

Jones Brothers (Hellan) Limited & Tai Tarian

MEADOW ROAD, NEATH

Outline Remediation Strategy Report

12722/LP/22/ORS

CLIENT: Jones Brothers (Hellan) Limited & Tai Tarian

PROJECT: Meadow Road, Neath

TITLE: Outline Remediation Strategy Report

JOB NO: 12722

DOCUMENT REF: 12722/LP/22/ORS

<i>Revision</i>	<i>Purpose Description</i>	<i>Originated</i>	<i>Reviewed</i>	<i>Authorised</i>	<i>Date</i>
0	Issue	LP	HP	RB	Feb'22

Geotechnical Engineers:

Intégral Géotechnique (Wales) Limited
Integral House
7 Beddau Way
Castlegate Business Park
Caerphilly
CF83 2AX

Tel: 029 2080 7991

CONTENTS

1.0 INTRODUCTION

- 1.1 General
- 1.2 Proposed Development

2.0 BACKGROUND

- 2.1 Site Location and Description
- 2.2 Available Site Investigation Data
- 2.3 Site History
- 2.4 Summary Ground Conditions
- 2.5 Identified Contamination
- 2.6 Detailed Site-Specific Risk Assessment – Human Health

3.0 REMEDIATION STRATEGY

4.0 REMEDIATION IMPLEMENTATION

- 4.1 Objectives
- 4.2 Methodology
- 4.3 Operations

5.0 REMEDIATION VERIFICATION

- 5.1 Objectives
- 5.2 Remediation Verification Methodology and Data Gathering Requirements

6.0 FINAL REMEDIATION VALIDATION

FIGURES

- Figure 1 Site Location
- Figure 2a Site Plan
- Figure 2b Remediation Area

1.0 INTRODUCTION

1.1 GENERAL

Intégral Géotechnique (Wales) Limited have been appointed as Geotechnical and Geoenvironmental Consultants by Jones Brothers (Hellan) Limited and Tai Tarian to prepare a remediation strategy for the redevelopment of land off Meadow Road in Neath to a standard suitable for a proposed residential end use.

An initial Site Investigation Report, ref: 12722/LW/20/SI Rev C, dated March 2021, and a Supplementary Site Investigation Report ref: 12722/PD/HP, dated 9th February 2022, have been previously prepared by Intégral Géotechnique (Wales) Limited. The previous reports have been used as information as part of the remediation strategy and should be read in conjunction.

The purpose of this report is to provide a remediation strategy for the delivery of the site to a standard suitable for the proposed residential end use and details how the remediation works will be supervised and validated.

This report (including all appendices to it and any subsequent addendums or correspondence) has been prepared for the sole benefit, use and information of Jones Brothers (Hellan) Limited and Tai Tarian and no third party is entitled or permitted to rely on it. This report may not be used, reproduced or circulated (in whole or part) for any purpose without the written consent of Intégral Géotechnique (Wales) Limited. Intégral Géotechnique (Wales) Limited shall not be liable to any third party who does not have such express written permission to rely on the report for any losses they may suffer.

1.2 PROPOSED DEVELOPMENT

The proposed development will comprise the construction of 52 No. properties of varying sizes and style as presented on Site Layout Ref. 2330-00(02)100 Rev: T produced by Spring Design. The development will include associated infrastructure including access roads, car parking areas and private driveways. The development will also include areas of landscaping and private gardens.

2.0 BACKGROUND

2.1 SITE LOCATION AND DESCRIPTION

The site is located off Meadow Road approximately 1km south of Neath at a National Grid Reference of 275020, 196120, see Figure 1.

The site is irregular in shape and occupies an area of approximately 2 hectares. The boundaries of the site are defined by the rear gardens of properties off Meadow Road to the northwest, Eaglesbush House and grounds and properties off Eaglesbush Mews to the west and southwest, existing access road to the south and undeveloped heavily wooded land to the northeast. A site plan is presented in Figure 2a.

The site is situated on undulating ground at approximate elevations of between 48m and 52m AOD, locally elevations fall to approximately 40m AOD towards the surface water feature/culvert which flows southwest to northeast approximately through the centre of the site.

The north western area of the site is currently heavily wooded and situated on steeply sloping ground. The boundaries of the site are also heavily wooded and vegetated. Vegetated sloping ground extends from the north eastern boundary into the adjoining wooded area. The majority of the site area is grass covered and undeveloped. Some trees and areas of vegetation are sporadically located across the site.

