

FAO Tasha Malik-Agrawal

Environment Agency

Permit Support Centre

Via email only

Date 26/06/2026

Application Reference: EPR/SP3429LN/A001

Facility: Virtus Saunderton Data Centre, Haw Lane, Saunderton, HP14 4JD

Dear Tasha,

I write in response to your request for additional information received via email on 15th June 2026, for Virtus' proposed Saunderton data centre Environmental Permit Application.

Please find our responses for the requested information in the table below, along with references to additional supporting information, which I have also attached to this email.

With regards to point number 5 – Air Quality Assessment, I have provided the requested stack emission parameters in the table below. All of the habitat sites within the minimum screening distance were included in our Air Quality Assessment as outlined and explained in the response table.

Given the above, I am therefore requesting that the requirement to update and resubmit an updated Air Quality Assessment on this basis is removed. Please confirm whether this is acceptable.

However, based on your second request for information received by email on 24th June, I appreciate the extension until close of play on Monday 6th July, to allow the necessary checks on the Air Quality assessment and model, by my colleague who returns from annual leave on 1st July.

I trust that the attached is sufficient, however, please do not hesitate to get in touch should you have any questions or require any additional information.

Yours Sincerely

Khary Cave
Managing Consultant

Requested Information	Responses and Supporting Documentation
Additional payment of £808.60 for the required Habitats Assessment	The payment of £808.60 was made on 19/06/2026 using the payment link provided and payment reference PSCAPPINSTVIRTU002 .
1. Request for confidentiality	No information provided in the submitted documents are considered to be confidential. We have referenced Virtus’ Operational Manual within our reports. We are not providing this manual as a part of the application. If requested, we will revisit the request for confidentiality.
2. Site Plans	
- The seven missing emissions to air points	Please see attached Figure 1 – Installation Boundary with Emissions to Air Locations , which includes all 57 emissions to air points.
- Emission to sewer point (s)	See attached Figure 2 – Foul Water Drainage , showing the proposed foul water drainage. <u>There are no emissions to foul or surface water sewer</u> associated with the permitted activities at the site.
- Emissions to surface water point(s)	See attached Figure 3 – Surface Water Drainage showing the surface water drainage including the location of the infiltration basin/ soakaway. Please note <u>that there are no emissions to surface water</u> associated with the permitted activities. The site will have several oil interceptors and forecourt separators to prevent fuel entering the drainage system upstream of the infiltration basin.
- Surface water drainage (including the location of the infiltration basin)	
3. Site Operations	
- Clarify the maximum amount (in tonnes) at any one time of each raw material used on site.	The operator has provided the following information Diesel – 1681 metric tonnes Propylene Glycol (50/50 solution – coolant/antifreeze) – 59.21 metric tonnes Lubricant Oil (mineral) - 26.7 metric tonnes - (using density of 0.88kg/l)
- Clarify the annual throughput (in tonnes) of each raw material used on site	The operator has provided the following information Diesel – 155 metric tonnes

