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CONTEMPORARY SCIENTISTS

Catalogue of the papers and correspondence of

Peter Walter Rowe D.Sc.

(1922-1997)

VOLUME II

PWR/4/2/3/16-PWR/4/5/109 Consultancies cont'd

By Heather Bird and Sarah Davis

John Rylands University Library of Manchester reference
PWR

NCUACS catalogue no.132/5/04

Reference and contact details: PWR/4/2/3/16

Faslane Shiplift

Dates: 1985–1993

Extent: 22 items.

Scope and Content:

Client: Babbie Geotechnical, Consulting Engineers (in association with Babbie Shaw and Morton).

Relating to ground movements behind the seawall at the Clyde Submarine Base at Faslane, Strathclyde (Argyll & Bute). A ground investigation was designed Babbie as consulting engineers to the Directorate of Civil Engineering Services (DCES), Property Services Agency of the Department of the Environment and carried out by Wimpey Laboratories, beginning in November 1988.

Reference and contact details: PWR/4/2/3/16/1

Sea wall drawings

Dates: Aug 1985–Oct 1989

Extent: 41 design drawings. 60 x 75 cms (h x w). Various scales.

Scope and Content:

Location plans of the development at Faslane, elevations of the sea front wall and locations of bore-holes. Drawings "as built," by Tarmac with additions by Babbie Shaw and Morton.

Reference and contact details: PWR/4/2/3/16/2

Sea wall drawings

Dates: Mar 1986–May 1987

Extent: 27 design drawings. 30 x 40 cms (h x w). Various scales.

Scope and Content:

Showing the layout and cross-section of walls by Babbie Shaw and Morton.

Reference and contact details: PWR/4/2/3/16/3

Colour photographs

Dates: Oct 1986–Mar 1988

Extent: 86 photographs; 16 sheets.

Scope and Content:

The photographs (all labeled on the reverse) show the site, the progress of construction work, investigations and rock samples. Also 16 sheets of colour photocopied photographs, with more detailed descriptions.

Reference and contact details: PWR/4/2/3/16/4

Ground movement and monitoring specification

Dates:n.d. [1987]

Extent: 1 soft-back volume.

Scope and Content:

Prepared by the Property Services Agency.

Reference and contact details: PWR/4/2/3/16/5

Daily reports of the Inspectors and Babbie Shaw and Morton graduate engineers

Dates:Jan-Aug 1987

Extent: 2 folders.

Arrangement:

Divided into 2 folders: (1) January-March 1987, (2) April-August 1987.

Reference and contact details: PWR/4/2/3/16/6

Settlement report by Babbie Geotechnical

Dates:Nov 1987

Extent: 1 file.

Reference and contact details: PWR/4/2/3/16/7

Charts and graphs of tidal information

Dates:Jan-Dec 1988

Extent: 1 folder.

Reference and contact details: PWR/4/2/3/16/8

Computer generated printouts

Dates: Mar 1988–Jun 1993

Extent: 9 folders.

Scope and Content:

Settlement/time and settlement/log time plots for the seawall monitoring stations, with graphs, sent to Rowe by Babbie Geotechnical. The first folder is incomplete.

/1 March-October 1989

/2 November 1989–April 1990

/3 May-July 1990

/4 August-September 1990

/5 October-December 1990

/6 January-May 1991

/7 June-December 1991

/8 January-July 1992

/9 August 1992–June 1993

Reference and contact details: PWR/4/2/3/16/9

Miscellaneous charts and figures

Dates: [1988–1989]

Extent: 1 folder.

Scope and Content:

These include results of the settlement monitoring and other data, which appears to have been mixed up.

Reference and contact details: PWR/4/2/3/16/10

Reports by Babbie Geotechnical

Dates: Nov 1988–May 1989

Extent: 5 soft-back volumes.

Scope and Content:

Including extracts from the site investigation reports, information to assist with the wall assessment and additional calculations concerning the sea bed slope.

Reference and contact details: PWR/4/2/3/16/11

Bore-hole logs and oedometer test results

Dates: Dec 1988
Extent: 1 folder.

Reference and contact details: PWR/4/2/3/16/12

Extensometer results

Dates: Dec 1988–Oct 1989
Extent: 1 folder.

Reference and contact details: PWR/4/2/3/16/13

Graphs showing horizontal movement

Dates: Dec 1988–Aug 1989
Extent: 1 folder.

Reference and contact details: PWR/4/2/3/16/14

Rowe's notes and calculations

Dates: Dec 1988
Extent: 1 folder.

Reference and contact details: PWR/4/2/3/16/15

Rowe's notes and calculations

Dates: [1988–1989]
Extent: 3 folders.

Scope and Content:

Used in the compilation of Rowe's reports, with drafts of the report and faxes sent to Rowe by Babbie Geotechnical.

Arrangement:

Divided into 3 folders: arranged as found.

Reference and contact details: PWR/4/2/3/16/16

Correspondence file

Dates: 7 Dec 1988–Jun 1989

Extent: 2 folders.

Scope and Content:

Letters and faxes from Babbie Shaw and Morton to Rowe with data and sketches. Also copies of letters from James Williamson and Partners to Babbie, copies of Polaroid photographs and draft of Rowe's report.

Arrangement:

Divided into 2 folders: (1) December 1988–January 1989, (2) February–June 1989.

Reference and contact details: PWR/4/2/3/16/17

Correspondence file

Dates: 12 Jun–31 Oct 1989

Extent: 2 folders.

Scope and Content:

Letters and faxes from Babbie Shaw and Morton to Rowe with data, graphs and maps. Also a draft of Rowe's discussion report on the causation of ground and wall movements.

Arrangement:

Divided into 2 folders: (1) June–September 1989, (2) October 1989.

Reference and contact details: PWR/4/2/3/16/18

Correspondence (loose papers)

Dates: 24 May 1989–3 Oct 1989

Extent: 1 folder.

Scope and Content:

Between Rowe and Babbie, with minutes of meetings, drafts of reports and notes.

Reference and contact details: PWR/4/2/3/16/19

Progress review report [by Babbie Geotechnical]

Dates: Mar 1989
Extent: 1 folder.

Reference and contact details: PWR/4/2/3/16/20

Reports on the site investigations carried out by Wimpey Laboratories

Dates: May-Sep 1989
Extent: 5 soft-back volumes.

Reference and contact details: PWR/4/2/3/16/21

Reports on the causation of ground and wall movements by Rowe

Dates: 12 Jun–13 Oct 1989
Extent: 1 folder.

Scope and Content:

6 reports (including an estimate of future movements) and an MS draft.

Reference and contact details: PWR/4/2/3/16/22

Soil investigation by Fugro McClelland

Dates: 24 Aug 1989
Extent: 1 folder.

Reference and contact details: PWR/4/2/3/17

Ramsden Dock, Barrow-in-Furness

Dates: Sep 1987
Extent: 14 items.

Scope and Content:

Client: [R. T. James and Partners?]

Relating to the proposal to construct a new locked entrance for Vickers Shipbuilding and Engineering Ltd, Barrow-in-Furness, Cumbria, between Walney Channel and Ramsden Dock, adjacent (to the south east) of the existing dock.

Arrangement:

The papers had become muddled. An attempt has been made to reconstruct the original order of the files, although some sheets appear to be missing.

Reference and contact details: PWR/4/2/3/17/1

Plans

Dates: Sep 1987–Feb 1990

Extent: 5 sheets; 16 planimetric maps. Various dimensions. Various scales.

Scope and Content:

Plans of the new dock entrance and associated works, showing position of bore-holes, by R. T. James and Partners, A. Monk and Ballast Nedam Civil Engineering Companies.

Reference and contact details: PWR/4/2/3/17/2

Report by R. T. James and Partners on the site investigation

Dates: Apr 1988

Extent: 2 folders.

Scope and Content:

With bore-hole logs provided by Soil Mechanics.

Reference and contact details: PWR/4/2/3/17/3

Report by Soil Mechanics on the ground-water control study carried out for R. T. James and Partners

Dates: Jul 1988

Extent: 1 folder.

Scope and Content:

[Pages 23–24 are missing.]

Reference and contact details: PWR/4/2/3/17/4

Site investigation for the new entrance carried out by Soil Mechanics for Vickers

Dates: Aug 1988

Extent: 1 folder.

Reference and contact details: PWR/4/2/3/17/5

Reports by R. T. James and Partners on the site investigation

Dates: Aug 1988–Oct 1988

Extent: 1 folder.

Reference and contact details: PWR/4/2/3/17/6

Computer print outs and general information

Dates: [Aug 1988]

Extent: 1 folder.

Reference and contact details: PWR/4/2/3/17/7

Final report on the soils investigation carried out by Fugro-McClelland for Nicholls Colton and Partners

Dates: Aug 1989

Extent: 1 folder.

Scope and Content:

With bore-hole logs and graphs of particle size distribution.

Reference and contact details: PWR/4/2/3/17/8

Bore-hole logs by A. Monk and Ballast Nedam

Dates: Sep–Dec 1989

Extent: 1 folder.

Reference and contact details: PWR/4/2/3/17/9

Report by R. T. James on the site investigation

Dates: Oct 1989
Extent: 1 folder.

Reference and contact details: PWR/4/2/3/17/10

Correspondence

Dates: 21 Aug 1989–26 Apr 1991
Extent: 1 folder.

Scope and Content:

Between Rowe and Monk Ballast Nedam relating to caisson sinking, roundhead sheet pile wall drainage and soil properties. The [stray] letter of 26 April 1991 relates to the Usk viaduct, upon which Rowe also worked on with A. Monk and Co.

Reference and contact details: PWR/4/2/3/17/11

Final report by Fugro McClelland on the site investigation for Ballast Nedam

Dates: Feb 1990
Extent: 1 folder.

Reference and contact details: PWR/4/2/3/17/12

Factual report by Nicholls Colton and Partners on the installation of piezometers at the new dock gates, for Ballast Nedam

Dates: May 1990
Extent: 1 folder.

Reference and contact details: PWR/4/2/3/17/13

Piezometer readings

Dates: Mar-Jul 1990
Extent: 1 folder.

Reference and contact details: PWR/4/2/3/17/14

Report on static cone penetration tests by Fugro McClelland

Dates: 7 Dec 1990

Extent: 1 folder.

Reference and contact details: PWR/4/2/3/18

Immingham Dock

Dates: 1989–1991

Extent: 6 items.

Scope and Content:

Client: Fairclough Civil Engineering.

Relating to the proposed construction of a deep-water riverside berth by Associated British Ports (ABP) at Immingham Dock on the south bank of the River Humber near South Killingholme Haven. Rowe was asked to support the prequalification submission for the project by Fairclough Civil Engineering Ltd. The submission was to be as a joint venture with Italimpianti. Oscar Faber and Partners were engaged to carry out the civil engineering design. One of the letters from Fairclough Civil Engineering Ltd, makes reference to Rowe's prior commitment to support Wimpey in their prequalification and the conflict of interests if both were to be successful.

Reference and contact details: PWR/4/2/3/18/1

Plans of Immingham Dock

Dates: 6 May 1989–15 Apr 1991

Extent: 6 planimetric maps 80 x 100 cms (h x w).

Scope and Content:

/1–2 Showing the proposed riverside berth and position of bore-holes, drawn by Soil Mechanics (Scale: 1:2500), 6 May 1989

/3 Showing the land fill area, drawn by Soil Mechanics (Scale: 1:1000), 17 October 1990.

/4 Materials handling equipment drawn by Halcrow-Soros, 15 April 1991.

/5–6 Section plans drawn by Soil Mechanics, n.d.

Reference and contact details: PWR/4/2/3/18/2

Factual reports

Dates: Oct 1990

Extent: 2 folders.

Scope and Content:

On the site investigations for the proposed riverside berth, carried out by Soil Mechanics

Reference and contact details: PWR/4/2/3/18/3

Tender documents

Dates: May-Jul 1991

Extent: 3 folders.

Scope and Content:

Produced by Sir William Halcrow and Partners with Soros Associates for the National Power, PowerGen and Associated British Ports.

Reference and contact details: PWR/4/2/3/18/4

Correspondence

Dates: 11 Jul-2 Oct 1991

Extent: 2 folders.

Scope and Content:

Between Rowe, Fairclough Civil Engineering Ltd and Oscar Faber Geotechnical Civil Engineering, relating to the proposed scheme. With drawings by Oscar Faber.

Arrangement:

Divided into 2 folders: (1) July-August 1991, (2) September-October 1991.

Reference and contact details: PWR/4/2/3/18/5

Static cone penetration test results

Dates: Aug 1991

Extent: 1 file.

Scope and Content:

Carried out by Fugro McClelland.

Reference and contact details: PWR/4/2/3/18/6

Rowe's notes and calculations

Dates: Aug-Oct 1991

Extent: 1 folder.

Scope and Content:

This file had become separated from other material in box 114, indicating that the calculations had been used in a lecture.

Reference and contact details: PWR/4/2/4

Power Station Foundations

Dates: 1958–1984

Extent: 9 subseries (37 items).

Scope and Content:

Peter Rowe was involved in the design and construction of five nuclear power stations during the late 1960s and early 1970s: Hinkley Point 'B', Heysham 2, Hartlepool, Hunterston and Oldbury. His principal role was to advise on foundation stability. Rowe worked on the majority of these projects for Sir Robert McAlpine and Sons Ltd. This firm was both a member of the consortium known as The Nuclear Power Group (TNPG) and a sub-contractor to the Group. TNPG was formed in 1957 and was chaired by Sir Edwin McAlpine. In the late 1970s and early 1980s Rowe worked on Torness, one of the second-generation advanced gas-cooled reactor nuclear power stations (PWR/4/2/4/9).

Rowe also advised on the foundation design of two conventional power stations in Scotland, Inverkip and Peterhead (PWR/4/2/4/5 & PWR/4/5/4/8) and a third, Stake Ness, which was not constructed (PWR/4/2/4/6).

Reference and contact details: PWR/4/2/4/1

Hinkley Point 'B' Nuclear Power Station

Dates: Mar 1966–Aug 1968

Extent: 4 items.

Scope and Content:

Client: [Sir Robert McAlpine and Sons Ltd]

The Central Electricity Generating Board proposed the construction of a nuclear power station to the east of the existing 'A' station at Hinkley Point, Somerset. Soil Mechanics Ltd carried out an initial site investigation and assessment of probable settlements under static loading based on preliminary designs by The

Nuclear Power Group.

Reference and contact details: PWR/4/2/4/1/1

Site investigation, blasting and foundation studies for the proposed power station

Dates: Mar-Apr 1966

Extent: 2 folders.

Scope and Content:

Carried out by Soil Mechanics Ltd for the Central Electricity Generating Board. The second part of the report contains some pencil annotations by Rowe.

Reference and contact details: PWR/4/2/4/1/2

Plan of reactor 4

Dates: 9 Sep 1966

Extent: 1 design drawing. 75 x 100 cms (h x w). 1/8 inch: 1 foot.

Condition: damaged by rust marks.

Scope and Content:

Drawn by Sir Robert McAlpine and Sons Ltd, showing the central arrangement of foundations sections.

Reference and contact details: PWR/4/2/4/1/3

Plan of pressure vessel reactor 4

Dates: 31 Jul 1968

Extent: 1 design drawing. 75 x 100 cms (h x w). 1/8 inch: 1 foot.

Scope and Content:

Drawn by Sir Robert McAlpine and Sons Ltd, showing the cross section and plan of top slab. Original drawing dated 14 December 1967.

Reference and contact details: PWR/4/2/4/1/4

Time/settlement curves for reactors 3 and 4

Dates: 8 Aug 1968

Extent: 2 sheets.

Reference and contact details: PWR/4/2/4/2

Heysham Nuclear Power Station

Dates: 1967–1968

Extent: 4 items.

Scope and Content:

Client: Sir Robert McAlpine and Sons Ltd, Engineering Contractors.

Relating to the proposal by the Central Electricity Generating Board to construct a nuclear power station immediately south of Heysham Harbour, Lancashire. Soil Mechanics Ltd carried out the initial soil investigations on behalf of C. S. Allott, the consulting engineers on The Nuclear Power Group provided the site plans. Rowe was asked to comment on the foundation settlement.

Reference and contact details: PWR/4/2/4/2/1

Correspondence

Dates: 26 Apr–16 Dec 1967

Extent: 1 folder.

Scope and Content:

Between Rowe and C. S. Allott and Son, Consulting Engineers, relating to the sand filling for the proposed power station. With graphs giving the particle size distribution for the sand in Morecambe Bay.

Reference and contact details: PWR/4/2/4/2/2

Correspondence

Dates: 5 Jun 1967–10 Mar 1968

Extent: 1 folder.

Scope and Content:

Between Rowe, The Nuclear Power Group and Sir Robert McAlpine and Sons Ltd, concerning Rowe's opinion on the possibility of creep settlement at Heysham. Contains references to observations at Oldbury and Hunterston A. Also contains minutes of site visits on 16 November 1967, Rowe's MS notes and a report by Rowe on the foundation settlement, 10 February 1968.

Reference and contact details: PWR/4/2/4/2/3

Site plans

Dates: 17 Jan 1967–18 Jan 1970

Extent: 2 sheets. 8 design drawings. 75 x 100 cms (h x w). Various scales.

Scope and Content:

Plans of the preferred site layout, drawn by The Nuclear Power Group. Also plans to accompany the specification by the Central Electricity Generating Board.

Reference and contact details: PWR/4/2/4/2/4

Reports on the site investigation at Heysham Harbour

Dates: Sep–Dec 1967

Extent: 6 soft-back volumes.

Scope and Content:

Carried out by Soil Mechanics Ltd for C. S. Allott on behalf of the Central Electricity Generating Board. Contains both on shore and offshore *in situ* test results.

Reference and contact details: PWR/4/2/4/3

Hartlepool Nuclear Power Station

Dates: May–Nov 1967

Extent: 6 items.

Scope and Content:

Client: Sir Robert McAlpine and Sons Ltd, Engineering Contractors.

Relating to the proposal by the Central Electricity Generating Board to construct a nuclear power station at Seaton Carew, West Hartlepool. Rowe gave advice on the soil and foundation problems.

Reference and contact details: PWR/4/2/4/3/1

Interim report on the site investigation by Holst and Co. Ltd

Dates: May 1967

Extent: 1 folder.

Reference and contact details: PWR/4/2/4/3/2

Plans

Dates: 2 Jun-29 Aug 1967

Extent: 4 sheets; 18 design drawings. 75 x 100 cms (outsized). Various scales.

Scope and Content:

Drawings (some as part of the tender) by The Nuclear Power Group and Sir Robert McAlpine and Sons Ltd for the Central Electricity Generating Board.

Reference and contact details: PWR/4/2/4/3/3

Correspondence

Dates: 9 Jun-16 Oct 1967

Extent: 1 folder.

Scope and Content:

Between Rowe, The Central Electricity Generating Board, The Nuclear Power Group and Edgar Morton, relating to the design of buildings adjacent to the main reactor. With MS and typed reports by Rowe on the settlement analysis.

Reference and contact details: PWR/4/2/4/3/4

Interim reports on the site investigation

Dates: Jun-Nov 1967

Extent: 2 files, 2 sheets.

Scope and Content:

Reports by George Wimpey and Co. Ltd.

Reference and contact details: PWR/4/2/4/3/5

Report on the site investigation (volumes 1 and 2)

Dates: Aug-Sep 1967

Extent: 2 hard-back volumes. Condition: The volumes are slightly affected by mould.

Scope and Content:

Reports by George Wimpey and Co. Ltd.

Reference and contact details: PWR/4/2/4/3/6

Reports on trial piling for Hartlepool Power Station

Dates: Oct 1967 and n.d.

Extent: 2 soft-back volumes.

Scope and Content:

By W. A. Fitzherbert, Civil Engineer of the Central Electricity Generating Board and Merz and McLelland, Consulting Engineers.

Reference and contact details: PWR/4/2/4/4

Hunterston Nuclear Power Station

Dates: 1958–1971

Extent: 4 items.

Scope and Content:

Client: Sir Robert McAlpine and Sons Ltd, Engineering Contractors.

Relating to the proposal by the South of Scotland Electricity Board for the construction of a nuclear power station at Hunterston, Ayrshire. The Nuclear Power Group worked in consultation with the General Electric Company Ltd, Simon Carves Ltd, Mowlem (Scotland) Ltd and the Motherwell Bridge and Engineering Co. Ltd, the consortium awarded the contract for the design and building of the power station by the Atomic Energy Commission. A further power station (Hunterston 'B') was then planned and Rowe, with Edgar Morton and Partner, provided advice on the foundation stability.

Reference and contact details: PWR/4/2/4/4/1

Site investigation report

Dates: Apr 1958

Extent: 1 folder.

Scope and Content:

Report no 2697/1 by Soil Mechanics Ltd for Mowlem (Scotland) Ltd, civil engineering contractors for the proposed Hunterston 'A' Power Station.

Reference and contact details: PWR/4/2/4/4/2

File of correspondence and plans

Dates: 21 Dec 1966

Extent: 2 folders. 15 design drawings.

Scope and Content:

Inscribed 'Hunterston B grouting'. Comprising mostly correspondence between Rowe, Sir Robert McAlpine and Sons Ltd, The Nuclear Power Group and the South of Scotland Electricity Board. Also includes 15 plans (75 x 100 cm) of the site and reactors drawn by Sir Robert McAlpine and Sons and The Nuclear Power Group, an assessment of the quantities for low pressure grouting, December 1966 and a report on the site investigation for the proposed new 'B' generating station by George Wimpey and Co. Ltd on the instructions of James Williamson and Partners, consulting engineers, February 1967.

Arrangement:

Divided into 3 folders: (1) site investigation, (2) correspondence, (3) plans.

Reference and contact details: PWR/4/2/4/4/3

Correspondence

Dates: 14 Aug 1967–21 Aug 1971

Extent: 1 folder.

Scope and Content:

Between Rowe, Edgar Morton, the South of Scotland Electricity Board, Sir Robert McAlpine and Sons Ltd and The Nuclear Power Group, concerning earth tremors and the foundations of reactor 3. With drilling records by Murdoch MacKenzie (Foundations) Ltd and plans of bore-holes.

Reference and contact details: PWR/4/2/4/4/4

Records of the three stages of grouting

Dates: Jun 1968–May 1970

Extent: 1 folder.

Scope and Content:

File inscribed 'TNPG Hunterston Tunnel'. Includes a plan of the outlet tunnel by James Williamson and Partners, June 1968 and Rowe's MS notes.

Reference and contact details: PWR/4/2/4/5

Inverkip Power Station

Dates: 1968–1972

Extent: 4 items.

Scope and Content:

Client: Sir Robert McAlpine and Sons Ltd, Engineering Contractors.

Relating to the proposed [oil-fired] power station at Inverkip, Renfrewshire (Inverclyde) for the South of Scotland Electricity Board. On the instructions of the consulting engineers, James Williamson and Partners, George Wimpey and Co. conducted an initial site investigation. Rowe commented on the grouting at the chimney and the T/A block foundations.

[Construction work began in 1970 and the power station was commissioned in three phases between December 1976 and August 1979.]

Reference and contact details: PWR/4/2/4/5/1

Reports by George Wimpey and Co. Ltd

Dates: 1968

Extent: 1 folder.

Scope and Content:

Comprising 2 site investigations and 1 hydrographic survey. With a covering letter from Robert McAlpine and Sons Ltd to Rowe, 29 January 1969.

Reference and contact details: PWR/4/2/4/5/2

Correspondence

Dates: 5 Mar 1971–29 Jun 1972

Extent: 1 folder.

Scope and Content:

Between Rowe, Sir Robert McAlpine and Sons, the Rock Fall Co. Ltd, the South of Scotland Electricity Board and the Nuclear Power Group, relating to the foundations of the station. With copies of letters from James Williamson and Partners.

Reference and contact details: PWR/4/2/4/5/3

Maps and design drawings

Dates: 10 Oct 1968–19 Apr 1972

Extent: 24 design drawings. Various dimensions (outsized). Various scales.

Scope and Content:

Drawn by The Nuclear Power Group.

Reference and contact details: PWR/4/2/4/5/4

Photograph of Inverkip Power Station

Dates: n.d. [c 1972]

Extent: 1 photograph.

Conditions Governing Reproduction:

The copyright on the photograph is owned by The Nuclear Power Group.

Reference and contact details: PWR/4/2/4/6

Stake Ness Power Station

Dates: 1970–1971

Extent: 3 items.

Scope and Content:

Client: Sir Robert McAlpine and Sons Ltd, Engineering Contractors.

Relating to the proposal by the North of Scotland Hydro-Electric Board to construct a power station at Stake Ness, near Whitehills, Banffshire (Aberdeenshire). George Wimpey and Co. conducted the initial site investigations under the direction of the consulting engineers, James Williamson and Partners. Rowe provided advice on the foundations as part of the tender by The Nuclear Power Group.

[The energy source is not specified, but may have been intended to be oil. The power station was not built.]

Reference and contact details: PWR/4/2/4/6/1

Correspondence

Dates: 5 Jan 1970–29 Apr 1971

Extent: 1 folder.

Scope and Content:

Between Rowe and Sir Robert McAlpine and Sons Ltd relating to the site investigations. With copies of the bore-hole logs.

Reference and contact details: PWR/4/2/4/6/2

Plans

Dates: Jun 1970–Mar 1971

Extent: 1 sheet. 6 design drawings.

Scope and Content:

5 plans drawn by Robert McAlpine and Sons and 1 plan drawn by James Williamson and Partners, with a shell and auger sample schedule drawn up by James Williamson and Partners.

Reference and contact details: PWR/4/2/4/6/3

Reports by George Wimpey and Co.

Dates: Apr 1971

Extent: 2 hard-back volumes. Condition: the volumes are slightly affected by mould.

Reference and contact details: PWR/4/2/4/7

Oldbury Nuclear Power Station

Dates: 1970–1971

Extent: 4 items.

Scope and Content:

Client: Sir Robert McAlpine and Sons Ltd, Engineering Contractors.

Concerning the proposal for a second nuclear power station (Oldbury 'B') at Oldbury-on-Severn, Gloucestershire for the Central Electricity Generating Board (Southern Project Group). The initial site investigation was carried out by Soil Mechanics Ltd on the instruction of the consulting engineers, Rendel Palmer and Tritton. Rowe, working with Edgar Morton and Partner, advised The Nuclear Power Group regarding their tender for the construction of the reactor building and provided help on the estimates of likely 'heave' at the bottom of the deep excavations.

Related Units of Description:

See also Oldbury Nuclear Power Station among the Litigation Papers,

PWR/4/5/90, relating to the problems with the settlement of the existing nuclear power station at Oldbury, constructed in the early 1960s and claims against Soil Mechanics Ltd by Sir Robert McAlpine and Sons for the cost of rectification of the works due to inadequate site investigations. Rowe, working with Edgar Morton and Partner, provided expert advice to the solicitors for the plaintiffs. This contains some of the site investigations for Oldbury 'B' conducted by Soil Mechanics which were used in the litigation process.

Reference and contact details: PWR/4/2/4/7/1

Site investigation details

Dates: 10 Jun–26 Nov 1970

Extent: 1 folder.

Scope and Content:

File inscribed 'TNPG McAlpine 30', comprising correspondence between Rowe, Sir Robert McAlpine and Sons Ltd and The Nuclear Power Group. With tender documents, preliminary bore-hole logs for the site investigation by Soil Mechanics Ltd for Rendel Palmer and Tritton and 1 plan of the geological sections through bore-holes, 21 October 1970. Possibly moved from box 30.

Reference and contact details: PWR/4/2/4/7/2

Laboratory test details

Dates: 16 Dec 1970–Apr 1971

Extent: 1 folder; 2 soft-back volumes.

Scope and Content:

Correspondence between Rowe and McAlpine and Sons Ltd, with the results of laboratory tests conducted by Soil Mechanics Ltd for Rendel Palmer and Tritton on soil samples from Oldbury. With 1 plan of the general arrangements of the foundations drawn by McAlpine and Sons Ltd, 16 December 1970.

Reference and contact details: PWR/4/2/4/7/3

Further test results conducted by Soil Mechanics Ltd

Dates: 5 Feb 1971

Extent: 1 folder.

Reference and contact details: PWR/4/2/4/7/4

Trial borings and pumping tests conducted by Soil Mechanics Ltd

Dates: 9 Feb-4 Mar 1971

Extent: 1 folder.

Reference and contact details: PWR/4/2/4/8

Peterhead Power Station

Dates: 1972-1973

Extent: 2 items.

Scope and Content:

Client: Sir Robert McAlpine and Sons Ltd, Engineering Contractors.

Relating to the proposal from the North of Scotland Hydro-Electric Board to construct a power station at Peterhead. Rowe was asked to provide advice in connection with the tender by The Nuclear Power Group.

[Peterhead Power Station was designed to run on either oil or gas, according to prevailing market conditions. Construction began in 1973. The first generator was commissioned in 1980, while the second came on stream in 1982.]

Reference and contact details: PWR/4/2/4/8/1

Correspondence

Dates: 14 Jun 1972-15 Feb 1973

Extent: 1 folder.

Scope and Content:

Correspondence between Rowe, Sir Robert McAlpine and Sons Ltd and The Nuclear Power Group Ltd, relating to the trial pit. With copies of bore-hole logs, plans and correspondence between George Wimpey and Co. and James Williamson and Partners Ltd.

Reference and contact details: PWR/4/2/4/8/2

Bore-hole logs

Dates: 16 Jun-6 Nov 1972

Extent: 3 folders; 2 maps.

Scope and Content:

Conducted by George Wimpey and Co. Ltd. With 2 plans of the bore-holes, drawn by McAlpine and correspondence between Rowe, Sir Robert McAlpine and Sons Ltd, with copies of correspondence between George Wimpey and Co. and James Williamson and Partners Ltd.

Reference and contact details: PWR/4/2/4/9

Torness Nuclear Power Station

Dates: 1976–1984

Extent: 6 items.

Scope and Content:

Client: Sir Robert McAlpine and Sons Ltd / National Nuclear Corporation Ltd.

Relating to the proposal by the South of Scotland Electricity Board for the construction of a nuclear power station of the advanced gas-cooled reactor (AGR) type at Torness Point, East Lothian, Scotland. The consultant for the preliminary civil engineering works was James Williamson and Partners, and the contractor was Sir Robert McAlpine and Sons. The main civil works for the station were designed by the Nuclear Power Company (NPC). Rowe's *curriculum vitae* states that his client was Sir Robert McAlpine, however documents imply that he was also retained by the Nuclear Power Company as an advisor on the ground conditions and foundations. Following rock movements in 1981, Rowe advised the National Nuclear Corporation Ltd (NNC) on site monitoring.

[Building of the power station commenced in 1980, and it was commissioned in 1988.]

Reference and contact details: PWR/4/2/4/9/1

Correspondence

Dates: 28 Nov 1978–24 Nov 1980

Extent: 3 folders.

Scope and Content:

Between Rowe, Sir Robert McAlpine and Sons Ltd and the Nuclear Power Company Ltd, relating to Rowe's proposals for soft rock testing as part of the investigations for the reactor foundations. With copies of letters from the South of Scotland Electricity Board, James Williamson and Partners, Soil Mechanics Ltd and Wimpey Laboratories Ltd. Including time history graphs of specified earthquakes and Rowe's MS notes and drafts of a report and also the report on the site investigation by Wimpey Laboratories Ltd, April 1980.

Arrangement:

Divided into 3 folders: (1) 1978–July 1979, (2) August 1979–April 1980,

May-November 1980.

Reference and contact details: PWR/4/2/4/9/2

Correspondence file

Dates: Jan 1976–12 Oct 1981

Extent: 3 folders.

Scope and Content:

Inscribed 'Torness 1'. Containing correspondence between Rowe, Sir Robert McAlpine and Sons Ltd and the Nuclear Power Company Ltd, relating to site monitoring and ground water. With copies of letters from the South of Scotland Electricity Board, James Williamson and Partners, Soil Mechanics Ltd and Wimpey Laboratories Ltd. Also includes various site plans by the NPC and a report James Williamson and Partners on the monitoring of Middle Longcraig limestone, February 1980.

The 2 site investigations by Soil Mechanics Ltd of January and March 1976 were attached to Rowe's report/letter of 20 September 1979 and have been left in place.

Arrangement:

Divided into 3 folders: (1) 1976–1979, (2) January–February 1980, (3) March 1980–October 1981.

Reference and contact details: PWR/4/2/4/9/3

Correspondence file

Dates: 30 May 1979–11 Apr 1983

Extent: 2 folders.

Scope and Content:

Inscribed 'Torness 2'. Containing correspondence between Rowe, Sir Robert McAlpine and Sons Ltd and the Nuclear Power Company Ltd, relating to site investigations and foundation settlement. With piezometer readings, relief well water readings, site plans by NCP and 2 photographs. Also copies of letters from the South of Scotland Electricity Board, James Williamson and Partners, Soil Mechanics Ltd, the National Nuclear Corporation Ltd and Wimpey Laboratories Ltd.

Arrangement:

Divided into 2 folders: (1) 1979, (2) 1980–1983.

Reference and contact details: PWR/4/2/4/9/4

Correspondence file

Dates: 1972–1981

Extent: 1 folder.

Scope and Content:

Inscribed 'Torness Rock Slip'. Containing correspondence between Rowe and the National Nuclear Corporation Ltd, relating to the examination of the outfall culvert. With minutes of a site visit on 18 February 1981, 1 site plan by the Nuclear Power Company and bore-hole logs from 1972–1975 carried out by Soil Mechanics Ltd.

Reference and contact details: PWR/4/2/4/9/5

Letters

Dates: Nov 1979–16 Dec 1983

Extent: 1 folder.

Scope and Content:

From the National Nuclear Corporation Ltd to Rowe, relating to site monitoring. Including publicity brochures, a document on the assessment of reactor settlement, November 1979 and a site plan by the Nuclear Power Company, 1981.

Reference and contact details: PWR/4/2/4/9/6

Letters

Dates: 5 Oct 1983–28 Feb 1984

Extent: 1 folder.

Scope and Content:

From the National Nuclear Corporation Ltd to Rowe, relating to reactor basement monitoring, with the results of ground-water levels and settlement surveys.

Reference and contact details: PWR/4/2/5

Roads

Dates: 1965–1985

Extent: 13 sub-subseries (33 items).

Scope and Content:

Peter Rowe's professional career coincided with the rapid development of Britain's motorway network and the upgrading of many existing primary roads to dual carriageways. Among the motorways he advised on were the M1 in North London, the M62 Trans-Pennine motorway, the M63 south-west of Manchester (later incorporated into the M60 Manchester orbital motorway) and the M65 North Lancashire motorway. Urban motorways such as the A57(M) Mancunian Way in Manchester (PWR/4/2/5/1) and the A167(M) in Newcastle-upon-Tyne (PWR/4/2/5/6) often ran in elevated sections or through deep cuttings, whose foundations and retaining walls require special design considerations. Rowe was also involved in the improvement made to the A9 Perth to Inverness road (PWR/4/2/5/11) and the A55 North Wales Trunk Road (PWR/4/2/5/13). This section also includes files relating to the road bridge over the River Itchen in Southampton (PWR/4/2/5/9) and the Kessock Bridge over the Beaully Firth near Inverness (PWR/4/2/5/11).

Related Units of Description:

The Litigation section of the archive, PWR/4/5, contains files relating to numerous road-building projects since by their very nature road schemes are predominantly earthworks requiring a high input of geotechnical skills in their design and construction.

Reference and contact details: PWR/4/2/5/1

A57(M) Mancunian Way

Dates: 1965

Extent: 1 item.

Scope and Content:

Client: Maunsell and Partners, Chartered Civil Engineers.

Relating to the construction of the link road 17/7 – stage 2, Mancunian Way [A57 (M)], Manchester, for Manchester Corporation and the investigation of foundations adjacent to the West Manchester Fault. Rowe advised as a consultant to Edgar Morton and Partner.

Reference and contact details: PWR/4/2/5/1/1

Correspondence

Dates: 26 Jan–30 Jul 1965

Extent: 22 sheets; design drawings.

Scope and Content:

Between Rowe, C.W. Isherwood of Edgar Morton and Partner and Maunsell and Partners. Includes an undated diagram of the suggested arrangement for penetrometer tests at the base of piles by Maunsell and Partners and 2 diagrams illustrating the geology of the area by Edgar Morton, April 1965.

Reference and contact details: PWR/4/2/5/2

[M62] Lancashire-Yorkshire Motorway (West Riding Section)

Dates: 1965

Extent: 1 item.

Scope and Content:

Relating to the trials for the Pennine length of the proposed motorway from Windy Hill, near Rishworth to Outlane, near Huddersfield, West Yorkshire. One of the embankments on the 6 mile stretch was intended to perform the dual role of an embankment and a dam [Scammonden Dam] to hold 160 feet head of water.

There is no obvious reference to Rowe's involvement in the project, which was undertaken by the County Council of the West Riding of Yorkshire, as the agent authority to the Ministry of Transport.

Reference and contact details: PWR/4/2/5/2/1

Rock excavations and specification trials

Dates: May 1965

Extent: 2 soft-back volumes.

Scope and Content:

Report and appendices compiled by S. Maynard Lovell, County Engineer and Surveyor of the County Council of the West Riding of Yorkshire.

