C1675/EAJ/DPS/bz/20250231

23rd October 2025

F.A.O Mr Joe Woolley
Urban Splash Developments Ltd
Timber Wharf
16-22 Worsley Street
Manchester
M15 4LD

Consulting Engineers

[redacted]
www.shepherd-gilmour.co.uk
--
T (44)0161 837 1500
--
3rd Floor
Phoenix House
45 Cross Street
Manchester M2 4JF

Dear Joe,

NEW ISLINGTON 3B, MANCHESTER PILING STATEMENT

1. BACKGROUND

SGI Consulting Engineers Ltd (trading as SGI) have been instructed by Urban Splash Developments Ltd to provide a piling statement letter to address planning condition 13 pertaining to planning application for the site (Planning App Ref 122598/FO/2019). It is intended for submission to the regulatory bodies to outline the piling requirements and the low risk to controlled waters, to render the site suitable for the future development.

1.1. PREVIOUS SITE INVESTIGATION REPORTS

SGI have been provided with the following geoenvironmental investigations and assessments that have previously been carried out at the site:

- **Geotechnical Report** (Ref: CL-602- LKC 16 1334-02) dated February 2017. The report was prepared by LK Group for the Phase 2 development of the scheme on behalf of Urban Splash.
- **Phase 2 Geoenvironmental Investigation, Risk Assessment & Remediation Strategy** (Ref: CL-602-LKC 20 1282-02) August 2020. The report was prepared by LK Group for the Phase 3 development of the scheme on behalf of Urban Splash.

In addition to the above, SGI carried out a supplementary phase of intrusive ground investigation to fill in data gaps and uncertainties with respect to the contaminated land risk assessment that were highlighted in the previous investigations:

- **Ground Investigation Letter Report** (Ref: C1675/EAJ/DPS/jt/20240218) dated February 2025. The letter was prepared by SGI for the Phase 3B development of the scheme on behalf of Urban Splash.

For the avoidance of any doubt, the reports above should be read both as a precursor to and in conjunction with this document.

ace consultancy engineering business environment member

TABLE 1.1 SITE SUMMARY

Site History	The site formerly played host to a cotton mill, engineering works and a 1970s residential development. As part of the gentrification of the area and the installation of a canal basin, the area was used as a site compound and materials store for a wider development.
Ground Conditions	**Made Ground:** Made Ground deposits were encountered within all exploratory hole locations from ground level to a maximum proven depth of 4.20m bgl (WS104). The Made Ground deposits typically comprised interbedded gravelly sand or gravelly clay soils (of varying thickness), with granular constituents of brick, concrete, ash, sandstone, clinker and mixed lithologies.
	Drift Natural drift deposits were recorded in WS104, underlying the Made Ground, and comprises a gravelly CLAY. This reaffirms the conditions recorded within the deeper boreholes (CP103 and CP104) during the previous investigation.
	Solid Geology No solid geology was encountered during the investigation works. The British Geological Society (BGS) suggest bedrock in the locality is at depths of >20m bgl.
	Groundwater No groundwater strikes were recorded during the SGI site investigation. Groundwater was recorded at 16.10m bgl in CP103 and 4.70m bgl in CP104 during the previous investigation.
Human Health Risk Assessment	The Tier 2 screening values for Residential end use without plant uptake has been utilised for this assessment due to the proposed apartment-style style residential development, where there are no private gardens and it there place communal outdoor spaces. Referring to the assessment, elevated concentrations of potential contaminants of concern have been identified when compared with Tier I GACs for a residential end use (without plant uptake): ▪ Naphthalene ▪ Benzo(a)Anthracene ▪ Benzo(b)Fluoranthene ▪ Benzo(a)Pyrene ▪ Dibenzo(a,h)Anthracene ▪ TPHC21-C35 Asbestos was not identified in any of the ten samples submitted for analysis. However, due to the age and nature of the Made Ground, it cannot be discounted that asbestos is present within the Made Ground deposits.