	Propylene Glycol (coolant) (50/50 solution) –20.42 metric tonnes Lubricant Oil (mineral) – 26.7 metric tonnes
- Clarify if in Application Form B3, Appendix 1, biomass as a fuel was selected by mistake.	Biomass was added in error. Please find attached the corrected application form B3 excluding any mention of biomass.
- Provide further details of what pollutants are discharged to sewer	No pollutants will be discharged to sewer.
- Provide further details of what pollutants are discharged to surface water.	Only uncontaminated stormwater will be discharged to the onsite infiltration pond. No offsite connections to surface water bodies will be made.
4. BAT Assessment	
- Clarify how many engines are run at any one-time during testing / maintenance	During monthly maintenance/testing, the generators will be tested in turn (i.e. only one generator will operate at a time). When tested each generator will operate for up to 15 minutes and maintenance testing will only occur during daytime hours. The exception to the above will be during “Virtus test 2”, carried out once per year in the 12 th month, which will be a full service, onload test, consisting of an initial 20 minutes at 100% load immediately followed by 120 minutes at 100% load. For this test, up to three generators may operate at any given time.
- Confirm all stacks are vertical, with no impediments to dispersion such as caps or cowls	I can confirm that all stacks are vertical and there are no impediments to dispersion such as caps or cowls.
- Provide the design standard the tanks on site have been designed to.	The tanks on site conform to BS799-5: Oil Burning Equipment – Carbon Steel Oil Storage tanks. The tanks are of Type J construction and are manufactured to the Water Environment (Oil Storage) (Scotland Regulations 2006, the Control of Pollution (Oil Storage) (England) Regulations 2001 and SEPA and EA Guidelines. Tanks are integrally bunded (with 110% capacity of the tank) and fuel fill point cabinets will be IP65 rated, lockable and with drip tray and leak detection. The cabinet will be fitted with 2-pin overfill protection pockets to disable pump on tanker, one per generator belly tank with identifying labels.

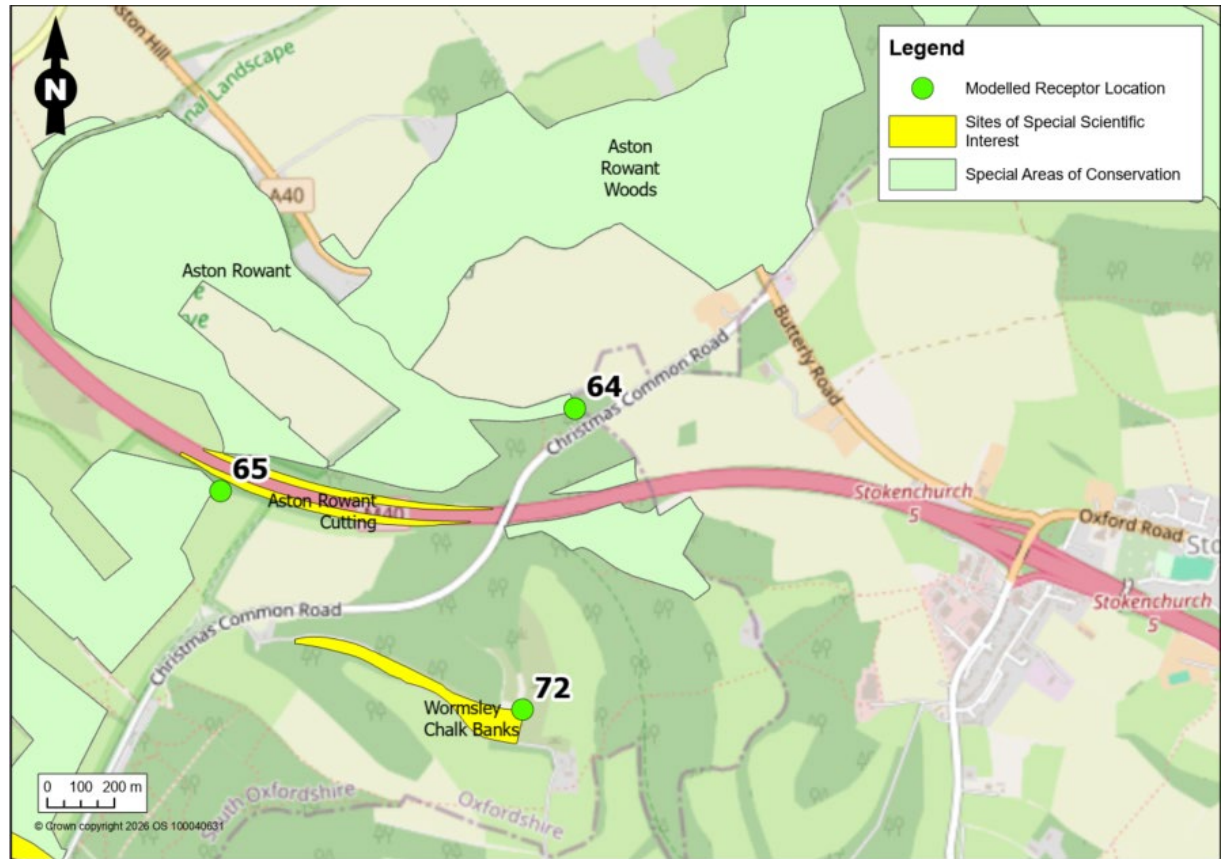
- Clarify how the bunds on site are engineered (i.e. are they "pre-bunded"/"Integrally bundled"	The tanks on site will be integrally bunded and will provide a capacity of 110% of the fuel tanks.
- Clarify if any of the following fixed tank additional requirements are used on site. If so, provide information on how they meet the " Oil storage regulations for businesses - GOV.UK "	
- Sight Gauges	Sight gauges will not be used on the tanks. Tanks will be fitted with Oil Level Equipment / Indicator (OLE gauges)
- Piping	Pipework will be twin wall/pipe in pipe and stainless-steel construction. All pipework outside of bunded areas will be twin wall/pipe in pipe with leak detection. Fuel pipework is EN10255 Red heavy carbon steel pipe and SCH40/black iron, fully welded. Fuel fill stations will be lockable with drip tray and leak protection. See attached Drawing number 24027-BWT-L15-00-DR-Y-A55501 - Piping will be positioned within the gantry, away from driveways, turning circles and forklift trucks. Any pipework located outside of this area will be protected by barriers to protect them from impact. - All pipework will be supported by appropriate brackets connected to the nearest wall.
- Delivery pipes	- Each group of generators will have a dedicated tanker bay. The fill point for each tank is located in a local secured cabinet that will be locked when not in use. The manifold within this cabinet identifies each fill point and is connected to each tank with twin walled pipe-in-pipe as described above. - Delivery cabinets have drip trays. - A locking point is provided for each fill point. - Each fill point cabinet contains the overfill alarm and overfill valves have been fitted to each belly tank.
- Pumps	- Fuel draw off pumps will be located within the generator enclosure. - Tanker pump used for fuel deliveries.