Within the lower areas of the site, particularly the centre and eastern area of the site, the ground was noted to be saturated at surface level.

2.2 AVAILABLE SITE INVESTIGATION DATA

The following reports have been reviewed as part of these works:

- Site Investigation Report, Meadow Road, Neath, issued on behalf of Jones Brothers (Hellan) Limited & Tai Tarian. Report Ref: 12722/LW/20/SI Rev C, dated March 2021.
- Supplementary Site Investigation. Letter Report Ref: 12722/PD/HP, dated 9th February 2022.

The above Site Investigation Reports should be reviewed in conjunction with this Outline Remediation Strategy Report in order to gain a detailed appraisal of the site and the works completed to date. The previously submitted Site Investigation Reports provide the information on which this Outline Remediation Strategy Report is based.

2.3 SITE HISTORY

The history of the site has been traced using historical Ordnance Survey (OS) maps, as detailed in in Site Investigation Report ref: 12722/LW/20/SI Rev C, dated March 2021. A brief summary of the site's history is as follows:

The earliest edition of the map dated 1881 indicated the site to be undeveloped fields with a tree lined field boundary crossing approximately through the centre of the site on a southwest to northeast orientation. The northeast corner of the site was indicated to be a mixed wooded area. A collection of buildings known as Eaglesbush occupied the area to the southwest of the site. Areas of landscaping were also indicated around the buildings and accessed via an existing road to the northwest of the site. An old quarry was indicated adjacent to the southeast boundary of the site and a larger quarry was indicated approximately 40m to the northeast of the site. Old gravel pits were located approximately 20m to the east and southeast of the site. Beyond the gravel pits, approximately 50m to the east of the site flowed Crythan Brook. Two old coal pits were indicated approximately 110m and 230m to the northwest of the site. Eaglesbush Foundry (Iron) was located approximately 200m to the north of the site.

The edition of the map dated 1899 indicated the site to have remained relatively unchanged and undeveloped. An additional wooded area was now indicated along the western boundary of the site. The field boundary which crossed the site was no longer indicated to be tree lined. The buildings to the southwest of the site had been extended slightly and were now known as Eaglesbush House. The quarry to the northeast of the site had now expanded up to the site boundary. Eaglesbush Colliery had also opened to the southeast of the site with associated colliery buildings located adjacent to the southeast boundary. Tramways ran from the colliery approximately along the path of the brook to Eaglesbush Foundry to the north and Cambrian Brick Works approximately 200m to the southeast. The old quarry was no longer indicated to the southeast of the site and a building known as Eaglesbush Grove had been constructed. Residential development continued beyond the road approximately 130m to the northwest of the site.

The edition of the map dated 1918-1919 indicated the site to have remained relatively unchanged. A new access which had been constructed to enter the grounds of Eaglesbush House from the southwest. Eaglesbush Colliery was now indicated to be disused, some of the buildings remained but the associated tramways had been removed. An old coal pit was indicated approximately 60m to the southeast of the site, associated with the former colliery. The foundry to the north and the brickworks to the southeast were still operational. The quarry to the northeast was now an old quarry. Residential development continued along Old Road to the northwest of the site. Development had also taken place further to the west of the site beyond Eaglesbush House.

2.3 SITE HISTORY (CONTINUED)

The 1935-1941 edition of the map indicated the site to have remained unchanged. Mainly residential development continued to the north and west of the site.

The edition of the map dated 1949-1967 indicated a water feature to flow across the site on a southwest to northeast orientation towards a pond feature located approximately 40m to the northeast, adjacent to the former quarry area. It then flowed onwards towards Crythan Brook. A small quarry excavation was also indicated to encroach across the northern boundary of the site. A new residential development was located along Meadow Road to the northwest of the site.

The 1962-1978 edition of the map indicated the site to have remained relatively unchanged and undeveloped. Eaglesbush House to the southwest had been extended to more than double the original size. The other buildings in the vicinity of Eaglesbush House remained unchanged. Residential development continued to the northwest of the site as Meadow Road extended with the properties and associated gardens now forming the northwest boundary.

The site itself remained relatively unchanged over the years that followed. New residential development was indicated to the south of the site by 1993.

