

Nick Russell

Expert Witness



- **BSc (Hons First Class) Civil Engineering**
- **NVQ Degree Strategic Business Management**
- **Chartered Engineer**
- **Fellow of the Institution of Structural Engineers**
- **Fellow of the Institution of Civil Engineers**
- **Fellow of the Association of American Society of Civil Engineers**
- **Member of the Chartered Institute of Management**

Overview

Nick has over 37 years' professional experience in consulting engineering, encompassing many aspects of structural and civil engineering. He has advised on the engineering aspects of projects up to £150m in capital value. Nick has particular interests in forensic engineering and advising on a wide range of engineering and professional negligence disputes.

He has extensive experience over the last 25 years acting as Expert Witness in a variety of guises and across a range of technical fields including:

- Expert advice and determination
- Single joint expert
- Expert reports
- Giving evidence and cross examination in court both in the UK and overseas.
- Rent valuation tribunal
- Professional negligence
- Mediation of technical and contractual disputes

Currently, he is a director at Perega and was the 2014 Global President at the Institution of Structural Engineers. Nick also served for 7 years on the Institution of Structural Engineers' Professional Conduct Committee and is its current Chair. Nick acts also as a Visiting Professor at the University of Surrey and the University of East London and is a member of its Industrial Advisory Board. Nick is the immediate past chair of the Joint Board of Moderators which is responsible for accrediting UK Civil Engineering Degrees.

Nick has been named Expert of the year on two occasions.

Recent Cases

Categories noted below with some notable references:

- **Professional negligence**
Many cases, including the omission of precautions for detailing against progressive collapse, delays in providing professional services, failure to advise on the consequences of a limited service and design errors.
- **Explosion damage**
A gas explosion in the basement of a steel framed office block in London. The blast listed the ground floor and caused vibration damage throughout the building. Advice on extensive repairs cost circa £1m.

PEREGA

- **Personal injury**
A number of cases including advice on a failure of a temporary crash deck designed to support a concrete slab during demolition. The case centered on the design of the temporary works and chain of responsibility. Also, the collapse of a tower crane arising from incorrect design and poor workmanship.
- **Failure of piled foundations**
A case in the South of England where contiguous piling to form a new basement has caused significant settlement of surrounding buildings. Ground conditions comprise 10m of alluvium overlying clay and I identified the cause as “fighting” where the continuous auguring to form the pile shaft drew the weak surrounding ground into the pile bores. Claim circa £6m.
- **Defective basement construction and leaks**
A case where a consultant had designed a basement beneath an existing building. The waterproofing details were inadequate and caused considerable water ingress into the completed basement. Identification of the problem and liability and monitored the consultant/contractor team carrying out the repairs. Case settled out of court.
- **Landslips - arising from excavations at the base of slopes**
Building and foundation failure - including collapse of vaulted structures beneath roads in London and movement in masonry railway arches as a result of significant adjacent basement construction.
- **Technical disputes** - including tower crane failures, large scale cantilever roofs, problems with alternative contractor designs and many insurance-based disputes.
- **Underpinning failure and collapse**
Many cases including partial collapse of part of a significant 19th century building in central London during underpinning operations to create a full plan area basement.
- **Fire damage**
A number of cases including fires during and post-construction.
- **Site appraisal and investigation issues**
Lack of adequate briefing of site investigation consultants and the consequences of under-specifying investigations.
- **Landlord and tenant disputes**
Over-specification of repair and maintenance works by landlords.
- **Retaining wall failures**
General failures as a result of increase in height and excessive surcharge loadings. Also, the effects of constructing above and below retaining walls.
- **Building collapse**
Partial and total collapse of buildings generally during construction including tower crane and crash deck failures.
- **Foundation failures**
General foundation failures including the effect of tree vegetation.

- **Defective construction**
Failure of waterproofing system in substantial basements both in the UK and Middle East.
- **Earthworks failures**
Failure of a reinforced earth slope adjacent to a live gas holder.
Collapse of continuous flight auger pipelines beneath major roads.