	Generators will also have a fuel polishing circulation pump which will comply with the Oil Storage Regulations as follows: - The fuel polishing circulation pump will have a foot valve/non-return valve that prevents the tank contents emptying if there is damage to the pump or feed line. - Fuel polishing pumps are located within the generator enclosure away from vehicle routes. - Pumps are located in secure, generator enclosures.
- Vent pipe, taps and valves	Tanks will include OLE gauges, vent pipes and overfill valves. I can confirm that they will conform to the Oil Storage Regulations for businesses as per below: • All valves will be located within the bund which will retain any leaks. • Taps and valves will have a lock and will be locked shut when not in use. • All tanks (integrally bunded) and hence vent pipes, taps and valves will be located within the bund or generator enclosure above the tank.
- Overfill prevention	An overfill prevention (rise stop) valve is to be installed on the fuel delivery line entering the belly tank. These will meet the oil storage for businesses regulations by: - An automatic overfill prevention device is fitted to the tanks.
- Screw fittings	There are no screw fittings other than the pipe cap.
- Fixed Couplings	- Fixed couplings will be used whenever the tanks are being filled. - Fixed couplings will be kept in good working order through Virtus' maintenance programme. - Checks will be made during tank filling to ensure that fixed couplings are not becoming corroded and that debris is not getting trapped in it. All checks will be completed by a competent and trained Virtus employee.