Reference and contact details: PWR/4/2/5/3

[M1] Hendon Urban Motorway (1965)

Dates: 1965

Extent: 1 item.

Scope and Content:

Client: Marples Ridgeway Ltd, Civil Engineering Contractors.

Relating to the design of the retaining walls (Cubbit's bridge section) on the [M1] motorway in Hendon (London Borough of Barnet). Rowe was asked to advise on the methods of construction and on the properties of London Clay following movements and cracks.

Reference and contact details: PWR/4/2/5/3/1

File

Dates: 25 Aug-6 Sep 1965

Extent: 10 sheets.

Scope and Content:

Inscribed 'Marples Ridgeway, Hendon Motorway'. Comprising correspondence between Rowe, Marples Ridgeway Ltd and W.S. Atkins and Partners, concerning the retaining walls. With Rowe's notes, minutes of a meeting on 25 August 1965 and observations by Edgar Morton. The minutes refer to possible solutions to the problems and the interest of Skempton in the discussion.

Reference and contact details: PWR/4/2/5/4

M63 Sale Eastern Bypass

Dates: 1965- 1973

Extent: 5 items.

Scope and Content:

Client: Cheshire County Council.

Relating to the construction of the Sale Eastern and Northenden By-pass as part of the M63 Sale-Stretford-Eccles Motorway in Greater Manchester [later redesignated the M60]. The Northenden section of the motorway was designed by Maunsell and Partners on behalf of the North Western Road Construction Unit (a sub-unit of Cheshire County Council). Rowe advised Cheshire County Council on the possibility, methods and timing of the construction of road embankments over the Sale Ees and use of river deposits from the Sale Ees as fill.

Rowe also provided advice on soil settlement and excavations to Rofe and Raffety, Consulting Engineers, who designed the Sale Ees Marina. During this period, Rofe and Raffety joined with Sandeman, Kennard and Partners and Herbert Lapworth and Partners to become Rofe, Kennard and Lapworth.

Related Units of Description:

See also material relating to the Bredbury By-pass section of the M63, PWR/4/2/5/7.

Reference and contact details: PWR/4/2/5/4/1

File

Dates: Nov 1965-Aug 1971

Extent: 2 folders; 70 photographs.

Scope and Content:

/1 Logs and sample data, with some correspondence between Rowe, North Western Road Construction Unit, Cheshire County Council and Cementation Ground Engineering, November 1965–August 1971.

/2 Sub-folder of bore-hole logs for GR2 and GR3, November 1969.

/3 Sub-folder of 70 black and white photographs of soil samples, undated.

Reference and contact details: PWR/4/2/5/4/2

File

Dates: 20 Dec 1966–30 Apr 1973

Extent: 1 folder.

Scope and Content:

Inscribed 'Sale Ees correspondence and s[ite] i[n]vestigation' specification'. Comprising correspondence between Rowe, D. B. McIntyre the County Surveyor for Cheshire, the North Western Road Construction Unit of Cheshire County Council, Soil Mechanics Ltd, Geo. Research, Rofe and Raffety and the Engineer to the Mersey and Weaver River Authority. Relating to the proposed Sale Eastern By-pass and Hardy Lane Extension. Also copies of the conditions of contract, specification, form of tender, 5 drawings and a draft report by Rofe and Raffety, Consulting Engineers on the proposed Sale Ees Marina, July 1969.

Reference and contact details: PWR/4/2/5/4/3

File

Dates: 2 Nov 1967–13 Mar 1969

Extent: 1 folder.

Scope and Content:

Inscribed 'Sale Eastern By-pass soil test data c', σ' by County Council'. Containing Data sheets and Rowe's summary of the results of consolidated undrained triaxial tests.

Reference and contact details: PWR/4/2/5/4/4

File

Dates: 29 Jul 1970–11 May 1973

Extent: 1 folder.

Scope and Content:

Inscribed 'Cheshire County Council, Sale Eastern By-pass report and [? R. Ps] report'. Comprising a report of 29 July 1970 by Rowe on the results of the site investigation and on their significance to the design and construction of the proposed embankment, with figures. Also a letter from Cheshire County Council Surveyor's Department, 11 May 1973, relating to Dr Cheetham's calculations [not enclosed].

Reference and contact details: PWR/4/2/5/4/5

File

Dates: 1973

Extent: 1 folder.

Scope and Content:

Inscribed 'Scale Ees field data. G.R. Report'. Comprising extracts from reports [by Geo. Research] on the piezometer and settlement gauge readings taken between March and December 1972. Also 2 maps of the advance works contract for the Sale Eastern and Northenden By-pass. The reports refer to Peter Lumb's solutions for the rate of settlement of a clay layer and the file contains a copy of his article for the *Engineering and Public Works Review*, (March 1963).

Reference and contact details: PWR/4/2/5/5

Hardy Lane Extension, South Manchester

Dates: 1967–1971

Extent: 6 items.

Scope and Content:

Client: Corporation of Manchester.

Relating to the proposed extension of Hardy Lane, Chorlton [Chorlton cum Hardy] between the end of the existing road and Jackson's Bridge about 4 miles south of Manchester city centre. The proposed extension of c. 600 yards towards the city boundary was within the flood plain of the River Mersey. Consequently the road was to be carried on an embankment 20 feet above the existing playing fields belonging to the University of Manchester. A bridge was to be constructed to carry the road over the Mersey and part of the existing road was to be widened. Rowe gave specialist advice on the construction of the embankment.

[The extension was apparently not constructed.]

Arrangement:

Loose papers all found in box 5.

Reference and contact details: PWR/4/2/5/5/1

Report on the soil survey and site investigation

Dates: Mar-Sep 1967

Extent: 4 soft-back volumes.

Scope and Content:

Report by Ground Tests Ltd, consisting of 4 volumes:

/1 Discussion with 2 supporting drawings enclosed, March 1967.

/2 Results of the mechanical and chemical testing, March 1967.

/3 Bore-hole records, March 1967.

/4 Report on the additional bore-holes for bridge approaches, September 1967.

Reference and contact details: PWR/4/2/5/5/2

Correspondence and notes

Dates: 7 May 1967-26 Jun 1971

Extent: 1 folder. Condition: some damage due to rust.

Scope and Content:

Correspondence between Rowe, John Hayes the City Engineer and Surveyor, Geo-Research Ltd and J.A. Cheetham. With Rowe's MS notes and a form of tender, specification and bill of quantities for boring and sampling in connection with the soil survey for the extension scheme.

Reference and contact details: PWR/4/2/5/5/3

Site investigation

Dates: Nov 1969

Extent: 1 folder.

Scope and Content:

By Nuttall Geotechnical Services, Contractors to the Corporation of Manchester.

Reference and contact details: PWR/4/2/5/5/4

Site plan

Dates: Nov 1969

Extent: 1 design drawing. 60 x 115 cms (h x w). 1:500.

Reference and contact details: PWR/4/2/5/5/5

Plan of well point and stand pipe levels

Dates: 14 Jan 1971

Extent: 1 design drawing. 30 x 42 cms (h x w). 1:500.

Scope and Content:

Drawn by T.J.G. for the office of the County Surveyor and Engineer.

Reference and contact details: PWR/4/2/5/5/6

Site investigation report

Dates: 8 Jun 1971

Extent: 1 soft-back volume.

Scope and Content:

By John Hayes, the City Engineer and Surveyor.

Reference and contact details: PWR/4/2/5/6

[A167 (M)] Newcastle Motorway

Dates: 1968–1969

Extent: 1 item.

Scope and Content:

Client: Mott Hay and Anderson, Civil Engineers

Relating to the proposal to construct a motorway to the north and east of the city centre of Newcastle-upon-Tyne, Northumberland (Tyne & Wear). Mott Hay and Anderson were consulting engineers to Newcastle City Council.

Related Units of Description:

See also two files relating to the East-West Motorway, Newcastle-upon-Tyne, PWR/4/2/7/93.

Reference and contact details: PWR/4/2/5/6/1

File

Dates: May 1968–Jan 1969

Extent: 4 folders and 1 soft-back volume. Condition: some damage due to rust.

Scope and Content:

Inscribed 'Mott Hay and Anderson Newcastle Motorway, logs and site tests and plans.'

Including:

/1 Maps (scale 1: 1250) showing the location of the bore-holes and diagrams of the piezometer installations. In total 6 maps and 13 design drawings drawn by Mott Hay and Anderson, May-August 1968.

/2 Bore-hole logs, July-September 1968.

/3 Preliminary consolidation test results, with notes and correspondence between Rowe, Mott Hay and Anderson and George Wimpey and Co. Ltd, September 1968–January 1969.

/4 Tender documents, undated.

/5 Report by George Wimpey and Co. Ltd on the site investigations, December 1968.

Reference and contact details: PWR/4/2/5/7

M63 Bredbury By-pass

Dates: 1972

Extent: 1 item.

Scope and Content:

Client: Cheshire County Council.

Relating to the proposed M63 Motorway by-passing Bredbury, Cheshire (Greater Manchester), undertaken by the North Western Road Construction Unit (a sub-unit of Cheshire County Council). Rowe advised Cheshire County Council on the stability analyses, and suggested using slow shear tests. Precise dates of his involvement are difficult to ascertain.

Related Units of Description:

See also material relating to the Sale Eastern and Northenden By-pass, another part of the M63, PWR/4/2/5/4.

Reference and contact details: PWR/4/2/5/7/1

Interim soils report

Dates: 11 Feb 1972

Extent: 1 soft-back volume.

Scope and Content:

By the Soils and Materials Section of Cheshire County Council. Concerning the stability at the Peak Forest Canal. With annotations in pencil by Rowe.

The report concerns the unfavourable ground conditions in the area of the Peak Forest Canal to the top of the southern side of the River Tame valley and alternative routes for the by-pass.

Reference and contact details: PWR/4/2/5/8

Longroyd / Leeds Freeway

Dates: 1972–1973

Extent: 1 item.

Scope and Content:

Client: County Borough of Huddersfield.

Relating to the proposed construction of 4 miles of urban motorway in West Yorkshire. The route alongside the River Colne was deemed to be a particularly difficult section. Rowe was asked for advice, following his talk at Sheffield on 3 May 1972. [The motorway does not appear to have been built along the lines of the original proposal].

Reference and contact details: PWR/4/2/5/8/1

File

Dates: Apr 1972–9 Jun 1973

Extent: 2 folders.

Scope and Content:

Inscribed 'Huddersfield'. Comprises mostly correspondence between Rowe, A. L. Percy the Borough Engineer and Surveyor for Huddersfield, and Geo. Research, the contractors. Also includes 8 photographs of the trial face at Kilner Bank, 8 design drawings showing sections of the proposed road and bore-holes, bore-hole logs, tender documents and a report by the Institute of Geological Sciences on the Outlane/Longroyd/Leeds Road, April 1972.

Arrangement:

Divided into 2 folders: (1) April-November 1972, (2) November 1972-June 1973.

Conditions Governing Reproduction:

The copyright on the photographs is owned by the County Borough of Huddersfield.

Reference and contact details: PWR/4/2/5/9

[A 3025] River Itchen Bridge, Southampton

Dates: 1972-1975

Extent: 4 items.

Scope and Content:

Client: R. Travers Morgan and Partners, Consulting Engineers.

Relating to the proposed construction of a bridge over the River Itchen for the City of Southampton, Hampshire. Rowe advised on the foundations for the bridge and approach road.

Arrangement:

Loose papers found in box 34.

Reference and contact details: PWR/4/2/5/9/1

Site investigations

Dates: Nov-Dec 1972

Extent: 2 hard-back folders. Condition: the folders are in poor condition – papers cannot be extracted without tearing.

Scope and Content:

Report No. S22/556 by Terresearch Ltd.

/1 Bore-hole records and test results, November 1972.

/2 Engineering analyses and recommendations, December 1972.

Reference and contact details: PWR/4/2/5/9/2

Correspondence

Dates: May 1973–27 Dec 1975

Extent: 2 folders.

Scope and Content:

Between Rowe and R. Travers Morgan and Partners, Including bore-hole logs and *in situ* 'constant head' permeability tests and Rowe's MS notes.

Arrangement:

Divided into 2 folders: (1) 1973, (2) 1974–1975. Due to their larger size, the design drawings have been extracted and can be found below.

Reference and contact details: PWR/4/2/5/9/3

Drawings

Dates: Apr–Nov 1974

Extent: 18 design drawings.

Scope and Content:

By the City Surveyor and Engineer, Terresearch and Travers Morgan. Showing existing arrangements at Woolston (various scales and dimensions) and the embankment construction for the road.

Reference and contact details: PWR/4/2/5/9/4

Test results

Dates: Sep 1974

Extent: 1 soft-back volume.

Scope and Content:

Copies of triaxial and oedometer test results as obtained by Ground Engineering Ltd.

Reference and contact details: PWR/4/2/5/10

M65 North Lancashire Motorway

Dates: [1973]

Extent: 1 item.

Scope and Content:

Client: [Lancashire County Council?]

Relating to part of the proposed motorway between Burnley and Colne, which was to form part of the M65 North Lancashire Motorway, linking the Calder Valley towns with the M6. A preliminary survey of the route was undertaken in 1969, with potentially unstable areas pin pointed. The main site survey was conducted between June 1972 and June 1973 and the report probably dates from just after the completion of the survey. There is no obvious reference to Rowe's involvement in the project.

Related Units of Description:

See also files relating to canal diversions across the route of the M65 Motorway, PWR/4/5/14 and PWR/4/5/19.

Reference and contact details: PWR/4/2/5/10/1

Site investigation report no. 369

Dates:[1973]

Extent: 1 soft-back volume.

Scope and Content:

By the Highways Laboratory of Lancashire County Council.

Reference and contact details: PWR/4/2/5/11

A9 Trunk Road Diversion – Kessock Bridge

Dates:1970–1977

Extent: 2 items.

Scope and Content:

Client: Taylor Woodrow Construction Ltd.

Relating to the reconstruction of the A9 trunk road from Perth to Inverness for the Scottish Development Department, in particular the Beaully and Cromarty Firths diversion and the proposed Kessock Bridge across the Beaully Firth, Inverness. Rowe advised Taylor Woodrow Construction Ltd on their tender for the design of the bridge. The firm were unsuccessful in their bid and the tender went to the Cleveland Bridge Company / Redpath Dorman Long.

Reference and contact details: PWR/4/2/5/11/1

Reports on the site investigations

Dates:1970–1977

Extent: 2 folders, 12 sheets.

Scope and Content:

/1 Report on the site investigation by George Wimpey Ltd, January 1970.

/2 Report on the site investigation by George Wimpey Ltd, June 1974.

/3 Typed report by Rowe on the site data and proposed foundation design, 9 March 1977.

Reference and contact details: PWR/4/2/5/11/2

File

Dates: 1974–1977

Extent: 2 folders; 6 design drawings.

Scope and Content:

Inscribed 'Kessock Bridge'. Comprising:

/1 Report on the test piling contract by Edmund Nuttall Ltd, [1974x].

/2 Correspondence between Rowe, Taylor Woodrow Construction Ltd and the Scottish Development Department, with Rowe's MS notes and calculations by Taylor Woodrow Construction, 15 December 1976–8 Jul 1977.

/3 Designs by Taylor Woodrow Construction of the bridge structure and layout and additions to an earlier design by Crouch and Hogg (various scales and dimensions), January–March 1977.

Reference and contact details: PWR/4/2/5/12

Carrington Spur Road, Greater Manchester

Dates: 1985

Extent: 4 items.

Scope and Content:

Client: A. Monk and Co. Ltd, Building and Civil Engineering Contractors.

Relating to the proposed construction of the [A6144(M)] Carrington Spur, Borough of Trafford, Greater Manchester. The proposed route ran from the roundabout at Carrington Lane, across the flood plane of the Mersey to link with the existing M63 motorway [later redesignated the M60]. Rowe advised A. Monk and Co. on their tender for construction of embankments.

Reference and contact details: PWR/4/2/5/12/1

Drawing

Dates: Jan 1985

Extent: 1 design drawing. 75 x 120 cms (h x w). 1:2500.

Scope and Content:

Bore-hole location plan (G4/384/513) for the Carrington Spur Road as part of the M 63 improvement scheme, stage III. Drawn by A.W. Naylor, County Engineer for the Greater Manchester Council.

Reference and contact details: PWR/4/2/5/12/2

Drawings

Dates: Jul 1985

Extent: 4 design drawings. 75 x 120 cms (h x w). 1:500.

Scope and Content:

Set of 4 drawings (G4/384/522) of vertical drainage for the Carrington Spur Road. Drawn by A.W. Naylor, County Engineer for the Greater Manchester Council.

Reference and contact details: PWR/4/2/5/12/3

Reports on the site investigation at Trafford

Dates: n.d.

Extent: 2 folders.

Scope and Content:

By Exploration Associates.

/1 Volume 1: Factual data.

/2 Volume 2: Interpretation and recommendations.

Arrangement:

The enclosures to volume 2 were found in box 125.

Reference and contact details: PWR/4/2/5/12/4

Correspondence

Dates: 13 Aug-17 Sep 1985

Extent: 22 sheets.

Scope and Content:

Between Rowe and A. Monk and Co. p.l.c., relating to the tender for the embankment construction on the Carrington Spur. With 2 MS drafts of Rowe's letter of 4 September.

Arrangement:

The first draft of Rowe's letter was found in box 125, but had clearly been misplaced.

Reference and contact details: PWR/4/2/5/13

A55 North Wales Coast Road

Dates: 1977-1985

Extent: 5 items.

Scope and Content:

Client: A. Monk and Co. Ltd, Building and Civil Engineering Contractors.

Relating to the construction of the A55 Chester to Bangor Trunk Road for Clwyd County Highways Department, in particular the Penmaenbach / Dwygyfylchi (Conwy) contract. Rowe advised A. Monk and Co. on two specific points relating to their tender for the contract.

Related Units of Description:

See also Litigation Papers, PWR/4/5/1, for details of a claim by A. Monk and Co. Ltd under clause 12 (1).

Reference and contact details: PWR/4/2/5/13/1

Drawings

Dates: Jan 1977

Extent: 19 design drawings. Condition: crumpled and damaged at edges. 85 x 100 cms (h x w). horizontal 1:2500; vertical 1:25 and 1:50.

Scope and Content:

Showing the Chester to Bangor trunk road, proposed diversion east of Abergele. Information for construction, drawn by Clwyd County Highways Department. Mostly undated.

Reference and contact details: PWR/4/2/5/13/2

Tender documents

Dates: Aug 1983

Extent: 3 soft-back volumes.

Scope and Content:

Relating to the Penmaenbach / Dwygyfylchi contract and the factual site investigations carried out by Soil Mechanics into the proposed tunnel and approach roads at Penmaenbach for R. Travers Morgan and Partners, consulting engineers to the Welsh Office.

/1 Volume C: Relating to contract H for Penmaenbach tunnels and immediate approaches, August 1983.

/2 Volume F: Relating to contract F for Conwy Morfa to Aber, undated.

/3 Volume K: Piezometer records, undated.

Reference and contact details: PWR/4/2/5/13/3

Drawing

Dates: n.d.

Extent: 1 design drawing. 75 x 90 cms (h x w). 1:500.

Scope and Content:

Drawing S. 33/638 figure 2, showing the location of exploratory holes and access routes Drawn by Terresearch.

Reference and contact details: PWR/4/2/5/13/4

Drawing

Dates: Sep 1983

Extent: 1 design drawing. 45 x 75 cms (h x w). 1:50 and 1:125.

Scope and Content:

Drawing S. 33/638 figure 4, showing sections of the depth of penetration of Mackintosh probe test. Drawn by Terresearch.

Reference and contact details: PWR/4/2/5/13/5

Letter

Dates: 24 Sep 1985

Extent: 2 sheets.

Scope and Content:

From Rowe to A. Monk and Company, relating to their tender. The letter compares the scheme to the Carrington Spur and makes reference to the pond area and water meadow in particular.

Reference and contact details: PWR/4/2/6

Sewerage and Sewage Systems

Dates: 1959–1991

Extent: 42 sub-subseries (90 items).

Scope and Content:

Peter Rowe acted as a consultant on a large number of schemes for the construction or enlargement of sewage treatment and disposal works, and for the construction of sewers and drainage systems. He provided advice on ground conditions, the design and construction of foundations and retaining walls, dewatering, and problems encountered during tunnelling operations. His clients included local authorities, water boards and civil engineering contractors.

Related Units of Description:

The Litigation section of the archive contains material relating to sewage treatment works at Barnetby and Keelby (PWR/4/5/4); Broomhurst Farm, Fleet (PWR/4/5/10); Five Fords, Wrexham (PWR/4/5/31); Mold (PWR/4/5/47); Poole (PWR/4/5/52); Southport (PWR/4/5/60); Peel Common, Lee-on-Solent (PWR/4/5/92); and Sudden Valley, Rochdale (PWR/4/5/101). It also contains files relating to sewerage schemes at Blades Street, Lancaster (PWR/4/5/6); Bradford (PWR/4/5/8); Cleethorpes (PWR/4/5/18); Halifax (PWR/4/5/32); Woughton, Milton Keynes (PWR/4/5/65); and Nantwich (PWR/4/5/86). The International Construction Projects section contains material relating to the Istanbul Water Supply and Sewerage Project (PWR/4/3/12).

Reference and contact details: PWR/4/2/6/1

Countess Wear Sewage Works, Exeter, Devon

Dates: 1959–1964

Extent: 1 item.

Scope and Content:

Client: City and County of Exeter.

Relating to the site investigations for the proposed sewage works at Countess Wear, Exeter, Devon. Rowe, acting as a consultant with Edgar Morton, directed the soil mechanics tests and gave advice on the positioning of the access road and the problems caused by the nearby River Exe.

Reference and contact details: PWR/4/2/6/1/1

Correspondence

Dates: 7 Jul 1959–1 Jun 1964

Extent: 1 folder.

Scope and Content:

Between Rowe, Edgar Morton and the City Engineer for Exeter, concerning the tests. With draft specifications for the site investigation and results of the triaxial compression tests on the Frog Street Bridge bore-holes conducted at Manchester University.

Reference and contact details: PWR/4/2/6/2

Leekbrook Sewage Disposal Works, Staffordshire

Dates: 1967–1969

Extent: 1 item.

Scope and Content:

Client: Willcox, Raikes and Marshall, Chartered Civil Engineers.

Relating to the enlarging of the existing sewage works at Leekbrook [near Cheddleton, Staffordshire] for Leek Urban District Council. Rowe, working with Edgar Morton, gave preliminary observations on the site investigation and foundations for the tanks.

Reference and contact details: PWR/4/2/6/2/1

File

Dates: Dec 1967–15 Dec 1969

Extent: 2 soft-back volumes. 4 sheets.

Scope and Content:

Inscribed 'Willcox Raikes Marshall Leekbrook Sewage Scheme and Leek UDC collapsed wall'. Comprising correspondence between Rowe, Edgar Morton and Willcox Raikes and Marshall, relating to dewatering problems at Leekbrook. The file also contains one letter of 15 December 1969 relating to methods of stabilizing the wall in Mill Street. With a site investigation made by William Coulson Ltd, December 1967 and a form of tender, specification and bill of quantities, January 1969.

Reference and contact details: PWR/4/2/6/3

Middlewich Sewerage Disposal, Cheshire

Dates: 1970–1978

Extent: 2 items.

Scope and Content:

Client: A. H. S. Waters and Partners, Chartered Civil Engineers.

Relating to the Middlewich sewerage and sewage disposal contract no. 1 for the Borough of Middlewich Urban District Council, Cheshire. Rowe, in association with Edgar Morton and Partner, gave advice on how the problems resulting from the contractor's laying of the sewers in Sutton Lane might be resolved. There is also reference to a subsequent claim between the contractors, the Chamberlain Group, and the consulting engineers, A. H. S. Waters and Partners.

Reference and contact details: PWR/4/2/6/3/1

File

Dates: 2 Oct 1970–18 Jun 1973

Extent: 1 folder.

Scope and Content:

Inscribed 'A. H. Waters Birmingham Middlewich sewer. Rest of file with E [dgar] M[orton] 24 October 1970'. Comprising correspondence between Rowe, Edgar Morton, A. H. S. Waters and Partners and Geo. Research, relating to the Sutton Lane problems. With Morton's diagrams of the boreholes, January 1971 and Rowe's MS notes.

Reference and contact details: PWR/4/2/6/3/2

Correspondence

Dates: 16 Dec 1971–17 Jul 1978

Extent: 1 folder. Condition: the photographs are likely to deteriorate, due to the nature of the mounting.

Scope and Content:

Between Rowe, Edgar Morton and A. H. S. Walters and Partners, concerning the problems in Sutton Lane. With a site investigation by Geo. Research, April 1972, reports on the contractor's claim by Frank T. Howell, February 1976, an undated draft report by Rowe and 7 mounted photographs of soil samples.

The correspondence also includes a letter from Grant Lyon Eagre Ltd to Rowe, 17 February 1975, in which Rowe was asked to give an expert opinion for the contractors. He refused because he had already advised A. H. S. Waters at the time of the misalignments, although "not from the point

of view of a claim but rather on how the works might be best completed."

Reference and contact details: PWR/4/2/6/4

Douglas Valley Scheme, Lancashire

Dates: 1972–1973

Extent: 1 item.

Scope and Content:

Client: Ward Ashcroft and Parkman, Consulting Engineers.

Relating to the proposed Douglas Valley sewer from Pemberton near Wigan to Hoscar near Burscough Bridge, Lancashire, for the County Borough of Wigan. Rowe gave advice on the soft alluvial clays, which were causing problems.

Reference and contact details: PWR/4/2/6/4/1

Correspondence

Dates: 1 Sep 1972–20 Feb 1973

Extent: 1 folder.

Scope and Content:

Between Rowe, Ward Ashcroft and Parkman, Pre-piling Surveys Ltd and Cementation Ground Engineering Ltd, concerning the treatment of the ground beneath the proposed sewer. With a report on the investigation of the slip by manhole no. 19, by Leonard Fairclough Ltd, 1972 and 4 drawings of the bore-holes by Ward Ashcroft and Parkman, September 1972 and January 1973.

Reference and contact details: PWR/4/2/6/5

Thornton Cleveleys Sewerage Scheme, Lancashire

Dates: 1968–1974

Extent: 1 item.

Scope and Content:

Client: Ward Ashcroft and Parkman, Consulting Engineers.

Relating to the foul sewerage line from Thornton to Cleveleys and a culverting scheme at Thornton, Lancashire for Thornton Cleveleys Urban District Council. Throughout the contract, the contractors, McGregor and Sons Ltd, found difficulty in supporting the sides of trenches, leading to ground movements and subsidence of roads. Rowe gave advice on the ground conditions, particularly in

Victoria Road, and alternative methods of working.

One of the results of the subsidence resulting from the installation of the sewer in Stanah Road was damage to a house in Little Thornton. This led to meeting between the aggrieved party and the solicitor for the Urban District Council. Rowe's role as consultant to Ward Ashcroft and Parkman was, however, to give advice on the methods of overcoming the poor ground conditions rather than as an expert witness.

Reference and contact details: PWR/4/2/6/5/1

Correspondence

Dates: 1 Jan 1968–4 Aug 1974

Extent: 2 folders.

Scope and Content:

Between Rowe, Ward Ashcroft and Parkman, Geo. Research Ltd, Ground Water Services Ltd, Norweb Electricity and Thornton Cleveleys Urban District Council, relating to the ground conditions. Includes copies of correspondence relating to the damage to property in Stanah Road, minutes of site meetings and MS notes. Also 2 early drawings of the sewerage scheme by Ward Ashcroft and Parkman, 1968 and 2 reports on the site investigations by Geo. Research Ltd, 22 January 1973 and 13 June 1974.

Arrangement:

Divided into 2 files: (1) January-June 1973, (2) July 1973–August 1974.

Reference and contact details: PWR/4/2/6/6

Deeside Drainage, Flintshire

Dates: 1973

Extent: 1 item.

Scope and Content:

Client: Elliott and Brown, Chartered Civil Engineers.

Relating to the Deeside Surface Water Drainage Scheme for Hawarden Rural District Council, Flintshire. Rowe advised on the ground conditions for the proposed pumping station.

Reference and contact details: PWR/4/2/6/6/1

Correspondence

Dates: 19 Mar-23 May 1973

Extent: 1 folder.

Scope and Content:

Between Rowe, Foraky Ltd and Elliott and Brown, relating to the site investigation for the pumping station. Also includes bore-hole logs and 2 maps of the drainage scheme, March 1973 and 2 elevations of the pumping station, April 1973 both drawn by Elliott and Brown.

Reference and contact details: PWR/4/2/6/7

Hoylake Main Drainage Scheme, Merseyside

Dates: 1973-1980

Extent: 4 items.

Scope and Content:

Client: John Taylor and Sons, Civil Engineers.

Relating to the main drainage contract for Hoylake Urban District Council, Cheshire, and (from 1974) Wirral Borough Council, Merseyside, concerning sewer construction. Rowe advised on methods of construction and dewatering.

Reference and contact details: PWR/4/2/6/7/1

Drawings

Dates: Feb 1973

Extent: 1 sheet and 3 design drawings. 80 x 120 cms (h x w). Various scales.

Scope and Content:

Of the North Wirral Main Drainage Scheme, drawn by John Taylor and Sons. With a covering letter.

Reference and contact details: PWR/4/2/6/7/2

File

Dates: 8 Aug 1973-12 May 1975

Extent: 1 folder; 19 design drawings.

Scope and Content:

Comprising correspondence between Rowe, Geo. Research and John Taylor and Sons, relating to the site investigation. Also minutes of regular site

meetings, bore-hole logs compiled by Geo. Research and 19 drawings of the bore-holes by John Taylor and Sons, September 1973–January 1974.

Reference and contact details: PWR/4/2/6/7/3

File

Dates: Mar 1972–28 Dec 1980

Extent: 2 folders; 6 design drawings.

Scope and Content:

Comprising the following sub-folders:

/1 Design drawings of the Birkenhead Road sewer bore-holes and the main layout of the drainage. Drawn by the Director of the Engineering Services for Wirral Borough Council and John Taylor and Sons, March 1972–January 1974.

/2 A folder marked 'Hoylake UDC main drainage, contracts 3 and 4' containing bore-hole logs, August–October 1973.

/3 Correspondence between Rowe, John Taylor and Sons and Wirral Borough Council, relating to the site investigation for the Birkenhead Road sewer, 18 May 1974–28 December 1980. Also includes a site investigation by Strata Surveys, 15 May 1980 and bore-hole logs by Structural Grouting Ltd

Reference and contact details: PWR/4/2/6/7/4

File

Dates: Nov 1973–11 Jun 1974

Extent: 18 sheets; 24 design drawings.

Scope and Content:

Comprising correspondence between Rowe, Geo. Research and John Taylor and Sons, relating to the implications of the site investigation for methods of sewer construction, 27 November 1973–11 June 1974. With minutes of a site meeting and 24 plans of the bore-holes for various streets in Hoylake. Drawn by John Taylor and Sons, January 1974.

Reference and contact details: PWR/4/2/6/8

South Western Parishes Sewerage and Sewage Disposal Scheme, Shropshire

Dates: 1974

Extent: 1 item.

Scope and Content:

Client: Wellington Civil Engineering Ltd.

Relating to the sewerage and sewage disposal scheme for North Shropshire Rural District Council. Rowe advised Wellington Civil Engineering Ltd on dewatering problems.

Reference and contact details: PWR/4/2/6/8/1

File

Dates: 15 Mar–Apr 1974

Extent: 1 folder.

Scope and Content:

Inscribed 'Mr John Summerton, Wellington Baschurch'. Comprising a letter confirming Rowe's agreement to advise Wellington Civil Engineering Ltd, 5 March 1974 and bore-hole logs from Geo. Research Ltd.

Reference and contact details: PWR/4/2/6/9

Telford Northern Area Foul Sewerage, Shropshire

Dates: 1974

Extent: 1 item.

Scope and Content:

Client: [C. V. Buchan?]

Relating to the proposed Northern Area Foul Sewers Scheme, north of Wellington, Shropshire for the Telford Development Corporation. The nature of Rowe's role as a consultant is unclear from the papers.

Reference and contact details: PWR/4/2/6/9/1

File

Dates: 23 Sep 1974

Extent: 1 folder.

Scope and Content:

Inscribed 'C. V. Buchan nr Wellington, 1975'. Includes bore-hole logs and results of laboratory tests conducted by Tarmac for C. V. Buchan and

Company Ltd, a report by Geo-Testing Services Ltd and a page of Rowe's MS notes.

Reference and contact details: PWR/4/2/6/10

Preston Outfall Sewers, Lancashire

Dates: 1975–1977

Extent: 1 item.

Scope and Content:

Client: North West Water Authority (Ribble Division).

Relating to the proposed construction of a major sewer close to the River Ribble at Preston, Lancashire, by the North West Water Authority. Rowe gave advice on the scheme, which aimed to avoid the poor ground on either side of the Bunter Sandstone ridge.

Reference and contact details: PWR/4/2/6/10/1

File

Dates: Aug 1975–4 Nov 1977

Extent: 1 folder.

Scope and Content:

Inscribed 'NWWA Preston Outfall Sewer'. Comprising correspondence between Rowe and the North West Water Authority, relating to the design problems and ground properties. With an undated report by South Lancs Boring, 3 plans of the proposed routes of the Watery Lane/Clifton Marsh outfall sewer by the North West Water Authority, August 1975–December 1976 and 1 similar plan by the County Borough of Preston, December 1976.

Reference and contact details: PWR/4/2/6/11

Howdon Sewage Treatment Works, Tyne & Wear

Dates: 1973–1980

Extent: 7 items.

Scope and Content:

Client: Northumbrian Water Authority.

Relating to the construction of the sewage treatment works at Howdon, Tyne & Wear (North Tyneside), as part of the major sewerage and sewage treatment scheme, covering the Tyneside conurbation. The works was designed to give

primary treatment to sewage from the north and south of the River Tyne. The original scheme involved the removal of overburden which, it was predicted, could lead to changes in stresses in the underlying soils which would have a deleterious effect on the proposed structures. Rowe advised on the *in situ* testing to predict the heave and consequential stresses.

Related Units of Description:

A further part of the Tyneside Sewerage Scheme involved the construction of a pumping station at Derwenthaugh, see PWR/4/2/6/38.

Reference and contact details: PWR/4/2/6/11/1

Drawings

Dates: Mar 1976–Aug 1978

Extent: 17 design drawings. 80 x 120 cms (h x w). Various scales.

Scope and Content:

Heave prediction geotechnical drawings, heave prediction drawings and heave analysis results (shear and deflexion) for the North Bank. Drawn by the Northumbrian Water Authority Directorate of Operations and Works, with later amendments.

Reference and contact details: PWR/4/3/6/11/2

Drawings

Dates: May–Jul 1976

Extent: 18 design drawings. 80 x 120 cms (h x w). Various scales.

Scope and Content:

Construction drawings of the south bank and north bank [of the Tyne]. Drawn by the Northumbrian Water Authority Directorate of Operations and Works, with later amendments.

Reference and contact details: PWR/4/2/6/11/3

Correspondence

Dates: Jul 1975–Feb 1980

Extent: 1 folder.

Scope and Content:

Between Rowe and the Northumbrian Water Authority relating to the heave investigation. With an undated report on the heave at Howdon and 5 earlier

drawings by the Northumbrian Water Authority Directorate of Operations and Works, showing the arrangements of tanks and heave, July 1975–June 1977.

Reference and contact details: PWR/4/2/6/11/4

Heave Investigation

Dates: Nov 1979

Extent: 1 soft-back volume.

Scope and Content:

A report by the Materials and Geotechnics Group for the Northumbrian Water Authority.

Reference and contact details: PWR/4/2/6/11/5

Report

Dates: Dec 1979

Extent: 1 soft-back volume.

Scope and Content:

On the effects of the predicted outstanding heave on the Howdon sedimentation tank structures. By the Northumbrian Water Authority Directorate of Operations and Works.

Reference and contact details: PWR/4/2/6/11/6

Letter

Dates: Sep 1973–11 Jan 1980

Extent: 1 folder.

Scope and Content:

From the Northumbrian Water Authority to Rowe, relating to the heave problems, 11 January 1980. Enclosed with the letter were earlier graphs of piezometer readings, extracts from papers on ground heave problems and 3 drawings by the Northumbrian Water Authority of sections through the Howdon site and monitoring details, September 1973–July 1976.

Reference and contact details: PWR/4/2/6/11/7

Correspondence

Dates: Nov 1975–24 Jan 1983

Extent: 1 folder.

Scope and Content:

Between Rowe and the Northumbrian Water Authority, relating to the south bank heave and the effects of drainage. With 4 earlier drawings by the Northumbrian Water Authority of the drainage, November 1975–August 1981 and charts of the heave analysis.

Reference and contact details: PWR/4/2/6/12

Portrack Sewerage Treatment Works, Cleveland

Dates: 1971–1980

Extent: 5 items.

Scope and Content:

Client: Northumbrian Water Authority.