The aerial photo dated 2000 indicated the area to the south of the site was now also fully developed along The Avenue. The area at the location of the small quarry excavation was now completely wooded.

No significant changes were noted on site or in the surrounding areas in between the year 2000 and the present day.

2.4 SUMMARY GROUND CONDITIONS

The initial site investigation, undertaken during October 2020, comprised the excavation of twelve machine excavated trial pits and eight windowless sampling boreholes. Further intrusive works were undertaken in December 2020 comprising the drilling of four cable percussive boreholes and four windowless sample boreholes.

The supplementary works were undertaken in January 2022 and comprised the excavation of twelve machine excavated trial pits from the areas of made ground as determined during the original investigation. An additional six topsoil samples were also taken at this time.

2.4 SUMMARY GROUND CONDITIONS (CONTINUED)

During the initial intrusive investigation, the ground conditions within the site were found to be variable in nature but generally comprised topsoil overlying variable in-situ clays and sands and with most of the trial pits and windowless sample boreholes terminated within what was considered to be weathered sandstone bedrock. However, weathered bedrock was not encountered within the trial pits in the western and north western area of the site and the overlying deposits were found to be loose or soft with groundwater encountered resulting instability within the trial pits (TP1, TP3, TP4 and TP12). Supplementary cable percussion boreholes (BH01 to BH04) undertaken in the western and north western area were undertaken to confirm the ground conditions including the depth to weathered bedrock and is further discussed below.

Areas of made ground or disturbed ground were also encountered within the northwest area of the site and in localised areas within the south (TP2 and TP11).

A summary of the ground conditions encountered across the southern and eastern area of site is presented below in Table 1.

TABLE 1: SUMMARY OF GROUND CONDITIONS (SOUTHERN AND EASTERN AREA OF SITE)		
Depth (m) From To		Stratum
GL	0.10/0.25	TOPSOIL: Grass onto brown organic slightly gravelly slightly sandy silty clay with roots and rootlets
0.10/0.25	0.10/0.80	MADE GROUND: (Loose to medium dense) black grey silty slightly clayey sand and gravel. Gravel is fine to coarse angular to subangular and tabular of siltstone, sandstone and brick with frequent cobbles of sandstone (TP2) or (Loose) grey gravelly sand. Gravel is fine to coarse angular of frequent ash material, brick, sandstone with fragments of metal and plastic. Some brick cobbles. (TP11)
0.10/0.80	0.25/1.10	Soft to firm, firm grey brown or light brown slightly sandy slightly gravelly silty CLAY. Gravel is fine to coarse angular and tabular of sandstone and siltstone
0.25/1.10	1.10/2.00	(Medium dense) brown grey slightly sandy GRAVEL/SAND and GRAVEL. Gravel is fine to coarse tabular of sandstone and siltstone or (Medium dense) light brown slightly clayey silty in areas gravelly SAND

2.4 SUMMARY GROUND CONDITIONS (CONTINUED)

TABLE 1: SUMMARY OF GROUND CONDITIONS (CONTINUED)		
(SOUTHERN AND EASTERN AREA OF SITE)		
Depth (m)		Stratum
From	To	
1.10/2.00	>1.10/2.00	Medium strong weathered brown grey SANDSTONE. Recovered as tabular gravel with some sandy matrix.

In the northern and western area, trial pits TP1, TP3, TP4 and TP12 encountered variable ground conditions and did not encounter weathered bedrock due to the termination of the excavations following instability within the trial pit which caused the sides to collapse.

Trial pit TP1 encountered topsoil which included fragments of plastic overlying possible made ground to 1.8m depth comprising medium dense grey slightly sandy slightly silty slightly clayey to clayey gravel. Gravel is fine to coarse angular to subangular of siltstone and sandstone. These materials were underlain by a coal seam with bands of brown clay down to 2.0m depth. This is likely to be the Westernmoor seam whose outcrop is conjectured beneath this area of the site. The band of coal is underlain by soft to firm yellow brown silty clay down to a depth of 2.2m.

Trial pit TP3 encountered a thicker layer of topsoil down to 0.5m depth. This was underlain by a variable mixture of loose wet grey brown slightly gravelly silty clayey sand and very soft to soft sandy silty clay down to 2.0m depth. These materials were underlain by soft yellow grey brown very sandy silty clay down to 2.2m depth.