5. Air Quality Assessment	
Please update and resubmit an Air Quality Assessment which includes the following	
Stack emission parameters	
I. Actual volumetric flowrate (Am ³ /s)	The exhaust flow rate for each modelled generator is provided below: 16M55G6D2/5: 12.77 m³/s 12M55G10D2/5: 9.45 m³/s 16M55G0D3/5: 10.09 m³/s
II. Moisture and oxygen content (%)	Reference conditions for all generators are corrected to Dry Basis with 5% oxygen content.
III. Emission concentrations (mg/m ³) used to calculate emission rates for Nox, PM ₁₀ , PM ₂₅ , and SO ₂	Emission rates were only calculated for NO_x and PM₁₀. Emission rates were calculated at 100% power using the emission concentration expressed as g/kWh, however emission concentrations expressed as mg/Nm³ have also been provided below for each generator. 16M55G6D2/5 NO_x: - 7.9 g/kWh - 3885 mg/Nm³ PM₁₀: - 0.1 g/kWh - 5.84 mg/Nm³ 12M55G10D2/5 NO_x: - 9.3 g/kWh - 3107 mg/Nm³

	PM10: - 0.1 g/kWh - 5.84 mg/Nm³ 16M55G0D3/5 NOx: - 6.69 g/kWh - 1666.5 mg/Nm³ PM10: - 0.12 g/kWh - N/A mg/Nm³
The missing habitat sites within the minimum screening distance	
I. Aston Rowant (SAC)	This receptor has been included within the assessment at the modelled receptor point (473959, 196743) which has been labelled as Aston Rowant Cutting SSSI (ID 64). This receptor is located at Aston Rowant SAC/SSSI which has overlapping designation with Aston Rowant Cutting SSSI. The position of this modelled receptor is shown in Figure AQ1 below.

