

**Walters Land Limited**

**FORMER HOOVER CANDY SITE, MERTHYR  
TYDFIL**

**Groundwater and Surface Water Scheme of  
Monitoring**

Job No.14275/RH/26/WSM

**CLIENT:** Walters Land Limited

**PROJECT:** Former Hoover Candy Site, Merthyr Tydfil

**TITLE:** Groundwater and Surface Water Scheme of Monitoring

**JOB NO:** 14275

**DOCUMENT REF:** 14275/RH/26/WSM

| Revision | Purpose Description | Originated | Reviewed | Authorised | Date     |
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| 0        | Final               | RH         | RB       | JJ         | May 2026 |

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## 1.0 INTRODUCTION

Walters Land Limited are proposing the redevelopment the former Hoover Candy factory site in Merthyr Tydfil for residential end use.

Ahead of the site enabling works comprising demolition, remediation, earthworks and infrastructure works a Construction Environmental Management Plan (CEMP) has been prepared by Walters Land Limited. The CEMP outlines the intended procedures that are to be followed to ensure on-going protection of the environment during the works and includes a Surface Water Management Plan and Environmental Monitoring Method Statement.

This Groundwater and Surface Water Scheme of Monitoring is intended to be included within Appendix J of the CEMP.

The Surface Water Management Plan identifies the two following hazards posed to surface water environment by the works:

- Pollution from fuels, oils and other chemicals that are being used and/ or stored on site entering the stream following spills, leaks or accidental releases.
- Impact from sediment/silt created by exposed soils being eroded by rainfall, flowing into the streams. Mitigation measures are to include the creation of 'a combination of ditches, berms and sediment traps will be employed in order to control the direction of and to slow the flow of rainwater runoff. In this way, runoff from all earthworks areas will be intercepted prior to it reaching watercourses. Watercourses in this context includes field drains, ditches and other watercourses that only flow under certain weather conditions, as these watercourses drain into the main river system.

The Environmental Monitoring Method Statement advises that environmental monitoring will comprise the following:

- Boundary Monitoring,
- Monitoring associated with general excavation,
- Monitoring of excavation of known contaminated areas.

The CEMP has been reviewed by Natural Resources Wales (NRW) in relation to Planning Condition 10 (CEMP) of Planning Permission P/25/0165. NRW provided the following response in correspondence dated 31<sup>st</sup> March 2026 (NRW Ref: CAS-302232-Z9W8):

**1.0 INTRODUCTION** (CONTINUED)*Condition 10*

*We do not recommend your Authority discharges condition 10 (CEMP) as there is no plan or mention of any environmental monitoring of the water quality leaving site within the Appendix J (Environmental Monitoring Method Statement). There should be a robust monitoring plan in place to ensure the mitigation used on site is effective and suitable for the task.*

A copy of NRW's correspondence is provided in Appendix A.

Intégral Géotechnique (Wales) Limited have been appointed as the geoenvironmental engineers to provide an accompanying specification for monitoring of water quality during the enabling works.

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## 2.0 SITE SUMMARY

A previous desk study and preliminary site investigation works were undertaken at the site by Redstart / WSP and Quantum Geotechnic Limited, on behalf of Merthyr Tydfil County Borough Council. Intégral Géotechnique subsequently prepared the following report for the site based on the above studies:

- Geo-environmental and Geotechnical Site Investigation Report and Outline Remediation Strategy, Ref. 14275/JJ/25/DS dated February 2025.

The following sections summarises the hydrological and hydrogeological setting of the site and potential sources of contamination that could have the potential to impact controlled waters.

### 2.1 HYDROLOGY AND HYDROGEOLOGY

The River Taff is the primary surface water feature in the area, flowing in a southerly direction approximately 20-50m to the west and southwest of the site. The River Taff discharges into Cardiff Bay.

The underlying Lower and Middle Coal Measures strata, as well as superficial Alluvium deposits, are classed as Secondary 'A' Aquifers.

Previous site investigative works identified the presence of groundwater beneath the site in exploratory cable percussive and rotary boreholes between depths of approximately 4.5m and 13.9m below existing ground level, within the superficial granular alluvial deposits.