Trial pit TP4 encountered made ground beneath the topsoil to a depth of 0.9m comprising very loose to loose wet black grey slightly clayey to clayey silty sand and gravel. Gravel is fine to coarse angular to subangular of siltstone and sandstone with rare brick and fragments of cloth/textiles. The made ground was underlain by loose to medium dense blue brown grey clayey silty gravelly sand. Gravel is fine to coarse angular of siltstone and sandstone.

2.4 SUMMARY GROUND CONDITIONS (CONTINUED)

Trial pit TP12 encountered possible made ground beneath the topsoil to a depth of 0.8m comprising medium dense grey slightly clayey silty sandy gravel. Gravel is fine to coarse angular to subangular and tabular of sandstone and siltstone. These materials were underlain by a coal seam with bands of brown clay down to 1.1m depth. This is likely to be the thin Mountain seam whose outcrop is conjectured beneath this area of the site. The band of coal was underlain by a variable mixture of loose wet grey brown slightly gravelly silty clayey sand and very soft to soft sandy silty clay down to a depth of 2.2m.

The other trial pits which were excavated across the site remained stable although slight spalling of the sides was noted within trial pits TP5 and TP11.

To confirm the ground conditions in the northern and western area of trial pits TP1, TP3, TP4 and TP12, supplementary cable percussion boreholes were drilled across this area. The boreholes confirmed the ground conditions within the area is variable and typically consisted of a variable sequence of very soft, soft, soft to firm, firm sandy silty clays and very loose to loose clayey silty sands encountered to depths of between 4.1m and 4.8m below existing ground level in boreholes BH01 and BH02 respectively.

Firm cohesive strata was encountered within boreholes BH03 and BH04 at depths of 1.0m and 1.10m below existing ground level respectively. A weathered coal seam was encountered within shell and auger BH04 at a depth of between 0.8m and 1.1m below existing ground level.

Within the cable percussion boreholes sandstone or mudstone bedrock was encountered at depths of between 2.8m and 6.0m below existing ground level. Instability was noted within the boreholes with casing required throughout to bedrock.

2.4.1 Topsoil and Made Ground

A layer of topsoil was encountered across the site. Within trial pits TP1, TP2, TP4, TP11 and TP12 made ground was encountered which comprised possible reworked materials. More variable made ground which contained ashy materials, brick, metal and plastic, particularly within TP11 which was located within the southeast area of the site in close proximity to the former colliery which was located just off site.

2.4 SUMMARY GROUND CONDITIONS (CONTINUED)

2.4.2 Superficial Soils

The superficial soils were encountered within all the trial pits beneath the topsoil or the made ground. These materials were also variable in nature and comprises clays, sands and gravel in a varying matrix. These materials were also found to become soft/very soft and loose/very loose if groundwater was encountered. Running sand was noted within TP6 below 1.1m depth.

2.4.3 Weathered Bedrock

All of the trial pits, with the exception of TP1, TP3, TP4 and TP12 and all the cable percussion borehole and windowless sample boreholes were terminated within the suspected weathered bedrock when further excavation or drilling became difficult. Minimal excavation or drilling was possible into the weathered sandstone or locally mudstone, but where limited excavation was possible the excavated materials were described as medium strong weathered brown grey sandstone or weak weathered brown mudstone. Recovered as tabular gravel with some sandy matrix.

2.4.4 Groundwater

The groundwater conditions are based on observations made at the time of the fieldwork. It should be noted that groundwater levels may vary due to seasonal and other effects.

Trial pit TP3 was found to be wet below 0.5m depth. Multiple inflows were encountered within trial pit TP4 at 0.5m depth. Slight seepages were encountered within trial pit TP5 and TP6 at 1.3m and 1.9m depth respectively. Trial pit TP12 was found to be wet below 1.1m and with groundwater encountered at 1.8m depth.

Groundwater was encountered within borehole BH01 and BH02 at a depth of 2.7m and 3.0m below existing ground level, respectively.

2.4.5 Supplementary Investigation Works

The supplementary trial pitting established grass overlying topsoil ranged from approximately 0.1 to 0.2mgl and subsequently encountered typically a soft to firm brown sandy silty CLAY with some to many gravels or clayey sandy gravels and cobbles which often appear to be reworked virgin soils in S1 to S10 to approximately 0.5 to 2.0mbgl in the western third of the site, then encountering virgin soils in the form of firm granular soils or an occasional weathered rocky outcrop.