Figure AQ1: Aston Rowant SAC Modelled Receptor Location

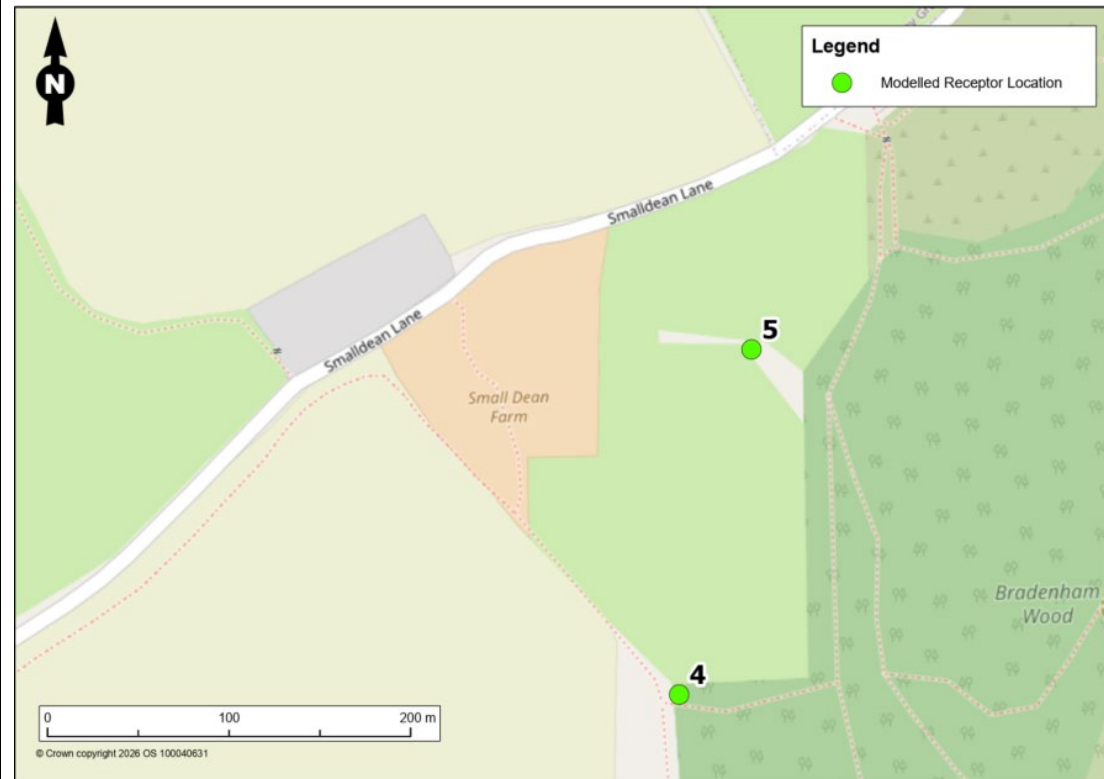


II. Slough Hill (SSSI)	Slough Hill has been included within the assessment as Slough Hill LWS (receptor ID 36-39). Following a review of DEFRA's multi-agency Geographic information for the Countryside (MAGIC) map there is no designated SSSI located here.
III. Bradenham Wood to Saunderton (LWS)	This receptor has been included within the assessment at the worst-case modelled receptor point (481298, 198382), which has been labelled as Bradenham LWS (receptor ID 40). The position of this modelled receptor is shown in Figure AQ2 below: Figure AQ2: Bradenham Wood to Saunderton (LWS) Modelled Receptor Location 

IV. Small Dean Farm Bank and Gunner's Hill (LWS)

This receptor has been included within the assessment at the modelled receptor points **ID4** (482205, 198658) and **ID5** (482245, 198848), which have been labelled as Chiltern Beechwoods SAC. This receptor has therefore been assessed against the more stringent thresholds applied to Ramsar, European and national designated sites. The position of this modelled receptor is shown in Figure AQ3 below.

Figure AQ3: Small Dean Farm Bank and Gunner's Hill (LWS) Modelled Receptor Locations





Legend

Site Boundary

Permit Boundary

Proposed Surface Water Drainage

Drainage Channel

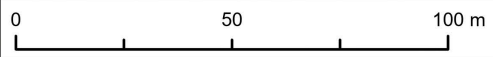
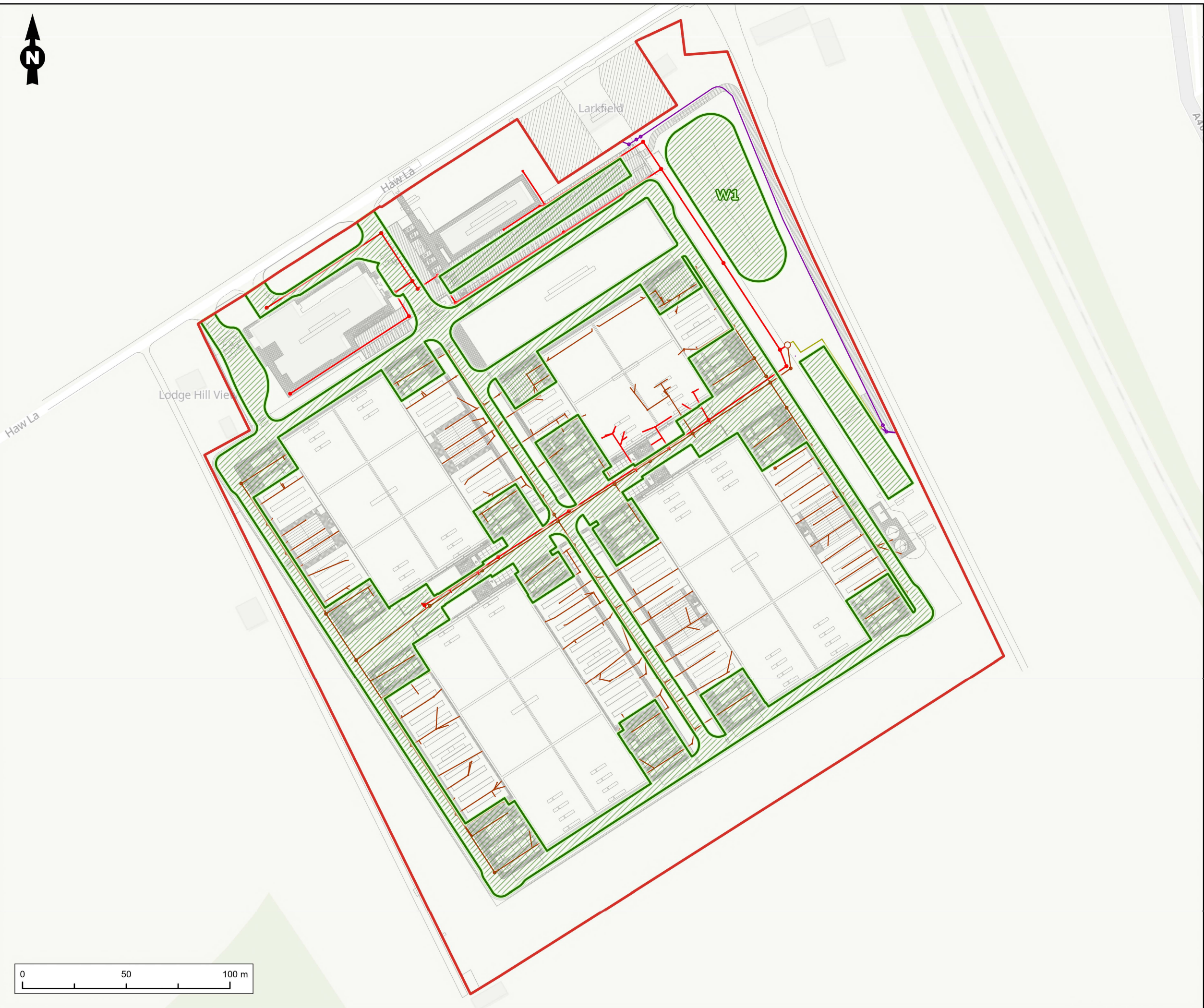
Petrol Interceptor