Groundwater within the alluvial deposits may be expected to be in hydraulic continuity with the River Taff.

It is understood that several drains, acting as catchment for either watercourses or surface waters in the northern and eastern areas of the site, connect at a manhole in the south of the site before onward flow and discharge into the River Taff. The approximate location of the manhole is illustrated on Figure 1.

During the enabling works, as stated above, surface run-off will be captured in specifically formed ditches, berms and sediment traps.

## 2.2 POTENTIAL CONTAMINANTS

The quality of both surface and groundwater receptors may be impacted during the works by contaminants originating from accidental spillage or leaks of fuels/oils/chemicals and leaching of contaminants within exposed or excavated soils, via surface water run-off, mobilisation through the ground within percolating rainwaters and direct groundwater migration.

The site has been subject of to a number of historical potentially contaminative uses. Spoil heaps were present across the site from pre-1880 with the spoil generated from the nearby collieries and ironworks. Construction of the Hoover factories commenced in the 1940s and continued until the late 1980s. The factory buildings were utilised for a number of processes which would have potential to cause contamination.

The results of laboratory testing of site soils indicated a number of chemical elements or compounds to be present at concentrations above the appropriate thresholds. Exceedances of arsenic, barium, beryllium, nickel, and several speciated PAH compounds and aromatic petroleum hydrocarbon were detected.

Subsequent leachate analysis recorded elevations of zinc, copper, vanadium, nickel and lead when compared to the UK EQS values.

Groundwater samples screened against the relevant Environmental Quality Standards (EQS) or Drinking Water Standards (DWS) during two rounds of groundwater monitoring recorded exceedances of ammonia, beryllium, cadmium, selenium and lead, copper, zinc, nickel, barium, manganese and ammoniacal nitrogen. It was noted that the groundwater and the river water did not record detectable levels of TPH suggesting that the elevations within the made ground had not mobilised to the groundwater.

### **3.0 PROPOSED GROUNDWATER AND SURFACE WATER MONITORING**

#### **3.1 GROUNDWATER SAMPLING**

It is proposed that 5 No. monitoring wells are installed across the site to facilitate sampling of the groundwater.

Proposed approximate locations for the wells are illustrated in Figure 1.

Groundwater is not generally anticipated to be present in the made ground, but within the underlying granular Alluvium deposits. It is recommended that the wells are installed to a depth of 10 – 15m, with the response zones within the granular Alluvium.

The enabling works are scheduled to take 40 weeks, or approximately 9 months.

Groundwaters will be sampled at the following intervals:

- 1 No. round within the month prior to commencement of the enabling works (following demolition, but prior to any groundworks) to establish current baseline groundwater quality,
- 1No. round, 1 month following commencement of the enabling works,
- Subsequent rounds at 1 monthly intervals during the enabling works,
- A final 3 rounds 1 month apart, following completion of the enabling works.

It should be noted that if fluctuations in groundwater quality are recorded during the enabling works, closer spaced sampling may be undertaken.

#### **3.2 SURFACE WATER SAMPLING**

Surface water will be sampled from the manhole located in the south of the site, see Figure 1.

The surface water will be sampled at the following intervals:

- 1 No. round within the month prior to commencement of the enabling works to establish current baseline surface water quality,
- 1No. round, 1 month following commencement of the enabling works,
- Subsequent rounds at 1 monthly intervals during the enabling works,
- A final round 1 month following completion of the enabling works.

### 3.3 LABORATORY TESTING

All retrieved groundwater and surface samples will be tested for the following potential contaminants:

- Metals and semi-metals (including beryllium, barium and manganese)
- Inorganics
- Ammonia and ammoniacal nitrogen,
- Polyaromatic hydrocarbons (PAH),
- Petroleum Hydrocarbons (VPH/EPH) and BTEX,
- Biological Oxygen Demand (BOD)
- Chemical Oxygen demand (COD)

Test results will be assessed with reference to Annual Average Environmental Quality Standards (AA-EQS) derived for a freshwater environment in the first instance. Where no AA-EQS values are available, reference may be made to Maximum Allowable Concentration Environmental Quality Standards (MAC-EQS) for freshwater. Where no EQS values are available UK and WHO drinking water standards will be employed.