Relating to the proposal by the Northumbrian Water Authority to construct a sewage treatment works at Portrack, Cleveland (Stockton-on-Tees). Rowe was engaged as their geotechnical consultant and gave advice on the problems caused by the low strength ground conditions and suggested the methodology for the site investigations, which were carried out by Soil Mechanics Ltd.

Related Units of Description:

In 1983, Rowe also provided advice on the Lustrum Pumping Station, a further part of the Portrack Sewerage Treatment Works Scheme, see PWR/4/2/6/31.

Reference and contact details: PWR/4/2/6/12/1

File

Dates: Nov 1971–Nov 1978

Extent: 1 folder.

Scope and Content:

Inscribed 'Portrack odd papers'. Comprising the addendum to the site investigation for Portrack Sewage Works, November 1971, with Rowe's graphs, MS notes and calculations and a letter from Rowe to the Northumbrian Water Authority concerning the site fill, 18 November 1978.

Reference and contact details: PWR/4/2/6/12/2

File

Dates: Jan 1973–17 Apr 1979

Extent: 1 folder.

Scope and Content:

Inscribed 'Portrack dewatering trial'. Comprising correspondence between Rowe, Soil Mechanics Ltd and the Northumbrian Water Authority. Also a site investigation for the pumphouse and sewer conducted by the Borough Engineer and Surveyor, January 1973), Rowe's MS notes and calculations and the final report on the site investigation by Soil Mechanics, October 1978.

Reference and contact details: PWR/4/2/6/12/3

Drawings

Dates: Nov 1973–Jan 1980

Extent: 23 design drawings. Mostly 80 x 120 cms (h x w). Various scales.

Scope and Content:

Plans of the general arrangement, site fill and instrumentation by the Northumbrian Water Authority Directorate of Operations and Works.

Reference and contact details: PWR/4/2/6/12/4

Bore-hole logs and reports

Dates: 1975–Oct 1978

Extent: 1 folder.

Scope and Content:

Draft report by Soil Mechanics, October 1978, with accompanying bore-hole logs by Holst Soil Engineering and the Northumbrian Water Authority, 1975.

Reference and contact details: PWR/4/2/6/12/5

Correspondence

Dates: Jul 1975–Sep 1980

Extent: 3 folders.

Scope and Content:

Between Rowe and the Northumbrian Water Authority, concerning the site investigation, tests and dewatering trials. With regular minutes of site meetings, Rowe's MS notes and typed reports. Also includes a geotechnical report by Northumbrian Water Authority, July 1975, bore-hole logs, 1979–

1980, 13 photographs of soil samples, July 1979 and 3 plans of the general arrangement and trials, drawn by the Northumbrian Water Authority Directorate of Operations and Works, 1976–1980.

Arrangement:

Divided into 3 folders: (1) 1975–1978, (2) January – May 1979, (3) June 1979–1980.

Reference and contact details: PWR/4/2/6/13

Seaford Road Sewer Reconstruction, Salford, Greater Manchester

Dates: 1976–1980

Extent: 1 item.

Scope and Content:

Client: City of Salford.

Relating to the reconstruction of the sewer in Seaford Road for the City of Salford, Greater Manchester. Rowe gave advice on particular problems, possibly relating to dewatering.

Reference and contact details: PWR/4/2/6/13/1

File

Dates: Dec 1976–6 Aug 1980

Extent: 1 folder. Condition: some sheets are very crumpled.

Scope and Content:

Inscribed 'Seaford Road Sewer'. Containing correspondence between Rowe and the City Technical Services Officer for Salford. With 1 map showing the position of bore-holes by the City Technical Services Officer, 1976, bore-hole logs and a site investigation report by Geo. Research Ltd, 17 January 1978.

Reference and contact details: PWR/4/2/6/14

Roebuck Lane Sewer, Smethwick, West Midlands

Dates: 1977

Extent: 1 item.

Scope and Content:

Client: Wrekin Construction Ltd.

Relating to the proposed construction of the Roebuck Lane–Mornington Road [Smethwick, West Midlands] storm water sewer for the Metropolitan Borough of Sandwell. Rowe, as a consultant with Edgar Morton and Partner, contributed to the advice on the behaviour of the strata by inspecting and testing samples from the trial bores sunk by Strata Ground Engineering Ltd.

Reference and contact details: PWR/4/2/6/14/1

Letter

Dates: 10 Jun 1977

Extent: 9 sheets.

Scope and Content:

From Edgar Morton and Partner to Wrekin Construction, reporting on the behaviour of the strata on the line of the abandoned railway west of the Hawthorns Halt.

Reference and contact details: PWR/4/2/6/15

Dams Valley Relief Sewer, Cheshire

Dates: 1977–1979

Extent: 2 items.

Scope and Content:

Client: Macclesfield Borough Council.

Relating to the relief sewer in the Dams Valley, Macclesfield, Cheshire. Edgar Morton and Partner wrote the report on the site investigation, bore-hole logs for which were sunk by Geo. Research Ltd. Rowe advised as a consultant with Edgar Morton and Partner, but the documents do not reveal the detail of his input.

Reference and contact details: PWR/4/2/6/15/1

Letter (copy)

Dates: 16 Aug 1977

Extent: 6 sheets.

Scope and Content:

From Edgar Morton and Partner to the Assistant Borough Engineer, relating to the geology of the area and the problems which may arise in the execution of the proposed works.

Reference and contact details: PWR/4/2/6/15/2

Report on the site investigation

Dates: 15 Mar 1979

Extent: 2 folders.

Scope and Content:

Drafts and final version of the report on the site investigation for the proposed Dams Valley relief sewer. By Edgar Morton and Partner for Macclesfield Borough Council, 15 March 1979. The report contains bore-hole logs, 2 plans of the sewer layout by the Borough Engineer and plans of the geological sections.

Arrangement:

Divided into 2 folders: (1) drafts, (2) final version of the report.

Reference and contact details: PWR/4/2/6/16

Tinker Brook Sewerage Scheme, Oswaldtwistle, Lancashire

Dates: 1976–1978

Extent: 1 item.

Scope and Content:

Client: Fairclough Civil Engineering Ltd.

Relating to the Tinker Brook Sewerage Scheme, Oswaldtwistle, Lancashire, for Hyndburn Borough Council. Rowe was asked to advise the engineers, Fairclough Civil Engineering on the cause of a collapse in the tunnel and remedial measures that could be taken with regard to the distortion in the tunnel lining.

Reference and contact details: PWR/4/2/6/16/1

File

Dates: Jun 1976–6 Feb 1978

Extent: 1 folder.

Scope and Content:

Inscribed 'Fairclough Hyndburn Sewer 1978'. Comprising correspondence between Rowe, Fairclough Civil Engineering and Hyndburn Borough Council, relating to the tunnel collapse. The file also includes the ground investigation report by Fairclough, June 1976.

Reference and contact details: PWR/4/2/6/17

Broomhill Tunnel Sewer, Blackburn, Lancashire

Dates: 1978

Extent: 1 item.

Scope and Content:

Client: T. Kilroe and Sons Ltd, Tunnel and Civil Engineering Contractors.

Relating to the Brownhill tunnel sewer, Baywood Street, Blackburn, Lancashire. Rowe was asked to advise on the causes of difficulties which Kilroe and Sons encountered during tunnelling work.

Reference and contact details: PWR/4/2/6/17/1

Correspondence

Dates: 10–12 Mar 1978

Extent: 5 sheets.

Scope and Content:

Between Rowe and T. Kilroe and Sons Ltd, relating to the causes of tunnelling difficulties and options available to the Employer.

Reference and contact details: PWR/4/2/6/18

Paupers Drain, Cowle, Lincolnshire

Dates: 1963–1978

Extent: 1 item.

Scope and Content:

Client: A. Barker (Excavators) Ltd.

Relating to the proposed Farm Bridge improvement for the Crowle Area Internal Drainage Board. Rowe advised on problems occurring with the proposed Paupers Drain Pumping Scheme.

Reference and contact details: PWR/4/2/6/18/1

File

Dates: May 1963–1 Mar 1978

Extent: 1 folder.

Scope and Content:

Comprising a letter from A. Barker to Rowe, thanking him for advice on the problems encountered during the scheme, 1 March 1978. With bore-hole logs, 1963, a geotechnical report by Ground Tests Ltd, October 1964 and 3 plans of the existing and proposed pumping stations drawn by John H. Haiste and Partners, April – June 1977.

Reference and contact details: PWR/4/2/6/19

Shieldhall Sewage Purification Works, Glasgow

Dates: 1970–1978

Extent: 5 items.

Scope and Content:

Client: Fairclough Civil Engineering.

Relating to the proposed modernization of the Shieldhall sewage purification works between Renfrew Road and the River Clyde at Linthouse, Glasgow, for the Corporation of the City of Glasgow and Strathclyde Regional Council. Rowe advised on the field pumping tests and dewatering.

Reference and contact details: PWR/4/2/6/19/1

Report on the site investigation

Dates: Aug 1970

Extent: 1 folder.

Scope and Content:

Carried out by George Wimpey and Co. Ltd.

Reference and contact details: PWR/4/2/6/19/2

Ground investigation reports

Dates: Oct–Nov 1978

Extent: 2 soft-back volumes.

Scope and Content:

For phase 2 of the Shieldhall Sewage Works Scheme, by Fairclough Civil Engineering (Scottish Division).

Reference and contact details: PWR/4/2/6/19/3

Drawings

Dates: Mar-Jun 1978

Extent: 16 design drawings. Various dimensions (outsized). Various scales.

Scope and Content:

Of the Shieldhall reconstruction, by W. A. Fairhurst and Partners for Strathclyde Regional Council.

Reference and contact details: PWR/4/2/6/19/4

Bore-hole logs and daily reports

Dates: Apr-Jun 1978

Extent: 1 file.

Scope and Content:

Including reports of stand-pipe and river water levels. With a covering letter from Fairclough Civil Engineering to Rowe, 8 June 1978 and a plan of the site investigation by W. A. Fairhurst and Partners, (scale 1:500), March 1978.

Reference and contact details: PWR/4/2/6/19/5

Report

Dates: 31 Dec 1978

Extent: 1 folder.

Scope and Content:

By Rowe for Fairclough Civil Engineering, on his interpretation of the field pumping tests and procedure for dewatering. With MS notes and draft.

Reference and contact details: PWR/4/2/6/20

Goole Sewerage Scheme, Humberside

Dates: 1978

Extent: 1 item.

Scope and Content:

Client: J.F. and Company Ltd, Civil Engineering and Tunnel Contractors.

Relating to the Goole sewerage scheme for Yorkshire Water Authority, Humberside (East Riding of Yorkshire). Rowe assisted with their tender.

Reference and contact details: PWR/4/2/6/20/1

File

Dates: 17 Jun-21 Jul 1978

Extent: 5 sheets.

Scope and Content:

Inscribed 'J.F. Contractor', Comprising a draft letter from Rowe to J.F. Donelon and Co. Ltd, relating to the tender proposal for the Goole Sewerage Contract. With Rowe's MS notes and a letter of thanks from Donelon.

Reference and contact details: PWR/4/2/6/21

Halton Western Industrial Sewer, Cheshire

Dates: 1977-1979

Extent: 3 items.

Scope and Content:

Client: Halton Borough Council.

Relating to the proposed western industrial sewer at Halton, Widnes, Cheshire. Rowe gave advice culminating in a report of 17 November 1979 regarding the soft ground tunnelling and laboratory testing for the western industrial sewer scheme. The scheme was deferred by North West Water until 1983, when Rowe was asked for further advice and the report was redrafted.

Related Units of Description:

See also papers relating to Rowe's later periods of consultancy work on the Halton industrial sewers, PWR/4/2/6/29 and PWR/4/2/6/33.

Reference and contact details: PWR/4/2/6/21/1

File

Dates: 26 Oct 1977-13 Oct 1979

Extent: 2 folders.

Scope and Content:

Inscribed 'Halton Borough Council, 1978 (45)'. Comprising correspondence

between Rowe and Halton Borough Council, concerning the proposed line of the sewer. Also includes 3 reports by Strata Surveys Ltd, 26 October 1977–28 April 1978, bore-hole logs by Exploration Services Ltd and 8 plans of the sewer route by the Engineering Services of Halton Borough Council, July 1977–February 1979.

Arrangement:

Divided into 2 folders: (1) 1977–1979, (2) bore-hole logs, 1979–n.d.

Reference and contact details: PWR/4/2/21/2

Drawings

Dates: Nov 1978–Feb 1979

Extent: 4 design drawings. 80 x 120 cms (h x w). Various scales.

Scope and Content:

Showing the location of bore-holes. Drawn by the Engineering Services of Halton Borough Council.

Reference and contact details: PWR/4/2/6/21/3

Final report on the site investigation on Halton Western Sewer

Dates: 10 Dec 1979

Extent: 1 soft-back volume and 1 sheet.

Scope and Content:

By Exploration Associates. With a letter from Halton Borough Council to Rowe thanking him for his advice.

Reference and contact details: PWR/4/2/6/22

Wallasey Interceptor Sewer, Merseyside

Dates: 1976–1983

Extent: 2 items.

Scope and Content:

Client: Metropolitan Borough of Wirral.

Relating to the proposed construction of a sewer at Wallasey for the Metropolitan Borough of Wirral, Merseyside. Rowe advised on the interpretation of the site investigation data in relation to dewatering measures to ensure the stability of the

ground and commented on alternative routes.

Reference and contact details: PWR/4/2/6/22/1

File

Dates: Jun 1976–14 May 1983

Extent: 3 folders.

Scope and Content:

Inscribed 'Wirral Wallasey interceptor sewer'. Comprising correspondence between Rowe and the Department of Engineering Services of the Metropolitan Borough of Wirral, relating to the site investigations and alternative routes for the sewer. Including the results of permeability testing of bore-holes, bore-hole logs and an undated report on the site investigation by Strata Surveys Ltd and 31 drawings of the routes and sections of the sewer, by the Department of Engineering Services, June 1976–December 1982.

Arrangement:

Divided into 3 folders: (1) Correspondence, (2) Bore-hole logs, (3) Loose drawings.

Reference and contact details: PWR/4/2/6/22/2

Reports on the site investigation

Dates: 16 Nov 1979–1983

Extent: 1 folder.

Scope and Content:

Preliminary site investigation by Strata Surveys Ltd, 16 November 1979. With a letter from the Metropolitan Borough of Wirral to Rowe, asking him to report on the site investigation and recommended working practices, 20 January 1983 and Rowe's draft report on stage 1 of the Wallasey interceptor sewer scheme, with MS notes [1983].

Reference and contact details: PWR/4/2/6/23

Peterlee Sewerage, Co. Durham

Dates: 1980–1981

Extent: 1 item.

Scope and Content:

Client: Northumbrian Water Authority.

Relating to the replacement of Blunt's Dene sewer, Peterlee, County Durham.
Rowe was asked for advice on difficult water conditions.

Reference and contact details: PWR/4/2/6/23/1

File

Dates: Jul 1980–4 Aug 1981

Extent: 1 file.

Scope and Content:

Inscribed 'NWA Peterlee sewer 1981'. Comprising correspondence between Rowe, the Northumbrian Water Authority and A. Streeter and Co. Ltd. Also includes Rowe's MS notes and a report on the site investigation with 3 accompanying drawings by Northumbrian Water Authority, July 1980.

Reference and contact details: PWR/4/2/6/24

Bangor Sewerage and Sewage Scheme, Gwynedd

Dates: 1980–1981

Extent: 3 items.

Scope and Content:

Client: A. H. S. Waters and Partners, Consulting Engineers.

Relating to the Bangor Sewerage and Sewage Disposal Scheme and, in particular, the proposed construction of a foreshore pumping station on Beach Road for the Welsh Water Authority, Gwynedd Division. Rowe gave advice, as a consultant with Edgar Morton and Partner, on the safety of the foundations and methods of construction for the pumping station.

Related Units of Description:

For papers relating to later advice given by Edgar Morton and Partner on the Bangor Sewerage and Sewage Disposal Scheme, see PWR/4/2/6/37.

Reference and contact details: PWR/4/2/6/24/1

Letter

Dates: 5 Dec 1980

Extent: 8 sheets.

Scope and Content:

From Rowe to Edgar Morton and Partner, relating to the site investigation and settlement. Rowe also gave advice on methods of construction of the pumping station. With an MS draft and notes.

Reference and contact details: PWR/4/2/6/24/2

File

Dates: 8 Dec 1980–3 Aug 1981

Extent: 1 folder.

Scope and Content:

Inscribed 'EMP Bangor Sewerage WWA; Abstract of Geo. Research's report, Geo. Research's sections and plan showing bore positions, EMP reports.' Comprising correspondence between Rowe, Edgar Morton and Partner and A. H. S. Waters and Partners, relating to the possible re-design of the pumping station. Including Edgar Morton and Partner's report on the results of the site investigation carried out by Geo. Research Ltd, 3 August 1981 and an undated site investigation report by A. H. S. Waters and Partners. The latter report is unbound and contains longitudinal sections.

Reference and contact details: PWR/4/2/6/24/3

Correspondence

Dates: 17 Mar–4 Jun 1981

Extent: 35 sheets.

Scope and Content:

Between Rowe, Edgar Morton and Partner and A. H. S. Waters and Partners, relating to findings and conclusions from the site investigation by Geo. Research.

Reference and contact details: PWR/4/2/6/25

Runcorn Sewerage Works, Cheshire

Dates: 1981–1982

Extent: 2 items.

Scope and Content:

Client: A. H. S. Waters and Partners, Consulting Engineers.

Relating to stage C of the Runcorn Sewerage Works Scheme for Halton Borough Council, Runcorn, Cheshire. This included the proposed construction of a pumping station to the immediate south of the Manchester Ship Canal, west of the Runcorn Bridge. Rowe, as a consultant with Edgar Morton and Partner, gave

advice on the Triassic Bunter Pebble Beds, which lay under the site and on the implications of this for the construction of the pumping station foundations.

Reference and contact details: PWR/4/2/6/25/1

Correspondence

Dates: 10–18 May 1981

Extent: 6 sheets.

Scope and Content:

Between Rowe, Edgar Morton and Partner and A. H. S. Waters and Partners, relating to the problems encountered in constructing the pumping station. With reference to the Bunter Sandstones in North West Cheshire and South West Lancashire.

Reference and contact details: PWR/4/2/6/25/2

Letter

Dates: 2 Feb 1982

Extent: 11 sheets.

Scope and Content:

From Rowe to A. H. S. Waters and Partners, relating to the site investigation by Geo. Research and methods of construction of the pumping station.

Reference and contact details: PWR/4/2/6/26

Northallerton and Romanby Sewage Treatment Works, North Yorkshire

Dates: 1982

Extent: 1 item.

Scope and Content:

Client: Ken Mac Construction?

Relating to the expansion of the Northallerton sewage treatment works and improvements to the Romanby works, North Yorkshire. It is unclear how or to whom Rowe provided advice in this project. Possibly he gave help to Ken Mac Construction in their tender.

Reference and contact details: PWR/4/2/6/26/1

Specification for extensions and improvements

Dates: Jan 1982

Extent: 1 folder.

Scope and Content:

Project 4230 for the Yorkshire Water Authority, North Central Division. In an envelope marked 'Ken Mac Const. Northallerton'.

Reference and contact details: PWR/4/2/6/27

North West Regional Sludge Pipe

Dates: 1980–1983

Extent: 4 items.

Scope and Content:

Client: North West Water, Eastern Division.

Relating to the proposed Regional Sludge Pipeline Scheme for the North West Water Authority and, in particular, the section from the Bolton sewage works site in the Irwell Valley to the Davyhulme effluent treatment works. This section crossed several major roads, the Manchester Ship Canal and the Manchester to Wigan railway line. Rowe gave advice on the ground conditions for several of the crossings.

Reference and contact details: PWR/4/2/6/27/1

File

Dates: Apr 1980–11 Jun 1983

Extent: 2 folders.

Scope and Content:

Inscribed 'NWW Bridgewater Canal crossing'. Comprising correspondence between Rowe and North West Water, concerning the pipe jacking and implications of trial site pumping tests. With a "history of events leading to the thrust pit base heaving [in 1983]", 7 plans of the canal crossing (various scales) drawn by North West Water, April 1980–April 1982, tender documents and a report on the ground investigation by Sub Soil Surveys Ltd, March 1982.

Arrangement:

Divided into 2 folders: (1) 1980–July 1982, (2) August 1982–1983.

Reference and contact details: PWR/4/2/6/27/2

File

Dates: Mar 1982–Oct 1982

Extent: 2 folders.

Scope and Content:

Inscribed 'NW Water railway and road crossings'. Comprising correspondence between Rowe and North West Water, relating to major road and rail crossings in the Bolton to Davyhulme section of the regional sludge pipeline. With reports on the ground investigation by Sub Soil Surveys Ltd, March and October 1982 and 5 plans showing the A580 East Lancashire Road Crossing (various scales), drawn by North West Water, April 1982.

Arrangement:

Divided into 2 folders: (1) March–April 1982, (2) May–October 1982.

Reference and contact details: PWR/4/2/6/27/3

Correspondence

Dates: 7–12 Apr 1983

Extent: 2 sheets.

Scope and Content:

Between Rowe and North West Water, relating to Rowe's advice on the Bridgewater Canal crossing and terms and fees for continuing to work on the Regional Sludge Pipeline Project.

Reference and contact details: PWR/4/2/6/27/4

File

Dates: Nov 1983–28 Jan 1984

Extent: 1 folder.

Scope and Content:

Inscribed 'NWWA Oldham – Davyhulme crossing'. Comprising photographs of the sludge pipeline (1 volume and 15 loose), 2 plans of the crossing of the M62 and M66 motorways (scale 1:100) drawn by North West Water, November–December 1983 and a letter from Rowe to North West Water, concerning the ground conditions and dewatering, 28 January 1984.

Reference and contact details: PWR/4/2/6/28

Lytham Road Relief Sewer, Blackpool, Lancashire

Dates: 1960–1984

Extent: 6 items.

Scope and Content:

Client: Blackpool Borough Council.

Relating to the proposed relief sewer on Lytham Road, Blackpool, Lancashire, for Blackpool Borough Council. Rowe gave advice on the site investigation for the part of the sewer to be constructed on railway land, dewatering and methods of construction.

Arrangement:

Papers found loose in a box. The plans have been kept, as found, separate to the correspondence.

Reference and contact details: PWR/4/2/6/28/1

Bore-hole logs

Dates: Jan-Feb 1960

Extent: 10 sheets.

Scope and Content:

For the central area main drainage. Conducted by Elmat Limited for Blackpool Corporation.

Reference and contact details: PWR/4/2/6/28/2

Report on the site investigation

Dates: 14 Apr 1981

Extent: 26 sheets.

Scope and Content:

By Surveying Services for Blackpool Borough Council.

Reference and contact details: PWR/4/2/6/28/3

Correspondence

Dates: 14 Dec 1982–7 Oct 1984

Extent: 1 folder.

Scope and Content:

Between Rowe and Blackpool Borough Council, relating to the difficult ground conditions (silt and peat, with adjacent property). Includes Rowe's report on construction methods [September 1983], tender documents annotated by Rowe and MS notes.

Reference and contact details: PWR/4/2/6/28/4

Drawings

Dates: Jan-Aug 1983

Extent: 24 design drawings. Condition: drawings are badly creased. Mostly 80 x 120 cms (h x w). Various scales.

Scope and Content:

Showing the layout of the sewer, bore-holes and longitudinal sections, drawn by Blackpool Borough Council. Some are duplicate plans, with annotations by Rowe and others.

Reference and contact details: PWR/4/2/6/28/5

Bore-hole logs and test results

Dates: Jun-Jul 1983

Extent: 2 folders.

Scope and Content:

Conducted by Geo. Research Ltd.

Arrangement:

Divided into 2 folders as found.

Reference and contact details: PWR/4/2/6/28/6

Photographs

Dates: 19 Aug 1983

Extent: 2 soft-back volumes.

Scope and Content:

Volumes of colour photographs, taken as part of the site investigation by

Geo. Research.

Reference and contact details: PWR/4/2/6/29

Halton Western Industrial Sewer, Cheshire

Dates: 1978–1983

Extent: 1 item.

Scope and Content:

Client: Halton Borough Council.

Relating to the proposed industrial sewer at Halton, Widnes. Rowe was engaged as a consultant to Halton Borough Council in 1983 to provide advice on the site investigation. Rowe had previously given preliminary advice in the planning stages of the western sewer scheme in 1979.

Related Units of Description:

See also papers relating to Rowe's earlier advice on the western industrial sewer, PWR/4/2/6/21 and also papers relating to the eastern industrial sewer, PWR/4/2/6/33.

Reference and contact details: PWR/4/2/6/29/1

File

Dates: 4 Sep 1978–27 June 1983

Extent: 1 folder.

Scope and Content:

Inscribed 'Western Sewer, Halton Borough Council, 1983 (45)'. Comprising correspondence between Rowe and Halton Borough Council, relating to the revised line site investigation and 3 plans by the Engineering Services of Halton Borough Council.

Reference and contact details: PWR/4/2/6/30

Parkhead and Cartyne Relief Sewers, Strathclyde

Dates: 1983–1984

Extent: 1 item.

Scope and Content:

Client: G. Dew and Company Ltd, Civil Engineering Contractors.

Relating to phase 2 of the proposed construction of the Parkhead / Cartyne relief sewers for Strathclyde Regional Council. Rowe advised on the stability provisions for the cofferdam for the overflow chamber.

Reference and contact details: PWR/4/2/6/30/1

File

Dates: Jan 1983–29 Aug 1984

Extent: 1 folder.

Scope and Content:

Inscribed 'Dews, Strathclyde'. Comprising correspondence between Rowe, G. Dew and Company Ltd, Geo. Research Ltd and Strathclyde Regional Council, relating to the site investigations. Also includes a report on the site investigation by Murdoch MacKenzie (Foundations) Ltd, January 1983, 2 plans and longitudinal sections of the sewers, drawn by Strathclyde Regional Council Department of Sewerage, April 1983 and 1 plan of the cofferdam detail by G. Dew and Co. Ltd, 21 September 1983, bore-hole logs, MS notes, Rowe's undated report on the cofferdam and site investigation reports by Geo. Research, 5–10 January 1984.

Reference and contact details: PWR/4/2/6/31

Lustrum Pumping Station, Portrack, Cleveland

Dates: 1979–1983

Extent: 1 item.

Scope and Content:

Client: Northumbrian Water Authority.

Relating to the proposed construction of a pumping station at Lustrum, as part of the Portrack sewage treatment works scheme, Cleveland. Rowe had provided advice in 1979 on method of construction for the pumping station, recommending the use of a structural diaphragm wall. He was subsequently asked for advice on the calculations and information for tenderers.

Related Units of Description:

For Rowe's earlier advice to Northumbrian Water in connection with the same scheme, see PWR/4/2/6/12.

Reference and contact details: PWR/4/2/6/31/1

File

Dates: 3 Jul 1979–14 May 1983

Extent: 1 folder.

Scope and Content:

Inscribed 'NWA Lustrum Pumping Station'. Comprising correspondence between Rowe and the Northumbrian Water Authority, relating to the construction of the pumping station. Includes a plan of the pumping station (scale 1:500), drawn by the Northumbrian Water Authority, January 1983 and a report by the Directorate of Operations and Works, March 1983.

Reference and contact details: PWR/4/2/6/32

Haslington and Winterley Sewerage Scheme, Cheshire

Dates: 1980–1983

Extent: 1 item.

Scope and Content:

Client: Borough of Crewe and Nantwich.

Relating to the proposed sewerage scheme for Haslington and Winterley, Cheshire. Rowe was asked to comment on the information to be given to tenderers and any foreseeable problems in laying the sewer through areas of peat. There is no extant copy of Rowe's reply.

Reference and contact details: PWR/4/2/6/32/1

File

Dates: Jun 1980–31 Jan 1983

Extent: 1 folder.

Scope and Content:

Inscribed 'Haslington and Winterley'. Comprising a letter from the Borough of Crewe and Nantwich to Rowe, asking for his advice, 31 January 1983. Enclosed with the letter were copies of the site investigation carried out by Soils Engineering Ltd, June 1980 with additional laboratory tests, 5 August 1980 and also 2 drawings of the layout and bore-holes by the Borough Technical Officer (scale 1:2500), November and December 1980.

Reference and contact details: PWR/4/2/6/33

Halton Eastern Industrial Sewer, Cheshire

Dates: 1979–1983

Extent: 5 items.

Scope and Content:

Client: Halton Borough Council.

Relating to the proposed eastern industrial sewer at Halton, Widnes, Cheshire. Rowe provided advice on the site investigations. This was the continuation of the Western Industrial Sewer Scheme, for which Rowe had previously advised Halton Borough Council.

Related Units of Description:

See also material relating to the western industrial sewer at Halton, PWR/4/2/6/21 and PWR/4/2/6/29.

Reference and contact details: PWR/4/2/6/33/1

File

Dates: Feb 1979–31 Aug 1983

Extent: 1 folder; 5 design drawings.

Scope and Content:

Inscribed 'Halton B. Council, Widnes Eastern Ind. Sewer'. Comprising the specification, bill of quantities and conditions of contract for the site investigation, May 1983 with related material including 5 plans by the Engineering Services of Halton Borough Council, February 1979–March 1983.

Reference and contact details: PWR/4/2/6/33/2

Drawings

Dates: Nov 1982–Mar 1983

Extent: 10 design drawings.

Scope and Content:

Of the Halton eastern sewer, drawn by the Engineering Services of Halton Borough Council.

Reference and contact details: PWR/4/2/6/33/3

Bore-hole logs and daily reports

Dates: 6 Apr–20 Dec 1983

Extent: 2 folders.

Scope and Content:

By Explorations Associates. With correspondence between Halton Borough Council and Rowe, relating to tenders for the site investigation and 10 plans of the eastern sewer by the Engineering Services of Halton Borough Council, September-November 1983.

Arrangement:

Divided into 2 folders: (1) Bore-hole logs and correspondence, (2) plans.

Reference and contact details: PWR/4/2/6/33/4

Correspondence

Dates: 8 Feb-16 Aug 1983

Extent: 1 folder.

Scope and Content:

Between Rowe, Halton Borough Council and Exploration Associates, relating to the site investigation for eastern sewer at Halton.

Reference and contact details: PWR/4/2/6/33/5

Revised report on the Halton eastern industrial sewer

Dates: 18 Dec 1983

Extent: 5 sheets.

Scope and Content:

Rowe's report following revisions made to the line of the sewer at Bowers Brook.

Reference and contact details: PWR/4/2/6/34

Queen's Street Resewering, Northwich, Cheshire

Dates: 1976-1983

Extent: 1 item.

Scope and Content:

Client: Vale Royal District Council.

Relating to the problems encountered in resewering work in Queen's Street,

Northwich, Cheshire. Rowe reported on the ground conditions in relation to trench excavation dewatering and pipe bedding.

Reference and contact details: PWR/4/2/6/34/1

File

Dates: 23 Jun 1976–1 Dec 1983

Extent: 1 folder.

Scope and Content:

Inscribed 'Vale Royal DC new sewerage Northwich, 1983'. Comprising correspondence between Rowe and the Vale Royal District Council. Including site investigation reports by Holst Soil Engineering Ltd, 23 June 1976 and by Cheshire County Council, December 1982. With 5 plans of the proposed sewer layout, drawn by the Vale Royal District Council, December 1982, bore-hole logs for work conducted by Cheshire County Council, October 1983 and Rowe's report on the dewatering problems, 1 December 1983.

The letter from the District Council to Rowe of 17 October 1983, also makes reference to a housing scheme between Chesterway and London Road [Northwich] for which Rowe also gave advice.

Arrangement:

Divided into 2 folders: (1) Correspondence, (2) Plans.

Related Units of Description:

See papers relating to the housing scheme in PWR/4/2/7.

Reference and contact details: PWR/4/2/6/35

Market Hall Sewer Diversion, Wigan, Greater Manchester

Dates: 1981–1983

Extent: 1 item.

Scope and Content:

Client: T. Kilroe and Sons Ltd, Tunnel and Civil Engineering Contractors.

Relating to the sewer diversion at Market Hall, Wigan, Greater Manchester, as part of the Wigan North Resewerage Scheme for the Metropolitan Borough Council of Wigan. Rowe gave advice on the settlement at ground level, experienced during tunnelling operations.

It appears that Rowe also worked with T. Kilroe and Sons on Congleton drainage system and on Pendlebury sewer.

Reference and contact details: PWR/4/2/6/35/1

File

Dates: May 1981–1984

Extent: 1 folder.

Scope and Content:

Inscribed 'T. Kilroe, Pendlebury Sewer, 45'. Comprising a letter from T. Kilroe and Sons Ltd to Rowe, concerning problems in tunnelling operations, 9 December 1983. With bore-hole logs for Frog Lane, Wigan, conducted by Sub Soil Surveys Ltd in 1981 and 2 plans of the Market Hall sewer diversion, drawn by the Metropolitan Borough of Wigan, December 1982 and January 1983.

Also in the file were 3 plans of the Congleton drainage scheme, drawn by Congleton Borough Council, May-June 1982 and an undated site investigation for the Congleton Main Drainage Scheme, prepared by Manstock Geotechnical.

Also in the file was a sheet with a diagram of Pendlebury sewer, 1984.

Reference and contact details: PWR/4/2/6/36

Hyde Effluent Treatment Works, Greater Manchester

Dates: 1983–1985

Extent: 1 item.

Scope and Content:

Client: North West Water Association.

Relating to the reconstruction of sewerage works at Hyde, Greater Manchester. Rowe appears to have given advice on the ground conditions and dewatering.

Reference and contact details: PWR/4/2/6/36/1

File

Dates: Oct 1983–Jan 1985

Extent: 1 folder.

Scope and Content:

Inscribed 'NWWA Hyde ETW Geological appraisal, 1984'. Comprising calculation sheets for the inlet works at Hyde, compiled by North West Water in October 1983, Rowe's MS notes and a geological memo relating to the site investigation for works.

Reference and contact details: PWR/4/2/6/37

Bangor Sewerage and Sewage Disposal Scheme, Gwynedd

Dates: 1984

Extent: 1 item.

Scope and Content:

Client: A. H. S. Waters and Partners, Consulting Engineers.

Relating to the construction of the foreshore pumping station as part of the Bangor sewerage and sewage scheme for Welsh Water Authority, Gwynedd Division. Rowe, as a consultant with Edgar Morton and Partner, gave advice on the problems likely to be encountered in the construction of the pumping station.

Related Units of Description:

For papers relating to advice given previously by Edgar Morton and Partner relating to the Bangor Sewerage and Sewage Disposal Scheme, see PWR/4/2/6/24.

Reference and contact details: PWR/4/2/6/37/1

Correspondence

Dates: 16 Mar–20 Aug 1984

Extent: 29 sheets.

Scope and Content:

Between Rowe, Edgar Morton and Partner and A. H. S. Waters and Partners, relating to the pile driving and problems likely to be experienced in the construction of the pumping station, following the report by Thomas Vale and Sons. The file also contains a letter from Rowe to Rofe, Kennard and Lapworth relating to damage to bridge piers at Llandefedd, another scheme for the Welsh Water Authority, 22 March 1984.

Reference and contact details: PWR/4/2/6/38

Derwenthaugh Pumping Station, Blaydon, Tyne & Wear

Dates: 1983–1986

Extent: 4 items.

Scope and Content:

Client: Northumbrian Water Authority

Relating to the proposed construction of a rising main sewer from a pumping station at Derwenthaugh on the south bank of the River Tyne [at Blaydon, Tyne & Wear] as part of the Tyneside Sewerage Scheme. The pumping station was to be constructed within a temporary cofferdam. Rowe gave advice on the relief of ground-water pressure and recommended pumping tests in the bedrock.

Related Units of Description:

For papers relating to Rowe's earlier work on the Tyneside Sewerage Scheme, see PWR/4/2/6/11.

Reference and contact details: PWR/4/2/6/38/1

Drawings

Dates: Jan 1983–May 1985

Extent: 8 design drawings. 80 x 120 cms (h x w). Various scales.

Scope and Content:

Of the substructure of the pumping station and rising main and works requirements. Drawn by the Northumbrian Water Authority Directorate of Operations and Works.

Reference and contact details: PWR/4/2/6/38/2

Supplementary report on Derwenthaugh Pumping Station

Dates: Mar 1984

Extent: 1 soft-back volume.

Scope and Content:

By Soil Mechanics Ltd as part of the site investigation for the Eastern Interceptor sewer, Tyneside Sewerage Scheme.

Reference and contact details: PWR/4/2/6/38/3

Report on the site investigation

Dates: Aug 1984

Extent: 1 soft-back volume.

Scope and Content:

By the Northumbrian Water Authority.

Reference and contact details: PWR/4/2/6/38/4

Correspondence

Dates: 30 Apr 1985-28 Jan 1986

Extent: 1 folder.

Scope and Content:

Between Rowe and Northumbrian Water. Relating to the pumping out test results. Including data provided by Northumbrian Water and Wimpey Laboratories Ltd and an engineering comment on the pumping station, April 1985 and a report by Wimpey Laboratories on the ground-water pumping tests, August 1985.

Reference and contact details: PWR/4/2/6/39

Rhyl Main Drainage Scheme, Clwyd

Dates: 1985

Extent: 4 items.