Whereas the smaller south eastern area of made ground encountered in S12 underlying the topsoil is a dark grey ash with fragments of brick, metal and mortar to approximately 0.5mbgl.

2.5 IDENTIFIED CONTAMINATION

The results of the laboratory testing from the initial site investigation indicate that most of the analysed chemical elements or compounds are present at concentrations below the appropriate thresholds for residential end-use with home grown produce. However, the initial screening indicates exceedances of arsenic, lead and mercury within one sample of made ground. Asbestos was not detected within any of the samples tested.

A made ground sample taken from TP11 at 0.5m depth recorded an elevated level for arsenic of 160mg/kg, an elevated level for lead of 420mg/kg and an elevated level for mercury of 1.9mg/kg which are above the suggested trigger concentration levels of 37mg/kg, 200mg/kg and 1.2mg/kg respectively.

It should be noted that the elevated concentration of arsenic within the topsoil is considered to be representative of the background levels of arsenic within the near surface within the Swansea, Neath and Port Talbot area resulted from a windborne deposition of metals, including arsenic in the shallow soils across the region.

The results of the contamination laboratory testing from the supplementary testing indicate that most of the analysed chemical elements or compounds are present at concentrations below the appropriate thresholds for residential end-use with home grown produce. However, the initial screening indicates exceedances of arsenic and, lead within one sample of made ground. Asbestos was not detected within any of the samples tested.

The ashy made ground sample taken from S12 at 0.5m depth recorded an elevated level for arsenic of 66mg/kg, an elevated level for lead of 340mg/kg which are above the suggested trigger concentration levels of 37mg/kg, 200mg/kg respectively. In addition, and an elevated levels for arsenic of 44 and 68mg/kg were recorded in TS1 at 0.5m and TS6 at 0.1m respectfully.

Supplemental topsoil samples were also taken from across the site for bio-accessible arsenic testing. The results of the bio-accessible arsenic testing have been used to derive a 'site-specific screening level' for arsenic which has in turn allowed for a revised human health risk assessment in relation to this potential contaminant of concern. A site-specific screening level for arsenic of 209mg/kg has been determined. The bio-accessible arsenic testing has shown that the level of arsenic recorded is not considered to pose a human health risk to the proposed residential development.

2.6 DETAILED SITE-SPECIFIC RISK ASSESSMENT – HUMAN HEALTH

The 'general' approach for assessing the potential risk to a receptor is by a combination of qualitative and quantitative risk assessment. A quantitative risk assessment would involve selecting and deriving generic assessment criterion to compare contaminants against, based on the fate, transport and toxicological properties and the exposure scenario being considered.

With regards to assessing risk to human health, a generic quantitative risk assessment has been undertaken using published screening criteria values for a proposed residential end use with homegrown produce.

Elevated concentrations of lead and mercury have been identified in the vicinity of TP11 and S12 within the southeast corner of the site. The area under discussion is indicated on Figure 2a and 2b.

Given the contamination recorded within the materials beneath the southeast corner of the site, it is considered that a potential risk to human health may exist via the following relevant contaminant pathways:

- Dermal contact,
- Ingestion of soil or soil derived dust,
- Ingestion of soil attached to homegrown produce,
- Ingestion of homegrown produce,
- Inhalation of soil bourn dust, and
- Migration of contaminants in ground to drinking water supply pipes.

It is considered that remedial measures will be necessary to protect future site end users and construction site operatives from the contamination recorded within the materials within the southeast corner of the site.

The remediation measures to be carried out have been designed to address the identified potentially active contaminant pathways listed above.

3.0 REMEDIATION STRATEGY

The findings of the site investigations carried out across the site have identified that a potential risk to end users exists in the vicinity of TP11 and S12 within the southeast area of the site, as indicated on Figure 2b, covering Plots 25, 26 and 27 and adjacent landscaped area.

A remediation strategy is proposed such that this area of the site is prepared to a standard suitable for the proposed residential end use.

