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| To:               | Planning Services (Kate Pickles)                                                                                                                                               |                 |
| Planning App. No: | 21/00959/COND7                                                                                                                                                                 | 26/00346/PLANDI |
| Date:             | 16 April 2026                                                                                                                                                                  |                 |
| Location:         | Imagination Two, Image Business Park, Acornfield Road, Knowsley Industrial Park, Kirkby, Knowsley, L33 7SP                                                                     |                 |
| Proposal:         | RETROSPECTIVE AGREEMENT TO MINOR VARIATION OF THE APPROVED REMEDIATION SCHEME (PURSUANT TO CONDITION 4 (CONTAMINATION) PARTS C PERTAINING TO PLANNING PERMISSION 21/00959/FUL. |                 |

We are in receipt of the letter from Environmental Health & Consumer Protection (Ian Gaskell) to Planning Services (Kate Pickles), dated 15 April 2026 in reference to Planning App. No: 21/00959/COND7 & 26/00346/PLANDI.

It is noted that the current status is "Further Information Required" and your advisers (MEAS) state that further information is required to satisfy the requirements of Condition 4 Part C (Implementation of Approved Remediation Scheme).

The detail of the requirements are duly noted, and this letter serves to meet the requirements as set out below:

*[11.] To satisfy Condition 4 Part C in relation to gas protection, we advise that the applicant seek formal retrospective written agreement from the Local Planning Authority for the installed gas protection measures as a minor variation to the approved remediation scheme.*

*[12.] This should be supported by:*

- *A clear statement identifying the departure from the approved gas protection specification;*
- *The site-specific gas risk reassessment justifying the installed approach; and*
- *Confirmation that the installed measures achieve the remediation objectives and do not increase risk to human health.*

*[14.] The information provided within the Gas Membrane Installation Validation Report (MEC Environmental Ltd, undated) is satisfactory and accepted. However, the report refers to an installer CQA report for areas not inspected independently; this document is not provided and should be submitted to complete the validation record.*

*[16.] Epsilon Environmental note that 180no. waste haulage certificates are available upon request. These should be provided to complete validation record.*

## Preamble

Wiltan Construction Limited were responsible for carrying out construction of the permitted building and followed the design and specification provided by Powell Tolner Associates with regards to the design and extent of the gas protection measures and technical advice provided by the Project Engineer and the Environmental Consultant (Powell Tolner & Associates Ltd and Delta Simons). Crucially, this design recommended a hydrocarbon resistant (gas/vapour) membrane under the offices but not under the warehouse. Wiltan Construction Limited acknowledge that they did not seek prior approval from the LPA to the change of specification at the time but were acting in good faith.

The following supporting information has been submitted in order to clearly identify the departure from the approved gas protection specification and set out the site-specific gas risk re-assessment justifying the installed approach.

## As-Built Membrane Details

### Offices

CS Linings were appointed to install the **hydrocarbon resistant gas protection membrane** beneath the offices and MEC Environmental Ltd (MEC) were appointed by ACS Linings to carry out independent validation of the installation of the membrane. This confirms that the installer carried out the installation in a workmanlike manner, the materials were adequately prepared and applied, used and fixed so as to perform adequately the functions for which they are intended as per Regulation 7 of the building regulations.

With regard to point [14.] please note that the Gas Membrane Installation Validation Report (MEC Environmental Ltd) refers to the requirement for an installer CQA report for areas not inspected independently; however, there were no areas of installation of the hydrocarbon resistant gas protection membrane gas that were not inspected by MEC Environmental, therefore no additional documentation requires submission.

### Warehouse

Within the warehouse, ABS Brymar floors were contracted to design & install the ground floor concrete slab for the Site. The floor slabs were cast in large bay format utilising Somero laser screed technology over a period of 4 days in December 2025. The floor slab consists of a 175mm deep slab of well graded C40 concrete laid onto a **1200g polythene membrane with 300mm lapped joints**. The slab has 1 layer of A142 mesh reinforcement throughout which is positioned 40mm from the bottom of the slab. Day joints within the floor slab consist of armoured type joints, further sawn crack control joints are installed within each panel. All areas of the slab were treated with a spray applied curing and sealing agent. Sawn and isolation joints within the slab were sealed using a polysulphide sealant. There are minimal service penetrations within the warehouse floor slab.

## Remediation & Verification Strategy (Ground Gas, Soil Vapour Protection)

The requirements of the remediation and verification strategy for the scheme was set out in the following Approved document:

- *Remediation & Verification Strategy Imagination 2, Image Business Park, Knowsley L33 7UF Presented to Knowsley (Image Business Park) Ltd dated : Issued: August 2022 (Delta-Simons Project No: 19-0654.08). Submitted with 25/00053/DISCON.*

Included in the above was the requirements for ground gas protection measures to be installed, which were based on gas monitoring and a ground gas risk assessment carried out by Delta-Simons in 2022. Delta-Simons identified that the ground gas Source was the topsoil/ nominal thickness of Made Ground, and the measured concentrations of ground gas had a Gas Screening Value (GSV) that equated to Characteristic Situation CS1, but was increased to CS2 based on a peak carbon dioxide reading exceeding 5%v/v; and applying building Type C (offices) across the entire building footprint (whilst also acknowledging that much of the building actually fell under Building Type D (industrial style building) therefore taking the most conservative approach). This led to the specification for a gas/vapour resistant membrane to be installed across the entire building footprint.

