Henwood Pavilion Henwood Ashford Kent TN24 8DH



Tel: 01580 241044 www.gabrielgeo.co.uk

Mr Matt Godfrey 142A Hermon Hill London E18 1QH 14th June 2017

Our Ref: 16493/Apt2

Dear Mr Godfrey,

76 Fleet Road, London, NW3 2QT - Application Ref: 2016/0358/P Acknowledgment of appointment

Thank you for your letter of appointment, which we are pleased to accept, to inspect, approve and monitor the critical elements of both permanent and temporary basement construction works at 76 Fleet Road, NW3 2QT, throughout their duration, as relevant to our expertise. Copies of the CVs are attached for the following personnel who will undertake the primary aspects of this appointment:

- Keith Gabriel CGeol UK-RoGEP
- Mike Summersgill CEng C.WEM

We look forward to assisting you further with this project.

Yours sincerely

Keith Gabriel

MSc DIC CGeol FGS

UK Registered Ground Engineering Adviser

for and on behalf of Gabriel GeoConsulting Ltd

e: KeithG@gabrielgeo.co.uk

m: 07793 213847

Encs.

Cc: Mike Summersgill

Keith Gabriel



Curriculum Vitae

Nationality: British

Education: Oxford Polytechnic

Imperial College, University of London

Qualifications: B.Sc. (First Class Hons.) Geology

M.Sc. (Distinction) Engineering Geology

Diploma of Imperial College - Engineering Geology

Chartered Geologist

Fellow of the Geological Society

UK Registered Ground Engineering Adviser



2008 - PresentGabriel GeoConsulting Ltd2006 - 2007Bureau Veritas B&I LtdRegional Director (South East)2003 - 2006Bureau Veritas Laboratories LtdCommercial Director and, in 2006, General Manager of Maidstone Laboratory2000 - 2003WEEKS Laboratories Ltd:Technical Director, and Project Director - RSA-WEEKS

1986 – 2000 WEEKS Consulting Ltd: Senior Engineer rising to Technical Director

1984 – 1986 A.F. Howland Associates, Norwich: Senior Engineer

1980 – 1984 Harrison and Company (...) Limited, Norwich: Engineering Geologist rising to Site Investigation Manager

1978 &1979 Institute of Geological Sciences, Engineering Geology Unit (summer vacation work)

Other Positions Held:

Founder member of the Register Panel for the UK Register of Ground Engineering Professionals (UK RoGEP)

Chairman, The Ground Forum

(the umbrella body for trade associations and learned societies involved with ground engineering)

Chairman, Association of Geotechnical & Geoenvironmental Specialists (AGS):

Committee member, Geological Society South East Regional Group:

1998-2000

Experience Summary:

Keith Gabriel has achieved a diverse range of technical and management experience from a variety of roles throughout his career. These roles have included delivery of technical projects ranging from small investigations to major infrastructure works and senior level management experience within WEEKS Consulting, WEEKS Laboratories and Bureau Veritas prior to founding Gabriel GeoConsulting in February 2008. In addition, as Chairman of AGS and then the Ground Forum he has aspired to use his experience to benefit the industry as a whole.

Keith's primary fields of technical expertise are in slope stability and hydrogeology, the combination of which is ideally suited to the recent demand for land stability and groundwater advice for basement projects in London; by January 2016 Keith had prepared reports on more than 150 basements in seventeen London Boroughs. He has extensive experience of investigating and designing remedial stabilization works for active landslips and failing retaining walls, and preventative stabilization of slopes affected by solifluction. His geotechnical design experience includes, in addition to slope stabilization works, cliff hazard reduction schemes, marine works, large diameter oil storage tank foundations, piled foundations and shallow footings. Keith's hydrogeological experience has included investigation and giving expert evidence in the High Court on causes nitrate pollution in spring water near Maidstone, specialist advice to Mid Kent Water regarding the hydrogeology of their Charing catchment, basement impact assessments, appraisal of the potential yield from a spring catchment for a water bottling plant, expert advice on groundwater flows into deep sewer trenches (for a 'clause 12' claim) and various groundwater flooding cases. His other main areas of technical experience include performance and management of site investigations for tunneling/pipe jacking schemes, land reclamation, foundation failures and geotechnical aspects of residential, commercial and industrial developments. He has provided expert advice for litigation cases and contractual claims on a range of geotechnical problems and has given evidence in the High Court.