The following remediation strategy is proposed for Plots 25, 26 and 27 and adjacent landscaped area:

- The proposed garden and soft landscaped areas within the southeast area of the site will require provision of a clean capping/cover system in order to break the link between future site end-users and any residual contamination within the underlying made ground. This capping system should the form of a minimum 600mm of clean topsoil and subsoil placed over an anti-mix geotextile separation membrane.
- Elsewhere, across the rest of the development site, a 150mm thick layer of topsoil will be required in all gardens and areas of soft landscaping in order to provide a suitable growing medium and to promote plant growth.

4.0 REMEDIATION IMPLEMENTATION

4.1 OBJECTIVES

The main objective of the proposed remediation works is to render the site suitable for residential end use. In order to achieve this objective, it is necessary to break any potential pathways between proposed site end users and contaminated soils/materials.

4.2 METHODOLOGY

The remediation works required in order to meet the objective defined above will be undertaken as follows:

1. During excavation, in order to prevent cross contamination of materials, the arisings should be segregated from any underlying natural soils.
2. In order to protect end users from the identified contamination, the processed material should be placed beneath proposed building floor slabs or areas of hard standing, in areas that are unlikely to be disturbed in the future e.g. away from proposed buried service runs, or taken off site.
3. A system should be established by which any 'unusual' materials and potential hotspots of contamination that may be encountered are reported rapidly to the site management, so that the appropriate action may be taken, following specialist advice if necessary. An unusual material may be identified on site by colour, odour or physical nature.
4. All proposed garden and soft landscaped areas in the southeast area will require provision of a clean capping/cover system in order to break the link between future site end-users and any residual contamination within the underlying made ground. This capping system should form a minimum of 600mm of clean topsoil and subsoil placed over an anti-mix geotextile separation membrane.

The site will be deemed remediated by the following active remedial measures:

- Placement of 600mm of clean topsoil and subsoil (with an underlying anti-mix geotextile separation membrane) in all proposed gardens and soft landscaped areas within the southeast area (Plots 25, 26 and 27 and adjacent landscaped area).

4.3 OPERATIONS

The groundworks are to be undertaken by suitably trained contractor experienced in brownfield reclamation/remediation.

Site preparation and operational constraints will be covered in the contractor's method statements. These should include the contractor's proposals for controls and monitoring of dust, noise, vibrations and odour.

Site procedures for managing the remedial works in a manner that will not cause pollution to controlled waters will be covered in the contractor's method statements which will be submitted in discharge of the Conditions of Planning.

The remediation works will be controlled by the appropriate mobile treatment license to be held by the remediation contractor, if such works become necessary. The conditions imposed under the planning process will be considered adequate to control the works.

5.0 REMEDIATION VERIFICATION

5.1 OBJECTIVES

A remediation verification report is required in order to record the data gathering necessary to demonstrate that the works have been carried out in accordance with the agreed strategy, confirm that the works satisfy the site remediation criteria and that the site is suitable for the proposed development.

5.2 REMEDIATION VERIFICATION METHODOLOGY AND DATA GATHERING REQUIREMENTS

The site reclamation/remediation will be verified by the following measures:

- Validation of the chemistry and thickness of the proposed 600mm thick capping layer to be placed within gardens and soft landscaped areas within the southeast area within Plots 25, 26 and 27 and adjacent landscaped area.
- Validation of the anti-mix geotextile separation membrane at the base of the capping soils.
- Notification in the CDM file of residual risks associated with the remediated site.

6.0 FINAL REMEDIATION VALIDATION

The development will not be complete, in accordance with the remediation strategy for the site, until placement of the final 600mm (minimum thickness) of clean capping soils over an anti-mix geotextile separation membrane in all gardens and areas of soft landscaping which fall within the southeast area of the site (see Figure 2b). In order to validate these works a series of hand dug pits will be excavated to confirm an adequate thickness of clean capping soils are in place. A photographic record will be kept. The capping system is to comprise imported clean inert materials conforming to the Requirements for the Chemical Testing of Imported Materials for Various End Uses and Validation of Cover Systems prepared by Welsh Land Contamination Working Group and satisfy appropriate soil guideline values for residential development with gardens.

Placement of the required final 600mm capping layer will be the responsibility of the developer and is usually undertaken on a plot by plot basis, late in the development programme, as plots are completed.

Reporting of the clean capping to garden areas will be submitted independently of the remediation works.

