

Planning Consultation Response

Condition Discharge Application

Environment Section – Contaminated Land

Application Reference:	69940	Discharge Reference:	73287
Site:	Fire Station, Bury New Road, Whitefield, Manchester, M45 7SY		
Approved Development:	Demolition of existing fire station and erection of new fire station including new training tower, parking/manouvering areas, fencing and landscaping; Provision of temporary fire station on site for the duration of the redevelopment		
To:	Helen Pressley	From:	Rebecca Jones
Our Reference:	CL1062.020726.CL1	Date:	2 July 2026

Recommendations
Condition Status Summary
Pre-commencement: Site Characterisation and Remediation Strategy – Requirements met prior to approval of application 69940. Condition 5 (Prior to first use: Remediation Verification) – This Section is satisfied that the requirements of Condition 5 have been met and that this condition can be recommended for discharge.
Outstanding Information
No further information is required.

Desk Study Information	
Current use	On-site: A fire station Off-site: Residential properties, commercial and retail buildings, a petrol station and Elms Recreation Ground.
Previous potentially contaminating land uses	On-site: Terraced houses, allotment gardens and a fire station. Off-site: A fustian mill, cotton mills, a smithy, a confectionery works, a cabinet makers factory, an upholstery works, a petrol filling station and infilled reservoirs.

Environmental setting	Geology: Collyhurst Sandstone and Manchester Marl Secondary overlain by glaciofluvial sand and gravel deposits. A fault trending northwest to southeast is present 75m to the southwest of the site. Hydrogeology: Principal Aquifer (Collyhurst Sandstone) and Secondary B Aquifer (Manchester Marl). A Private Water Supply is present 60m to the south of the site. Hydrology: Not in close proximity to any major surface watercourses. Mining: Not within a Development High Risk Area. Landfill/Waste: Not located within 250m of a known landfill site. Radon: Not located within a Radon Affected Area.
Approved development	• Landscape Proposals Plan, Whitefield Fire Station, September 2023.

Assessment / Comments	
Information Reviewed	• Validation Report, Whitefield Fire Station, IGE Consulting, Reference: 3866a-05/JH/A, 1 July 2026. Previously received and reviewed: • Phase 1 Geo-Environmental Investigation, Whitefield Fire Station, Whitefield, IGE Consulting, Reference: 3866a-01 Rev A, February 2023. • Phase 2 Geo-Environmental Investigation Report, Whitefield Fire Station, Whitefield, IGE Consulting, Reference: 3866a-02 Rev A Updated, 10 May 2023. • Asbestos Demolition Survey, Whitefield Fire Station, Home Counties Asbestos, Reference: HCA03405 Version 1, 23 May 2023. • Hydrogeological Risk Assessment report, Whitefield Fire Station, Whitefield, IGE Consulting, Reference: 3866a-03, January 2024 • Phase 2 Geo-Environmental Investigation Report, Whitefield Fire Station, Whitefield, IGE Consulting, Reference: 3866a-02 Rev B Updated, 14 February 2024. • Letter response from Environment Agency regarding Whitefield Fire Station, Reference: SO/2023/123503/02-L01, 16 February 2024. • Remediation Statement – Whitefield Fire Station, Bradshaw Gass and Hope LLP, Reference: 1978/35, No Date. • Validation Report, Whitefield Fire Station, IGE Consulting, Reference: 3866a-05/JH, 2 June 2026.