General Experience

Associate (1988), then Partner and Director (1992 onwards) – Peregá

Responsible for overall control of projects, staff resourcing and procurement, fee negotiation and practice management. Implementation of a quality management system throughout the practice and subsequent third party certification in 1991 to BS 5750 and development to current ISO9001:2015 standard.

Professional development in technical and management skills have been continually updated by attendance to selected courses, self learning and project participation.

Experienced in the following fields:

- Town centre developments
- Multi storey basements
- Significant alterations to buildings dating from 1900's onwards
- Regeneration and development of contaminated sites
- Deep foundations
- Steel structures
- Car parks
- Urban regeneration
- Façade retention

Author of many Expert and Single Joint Expert Reports involving personal injury, nuisance, structural failures, fire damage, subsidence and collapse of structures and underground pipelines. Has given evidence and been cross examined in court.

Senior Engineer – Peregá (1985-88)

Responsible for running a number of projects from conception to completion. Design team management, cost control, client and professional team liaison. Extensive experience has been gained in various types of contract and design and site processes necessary for fast-track construction. Typical projects and experience gained include:

- Debenhams stores - Major structural alterations to six stores to construct atrium/escalator complexes. All projects required fast-track construction and experience was gained in the alteration of old buildings and foundations in liquefied sands.
- Queenswest, Cardiff - Upward extension of existing department store, demolition of adjoining building and facade retention and creation of the first shopping centre galleria in Wales. Foundation problems were posed by adjoining basements and old canal locks under the existing buildings.

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Project Engineer (1982-85) Travers Morgan Consulting Group (1979-85)

Responsible for industrial and refurbishment projects including:

- Portals Ltd. - Structural upgrading and refurbishment of 1913 and 1920 reinforced concrete paper mill buildings suffering from calcium chloride and carbonation attack. Installation of large service cranes, boilers, process tanks and substantial floor strengthening.
- Cold stores, Birmingham, Chelmsford and Grimsby - Design of steel framed cold store enclosures including ground frost protection. Assessment of three cold stores in Grimsby where significant frost heave related movements had occurred and engineering of remedial scheme.
- Middle East work, Pedestrian footbridge, Jeddah - Design of 55m span tubular steel truss footbridge carrying a multi-level passenger conveyor. Overseeing fabrication and welder approval and weld testing. British Bank of the Middle East – design of mainly reinforced concrete with security detailing of walls and vaults. University of Oman – design of Halls of Residence and associated buildings. Assistance on design of several buildings for the Oman Ministry of Works.
- Structural investigations and litigation advice - Reports on various structural and civil engineering failures including settlement of buildings and professional negligence.
- Contract Administration. Responsible for running various contracts under GC Works 1 Form including road extension and remedial works for cold store mentioned above.

Assistant Engineer (1979-82)

Training and responsible for supervising construction works on land remediation projects in Wales and the Midlands. Design of drainage and road works. Experience in contract management and quantity surveying.

Undergraduate Placement – Engineering and Power Development Consultants Limited (1978)

Alcan (UK) Limited. Assisted in the design of three, 550m long aluminium smelting shops to cater for two 75T cranes, high temperature working and fatigue. Also strengthening works for harbour dock wall. Also worked on design of 25m high, 50m diameter concrete tank to retain liquefied petroleum gas and undertook research into use of cooling pipes to control temperature during large concrete pours.

Other Experience

Institution of Structural Engineers

- Involvement with the Institution of Structural Engineers from 1986 to date, serving on many committees, Council and Board.
- Responsible for its worldwide examination and work in delivering the examination to centres in the Peoples Republic of China and Singapore.
- Global President Institution of Structural Engineers 2014
- Joint Board of Moderators (JBM), Chair of Board. The JBM accredit all UK and some overseas Civil Engineering Degrees.

Surrey University

- Advisory Board
- Visiting Professor

University of East London

- Visiting Professor

Round Table

- Member of Leatherhead Northdown Round Table and chairman in 2003/2004.
- Significant charitable and public benefit work.