FIGURES



NORTH

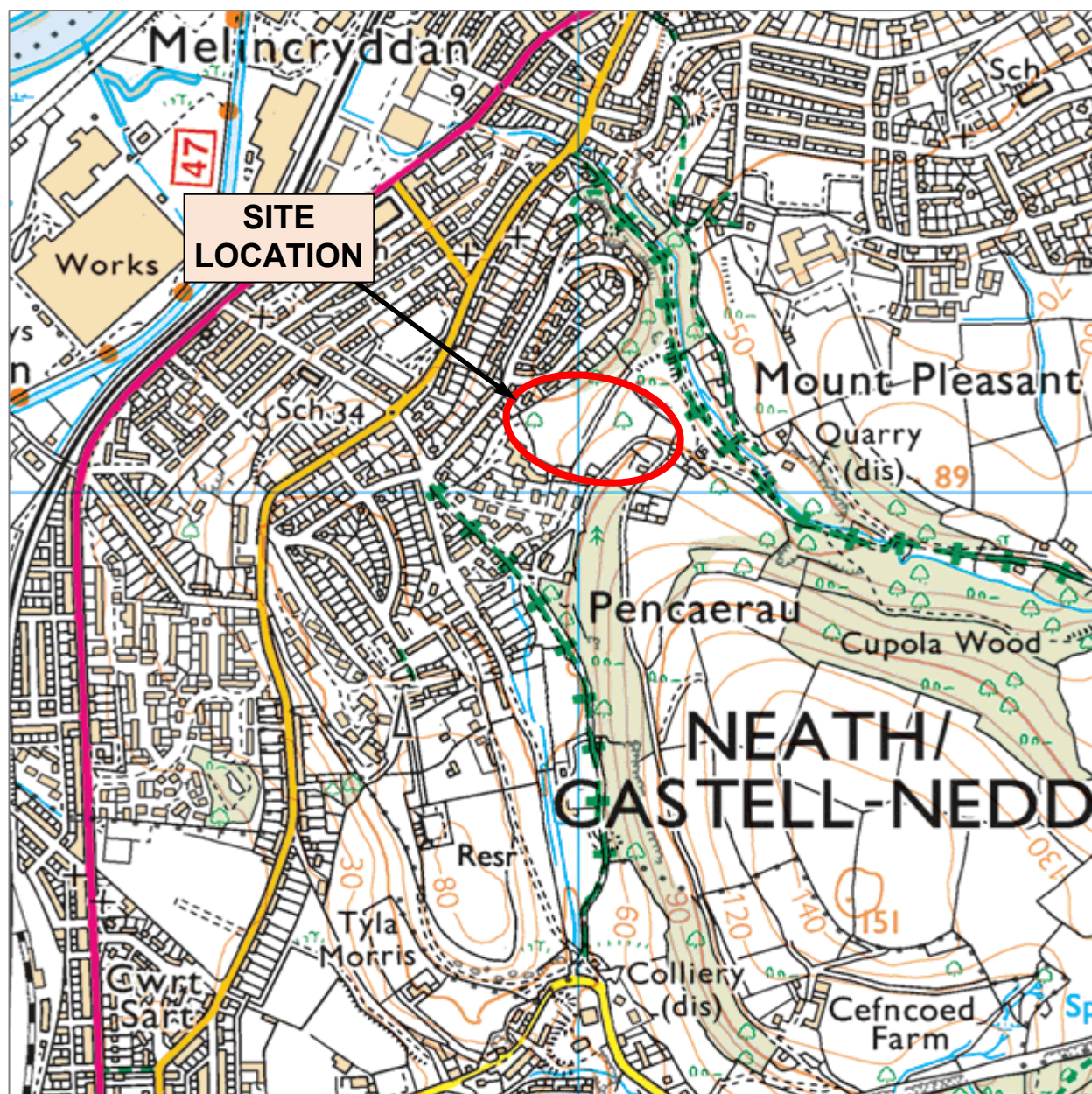


FIGURE 1: SITE LOCATION

Meadow Road, Neath

Intégral
Géotechnique

Intégral House
7 Beddau Way
Castlegate Business Park
Caerphilly
CF83 2AX
Tel: 029 2080 7991
Fax: 029 2086 2176