LCRM Stage 1 - Site Characterisation and Risk Assessment	
Preliminary Risk Assessment	The report included a description of the site including its past historical uses. An appraisal of the site environmental setting was presented including its geology, hydrogeology and hydrological regime, mining activities, waste management issues, and identification of additional environmental sources, pathways and receptors. This information was used to compile a clear site conceptual model, which identifies potential sources, pathways and receptors and likely pollution linkages. A site reconnaissance visit, undertaken on 28 October 2022, found the site was mainly hardstanding with limited soft landscaping and comprised a fire station and training area. Potential sources of contamination were noted including a disused diesel pump and underground storage tank, AdBlue and hydrocarbon spirit storage, a fuel interceptor, a boiler room and vehicle storage. The potential for the possible use of PFAS containing fire-fighting foam at the site was highlighted. Anecdotal evidence from the station commander suggested that foam had not been used during training exercises in the past. However, testing for PFAS was recommended as part of the proposed site investigation. The report concluded that there was a potential risk to future site users and the environment from potential contamination at the site. Consequently, a site investigation was proposed to include excavation of boreholes and trial pits, installation of gas and groundwater monitoring wells, soil and leachate/groundwater sampling and gas monitoring. Testing for PFAS was to focus on the soils/sub-base beneath cracked concrete or paving slabs where PFAS from foam may have entered the ground if foam had been used at the site. It was recommended that the Environment Agency (EA) be consulted regarding the investigation into potential PFAS contamination and that any proposed testing methodologies for PFAS contamination should be approved by the EA prior to commencement.
Site Investigation and Generic Quantitative Risk Assessment	Multiple phases of site investigation were undertaken between December 2022 and May 2023 and comprised the following: • 4 no. dynamic sampling boreholes – excavated to depths of between 4.38m and 6.00m bgl (DS01, DS02, DS03 and DS04). • 3 no. cable percussion boreholes – excavated to depths of between 9.90m and 19.95m bgl (BH02, BH03 and BH04). • 1 no. hand dug inspection pits – excavated to a depth of 0.5m bgl. This location was to be BH01 but due to an obstruction the location was not progressed further (HDP01). • 2 no. foundation inspection pits - excavated to depths of between

1.1m and 1.2m bgl (FP02 and FP03).

- 9 no. samples – Samples were analysed for a suite of analysis that included metals, banded TPH, speciated PAHs and asbestos:
 - Made ground - DS01 0.8m, DS01 1.5m, DS02 0.5m, DS02 1.0m, DS03 1.2m, DS04 0.5m, HDP01 0.4m.
 - Natural clay - DS03 2.0m, DS04 1.5m.
- PFAS testing (4 no. soil, 2 no. water, 1 no. swab) - Samples of sub-base were obtained after drilling concrete cores in the eastern section of the site (PFC-01, PFC-02, PFC-03 plus one duplicate). Additionally, samples of the rinsate from cleaning equipment prior to sampling (FIELD-BLANK) and on-site water supply (SITE-BLANK) were taken to ensure there was no cross-contamination. A swab sample of the concrete surface was also taken.
- 6 no. gas monitoring visits over 3 months - Monitoring wells installed in five boreholes with the following response zones:
 - DS01 (1-2m – made ground)
 - DS02 (2-4m – organic clay/peat) – flooded on all occasions.
 - DS03 (2-4m – silt/clay/sand) – flooded on 1 out of 6 occasions.
 - DS04 (1-2m – organic clay) – flooded on 1 out of 6 occasions.
 - BH03 (6-10m – sand/clay) – flooded on 2 out of 3 occasions.

Site Ground Conditions and Risk Assessment: Ground conditions at the site comprise mainly of tarmac, over concrete, over subbase of concrete and limestone gravel. Topsoil-like made ground was present in DS04 and HDP01. Cohesive made ground containing brick fragments, concrete, mudstone and sandstone, timber, slate, ceramic and clinker was encountered to depths of between 0.75m and 2.8m bgl. Made ground of organic clay was encountered in DS02 and DS03. The natural strata comprises Glaciofluvial Sheet Deposits (peat, clay and sand layers), over Glacial Till deposits. Bed rock was not encountered.

The soil analysis results have been compared to the Defra C4SLs, CIEH/LQM S4ULs and CLAIRE GACs for commercial land use (SOM 2.5%).