Keith also has extensive management experience, initially running Harrison & Company's site investigation division in the early 1980s, then as head of the geotechnical section in WEEKS' Hastings office (1989), and Office Manager from 1991. He returned to the Maidstone head office as joint Office Manager in February 1993 and was appointed Quality Assurance Manager in January 1994, in which role he managed the successful preparation for, and then maintenance of, certification to ISO9001 for both WEEKS' consultancy and site investigation divisions. In 1998 he was promoted to Discipline Head for Engineering Geology. In May 2000 he moved to WEEKS Laboratories as Project Director for WEEKS' innovative cost-plus, risk-and-reward nationwide contract with Royal & SunAlliance. His role at WEEKS Laboratories broadened to include commercial overview of major contract documents and control of capital expenditure which lead to his appointment as Commercial Director. In 2006 Keith was extensively involved with a re-structuring of Bureau Veritas' operations in the UK, with consolidation of eight companies into two, and resulted in his appointment as Regional Director (South East) of the newly formed Bureau Veritas B&I Ltd.

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CV - Keith Gabriel



Management Experience Detail:

- Since founding Gabriel GeoConsulting Ltd in 2008, Keith has built the client base and workload. The practice now employs two other engineering geologists and his intention is to expand the business organically in a sustainable manner.
- Keith Gabriel's role as Regional Director of Bureau Veritas B&I Ltd involved managing nearly 100 staff including teams of geotechnical, geoenvironmental and structural engineers, together with the company's Maidstone Laboratory where he had been General Manager for the previous year. Motivating staff and recruiting additional staff were the primary challenges. As part of a global organization, effective coordination and cross-selling with a diverse range of colleagues was essential.
- As Project Director of the RSA-WEEKS service for Royal & SunAlliance Keith was responsible, twice, for successfully re-negotiating the
 contract with RSA. He oversaw service delivery by two teams under the day to day control of Laboratory/Section Managers.
- As Quality Assurance Manager, Keith was responsible for co-ordinating preparation of new Company Quality Manual and Quality Assurance Procedures documents, implementation of the new system, auditing and achieving external certification (May 1996).
- Keith's appointment as Acting Site Investigation Manager at Harrison & Company Ltd was made only one year after graduating, so gave him unusually early experience of managing professional, laboratory and site staff. Membership of British Junior Chamber, the 'out-of-hours' management training organisation provided valuable support. The Office Manager positions at WEEKS' Maidstone and Hastings offices gave Keith further experience of general staff management.

Technical Experience Detail: Principal types of projects undertaken, with examples:

