st July 2022. Planning Application P/00072/116
- **Form B2, Question 6 Environmental Risk Assessment:** *The following aspects required by our guidance were not provided in the Environmental Risk Assessment:*
 - a. *Confirmation of bunding/ containment type, material and size.*

Table 2.3 in Appendix B Environmental Risk Assessment of the application document addresses the above. The generator belly tanks are designed to British Standard BS799 Part 5 2010 (Oil burning Equipment Carbon Steel oil storage tanks. Specification) therefore will have 110% containment.

Both diesel receiver tanks will be designed to provide 110% containment. The Permitted installation also benefits from tertiary containment within the wider vicinity which is described in Section 7.10 ('Fuel Fill Station- Fuel Filling') of the Permit application supporting

information.

The fuel receiver tanks will sit on a structural concrete slab and any spills will be diverted to the foul network which has an environmental closure valve (supplied by Darcy Spillcare) which will activate in contact with glycol and fuel.

An individual fuel refilling bay has been designed which is lowered and lined with an impermeable liner (see Figure provided as Appendix A). Surface water/fuel collected within this area diverts through an oil interceptor with an automatic closure valve in the event of a spill.

Any unplanned release of diesel would be prevented from percolating into the ground by the hardstanding; should such a release enter the local on-site surface water drainage system it would be captured by the alarmed interceptor (9,600 litre capacity Class 1 full retention) which will have an automatic shut off device that will activate on detection of diesel in the interceptor (this alarm will be connected to the BMI) preventing the release of diesel to soakaway (the automatic closure device will also be activated by the BMS in the event of a fire alarm).

In such an event, spillage procedures would be implemented.

The tertiary containment measures will provide adequate containment capacity in the unlikely event that there is a spill/leak of diesel from a belly tank.

b. Fuel barriers – please confirm type, material and size.

The Yondr 'Specification: External Areas Civil Specification' states:

Road Restraint System (RRS) parapets, connections, safety barriers and terminals shall be installed, tested and maintained in accordance with the manufacturer's specification.

- The Contractor shall provide proof that the RRS parapets and safety barriers can comply with EN 1317-5.
- The Contractor shall provide proof that the RRS transitions and terminals can comply with DD ENV 1317-4
- Layout and specification is based on a site specific basis.
- RRS components are to be containment class N2-subject to a collision load of no greater than 100kN over a length of 1.0m. See security specification for final details.
- Steel Road Restraint System rails, posts and fixings shall be S275/S355 galvanised in accordance with EN ISO 1461 and EN 10025.
- Safety barrier and security equipment to have a manufactured serviceable life of not less than 20 years.
- The Contractor shall ensure that the installation instructions, or installation manual for a proposed system includes all the information necessary to install the systems in the locations shown on the drawings such that the system will meet its declared performance.

c. A procedure which deals with any potential tank / storage and secondary containment failure e.g. testing before discharge and tankering off-site if found to be contaminated

An Emergency Response Plan has been drafted as part of the supporting documentation for the EMS for the permitted facility.

The plan outlines the procedures to be adopted in the event of the major release of oil/diesel during refueling (via fuel tanker) and damage to oil tanks.

Should significant oil be released which cannot be contained or managed by personnel on site, the procedure provides contact details for an external environmental response contractor.

As the construction and development of the Data Centre is on going, it should be noted that full details may only be confirmed once the operator is in position to take control of the site.

The approach outlined in Appendix B to this document presents the procedures expected to be followed as based on other established site operations of a similar nature.

- **Form B2, Question 6 Environmental Risk Assessment - Air Quality Assessment:** *The following aspects required by our guidance were not provided in the Air Quality Assessment:*
 - a. *Confirmation that the back-up generators in use at the data centre will conform to TA-Luft 2g (BAT).*

Section 7.5 ('Engine Configuration and Plant Sizing') within Sweco's Permit Application supporting information states that the specific engines to be used at the site will conform to emissions standards 'TA-luft 2g' or Tier II USEPA as required by the draft EA guidance. This has requirements for 2000mg/m³ NO_x; 650 mg/m³ for CO; particulates and dust 130 mg/m³ and 150 mg/m³ for hydrocarbons (all at reference conditions and 5% O₂).

An Engine Specification document has been provided as Appendix C. of the Permit application.

- b. *Confirmation of the load that the back-up generators are optimised for.*

Section 1.3.2 ('Environmental Permit Application') within the Permit application supporting information states that the data centre will comprise in total a rated electrical generating capacity of 63.2 MWe (net, under standby operation of the engines) with an approximate corresponding thermal input of 295 MWth based on 52 engines with a 5.67 MWth capacity.