Scope and Content:

Client: Borough of Ruddlan.

Relating to the main drainage scheme for Rhyl, Clwyd (Denbighshire) which involved the construction of over 6 km of sewers. Rowe, working for Edgar Morton and Partner, appears to have provided advice on drilling machines.

Reference and contact details: PWR/4/2/6/39/1

Letter

Dates: 31 Jul 1985

Extent: 41 sheets.

Scope and Content:

From C.W. Isherwood of Edgar Morton and Partner to the Borough Engineer and Surveyor for the Borough of Rhuddlan. This comments on the results of the site investigation of 1984.

Reference and contact details: PWR/4/2/6/39/2

Letter

Dates: 7 Nov 1985

Extent: 38 sheets.

Scope and Content:

From C.W. Isherwood of Edgar Morton and Partner to the Borough Engineer and Surveyor for the Borough of Rhuddlan. This comments on the site investigations of 1984 and 1985.

Reference and contact details: PWR/4/2/6/39/3

Letter

Dates: 21 Feb 1986

Extent: 2 sheets.

Scope and Content:

From Rowe to C.W. Isherwood of Edgar Morton and Partner, relating to the new Rollshor machine.

Reference and contact details: PWR/4/2/6/39/4

Letter

Dates: 8 May 1987

Extent: 5 sheets.

Scope and Content:

From Rowe to John Taylor and Sons, relating to the tunnel boring machine.

Reference and contact details: PWR/4/2/6/40

Knutsford Resewerage, Cheshire

Dates: 1985–1988

Extent: 5 items.

Scope and Content:

Client: Jim Ennis Construction Ltd, Civil Engineering Contractors.

Relating to the resewerage scheme for Knutsford for the Borough of Macclesfield.

Rowe was asked for advice on ways of solving the ground-water problems, encountered by the contractors.

Arrangement:

Loose papers found in the box.

Reference and contact details: PWR/4/2/6/40/1

Report

Dates: Feb 1985

Extent: 1 soft-back volume.

Scope and Content:

On the ground investigation along the lines of proposed Knutsford re-sewerage scheme stage 1, section 2. By Sub Soil Surveys Ltd for Macclesfield Borough Council.

Reference and contact details: PWR/4/2/6/40/2

Factual report on Knutsford re sewerage

Dates: 4 Jun 1986

Extent: 1 soft-back volume.

Scope and Content:

Compiled by Strata Surveys Ltd.

Reference and contact details: PWR/4/2/6/40/3

Hydrogeological report

Dates: Oct 1987

Extent: 1 folder.

Scope and Content:

By North West Water.

Reference and contact details: PWR/4/2/6/40/4

Correspondence

Dates: Feb -15 Jun 1988

Extent: 1 folder.

Scope and Content:

Between Rowe, DEMCO (drilling equipment manufacturers), Jim Ennis Construction Ltd, the Chief Technical Officer for the Borough of Macclesfield and Ground Water Control Ltd, relating to ground-water problems. Including bore-hole logs by Manchester Geotechnical Ltd, a report on the ground investigation by Sub Soil Surveys Ltd, May 1988 and a plan of the pumping station site (scale 1:100), drawn by the Borough of Macclesfield Technical Officer, May 1988.

Reference and contact details: PWR/4/2/6/40/5

Report on the site investigation

Dates:n.d. [1988]

Extent: 1 folder.

Scope and Content:

By North West Water. With bore-hole logs and test data from Geo. Research.

Reference and contact details: PWR/4/2/6/41

Lytham St Anne's Resewerage, Lancashire

Dates:1989-1990

Extent: 2 items.

Scope and Content:

Client: Kilroe Civil Engineering Ltd.

Relating to the sewerage scheme for Lytham St. Anne's, Lancashire for North West Water. This included the replacement of two sewers at Clifton Drive / St Anne's Road and Smithy Lane / Heyhouses Lane. Rowe gave advice to Kilroe Civil Engineering regarding the existing ground conditions and then advised on the problems of formation heave and settlement.

Reference and contact details: PWR/4/2/6/41/1

Report on the site investigation

Dates:Mar 1989

Extent: 1 soft-back volume.

Scope and Content:

Carried out by Soil Mechanics Ltd for North West Water. Relating to phase 4 of the scheme (volume 3).

Reference and contact details: PWR/4/2/6/41/2

Correspondence

Dates: 23 Nov 1989–17 Apr 1990

Extent: 14 sheets.

Scope and Content:

Between Rowe and Kilroe Civil Engineering Ltd, concerning the causes of and methods of solving problems of settlement due to temporary dewatering.

Reference and contact details: PWR/4/2/6/42

Oldham Deep Interceptor Sewer, Greater Manchester

Dates: 1990–1991

Extent: 1 item.

Scope and Content:

Client: Oldham Metropolitan Borough.

Relating to the Odis southern branch sewer, Oldham, Greater Manchester. Rowe gave advice on the problems occurring during sinking.

Reference and contact details: PWR/4/2/6/42/1

File

Dates: 1 Nov 1990–10 Apr 1991

Extent: 1 folder.

Scope and Content:

Inscribed 'Oldham Borough Council (NWW) Mr Walthell'. Comprising correspondence between Rowe, the Director of Technical Services for Oldham Metropolitan Borough and North West Water, regarding alternative methods for construction of the shaft. With Rowe's MS notes and pages from a site investigation of Snipe Clough, Oldham by Strata Surveys Ltd.

Reference and contact details: PWR/4/2/7

Other British Construction Projects

Dates: 1957-1993

Extent: 94 sub-subseries (277 items).

Scope and Content:

Peter Rowe worked on a large number of civil engineering projects, problems and proposals in Britain, relating to sewage schemes, housing developments, land reclamation schemes, coal mines, sugar silos, storage facilities for chemicals and gases, and factory and office developments. Most of the consultancy work was undertaken on behalf of local authorities, water authorities, nationalized industries such as the National Coal Board, Central Electricity Generating Board and British Waterways, and public and private limited companies. Among the most significant consultancy projects in this series, Rowe worked on the Alness oil rig construction site on the Cromarty Firth, and on the investigation of the Aberfan Tip Disaster in 1966.

This component of the archive overlaps with others such as Reservoirs and Dams (PWR/4/2/1), Offshore Structures (PWR/4/4), and Litigation (PWR/4/5). For example, Rowe worked for the British Waterways Board concerning the Marple Canal and the Peak Forest Canal Woodley Embankment (part of the Macclesfield and Peak Forest Canals group), and concerning Tunnel End Reservoir, Marsden, Yorkshire. Papers relating to the former are found within this series (PWR/4/2/7/44), while the latter occurs within the Reservoirs and Dams component (PWR/4/2/1/101).

Projects are arranged in alphabetical order, according to the name or location of each project site. Among the general and miscellaneous files at the end of this series, there is material concerning the Rowe Consolidation Cell. This includes correspondence between Rowe and The Armfield Hydraulic Engineering Co. Ltd relating to Rowe Consolidation Cell royalty payments and sales, 1966-1967, and a copy of his paper "A New Consolidation Cell", published by the Institution of Civil Engineers in 1966.

Reference and contact details: PWR/4/2/7/1

Aberfan Tip Disaster

Dates: 1966-1967

Extent: 2 folders.

Scope and Content:

Aberfan Tip Disaster, Aberfan near Merthyr Tydfil, South Wales - Aberfan Tribunal Inquiry: National Coal Board. Client: solicitors for the National Union of Teachers. Correspondence, plan of Merthyr Vale Colliery showing the Pictorial Layout of Rubbish & Coal Handling Plants & Tailings Plant, November 1966, site investigation and test data, calculations, reports, notes on the history of coal preparation, Merthyr Vale Colliery, in relation to the Aberfan Tip Disaster, diagrams, sketches, and client documents, including much Edgar Morton and Partner material such as the Notes on the Aberfan Slips for the Information of Counsel, 13 December 1966, and relating to the Aberfan coal waste mountain ("slag heap") slip of 1966 (including former slips in 1944 and 1963) causing 144 deaths when the mountain slipped down onto a school.

Edgar Morton states the urgent measures he believes are needed to ensure the immediate safety of the Aberfan residents, and that these should be considered a priority and of paramount importance before conducting tests and investigations to determine the cause of the disaster.

Reference and contact details: PWR/4/2/7/2

Alness Cofferdam, Cromarty Firth, Ross and Cromarty

Dates: 1972-1974

Extent: 11 folders.

Scope and Content:

Alness Site Development, Alness Point, Cromarty Firth, Ross and Cromarty (Highland): Cofferdam for Brent Field Oil Rig. Correspondence, test data including bore-hole records, calculations, plans, report (Terresearch Ltd) with accompanying calculations, notes, jottings, notes of meetings, and pumping test specification (Taylor Woodrow Construction Ltd), relating to cofferdam design and pumping test.

Related Units of Description:

See also Brent Field, PWR/4/4/7.

Reference and contact details: PWR/4/2/7/3

Ampthill Bulk Supply Scheme Trunk Main, Bedfordshire

Dates: 1966-1969

Extent: 2 folders.

Scope and Content:

Ampthill Bulk Supply Scheme Trunk Main, Bedfordshire. Client: Buckinghamshire Water Board. Correspondence, graphs, test data, and plans, Edgar Morton and Partner material, relating to proposed diversion of 30" diameter trunk main around the perimeter of the proposed engineering proving ground which Vauxhall Motors Ltd were constructing at Ampthill near Lidlington/Millbrook, Bedfordshire.

Reference and contact details: PWR/4/2/7/4

[Point of] Ayr Surface Drift Mine, Clwyd

Dates: 1982-1984

Extent: 1 folder.

Scope and Content:

[Point of] Ayr Surface Drift Mine, Clwyd (Flintshire) - National Coal Board, Western Area. Client: A. Monk and Co. plc (building and civil engineering contractors). Letter, method statement, and plans, relating to C4548 Point of Ayr Surface Drift Mine: dewatering and demolition problems, and cofferdam works.

Reference and contact details: PWR/4/2/7/5

Basing Mill Weir, Basingstoke, Hampshire

Dates: 1969

Extent: 2 folders.

Scope and Content:

Basing Mill Weir, River Loddon, near Basingstoke, Hampshire. Client: Thames Conservancy. Correspondence, plans, site investigation, and test data relating to proposed new weir at Basing Mill, including ground-water control problem. Rowe and Edgar Morton and Partner material.

Reference and contact details: PWR/4/2/7/6

Beeston Castle and Tarporley Station Government Storage Facility, Cheshire

Dates: 1966-1972

Extent: 2 folders.

Scope and Content:

Beeston Castle and Tarporley Station Government Oil Storage Facility, near Tarporley, Cheshire. Client: Texaco Ltd (formerly Regent Oil Co. Ltd). Correspondence, site investigation report, test data including bore-hole logs, photographs (bore-hole samples, rail siding area, tank sites), notes, jottings, and plans (including copy of old plan dated 1939), relating to soil investigation and land drainage at the oil storage goods sidings. Includes Rowe and Edgar Morton and Partner material, and undated typed [draft] report document concerning sandtip slips at quarry occupied by the Asphalt Plant of the Limmer and Trinidad Asphalt Co. (operational since August 1965): annotation in Rowe's handwriting at top of the document states "Discussed 1 hr. Quarry. Beeston. Commercial Union Assurance Group."

Reference and contact details: PWR/4/2/7/7

Bergholt Water Tower, West Bergholt, Essex

Dates: 1965

Extent: 1 folder.

Scope and Content:

Bergholt Water Tower, West Bergholt, Essex: River Colne Scheme. Client: Colchester and District Water Board. Correspondence, site plans, test data, and site investigation, Edgar Morton and Partner material, relating to proposed water tower. Includes a reference to Bourne Brook Reservoir exploratory bore-hole.

Reference and contact details: PWR/4/2/7/8

Black Lion Tip Area, Taff Vale Trunk Road, Glamorgan

Dates: 1982

Extent: 1 folder.

Scope and Content:

Black Lion Tip area, Taff Vale Trunk Road (A470), Mid Glamorgan (Rhondda Cynon Taff). Correspondence, diagram, jottings, etc., relating to dewatering of the Black Lion tip (colliery waste tip).

Reference and contact details: PWR/4/2/7/9

Boat Inn, Erbistock, near Wrexham, Denbighshire

Dates: 1965-1966

Extent: 1 folder.

Scope and Content:

Boat Inn, Erbistock, near Wrexham, Denbighshire (Wrexham). Client: J. Chamberlain Esq. Correspondence, plan, test data, graphs, diagrams, and calculations relating to landslip due to car park being extended towards the Boat Inn, and related legal considerations.

Reference and contact details: PWR/4/2/7/10

British Tar Products Ltd, Cadishead, Lancashire

Dates: 1962-1967

Extent: 2 folders.

Scope and Content:

British Tar Products Ltd, Cadishead, Lancashire (Greater Manchester) - storage tanks. Client: British Tar Products. Correspondence, plan, site investigation and test data, photograph, diagrams, and calculations, relating to failure of B9ST

storage tank, proposed new tank construction programme, and related testing. Includes correspondence and notes relating to Lancashire Tar Distillers Ltd legal case (unrelated to the tank collapse at British Tar Products Ltd next door) concerning an accident at their Cadishead premises in which two men were killed and others injured, 28 April 1964: request for Rowe's services as expert witness declined, he suggested the company use Edgar Morton and Partner instead.

Reference and contact details: PWR/4/2/7/11

British Transport Commission, Derby

Dates: 1962

Extent: 1 folder.

Scope and Content:

British Transport Commission, British Railways Research Department site, Derby. Correspondence, drawings, site investigation and test data (Manchester University), and notes, relating to fatigue pit foundation problem. Includes copy letter from Rowe dated October 1965 relating to settlement of account.

Reference and contact details: PWR/4/2/7/12

British Waterways Canals System Study

Dates: March 1974

Extent: 1 folder.

Scope and Content:

British Waterways Canals System study. Clients: Department of the Environment and the British Waterways Board. Correspondence, Rowe's list of Works and Clients he was currently advising, and notes relating to background to the study (D.O.E.), relating to request by Rowntree Boddington Associates for Rowe to join their team if their submission bid for the Canals System study is successful. Includes references to a Memorial Fund and Memorial Lecture in memory of the late Edgar [Morton].

Reference and contact details: PWR/4/2/7/13

Bury St Edmunds Sugar Factory, Suffolk

Dates: 1972-1988

Extent: 34 folders.

Scope and Content:

Bury St Edmunds Sugar Factory, Suffolk. Client: British Sugar Corporation Ltd; later British Sugar plc. Correspondence, test data including soil investigations, report, case study, and other documents relating to the cracking of columns

supporting the sugar silos (designed by John Laing Design Associates) and related problems with behaviour (the "creep[ing]") of the chalk under the silos; model silo experiments (1, 4, 6), 1987; reports and other documents relating to litigation, 1987, inc. relating to case solicitors (Lowell, White and King); tender, estimates, minutes of meetings, site investigation material including Terresearch report (with photographs of chalk cores), plans, calculations, progress sheets (drilling records, etc.), notes, jottings, diagrams and sketches, graphs, and other documents relating to proposed new silo no. 6, 1984-1985; report relating to cracking of silos 3 and 4 in 1983; group photograph of the delegates (including Rowe) at the British Sugar plc Technical Conference June 1988, and joint papers by Rowe and others given at the same conference. Includes references to Felstead sugar factory tests, 1987.

Related Units of Description:

See also Litigation Papers, PWR/4/5/72, which overlaps with PWR/4/2/7/13 relating to legal matters appertaining to the Bury St Edmunds sugar silos.

Reference and contact details: PWR/4/2/7/14

Canvey Island, Essex

Dates: 1960-1972

Extent: 23 folders.

Scope and Content:

Canvey Island, Essex - Liquid Natural Gas (LNG) storage. Client: North Thames Gas Board. Correspondence with Sir Robert McAlpine and Sons, and Toplis and Harding (loss adjusters), calculations, plans, notes, minutes of meetings, site investigation material, diagrams, test data including freezing tests photographs and negatives, reports especially an extensive, numbered (by Rowe) series of Frozen Ground Storage Reports (Conch International Methane Ltd, for various UK and overseas clients), and study, relating to stability of the concrete cofferdam for proposed methane underground storage, November 1965, related technical articles and extracts, and other material, relating to contractual claim and litigation concerning design and other problems.

Related Units of Description:

See also Canvey Island, PWR/4/5/74.

Reference and contact details: PWR/4/2/7/15

Cardiff Telephone Exchange

Dates: 1973

Extent: 2 folders.

Scope and Content:

Cardiff Telephone Exchange, Cardiff, Glamorgan - Post Office

Telecommunications Division; Fondedile Foundations Ltd. Correspondence, article relating to SPT [sic] testing, and site investigation report (Soil Mechanics Ltd) relating to proposed multi-storey telephone exchange at Park Street, Cardiff. Includes reference to Fondedile Foundations Ltd wishing to also submit a claim for similar work at Leicester.

Related Units of Description:

See also Leicester Cardinal Telephone Exchange, PWR/4/2/7/37.

Reference and contact details: PWR/4/2/7/16

Cledford Lane Settlement Lagoons, Middlewich, Cheshire

Dates: 1967-1987

Extent: 8 folders.

Scope and Content:

Cledford Lane Settlement Lagoons, Middlewich, Cheshire. Client: British Salt Ltd. Correspondence, photographs, calculations, notebook, diagrams, test data including bore-hole logs, site investigation material relating to railway lines and lagoon embankment (Cerebos Foods Ltd), 1967-1968, and reports (including Rowe's draft report), relating to stability of the walls of the lagoons, the possibility of Cheshire County Council's requirement as a Local Authority to register the brine lagoons (used for effluent disposal) as a large raised reservoir structure under the Reservoirs Act, 1975; and other matters.

Reference and contact details: PWR/4/2/7/17

Cominco UK Ltd, Hartlepool, Cleveland

Dates: 1973-1975

Extent: 6 folders.

Scope and Content:

Cominco UK Ltd zinc plant, Seaton Carew, Hartlepool, Cleveland. Correspondence, test data including old readings, 1965, plots and graphs, reports by Rowe and Terresearch Ltd, plans, notes, diagrams, calculations, site and soils investigations, including additional site investigation at the Leathers Chemical Works site at Seaton Carew relating to proposed zinc concentrate storage facility (contractor: Taylor Woodrow Construction Ltd) - later abandoned and not implemented. Includes two letters, August 1966 relating to equipment familiarity and other consultancy matters.

Reference and contact details: PWR/4/2/7/18

Cotes Park Industrial Estate, Alferton, Derbyshire

Dates: 1979-1986

Extent: 7 folders.

Scope and Content:

Cotes Park Industrial Estate, Alferton, Derbyshire; two projects: a) Balken Piling Ltd site, Somercotes; b) Strand Furniture Ltd, Alferton factory. Correspondence, plans, site investigation material, Rowe's advice, reports, test data including bore-hole logs, calculations, notes, relating to embankment stability proposed remedial works, and legal case v. Derbyshire County Council and Amber District Council, 1980-1983. Site is situated on reclaimed coal workings.

Correspondence, plans, photographs, site investigation material, reports, calculations, notes, rainfall figures, test data including bore-hole logs, and Rowe's advice on embankment slips and comments on reports, relating to factory for Frincon Holdings Ltd at the Alferton site, 1980-1985. Includes copy mining rig reports, 1955.

Reference and contact details: PWR/4/2/7/19

Denton Swimming Baths, Denton, Lancashire

Dates: 1966-1968

Extent: 1 folder.

Scope and Content:

Denton Swimming Baths, Denton, Lancashire (Greater Manchester). Client: Denton Urban District Council. Correspondence, plans, diagrams, site investigation and test data, relating to proposed public swimming baths, Edgar Morton and Partner report and advice on foundation design aspects.

Reference and contact details: PWR/4/2/7/20

Dunston Strategic Site, Tyneside

Dates: 1980-1983

Extent: 13 folders.

Scope and Content:

Dunston Strategic Site, Tyneside Enterprise Zone, Gateshead, Tyne & Wear - Cross Lane Reclamation Scheme. Clients: Tyne & Wear County Council and Gateshead Metropolitan Borough Council. Correspondence, aerial photographs, site investigation material, plans, test data, reports including geotechnical and feasibility study, meetings minutes and notes, calculations, diagrams, jottings, graphs, notes, and piezometer records, relating to reclamation of derelict land, Dunston, for proposed ash lagoons, etc., Cross Lane site, Dunston Power Station. Includes Tyneside Enterprise Zone publicity leaflets, and lab test results (Geo-

Research Ltd) for Cross Lane outfall sewer, n.d., it being unclear if the latter relates to the Cross Lane reclamation scheme.

Related Units of Description:

See also Tyneside Enterprise Zone - Metro Centre, PWR/4/2/7/81.

Reference and contact details: PWR/4/2/7/21

Eltonhead Road Estate, St Helens, Merseyside

Dates: Jan 1981

Extent: 1 folder.

Scope and Content:

Empty folder.

Related Units of Description:

See also Farringdon Close, Eltonhead Estate, PWR/4/5/30.

Reference and contact details: PWR/4/2/7/22

Exxon Production Research Company, Bering Sea

Dates: 1977

Extent: 1 folder.

Scope and Content:

Exxon Production Research Company - Parametric Design Study, Bering Sea: Research undertaken by Taylor Engineering Ltd on Exxon's behalf. Two letters, calculations, and notes of meeting, relating to foundation problems for the above study, and related seismic concerns.

Reference and contact details: PWR/4/2/7/23

Eyton Mound, Telford, Shropshire

Dates: 1979

Extent: 1 folder.

Scope and Content:

Eyton Mound, Telford, Shropshire. Client: Fairclough Civil Engineering Ltd. Correspondence, preliminary ground investigation report, notes, sketches and diagrams relating to site investigation and proposed remedial measures for stabilisation of Eyton Mound land slip.

Reference and contact details: PWR/4/2/7/24

Glossop, Derbyshire

Dates: 1964-1971

Extent: 2 folders.

Scope and Content:

Glossop, Derbyshire: a) Refuse Pulverisation Plant; b) Development at The Royle, High Street East. Client: Glossop Borough Council. Correspondence, reports, test data including lab. test results (Geo-Research Ltd), calculations, and plans, Edgar Morton and Partner material, relating to proposed refuse pulverisation plant, 1971.

Correspondence, plans, calculations, diagrams, site investigation and test data including geological material, notes, Edgar Morton and Partner material, relating to proposed development (several storeys) at The Royle, 1964.

Reference and contact details: PWR/4/2/7/25

Hale Barns Church, Altrincham, Cheshire

Dates: 1966-1967

Extent: 1 folder.

Scope and Content:

Hale Barns Church, Hale Barns, near Altrincham, Cheshire. Client: Cooper and Beal, Chartered Civil Engineers. Correspondence, plans, site investigation, and settlement analysis, relating to proposed new church at Hale Barns. Includes reference to a deep pond not revealed by the bore-holes. Total weight of the church "is some 750 tons".

Reference and contact details: PWR/4/2/7/26

Haverigg Pool Improvement Scheme, Cumberland

Dates: 1967

Extent: 1 folder.

Scope and Content:

Haverigg Pool Improvement Scheme, Haverigg near Millom, Cumberland (Cumbria). Client: Lancashire River Authority. Correspondence, plans, site investigation and test data, sketches, graph, and soil survey (Cumberland County Council Highways Laboratory), relating to proposed diversion channel, and design of same.

Reference and contact details: PWR/4/2/7/27

Hayhurst Close, Northwich, Cheshire

Dates:1983

Extent: 1 folder.

Scope and Content:

Hayhurst Close, Hallfields Road, Northwich, Cheshire: specialist housing. Client: Vale Royal District Council. Correspondence, plans, sketches, jottings, diagrams, notes, calculations, and test data, relating to proposed housing development.

Reference and contact details: PWR/4/2/7/28

Heatley Salt Field, Agden Salt Works, Cheshire

Dates:1961

Extent: 1 folder.

Scope and Content:

Heatley Salt Field, Agden Salt Works, Agden Cheshire - proposed ethylene storage in a spherical cavity in the rock salt. Letter to Edgar Morton and Partner giving Rowe's views relating to the specific allowable pressure range concerning the above storage, and accompanying calculations sheet.

Reference and contact details: PWR/4/2/7/29

Henbury Hall, Macclesfield, Cheshire

Dates:1979-1981

Extent: 1 folder.

Scope and Content:

Henbury Hall, Henbury, Macclesfield, Cheshire: ornamental lake. Client: Robb of St Ives (Water Services) Ltd. Correspondence, publicity leaflet (Robb of St Ives), reports by G.H. Hill and Sons, and Rowe's advice relating to proposed construction of "an ornamental sheet of water" on the site of the Henbury Park old lake, for Mr de Ferranti [owner]. Includes copy letters relating to "restoration of the big lake" and proposed repair to the breached dam, 1959.

Reference and contact details: PWR/4/2/7/30

Hirwaun, Aberdare Valley, Glamorgan

Dates:1973

Extent: 1 folder.

Scope and Content:

Hirwaun, Aberdare Valley area, Glamorgan (Rhondda Cynon Taff) - Liquid Natural Gas (LNG) storage. Correspondence with Sir Robert McAlpine and Son, plans and bore-hole records, Rowe's observations, and invitation to tender, relating to proposed construction of an underground LNG storage facility at Hirwaun.

Reference and contact details: PWR/4/2/7/31

ICI (Imperial Chemical Industries)

Dates: 1953-1981

Extent: 8 folders.

Scope and Content:

ICI (Imperial Chemical Industries); two projects a) ICI Blackley Works, Foodstuffs Division, Blackley, Manchester - new AR.TS [sic] Building; b) ICI Heavy Organic Chemicals Division - Brine Storage Reservoirs at ICI Billingham and ICI Wilton on Teesside, including Ethylene Storage. Correspondence, plans, site investigation material including Holst [& Co. Ltd] report, 1966, and Soil Mechanics Ltd report and test data concerning reconstruction of Crumpsall Vale Sewer, Blackley, Manchester, 1953, which adjoined the southern perimeter of the Blackley site, test data including bore-hole logs, graphs, calculations, notes of meeting, and Rowe's comments and advice, relating to foundations and settlement problems concerning the proposed new building, 1969-1970. Sir Frederick Snow and Partners.

Correspondence, test data including bore-hole and drilling records, graphs, contract documents, notes, calculations, sketches, slope stability data, and plans, relating to rapid drawdown condition of reservoir embankments and other matters, 1964-1981.

Reference and contact details: PWR/4/2/7/32

Immingham Super Terminal, Lincolnshire

Dates: 1966-1972

Extent: 5 folders.

Scope and Content:

Immingham Super Terminal, South Killingholme Haven, Immingham, (North East) Lincolnshire - National Coal Board Coal stacks. Correspondence, plots and graphs, field trials material, notes, on-shore site investigation material including report, plans, calculations, bore-hole records, Atlas computer printouts (slope stability, 1966), and test data including piezometer records and centrifuge model soil tests, relating to proposed conveyor system and coal stacking area, and stability of the proposed coal stacks. Rowe's advice to George Wimpey and Co. Ltd.

Reference and contact details: PWR/4/2/7/33

Kay Brothers Plastics, Macclesfield, Cheshire

Dates: 1962

Extent: 1 folder.

Scope and Content:

Kay Brothers Plastics - Bollington Mill, Macclesfield, Cheshire. Trial bore-holes report (Edgar Morton and Partner), plan, and results of borings diagram, relating to proposed construction of a single storey factory at the site.

Reference and contact details: PWR/4/2/7/34

Kelvin Viaduct, Glasgow

Dates: 1982

Extent: 2 folders.

Scope and Content:

Kelvin Viaduct, Glasgow: repairs to underbridges (Kelvin Viaduct) Charing Cross to Partick and Helensburgh to Airdrie. Client: British Railways Board, Scottish Region. Correspondence, plans, calculations, report, test data including bore-hole logs, contract, and notes, relating to ground investigation by Fairclough Civil Engineering Ltd relating to proposed embankment retaining wall, Kelvin Viaduct, for British Railways.

Reference and contact details: PWR/4/2/7/35

Kinlochbervie, Highland

Dates: 1987

Extent: 1 folder.

Scope and Content:

One page of notes with calculations. It is unclear what this relates to: possibly a harbour or offshore drilling installation.

Reference and contact details: PWR/4/2/7/36

Knights Hill Land, Lambeth, London

Dates: 1963-1978

Extent: 2 folders.

Scope and Content:

Knights Hill land, Rosendale Road, Lambeth, London - London County Council: construction claim. Correspondence, plans, site investigation and test data, calculations and notes, originally in one file entitled 'Ground Movement', including Fairclough Building Ltd material, plus separate report and Rowe's advice relating to construction difficulties.

Related Units of Description:

See also Knight's Hill, PWR/4/5/82.

Reference and contact details: PWR/4/2/7/37

Leicester Cardinal Telephone Exchange

Dates: 1967-1975

Extent: 3 folders.

Scope and Content:

Leicester Cardinal Telephone Exchange, Humberstone Road, Leicester - Fondedile Foundations Ltd v. Costain Construction Ltd. Correspondence, bore-hole logs, reports, plans, calculations, diagrams, notes, site investigation, photograph, and legal material, relating to subcontractor Fondedile Foundations Ltd legal claim against their contractor Costain Construction Ltd concerning changed ground conditions encountered in constructing the diaphragm wall at the site. Includes reference to the death of Mr Oriani (Fondedile), February 1974.

Reference and contact details: PWR/4/2/7/38

Leighton Hospital, Crewe, Cheshire

Dates: 1964-1966

Extent: 1 folder.

Scope and Content:

Leighton Hospital, Crewe, Cheshire. Client: Manchester Regional Hospital Board. Correspondence, plans, site investigation material, test data from Manchester University, bill of quantities, reports including ground investigations and progress report, and calculations, Edgar Morton and Partner material, relating to proposed new South Cheshire Hospital at Leighton site.

Reference and contact details: PWR/4/2/7/39

Leyland Motors Ltd, Higher Farington, Leyland, Lancashire

Dates: 1966-1967

Extent: 1 folder.

Scope and Content:

Leyland Motors Ltd, Higher Farington site, Leyland, Lancashire - Spurrier Works: new engine production and test factory. Correspondence, map and plans, site investigation and test data, and notes, relating to the proposed factory.

Reference and contact details: PWR/4/2/7/40

Leyton Borough Council, London

Dates: 1963-1964

Extent: 2 folders.

Scope and Content:

Leyton Borough Council, London - Montague Road Development: London Borough of Waltham Forest [merger of Leyton Borough Council and others] v. Le Grand Adsko Ltd. Correspondence, plans, site investigation material, calculations, and test data including bore-hole logs and test results, Edgar Morton and Partner material, relating to legal claim concerning the proposed flats (tower blocks housing site).

Reference and contact details: PWR/4/2/7/41

Madingley, Cambridge

Dates: 1979

Extent: 2 folders.

Scope and Content:

Madingley, Cambridge – Cambridge University Engineering Department/Department of Energy: West Cambridge site, University of Cambridge. In situ soil tests report, Shorts Site, May 1979, by PM Insitu Techniques Ltd, and two site investigation field reports (full scale pile tests), March and April 1979 (the former has bore-hole samples photographs pasted in), by Fugro Geotechnical Consultants, relating to site and laboratory tests and subsequent results.

Reference and contact details: PWR/4/2/7/42

Manchester International Airport

Dates: 1980-1981

Extent: 2 folders.

Scope and Content:

Manchester International Airport runway extension - Manchester International Airport Authority. Correspondence, site investigation tender (Vol. 4), map, notes, test data, and calculations, relating to proposed main runway extension at the Airport. Rowe was employed as a consultant by Taylor Woodrow Construction (Northern) Ltd to assist with submitting a tender to Manchester International Airport Authority for the above project.

Reference and contact details: PWR/4/2/7/43

Marley Hill Opencast Mine, Tyne & Wear

Dates: 1990

Extent: 1 folder.

Scope and Content:

Marley Hill Opencast Mine, Tyne & Wear - Gateshead Metropolitan Borough Council: Public Inquiry. Correspondence, maps, jottings, calculations, notes, Proof of Evidence Appeal document, reports including Rowe's and Exploration Associates' report on sand and gravel resources material, concerning an application by the British Coal Corporation for a proposed opencast coal site at Marley Hill, refused by Gateshead MBC. Rowe asked Edgar Morton and Partner for advice.

Related Units of Description:

See also Marley Hill, PWR/4/5/85.

Reference and contact details: PWR/4/2/7/44

Marple Canal and the Peak Forest Canal, Greater Manchester

Dates: 1979-1980

Extent: 2 folders.

Scope and Content:

Marple Canal and the Peak Forest Canal, part of the Macclesfield and Peak Forest Canals group - British Waterways Board: Woodley Embankment (Greater Manchester). Bore-hole logs (Geo-Research Ltd), and related jottings, 1979; correspondence, site investigation report, mining report, calculations, and minutes of meeting, relating to assessment of effects of mining activities on stability of the Woodley embankment, 1980, also details relating to Bollington and Dane-in-Shaw Embankments on the Macclesfield Canal. G.H. Hill and Sons.

Reference and contact details: PWR/4/2/7/45

Meathop Tidal Embankment, Cumbria

Dates:1979-1980

Extent: 3 folders.

Scope and Content:

Meathop Tidal Embankment, Cumbria - North West Water (Rivers Division) and Cumbria County Council. Correspondence, site investigation reports including supplementary soil survey, test data, map, plans, 1978, diagrams, sketches, and ground-water levels relating to proposed reconstruction of the Embankment, and Rowe's advice sought.

Reference and contact details: PWR/4/2/7/46

Mersey South Banks, Cheshire

Dates:1980-1989

Extent: 4 folders.

Scope and Content:

Mersey South Banks - Cheshire County Council: land reclamation scheme (jointly funded study) and proposed utilisation of waste deposits such as PFA (Pulverised Fuel Ash or flyash) as the landfill. Correspondence, reports by Rowe, feasibility and economic viability, and Final Report (Executive Summary), 1989, test data including field soil consolidation trials at Woolston Deposit Grounds, lab test results (Manchester University), calculations, notes, jottings, graphs, diagrams, sketches, articles and academic papers relating to Flyash as Fill Material, June 1981, maps and plans, relating to particularly the Stanlow and Ince Banks (part of Mersey Marshes) - proposed land reclamation of a large area of the saltmarsh on the River Mersey South Banks and site development project, funded by Cheshire County Council, the Department of the Environment, Central Electricity Generating Board, Manchester Ship Canal Company, and others.

Includes Frodsham Deposit Grounds Development/Reclamation Potential report, August 1986, and related material; copy of Rowe's paper on cell consolidation testing, 1964. [The Calculation of the Consolidation Rates of Laminated, Varved or Layered Clays, with Particular Reference to Sand Drains].

Related Units of Description:

See also Frodsham, PWR/4/1/12-20, and Woolston, PWR/4/1/40-41.

Reference and contact details: PWR/4/2/7/47

Middlecroft Estate No. 2, Staveley, Derbyshire

Dates:1961

Extent: 1 folder.

Scope and Content:

Middlecroft Estate No. 2, Staveley, near Chesterfield, Derbyshire - Staveley Urban District Council. Correspondence, graph, notes, lab report (Geotechnical and Concrete Services Ltd), and loose shale tip plate load bearing test data, relating to type of foundations to be used for proposed construction of two-storey housing development on the site. Rowe's advice sought and given on the matter. [Client is Staveley Chemicals?].

Reference and contact details: PWR/4/2/7/48

Mill Street, Leek, Staffordshire

Dates: 1969

Extent: 1 folder.

Scope and Content:

Mill Street, Leek, Staffordshire: collapsed wall - Leek Urban District Council and Willcox, Raikes and Marshall. Empty folder: this was an Edgar Morton and Partner job.

Related Units of Description:

See also PWR/4/2/6/2/1.

Reference and contact details: PWR/4/2/7/49

NALGO Holiday Camp, Scarborough

Dates: 1974-1981

Extent: 2 folders.

Scope and Content:

NALGO (National and Local Government Officers Association) Cayton Bay Holiday Park, Scarborough, North Yorkshire. Correspondence, bore-hole logs, drilling logs, publicity brochure, diagrams, plan, and site investigation report (Geo-Research Ltd), relating to proposed remedial measures to protect the holiday camp from the effects of severe sea cliff erosion and landslipping, particularly following land slip in 1969.

Reference and contact details: PWR/4/2/7/50

Nelson, Glamorgan

Dates: 1973-1974

Extent: 1 folder.

Scope and Content:

Nelson, Glamorgan (Caerphilly): housing development - Northern Developments (Holdings) Ltd. Correspondence, plans, bore-hole logs, and test data, relating to drainage proposals for the site.

Reference and contact details: PWR/4/2/7/51

Newport Pagnell By-Pass Main, Buckinghamshire

Dates: 1980-1981

Extent: 1 folder.

Scope and Content:

Newport Pagnell By-Pass Main, Buckinghamshire - pipe jack crossing of M1 Motorway to link to Milton Keynes grid system. Correspondence, plans (1980-1981), and notes, concerning construction problem, 1981.