### 3.4 MITIGATION AND CONTINGENCY MEASURES

Specific site practices to be followed during the enabling works to manage the risks from potential contaminative hazards is outlined in the CEMP Surface Water Management Plan.

The results of the ground and surface water testing will be assessed and reviewed throughout the enabling works.

The sampling frequency may be amended accordingly in response to any areas and contaminants of concern.

Additional or alternative control measures will be employed by the site where necessary if the water testing indicates that the site works have had an adverse affect on in the surface and groundwater quality.

## **APPENDIX A**

### **NRW CORRESPONDENCE**

Ein cyf/Our ref: CAS-302232-Z9W8  
Eich cyf/Your ref: P/26/0039

Merthyr Tydfil County Borough Council  
Unit 5 Triangle Business Park  
Pentrebach  
CF48 4TQ

Dyddiad/Date: 31 March 2026

Annwyl Syr/Madam/Dear Sir/Madam,

**BWRIAD/PROPOSAL: DISCHARGE OF CONDITIONS 10 (CEMP), 18 (INVASIVE SPECIES), 21 (CEMP-B), 24 (CONTAMINATION PARTS 1-3) AND 30 (HISTORIC BUILDING RECORDING) OF PLANNING PERMISSION P/25/0165.**

**LLEOLIAD/LOCATION: FORMER HOOVERS SITE MERTHYR TYDFIL, CF48 4TU.**

Thank you for consulting Cyfoeth Naturiol Cymru (CNC)/Natural Resources Wales (NRW) about the above, which we received on 03 March 2026.

**We have concerns with the application as submitted. We do not recommend your Authority discharges 10 (CEMP) and 24 (contamination parts 1-3) for the following reasons.**

Condition 10

We do not recommend your Authority discharges condition 10 (CEMP) as there is no plan or mention of any environmental monitoring of the water quality leaving site within the Appendix J (Environmental Monitoring Method Statement). There should be a robust monitoring plan in place to ensure the mitigation used on site is effective and suitable for the task.

Condition 24

We have reviewed the submitted information in support of the application and advise a partial discharge of condition 24 (contamination parts 1-3). We advise a discharge of part 1 only as part 2 and 3 have not been undertaken to date.

Parts 2 and 3 of Condition 24 require the removal of buildings on site before the additional site investigation and subsequent controlled waters risk assessment can be completed. (As stated in section 9.2 of the report referenced above under the Part 1 remediation works.)

We note the works on site will be phased; however, it is unclear if the demolition works be undertaken with a phased approach. If demolition works are to be phased, we advise that each phase is clearly stated within the discharge of condition applications.

#### Conditions 18, 21 and 30

We have no comments in regards to the discharged of conditions 18 (Invasive Species), 21 (CEMP-B) and 30 (Historic Building Recording) as these were not conditions, we requested.

#### **Other Matters**

The advice in this letter relates to matters which are included on our [consultation topics list](#). We do not rule out the potential for the proposed development to affect other environmental interests that are not included on this list.

We advise the applicant that, in addition to planning permission, it is their responsibility to ensure they secure all other permits/consents/licences relevant to their development. Please refer to our [website](#) for further details.

If you have any queries about the above, please do not hesitate to contact us.