At an earlier stage in the planning process, the applicant considered development of an expanded data centre facility with a higher capacity to that which forms the subject of this permit application

Beyond the current development, there is currently no plan for the installation of further back-up generators at the data centre in the foreseeable future. At this stage no increase in the on-site electrical load is anticipated.

The data hall is only likely to be loaded to a maximum 80% of capacity.

Section 4.5 of the Permit application supporting information ('Resilience Configuration') states that the resilience configuration for the permitted installation is N+1. The associated control systems; all ancillary electrical supplies; the local fuel storage for each generator and associated power and control systems are to be of an N configuration. The generator starting system shall be of a 2N design.

- c. *An 'in combination' modelling assessment of the impact of air emissions when combined with the other data centres in the area. Please search for other data centre permits in the location surrounding your data centre. Information on these can be found on the .gov website, public register and the local planning portal.*

Sweco completed air quality dispersion modelling in support of the planning application. The modelling of long-term impacts during the operational phase included contribution as 'cumulative' - i.e. from Data Halls A, B, and C. Data Hall C is scheduled for development at a later date and no other data centers were identified within close proximity.

This cumulative assessment was sufficient for the planning consent. The most sensitive receptor was the Air Quality Management Area (AQMA), located approximately 330m to the south.

In consideration of the downwind location and distance of the additional data centres from the site under assessment, we consider the greatest cumulative impact to be derived from the construction and operation of the adjacent additional Data Hall C. Sweco do note, however, that there is potential for the other Data Centers in western Slough to impact on the most sensitive ecological receptor at Burnham Beeches SAC.

Sweco requests further discussion to determine whether the current approach to the 'in combination' is sufficient.

- d. Assessment of short-term impacts for NO₂ and NO_x (1-hour and 24-hour mean).*

This was screened out during the consultation stage with the Local Planning Authority and therefore not included within the modelling undertaken in support of the planning application.

This can be undertaken, if required following discussion with the EA. Any additional data required would be supplied in due course.

- e. List of sensitive human and ecological receptors affected by the site with grid references – Ecological sites of Windsor Forest and Great Park (SAC), South West London Waterbodies (SPA) and (RAMSAR), ancient woodland and protected species of the European Water Vole are missing from the assessment.*

These locations were assessed in the initial screening for the assessment undertaken in support of the planning application. This information can be supplied if required.

- f. Process contributions (PCs) and predicted environmental concentrations (PECs) at specific receptor locations for all scenarios (short and long term affects).*

Modelling undertaken as part of the planning application considered two operational scenarios for long-term impacts:

- Most Likely Scenario – Only to include the required testing runs.
- Worst Case Scenario – Including testing and emergency operation due to power outages

Both modelling scenarios also took into account contributions from transport and housing (those related to energy/heating). As discussed in our response to air quality query 'c', data centres located in western Slough have not been included in the modelling undertaken due to their direction and distance from the permitted installation. For this reason, 'cumulative' has been established as the contribution from the proposed adjacent Data Centre 'C'.

Sweco anticipate (subject to confirmation with the EA) that further modelling to determine short-term impacts of these emissions scenarios could be undertaken. Further to this modelling short- and long-term PCs and PECs at specific receptors locations for all scenarios could also be provided.

We recommend further discussion with the EA regarding any additional modelling inputs.

- g. A copy of the full detailed air quality assessment completed as part of the AQ ES Chapter as referred to in Section 5 of your Air Quality Assessment.*

This will be provided.

- h. Air quality modelling files.*

Sweco would be able to provide data for air quality modelling undertaken as part of the planning application for the development.

Sweco could supplement this with the air quality modelling files required in support of any further modelling (the scope of which to be discussed the EA).

Please re-submit an Air Quality Assessment following the Air emissions risk assessment for your environmental permit guidance ([Air emissions risk assessment for your environmental permit - GOV.UK \(www.gov.uk\)](http://www.gov.uk)) with the above aspects included based on the actual generators that will be operated at the data centre.

- **Form B2, Question 6 Environmental Risk Assessment - Noise Impact Assessment:** The following aspects required by our guidance were not provided in the Noise Impact Assessment:
 - a. Noise modelling files.

Please submit the noise modelling files as per our guidance [Risk assessments for your environmental permit - GOV.UK \(www.gov.uk\)](http://www.gov.uk), [Control and monitor emissions for your environmental permit - GOV.UK \(www.gov.uk\)](http://www.gov.uk), [Noise and vibration management: environmental permits - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

Sweco Acoustics Specialists can provide CadnA files, if sufficient.