Reference and contact details: PWR/4/2/7/52

North Shields Central Riverside Development, Tyne & Wear

Dates: 1988-1990

Extent: 6 folders.

Scope and Content:

North Shields Central Riverside Development, North Shields, Tyne & Wear - Scarp Park land reclamation (Clive Street); fish quay. Correspondence, site investigation material including draft report by Ian Farmer Associates for R.T. James and Partners, test data, calculations, graphs, diagrams, notes, maps, plans (some dated 1982), sketches, jottings, and sheet piled wall analysis, relating to the proposed development, which will include two re-located factories for Cosalt plc, flats, tourism/leisure centre, public house, restaurants, shops, etc., and concerning related repair of the sheet piled river wall - which Rowe has been called in to advise upon. The project director was Den Dover, Conservative MP for Chorley, Lancashire. Includes official tide tables for River Tyne, 1989, and Annual Report and Accounts, 1988, for Cosalt plc (printed booklets).

Reference and contact details: PWR/4/2/7/53

Penarth, Glamorgan

Dates: 1973-1974

Extent: 1 folder.

Scope and Content:

Penarth, Glamorgan (Vale of Glamorgan) - Penarth Urban District Council: pipe

jacking contract. Correspondence, notes, and Rowe's report relating to surface water drainage pipe jacking contract, the client being Wallace Evans and Partners.

Reference and contact details: PWR/4/2/7/54

Pilling and Cockerham Tidal Embankment, Lancashire

Dates: 1978-1979

Extent: 1 folder.

Scope and Content:

Pilling and Cockerham Tidal Embankment, Fluke Hall to Cocker Bridge, North Lancashire - North West Water, Rivers Division, Warrington. Correspondence, plans, calculations, notes, sketches, diagrams, Rowe's advice sought and given, relating to problems with design of proposed new tidal embankment. Discussions with Messrs Hockin and Rushton.

Reference and contact details: PWR/4/2/7/55

Princes Pit, Connah's Quay, Clwyd

Dates: 1978

Extent: 1 folder.

Scope and Content:

Princes Pit, Connah's Quay, Deeside, Clwyd (Flintshire) - Alyn and Deeside District Council. Correspondence, sketch, and map, relating to ground-water pollution problem at Princes Pit, a five hectare site at one time used for the extraction of clay for brickmaking, and later filled after a haulage contractor was issued a licence for tipping. Rowe's professional advice sought by the above Council "on the most appropriate survey techniques to be employed in the ground water and composition survey of a refuse tip, with a view to reducing pollution of the ground water."

Reference and contact details: PWR/4/2/7/56

Ragdale to Leicester Water Distribution Main, Leicestershire

Dates: 1971-1972

Extent: 2 folders.

Scope and Content:

Ragdale to Leicester 48-inch diameter water distribution main, Leicestershire - Leicester Water Department: contractual claim. Correspondence, plans, 1969,

report, bore-hole logs, test data, and contract documents relating to contractual claim relating to the crossing of the water main beneath the railway line near Syston, Leics.

Related Units of Description:

See also Rushey Fields Water Distribution Main, PWR/4/2/1/120.

Reference and contact details: PWR/4/2/7/57

Redwood Drive No. 33, Rawtenstall, Lancashire

Dates: 1974-1975

Extent: 1 folder.

Scope and Content:

No. 33, Redwood Drive, Rawtenstall, Lancashire - Borough of Rossendale. Correspondence, plans, bore-hole logs, notes, and calculations relating to land slip investigation and slope instability, at the rear of the properties numbered 33 to 39 Redwood Drive, and proposed remedial measures. Tenants of No. 33: Mr and Mrs Batty. Brian Moorehead and Partners; Trippier Construction Ltd. Rowe's advice sought and given.

Reference and contact details: PWR/4/2/7/58

**Risley Nuclear Power Development Establishment,
Warrington, Cheshire**

Dates: 1977-1982

Extent: 3 folders.

Scope and Content:

Risley Nuclear Power Development Establishment, Risley, Warrington, Cheshire - United Kingdom Atomic Energy Authority (UKAEA), Northern Division: Radio Active Waste Depositories. Correspondence, plans, calculations, sketches, notes, and various published articles and reports (some are copies), relating to analysis of possible rock types suitable for storage caves repositories, and important selection criteria relating to potential sites of same. Includes Edgar Morton and Partner material, and later correspondence relating to Rowe's terms and conditions, and consultancy fee rates, relating to recently filed patent concerning radio active waste management, being a joint venture between the National Nuclear Corporation Ltd and Nu-Tech (Consultancy In Nuclear Technology), 1982.

Access Conditions:

Includes Closed Access material.

Reference and contact details: PWR/4/2/7/59

River Sow Flood Prevention Scheme, Stafford

Dates: 1973

Extent: 1 folder.

Scope and Content:

River Sow Flood Prevention Scheme, Stafford - Trent River Authority: Rofe, Kennard and Lapworth. Correspondence between Rowe and Edgar Morton and Partner, report, and map, relating to the proposed construction of flood relief reservoirs (earth banks) in the River Sow valley above Stafford, and related matters.

Reference and contact details: PWR/4/2/7/60

River Strine, Newport, Shropshire

Dates: 1976

Extent: 1 folder.

Scope and Content:

River Strine [Strine Brook] near Newport, Shropshire - slope stability. Client: Severn Trent Water Authority, Upper Severn Division. Report and observations (Edgar Morton and Partner to Mr Isherwood), calculations, instrumentation readings and notes, relating to soil test data and relevance of same to bank remedial measures.

Reference and contact details: PWR/4/2/7/61

River Tame Improvement Scheme, Oldbury, West Midlands

Dates: 1979

Extent: 1 folder.

Scope and Content:

River Tame Improvement Scheme, Oldbury Arm, Section 3, Contract 1, West Midlands: Severn Trent Water Authority, Tame Division. Letter, plan, and notes: Edgar Morton and Partner asked for advice by Wrekin Construction Co. Ltd who are submitting a tender for the above project, relating to the stability of the embankment carrying the Birmingham Canal and railway lines.

Reference and contact details: PWR/4/2/7/62

Ryan Industrial Fuels, Cardiff, Glamorgan

Dates: 1980-1981

Extent: 1 folder.

Scope and Content:

Ryan Industrial Fuels, Cardiff, Glamorgan - Donisthorpe Colliery, Ashby de la Zouche, Leicestershire - lagoons (slurry reservoirs) embankment stability. Correspondence with Delwyn Davies and others, site investigation material, test data and drilling records, and report incorporating pasted-in photographs, relating to Rowe advising on embankment stability for coal recovery and land reclamation by the client, Ryan Industrial Fuels.

Reference and contact details: PWR/4/2/7/63

Sandycroft Industrial Estate, Hawarden, Flintshire

Dates: 1972-1973

Extent: 1 folder.

Scope and Content:

Sandycroft Industrial Estate, West Saltney area, Hawarden, Flintshire - Hawarden Rural District Council. Correspondence, test data, graphs, calculations, plans, diagrams, quotation, notes, bore-hole logs, and site investigation reports by Geo-Research Ltd, relating to proposed development of the above estate.

Related Units of Description:

See also Sandycroft Pumping Station and Rising Main, PWR/4/5/98.

Reference and contact details: PWR/4/2/7/64

Scalford Brook Flood Alleviation Scheme, Melton Mowbray, Leicestershire

Dates: 1980-1989

Extent: 8 folders.

Scope and Content:

Scalford Brook Flood Alleviation Scheme (FAS) - Melton Mowbray Borough Council; Severn Trent Water Authority, Soar Division; Severn Trent Engineering. Correspondence, site investigation material, notes, calculations, plans, graphs, diagrams, and photographs August 1989, relating to proposed scheme. Includes Edgar Morton and Partner material. Also "copy of the Journal of Water Engineers, May [19]7" - Document was not found.

Reference and contact details: PWR/4/2/7/65

Seisdon, Staffordshire

Dates:1974

Extent: 1 folder.

Scope and Content:

Seisdon, Staffordshire: regrading of Moat Brook, Codsall, Wolverhampton - Seisdon Rural District Council. Two letters relating to pipe jacking the under railway line, concerning the above regrading. These letters seem to be strays from Codsall Motebrook Thrust Bore Claim material, see PWR/4/5/77.

Reference and contact details: PWR/4/2/7/66

Selby New Mine, North Yorkshire

Dates:1975-1976

Extent: 1 folder.

Scope and Content:

Selby New Mine, Selby, North Yorkshire: Gascoigne Wood Drifts - Taylor Woodrow Construction Ltd, for the National Coal Board. Correspondence, plans, bore-hole logs, test data, graphs, notes, diagrams, plans, and site investigation report, relating to proposed drift mine at Selby.

Reference and contact details: PWR/4/2/7/67

Smithy Lane No. 10, St Anne's-on-Sea, Lancashire

Dates:1978-1979

Extent: 1 folder.

Scope and Content:

No. 10, Smithy Lane, St Anne's-on-Sea, Lancashire - Richard Hilton Construction Co. Ltd. Correspondence, plans, Polaroid photographs, bore-hole logs and calculations. Rowe advising on problem of two-storey modern house, built on an 18" concrete raft, now the house has tilted uniformly to one side about 5 years later. Richard Hilton Construction Co. Ltd - Director and General manager R. L. Hubbard, ex-student of Rowe's - he refers to having "had the great priveledge [sic] of studying soil mechanics under your direction about 20 years ago", written 31 May, 1979. Includes reference to Rowe's work on the [Leaning] Tower of Pisa problem relating to underpinning.

Reference and contact details: PWR/4/2/7/68

Sparrow Park, Church Side, Macclesfield, Cheshire

Dates: 1981-1983

Extent: 1 folder.

Scope and Content:

Sparrow Park, Church Side, Macclesfield, Cheshire: vertical crack in centre of retaining wall - Macclesfield Borough Council. Correspondence, plans, site investigation material, calculations, notes, rainfall figures 1982-1983 and press cutting ca. May 1981 entitled "Sparrow Park may sink into sunset...", relating to stability of old stone retaining wall behind the Parish church. Calvin Beck and Associates.

Includes references to Cotes Park Industrial Estate, Alfreton relating to fluorescein traces, etc., another project which Calvin Beck and Associates are working on - see PWR/4/2/7/18.

Reference and contact details: PWR/4/2/7/69

Stansfield View Replacement E.S.N. School, Calderdale, West Yorkshire

Dates: 1976

Extent: 1 folder.

Scope and Content:

Stansfield View Replacement E.S.N. School, Calderdale, West Yorkshire - Calderdale Metropolitan Borough Council: Cracking of retaining wall at north end of the site. Correspondence and plan, relating to site stability, including Rowe's advice on remedial measures.

Reference and contact details: PWR/4/2/7/70

Stanton North, Ilkeston, Derbyshire

Dates: 1989-1991

Extent: 2 folders.

Scope and Content:

Stanton North, Ilkeston, Derbyshire: derelict land reclamation, Hallam Fields Industrial Park - Erewash Borough Council. Correspondence with Den Dover MP, of Regent Developments (Midlands) plc, and others, minutes of site meeting, maps including copies of 19th and 20th century Ordnance Survey maps, plans, and site investigation report, relating to proposed site development by Regent Developments as above.

Reference and contact details: PWR/4/2/7/71

Stockport, Cheshire

Dates: March 1973

Extent: 1 folder.

Scope and Content:

Stockport, Cheshire: assessment of possible negligence from 1968 soil survey - County Borough of Stockport. Letter requesting Rowe's advice relating to partially inaccurate soil survey conducted for the Corporation by an outside (unnamed) company in 1968 to assist in the design of certain works, and Rowe's reply containing details of his fees.

Reference and contact details: PWR/4/2/7/72

Stokesley Flood Relief Scheme, North Yorkshire

Dates: 1962-1963

Extent: 2 folders.

Scope and Content:

Stokesley Flood Relief Scheme, North Yorkshire: diversion of the River Leven - Wear and Tees River Board. Correspondence, site investigation material, test data, calculations, soils investigation at Stokesley Grammar School, Yorkshire, 1956 (John Laing and Son Ltd), relating to the proposed scheme and diversion channel.

Reference and contact details: PWR/4/2/7/73

Stretford, Manchester: Multi-Storey Flats

Dates: 1966

Extent: 2 folders.

Scope and Content:

Stretford, Manchester: Chester Road/Barton Road multi-storey flats. Correspondence, pile test data and drawing, graph, bore-hole logs, and notes, Edgar Morton and Partner material, relating to foundation problem concerning proposed 23-storey flats, Southern Approach, Stretford. Douglas Henfry and Daavid Hall, former student of Rowe. Client: Matthews and Mumby Ltd.

Reference and contact details: PWR/4/2/7/74

Studley Tunnel, Clee Hill, Shropshire

Dates: 1986-1988

Extent: 4 folders.

Scope and Content:

Studley Tunnel, Clee Hill, Ludlow, Shropshire: Elan Aqueduct - Severn Trent Water Authority. Correspondence, test data, notes, jottings, reports, draft reports, calculations, sketches, plans, diagrams, graph, site investigation material including Soil Mechanics and Norwest Holst Soil Engineering Ltd reports, and probable copy of engineer's field notebook, 1898-1905, relating to proposed new tunnel due to old tunnel collapse, seepage problems, etc. Consulting engineers: Sir William Halcrow and Partners.

Reference and contact details: PWR/4/2/7/75

Tate and Lyle Ltd, Liverpool

Dates: 1960-1961

Extent: 2 folders.

Scope and Content:

Tate and Lyle Ltd, Liverpool, sugar refiners - raw sugar silos. Correspondence, notes, force diagrams (sugar thrust), plan dated 1955, calculations, and meeting notes, relating to comments on proposed silo design. Rowe's advice to Cementation Co. Ltd. Includes copy article relating to raw sugar silo design, ca. 1953.

Reference and contact details: PWR/4/2/7/76

Team Valley Trading Estate, Gateshead. Co. Durham

Dates: 1957-1966

Extent: 2 folders.

Scope and Content:

Team Valley Trading Estate, Gateshead. Co. Durham (Tyne & Wear) - Primula Crispbread Ltd (Kavli Ltd) factory floor. Correspondence, plans, site investigation comments, drilling report, notes, sketches, settlement record, diagrams, relating to factory floor settlement problem and proposed remedial measures.

Reference and contact details: PWR/4/2/7/77

Tennyson Road, Hanwell, Ealing, London

Dates: 1969-1980

Extent: 10 folders.

Scope and Content:

Tennyson Road, Hanwell, Ealing, London: cause of cracking at Block 7 - Greater London Council (GLC). Correspondence, some dated 1975 prior to Rowe's involvement in the matter, and from Den Dover, MP, Director of GLC Housing Construction at the time (1978), reports by Rowe, 1980, Foul Sewer survey, 1977, and 1969 and 1970s reports prior to building of the houses by The Cementation Co. Ltd, plans, maps, jottings, sketches, bore-hole logs, test data, graphs, diagrams, calculations, rainfall figures (London Airport), 1970s, and photographs; relating to foundations failure, and Rowe's investigation into the subsoil conditions as requested by Den Dover, 1978-1980.

Reference and contact details: PWR/4/2/7/78

Titan Project, Flint, Clwyd

Dates: 1981-1982

Extent: 3 folders.

Scope and Content:

Titan Project, Flint, Clwyd (Flintshire): Coleshill Farm site - Kimberley Clark Ltd. Correspondence, test data, bore-hole logs, maps, plans, graph, photographs (depicting foundation fabric), draft reports including on potential mining instability at a green-field site, trial embankment study, and site investigation material, relating to proposed industrial developments and geological appraisal concerning embankments settlement. Consulting Engineers: R.T. James and Partners.

Reference and contact details: PWR/4/2/7/79

Travis Brow, Stockport, Greater Manchester

Dates: 1977-1985

Extent: 3 folders.

Scope and Content:

Travis Brow, Stockport, Greater Manchester - retaining wall extension to river wall: temporary rock anchors. Correspondence, plans, test data, calculations, sketches, and jottings, 1983-1985, photographs with 35 mm negatives and contact sheet, 1977, relating to proposed works. Rock Services (Midlands) Ltd, L. G. Mouchell and Partners, and G. Dew and Company.

Reference and contact details: PWR/4/2/7/80

Turner Bros Asbestos Ltd, Rochdale, Greater Manchester

Dates: 1957-1991

Extent: 8 folders.

Scope and Content:

Turner Bros Asbestos Ltd (TBA) [part of the Turner & Newall Group] - Research and Development Block, Rochdale Factory: Storage sheds. TBA Industrial Products Ltd - 'B' Block building. Correspondence with Harry S. Fairhurst & Son Chartered Architects, Surveyors, plans, site investigation and test data (Manchester University and others), calculations, notes, photographs, minutes of meetings, and Rowe/Edgar Morton and Partner reports and other documents, 1957-1959, and 1991, covering from the original proposed research and development block in the 1950s to later remedial work and floor strengthening of the block in the 1990s. Comparisons and updates made between the original building conditions and those existing later.

[This case was cited extensively by Rowe in lectures.]

Reference and contact details: PWR/4/2/7/81

Tyneside Enterprise Zone, Gateshead, Tyne & Wear

Dates: 1983-1990

Extent: 2 folders.

Scope and Content:

Tyneside Enterprise Zone: Metro Centre, Gateshead, Tyne & Wear, Zone 3 - Tyne & Wear County Council. Correspondence, reports, maps, site investigation and test data (Solmek Ltd and others), graphs and plots, relating to proposed Metro Centre. Includes some Cross Lane Reclamation Scheme material. It is unclear if the Metro Centre is part of the same Scheme or another part of the Tyneside Enterprise Zone.

Related Units of Description:

See also PWR/4/2/7/20 for further Cross Lane material.

Reference and contact details: PWR/4/2/7/82

Warrington, Cheshire

Dates: 1979-1993

Extent: 7 folders.

Scope and Content:

Warrington, Cheshire. Two projects: a) cold store - Sanderson Watts and Co.; b) water campus - North West Water (NWW). Correspondence, plan, and site investigation report relating to proposed cold store at Risley Estate, Warrington (Christian Salvesen (Cold Storage) Ltd of Edinburgh), 1979. Rowe acting as consultant on additional site investigation (foundation design) for same.

Correspondence with Galliford North West and others, reports and draft reports including trench backfill settlement and site investigation report, ground investigation material, notes, plans, and test data, relating to works packages 130 and particularly 150 (road settlement rectification works) and 152, etc., concerning NWW central site (water campus), 1991-1993. Building Design Partnership.

Reference and contact details: PWR/4/2/7/83

Water Orton, Coleshill, Warwickshire

Dates: 1973

Extent: 1 folder.

Scope and Content:

Water Orton, near Coleshill, Warwickshire: pipe jacking - East Midlands Gas Board. Correspondence, and calculations, relating to pipe jacking problems.

Reference and contact details: PWR/4/2/7/84

Wetherby Drive, Royton, Greater Manchester

Dates: 1982

Extent: 2 folders.

Scope and Content:

No. 18, Wetherby Drive, Royton, Oldham, Greater Manchester: causes of cracking in external and internal walls. Correspondence, quotation relating to site investigation (Northern Foundations Ltd), notes of meeting, final bore-hole log, and structural report, relating to foundation problems affecting No. 18 and related properties. Calvin Beck and Associates, Consulting Engineers. Mr and Mrs R Whittaker: owners (?) of No. 18, built ca. 1969.

Reference and contact details: PWR/4/2/7/85

White Horse Business Park, Trowbridge, Wiltshire

Dates: 1988

Extent: 3 folders.

Scope and Content:

White Horse Business Park, Trowbridge, Wiltshire: Fairclough Civil Engineering Ltd. Correspondence, plans, site investigation and test data, bore-hole sample photographs, reports by Rowe, and ground investigation relating to the proposed buildings for Invacare at the site. Client: Fairclough Building Ltd, Wales Division.

Reference and contact details: PWR/4/2/7/86

Wilmslow, Cheshire

Dates:1961

Extent: 1 folder.

Scope and Content:

Wilmslow, Cheshire - Norwich Union Fire Insurance Society site at The Carrs. Copy of [Edgar Morton and Partner] report giving opinion and further observations relating to failure of sheet steel piling at the site.

Reference and contact details: PWR/4/2/7/87

Winsford Development, Winsford, Cheshire

Dates:1971

Extent: 1 folder.

Scope and Content:

Winsford Development, Winsford, Cheshire - Cheshire County Council. Correspondence, test data including soil tests and soil mechanics samples report (Shell Chemical Co.), diagrams, and Edgar Morton and Partner report relating to proposed factory at Winsford Industrial Estate for Shorko Ltd.

Reference and contact details: PWR/4/2/7/88

Workington Iron and Steel Co., Workington, Cumberland

Dates:1962

Extent: 2 folders.

Scope and Content:

Workington Iron and Steel Co., Workington, Cumberland (Cumbria): power house extension and related damage claim - Century Insurance Co. Ltd. Correspondence, reports, test data, calculations, and notes, relating to claim against John Gill Ltd for damage sustained by north gable of existing Power House and No. 3 Turbine Blower. Cooper and Beal, chartered civil engineers.

Reference and contact details: PWR/4/2/7/89

Miscellaneous: C.E.G.B. Ironbridge

Dates:1968

Extent: 1 folder.

Scope and Content:

C.E.G.B. Ironbridge Powerstation - Devil's Dingle Lagoon: fly ash disposal. Letter from Edgar Morton and Partner to Rowe asking for his comments concerning relief wells proposals, and Rowe's reply, April 1968.

Reference and contact details: PWR/4/2/7/90

Miscellaneous: Channel Tunnel Pipe Jacks

Dates: 1988

Extent: 1 folder.

Scope and Content:

Channel Tunnel Pipe Jacks - British Design Partnership. Drafts of costings, Oct 1988, notes, sketches, calculations, and jottings relating to Channel Tunnel Terminal pipe jacks.

Reference and contact details: PWR/4/2/7/91

Miscellaneous: Great Universal Stores Ltd

Dates: 1963

Extent: 1 folder.

Scope and Content:

G.U.S. Ltd [Great Universal Stores Ltd] - site investigation. Edgar Morton and Partner letter to the Ashburton Chemical Works Ltd, Trafford Park, Manchester, 8 February 1963, commenting on Leonard Fairclough Ltd's report (not found) on the five trial bore-holes.

Reference and contact details: PWR/4/2/7/92

Miscellaneous: Tunnel Documents

Dates: 1978-1983

Extent: 2 folders.

Scope and Content:

Letter relating to initial briefing to discuss proposed report preparation relating to 'one of our current contracts' (Daly and Naughton Ltd), 13 April 1978, with handwritten annotations relating to 'causes of tunnel difficulties'; plans showing geological sections and site investigation bore-holes relating to weathering in tunnel drives, 1983; British Geological Survey test data sheets concerning grading of tunnel spoil, J.F. Donelon [and Co. Ltd], n.d. It is unclear which project either

of these three separate sets of documents relate to, they have been placed in the Other British Construction Projects section as the most likely section.

Reference and contact details: PWR/4/2/7/93

Additional material: East-West Motorway, Newcastle-upon-Tyne

Dates: 1968-1969

Extent: 2 folders.

Scope and Content:

Additional material: East-West Motorway, Newcastle-upon-Tyne, Northumberland (Tyne & Wear). Correspondence, test data, design and cost study, site investigation report, boring records, notes, sketches, and diagrams relating to proposed motorway including underground section and effect of its construction on future surface structures and development. Mott, Hay and Anderson, consulting civil engineers.

Related Units of Description:

See also a file relating to the A167(M) Newcastle Motorway, PWR/4/2/5/6.

Reference and contact details: PWR/4/2/7/94

General: Rowe Consolidation Cell etc.

Dates: 1960-1967

Extent: 1 folder.

Scope and Content:

Rowe Consolidation Cell (The Armfield Hydraulic Engineering Co. Ltd); Clockhouse Engineering and Instrument Co.; Manchester College of Science and Technology; Tay Bridge; University of Manchester; etc. Correspondence between Rowe and The Armfield Hydraulic Engineering Co. Ltd relating to Rowe Consolidation Cell royalty payments and sales, 1966-1967, including copy of Rowe's paper 'A New Consolidation Cell', published by the Institution of Civil Engineers, 1966; correspondence between Rowe and the Clockhouse Engineering and Instrument Co. relating to Rowe acting as consultant for the company concerning Soil Mechanics apparatus, 1967; document sheets stating criteria to be adhered to by the Contractor relating to bore-hole drilling operations and related considerations, concerning unknown project, not stated, and n.d.; correspondence between Rowe and Edgar Morton and Partner, test data and exploratory boring records (Sub Soil Surveys Ltd) relating to further building extension to the Manchester College of Science and Technology, 1964-1965; correspondence between Rowe, EMP, and Simon-Carves Ltd relating to consultancy fees for Morton and Rowe, etc. concerning Tay Bridge site investigation, February 1960; EMP site investigation results report, 1963, and ground investigation report (Sub Soil Surveys Ltd), 1962, relating to University of Manchester proposed new

Physics Department building.

Related Units of Description:

For the Rowe Consolidation Cell, see also PWR/5/2.

Reference and contact details: PWR/4/3

International Construction Projects

Dates: 1957-1991

Extent: 32 subseries (176 items) .

Scope and Content:

Peter Rowe worked on a large number of international civil engineering projects, problems and proposals, in a wide variety of countries. These included: jetty design in Iran; the Falklands Islands Airport; a new dock in Newcastle, Australia; Magodro Dam in Fiji; quay walls failure in Kuantan Port, Malaysia; a new wharf in Puerto Bolivar, Ecuador; the Ayalon Canal Flood Relief Scheme in Tel Aviv, Israel; the Oosterschelde Storm Surge Barrier in The Netherlands (which necessitated the installation of a diving bell, and underwater site investigations using the bell); the two 8-mile crossings of the Jamuna River in Bangladesh, which scours 60 metres deep, for electricity, gas, road, and rail links; the Hat Creek Thermal Power Project in Canada; and the construction of grain silos in Jeddah and Riyadh, Saudi Arabia.

Rowe's international renown led to the Italian Government's request for advice on how to halt the settlement of Venice. The Venice material includes photographs, press cuttings, articles, and separated material that was reunited with the archive in 2003. After his retirement from the University of Manchester, Rowe continued to work on various overseas projects and travelled extensively in the course of his work on a regular basis until his death in 1997.

From 1972 onwards Rowe conducted research into the performance of structures when subjected to cyclic loading due to major waves (30 m high) and to cyclic loading from ice fields. This work had been made possible by using the 700 g-tonne centrifuge which Rowe had developed at the Simon Engineering Laboratories at the University of Manchester from 1969. Centrifuge model-testing material occurs in the Amsterdam (cylindrical underground car park), Oosterschelde Storm Surge Barrage, and Jamuna River Crossing project files.

Reference and contact details: PWR/4/3/1

Amsterdam, The Netherlands

Dates: 1971-1978

Extent: 1 folder.

Scope and Content:

Amsterdam, The Netherlands, car park diaphragm wall, Amstelveen site - Nederhorst Grondteckneik BV. Correspondence, reports, photographs, plans, notes, sketches, diagrams, jottings, graphs and plots, and calculations, relating to the centrifuge at the

Simon Engineering Laboratories at Manchester University being used to test the behaviour of proposed cylindrical underground car parking garage.

Reference and contact details: PWR/4/3/2

Ashuganj Fertiliser Plant, Bangladesh

Dates: 1974

Extent: 1 folder.

Scope and Content:

Ashuganj Fertiliser Plant, Meghna River, Bangladesh: Bangladesh Fertilizer, Chemical and Pharmaceutical Corporation. Correspondence between Rowe and the Scientific Design Co. Ltd (two letters) relating to the proposed ammonia/urea fertiliser plant on the east bank of the Meghna River.

Reference and contact details: PWR/4/3/3

Ayalon Canal Flood Relief Scheme, Tel Aviv, Israel

Dates: 1968-1971

Extent: 8 folders.

Scope and Content:

Ayalon Canal Flood Relief Scheme, Tel Aviv, Israel: Netivey Ayalon Ltd. Correspondence, site investigation material, test data, plans and other documents in French, reports, calculations, notes, sketches, jottings, various published articles and papers ca. 1960s, and photographs including of bore-hole samples, relating to proposed scheme for the Ayalon storm water canal. Rowe visited Israel (accompanied by his family), having been brought in as consultant on an alternative sheet pile wall design for the canal, 1970-1971.

Reference and contact details: PWR/4/3/4

Bandar Shekpur, Iran

Dates: 1972

Extent: 1 folder.

Scope and Content:

Bandar Shekpur, Iran, four berths extension jetty: Amsterdamsche Ballast. Letter, report extract, and plans, relating to alternative design for the jetty.

Reference and contact details: PWR/4/3/5

Bisri Dam Project, Lebanon

Dates: 1974-1980

Extent: 1 folder.

Scope and Content:

Bisri Dam Project, Lebanon: Litani River Authority. Correspondence, and Republique Libanaise report (including plans in French), relating to the hydro-agricultural development of Southern Lebanon, relating to proposed Bisri Dam site. Consulting engineers Rofe, Kennard and Lapworth in association with Sir William Halcrow and Partners (for Litani River Authority). Includes sheet of notes and calculations relating to Dokan Dam in Iran, and references to Rowe's current research on the centrifugal models of offshore structures, Venice solution paper, and the 1972 Rankine Lecture, plus references to tender submission, and to the fighting in Beirut (February 1980).

Reference and contact details: PWR/4/3/6

Bula Mine, Navan, Republic of Ireland

Dates: 1980-1981

Extent: 1 folder.

Scope and Content:

Bula Mine, Navan, Republic of Ireland, underground mine and Navan County Meath Dam: De Leuw Chadwick O'hEocha: Underground mine and Navan County Meath Dam. Correspondence, press cutting concerning open-cast development (lead/zinc deposits) proposal rejection, Rowe's comments relating to design proposal report, notes, and draft, relating to planning submission for Bula Ltd for proposed tailings dam at Navan.

Reference and contact details: PWR/4/3/7

Dubai Road Embankment, Dubai

Dates: 1970-1971

Extent: 3 folders.

Scope and Content:

Dubai Road Embankment, Dubai, Trucial States: Trucial States Council: public works development, North-South road. Correspondence, plans, test data, graphs, diagrams, sketches, jottings, notes, calculations, and reports, relating to stability of proposed embankment for the North-South trunk road.

Reference and contact details: PWR/4/3/8

Falkland Islands Airport

Dates: 1972

Extent: 1 folder.

Scope and Content:

Falkland Islands Airport, Cape Pembroke Peninsula, Falkland Islands. Correspondence, preliminary site investigation report dated 1971 including test data, and sheet of notes and calculations, relating to feasibility study concerning proposed airport east of Port Stanley in the Falkland Islands. Consulting engineers: Rendel Palmer and Tritton.

Reference and contact details: PWR/4/3/9

Graving Dock, Newcastle, NSW, Australia

Dates: 1974

Extent: 2 folders.

Scope and Content:

Graving dock, Newcastle, New South Wales, Australia: Department of Public Works. Correspondence, plans, calculations, bore-hole logs, graph plots, site investigation report, report extracts, and notes, relating to proposed dock site. Consulting engineers: Posford, Pavry, and Partners.

Reference and contact details: PWR/4/3/10

Hail Stables, Saudi Arabia

Dates: 1972-1978

Extent: 3 folders.

Scope and Content:

Hail Stables, Saudi Arabia, selected fill: Fairclough-Al-Midani Co. Ltd. Correspondence, plans relating to Hail Airport group shelters etc. (representative building fill examples), lab test results, correspondence, test data (Geo-Research Ltd), graph plots, and calculations, relating to Phase I of the works.

Reference and contact details: PWR/4/3/11

Hat Creek Thermal Power Project, British Columbia, Canada

Dates: 1977-1982

Extent: 11 folders.

Scope and Content:

Hat Creek Thermal Power Project, 200 km from Vancouver, British Columbia, Canada:

British Columbia Hydro and Power Authority: geotechnical assessment. Correspondence with Nigel Skirmer of Golder Associates [ex-student of Rowe's], graph, notes, calculations, 1982, environmental impact document, May 1981, Golder Associates Geotechnical Study Report No. 6, Final Report, Vols. 1-4, March 1977, and Preliminary Engineering Work - Geotechnical Study 1977-78, Final Report Vols. 1-6, December 1978 including test data, etc.; and Rowe's advice on opencast pit slope stability, relating to proposed Hat Creek powerplant. Rowe's visit to Canada seems to have occurred in May 1982.

Reference and contact details: PWR/4/3/12

Istanbul Water Supply and Sewerage Project, Turkey

Dates: 1965-1967

Extent: 1 folder.

Scope and Content:

Istanbul Water Supply and Sewerage Project, Turkey: United Nations World Health Organization. Correspondence, and project description relating to proposal to be submitted concerning preparation of a Master Plan for Water Supply and Sewerage for the City of Istanbul and the neighbouring industrial region. Consulting engineers: Rofe and Raffety. Includes Rowe's *curriculum vitae*, notes relating to his work particularly concerning reservoirs and dams projects, rough lists of named reservoirs and other public utility and works projects, clients, water authorities, etc., and a summary biography concerning his professional working life in general at the University of Manchester. Also references to Hardham Culvert construction, and "the Inquiry on Rugby" and related design progress.

Reference and contact details: PWR/4/3/13

Jamuna River Crossing and Bridge Projects, Bangladesh

Dates: 1970-1988

Extent: 41 folders.

Scope and Content:

Jamuna River 230kV transmission line and bridge projects, Bangladesh (East Pakistan): United Nations and World Bank-funded Bangladesh East-West [Transmission Line] Interconnector Project. Correspondence, site and ground investigation material, plans of the Jamuna River area, and caissons [pre-cast circular rings installed on top of each other, forming a pile foundation for the mid-stream pylons], minutes of meetings 1988, notes, calculations, sketches, various published technical papers and articles from 1970s to 1980s, contract and tender documents including Data for Tenderers, jottings, Indian Standard earthquake criteria, 1976, test data including centrifuge model test and extensive material concerning the caissons and failure of same, diagrams, *New Civil Engineer* article on Jamuna, 27 March 1986, and *Bangladesh Times* article, 20 Dec 1981, various reports including Progress Reports, Liquefaction Study, geotechnical, and Design Transmittals document (design criteria summary used to evaluate the spread

footing foundations for the overland transmission towers of the project), relating to major international project river crossing proposals to link the East Pakistan power grid, bringing electrical power to the area, with terminus points at the towns of Ghorasal and Ishurdi, outside Dacca. Rendel Palmer and Tritton (RPT) joint venture with Nedeco and Bangladesh Consultants Ltd, with Rowe advising RPT on design. Michael (Mike) Tomlinson (Chartered Civil Engineer); Acres International Ltd.

Related Units of Description:

See also files relating to the publication of Rowe's paper 'Jamuna river 230 kv crossing – Bangladesh', PWR/6/1/24.

Reference and contact details: PWR/4/3/14

Jeddah Desalination and Power Plant, Saudi Arabia

Dates: 1975-1978

Extent: 4 folders.

Scope and Content:

Jeddah 4 Desalination and Power Plant, near Jeddah, Saudi Arabia: Saline Water Conversion Corporation. Correspondence, plans, geotechnical and soil investigation report including test data, relating to the proposed site, situated north of Jeddah along the coast of the Red Sea (foundation on coral limestone). Ewbank and Partners. Sogex Services (UK) Ltd. Subcontractor: Saudi Fugro Ltd.

Reference and contact details: PWR/4/3/15

Jeddah Grain Silos, Saudi Arabia

Dates: 1979-1982

Extent: 2 folders.

Scope and Content:

Jeddah Grain Silos, Saudi Arabia: Grain Silos and Flour Mills Organisation. Correspondence, supplementary soil investigations document, sketches, notes, graphs, test data, calculations, and plans, relating to proposed remedial works concerning cracks in the silos. 1982. Kettaneh Brothers (Construction Services). Dyckerhoff and Widman (Germany). Further documents include Report by J.O. Osterberg [Engineer], covering letter and note that Felix Samuely is the client.

Reference and contact details: PWR/4/3/16

Kuantan Port, Malaysia

Dates: 1979

Extent: 1 folder.

Scope and Content:

Kuantan Port, Kuantan, east coast of Malaysia: failure of the straight web sheet-piled cells forming the quay walls. Letter thanking Rowe for his CV and application to advise on the failure of the quay walls at the Port "and on the design of remedial measures", 14 September 1979, from Sir Bruce White, Wolfe Barry and Partners, Consulting engineers.

Reference and contact details: PWR/4/3/17

Leaning Tower of Pisa, Pisa, Italy

Dates: Jan 1973

Extent: 1 folder.

Scope and Content:

Leaning Tower of Pisa: Alan Grant and Partners. Presscutting and magazine extracts. Documents located elsewhere: see PWR/13.

Reference and contact details: PWR/4/3/18

Limassol Quay Wall, Limassol, Cyprus

Dates: 1977-1978

Extent: 1 folder.

Scope and Content:

Limassol quay wall, Limassol, Cyprus: Cyprus Ports Authority, Limassol and Larnaca Ports expansion project. Correspondence, calculations, notes, sketches, design analysis, site investigation material, reports, photographs, and plans relating to proposed new harbour and sheet piled quay wall at Limassol. Includes some Larnaca references. Consulting Engineers: Coode and Partners.