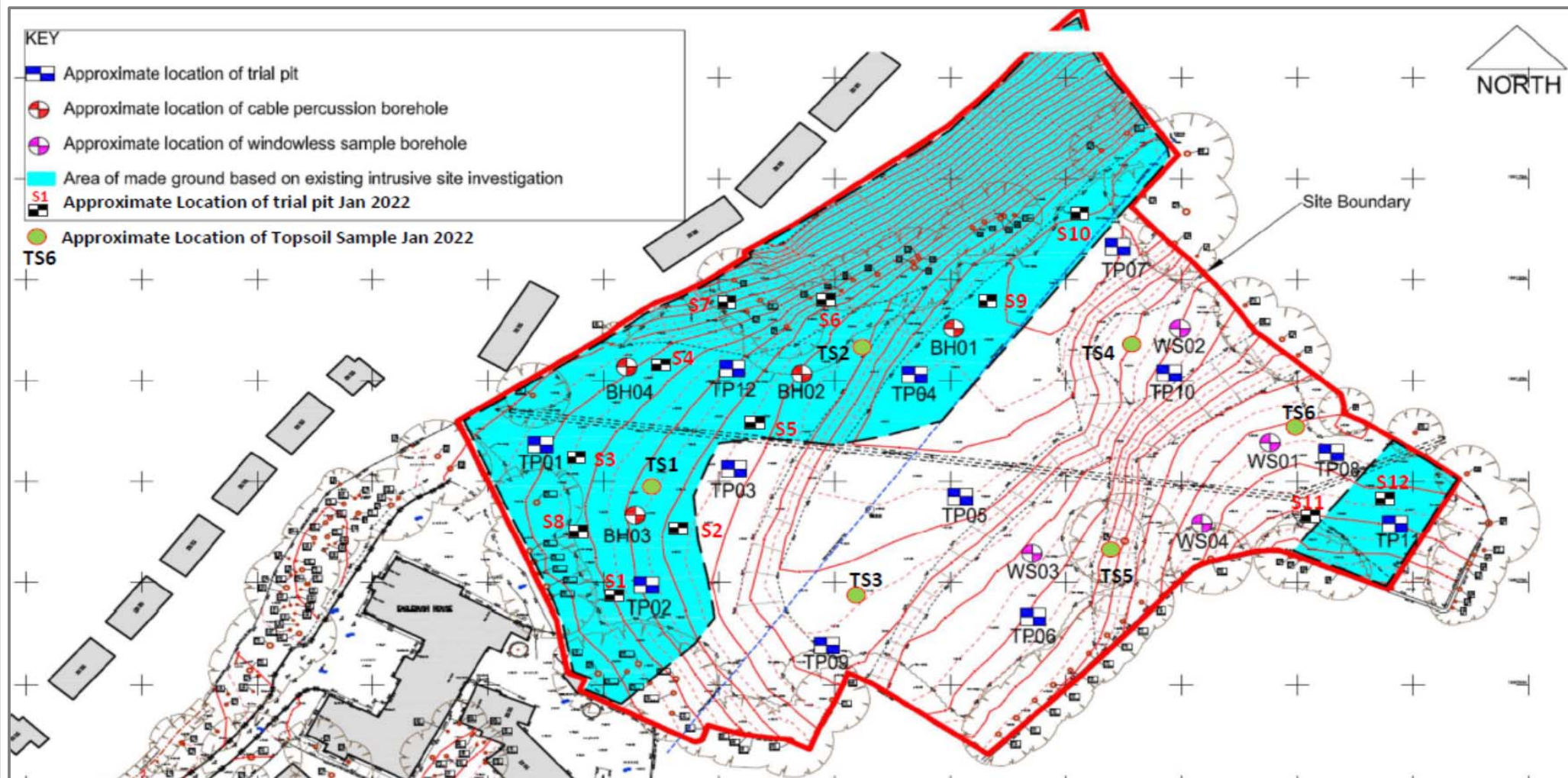


FIGURE 2a: SITE PLAN

Meadow Road, Neath

Intégral
Géotechnique

Intégral House
7 Beddau Way
Castlegate Business Park
Caerphilly
CF83 2AX
Tel: 029 2080 7991
Fax: 029 2086 2176



FIGURE 2b: REMEDIATION AREA

Meadow Road, Neath

Intégral
Géotechnique

Intégral House
7 Beddau Way
Castlegate Business Park
Caerphilly
CF83 2AX
Tel: 029 2080 7991
Fax: 029 2086 2176