- **Form B3, Question 3a Operating Techniques (Technical Standards) – Table 3 BAT:** Please confirm the following:
 - a. Will the monthly testing for each generator for a duration of 15 minutes at no load, equating to 3 hours per generator/ year be at the same time? or will testing be staggered?

Within Section 4.16 (Operating Regime) and 6.3.3 (Proposed Plant and Noise Control Strategies) of the Permit application supporting information provides an overview of the testing regime:

Onload testing is to be undertaken on one generator at a time. Offload testing will be undertaken on the other generators sequentially whilst one generator is being tested offload. Consequently the number of generators being tested at any one time will be two. Generator noise emissions are likely to be lower for the generator being tested offload than if running.

A Noise Management Plan has been drafted which accompanies the Environmental Management System (EMS) for the permitted installation.

- **Form F1, Question 1 Working out charges, Table 3 (Additional assessment charges (B)):** Your application requires an assessment under the Habitats Regulations. The charge for this assessment is not included in your baseline application charge. You will therefore need to make an additional payment of £779 (Ref:1.19.2). Please update and re-submit Form F1 with the fee.

A Habitat Regulations Assessment (Stage 1 Screening Report and Stage 2 Appropriate Assessment) was undertaken by Middlemarch Environmental (December 2019) in support of the development planning application. The assessment considered the 'current use of the site' which was the vacant manufacturing facility and the 'proposed works' which included the development of the data centres:

"Outline planning application (all matters reserved except for principal points of access), to be implemented in phases, for mixed use development comprising:

- a) Demolition of existing buildings and structures and preparatory works (including remediation) and access from Wexham Road;
- b) up to 1,000 residential dwellings; along with flexible commercial uses including all or some of the following use classes A1, A2, A3, D1 and D2; car parking; new public spaces and landscaping; and vehicular and pedestrian access; and
- c) the provision of commercial floorspace including all or some of the following use classes B2, B8, and sui generis data centre (including ancillary B1a office space and associated plant and, infrastructure provision); car parking, landscaping and vehicular and pedestrian

access.”

The scope of the proposed works considered within the assessment is that which has been granted full planning permission.

Sweco enclose a copy of the Habitats Regulations Assessment for the development. Middlemarch Environmental consulted with the Principal Planning Officer at Slough Borough Council and ‘Burnham Beeches SAC’ was identified as the Natura 2000 site requiring assessment. The report provides justification for scoping other Natura 2000 sites from the assessment.

There is potential for recreational impacts on Burnham Beeches SAC as a result of increased public access / disturbance from the proposed development in combination with other plans and projects. Proposed mitigation for this is the requirement for developers to make a financial contribution towards the ‘Burnham Beeches Access Management Scheme’.

It has been concluded that the other potential direct or indirect effects on the Burnham Beeches SAC from the proposed works would not result in any adverse impact on the integrity of Natura 2000 sites and as such no mitigation is needed.

A copy of the above referenced reports is enclosed.