Forecourt Separator

W1

Soakaway

Figure Title		
Installation Boundary and Flue Locations/Emissions to air		
Project Name		
Virtus Saunderton Campus Environmental Permitting		
Project No./Filery ID		
162TG_T11066 / REH2025N07958		
Date	Figure No.	Revision
June 2026	1	1.1
Prepared By	Scale	
JET	1:1,750 @A3	
Client		
Bryden Wood Technology Ltd		
		



- Legend**
- Site Boundary
 - Permit Boundary
 - Proposed Domestic Foul Water Drainage
 - Proposed Processed Foul Drainage
 - Proposed Public Combined Sewer Drainage
 - Proposed Combined Sewer Drainage
 - W1 Soakaway

Figure Title		
Foul Water Drainage		
Project Name		
Virtus Saunderton Campus Environmental Permitting		
Project No./Filery ID		
162TG_T11066 / REH2025N07958		
Date	Figure No.	Revision
June 2026	Figure 2	1.0
Prepared By	Scale	
JET	1:1,750 @A3	
Client		
Bryden Wood Technology Ltd		
		



Legend

Site Boundary

Permit Boundary

Permeable paving

Underground attenuation tank

Proposed Combined Surface Water Drainage

Proposed Roads Surface Water Drainage

Proposed Roof Surface Water Drainage

Proposed Interception Drain

Petrol Interceptor

Forecourt Separator

W1

Soakaway

Figure Title		
Surface Water Drainage		
Project Name		
Virtus Saunderton Campus Environmental Permitting		
Project No./Filey ID		
162TG_T11066 / REH2025N07958		
Date	Figure No.	Revision
June 2026	3	1.0
Prepared By	Scale	
JET	1:1,750 @A3	
Client		
Bryden Wood Technology Ltd		
		

LEGEND:

- GENERATOR FUEL FILLING STATION.
- GENERATOR FUEL AD BLUE FILLING STATION.
- PIPEWORK RISES TO HIGH LEVEL.
- PIPEWORK DROPS TO SERVE GENERATOR. LOCATION TO BE CONFIRMED WITH GENERATOR MANUFACTURER.