No elevated concentrations of contaminants were identified. Chrysotile asbestos was encountered in the made ground sample taken from HDP01 at 0.4m. However, the quantification testing found a concentration of <0.001% and consequently, the consultant considers this to be a trace amount and no remedial action or specific precautions

during the development are required. This assessment appears reasonable.

The PFAS analysis only identified one sample with PFAS above the limit of detection. This was the SITE-BLANK which was taken from the site water supply (PFOA (335-67-1), where a concentration of 1.03 ng/l was recorded, compared to a laboratory detection limit of 0.65 ng/l. No exceedances of laboratory detection limits for PFAS were recorded in either the soil or concrete swab analysed, including the quality assurance duplicate sample, or the rinsate sample.

The consultant has concluded that the risks to human health are low, and consequently, no remedial measures are required. This assessment appeared reasonable.

Site Water Conditions and Controlled Waters Assessment: During the investigation groundwater strikes were located at depths of between 1.4 and 7.9m associated with the Glaciofluvial Sheet Deposits. No groundwater samples were taken.

4 no. samples of sub-base were obtained after drilling concrete cores in the eastern section of the site (PFC-01, PFC-02, PFC-03 plus one duplicate) and tested for a PFAS suite. Additionally, samples of the rinsate from cleaning equipment prior to sampling (FIELD-BLANK) and on-site water supply (SITE-BLANK) were taken to ensure there was no cross-contamination. A swab sample of the concrete surface was also taken and tested.

The PFAS analysis only identified one sample with PFAS above the limit of detection. This was the SITE-BLANK which was taken from the site water supply (PFOA (335-67-1), where a concentration of 1.03 ng/l was recorded, compared to a laboratory detection limit of 0.65 ng/l. No exceedances of laboratory detection limits for PFAS were recorded in either the soil or concrete swab analysed, including the quality assurance duplicate sample, or the reinstatement sample.

The consultant considered that the risks to controlled waters were low due to the lack of contamination found in the made ground on-site and the lack of PFAS identified in the sub-base samples and concrete swab. Consequently, no remedial actions were considered necessary.

The Site Investigation and Hydrogeological Risk Assessment reports were forwarded to the Environment Agency (EA) for comment. A letter response from the EA (Reference: SO/2023/123503/02-L01, 16 February 2024) made no objection to the findings of the controlled waters assessment. Consequently, this Section was satisfied with the conclusions of the risk assessment.

	Site Ground Gas Conditions and Risk Assessment: A total of 6 visits was carried out over a period of 3 months (4 January to 19 April 2023) with atmospheric pressure less than 1000mb on two occasions. BH03 was monitored on three occasions and DS02 on five occasions. Elevated concentrations of methane were recorded in DS02 and DS03 (maximum concentrations 5.3%v/v and 12.6%v/v respectively) and carbon dioxide in DS02 (maximum 8.7%v/v). Slightly depleted oxygen levels were recorded in DS02, DS03 and DS04 (minimum 10.3%v/v). Flow rates were negligible (<0.1 l/h). The response zones were flooded in DS02 on all occasions, BH03 on 2 out of 3 occasions, and DS03 and DS04 on one occasion. Consequently, the consultant considers that the results from DS02 should be removed from the dataset and that the results from DS03 are unreliable. The consultant has used the methodology set out in CIRIA 665 and BS8485:2015 to assess the gas regime at the site. A worst-case Gas Screening Values of 0.0043 l/h for methane and 0.0045 l/h for carbon dioxide were calculated (4.3%v/v methane, 4.5%v/v carbon dioxide and 0.1 l/h flow). Although the maximum concentration of methane recorded exceeds 1%v/v, the source of the methane was considered likely to natural organic clay and peat deposits identified during the investigation. These deposits produce high concentrations but have a very low gas generating potential as demonstrated by the very low flow rates. Consequently, the consultant considered that the gas regime at the site is representative of Characteristic Situation 1 and that no special gas protection measures were required. This assessment appeared reasonable.
Detailed Quantitative Risk Assessment	Not required.
LCRM Stage 2 - Options Appraisal	
Remediation Strategy & Verification Plan	A Remediation Statement (produced by the engineers for the site) confirmed that the following actions will be undertaken as part of the development and that Verification Report will be submitted upon completion of the development: • Watching brief to identify and deal with any previous unforeseen contamination at the site. • A United Utilities water pipeline assessment to confirm that barrier pipe is not required.