- Basement Impact Assessments (BIAs): The current huge demand for basement extensions in London has created a new demand for BIA reports in support of planning applications. The scope of such BIAs ranges from consideration of hydrogeology alone, to 'full' BIAs which cover slope/ground stability, hydrogeology and hydrology (surface water and flooding), with Ground Movement Assessments and Damage Category Assessments either as an integral part or as separate stand-alone reports.
- Shortly after writing his first full BIA for a project in Hampstead (in 2012), Keith was invited to assess BIAs written by others on behalf of the London Borough of Camden. He undertook several such assignments (and has one still on-going) until Camden awarded all this audit work to a single consultancy.
- Provision of specialist advice to Local Authority Planning Control departments regarding land stability issues in relation to PPG14 and, more
 recently, the National Planning Policy Framework (NPPF).
- Provision of expert advice in relation to various litigations; topics covered include hydrogeology of polluted groundwater, hydrogeology of
 alleged groundwater flooding in a residential property, basement flooding from an over-loaded sewer system, failure of retaining structures
 and the technical feasibility of developing a site for housing. Keith has twice given evidence as an expert witness in the High Court.
- Provision of expert advice in relation to contractual claims. ICE 'Clause 12' claims have included de-watering of deep sewer trenches and the stability of deep open cut works for the Conwy Tunnel (claim value £20M, arbitration hearing took 1 month).
- Provision of expert advice for a Public Inquiry on behalf of Mid Kent Water Company, including management of a programme of ground investigation and specialist laboratory testing in order to understand better the hydrogeology of MKWC's Charing catchment.
- Management of investigations of active or dormant landslips. Projects managed include:
 - Channel Tunnel, U.K. Terminals: Geotechnical consultancy to the Building Design Partnership primarily concerned with stability of
 four large natural landslips on the chalk escarpment, two of which were intersected/crossed by permanent way rail lines. Three
 dimensional stability analyses with earthquake-induced accelerations.
 - The West Weares Landslip complex crossed by the A354 at Priory Corner, Portland.
- Management of investigations for major infrastructure projects, including:
 - SWA Public Surface Water Relief Sewer, Folkestone (the tunnel to take all surface water from the Channel Tunnel site out to sea): Resident Engineer and Chief Engineering Geologist for the Phase 1 ground investigation and feasibility study (£0.5M). Proposed works included up to 3.8km. of 1.8m/2.1m. diameter sewer to be constructed by open cut and tunneling/pipe jacking, at depths of up to 50m. Compiled detailed specification, tender documents and contract documents. Wrote interpretive report.
 - Channel Tunnel, Folkestone Terminal Drainage ground investigation: Prepared the interpretive geotechnical report. Proposed works include the main foul water and surface water sewers within the terminal site (constructed by pipejack, tunneling and open cut) and twin pipejacks beneath the M20 motorway.
 - Black Country Trunk Sewer ground investigation for Severn Trent Water, including rotary drilling and packer tests in Bromsgrove Sandstone and Kidderminster Conglomerate. (£0.25M).
 - Investigation of chalk structure to assess feasibility of tunneling beneath the A26.
- Checking retaining wall design calculations and slope stability analyses on behalf of Hastings Borough Council.
- Provision of specialist advice to developers and Housing Associations on innovative preventative stabilization techniques for soliflucted Wadhurst Clay slopes. Several sites in East Sussex, mainly for developments of 20 to 60 houses. Detailed slope stability analyses of the soliflucted Wadhurst Clay for 95 houses on the former Tonbridge Grammar School site (2011).
- Investigations of active landslips and subsequent design and supervision of stabilization works in Wadhurst Clay.
 - Extensive slope failures within a development of 200 houses in St Leonards-on-Sea. The works included steel sheet piling, land drainage and mass rock fill stabilization; value £1.3M.
 - Highway slope failure, Little Ridge Avenue, Hastings; value £0.25M.

CV - Keith Gabriel



- Inspection and provision of advice on the stability and potential hazards from cliffs and quarry faces. When appropriate, followed by design and supervision of hazard reduction or stabilization works. Projects include 1.1km of chalk cliffs for Dover Harbour Board, various cliffs in Wadhurst Clay/Ashdown Beds, and assessment of quarry face stability in locked sands (Folkestone Beds) at Princes Royal Sandpit, Runfold and elsewhere.
- Investigation of chalk solution features in southeast England and Norfolk using both microgravity and traditional techniques.
- Other residential sector projects:
 - Investigations of raft failures of varying size
 - Structural redevelopments: assessing the influence of increased loadings on existing footings, including old mill buildings and the former Medical Research Council laboratories at Mount Vernon, Hampstead.
 - Extensive experience with domestic heave and subsidence investigations.
- Management of multiphase site investigations for commercial or industrial developments:
 - £20M office and warehousing development at Royal Docks, London
 - Re-development schemes for the London Borough of Ealing, including geoenvironmental investigations
 - Investigation for BBC World Service H.F. transmitter aerial array, Orfordness
 - Heavy industrial: oil refining plant/large diameter oil storage tanks
 - Light industrial; various, including DoE land reclamation projects
 - Highly contaminated sites: Belper and Norwich gas holder sites
 - Marine site investigation in the Outer Hebrides for new fisheries pier.
- Retail Sector: Desk studies and geotechnical investigations for various large superstore developments (Safeways, J. Sainsbury plc and others).
- Investigations of underground cavities:
 - · Hazard and risk assessments concerning stability of abandoned mine workings in cambered Hythe Beds
 - Stability assessment of 'gulls' in Cliff End Sandstone at East Hill Cliff Lift, Hastings.
- Other hydrogeological projects:
 - Strategic review of site for proposed marina in former gravel pits in the Nene valley
 - Appraisal of likely influence of groundwater abstraction on adjacent buildings at Ridham Dock, and subsequent monitoring
 - Preliminary feasibility analysis and ground investigations for sheet piled quay heading, river diversion and flood defence barrier in King's Lynn.
- Investigation of failed tennis courts during construction for the Lawn Tennis Association and proposals for rectification by lime stabilization; successful implementation enabled the courts to open on time for a major tournament.
- Six months working as `2nd man' on a cable percussion drilling rig.