Reference and contact details: PWR/4/3/19

Magodro Dam, Viti Levu, Fiji

Dates: 1978-1979

Extent: 1 folder.

Scope and Content:

Magodro Dam, Nadi River, Viti Levu island, Fiji: Nadi and Lautoka Regional Water Supply Scheme. Correspondence, plans, diagrams, sketches, contract documents, reports, jottings, relating to site investigation for proposed works at dam site in the Magodro Plateau, north of the village of Natawa. Rendel Palmer and Tritton proposed contract for Government of Fiji. Rowe's comments and advice sought and given.

Reference and contact details: PWR/4/3/20

Morocco Grain Silos

Dates: 1988-1989

Extent: 2 folders.

Language: French

Scope and Content:

Tangier and Agadir grain silos, Morocco: Kettaneh Brothers (Construction Services) Ltd. Correspondence, calculations, and soil reports, etc., in one file, including French Regulations and other documents in French, relating to Kettaneh Brothers tender, the load-bearing capacity of the foundations of the silos, especially during an earthquake, and pile design.

Reference and contact details: PWR/4/3/21

Oman Cooling Water Pumping, Sultanate of Oman

Dates: 1981

Extent: 1 folder.

Scope and Content:

Cooling Water Pumping Station at the Petroleum Development Oman Refinery, Mina Al Fahal, Sultanate of Oman. Correspondence, plans, site investigation and test data, report, notes, sketches, graphs and plots, and calculations, relating to proposed pumping station for the cooling water intake at the refinery. Rowe's advice to the Dewatering Services (GB) Company, relating to tender.

Reference and contact details: PWR/4/3/22

Ontario, Canada: Various Projects

Dates: 1963-1969

Extent: 6 folders.

Scope and Content:

Ontario, Canada, various projects for William Trow Associates Ltd, including: Atwater Centre, Montreal, Quebec; Toronto Transit subway commission; silos at Fort William; various sewer networks and works; wharf extension, Port Arthur, Lake Superior; York Mills Road and the Canadian National Railways grade separation; Don Mills Road realignment scheme (across Donalda Golf Club). Correspondence including personal matters and details of former and current students including [Nigel] Skermer; test data, site investigation, notes, plans, some dated 1959 and 1961, sketches, calculations, discussions of published papers, press cutting and report etc. relating to inquest into a man's death from the landslide in 1962 at Notley Place, East York, Ontario (Rowe's report is mentioned), relating to settlement, pile testing, soil problems, and foundation conditions of the proposed 9-storey Atwater Centre office building (podium structure)

which is built on sand.

Also correspondence, plans, reports, and related material relating to proposed sewer line, Sudbury, Ontario, and East Bank combined trunk sewer (sewage tunnel network), city of Welland, and Toronto Transit Commission relating to subway, ?1963-1965. Includes reference to Rowe's mother dying recently, ca. May 1967. Rowe acted as consultant to William Trow Associates Ltd on all the jobs listed. Dr K.R. Peaker and Dr D.H. Shields were former Rowe students and lecturers at the University of Manchester.

Related Units of Description:

See also Trans-Canada Study Tour - Toronto subway papers, PWR/3/29.

Reference and contact details: PWR/4/3/23

Oosterschelde Storm Surge Barrier, Delft, The Netherlands

Dates: 1974-1980

Extent: 55 folders.

Scope and Content:

Oosterschelde Storm Surge Barrier, Oosterschelde (one of the estuaries in the Lower Rhine Delta), Eastern Scheldt, Delft, The Netherlands: Rijkswaterstaat Consultants Group; Rijkswaterstaat [the Dutch Public Works Department] Delta Dienst Den Hage. Correspondence, site investigation and test data (some going back to the 1960s), especially centrifuge model test results and reports, and in situ and other caisson tests, lab test data from Delft Ground Mechanics, etc., calculations, notes, jottings, sketches, diagrams, reports by T.W. Lambe Associates (USA), photographs, booklets relating to the Delta Project and the proposed barrier, Foundation Aspects of Coastal Structures International Symposium papers and others, with Rowe's collaborations and summaries of certain papers including Rowe's, plans, inauguration of diving bell (submersible working chamber - MISSION - Manned Installation for Subsea Soil Investigation) including speeches, booklet, and underwater site investigations using the diving bell, etc., September 1978, client documents, and many documents in Dutch including reports, relating to the Oosterschelde storm surge barrier project, involving construction of deep caissons, as part of the Delta Plan - a major undertaking to prevent a similar catastrophe to that of the disastrous storm-flood of 1953 in The Netherlands from reoccurring, by protecting the area by building a dam, to close it completely, or alternatively (as was adopted) a barrier closing only when needed to combat storm surges.

Related Units of Description:

See also the Oosterschelde / Eastern Scheldt files among the research papers, PWR/5/5/1/6-7, PWR/5/5/2/3-5.

Reference and contact details: PWR/4/3/24

Puerto Bolivar, Ecuador

Dates: 1977-1978

Extent: 5 folders.

Scope and Content:

Puerto Bolivar, Ecuador, extension to fishing port: Howard and Humphreys. Correspondence, reports on alternative wharf designs, readings, test data and plans (some in Spanish), plots and graphs, calculations, and notes of meeting, Oct 1977 relating to proposed new wharf. Rowe's opinion sought relating to Consulting Engineers Livesey and Henderson's design proposals.

Reference and contact details: PWR/4/3/25

Riyadh Grain Extension Silos, Saudi Arabia

Dates: 1982-1983

Extent: 3 folders.

Scope and Content:

Riyadh Grain Extension Silos, Riyadh, Saudi Arabia: Kettaneh Brothers (Construction Services) Ltd. Correspondence, minutes of meeting, August 1982, notes, plans, reports (soil investigation, drilling and grouting work summary, etc.), relating to proposed FASR project (Further Additional Silos Riyadh). Consulting Engineer: Kling Consult (Karl Kling), Germany.

Reference and contact details: PWR/4/3/26

SAMA Bank, Jeddah, Saudi Arabia

Dates: 1976

Extent: 1 folder.

Scope and Content:

SAMA (Saudi Arabian Monetary Agency) Bank, Jeddah, Saudi Arabia: new branch bank building. Correspondence, site investigation material, plans, engineering geology and hydrology map of Jeddah (Jiddah), test data, boring logs, diagrams, notes, jottings, sketches, site investigation and deep basement construction specification, and reports, photocopies of photographs of the existing buildings at the site, and soil survey, relating to proposed Branch Bank site in the coastal area, being part of the SAMA Bank building programme (Dammam and Jeddah). Felix J Samuely and Partners, Consulting Engineers.

Reference and contact details: PWR/4/3/27

Sicartsa Plate Mill, Las Truchas, Mexico

Dates: 1984-1985

Extent: 1 folder.

Scope and Content:

Sicartsa Plate Mill, near the remote town of Las Truchas, Mexico, a key component of the massive Sicartsa Steelworks complex (Siderurgica Lazaro Cardenas-Las Truchas S.A.). Correspondence, plans (some dated 1982), maps, notes, jottings, sketches, some documents in Spanish, relating to proposed scale pit construction by caisson techniques for Davy McKee (Sheffield) Ltd [who won the hard-fought battle for the contract among foreign nations, for Britain]. Consulting Engineers and Architects: Husband and Company. [The Mexican government planned to build the complex in four phases, each to be built in the term of a different Mexican president].

Includes Rowe's references to 'a major matter in Hong Kong' and being called as an 'Expert Witness': probably referring to the Queens Road, Hong Kong litigation case, see PWR/5/97.

Reference and contact details: PWR/4/3/28

Venice, Italy

Dates: 1969-2003

Extent: 9 folders.

Scope and Content:

Venice, Italy: Consiglio Nazionale delle Ricerche (National Research Council of Italy), Dr Roberto Frassetto. The physical safeguarding of Venice and measures to halt the settlement of the city into the sea, particularly concerning the alarming but increasing frequency of the flooding of the old city at times of 'acqua alta' (high tide), most notably in the 1966 flood. Correspondence, bore-holes and other test data, plans, graphs and plots, diagrams, sketches, instrumentation readings, calculations, notes and jottings, settlement analysis material, various papers, articles, and reports, including joint article by G. Ricceri and R. Butterfield entitled "An Analysis of Compressibility Data from a Deep Bore-hole in Venice", 1974, and "Need Venice Disappear? How and why floods threaten Venice", a study by the Vice-Chairman of the 'Venice in Peril' fund, Sir Ashley Clarke, 1971, article relating to Venice Lagoon "artesian exploitation" etc., covering the period 1846-1970, and UNESCO article relating to investigating and controlling the subsidence of Venice, Paris 1969, technical reports, photographs ca. 1973-1974 (including bore-holes and Venice canals), covering the period 1969-1986. Many documents in Italian.

Also *Manchester Evening News* with Venice article page 10, dated 16 March 1974, and additional correspondence and related material appertaining to Professor Rowe, and to Professor Roy Butterfield from the University of Southampton, 2002-2003, collected by John Scriven, former student and later colleague of Peter Rowe, who has included a chronology of the material and important events, 1972-1986.

Related Units of Description:

See also PWR/4/4/3 for press cutting from *The Times*, 5 November 1976, relating to publication of a new book concerning the plight of Venice and seemingly deliberate attempts at thwarting measures to save Venice from sinking into the sea: including mention of the sterling work of Dr Roberto Frassetto and Sir Ashley Clarke (above).

Reference and contact details: PWR/4/3/29

Miscellaneous: Canada - Trans-Canada Study Tour

Dates: 1957-1966

Extent: 3 folders.

Scope and Content:

Trans-Canada Study Tour, 1965: Canadian dam and reservoir schemes in particular, plus secondary material relating to North American, French, Swedish, and Australian schemes. Booklets, papers, reports, talk, articles, technical and other notes, etc., relating to various Canadian and overseas reservoir and dam schemes, projects, and proposals, including production of hydroelectric power: the Peace River Project (Portage Mountain Dam), British Columbia (BC); South Saskatchewan River Dam; The Red River Floodway, Winnipeg area; Columbia River (including Arrow Dam); Nelson River, Manitoba, and Kelsy Generating Station etc.; Fraser River, BC - Port Mann Bridge foundations. Letter from Rowe requesting permission to use part of a Trans-Canada Highway lecture given on the tour, for his forthcoming paper; list of registrants and details of the tour, 8th International Congress on Large Dams publication, 1964, photographs and negatives of the South Saskatchewan River Project, and Duncan Lake, aerial photographic map of the Columbia River, and geological map of Manitoba; fact sheet and photograph relating to Briones Dam, California, and booklets on the Messaure Dam, Sweden and the Snowy Mountains Scheme, Australia, and geological map for the latter.

Also Toronto Subway System General Data and Subsoil Stratiography [?Stratigraphy], August 1965.

Reference and contact details: PWR/4/3/30

Miscellaneous: Jeddah, Saudi Arabia

Dates: 1991

Extent: 1 folder.

Scope and Content:

Jeddah, Saudi Arabia: new building foundation. Letter from Rowe to Mr Najjar at Boll und Partner in Stuttgart confirming "I have [already] had experience of successful deep basement construction within the coralline sands of Jeddah and I would be happy to assist on the above project", 14 March 1991.

Related Units of Description:

See also SAMA Bank, Jeddah, PWR/4/3/26.

Reference and contact details: PWR/4/3/31

Miscellaneous: Lagos, Nigeria

Dates: 1964

Extent: 1 folder.

Scope and Content:

Lagos, Nigeria: Apapa Quays, Warehouse No. 1 etc. Photostat test sheets including bore-hole logs and test pile data.

Reference and contact details: PWR/4/3/32

Additional material: Suva-Nadi Highway, Viti Levu, Fiji

Dates: 1971

Extent: 3 folders.

Scope and Content:

Correspondence, notes, graphs and plots, plans, notes of meeting, calculations, test data including lab test data, bore-hole logs, bore-hole sample photographs, and aerial photograph with ground composition ('Typical Mangrove [swamp] Situation') and bore-hole locations marked, relating to proposed highway site investigation, Suva-Nadi Highway, Viti Levu, Fiji. Rendel Palmer and Tritton, consulting engineers.

Reference and contact details: PWR/4/4

Offshore Structures

Dates: 1970-1989

Extent: 27 subseries (118 items) .

Scope and Content:

Peter Rowe worked on a number of projects and proposals for offshore structures. The majority related to oil and gas production platforms in the UK sector of the North Sea. He worked on the foundations of several large platforms in the North Sea, in the Beryl, Brae, Brent, Ekofisk, Forties, Frigg, Magnus, Ninian, Piper and Thistle fields, and the TLP (Tension Leg Platform) in the Hutton Field. He also advised on platforms in the Phillips Cod, Troll and Ula fields of the Norwegian sector. Other offshore locations include the Arctic Ocean, Alaska (the St George Basin C.O.S.T. Well on the Bering Sea continental shelf), the Bahamas, Brazil, and Hawaii (Maui Field).

From 1972 onwards Rowe conducted research into the performance of offshore oil production platforms when subjected to cyclic loading due to major waves (30 m high) and to cyclic loading from ice fields. This work had been made possible by using the unique 700 g-tonne centrifuge which Rowe had developed for geotechnical applications at the Simon Engineering Laboratories at the University of Manchester from 1969.

Among the offshore structure foundations that were subjected to this centrifuge testing were those for the Brae and Brent Fields, and the Hutton Tension Leg Platform in the UK sector of the North Sea; for the Garoupa Field off the coast of Brazil; the Troll Field off the coast of

Norway; and the Condeep T-300 structure on the Norwegian continental shelf.

Additionally, the performance of mobile caissons in the Arctic Ocean was subjected to this same centrifuge model testing. Other caisson material is found in items relating to the Forties Field (Ekofisk oil storage caisson), Camilla Caisson (including some in Italian), and Phillips Cod Field (Norwegian Sector of the North Sea).

Related Units of Description:

For further information on the use of the centrifuge at the University of Manchester to test offshore structures, see PWR/5/5.

Reference and contact details: PWR/4/4/1

Arcolprod

Dates: 1977-1979

Extent: 4 folders.

Scope and Content:

Arcolprod - Oil and Gas from Deep Water: Research and Development Programme. Correspondence, test data, test results, plans, mathematical modelling data, calculations, notes, jottings, reports and studies (Taylor Woodrow Construction Ltd) relating to sea bed foundation system design for offshore structure and proposed pile modelling for same.

[A bulk sample of boulder clay was sent to Manchester University for use in laboratory testing, from the Cowden Reservoir site.]

Related Units of Description:

For further material relating to Arcolprod see PWR/5/5/3/12.

Reference and contact details: PWR/4/4/2

Arctic Mobile Caisson Model

Dates: 1980-1989

Extent: 11 folders.

Scope and Content:

Arctic Mobile Caisson Model: Gulf Canada (later Gulf Oil). Correspondence, test data, reports including report on Issungnak Island sand (being considered as potential borrow material for construction of the caisson in question), plans, notes and jottings, photograph, sketches, graphs and plots, instrumentation readings, and calculations, relating to proposed deep caisson design, and geotechnical centrifuge modelling at the University of Manchester, including proposed contract between the University and Gulf Canada Resources Inc. (signed by the latter only) for the centrifuge testing. Also published material and various articles on sandisle structures (Golder Associates), Arctic

caisson performance, including some written by Rowe himself, newspaper article relating to Beaufort Sea new oil discovery, November 1981. Includes references to Nigel Skermer, former student of Rowe, and to Beaufort Sea Island Evaluation to be discussed at a geotechnical meeting, May 1982.

Reference and contact details: PWR/4/4/3

Bahamas Marine Structure

Dates: 1975-1976

Extent: 1 folder.

Scope and Content:

Bahamas Marine Structure: Burmah Oil. Correspondence, Rowe's paper on geotechnical science application difficulties including offshore gravity platforms examples (and Venice examples, see also press cutting below), relating to legal arbitration "Claim by Gem-Hersent [company] for additional costs when piling in coral for a marine structure in the Bahamas built on behalf of... Burmah Oil."

Related Units of Description:

Includes press cutting from *The Times*, 5 November 1976, relating to publication of new book concerning the plight of Venice and seemingly deliberate attempts at thwarting measures to save Venice from sinking into the sea - see PWR/4/3/28.

Reference and contact details: PWR/4/4/4

Beryl Field

Dates: 1973

Extent: 12 folders.

Scope and Content:

Beryl Field, UK Sector, North Sea: Mobil North Sea Ltd, North Sea Platforms. Correspondence, plans, reports including geophysical survey, and soil and foundation investigation, soil mechanics considerations, test data, bore-hole logs, calculations, notes and jottings, and sketches, relating to Beryl Field development. Sir Robert McAlpine and Sons tender for Mobil UK. Taylor Woodrow Construction Ltd.

Includes material relating to Brent A Field; see PWR/4/4/7.

Reference and contact details: PWR/4/4/5

BP Forties Field: Condeep Project

Dates: 1970-1974

Extent: 13 folders.

Scope and Content:

BP (British Petroleum Company Ltd) Forties Field, UK Sector, North Sea - Condeep Project: concrete deepwater platform for production drilling, FB and FD sites (in UK Sector of the North Sea). Correspondence, plans for Ekofisk oil storage caisson, calculations, notes, bore-hole records, graphs and plots, meeting notes, August 1972, various published articles and papers, reports and studies (including photographs), and lab testing of soil samples (Norwegian Geotechnical Institute, BP and others), relating to proposed Condeep fixed drilling platform at the Forties Field. Consulting Engineers: Parsons Brown and Harris. Decca Survey Ltd: MV "Explorer". Also Department of Energy material relating to updating of expert evidence on platform design.

Related Units of Description:

See also Ekofisk, PWR/4/4/10.

Reference and contact details: PWR/4/4/6

Brae B Field

Dates: 1979-1984

Extent: 4 folders.

Scope and Content:

Brae B Field, UK Sector, North Sea: Pan Ocean Oil Corporation (North Sea); Marathon Oil UK Ltd. Correspondence, reports on evaluation of foundation conditions, 1978, and soil and foundation investigation, 1977, and Rowe's report on centrifuge testing, plans including geological data, calculations, instrumentation readings, graphs and plots including Hutton Field, notes, jottings, centrifuge model studies and test data, relating to proposed fixed production platform in the southern region of Brae Field.

Related Units of Description:

See also Hutton Field, PWR/4/4/13, and North Brae, PWR/4/4/18; also PWR/5/5/3/11 among the Research papers.

Reference and contact details: PWR/4/4/7

Brent A, B and C Fields

Dates: 1972-1976

Extent: 9 folders.

Scope and Content:

Brent A, B and C Fields, UK Sector, North Sea, Brent Platform Development: Shell Oil; Taylor Woodrow Construction Ltd; [Sir Robert] McAlpine and Son; Rendel, Palmer and Tritton. Correspondence, reports, plans, notes, diagrams, sketches, graphs and plots, calculations including stability, graphs and plots, notes of meeting, February 1973,

tender documents, and test data, relating to soil investigation in the North Sea for Shell Oil. Includes material relating to Beryl Field, Thistle [Field] (model test), Frigg Field, and Ekofisk oil storage tank and centrifuge model testing; conference details (offshore structures); and Department of Energy correspondence with Rendel Palmer and Tritton relating to certification of offshore structures, 1975-1976.

Related Units of Description:

See also Alness (Cofferdam for Brent Field Oil Rig), PWR/4/2/7/2, Beryl Field, PWR/4/4/4, Thistle Field, PWR/4/4/24, and Ekofisk, PWR/4/4/10.

Reference and contact details: PWR/4/4/8

Camilla Caisson

Dates: 1971-1973

Extent: 3 folders.

Scope and Content:

Camilla Caisson: Amsterdamsche Ballast and Taylor Woodrow Construction Ltd. Correspondence, photographs, notes, stability calculations, plots, and instrumentation readings, relating to investigation and stability of the Camilla Caisson, and related research project using the centrifuge. Includes paper by R. Butterfield, University of Southampton, relating to silo pressures, February 1968; and correspondence, caisson construction article and plan (written in Italian) relating to Richards Bay Harbour, South Africa: Rowe is being asked for advice on the project by Amsterdamsche Ballast.

Reference and contact details: PWR/4/4/9

Conoco Inc.

Dates: 1974

Extent: 1 folder.

Scope and Content:

Conoco Inc. [ConocoPhillips since merger with Phillips Petroleum Company in 2002]: North Sea Platform. Correspondence, report and technical specification extract relating to preparation of tender for proposed platform design by Sir Robert McAlpine and Sons Ltd, and asking for Rowe's advice, in answer to an enquiry from Conoco Inc.

Reference and contact details: PWR/4/4/10

Ekofisk Shore Facilities

Dates: 1973

Extent: 1 folder.

Scope and Content:

Ekofisk Shore Facilities: Teeside Jetties. Correspondence, report, and plan relating to site investigation concerning proposed shore facilities at Teesside for oil from the Ekofisk oil and gas field. Includes part of published paper (untitled) relating to the Ekofisk field and storage tank ca. June 1973. Consulting Engineers: Low and Parsons Brown (working for Phillips Petroleum Co.).

Reference and contact details: PWR/4/4/11

Garoupa Field, Brasil

Dates: 1977

Extent: 1 folder.

Scope and Content:

Garoupa Field, Brasil, offshore sites for process tower, loading tower, and manifold: C. G. Doris (Paris). Correspondence, report, test data and results of centrifuge model testing, plots and graphs, calculations, notes, jottings, sketches, photograph, and diagrams relating to proposed oil platform offshore Brazil, at Petrobras (a Brazilian oil company) articulated towers site. Investigation conducted by MV "Astragale". Note there are variations on the spelling of 'Garoupa'.

Reference and contact details: PWR/4/4/12

G.E.O.R.D.I.E. Project

Dates: 1974

Extent: 2 folders.

Scope and Content:

G.E.O.R.D.I.E. Project: Mobil Oil offshore drilling/production platform. Correspondence, plans, calculations, and notes relating to proposed platform and tower base, and foundation stability. Design [consultant?]: Robin Dodwell of Acomb, Hexham, Northumberland. It is unclear what the 'G.E.O.R.D.I.E' project refers to. Includes Brief Typical Soil Conditions at Cod, Fortes [Forties], Beryl, Ninian, and Brent A Fields.

Reference and contact details: PWR/4/4/13

Hutton Field Tension Leg Platform

Dates: 1979-1982

Extent: 11 folders.

Scope and Content:

Hutton Field Tension Leg Platform (TLP), UK Sector, North Sea: Conoco North Sea Inc. Correspondence, reports by the Norwegian Geotechnical Institute, Fugro, etc., including centrifuge model studies; Rowe's Review of Engineering Reports relating to

foundation performance (prediction based on centrifugal model studies: centrifuge application to design); test data and instrumentation readings, lab test results, notes, graphs and plots, site investigation, jottings, diagrams, calculations, and summary of meeting, September 1980, relating to Hutton Field development and foundation analysis. Includes various published papers and articles, and Lloyd's Register of Shipping and Brown and Root (UK) Ltd/Vickers Offshore Ltd material.

Related Units of Description:

See also files PWR/5/5/3/1/16–17 among the Research papers.

Reference and contact details: PWR/4/4/14

Magnus Field

Dates: 1980

Extent: 1 folder.

Scope and Content:

Magnus Field, UK Sector, North Sea: BP Trading Ltd. Correspondence, test data, calculations, and notes, and Rowe's advice sought and given, relating to piled foundations, shear keys, and effect of weld beads on pile capacity in the Magnus Field offshore structure. Includes Lloyd's Register of Shipping requirements and comments concerning certification.

Reference and contact details: PWR/4/4/15

Maui Field Platform, Hawaiian Islands

Dates: 1977

Extent: 1 folder.

Scope and Content:

Maui Field Platform, Hawaiian Islands: New Zealand Ministry of Public Works: gravity platforms founded on sand. Letter requesting Rowe's advice in the form of a short report (not included in the original envelope), and Rowe's reply, March 1977, relating to Maui Field feasibility study: effects of New Zealand fault lines and seismic activity on stability. Consulting Engineers: Harris and Partners, London.

Reference and contact details: PWR/4/4/16

Morecambe Bay Project

Dates: 1989

Extent: 1 folder.

Scope and Content:

Morecambe Bay Project: Hydrocarbons GB, DP6 and DP8 Platform Locations. Lab tests report by Multi Design Consultants and PWR's notes - documents were not found. Hydrocarbons GB (Rowe's client?).

Reference and contact details: PWR/4/4/17

Ninian Field

Dates: 1974-1977

Extent: 2 folders.

Scope and Content:

Ninian Field Offshore Structure, UK Sector, North Sea: British Petroleum (BP). Correspondence, estimated loadings, test data including Forties Field site data for comparison, and plan relating to tender for proposed gravity platform offshore structure, 1974, the consulting engineers being Rendel Palmer and Tritton. Correspondence, notes, calculations, and boring and soil data, relating to Howard Doris offshore structure, 1977, presumed to be the Ninian Field structure. Includes Rowe's comments on the likely effects of soil fabric under cyclic loading as requested by BP.

Reference and contact details: PWR/4/4/18

North Brae

Dates: 1981-1983

Extent: 2 folders.

Scope and Content:

North Brae, UK Sector, North Sea: Marathon Oil UK Ltd, contract CB0007. Engineering and soil investigation reports including lab testing, by Fugro Geotechnical Consultants relating to proposed steel jacket structure foundations at the North Brae site in the Brae Field.

Related Units of Description:

See also Brae Field, PWR/4/4/6.

Reference and contact details: PWR/4/4/19

North Sea: Flare Spar

Dates: 1974-1976

Extent: 2 folders.

Scope and Content:

North Sea - Flare Spar: Shell Oil (?). Correspondence, plans, notes, and calculations

relating to spar proposals and stability, 1975-1976, including a plan dated 1974. Rowe acting as consultant to consulting engineers Faber Waterhouse Offshore (amalgamation of Oscar Faber and Partners, and Waterhouse and Partners). Includes Rowe's offshore *curriculum vitae*/career summary, and that of Gordon Fenton, and company brochure and information sheets for Faber Waterhouse Offshore. Includes references to Frigg Field platform and to the Oosterschelde test caissons.

Related Units of Description:

See also Oosterschelde, PWR/4/3/23.

Reference and contact details: PWR/4/4/20

Phillips Cod Field

Dates: 1972-1973

Extent: 2 folders.

Scope and Content:

Phillips Cod Field, Norwegian Sector, North Sea: Phillips Petroleum Company Ltd, Tender submission. Correspondence, plan (including caisson), report, notes, and calculations relating to Phillips cod field soil and foundation investigation for proposed platform. Sir Robert McAlpine and Sons Ltd. Includes reference to Brent Field having 'soil problems'.

Reference and contact details: PWR/4/4/21

Piper Field

Dates: 1973

Extent: 1 folder.

Scope and Content:

Piper Field, UK Sector, North Sea: Occidental Petroleum (UK). Correspondence and report relating to soil mechanics considerations: also the original envelope refers to Piper Field as being a "soft [clays] site". Taylor Woodrow Construction Ltd. Includes references to Brent Field including Brent B, and Forties Field.

Reference and contact details: PWR/4/4/22

RDL Hybrid Gravity Platform

Dates: 1975-1976

Extent: 4 folders.

Scope and Content:

RDL Hybrid Gravity Platform, Northern North Sea: Harris and Partners. Correspondence, reports, plans, calculations, notes, diagrams, sketches, Lloyd's Register of Shipping material, and graphs, relating to proposed oil production platform foundation design and related matters. Harris & Partners working for RDL (Redpath Dorman Long) North Sea Ltd. Includes references and data appertaining to the Heather Field and Dunlin Field.

Reference and contact details: PWR/4/4/23

St George Basin C.O.S.T. Well, Alaska

Dates: 1976-1984

Extent: 4 folders.

Scope and Content:

St George Basin C.O.S.T. [Continental Offshore Stratigraphic Test] Well, Alaska: Taywood Engineering Ltd, Bering Sea monotower gravity structure. Correspondence, notes on geotechnical design parameters, calculations, reports, notes of meeting, January 1984, and technical specifications relating to investigation of proposed C.O.S.T. [Continental Offshore Stratigraphic Test] well site in the Bering Continental Shelf, and associated foundation problems. Atlantic Richfield Co., Dallas, Texas; Woodward-Clyde Consultants; Exxon Production Research Company.

Reference and contact details: PWR/4/4/24

Thistle Field

Dates: 1974

Extent: 1 folder.

Scope and Content:

Thistle Field, UK Sector, North Sea, offshore structure. Correspondence and foundation stability analysis document. Consulting and Designing Engineers: Rendel Palmer and Tritton.

Includes references to Hutton, Alwyn, and Ninian Fields.

Reference and contact details: PWR/4/4/25

Troll Field

Dates: 1982-1987

Extent: 19 folders.

Scope and Content:

Troll Field, Norwegian Sector, North Sea: Norske Shell and A/S Shell Norske: Condeep T-300 Foundation Platform. Correspondence, reports (with photographs pasted in),

contract documents, test data including cyclic loading and centrifuge model testing at the University of Manchester, calculations, minutes of meetings, notes, jottings, graphs and plots, sketches and diagrams, and analyses, relating to foundation of the Condeep structure, Norwegian continental shelf. Includes Mersey River sand test data (sieve analysis) found with the Troll Field papers, dated 1981.

Related Units of Description:

See also BP Forties Field (Condeep project), PWR/4/4/5.

Reference and contact details: PWR/4/4/26

Ula Field

Dates: 1980

Extent: 4 folders.

Scope and Content:

Ula Field, south-west of Stavanger, Norwegian Sector, North Sea: BP Petroleum Development Ltd. Correspondence, notes, calculations, reports by McClelland Engineers, Fugro Geotechnical Consultants, and Rowe, contract documents, test data, plots and graphs, sketches, diagrams, jottings, and Rowe's advice sought and given relating to stability of the proposed steel gravity permanent jack-up platform in the Ula Field, and foundation analyses.

Reference and contact details: PWR/4/4/27

Woodside Offshore Project

Dates: 1980

Extent: 1 folder.

Scope and Content:

Woodside offshore project: PASCO Engineering Ltd. Correspondence relating to "sea-bed ground conditions at the location of the structures..." and the fact that PASCO's "involvement in the first stage of the Woodside Technical Review [concerning "review of the technical and commercial feasibility of a major offshore project"] has unfortunately been suspended...".

Reference and contact details: PWR/4/5

Litigation

Dates: 1965-1997

Extent: 109 subseries (674 items) .

Scope and Content:

This section of the archive comprises papers relating to Peter Rowe's involvement as an expert witness in a large number of civil engineering projects in Britain and abroad that gave rise to claims and disputes. Cases relate to the construction of roads, hospitals, factories, housing schemes, gas pipelines, sewerage schemes, waste treatment works, pumping stations and landfill sites. The section has been divided into two sub-sections, Pre-Litigation Claims (PWR/4/5/1-65), and Arbitration (PWR/4/5/66-109). Within each sub-section the material is arranged alphabetically by project, geographical location, or company name, as appropriate.

The **Pre-Litigation Claims sub-section** consists mostly of contractual claims for the recovery of additional costs incurred during construction and civil engineering projects. Claims were usually made by contractors against their clients or consulting engineers for the recovery of additional costs incurred when, for example, unexpected ground conditions were encountered during the construction phase of a project. There are also cases relating to the failure of structures during or after construction, accidental damage to other properties during construction, insurance claims, and issues of negligence. Rowe acted as an expert witness in such cases.

The **Arbitration sub-section** largely comprises cases that began as claims which could not be resolved and later went to court or to arbitration. Rowe was often called upon to act as an expert witness and occasionally as a mediator in such cases. If the outcome of a case is known, this has been noted in the catalogue entries. The range and type of cases are very similar to those in the preceding section. There is indeed some overlap between the two sections as it is sometimes unclear whether the case went to court or not, and arbitration disputes also occur in Pre-Litigation Claims.

The material covers claims and cases in the United Kingdom and abroad, in a wide range of locations, such as HMS Warrior in Portsmouth Dockyard; the Burrator to Liskeard gas pipeline in Cornwall; Swansea Bay Bathing Water Improvement Scheme; the Gateway Project in Singapore; Queens Road in Hong Kong; and a tunnel project in Kenya. Finally, the Clyde Bank Shipyard papers were used as a case study for anchored sheet piled walls in Rowe's lectures.

Related Units of Description:

There are overlaps between the Litigation section as a whole and other sections of the archive. For example, the Reservoirs and Dams series (PWR/4/2/1) includes the Brenig Dam Claim, and the Carsington Reservoir post failure legal case. The Other British Construction Projects series (PWR/4/2/7) contains material on the Aberfan Tip Disaster case. The Offshore Structures series (PWR/4/4) includes the Bahamas Marine Structure arbitration case. Mr Den Dover, a former student of Peter Rowe and MP for Chorley in Lancashire, was involved in opposition to the Ulnes Walton Tip Landfill Site arbitration case (PWR/4/5/104), and he also features in three projects in the Other British Construction Projects series (PWR/4/2/7).

Reference and contact details: PWR/4/5/1

A55 Abergele By-Pass, Clwyd

Dates: 1979-1981

Extent: 5 folders.

Scope and Content:

Abergele By-Pass, A55 Trunk Road, Clwyd (Conwy): Clwyd County Council.

Correspondence, test data and photographs, bore-hole logs and records, soil classification survey material, calculations, notes, plans (some dated earlier in the 1970s), and diagrams relating to contractor's Claim under clause 12 (1) for unexpected ground conditions concerning proposed road diversion, Chester to Bangor Trunk Road A55. The case is A. Monk and Co. Ltd (contractor) v. Clwyd County Council, with Rowe acting on behalf of the contractor.

Related Units of Description:

See also PWR/4/2/5/13.

Reference and contact details: PWR/4/5/2

Aldi Foodstores Ltd, Stockport, Cheshire

Dates: 1993-1995

Extent: 11 folders.

Scope and Content:

Aldi Foodstores Ltd, New Bridge Lane, Stockport, Cheshire. Large number of architects' plans, and extensive file photocopy material labelled in sections, including correspondence, minutes of meetings, daily site and work diaries, site progress reports, test data and analyses, bore-hole logs, and other related documents and supporting evidence, relating to Aldi seeking to obtain warranty for soil nailing and store piling via their architects, the PDA Partnership Ltd 'New Bridge Lane also referred to as 'Newbridge Lane'. Client: Shaw Whitmore Fyffe Partnership.

Reference and contact details: PWR/4/5/3

Alhambra Shopping Centre, Barnsley, West Yorkshire

Dates: 1990-1995

Extent: 20 folders.

Scope and Content:

Alhambra Shopping Centre, Barnsley, West Yorkshire: Gyngleboy [public house] foul sewer diversion: Fairclough Buildings Ltd v. Midland Construction (Daventry) Ltd. Correspondence, photographs, maps and plans, calculations, notes, jottings, Rowe's report on behalf of the defendants, copy legal material, document files, tender documents and other background information including published material, going back to the 1970s and 1980s, geotechnical reports by Ove Arup and Partners, relating to Claim by management contractors Fairclough Building Ltd (later Amec Buildings Ltd) against subcontractors Midland Construction, concerning excavation trench support safety measures and subsequent backfilling. Many groupings of documents numbered in sections, 1 to 10, and subdivided. Solicitors: Russell and Creswick. Client: Greycoat Shopping Centres plc.

Reference and contact details: PWR/4/5/4

Barnetby and Keelby Sewage Treatment Works, Lincolnshire

Dates: 1984-1985

Extent: 1 folder.

Scope and Content:

Barnetby and Keelby Sewage Treatment Works, Lincolnshire: Kass Construction Co. Ltd v. Anglian Water Authority. Correspondence, notes, calculations, Rowe's advice and comments, bore-hole logs and other test data, and ground investigation contract documents going back to 1982, relating to Claim concerning ground-water conditions, the bore-hole information supplied at time of tender seen as being insufficient, concerning work on behalf of Anglian Water Authority, Lincoln Sewerage Division, at the above Works sites, and additional costs incurred.

Reference and contact details: PWR/4/5/5

Black Country Trunk Sewer, Oldbury, West Midlands

Dates: 1984-1986

Extent: 1 folder.

Scope and Content:

Black Country Trunk Sewer, Oldbury Arm, West Midlands: Contract 16, Holloway Bank to Toll End. Correspondence, site investigation reports, plan, calculations, sketches and diagrams, and notes relating to Claim against T. Kilroe and Sons by Severn Trent Water Authority, the latter being a client of Exploration Associates (Warwick) Ltd.

Reference and contact details: PWR/4/5/6

Blades Street Sewerage Scheme, Lancaster

Dates: 1994-1995

Extent: 6 folders.

Scope and Content:

Blades Street sewerage scheme, Lancaster: Lancaster City Council sewerage system improvements. Correspondence, plans and maps, site investigation and test data, reports (by Rowe and others) including photographic reproductions in colour, calculations, notes and jottings, diagrams, sketches, graphs, background information and evidence including contract and client documents going back to 1993, concerning pipeline construction difficulties and unexpected ground conditions while microtunnelling under a railway embankment. This Clause 12 contractual Claim appears to be J.F. Donelon and Co. Ltd [contractors] v. Lancaster City Council.

