

SM/7395c/HP

13 June 2022

Persimmon Homes East Wales
Llantrisant Business Park
Llantrisant
Pontyclun
CF72 8YP

For the attention of Mr Matthew Smith

Dear Sirs,

Supplemental Site Investigation, Earthworks Specification, Drilling and Grouting Specification, Twynnyrobyn, Mountain Hare, Merthyr Tydfil

We refer to recent email regarding geotechnical consultancy services to support the planned full planning application for the above site. We have reviewed the content of our Site Investigation Report for the site, which was undertaken in 2008 for Merthyr Tydfil County Borough Council, report reference 9913/GNS/08 and the content of our Mine Entries Risk Assessment - Technical Note – Land at Twynnyrobyn, Merthyr Tydfil ref:12690/JJ of 5 August 2020.

Supplemental Site Investigation Works

Subsequent to the content of report reference 9913/GNS/08, it is recommended that the desk study searches within the report are brought up to date.

Additionally, it is recommended that some supplemental trial pitting, with laboratory contamination and calorific value testing is undertaken in order to confirm the site in in the same condition as it was in 2004. These works will allow the existing site investigation data, risk assessments and site investigation report to be brought up to current standards and re-reported in favour of Persimmon Homes.

Our costs for undertaking these works would be as follows:

	Estimated Amount Excluding VAT (£)
1. Update Desk study searches including Envirocheck Report	██████████
2. Mobilisation of a JCB 3CX to site to excavate supplemental trial pits (one day)	██████████

3. Site attendance by a qualified Geotechnical Engineer to set supervise the trial pit works and take representative soil samples including expenses (one day)	██████████
4. Laboratory chemical contamination testing (provisional sum)	██████████
5. Laboratory calorific testing	██████████
6. Laboratory PSD and 2.5kg Hammer Optimum Compaction Testing	██████████
7. Assessment of the results and preparation/submission of a site investigation report with findings and recommendations	██████████
Total Estimated Amount	██████████

In the above we have assumed that current buried service plans will be provided to us prior to mobilisation to inform our RAMS.

Trial pits will be backfilled with excavated arisings without formal reinstatement. If you require a higher level of reinstatement please advise us of your specification in order that we can cost the required reinstatement works.

Mine Entry Investigation Works

Subsequent to the content of Mine Entries Risk Assessment - Technical Note – Land at Twynyrodyn, Merthyr Tydfil ref:1 2690/JJ of 5 August 2020., it is recommended that four adit mine entries as further investigated, these being mine entries ref: 305205-021, 305205-034, 305205-045 and 305205-053.

We note that in 2008 access restrictions (due to the presence of footpaths, tracks, wooded areas or services in the vicinity of the recorded mine entry locations) prevented searches being carried out for all of these except for the entry referenced 305205-021. In order to investigate mine entries 305205-034, 305205-045 and 305205-053 these constraints would need to be extinguished.

Each adit will be subject initially to a trail trenching exercise to attempt to establish their location.

Our costs to carry out the trial trenching works would be as follows:

	Estimated Amount Excluding VAT (£)
1. Mobilisation of a tracked 360 degree excavator to site to undertake trial trench works at four locations to site to excavate supplemental trial pits (two days)	1 ██████████
2. Site attendance by a qualified Geotechnical Engineer to set supervise the trial trenching works and take representative soil samples including expenses (two days)	██████████
3. Coal Authority Permit to investigate 4 mine entries	██████████
4. Assessment of the results and preparation/submission of a site investigation report with findings and recommendations	██████████
Total Estimated Amount	██████████

If any of the 4 adit mine entries are not located by the trail trenching works it may be necessary to carry out further rotary drilling works to further attempt to identify the mine entry locations. These costs would best be advised upon completion of the trial trenching works.

If the site does not have security measures in place it will be necessary to provide an overnight security guard to protect the 360 degree excavator. In this instance a cost of [REDACTED] exc. VAT should be allowed for the security guard.

In the above we have assumed that current buried service plans will be provided to us prior to mobilisation to inform our RAMS.

Trial pits will be backfilled with excavated arisings without formal reinstatement. If you require a higher level of reinstatement please advise us of your specification in order that we can cost the required reinstatement works.

Earthworks Specification

Following on from the re-reported site investigation, it will be necessary to produce an earthworks specification for the reclamation works required to re-engineer the development plateau. At this stage, it is envisaged that the site will be re-levelled sympathetic to the proposed development plateau prior to carrying out re-compaction works.

The earthworks specification will incorporate available engineering design drawings. For the production of the detailed specification for the earthworks a budget of [REDACTED] excluding VAT should be allowed.

We trust this information is to your satisfaction. If you have any queries with regard to this correspondence, please do not hesitate to contact us.

Yours faithfully,



Huw Pritchard

For

Intégral Géotechnique (Wales) Limited

Enc Conditions of Engagement and Contract
 Health and Safety Schedule

Conditions of Engagement and Contract

The following Conditions of Engagement and Contract apply to all work undertaken by *Intégral Géotechnique* (the Company) unless specifically amended in writing by the Company prior to the commencement of the Works.

The Client is the person, company, authority or other body who instructs the Company to carry out the work and to whom invoices will be rendered. The Contract is between the Client and the Company.