Yn gywir / Yours faithfully,

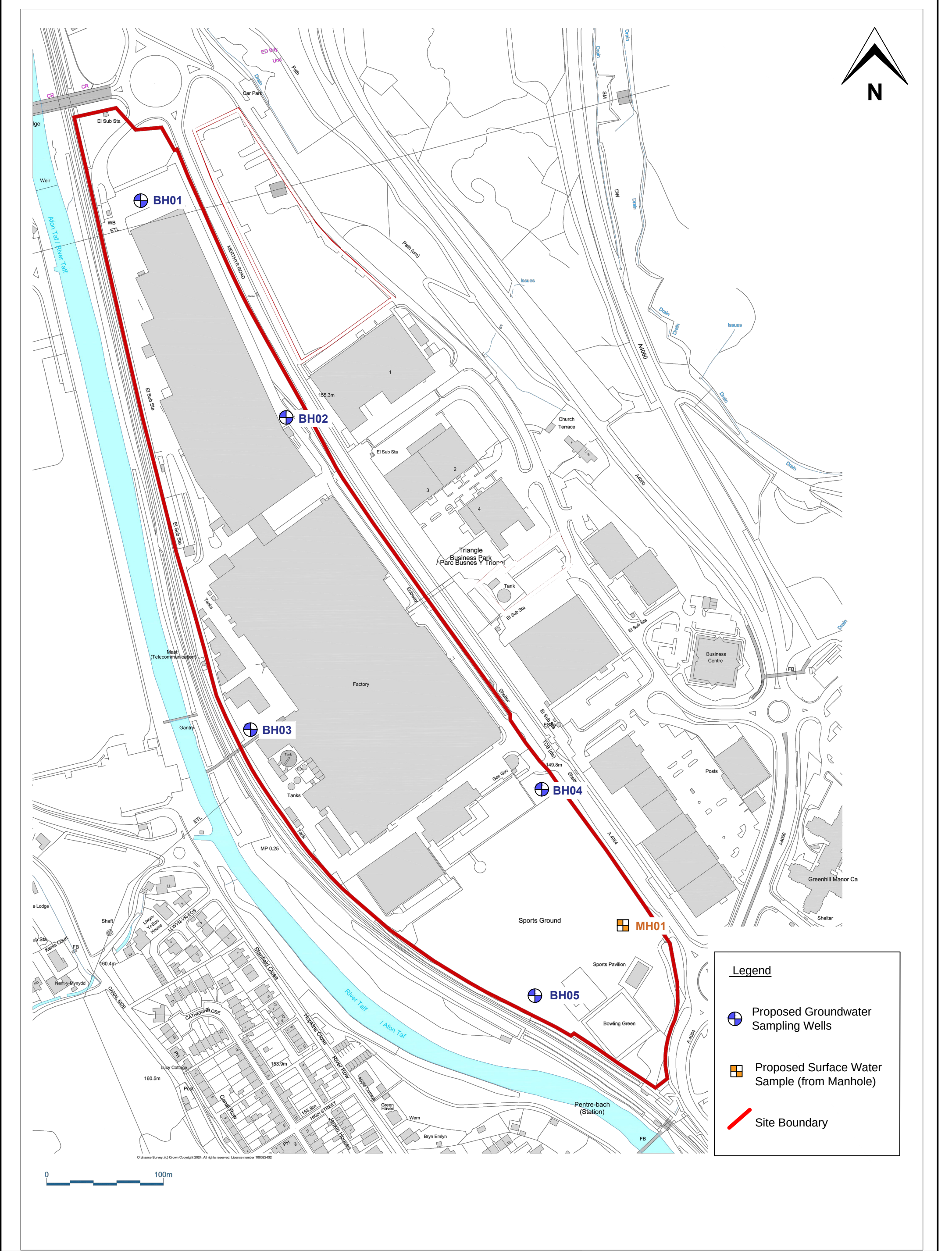
#### **K Murphy**

Cynghorydd - Cynllunio Datblygu/Advisor - Development Planning  
Cyfoeth Naturiol Cymru/Natural Resources Wales

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Croesewir gohebiaeth yn Gymraeg a byddwn yn ymateb yn Gymraeg, heb i hynny arwain at oedi./Correspondence in Welsh is welcomed, and we will respond in Welsh without it leading to a delay.

## FIGURES



|                                                   |  |                 |                                 |                                                                                                                 |
|---------------------------------------------------|--|-----------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Project: Former Hoover Candy Site, Merthyr Tydfil |  | Job No.: 14275  | <b>Intégral</b><br>Géotechnique | Integral House,<br>7 Beddau Way,<br>Castlegate Business Park,<br>Caerphilly,<br>CF83 2AX.<br>Tel: 029 2080 7991 |
| Client: Walters Land Limited                      |  | Scale: As shown |                                 |                                                                                                                 |