Papers and Articles Published:

Pugh RS, Gabriel KR, Jenkins WG and Bromhead EN (2000) Realignment of Priory Corner, Isle of Portland. In: Landslides in research, theory and practice. Vol.3, pp 1245-1252. Proceedings of the 8th International Symposium on Landslides, Cardiff, June 2000.

Gabriel KR (1999) Local Knowledge – How geological variations govern local expertise: South east England. Ground Engineering, December 1999, Emap Construct.

Gabriel KR (2008) Soliflucted Clays - An overview. Ground Engineering, April 2008, Emap Construct.

Gabriel KR (2012) Ground Engineering – Why it Matters: Introduction. Science in Parliament, Vol 69 No.2 pp 36-37.

Gabriel KR, Jennings D, Hodgson I (2012) Ground Engineering – Why it Matters: Ground Engineering is everywhere but Ground Engineers are in short supply – What are the issues: What can we do? Science in Parliament, Vol 69 No.2 pp 43-44.

Other Interests:

Prime Warden of the Worshipful Company of Blacksmiths (2008-09), one of the ancient livery companies in the City of London, and member of the Blacksmiths' Charitable Trust committee (1996 -2008).

October 2016

Mike Summersgill, Ground Engineering specialist

Core skills

Civil engineering

Site investigation

Contaminated land risk assessment and remediation

Project management

Geotechnical and environmental engineering

Basement Impact Assessments

Waste management and landfills

Project planning/economics

Infrastructure design and adoption

Details

Qualifications

BA (Hons) - Engineering Tripos
MA Cantab (non-examined)
MSc in Soil Mechanics
MBA in Business Administration

Memberships

Chartered Civil Engineer

Member of the Institution of Civil Engineers (MICE, C.Eng)

Fellow of the Chartered Institution of Water and Environmental Management (FCIWEM, C.WEM)

Specialist in Land Condition (SiLC)

Qualified Person (QP 083) for re-use approval of waste soil, DoWCoP

CL:AIRE Trustee & TRG Member

BSI - Committee for BS8601:Subsoil

PROFILE

Mike is a Chartered Civil Engineer and Chartered Environmentalist with 40 years of experience in the planning, design and construction of civil engineering and property development projects. In his own business, Mike concentrates on aiding sustainable construction practices and facilitating land development, principally in south-east England. Mike is responsible for conducting feasibility studies, basement impact assessments, site investigations, soil/water risk assessments and remedial strategies, geotechnical design appraisals, waste management/re-use and other engineering aspects of brownfield development, such as sustainable drainage (SuDS).

Mike began his career training as a water and drainage engineer, before concentrating on ground/soil matters and land remediation. He has worked for consultancies and contractors in this field, home & abroad, whilst generally domiciled in Kent.

In 1987, after 7 years in the Middle East, he set up and led the infrastructure and engineering design section of Weeks Technical Services (now part of ESG). Mike then worked for Knight Piesold (now URS), was Head of Geo-environment for WS Atkins in Epsom from 1996-2000, then became General Manager of VHE Technology Ltd in Barnsley/Dartford, before joining RSK Geoconsult as a Regional Manager from 2006-11, and finally as (p/t) Director, Geotechnical at Ecologia until 2013.

He is a Fellow (and Past President) of the Chartered Institution of Water and Environmental Management (CIWEM), and has been a Member of the Institution of Civil Engineers (ICE) since 1979. Mike is also a Specialist in Land Condition (SiLC), a Trustee and on the Technical advisory group of CL:AIRE, and a Qualified Person (QP) for waste/soil re-use and assessment.

Mike has specialist skills in the following areas:

- Project management of large and complex site investigations and specialist sub-contract works;
- Scoping, design, specification and supervision of integrated geophysical, geological, hydrogeological, geotechnical and geo-environmental site investigations;
- Landfill engineering, especially building on closed tips (co-author of a national document C557 on the subject)
- Earthworks and site stability design/specification;
- Contaminated land remediation using in-situ and exsitu techniques, site waste management and re-use of treated/certified materials on construction sites;