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SCOTT BROS LIMITED

GRANGETOWN SOIL WASH FACILITY

SITE CONDITION REPORT

JUNE 2023

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SITE CONDITION REPORT

JUNE 2023

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APPROVED BY:

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UPDATED JUNE 2023

Alison Cook — Associate Director

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APPENDICES

DRAWINGS

Drawing number	Title	Scale
BM12258- 002	Site Layout	approximately 1:500

1 INTRODUCTION

1.1.1 This Site Condition Report has been prepared by Wardell Armstrong LLP to support the Application for an Environmental Permit, by Scott Bros Ltd, to enable waste treatment Activities in the form of a soil washing facility at land off John Boyle Road, Grangetown, Teeside.

1.1.2 This report contains information to establish the baseline conditions of the ground, both from a geological perspective and contamination setting.

1.1.3 This report has been prepared in line with the H5 Guidance and template published by the Environment Agency.

2 SITE DETAILS	
Name of the applicant	Scott Bros. Limited (Company no. **06329873**)
Activity address	John Boyle Road, Grangetown, Teesside
National grid reference	NZ 53987 21359 Wash plant located at NZ 54198 21250
Document references for site plans (including location and boundaries)	BM12258-001 – Site Location Plan BM12258-002 – Site Layout Plan

3 CONDITION OF THE LAND AT PERMIT ISSUE	
Environmental setting including: • geology • hydrogeology • surface waters	Prior to this development the site was covered in mixed density scrub, grassland and scattered trees. There were existing concrete platforms present from previous use. The site will be accessed via an existing access road leading to the proposed area of operations from the North-eastern edge of John Boyle Road. **Geology** Previous reports suggest made ground across the site including brick, ash, clinker and slag, probably associated with the former iron works. The superficials are understood to comprise glaciolacrustrine deposits, which on site comprise a slightly sandy clay. The bedrock underlying the site comprises formations in the Mercia Mudstone Group. The Mercia Mudstone Group is a dominantly red, less-commonly green-grey in colouration and comprised of mudstones and subordinate siltstones with thick halite-bearing units in some basinal areas. Thin beds of gypsum/anhydrite are widespread and sandstones can also be present. It is understood the bedrock in the vicinity of the site comprises mudstone. **Hydrogeology** Superficial deposits on the site are classified as unproductive strata on Aquifer designation mapping and the bedrock at the Site is designated as a Secondary B aquifer. The site is not located within a Source Protection Zone (SPZ).

	Hydrology The River Tees lies within 1.25km of the site to the North. No surface water features are known to be present on the site and there is no known surface water link to the river.
Pollution history including: • pollution incidents that may have affected land • historical land-uses and associated contaminants • any visual/olfactory evidence of existing contamination • evidence of damage to pollution prevention measures	The site has formerly been used in a variety of industrial and transport settings. Railway sidings have been historically recorded on or near the site between 1893 and 1989, with assorted supporting infrastructure. The site was part of a wider area for Cleveland Iron Works, including such structures as cooling towers, gas works and assorted storage tanks (up to 1962). The site does not appear to have been in use in beyond 1993, when the Cleveland Iron Works ceased operations. Whilst the iron works operation and railway sidings are shown on the site itself other nearby contaminative uses included chemicals works and landfilling.
Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)	There have been no recorded pollution incidents at the Site since its use ceased in 1992/1993. However, it has a long industrial history, being associated with the Cleveland Ironworks and associated railway sidings from the mid-19th Century until the late-20th Century. This long history of industrial use is consistent with the slag and ash present in the made ground across the site. Further detail is provided in a desk study report supplied by Caulmert in 2017.
Baseline soil and groundwater reference data	Due to the industrial use of the site a series of soil samples were taken in 2017 and 2020 with groundwater samples being collected in 2021. Golders prepared a report on the contamination and suggested remediation strategy in 2021. Unsurprisingly, given its history, the site was found to be contaminated with a range of

	metals, asbestos and PAHs. Golders reported high levels of PAH and lead in soils whilst the groundwater contained elevated PAH, copper and zinc. Their suggested remediation strategy was to dig and dump hotspots (areas with asbestos present) and then to provide clean cover over the contaminated land to protect future users of the site. Their report is provided as Appendix 2.
Supporting information	• Source information identifying environmental setting from BGS Mapping and Defra Magic Map Groundwater Designations Mapping • Historical Ordnance Survey plans • Site reconnaissance from Desk Top Study by Caulmert Limited • Historical investigation / assessment / remediation / verification reports • Baseline soil and groundwater reference data and remediation strategy by Golders

4 PERMITTED ACTIVITIES	
Permitted activities	Physico-chemical treatment of soils (soil washing and separation) and storage of wastes, pending treatment: **R5** Recycling/reclamation of other inorganic materials; **R12** Exchange of Wastes for submission to any of the operations numbered R1 to R11; **R13** Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced); Excavation wastes including soils, stones, brick, tile, concrete and glass will be washed and sorted to produce secondary aggregate including sand. Levels of contamination in demolition or excavation wastes will be limited to non-hazardous waste with acceptable levels of contamination clearly set out in the operating techniques.
Non-permitted activities undertaken	Diesel will be stored in a bunded tank to provide power to site plant. The bund will hold 110% of the tank capacity.
Document references for: • plan showing activity layout; and • environmental risk assessment.	Drawing number BM12258-002 shows the site layout. The Environmental Risk Assessment for the proposed Activities at the site is provided in the Habitats, Amenity and Accident Risk Assessment document. The management of fugitive dust emissions is described in the Dust Emissions Management Plan. The Operations on site are set out and described in the Operating Techniques document.

5 CONCLUSION

5.1.1 Given the previous use of the land, it is noted that there are elevated levels of contaminants such as heavy metals and hydrocarbon type organics (often tested as Total Petroleum Hydrocarbon and Polycyclic Aromatic Hydrocarbons) present within soils located on the site and within its wider setting.

5.1.2 The proposed Activities are highly unlikely to pose any risk of increasing levels of these contaminants or adversely affect the groundwater below the site given that:

- The wastes accepted on site are non-hazardous or inert and as such unlikely to contain levels of contaminants of concern that would leach and infiltrate/percolate the soil and groundwater beneath the site; and
- The Activities will take place on a concrete hardstanding apron, already installed at the site. This would in the event of any leaching from waste soils, act as a barrier to break any pathway of transmission to sensitive receptors, such as the groundwater beneath site.

APPENDICES

DRAWINGS

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