Includes references to Long Eaton [sewer]: see PWR/4/5/44.

Reference and contact details: PWR/4/5/7

Bournemouth Town Centre By-Pass, Dorset

Dates: 1975-1977

Extent: 2 folders.

Scope and Content:

Bournemouth Town Centre By-Pass, Bournemouth, Dorset: Dorset County Council: Stage VII, Richmond Hill intersection of the A347 with the A338. Correspondence, notes, calculations, site investigation report, relating to Claim for additional work: costs connected with the construction of ground anchors resulting from changed ground conditions at Bournemouth. Universal Anchorage Co. Ltd. Includes Ordnance Survey map of Bournemouth Solid and Drift Geology, 1991.

Reference and contact details: PWR/4/5/8

Bradford Basin Sewerage Scheme, West Yorkshire

Dates: 1993-1995

Extent: 2 folders.

Scope and Content:

Bradford Basin Sewerage Scheme, Bradford, West Midlands, Phase 1, Horton Valley Scheme 1/2: City of Bradford Metropolitan Council. Correspondence, site investigation and test data, shift engineers ring check sheets, calculations, notes, Rowe's report, client documents, and copies of published articles etc. going back to the 1970s, relating to possible Claim for additional payment relating to unexpected ground conditions and choice of tunnelling equipment used. Rowe acted for the contractor, J.F. Donelon and Co. Ltd. The case appears to be J.F. Donelon and Co. Ltd v. City of Bradford.

Reference and contact details: PWR/4/5/9

Britannia Bridge Approach Road

Dates: 1978

Extent: 1 folder.

Scope and Content:

Britannia Bridge Scheme across the Menai Straits, North Wales: approach road. Letter, Rowe's observations, diagram, and 'instructions to tender' notes, relating to preliminary assessment prior to possible Claim. Fairclough Civil Engineering Ltd.

[Robert Stephenson's tubular Britannia Railway Bridge was severely damaged by fire in 1970. It was rebuilt as 'a road and rail bridge, supported on new arches, with vehicular

traffic carried on the upper deck.]

Reference and contact details: PWR/4/5/10

Broomhurst Farm Sewage Treatment Plant, Fleet, Hampshire

Dates: 1977

Extent: 2 folders.

Scope and Content:

Broomhurst Farm Sewage Treatment Plant, Fleet, Hampshire: Thames Water Authority, Lambourn Division. Correspondence, plans including soil strata studies, calculations, site investigation material such as reports, notes, diagrams, and minutes, relating to supporting evidence (background material going back to 1973) for Clause 12 contractual Claim against Howard Humphreys and Sons, Consulting Engineers, by Simonbuild Ltd (working for Thames Water Authority), concerning ground conditions during extension work at the plant.

Reference and contact details: PWR/4/5/11

Burrator to Liskeard Gas Pipeline, Cornwall

Dates: 1992-1993

Extent: 1 folder.

Scope and Content:

Correspondence, meeting notes, notes and jottings, instrumentation readings, rock cutting and trenching equipment promotional leaflet, Rowe's comments and advice, colour photographs and negatives, relating to Claims by Terry and Thomas (Construction) Ltd for additional reimbursement from British Gas concerning unexpected ground conditions during trenching for the welded steel 450mm diameter gas pipeline.

Reference and contact details: PWR/4/5/12

Burslem to Strongford Link Sewer, Stoke-on-Trent, Staffordshire

Dates: 1991-1994

Extent: 4 folders.

Scope and Content:

Burslem to Strongford Link Sewer, Stoke-on-Trent, Staffordshire: Stoke-on-Trent City Council. Correspondence, plans, site investigation and test data, notes, lab test results, reports and comments including Rowe's, and other documents, going back to 1989,

relating to Claim concerning trench backfill composition. The case appears to be J.F. Donelon and Co. Ltd v. Stoke-on-Trent City Council.

Reference and contact details: PWR/4/5/13

Caerphilly Foul Sewer Improvements, Mid Glamorgan

Dates: 1987-1990

Extent: 2 folders.

Scope and Content:

Caerphilly Foul Sewer Improvements, Caerphilly, Mid Glamorgan, Phase 1: Rhymney Valley District Council. Correspondence, test data (Geo-Research), lab test results, Rowe's and other reports, plans, maps, notes, sketches, diagrams, jottings, specification, bore-hole logs, copy article dated 1957, and other background information and supporting evidence, relating to dispute concerning cause of pipeline construction difficulties during the improvement works, and the client's withholding of payment for the relevant section of the work. Kilroe Civil Engineering (contractor) v. Rhymney Valley District Council (client).

Reference and contact details: PWR/4/5/14

Calder Valley M65 Motorway, Lancashire

Dates: 1976-1980

Extent: 3 folders.

Scope and Content:

Calder Valley M65 Motorway, North Lancashire: Clifton Aqueduct Temporary Works Scheme, canal diversion crossing the motorway. Correspondence, calculations, plans and maps, notes including history of the temporary works, jottings, test data such as piezometer readings, and sketches. This material seems to overlap with material occurring later, namely Clifton Aqueduct PWR/4/5/19, in the case of Leonard Fairclough Ltd v. Lancashire County Council, yet was found labelled and stored quite separately.

Related Units of Description:

See also Hetton Tunnel Collapse, Calder Valley M65 Motorway, PWR/4/5/35.

Reference and contact details: PWR/4/5/15

Cambridge M11 Motorway

Dates: 1979

Extent: 1 folder.

Scope and Content:

Cambridge Western By-Pass, M11 Motorway: Contract no. 2. Correspondence, notes, jottings, memorandum relating to gault clays, and test data (soil surveys), concerning a delay and disruption claim. F.V. Osborne (Solicitor) seeking Rowe's advice concerning weathered and unweathered clay divisions. Client: Amey Roadstone Construction Ltd.

Reference and contact details: PWR/4/5/16

Claremont Walk, Bath, Somerset

Dates: 1974

Extent: 1 folder.

Scope and Content:

Claremont Walk, Bath, Avon (Somerset): City of Bath. Letter from Carpenter and Carpenter, Solicitors, Rowe's site inspection report concerning stability and suitability of the site, and photographs, relating to local government planning permission for proposed development.

Reference and contact details: PWR/4/5/17

Clayton Aniline Co. Ltd, Manchester

Dates: 1988

Extent: 1 folder.

Scope and Content:

Clayton Aniline Co. Ltd, Clayton, Manchester: Building 152: basement and foundation contract. Correspondence, notes, plots, and calculations, relating to a new subsequent contract problem and possible Claim with the same client, the previous problem occurring back in 1977. A copy of Rowe's advice from this previous problem, dated February 1977, is included. Fairclough Civil Engineering (contractor) v. Clayton Aniline Company.

Reference and contact details: PWR/4/5/18

Cleethorpes Sewerage, Cleethorpes, Humberside

Dates: 1992-1994

Extent: 11 folders.

Scope and Content:

Cleethorpes Sewerage, Trinity Road, Cleethorpes, Humberside (Lincolnshire): Anglian Water Authority, Shaft MH1 Clause 12 Claim. Correspondence, Rowe's and other reports and comments, bore-hole records, test data, calculations, notes and client documents, plans including hydrogeological and geological sections, maps, ground investigation reports (Anglian Water/Sir Alexander Gibb and Partners), etc., going back to 1991, and Shaft 1 Additional Information file including photographs, relating to

Claim concerning unexpected ground conditions during tunnel drive MH[Manhole]11 to MH13 - the proposed pipeline route. The case is J.F. Donelon and Co. Ltd v. Anglian Water.

Reference and contact details: PWR/4/5/19

Clifton Aqueduct, Lancashire - Temporary Works Scheme: Canal diversion crossing the North Lancashire M65 Motorway

Dates: 1976-1977

Extent: 2 folders.

Scope and Content:

Clifton Aqueduct, Lancashire, Temporary Works Scheme: canal diversion crossing the North Lancashire M65 Motorway. Correspondence, plans showing Whittlefield Street canal bridge, maps, notes and jottings, Sequence of Construction notes and history of the temporary works, and draft report on justification of the scheme at tender stage, etc. The case seems to be a contractual Claim against Leonard Fairclough Ltd (contractors) by Lancashire County Council concerning extension of time and costs due to unexpected difficulties in carrying out the contract for same. Works certification to be undertaken by a representative of Allott and Lomax (company).

This material seems to overlap with material occurring earlier, namely Calder Valley M65 Motorway, Clifton Aqueduct, PWR/4/5/14, yet was found labelled and stored quite separately.

Reference and contact details: PWR/4/5/20

Colchester Northern By-Pass, Essex

Dates: 1973-1974

Extent: 6 folders.

Scope and Content:

Colchester Northern By-Pass, Colchester, Essex: London to Great Yarmouth Trunk Road A12 Section. Correspondence, plans, site investigation report (Geo-Research Ltd) and test data, Rowe's soils report, calculations, notes, jottings, bore-hole logs (Geo-Research Ltd), and much background material from the 1970s or earlier, probably concerning contractual Claim relating to unsuitability of earthworks materials. The case seems to be Amey-Fairclough Consortium v. Department of the Environment. Client: Amey Roadstone Construction Ltd and Leonard Fairclough Ltd (the Amey-Fairclough Consortium). Solicitor F.V. Osbourne. Also photographs - not found.

Reference and contact details: PWR/4/5/21

Crawley Relief Sewer, Surrey

Dates: 1992

Extent: 1 folder.

Scope and Content:

Crawley - Furnace Green Relief Sewer, Crawley, Surrey: Crawley Borough Council. Correspondence, plans, diagrams, site investigation and test data, bore-hole logs, notes, minutes, and works specification relating to contractual dispute concerning unexpected ground conditions (presence of clay at the tunnel level) while microtunnelling. The case appears to be J.F. Donelon and Co. Ltd v. Dean and Dyball Construction Ltd and Crawley Borough Council - Clause 12 contractual Claim.

Reference and contact details: PWR/4/5/22

Darlington Memorial Hospital, Co. Durham

Dates: 1965-1966

Extent: 10 folders.

Scope and Content:

Darlington Memorial Hospital, Darlington, Co. Durham: Newcastle Regional Hospital Board: Main Phase 1 Contract. Correspondence, plans, site investigation report and other material dating back to 1962, test data, bore-hole logs, calculations, notes, photographs, graphs, contract documents and other client papers relating to Claim concerning foundation problem. Dispute appears to be between L.G. Mochel and Partners (consulting engineers) and Higgs and Hill Northern Ltd v. the Newcastle Regional Hospital Board.

Reference and contact details: PWR/4/5/23

Deeside Industrial Park, Shotton, Clwyd

Dates: 1981-1982

Extent: 1 folder.

Scope and Content:

Deeside Industrial Park, Shotton, Clwyd (Flintshire): pumping station excavation, dewatering wells Clause 12 (1) Claim. Correspondence, site investigation material, test data, Rowe's advice, notes and jottings, and calculations relating to Claim by T. Kilroe and Sons against their client Ward Ashcroft and Parkman, consulting engineers.

Reference and contact details: PWR/4/5/24

Derker Mill Reclamation Scheme, Oldham, Greater Manchester

Dates: 1986-1989

Extent: 2 folders.

Scope and Content:

Derker Mill Reclamation Scheme site, Derker Street, Oldham, Greater Manchester: arbitration dispute. Correspondence, site investigation material including report by Geo-Research Ltd, Rowe's advice, report, and comments; copy legal documents, contract documents, and notes, etc., some dating back to 1980, relating to Claim by Ruttle Plant Hire Ltd against Oldham Metropolitan Borough Council, in an attempt to get extra payment for unexpected ground conditions, as the excavated material was considered unsuitable to use as fill material as stipulated in the contract. Solicitors: Yates Barnes.

Reference and contact details: PWR/4/5/25

Don Valley Intercepting Sewer, Sheffield, South Yorkshire

Dates: 1982-1983

Extent: 7 folders.

Scope and Content:

Don Valley Intercepting Sewer, Sheffield, South Yorkshire: Sheffield City Council, Stage 1 Contract 1. Correspondence, site investigation report (4 volumes) and other reports by Rowe and others, plans, maps, and diagrams, copy published articles and other supporting background information going back to the 1970s, claim material, meeting notes, notes, and jottings, concerning Claim for recovery of additional cost incurred as a result of unexpected geological conditions during the driving of the sewer tunnel. Fairclough Civil Engineering Ltd were part of Don Valley Contractors Joint Venture. Sir William Halcrow and Partners were asked to report by the client (Sheffield City Council) on claims made by Don Valley Contractors. Rowe acted for Fairclough.

Reference and contact details: PWR/4/5/26

Doric Unit Company (Springs) Ltd, Rossendale, Lancashire

Dates: 1993-1995

Extent: 11 folders.

Scope and Content:

Doric Unit Company (Springs) Ltd, Burnley Road East, Waterfoot, Rossendale, Lancashire: P.S. Turner (Constructions) Ltd (plaintiffs) v. Cooper & Jackson Partnership, Howard Johnston, Nax Civil Engineering Ltd (t/a Dunelm Drilling Co.), and Mechplant Ltd (defendants). Correspondence, plans and drawings, notes, calculations, maps, photographs, site investigation report and site geology notes, diagrams, sketches, jottings, plaintiffs reports, defendants reports, site and other diary extracts for 1993, copy legal and other material going back several decades, slope stability analysis, minutes and notes of meetings of experts etc., relating to Claim for

negligence concerning failure of slope stability after piling collapse at the factory extension site. Various solicitors employed in the case, such as Lace Mawer acting for Mechplant Ltd.

Reference and contact details: PWR/4/5/27

Eccles Effluent Treatment Works, Eccles, Greater Manchester

Dates: 1978-1980

Extent: 4 folders.

Scope and Content:

Eccles Effluent Treatment Works Reconstruction Phase 2, Eccles, Greater Manchester: cofferdam to sludge pumping station: North West Water Authority Clause 12 Claims. Correspondence including company announcement letter dated July 1981 (G. Dew and Co. Ltd), notes, calculations, plans (some dated 1977), maps, graphs and plots, minutes of meeting, site investigation reports, and Rowe's advice given, relating to Claims by G. Dew and Co. Ltd (contractors) against the North West Water Authority and vice versa concerning the failure of the cofferdam. Includes copy press cutting referring to the very high projected completion cost of the previously damaged and flooded Peel Common sewage works at Fareham, Hampshire - see Peel Common PWR/4/5/92.

Reference and contact details: PWR/4/5/28

Egerton Road, Belmont, Lancashire

Dates: 1985-1990

Extent: 6 folders.

Scope and Content:

Egerton Road, No. 1 Ornamental Cottages: Belmont Sewer, Belmont, Blackburn, Lancashire: Arthur Allen Taylor and Nancy Josephine Taylor (plaintiffs) v. Borough of Blackburn and Norwest Holst Pipework Services Ltd (defendants). Correspondence, photographs, diagrams, notes, jottings, sketches, copy legal material, plan, and reports by Rowe, relating to Claim by the plaintiffs that council work on the sewer caused subsidence damage to their house, and question of liability. Forbes and Partners: solicitors acting for the Borough of Blackburn.

Reference and contact details: PWR/4/5/29

Ennerdale Intake, Ennerdale Water, Cumbria

Dates: 1986-1994

Extent: 36 folders.

Scope and Content:

Ennerdale Intake, Ennerdale Water, Cumbria, lake tunnel to the water treatment works including cofferdam: North West Water Authority. Correspondence, calculations, diagrams, reports on site investigation (relating to a new weir at Ennerdale Water, 1978), ground investigation, and engineering; maps, plans, bore-hole logs (Soil Mechanics, 1978), test data, piezometer readings, lab test results, tender and contract documents, site diaries and shift reports, photographs, minutes and notes of meetings (including draft), notes, jottings, sketches, and background material and copy articles going back to 1971, relating to lake tunnel drive access shaft Clause 12 contractual Claim: "use of [compressed] air" during tunnelling. Rowe advised Rofe, Kennard and Lapworth, the consulting engineers working for North West Water, on the building of the intake and concerning the dispute. The claim appears to be Rofe, Kennard and Lapworth in dispute with. J.F. Donelon and Co. (their subcontractors).

Includes press cutting obituary relating to mining engineer Rudolph "Silas" Glossop, comment by Rowe in one of his letters that he had been told that "the miners could hear work on the Inlet, which would appear to indicate that the tunnel has been proceeding generally in the right direction!", April 1993, and Retaining Wall Analysis Program Geosolve User's Manual Version 3.

Reference and contact details: PWR/4/5/30

Farrington Close, St Helens, Merseyside

Dates: 1980

Extent: 1 folder.

Scope and Content:

Farrington Close, Eltonhead Estate, St Helens, Merseyside. Copy letter from Rowe to Ingham, Clegg and Crowther and Layton (solicitors) detailing Rowe's initial assessment of the geotechnical aspects of possible negligence Claim against Fairclough Ground Engineering Division, 27 December 1980, and one sheet of calculations, n.d.

Related Units of Description:

See Eltonhead Road Estate, PWR/4/2/7/21.

Reference and contact details: PWR/4/5/31

Five Fords Sewage Treatment Works, Wrexham, Clwyd

Dates: 1979-1985

Extent: 1 folder.

Scope and Content:

Five Fords Sewage Treatment Works Extension, Wrexham, Clwyd (Wrexham): Clause 12 contractual Claim. Correspondence, plan, bore-hole logs, maps, jottings, sketches, photocopies of photographs for Appendix 10, and Claim No. 1 documents, relating to Claim for additional costs incurred due to unforeseen ground conditions by contractor

Alfred McAlpine, against employer Welsh Water Authority.

Reference and contact details: PWR/4/5/32

Halifax Main Sewerage Reconstruction Scheme, Halifax, West Yorkshire

Dates: 1985-1988

Extent: 1 folder.

Scope and Content:

Halifax Main Sewerage Reconstruction Scheme, Halifax, West Yorkshire: Stage 2, tunnel drive. Correspondence, plans, notes, diagrams, ground conditions report, site investigation material, and related documents, relating to Clause 12(2) Claim by J.F. Donelon and Co. Ltd against Calderdale Metropolitan Borough concerning tunnel instability.

Reference and contact details: PWR/4/5/33

Headingley Water Treatment Works, Leeds, West Yorkshire

Dates: 1991-1993

Extent: 2 folders.

Scope and Content:

Headingley Water Treatment Works, Headingley, Leeds, West Yorkshire: Yorkshire Water Company. Correspondence, plans, site investigation and test data, calculations, stability analysis, bore-hole logs, notes, and reports, including background material dated 1989-1990, relating to Claim concerning potential stability problem relating to retaining wall. Rowe acted for contractor in the case: Yorkshire Water Engineering (client), Dew Group Ltd (contractor), Keller Foundations (subcontractor).

Reference and contact details: PWR/4/5/34

Herringthorpe Leisure Centre, Rotherham, South Yorkshire

Dates: 1981-1985

Extent: 10 folders.

Scope and Content:

Herringthorpe Leisure Centre, Rotherham, South Yorkshire: Rotherham Metropolitan Borough Council v. Gillinson Barnett and Partners (architects) and James Miller and Partners Ltd. Correspondence, plans, maps, reports including structural, geotechnical,

site investigation, and Clerk of Works' Reports, Statement of Claim, 1982, notes, sketches, jottings, test data, graphs, diagrams, calculations, and photographs relating to Claim concerning failure (cracking and warping) of storeroom retaining wall at the Sports Hall Unit: Bradshaw, Buckton and Tonge (consulting engineers) were asked to look at evidence for James Miller and Partners (Miller Construction). Also copy technical articles going back to the 1960s, and other background material including Bills of Quantities document, and plans, going back to the early 1970s. Booth and Co. and Middletons (solicitors), G. D. Nicholls Partnership (consultant geologists and geochemists).

Reference and contact details: PWR/4/5/35

Hetton Bog Row Tunnel - Hetton Main Drainage Phases I and II: Calder Valley M65 Motorway

Dates: 1979-1980

Extent: 1 folder.

Scope and Content:

Correspondence, plans, maps, site investigation and Rowe's reports, test data, notes, jottings, and background information material going back to 1976, relating to Claim arising from unexpected ground conditions, subsequent shaft misalignment and tunnel collapse at Hetton-le-Hole, in the vicinity of the Ryhope Five Quarter Coal Seams. Client: Fairclough Civil Engineering Ltd (?).

Related Units of Description:

See also Calder Valley Motorway, PWR/4/5/14.

Reference and contact details: PWR/4/5/36

Hexham Temporary Works, Hexham, Northumberland

Dates: 1992

Extent: 1 folder.

Scope and Content:

Hexham Temporary Works, Pethhead Pumping Station, Hexham, Northumberland: R.T. James Ltd v. Northumbrian Water. Correspondence relating to contractor's temporary works scheme for reinforced concrete pumping chamber for Northumbrian Water Ltd, encountering unexpected ground conditions, and whether the site investigation by Exploration Associates (part of the Northumbrian Water Group) was adequate for the (unnamed) contractor. Includes Rowe's letter to R.T. James Ltd requesting payment for work done for them concerning the Kimberley-Clark Ltd Barton-upon-Humber Plant, and references by Rowe to his consultancy work on the Ennerdale Intake Scheme, and contractor selection procedure instigated by Rowe "after the Oldbury Power Station event...". Client: Regent Developments. Consulting Engineers: R.T. James Ltd.

Reference and contact details: PWR/4/5/37

HMS Warrior, Portsmouth Dockyard

Dates: 1989

Extent: 1 folder.

Scope and Content:

HMS Warrior, Portsmouth Dockyard, Portsmouth (Northwood NATO HQ): Kyle Stewart Ltd v. The Secretary of State for the Environment. Correspondence, and jottings, relating to the possibility of Rowe acting as an expert witness for James R Knowles, construction contracts consultants, in arbitration Claim by the contractor Kyle Stewart Ltd. Includes letter 5 March 1990 noting that "the parties have settled", and a copy of Rowe's *curriculum vitae* detailing his litigation experience up to 1988.

Reference and contact details: PWR/4/5/38

Hoylake Main Drainage, Wirral, Merseyside

Dates: 1980

Extent: 1 folder.

Scope and Content:

Hoylake Main Drainage, Wirral, Merseyside: Wirral Metropolitan Borough, Kingsmead School, Bertram Drive, Hoylake, Contract No. 4. Correspondence, test data, and plans (some dated 1973), relating to arbitration Claim by the School Authority that refilling of sewer trench led to land drainage deficiencies, during final reinstatement of the School playing fields.

Reference and contact details: PWR/4/5/39

Hythe End Pumping Station, Staines, Berkshire

Dates: 1970

Extent: 1 folder.

Scope and Content:

Hythe End Pumping Station [near Staines, Berkshire], Horton and Wraysbury Main Drainage: William Old Ltd v. Eton Rural District Council. Correspondence, Edgar Morton and Partner report, calculations, notes, sketch and jottings, including John Taylor and Sons comment and opinion, relating to Claim by contractor for failure of cofferdam. PWR/EMP acting for Eton RDC, but is primarily an EMP job.

Reference and contact details: PWR/4/5/40

Kearsley Interceptor Sewer Scheme, Bolton, Lancashire

Dates: 1987-1989

Extent: 2 folders.

Scope and Content:

Kearsley Interceptor Sewer Scheme, Bolton, Lancashire: Bolton Metropolitan Borough Council, Clause 12 Claim. Correspondence, plans, Rowe's site investigation reports, sketches, jottings, calculations, and notes, relating to Claim by contractors J.F. Donelon and Co. Ltd against consulting engineers Haiste International Ltd concerning site construction difficulties and unexpected ground conditions working in the peat: Claim continued to be rejected by the latter.

Reference and contact details: PWR/4/5/41

Kelvin Valley Sewer, Glasgow

Dates: 1994-1995

Extent: 11 folders.

Scope and Content:

Kelvin Valley Sewer Phase 2, Glasgow, Strathclyde (City of Glasgow): Kilroe Civil Engineering Ltd v. Strathclyde Regional Council. Correspondence, reports including site investigation, calculations, maps, plans, Pipejacking Claim document, December 1994, test data including analysis of ground conditions, bore-hole records, notes, jottings, diagrams and sketches, and background material going back to 1991 including tender documents, relating to Claims arising from unforeseen ground conditions and site events, pipejacking problems, etc. Rowe advised Kilroe in claim(s) against their client Strathclyde Regional Council. Also copy published articles and Kilroe publicity brochure; letter referring to possible claim on the Westhoughton Wastewater Treatment Improvements, 3 April 1995, and to the enclosure of photographs (none found); and Rowe's brief *curriculum vitae*.

Reference and contact details: PWR/4/5/42

Killingholme Combined-Cycle Gas Turbine Power Station, Immingham, Humberside

Dates: 1993-1995

Extent: 6 folders.

Scope and Content:

Killingholme Combined-Cycle Gas Turbine (CCGT) Power Station Project, Immingham, Humberside (Lincolnshire): Claim 20, Offshore Works, namely thrust boring for laying of cooling water intake and outfall pipes, from the site to the River Humber estuary, approx. two kilometres away. Correspondence, plans (some dating

back to 1991), notes, jottings, reports, calculations, maps, diagrams, site and ground investigation material going back to 1989 and earlier, probably relating to Claim originally made by subcontractors Keliston Marine Ltd who had sublet to Thrustboring Construction Ltd, followed by a claim then made by Wimpey against the client for extra costs arising from progress delays caused by unforeseen physical conditions during installation. Rowe provided expert advice for the Claim. Includes British Geological Survey publication entitled "Geology of the country around Grimsby and Patrington", 1994, and 'Fairclough News' publication, January 1984 including Killingholme article page 6.

Reference and contact details: PWR/4/5/43

Lancashire/Yorkshire M62 Motorway

Dates: 1970-1971

Extent: 4 folders.

Scope and Content:

Lancashire/Yorkshire M62 Motorway: Cut 9, Contract 7: Rochdale site. Correspondence, plans, site investigation material, notes, test data, jottings, graphs and tracings, diagrams, sketches, calculations, photographs, and reports, relating to Clause 12 Claim concerning unforeseen ground conditions. Edgar Morton and Partner and Rowe were both involved in acting for Sir Lindsay Parkinson and Co. Ltd (contractor) [also referred to as S.L.P.] in the claim. Includes handwritten letter from Edgar Morton to Peter Rowe, Skye, 27 November 1970; references to 'S.L.P. Seepage Flows' and 'French Drains' [a french drain is a trench that has a land drain installed at the bottom of the trench and has been backfilled with shingle or similar coarse stone. The purpose of such a drain is to change the pattern of drainage in a certain area]; report by EMP to Lancashire County Council concerning Slattocks Roundabout (Rochdale to Oldham motorway) [the A627(M)], 9 March 1971; and drilling test sheet, Sandiway Quarry, Cheshire, 4 June 1971.

Reference and contact details: PWR/4/5/44

Long Eaton Mid Level Sewer, Nottinghamshire

Dates: 1993-1994

Extent: 6 folders.

Scope and Content:

Long Eaton Mid Level Sewer, Long Eaton, Nottinghamshire: Erewash Borough Council, Clause 12 Contractual Claim. Correspondence, plans, site investigation and test data, notes, jottings, lab report, reports by Rowe and others, contract and tender documents, and background material going back to 1992, relating to Claim concerning unexpected ground conditions during microtunnelling, and pipejacking problems. Rowe advised the contractor, J.F. Donelon and Co. Ltd, in their claim against Acer Engineering Ltd. Includes microtunnelling company publicity brochures.

Reference and contact details: PWR/4/5/45

Manor Park, Runcorn, Cheshire

Dates: 1988-1993

Extent: 4 folders.

Scope and Content:

Manor Park, Runcorn, Cheshire: a) Manor Park 2 Main Drainage Works Claim; b) Manor Park East Foul Sewers Claim. Correspondence, plans, site investigation material, tender document, test data, graphs and plots, calculations, notes, photographs, and tender and contract documents, relating to Claim concerning dewatering problem, Manor Park 2 Main Drainage, 1988-1989, by contractors Kilroe Civil Engineering Ltd.

Correspondence, plans, maps, photograph, diagrams, graphs, site investigation material, test data, and bore-hole records, relating to Clause 12 contractual Claim concerning unexpected ground conditions: claim not pursued on Rowe's advice. J.F. Donelon and Co. Ltd (contractor) claiming against Rendel, Palmer and Tritton (engineering subcontractor), 1991-1993. Works and site investigation on behalf of the Commission on New Towns.

Reference and contact details: PWR/4/5/46

Market Lane Sewer, Gateshead, Tyne & Wear

Dates: 1982-1984

Extent: 10 folders.

Scope and Content:

Market Lane Sewer Phase 1, Gateshead, Tyne & Wear: Gateshead Metropolitan Borough Council v. Amies Pipe Trenching Ltd. Correspondence, notes, site investigation material, reports by Rowe and others, maps, plans, test data, bore-hole logs, piezometer records, lab test results (Geo-Research Ltd), Diary of Events, jottings, and contract and tender documents, and background material going back to 1979, relating to Clause 12 contractual Claim concerning unexpected site operations and pipe failures during sewer construction. Rowe advised Amies, the contractor, in their arbitration with Gateshead Metropolitan Borough Council.

Reference and contact details: PWR/4/5/47

Mold Sewage Treatment Works, Clwyd

Dates: 1985-1986

Extent: 1 folder.

Scope and Content:

Mold Sewage Treatment Works Extensions Phase 1, Mold, Clwyd (Flintshire): Welsh Water Authority, Clause 12 Claim. Reports comprising Rowe's dewatering report, April 1986, and accompanying letter, and site investigation final report, n.d. (Exploration

Associates), plans, maps, calculations, graph plot, and notes, relating to Claim by A. Monk and Co. (contractor) against their client the Welsh Water Authority.

Reference and contact details: PWR/4/5/48

New Wellington Bridge, Torry, Aberdeen

Dates: 1981-1983

Extent: 4 folders.

Scope and Content:

New Wellington Bridge, Torry, Aberdeen, Grampian (City of Aberdeen) - east and west pier cofferdams: Grampian Regional Council. Correspondence, Rowe's report on cofferdam stability, Claim Document, site investigation reports, graphs, calculations, notes, plans, test data, bore-hole records, meeting notes, relating to Claim by A. Monk and Co. Ltd (contractor) against Considere and Partners (engineer) for loss and expense as a result of ground condition being at variance with those indicated by the bore-hole records at time of tender. Rowe was consulted as an expert witness by A. Monk and Co. Ltd to give his opinion in the case. Client (employer): Grampian Regional Council. ? Also negatives, 1983 - not found.

Reference and contact details: PWR/4/5/49

Niddry Street Bridge, Paisley, Glasgow

Dates: 1977-1982

Extent: 1 folder.

Scope and Content:

Niddry Street Bridge, Paisley near Glasgow, Strathclyde (Renfrewshire): Strathclyde Regional Council: Paisley Inner Ring Road Phase IA. Correspondence, report, Rowe's comments and opinion, test data, piezometer readings, notes, jottings, graphs and plots, plans including tender drawings, photographs, and calculations, relating to Claim(s) concerning increased costs incurred by Fairclough Civil Engineering Ltd (contractor) resulting from unforeseen soil conditions at variance with those on the Tender drawings, and the subsequent effect on cofferdam provision, construction, and maintenance by the company. Rowe advised Fairclough in the case against their client Strathclyde Regional Council.

Reference and contact details: PWR/4/5/50

North Cheshire M56/57 Motorway

Dates: 1971-1979

Extent: 17 folders.

Scope and Content:

North Cheshire M56/57 Motorway, Preston Brook to Bowdon: Cheshire County Council. Correspondence, plans including geological section through Keuper Waterstones and series of outsize extra large Working Drawings, notes, photographs and negatives, minutes and notes of meetings, claim documents and copy legal material, Rowe's and other reports on geology, test data, and tender and contract documents, and background material going back to the 1960s including interim report, 1964, relating to Clause 12 (2) Claim by Robert McGregor and Sons Ltd for extra costs arising from problems with the specified use of unweathered Keuper Waterstone as fill material, and later arbitration case, with Rowe acting as expert witness: Marples Ridgeway Construction Ltd (contractors) v. The Department of Transport. Solicitors: McKenna and Company.

Reference and contact details: PWR/4/5/51

Peerglow Park, Longton, Stoke-on-Trent, Staffordshire

Dates: 1986-1990

Extent: 2 folders.

Scope and Content:

Peerglow Park, Denton Grove, Longton, Stoke-on-Trent, Staffordshire: Housing Development Phase III. Correspondence, Rowe's and other reports, background documents going back to 1986, Weston Park Phase II material, and test data, relating to Claim by Peerglow Construction (Northern) Ltd that EPH Pipelines Ltd (contractor) had carried out substandard workmanship, as possibly indicated in the original site investigation results obtained by Nicholls Colton and Partners (consulting engineers). Consulting engineers: John Burrows and Partners. Rowe retained by EPH Pipelines Ltd.

Reference and contact details: PWR/4/5/52

Poole Sewage Treatment Works, Dorset

Dates: 1992-1994

Extent: 29 folders.

Scope and Content:

Poole Sewage Treatment Works Extensions, Poole, Dorset: Wimpey Wessex Water Ltd v. Halcrow Engineering. Correspondence, ground and site investigation reports (by Soil Mechanics Ltd and others), photographs, calculations on stability, test data including lab tests etc. (mostly Wimpey Geotech Ltd), piezometer readings, graphs, diagrams, sketches, plans, notes of meetings, contract documents, slope stability analysis, notes, jottings, background material going back to 1991, and copy litigation and claim documents, relating to Clause 12 Claim(s) concerning unforeseen site events (ground movements), etc.

Includes *Halcrow Now* company magazine with "Poole Takes the Plunge" article, Autumn 1993. Rowe provided the geotechnical basis of the claims. Consulting engineers: Sir William Halcrow and Partners.

Reference and contact details: PWR/4/5/53

Portobello By-Pass, Edinburgh

Dates: 1990-1991

Extent: 15 folders.

Scope and Content:

Portobello By-Pass, Edinburgh: Phase 1, temporary works, Milton Road to Baileyfield Crescent. Correspondence, reports including soil investigation, test data, arbitration claim documents (Nigel Lowe and Associates), copy legal material, notes, calculations, jottings, maps and plans, and background material going back to 1983, relating to Claim arbitration by Mowlem Scotland Ltd against Lothian Regional Council for increased costs. Mowlem Scotland Ltd being clients of Nigel Lowe Associates (Financial and Management Associates) and McGrigor Donald (Solicitors). Includes plans of Musselburgh By-Pass: East approach to Leith; copy of Rowe's CV, 17 September 1990 "which does not include work over the last few years or any of that for McGrigor Donald".

Reference and contact details: PWR/4/5/54

Preston Brook Canal Tunnel, Runcorn, Cheshire

Dates: 1982-1983

Extent: 5 folders.

Scope and Content:

Preston Brook Tunnel Reinstatement Stage 2, Trent and Mersey Canal, near Runcorn, Cheshire: British Waterways Board. Correspondence, Rowe's and other reports, contract and tender documents, photographs, plans, diagrams, sketches, test data, and notes, relating to collapse of tunnel, which independent advisors later found to have not been the responsibility of the contractor but resulting from ground movement. Bush and Rennie Associates. Includes copy extract from doctoral thesis on British Canal Tunnels by P.K. Roberts, 1977.

Related Units of Description:

See also Manchester Ship Canal relating to Preston Brook Marina, PWR/4/1/28.

Reference and contact details: PWR/4/5/55

Royton Southern Main Sewer Reconstruction, Oldham, Greater Manchester

Dates: 1979-1981

Extent: 1 folder.

Scope and Content:

Royton Southern Main Sewer Reconstruction, Oldham, Greater Manchester: collapse of bus shelter and public convenience, Broadway, Royton, 9-12 March 1979. Correspondence, plan, site investigation report (Geo-Research Ltd), site daily diary sheets, test data, and Rowe's report, and background material going back to 1977, relating to Claim for negligence by Oldham Metropolitan Borough [Council] concerning cause of the collapse, which happened after work was done on the sewer by T. Kilroe and Sons Ltd Insurance Claim loss adjusters: Graham Miller and Company.

Reference and contact details: PWR/4/5/56

St Edmunds Terrace, Greenfield, Holywell, Clwyd

Dates: 1984-1986

Extent: 1 folder.

Scope and Content:

St Edmunds Terrace No.1, Greenfield, Holywell, Clwyd (Flintshire): potential insurance claim. Correspondence, notes, inspection report, and graph plot, relating to Claim by Mr C.M. Scott against Delyn Borough Council/Clwyd County Council, and Midland Construction Ltd, concerning alleged subsidence damage to his 111 year old house during pile driving at the reclamation site building work taking place across the road from the property in 1982-1983. Greenfield is also referred to as 'Greenfields'. Edgar Morton and Partner and Rowe both working on the geotechnical aspects of the Claim. Solicitors: Fanshaw, Porter and Hazlehurst. Curtin and Partners, consulting engineers, working for Mr Scott.

Reference and contact details: PWR/4/5/57

Seaforth Docks, Liverpool

Dates: 1971-1972

Extent: 1 folder.