## Revised Gas Risk Assessment by Epsilon Environmental

**Visual and Olfactory Evidence of Contamination (Soils):** No visual or olfactory evidence of potential significant contamination was observed during the Delta-Simons investigations. All environmental samples were screened in the field using a photoionization detector. All results were less than 1ppm (indicating an absence of volatile hydrocarbons within the samples).

**Visual and Olfactory Evidence of Contamination (Groundwater):** No visual or olfactory evidence of potential contamination was observed during both phases of investigation by Delta-Simons.

**Summary of Laboratory Analysis of Soils:** Generally, contamination of the soils has not been identified at the Site. None of the site-specific contaminants of concern were recorded at concentrations in excess of their respective generic assessment criteria (GAC).

One sample of Made Ground (TP104 at 0.70 m) tested positive for the presence of chrysotile type asbestos (loose fibrous debris, quantification analysis indicated 0.005 % by weight).

No observations of non-aqueous phase liquids (NAPL) were made within the soils observed during drilling. No elevated concentrations of Total Petroleum Hydrocarbons were recorded. No NAPL was measured during groundwater monitoring works.

**Ground Gas Data Re-Assessment:** The data set gathered by Delta-Simons in relation to the Site is detailed in their Controlled Water Risk Assessment and Updated Gas Assessment, dated July 2022 (Delta-Simons Project No: 19-0654.10). However, it is relevant to note and understand that their Gas Risk Assessment included the ground gas monitoring data for a separate site, known as "Imagination 3". Delta-Simons did not carry out a gas risk assessment of the data just relating to the Site, instead they combined the two data sets (for Imagination 2 & Imagination 3) to determine the gas screening value for the Site.

The data that was obtained from the Site has been re-analysed by Epsilon Environmental in order to determine the correct gas regime and Characteristic Situation (CS) calculation for this Site:

- The identified source of the gas is the topsoil/ nominal thickness of Made Ground above the natural deposits comprising Glacial Till & Chester Formation (see Ground Conditions – Soil Profile, above)). There are no significant off-site sources of Ground Gas identified within the CSM.
- Gas monitoring was carried out at the Site on six occasions in two phases between 2021 and 2022. Barometric pressures during the gas monitoring period ranged from 999 mBar to 1021 mBar, of which four visits were completed during periods of falling pressure.
- Boreholes BH5(d) and BH6(d) were not constructed as gas monitoring wells (they were installed primarily as groundwater monitoring wells) and their construction (including the depths at which the well was screened) means that they did not target the identified source area (topsoil and Made Ground). Therefore, the gas monitoring data obtained from these wells should not be used to calculate the gas screening value for the Site.
- The values for Total Organic Carbon (TOC) measured in the soil samples collected from the ground gas source area on the Site were 2.1% (from DS101 – sample depth 0.40 m bgl) and 1.1 % (from TP103 - at 0.2 m bgl).
- The concentration of carbon dioxide measured from the appropriate ground gas monitoring wells ranged from 7.6 %v/v to 13.1 %v/v.
- The concentration of methane measured from the appropriate ground gas monitoring wells did not exceed the instrument detection limit of 0.1 %v/v.
- Gas flow rates within the appropriate ground gas monitoring wells were recorded below the instrument detection limit of <0.1 l/h (note: The flow rates measured in BH5(d) and BH6(d) cannot be used to assess the gas regime, as they are not measured from the identified source area).
- Therefore, the concentrations of ground gas have been determined as Characteristic Situation (CS) 1.

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| <b>Revised Risk Assessment</b> | <ul style="list-style-type: none"> <li>i. The multiple lines of evidence approach indicates a very low risk ground gas regime on-Site: The principal ground gas Source is the topsoil/ nominal thickness of Made Ground, with a corresponding low Total Organic Carbon content. The concentrations of ground gas have been determined as Characteristic Situation (CS) 1.</li> <li>ii. The proposed use of the Site is Building Type D (large, open space warehouse unit) with ancillary Type C Offices.</li> <li>iii. British Standard BS 8485 states that <u>consideration</u> should be given to increasing the CS from CS1 to CS2 where the measured carbon dioxide concentration is greater than 5%v/v. In this case, given the very low gas generating potential of the source area and the nature of the building, consideration only needs to be given for the ancillary Type C Offices.</li> </ul> |
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## Remediation Objectives Statement - Ground Gas Protection Measures

The primary objectives of the Verification Report was to verify that the construction activities have mitigated the risks posed by the identified contaminants of concern and break potential contaminant linkages allowing the redevelopment of the Site for a commercial end use.

Epsilon Environmental confirms that the information provided accurately reflects the documentation and evidence received regarding the works undertaken on-site. Furthermore, it verifies that the construction activities relating to the installation of ground gas protection measures have met the remediation objectives and have not resulted in an increased of risk to human health.