	• Chemical testing results of any imported material for use in landscaped areas to demonstrate that the material is suitable for use. • Excess soil material to be disposed of at a suitable waste disposal facility. A Verification Report, produced by a suitably experienced geo-environmental consultant, should be submitted at the end of the development and include the following: • Confirmation that no unforeseen visual or olfactory contamination was encountered during the development. This should include a photographic record of the development and should focus particularly on the excavations for the foundation in order to illustrate the ground conditions encountered. • Details of any topsoil / subsoil imported to site including details of the source site for the soils, any chemical testing carried out and assessment criteria used to show that the material is suitable for use. A minimum of 3 samples is required which should be tested for a suite of analysis that includes metals, speciated PAH and asbestos. The test results should be compared to suitable generic assessment criteria. • Details of any soil material excavated and removed from site including copies of waste management records. • Confirmation that United Utilities did not require the use of barrier pipe at the site.
Materials Management	The CL:AIRE Definition of Waste Protocol was not used during the development. Therefore, a Materials Management Plan was not required.
LCRM Stage 3 - Remediation and Verification	
Verification	The following verification information has been provided in the IGE Validation Report (Reference: 3866a-05/JHA, 2 July 2026): • Watching brief to identify and deal with any previous unforeseen contamination at the site – A statement has been provided that no evidence of previously unrecorded contamination was encountered during the enabling works. • Chemical testing results of any imported material for use in landscaped areas to demonstrate that the material is suitable for use – Validation sampling of the following imported materials have been completed:

	- Topsoil used on soft landscaped areas – Supplied by Huperade Ltd. 3 no. soil samples were tested for a suite of analysis that included metals, speciated PAHs, TPHCWG, MTBE, BTEX and asbestos. No elevated concentrations of contaminants were found when compared to the commercial land use GACs. - Manufactured clay used to line the surface water attenuation basin – 5 no. samples tested for a suite of analysis that included metals, speciated PAHs, TPHCWG, MTBE, BTEX and asbestos. No elevated concentrations of contaminants were found when compared to the commercial land use GACs. • A United Utilities water pipeline assessment to confirm that barrier pipe is not required – A copy of the United Utilities Risk Assessment has been provided with confirms that standard PE pipes have been used. • Excess soil material to be disposed of at a suitable waste disposal facility – Excess material was removed from site by Roy Braidwood & Sons Transport Ltd in April 2025 and disposed of at NRE Aggregates' recycling yard in Eccles. Waste transfer notes have been provided.
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Notes	
	• Bury Council's Developers Guide for Contaminated Land provides an overview of the assessment of contaminated land in Planning and developing potentially contaminated land. • The Environment Section has used all reasonable endeavours to determine the risk from contaminated land and ground gas based upon the information available to it. However, the comments made above should not be taken to imply that the land is safe or otherwise suitable for this or any other development. The ultimate responsibility for safe implementation of the development scheme resides entirely with the landowner and/or Planning Applicant. • Developments that are brought into use prior to the requirements of pre-occupation conditions being satisfied, would be result in breach of condition and could result in the site being considered under Part 2A. • All parties involved with waste and soil movement at the site should be aware that materials illegally deposited or deposited at inappropriate sites may be subject to relevant landfill taxes, payable by all parties. Only robust due diligence is a defence against joint liability. Illegal deposits can include moving waste soil material on sites, or between sites, without

the appropriate permits, exemptions or duty of care.