Human Health Risk Assessment (Continued)	The risk to chronic human health associated with the elevated concentrations of non-volatile PAH compounds and TPH C21-C35 can be mitigated through the installation of a suitable cover system in proposed landscaping and public open space to remove any potential for direct exposure to impacted soils. With respect to elevated naphthalene identified in WS102 at 0.80 m bgl, this presents a potential volatilisation to indoor air risk and therefore this material requires further assessment or remedial action. If any Made Ground material is removed for off-site disposal a WM-3 waste classification will be required.
Controlled Waters Risk Assessment	Non-volatile PAH contamination has been identified as part of the leachate analysis, along with elevated heavy metal concentrations within the groundwater analysis. Where leachate analysis has been undertaken, this can overstate the risk and is not wholly representative of the site characterisation. The presence of CLAY within the drift deposits will serve to reduce the vertical migration of contaminants that might subsequently leach into the underlying bedrock aquifer. Furthermore, the underlying bedrock aquifer is recorded as a secondary B Aquifer within the Manchester Marls Formation and it is not considered a sensitive receptor. In addition, the dockwall structure, which separates the site from the marina to the south, means the two waterbodies are not likely to have hydraulic continuity. Furthermore, the groundwater level within the basin appears to be at a higher topographical level than the groundwater level recorded at the site; as such, if the two waterbodies were in hydraulic continuity, it is likely the basin would recharge the site, rather than the reverse. As such, this receptor is not considered to be critical. In light of the above, the site is considered to pose a low risk to controlled waters
Ground Gas	The ground gas monitoring undertaken as part of this investigation suggests that the site can be classified as Characteristic Situation (CS)1 – Very Low Gas Risk.

2. PILING

Due to the depth of made ground, piled foundations have been recommended. The piling design will be undertaken by a piling subcontractor in due course to satisfy the performance and workmanship criteria outlined on the piling drawings and specification.

Performance requirements outlined on the drawings and specification require the piling subcontractor to recognise good working practices for the design and drilling of piles on contaminated sites such as guidance provided by the Environment Agency (Environment Agency (2001) Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination: Guidance on Pollution Prevention) and the Institution of Civil Engineers SPERW (Specification for Piling and Embedded Retaining Walls 2016). Detailed pile designs and method statements will therefore be submitted directly by the piling sub-contractor in due course.

3. CONTROLLED WATERS RISK ASSESSMENT

Non-volatile PAH contamination has been identified as part of the leachate analysis, along with elevated heavy metal concentrations within the groundwater analysis. Where leachate analysis has been undertaken, this can overstate the risk and is not wholly representative of the site characterisation.

Whilst it is acknowledged that the site investigations report that piling operations may provide a preferential pathway for contaminants to the underlying groundwater, preliminary pile design criterial suggests that piles will generate working capacities at a depth of around 10–14m below ground, without needing to extend beyond the stiff clays and therefore mitigating the risk.

The presence of CLAY within the drift deposits will serve to reduce the vertical migration of contaminants that might subsequently leach into the underlying bedrock aquifer. Furthermore, the underlying bedrock aquifer is recorded as a secondary B Aquifer within the Manchester Marls Formation and it is not considered a sensitive receptor.

In addition, the dockwall structure, which separates the site from the marina to the south, means the two waterbodies are not likely to have hydraulic continuity. Furthermore, the groundwater level within the basin appears to be at a higher topographical level than the groundwater level recorded at the site; as such, if the two waterbodies were in hydraulic continuity, it is likely the basin would recharge the site, rather than the reverse. As such, this receptor is not considered to be critical.

In light of the above, the site is considered to pose a low risk to controlled waters.

We trust this information is satisfactory to your requirements, and should we be able to be of any further assistance, please do not hesitate to contact us.

Yours sincerely,



SGI Consulting Engineers Ltd

Damien Schofield
BSc (Hons), MSc
Structural Director