Appendix A

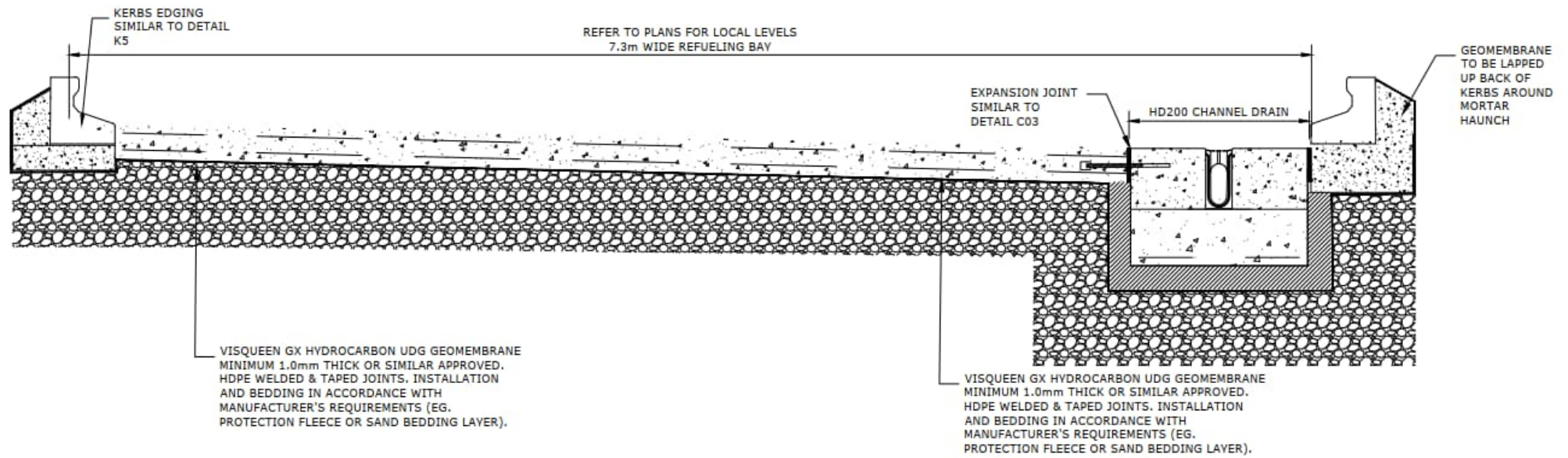


Figure 1: Fuel refilling bay

Appendix B

Potential Major Release of Oil/Diesel – Spill Response

It should be noted that this outline procedure will form part of an integrated Emergency Response Plan (ERP) which in turn forms part for the wider Environmental Management System currently being prepared for the operation of the Data Centre.

Details of the structure, scope and purpose of the ERP are being drafted, and this document will also set out the key contact details for site staff, emergency services and other stakeholders. Individual roles and responsibilities, experience and competencies will also be set out, together with training programmes and emergency drills.

At this stage, the suite of proposed management practices and operating techniques intended to prevent pollution and ensure operation within the conditions imposed under Permit remain a work in progress as reflects the current status of the site which is still under construction.

The operator (Yondr Group) remains, however, committed to fulfilling sustainability and environmental compliance obligations and to take every reasonable measure to conduct business activities responsibly.

Spillage / Release of Fuel

The most likely significant environmental emergency associated with the operation of the backup diesel generators would be the mass release of oil/diesel from a supply tanker and/or damaged tanks or pipes.

A suitable number of designated site operatives shall be trained in spill response and will be aware of the location of spill kits on site (and their maintenance, and use) and the location of drains.

A) Spill from fuel tanker- All deliveries to be managed by designated site operatives

The following processes should be undertaken, listed in chronological order:

Step 1: Shut down tank pump or request tanker driver to do so.

Step 2: All drains within the area (as identified on hard copy drainage plans) must be isolated. Spill kits contain materials necessary to successfully isolate the drains.

Step 3: Prohibit access to the impacted area to general site operatives (not including those trained operatives enacting the Response Plan).

Step 4: Apply a boom or oil barrier where possible as per the spill kit instructions.

Step 5: Alert the Site Manager/ director on duty to the emergency incident and relay actions taken. Diesel is Flammable and has a flash point of approximately 52°C and should it come into contact with a hot item such as the diesel engine then it may ignite. Evacuate the area if appropriate by activating the site fire alarm.

Step 6: Depending on the risk of a fire starting it may be necessary to call the fire service by dialling 999.

Step 7: Evaluate the Oil providers ability to clear the leak. This may include the clean up and transfer of the oil into another tank.

B) Spill from damaged oil tank

Step 1: All drains within the area (as identified on hard copy drainage plans) must be isolated. Spill kits contain materials necessary to successfully isolate the drains.

Step 2: Should damage to the tank have occurred through a vehicle strike, the welfare and safety of the driver should be established, the engine of the vehicle should be switched off, and the driver removed from the vehicle (if safe to do so). First aid should be sought, if required.

Step 3: All drains within the area (as identified on hard copy drainage plans) must be isolated. Spill kits contain materials necessary to successfully isolate the drains.

Step 4: Prohibit access to the impacted area to general site operatives (not including those trained operatives enacting the Response Plan).

Appendix B

Step 5: Apply a boom or oil barrier where possible as per the spill kit instructions.

Step 6: Alert the Site Manager/ director on duty to the emergency incident and relay actions taken. Diesel is Flammable and has a flash point of approximately 52°C and should it come into contact with a hot item such as a vehicle engine then it may ignite. Evacuate the area if appropriate by activating the site fire alarm.

Step 7: Depending on the risk of a fire starting it may be necessary to call the fire service by dialling 999.

The oil removed from the ground must be filtered and cleansed before use.

Should a significant spill occur on the site that cannot be managed by steps listed above, contact the external environmental response contractors:

Company Name	Account Contact	Emergency Telephone
xxxxx	xxxxx	xxxxxx

In the event of a significant environmental incident, the Environment Agency must be notified by calling:

0800 80 70 60