Contracts entered into between *Intégral Géotechnique* and their clients are subject to the following conditions;

1. Unless otherwise amended the appointment will be in accordance with the Association of Consulting Engineers Conditions of Engagement 1995 or the latest revision thereof, inclusive of all current amendments.
2. These terms and conditions relate to services in respect of the provision of reports, surveys and any necessary ancillary work, the scope of which will be agreed in writing, between the Client and Company, prior to commencement of the work.
3. No action or proceedings under or in respect of this Agreement, whether in contract or in tort, negligence or for breach of statutory duty or otherwise shall be commenced against the Company after the expiry of the period of 6 years from the date of the appointment or such earlier date as may be prescribed
4. Times quoted for completion of work are approximate. The Company will make every effort to meet the start date and programme for the work, but cannot accept any responsibility for delays or consequential costs however caused unless such delay or costs arise as a result of the failure of the Company to exercise to reasonable skill and care and diligence. *Intégral Géotechnique* shall not be held responsible for any delay or failure in performing a contract due to circumstances beyond their reasonable control. Such circumstances would include, without limitation, adverse weather conditions, force majeure, floods, fire etc.
5. Nothing in these Conditions of Engagement and Contract confers or purports to confer any third party benefit or any rights to enforce any term of this contract.
6. *Intégral Géotechnique* will not commence work until a written purchase order or signed agreement is received from the Client. Postponement or late stage cancellation due to circumstances outside our control will result in charges being levied.
7. Any dispute or difference arising out of the agreement shall be referred to Arbitration by an Arbitrator nominated by the President or Vice President or authorized persons of the Chartered Institute of Arbitrators.
8. Invoices will be raised monthly or on completion of each stage of work unless otherwise agreed by the Company. Where third party services are contracted for by the Company in order to complete the work for the Client, the Company reserves the right to render interim invoices to recharge the cost and management of third party services to the Client.
9. Invoices will be rendered on a lump sum, re-measure or time charge basis in accordance with the following Scale of Rates, unless otherwise agreed in writing between the Company and the Client prior to commencement of the work. Invoices issued will be deemed correct unless queried and notified within 7 days of issue.
10. Notwithstanding anything to the contrary contained elsewhere in this Agreement the total liability in the aggregate of the Consultant under or in connection with this Agreement whether in contract or in tort, in negligence, for breach of statutory duty or otherwise (other than in respect of personal injury or death) shall not exceed the sum of:
For Fees less than £10,000 total liability is limited to £250,000 (two hundred and fifty thousand);
For Fees between £10,000 and £50,000 total liability is limited to £1,000,000 (one million);
For Fees in excess of £50,000 total liability is limited to £3,000,000 (three million), except for claims in respect of pollution or contamination where total liability in the aggregate is limited to the lesser of the direct costs incurred by the Client in cleaning up the site of the works or any part thereof or £1,000,000 (one million).
11. VAT will be applied at the standard rate applicable at that time on all invoices rendered.
12. Payment is due on date of invoice and accounts should be settled in full within 30 days. Where payment is unduly delayed the Company reserves the right to charge interest on overdue invoices rendered at 8% above the bank of England Base rate in accordance with the Late Payment of Commercial Debts (Interest) Act 1998.
13. These Conditions of Engagement and Contract shall be governed by and construed in all respects in accordance with the laws of England and each party hereby submits to the non-exclusive jurisdiction of the English Courts.
14. Unless otherwise agreed, the final report will be presented and issued on completion of the project in electronic pdf format on disk together with one hard copy. Additional copies will not be supplied unless specifically requested for which a charge of £50.00 plus VAT will apply.

October 2012

Health and Safety Schedule

Health & Safety Issues

Please provide the following information prior to the start of any investigation. (Re - Health & Safety at Work Act and associated legislation).

1. The location and type of all underground and overhead services that may affect or be affected by our operation.
2. Any information or records of identified contamination on the surface at locations of the exploration.
3. Any specific requirements relating to access to the site for our equipment and supplies, including any restrictions on weight or parking or unloading, and restrictions with regards to working hours.
4. Any specific requirements relating to the movement of our equipment on the site.
5. Any specific site rules to be observed by Intégral Géotechnique.
6. The name of the Site Agent, Health & Safety representative and site telephone number.
7. Any requirements for the induction of our personnel, prior to commencing work.
8. Intégral Géotechnique are not privy to any services information and in the absence of appropriate services information we will dig / drill or excavate only where instructed or available services plans indicate it is safe to do so. We take NO responsibility for any damage to uncharted services.
9. On active controlled sites, on active construction sites a 'Permit to Work' to be completed and signed off in order to progress the work.

Safety First / Drilling Personnel & Equipment

The site access should be relatively level and safe for access of all personnel and equipment.

The rig will either be brought to site using a low-loader or hitched trailer which will require adequate parking for safe unloading of the plant or be towed by a land rover for which adequate space for maneuvering will be required.

The crew will be appropriately trained in the safe working procedures of the equipment and wear all necessary PPE.

All contaminated waste / general waste will be disposed of as directed by the Client on site. No waste will be removed from site.

No person other than the crew or the site engineer will be allowed within 3.0m of the drilling or excavation equipment.

On active sites, welfare facilities must be provided on site or Intégral Géotechnique informed prior to works commencing.

Site security is paramount when drilling on a site and the Client should advise the location of, or provide, safe storage for all drilling tools and equipment.

Please always be aware of the EU working time directive crews may no longer drive and work excessive hours under these laws.

August 2012