DRAWING NOTES:

- TO BE READ IN CONJUNCTION WITH SCHEMATICS, SPECIFICATION, MECHANICAL EQUIPMENT SCHEDULE AND BOD NARRATIVE.
- AD BLUE SYSTEM TO BE DESIGNED BY SPECIALIST. ALLOWANCE MADE FOR AD BLUE PIPEWORK TO BE TWIN WALLPIPE IN PIPE AND STAINLESS STEEL CONSTRUCTION.
- ALL PIPEWORK OUTSIDE OF BUNDED AREAS TO BE TWIN WALLPIPE IN PIPE WITH LEAK DETECTION AND DRAIN POINTS AT LOW POINTS.
- TRACE HEATING AND INSULATION TO BE ON ALL EXTERNAL FUEL OIL SYSTEM PIPEWORK.
- ALL FUEL PIPE IS EN10255 RED HEAVY CARBON STEEL PIPE SCH40 / BLACK IRON FULLY WELDED. INNERCARRIER PIPE TO BE SUITABLE FOR SERVICE AND ENVIRONMENT.
- FUEL OIL AND AD BLUE SYSTEM WITHIN CONTAINER SHALL BE DESIGNED BY GENERATOR MANUFACTURER.
- LOCKABLE FUEL FILL STATION WITH DRIP TRAY AND LEAK DETECTION. CABINET IS FITTED WITH 2 PIN OVERFILL PROTECTION SOCKETS (TO DISABLE PUMP ON TANKER), ONE PER GENERATOR BELLY TANK (WITH IDENTIFYING LABELS).
- 2 NO. CONTROL PLC CABINET INSTALLED WITHIN THE FUEL FILL STATION ENCLOSURE.
- NB. 80 FILL LINE WITHIN FILL CABINET TO SUIT LARGEST ROAD TANKER CONNECTION.
- MANUAL VALVES SHALL BE LOCKABLE TYPE TO ENABLE SITE PADLOCKS TO BE USED.

Note:
Hazards listed above are only those considered significant risks and:

- not likely to be obvious to a competent contractor or other designers;
- unusual; or
- likely to be difficult to manage effectively

General notes:

- This drawing shall not be used for construction purposes.
- All drawings to be read in colour and in scale.
- All dimensions are in mm (millimetre) U.N.O.
- All levels are in mm (millimetre) U.N.O and survey base point.
- No dimensions are to be scaled off this drawing. work to figured dimensions only.
- Any discrepancies or errors must be reported to BWT for clarification.

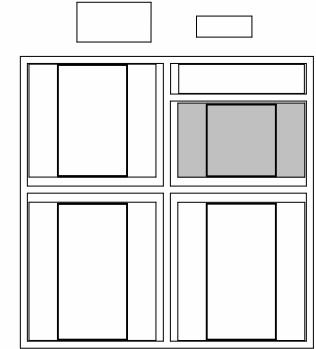
LEGEND:

- GENERATOR
- FUEL PIPEWORK
- PLANT

P02	2025-03-14	Stage 3 Suitable for Stage	TJ	OM	DW
P01	2025-02-07	Stage 3 Suitable for Review &	TJ	OM	DW
REV	DATE	DESCRIPTION	DWN	CHK	APP

Do not scale from this drawing. All dimensions to be verified on site prior to the commencement of any work or the production of any shop drawings. All discrepancies to be reported to Bryden Wood Technology Ltd. This drawing is to be read in conjunction with all related Consultant's drawings and any other relevant information. This drawing is the copyright of Bryden Wood Technology Ltd.

Key:



Project:
Virtus - Saunderton

Drawing Title:
Liquid Cooled - L15
Ground Floor
Generator Fuel Pipework

Drawing Number:
24027-BWT-L15-00-DR-Y-A5501

Scale: Paper Size: Status: Revision:
1:150 A0 S4 P02