Scope and Content:

Seaforth Docks, Liverpool: Mersey Docks and Harbour Board: Contract No.1. Correspondence, sheet of jottings, and Points of Claim document (including plans dated 1967) relating to Claim arbitration between Foundation Engineering Ltd (claimants and subcontractors to the respondents) and John Howard and Co. (Northern) Ltd (respondents and main contractors to the Harbour Board), concerning construction of a sea wall and docks at the site. Rowe advising the claimants. Original envelope marked 'Seaforth Docks. Costains'.

Reference and contact details: PWR/4/5/58

Sefton Meadows Landfill Site, Maghull, Merseyside

Dates: 1992-1993

Extent: 4 folders.

Scope and Content:

Sefton Meadows Landfill Site No. 3, Sefton Lane, Maghull, Merseyside: Galliford Northwest v. Merseyside Waste Disposal Authority. Correspondence, notes, copy of Rowe's paper on ground water published 1986, plans, Rowe's and other reports on ground investigations, bore-hole logs, test data, leachate control measures data, site diaries, and contract documents and background documents going back to 1990, relating to Claim arbitration over damage to filter pipe drainage system. Letter confirming that the dispute "has been satisfactorily settled between the parties", 14 September 1993.

Reference and contact details: PWR/4/5/59

South West Scotland Gas Interconnector Project

Dates: 1993-1994

Extent: 16 folders.

Scope and Content:

South West Scotland Gas Interconnector Project, Bord Gais Eireann: proposed gas pipeline from Ireland to Britain, via Moffat, Brighthouse Bay (near Kircudbright, Dumfries & Galloway), and connecting with the subsea pipeline at Wigtown Bay. Correspondence, large number of reports by Rowe and others, draft, control of ground water for temporary works, and geotechnical survey (Fugro Scotland Ltd), site investigation material, test data, plans, maps, photographs, daily blasting records, notes, calculations, contract documents, and jottings, relating to contractual Claim concerning unexpected site events and causes of delay during construction. Rowe working for AMEC Civil Engineering Ltd.

Reference and contact details: PWR/4/5/60

Southport Sewage Treatment Works, Merseyside

Dates: 1977-1991

Extent: 4 folders.

Scope and Content:

Southport Sewage Treatment Works, Southport, Merseyside: Southport Main Drainage Stage 1, temporary cofferdam to pumping station. Southport Sewage Treatment Works - Temporary Cofferdam to Pumping Station; Southport Main Drainage Stage 1. Correspondence, site investigation material by Geo-Research Ltd, calculations, bore-hole records and logs, notes, sketches and diagrams, jottings, contract document, and Rowe's report, relating to contractual Claim(s) concerning pile driving difficulties during construction of temporary cofferdam to the pumping station at Southport Sewage Treatment Works, 1977-1984, for the North West Water Authority, and dewatering problems, 1990-1991: Rowe advising G. Dew and Co. Ltd and D.G. Cummins (company) respectively concerning the said claims. Includes Peel Common site diary

sheets and other material, and Bangor Sewerage Scheme (Beach Road pumping station) documents "Observations on Trial Piling" and calculations sheet.

Related Units of Description:

See Peel Common, PWR/4/5/93, and Bangor Sewerage Scheme, PWR/4/2/6/24 and PWR/4/2/6/37.

Reference and contact details: PWR/4/5/61

Swanley to Sevenoaks, M25 Motorway, Kent

Dates: 1991

Extent: 1 folder.

Scope and Content:

Correspondence, Rowe's preliminary desk study notes concerning cause of damage, plans, map, and photographs, relating to stabilisation claim by Associated Asphalt Co. Ltd (plaintiff) against John Laing Construction Ltd (defendant). Includes tender documents and site investigation material going back to October 1984, and daily weather data from the Meteorological Office. Brain and Brain (Solicitors) for Assoc. Asphalt Co. Ltd Horwood and Partners (Surveyors).

Reference and contact details: PWR/4/5/62

Swanpool Street, Falmouth, Cornwall

Dates: 1970

Extent: 1 folder.

Scope and Content:

No. 25, Swanpool Street, Falmouth, Cornwall: damage to property. Correspondence between Rowe and Nalder and Son, solicitors, and Rowe's comments and notes, relating to feasibility of proceeding with legal case concerning the partial collapse to the above property in December 1968, owned by Mrs. E.V. Beard and her late husband, adjoining No. 23 owned by Mr Miller. Includes Rowe's site investigation cost estimate and comments on the cause of the collapse, and recommending Edgar Morton to be retained as expert witness for the case should it proceed, with likely involvement of the South Cornwall Water Board, Cornwall County Council, and Falmouth Borough Council as defendants.

Reference and contact details: PWR/4/5/63

Swansea Bay Bathing Water Improvement Scheme

Dates: 1995-1997

Extent: 12 folders.

Scope and Content:

Swansea Bay Bathing Water Improvement Scheme (SBBWIS), Contract 5: City and County of Swansea. Correspondence, plans (some going back to 1994), maps including published Swansea geological map (Ordnance Survey) and copies of 19th century Swansea Harbour maps and plans, bore-hole records, test data, site and ground investigation material including several report volumes, notes, jottings, calculations, Rowe's report, engineer's shift reports, reproduction of photographic images, and site diary: comprising documents marked 'A' to 'R' and related material, relating to contractual Claim concerning unexpected stoppages and damage to tunnelling machine during tunnel drive during River Tawe sewer crossings. Rowe advising Tarmac Soletanche Joint Venture (also referred to as 'JV'). [There is some suggestion that this may have been Rowe's last consultancy job, as the material continues to March 1997 and he died on 28 April the following month, age 74].

Reference and contact details: PWR/4/5/64

Woodhill Road, Bury, Greater Manchester

Dates: 1980-1983

Extent: 1 folder.

Scope and Content:

Woodhill Road, Bury, Greater Manchester, "N.S. [North-South] Interceptor Sewer" Phase 4, tunnel drive: Bury Metropolitan Borough Council. Correspondence, bore-hole logs (Norwest Holst Soil Engineering Ltd), notes, plans, test data, and Rowe's report to Hanella Ltd concerning claim regarding conditions after site visit. Rowe concludes in his report that in his view work on the rock face can now only be advanced by explosives, which he states could not have been predicted from the site investigation data.

Reference and contact details: PWR/4/5/65

Woughton Sewerage Scheme, Milton Keynes, Buckinghamshire

Dates: 1971-1972

Extent: 2 folders.

Scope and Content:

Woughton Sewerage Scheme, Milton Keynes, Buckinghamshire, Main Drainage Contract No. 2: Milton Keynes Development Corporation. Correspondence, contract documents, site investigation report, plan, maps including published Milton Keynes geological map (Ordnance Survey), bore-holes, and drainage proposals, Rowe's ground conditions report, calculations, colour transparency slides, photographs (Oxford Clays) and negatives, relating to legal dispute between G. Dew and Co. Ltd and the Corporation concerning works at Bletchley, Milton Keynes. Several papers are numbered.

Reference and contact details: PWR/4/5/66

Argyle Street Development, Glasgow

Dates: 1982-1983

Extent: 1 folder.

Scope and Content:

Argyle Street Development, Glasgow, Strathclyde (City of Glasgow): DCI Scotland v. British Rail. Correspondence, report, review, calculations, plans, test data, graph plot, and copy background material going back to 1968, relating to case appertaining to ground settlement concerns at proposed multi-storey commercial development at site just north of Argyle Street, British Rail being owners of the adjacent property, with Rowe to act as mediator in the arbitration dispute. Consulting engineers: Crouch and Hogg.

Reference and contact details: PWR/4/5/67

Barrow-in-Furness, Cumbria

Dates: 1985-1988

Extent: 2 folders.

Scope and Content:

Barrow-in-Furness, Cumbria, premises at Ironworks Road (formerly Barrow Ironworks): T. Brady and Son Ltd v. Westminster Dredging Co. Ltd and Duddon Contractors. Correspondence, photographs and negatives, Rowe's and other reports including site investigation, notes, 'Air Photographs' notes, diagrams, valuation, site history and development notes, and copy legal material relating to Claim concerning alleged flooding damage to the plaintiff's land during pumping operations, bringing seawater and sand and other deposits from the sea to the lagoon(s) by the defendants. Rowe advising Westminster Dredging Co. Ltd. Includes letter stating that the case has been settled, 24 March 1988. Vaudrey, Osborne and Mellor (solicitors). Ove Arup and Partners (engineers).

Reference and contact details: PWR/4/5/68

Birches Head, Stoke-on-Trent, Staffordshire

Dates: 1988-1990

Extent: 1 folder.

Scope and Content:

Birches Head, Stoke-on-Trent, Staffordshire: Hassal Homes. Correspondence, investigations report and stability report, Rowe's and other comments, graph, photographs, test data, notes, Rowe's invoice, and jottings, relating to legal case and arbitration concerning collapsed sewers at Birches Head. Fletcher Builders (client).

Reference and contact details: PWR/4/5/69

Blakewater Interceptor Sewer, Blackburn, Lancashire

Dates: 1973-1982

Extent: 7 folders.

Scope and Content:

Blakewater Interceptor Sewer Stage I Phase II, Blackburn, Lancashire: Blackburn Borough Council. Correspondence, notes, jottings, reports including site investigation (Geo-Research Ltd, Soil Mechanics Ltd, and others), contract and claim documents, bore-hole logs, photographs, minutes of meeting, calculations, maps and plans, background material, relating to Clause 12 insurance Claim probably Lilley Construction Ltd against Kilclare Ltd (the Council contractor), which then went to litigation, concerning damage incurred, April 1977, due to partial sewer tunnel collapse. Rowe gave advice to Blackburn Borough Council. Includes company publicity brochures.

Reference and contact details: PWR/4/5/70

Brindleheath Main Drainage Scheme, Salford, Greater Manchester

Dates: 1973-1977

Extent: 1 folder.

Scope and Content:

Brindleheath Main Drainage Scheme Phase 1, Salford, Greater Manchester: Salford City Council. Correspondence, plans, and calculations, relating to legal case concerning structural damage to Bridge Mill property in Holland Street, Salford, Manchester, in 1975. Includes Rowe's expenses incurred in preparing a report, 1975 (report not included in the material), and he was later asked in 1977 by Weightmans (solicitors for the City) for further help in supporting the City's case in *Smurfit Properties Ltd v. City of Salford and Others*.

Reference and contact details: PWR/4/5/71

Bury and Rochdale Old Road, Middleton/Heywood, Greater Manchester

Dates: 1985-1986

Extent: 2 folders.

Scope and Content:

Bury and Rochdale Old Road, road subsidence at Birtle, Middleton/Heywood, Greater Manchester. Correspondence, photographs and negatives, calculations, and notes

relating to Claim against the Kennedy Construction Group by the Water Authority concerning road collapse as a result of alleged faulty water mains pipe lining. J.W. Macalister and Dundas Ltd (loss adjusters). Rowe working for Edgar Morton and Partner, who in turn are acting for Kennedy Construction Group Ltd.

Reference and contact details: PWR/4/5/72

Bury St Edmunds Sugar Silos, Suffolk

Dates: 1984-1988

Extent: 24 folders.

Scope and Content:

Bury St Edmunds Silos, Suffolk: damage to sugar silos in 1974 and 1983: British Sugar plc. Correspondence, plans, a large number of engineering reports and appendices volumes, and other reports by Rowe and others, site investigations, test data including modelling and silo experiments at Felsted, calculations, notes, sketches, diagrams, jottings, photographs, graph plots, and background material going back to 1973 including doctoral thesis, and copy published papers (mostly arising from the British Sugar plc Technical Conference in 1988 which Rowe attended), etc., relating to litigation concerning investigation into cracking and bulging of the silo walls taking stored sugar pressure into account - British Sugar plc v. John Laing Construction Co. Ltd. Rowe reporting on the geotechnical aspects and causes of the damage. Includes index list of documents for the case, by bundle (colour coded by report covers). Engineer: W.S. Atkins and Partners. Solicitors: Lovell, White and King.

Related Units of Description:

See also PWR/4/2/7/13 which overlaps with Litigation PWR/4/5/72, relating to legal matters appertaining to the Bury St Edmunds sugar silos, and includes sugar conference delegate photograph.

Reference and contact details: PWR/4/5/73

Cadogan Street, Glasgow

Dates: 1986-1992

Extent: 25 folders.

Scope and Content:

Nos 34-38 Cadogan Street, Glasgow, Strathclyde (City of Glasgow): site demolition and preparatory works affecting Waterloo Street and surrounding area, and causing ground movements below Blythswood Street, Cadogan Street, Wellington Lane, and the southern side of No. 78, Waterloo Street. Correspondence, Rowe's reports and handwritten notebooks, notes, Rowe's comments and other documents relating to the arbiter's proposed findings report, copy legal and contract documents including copy arbitration documents marked 'Open Record' and 'Closed Record', other reports including structural damage and site investigation, analysis of building and site movement records, other site investigation material, Derick Sampson and Partners

(consulting engineers) material, files of notes, pleadings and examination of witnesses, photographs, plans, calculations, photocopies of photographs, sketches, diagrams, and jottings, including documents going back to 1982 and copy plan dated [19]29, relating to major arbitration case between Scottish Metropolitan Property plc and GA Group Ltd concerning Claim by the former for damage incurred to a three to four storey building at 75 Waterloo Street (used as the South of Scotland Electricity Board substation building, namely the SSEB building referred to in the above material), during continuous flight auger piling operations at 34-38 Cadogan Street. The parties seem to have settled amicably. McGigor Donald - solicitors to The Scottish Metropolitan Property plc. Rowe was engaged in independent assessment on behalf of The Scottish Metropolitan Property plc.

Includes documents for Lumley Road, Skegness, relating to Windsor Restaurant.

Related Units of Description:

See also Lumley Road, PWR/4/5/84.

Reference and contact details: PWR/4/5/74

Canvey Island, Essex

Dates: 1980

Extent: 12 folders.

Scope and Content:

Canvey Island, Essex, Thames Refinery Project: Occidental Refineries Ltd. Correspondence, notes, calculations, reports, photographs, plans, diagrams, copy material including case papers, published articles, tank and other test data, and background and copy material going back to 1962 (including methane terminal documents), relating to arbitration case concerning foundation problems associated with the oil storage tanks at Canvey Island. Client: Hill, Dickinson and Company. Engineer: R.T. James. Rowe acting as Expert witness for the defence in Occidental Refineries Ltd v. Sir Alfred McAlpine Zanen Dredging Co. Ltd.

Reference and contact details: PWR/4/5/75

Chapel Street, Coventry, West Midlands

Dates: 1988-1992

Extent: 13 folders.

Scope and Content:

Chapel Street, Coventry, West Midlands: new office block and car parks for Equity and Law Assurance Society plc. Correspondence, bore-hole logs, Rowe's report and advice, other reports including ground radar report, notes, pile record sheets, test data, plans and diagrams including geological, calculations, and contract and tender documents, relating to contractual Claims arbitration by Shepherd Construction Ltd (contractor) against Piggott Foundations Ltd (subcontractors) concerning cause of bored pile failures during

the above construction works. Rowe working for Shepherd Construction Ltd. Engineer: Woodward and Clyde/Cundall Johnston and Partners. Letter confirming that the above dispute has now been settled out of court, 27 January 1994.

Reference and contact details: PWR/4/5/76

Clyde Bank Shipyard, Glasgow

Dates: 1982-1988

Extent: 12 folders.

Scope and Content:

Clyde Bank Shipyard, Glasgow, Strathclyde (City of Glasgow), West and East Yard Quay Walls: UIE Shipbuilding (Scotland/UK) Ltd. Correspondence, Rowe's geotechnical report with photographs, site and ground investigation reports, test data (University of Strathclyde and Soil Mechanics Ltd, etc.), plans, copy of UIE Clydebank R.E. [Resident Engineer]'s diary, 1982-1983, piling records, diagrams, calculations, tide graphs (Clyde Port Authority), bore-hole logs, computer test data printout sheets, claim documents, documents relating to design of the anchored sheet piled wall, and background material and supporting evidence going back to 1972, relating to Arbitration between Sir Robert McAlpine and Sons Ltd (main contractor) claiming against UIE Shipbuilding (Scotland) Ltd the respondents, in 1988. Rowe was asked by the latter to report on the cause of steel pile movements at the new quay. Solicitors: McGrigor Donald. Engineer: Wallace Stone and Partners. [Clyde Bank Shipyard papers used as a case study for anchored sheet piled walls as cited in Rowe's lectures].

Related Units of Description:

See also Clydebank Ship Yard, PWR/4/2/3/9.

Reference and contact details: PWR/4/5/77

Codsall, Moat Brook, Staffordshire

Dates: 1973-1974

Extent: 1 folder.

Scope and Content:

Codsall, Moat Brook near Wolverhampton, Staffordshire, Regrading - Thrust Bore Claim: Seisdon Rural District Council. Correspondence and calculations relating to arbitration case between main contractor C.J. Pearce and Co. and subcontractor William Press and Son (contracted by the British Reinforced Concrete Engineering Co. Ltd), concerning thrust block failure problems with pipejacking under the railway line. Engineer: Edgar Morton and Partner, working for C.J. Pearce and Company.

Related Units of Description:

See also stray letters, Seisdon, PWR/4/2/7/65.

Reference and contact details: PWR/4/5/78

Dean Wood Dam, Buckfastleigh, Devon

Dates: 1988-1989

Extent: 4 folders.

Scope and Content:

Dean Wood Dam near Buckfast Abbey, Buckfastleigh, Devon: small dam collapse. Correspondence, notes, photographs, calculations, plans including copy plans, copy legal material, and background material to the case going back to 1984, relating to case between Robert Michael Fysh QC, intellectual property lawyer (plaintiff and owner of the woodlands) and Fountain Forestry Ltd (defendant), with Krijn van der Gaauw Associates the third party, concerning failure of the dam, and subsequent remedial measures and safety considerations. Fysh's idea had been to construct a dam to provide a lake, both for fire-fighting and recreational purposes, and he entered into a forestry management agreement with Fountain Forestry Ltd. Delays in approval for the dam followed, then when it was finally built in August 1988 it collapsed. McKenna and Co. (Solicitors) acting for Robert Michael Fysh. Rowe acted for McKenna & Co. Mr J. Millmore of Babbie, Shaw and Morton was consulted in his capacity as a Panel Engineer under the Reservoirs Act 1975.

Reference and contact details: PWR/4/5/79

Eastern Expressway, Runcorn, Cheshire

Dates: 1982-1986

Extent: 2 folders.

Scope and Content:

Eastern Expressway, Runcorn, Cheshire: Runcorn Development Corporation, road construction. Correspondence, photographs, bore-hole logs, plans, site investigation report, notes and statement relating to arbitration dispute concerning problems with construction of the road in June 1983. The case was brought by A. Monk and Co. Ltd against the Runcorn Development Corporation.

Reference and contact details: PWR/4/5/80

Gateway Project, Singapore

Dates: 1986-1988

Extent: 40 folders.

Scope and Content:

Gateway Project, Singapore (known as "The Gateway"): Turner (East Asia) Pte. Ltd (claimants) v. Gateway Land Pte. Ltd (respondents). Correspondence, Phase I and II Instrumentation Results files, test data including test results (Professor Ian Smith and

Engineering Department, University of Manchester), graphs, diagrams, Rowe's reports, large number of assorted and numbered report documents, site investigation material, file documents, photographs, plans, copy technical papers and articles dating back to 1977 and earlier, Norwegian Geotechnical Institute Technical Reports concerning strutted excavations, 1962, and National University of Singapore student thesis, 1985, notes, jottings, sketches, calculations and analysis, background material and supporting evidence for the case going back to the early 1980s, copy legal material including Points of Claim, Instructions to Counsel, etc., publicity material, and contract and client documents including Shimizu Construction Co. Ltd tender submission document, relating to Arbitration case concerning deflexions of the existing strutted sheet pile walls of the Gateway building project at URA Land Parcel at Beach Road, Singapore. Includes letter informing Rowe that Gateway's arbitration was discontinued after the company settled with Turner out of court in May 1988, c. July 1989. Counsel: Richard Southwell QC. Includes report appendices, 1983, marked 'Confidential'.

Reference and contact details: PWR/4/5/81

Kenya Tunnel

Dates: 1980-1982

Extent: 6 folders.

Scope and Content:

Kenya Tunnel: City Council of Nairobi Water and Sewerage Department: Chania to Kimakia to Thika Water Supply Project Phase II. Correspondence, test data, plans including geological sections, calculations, diagrams, graphs and plots, Shift Reports (outlet tunnel cutting), notes, jottings, contract and tender documents, and reports by Rowe and others relating to Contract C103 Geology Claim by Fairclough International Construction Ltd concerning difficult geological conditions encountered during tunnel drive. Rowe was employed by Fairclough as geotechnical consultant and to act as expert witness if the case came to court. It is unclear whether the case did actually come to arbitration or not. Includes background material, old plans, copy published technical equipment specifications and brochures, etc., going back to 1978, and Government of Kenya publication "Geology of the Kijabe Area", 1964.

Reference and contact details: PWR/4/5/82

Knights Hill, Lambeth, London

Dates: 1976-1982

Extent: 11 folders.

Scope and Content:

Knights Hill, Lambeth, London, Peabody Estate housing project: The Governors of the Peabody Donation Fund (plaintiffs) v. Sir Lindsay Parkinson and Co. Ltd, Austin Vernon and Partners, and London Borough of Lambeth (first, second, and third defendants respectively). Correspondence, plans (some going back to the 1960s), maps including copies of old 19th century maps or earlier, site investigation and test data, calculations, meeting notes, Rowe's reports including on Knights Hill geology, other

reports (including engineering, precision survey, slope stability, site investigation, and cracks in retaining walls and dwellings), photographs, copy technical articles, and notes, relating to legal case leading to arbitration in 1982, concerning construction problems, failure of the drains, and ground movement.

Includes hardback book, illustrated with photographs, entitled *The Story of Norwood*, by J.B. Wilson prepared by H.A. Wilson, published by the London Borough of Lambeth in 1973, which gives the history of the area including Knights Hill. Includes background material to the case going back to 1970. Architects: Moxley, Jenner and Partners, acting for the plaintiffs. Solicitors: Masons.

Related Units of Description:

See also Knights Hill, PWR/4/2/7/36.

Reference and contact details: PWR/4/5/83

Libra Chemicals, Irlam, Greater Manchester

Dates: 1981-1993

Extent: 11 folders.

Scope and Content:

Libra Chemicals, Irlam, Greater Manchester: factory building claim. Correspondence, plans, photographs, notes, Rowe's and other reports, calculations, graphs and plots, contract and tender documents, and copy legal documents and court papers including statement of evidence, statement of claim, particulars of claim, etc., relating to arbitration case between Libra Chemicals Ltd v. Downs and Variava, Spooner and Seth Ltd, John Lawlor Ltd, Geo-Research Ltd, Horridge and Power, concerning damage to two-storey office building by penetration of heat through ground floor slab into steelworks slag. Rowe acted as expert witness on behalf of Geo-Research Ltd (fourth defendant). Includes copy published articles and supporting documentation, going back to the 1970s.

Reference and contact details: PWR/4/5/84

Lumley Road, Skegness, Lincolnshire

Dates: 1978-1984

Extent: 6 folders.

Scope and Content:

Nos 85-87 Lumley Road Nos, Skegness, Lincolnshire, building collapse: Lings v. Greater Nottingham Co-operative Society Ltd (GNCS) (plaintiffs), and first, second, and third defendants respectively, Cementation Specialist Holdings Ltd, Shepherd Construction Ltd, and Bylander Waddell Associates. Correspondence, Rowe's geotechnical report on piling difficulties, 1979 (written in 1984 on instructions of GNCS), other reports including problems encountered during construction of foundations, and damage to the Windsor Restaurant, 1984, photographs, site

investigation material, test data including lab test results, notes, copy legal material and court papers including documents marked 1 to 53, and calculations, relating to Claims in 1981 and 1984 leading to arbitration case concerning foundations movement damage caused to the Windsor Restaurant, which adjoins the site of the GNCS premises extension works, during the course of making piled foundations for the latter. Solicitors: Hunt Dickins and Willatt.

Related Units of Description:

See also Lumley Road documents in with Cadogan Street material, PWR/4/5/73.

Reference and contact details: PWR/4/5/85

Marley Hill, near Sunnyside, Gateshead, Tyne & Wear

Dates: 1988-1990

Extent: 5 folders.

Scope and Content:

Marley Hill, near Sunnyside, Gateshead, Tyne & Wear: British Coal Corporation Open Cast Executive Planning application with Gateshead Metropolitan Borough Council: Public Inquiry. Correspondence including copy, planning application documents, court papers including proof of evidence documents, sand and gravel assessment and analysis, test data including bore-hole records, maps, and plans including geological, and geophysical and pitting survey, relating to Public Inquiry involving British Coal and Gateshead Metropolitan Borough Council for refusal of planning application concerning proposed sand and gravel extraction scheme on the site. The effect on the Tanfield Railway had been taken into consideration by British Coal. Includes background information and supporting documentation going back to the early 1980s and earlier. Rowe was brought in by Gateshead MBC to substantiate their case. Mr Isherwood of Edgar Morton and Partner actually assessed the reserves of sand and gravel for Rowe.

Related Units of Description:

See also Marley Hill, PWR/4/2/7/43.

Reference and contact details: PWR/4/5/86

Nantwich Sewerage Scheme, Nantwich, Cheshire

Dates: 1983-1987

Extent: 11 folders.

Scope and Content:

Nantwich Sewerage Scheme, Nantwich, Cheshire: Crewe and Nantwich Borough Council: damage to Beambridge Pumping Station foundation. Correspondence, plans, site investigation material, test data, bore-hole logs, calculations, notes, Rowe's and other reports, document files, contract and tender documents, photographs, diagrams, graphs and plots, copy legal material and court papers, relating to arbitration case Claim

(s) between Kennedy Civil Engineering Ltd (claimant) v. Crewe and Nantwich Borough Council (respondent), concerning sewerage scheme pumping station foundation construction difficulties. Rowe acting as expert witness for the latter. Includes background material going back to 1981, and A4 photocopy of a cartoon concerning the Nantwich pumping station foundation failure, by 'Mike French', n.d.

Reference and contact details: PWR/4/5/87

Nelson Joinery Ltd, Nelson, Lancashire

Dates: 1991-1992

Extent: 5 folders.

Scope and Content:

Nelson Joinery Ltd, Nos 1 to 3 Horncliffe Heights, Kings Causeway, Brierfield, Nelson, Lancashire. Correspondence, meeting of experts documents, reproduction photographic images, plans, calculations, reports by Rowe and others, notes, photographs, copy legal material and copy court documents, file documents, press cutting, 19 April 1990, relating to Brierfield residents "disappearing gardens", and copy ?house purchase agreement, insurance and conveyancing documents etc., relating to arbitration case following landslip at housing site. The case appears to be ?Nelson Joinery Ltd v. Pendle Borough Council. Rowe acting as expert witness for the case. Includes Daily Rainfall totals for Colne Sewage Works, 1982-1990, and monthly averages, 1961 to 1990 (Meteorological Office); and background material including plans, going back to 1982.

Reference and contact details: PWR/4/5/88

Nene Service Station, Wansford near Peterborough, Northamptonshire

Dates: 1991-1992

Extent: 20 folders + 1 VHS videotape .

Scope and Content:

Nene Service Station, Wansford near Peterborough, Northamptonshire: Heron petrol station, A47 Nene services. Correspondence, copy file documents (mostly found loose and untitled, including correspondence, minutes of meetings, etc.), reports including ground instability, remedial measures; plans, maps, site investigation material, test data, graphs and plots, diagrams, calculations, slope stability analyses, rainfall data, 1987-1992, notes, photographs and negatives, reproduction of photographic images, videotape in colour taken of inside of damaged and undamaged piping (filmed probably by camera attached to fibre-optic cable), extending several metres inside the pipes, taken 19 December [19]91, approx. 30 mins long, and copy legal and court material, claim particulars, witness statements, etc., relating to arbitration case concerning ?settlement of garage foundations, and remedial measures taken: Heron Garage Properties Ltd v. Stephen Johnson (trading as Stephen Johnson Associates) and Northern Foundations Ltd. Rowe acted for the defendants. Includes background material and plans going back to 1987. Elliot and Co. (Solicitors).

Reference and contact details: PWR/4/5/89

Newark Road Eastern Relief Sewer, Lincoln

Dates: 1984

Extent: 2 folders.

Scope and Content:

Newark Road Eastern Relief Sewer, Lincoln: Canwick Road Bridge pipe jack. Correspondence, Rowe's report for Thrustbore Construction Ltd, diagrams, Survey of Well Points plan, and notes, relating to possible court case (?pipe jacking Claim) concerning dewatering difficulties and problems with Sykes (dewatering contractor) construction precautions relating to the proposed pipe jack under the Canwick Road Bridge. Includes Rowe's opinion and comments on Pendle Valley Sewer Phase I Pipe jack thrustbore, etc.).

Reference and contact details: PWR/4/5/90

Oldbury Nuclear Power Station, Gloucestershire

Dates: 1968-1976

Extent: 24 folders.

Scope and Content:

Oldbury Nuclear Power Station, Oldbury-on-Severn, Gloucestershire - Reactor Settlement Estimates Claim. Correspondence, plans, large number of reports by Rowe, Edgar Morton and Partner, and Soil Mechanics Ltd; site investigation material including lab test results (Oldbury 'B', dated 1971), test data, calculations, notes, photographs (bore-hole samples, 1967), and other documents relating to major litigation case between the main contractor Sir Robert McAlpine and Sons Ltd and Soil Mechanics Ltd concerning settlement estimates of reactors ('E' value): excessive settlement of the reactor foundations. Includes background material to the case, and copy published articles in English and in French going back to 1910, but mostly ranging from the 1950s and 1960s. One of the articles is jointly written by Professor A.W. Skempton and Dr L. Bjerrum, ca. 1956, the former being Peter Rowe's contemporary in the field at Imperial College. Solicitors: Hair and Company.

Related Units of Description:

See also Oldbury Nuclear Power Station, PWR/4/2/4/7.

Reference and contact details: PWR/4/5/91

Palace Road/Palace Square Housing Sites, Penge, Bromley

Dates: 1976-1979

Extent: 1 folder.

Scope and Content:

Palace Road/Palace Square Housing Sites, Penge, Bromley, Greater London: Wiltshier Construction Ltd v. London Borough of Bromley. Correspondence, site investigation material, graphs and plots, notes, plan, test data, reports, and copy legal material and case papers relating to arbitration case concerning load-bearing cracked foundations. Rowe provided advice to Masons (solicitors), their client being the main contractor Wiltshier Construction Ltd, claimant, employed by the respondent, the London Borough of Bromley.

Reference and contact details: PWR/4/5/92

Peel Common Outfall Sewer, Lee-on-Solent, Hampshire

Dates: 1975-1979

Extent: 10 folders.

Scope and Content:

Peel Common Outfall Sewer, Lee-on-Solent, Hampshire: Hampshire Main Drainage Project: Landward Section and Browndown to Peel Common Rising Main Stages 1 and 2, Sewage Treatment Works. Correspondence, Rowe's geotechnical report, site investigation report, maps and plans including geological sections, graphs and plots, notes, jottings, diagrams and sketches, photograph, notes of meetings including conference with counsel, contract and tender documents, and copy legal material and copy case papers relating to arbitration case claims by G. Dew and Co. Ltd, claimants, in dispute against Southern Water Authority, respondents, concerning unforeseen physical conditions during excavation and piling, leading to construction delays and requests for additional payment. Rowe was to act as expert witness on behalf of the claimants. Includes background or copy material going back to 1972, and letter confirming the case has been "resolved by negotiation rather than recourse to the Arbiter's court", 7 August 1979.

Reference and contact details: PWR/4/5/93

Queens Road, Hong Kong

Dates: 1984-1985

Extent: 29 folders.

Scope and Content:

Queens Road, Central, Hong Kong: Hydegate Realty v. Attorney General of Hong Kong: Claim relating to Inland Lot [I.L.] 8512 bordered by Queens Road and Hollywood Road. Several reports on site investigation, drafts, and with pasted-in photographs, by Rowe, Professor G. Stuart Littlejohn (University of Bradford), Professor Peter Lumb (University of Hong Kong), and others, correspondence and file documents, site investigation material, test data, diagrams, graphs, calculations

including structural and stability, sketches, notes, jottings, Geological Society conference programme on 'Groundwater in Engineering Geology', September 1985, loose photographs including panoramic (several pasted together in a fan shape), publicity brochures, plans, maps, technical and copy published articles relating to Kowloon tests, Hong Kong Public Works Dept. report, January 1982, file of copy meteorological records, 1960 to 1984, cross-examinations, claim particulars, and other copy legal material, and notes of meetings, relating to arbitration case claim concerning compensation for land bought by Hydegate Realty, plaintiffs, which seems to have been undevelopable due to continuing ground movements on the site, associated with the construction and remedial works by the Government of Hong Kong on Lot 8512 and adjoining land between 1977-1985. Rowe and Professor Lumb both working for Hydegate Realty Ltd.

Includes plans and background material to the case going back to 1961, Rowe's *curriculum vitae*, copy legal material, including documents in English and Chinese, copy press cuttings concerning the site's problems and history and Rowe's involvement in the case as 'a world expert in geotechnics', 1985, History of Events 1960-1984, and later panoramic photograph (several pasted together in a fan shape) of the Hollywood Road site "5 years on" and accompanying correspondence commenting that the site was demolished before redevelopment, 1991. Consulting Geotechnical Engineers: Paul Tong Associates [?Paul Yuk Lun Tong, Commonwealth Scholar working with Rowe, 1969 - see Megget Reservoir PWR/4/2/1/79]; Solicitors: McKenna and Company. ?Rowe spent two months in Hong Kong working on the case.

Related Units of Description:

See Saltney Railway Bridge, PWR/4/5/97.

Reference and contact details: PWR/4/5/94

Radway Green Site, Alsager, Cheshire

Dates: 1979-1983

Extent: 2 folders.

Scope and Content:

Radway Green site, Alsager near Crewe, Cheshire: new boiler plant for Royal Ordnance Factory (ROF): coal hopper pit and cofferdam. Correspondence, site investigation material, calculations, plans, notes, jottings, diary notes (F. P. Broadhurst, 1982), Rowe's and Geo-Research Ltd's reports, test data including lab test results (Geo-Research Ltd), and bore-hole records, relating to arbitration claim by Simonbuild Ltd against Danks of Netherton Ltd concerning unexpected ground conditions. Includes technical data relating to pump installed in cofferdam sump, and copy background material going back to 1979. Rowe working for Simonbuild Ltd.

Reference and contact details: PWR/4/5/95

Rainford Estate, Rainford, Merseyside

Dates: 1980-1981

Extent: 1 folder.

Scope and Content:

Rainford Estate (Church Commissioners land), Rainford, Merseyside: Holiday Moss and White House Farms: Merseyside County Council. Correspondence, Rowe's and C.W. Isherwood's observations, statement of claim, maps including geological, and rainfall diagram, etc. relating to arbitration case between Mr J. Rosbotham, of White House Farm, and Mr J. Smith of Holiday Moss Farm, v. Holiday Moss (Landfill) Ltd. Edgar Morton and Partner advising on alleged damage to land belonging to Rosbotham and Smith as a consequence of tipping operations by Holiday Moss (Landfill) Ltd onto tenant's field, allegedly causing raising of the water table, and subsequent loss of potato crop. Includes copy correspondence, 1979. Client: Smiths Gore, Chartered Surveyors.

Reference and contact details: PWR/4/5/96

Russell Square, London

Dates: 1971-1980

Extent: 5 folders.

Scope and Content:

No. 20 (part of terrace Nos 17-24) Russell Square, London: Universal Anchorage Co. Ltd: University of London Contract. Correspondence, site investigation material, photographs (Russell Square and Woburn Square building works, taken in 1971, and ground composition), plans including Bedford Way and Woburn Square, copy legal material and court documents, calculations, notes, jottings, diagrams, sketches, test data, bore-hole logs, and reports by Geo-Research Ltd, relating to contractual claim(s) and arbitration case concerning alleged damage to Nos 20-24 Russell Square during the period of construction of the adjacent new buildings for the University of London Institute of Education and Law: Rowe titles one of the original envelopes of documents as "Claim on Higgs and Hill and Vice Versa...", 1977. Universal Anchorage Co. Ltd are the subcontractors to Higgs and Hill Building Ltd. Letter, 10 November 1980 stating that the case has now been settled. Includes publicity brochure for Universal Anchorage Co. Ltd, and background and other copy material going back to the early 1960s.

Reference and contact details: PWR/4/5/97

Saltney Ferry Railway Bridge, Saltney, Clwyd

Dates: 1984-1986

Extent: 1 folder.

Scope and Content:

Saltney Ferry Railway Bridge, Saltney near Chester, Clwyd (Flintshire): Mainwaring Estate Trustees. Correspondence, notes, sketches, jottings, copies of old plans, calculations, and report with photographs pasted in (Platt White Partnership), and site investigation report (Strata Surveys Ltd), relating to ?arbitration case concerning collapsed wall. The damage was allegedly caused by the Welsh Water Authority ditch

cleaning work in the vicinity. Solicitors: Walker, Smith and Way. Consulting Engineers: Platt White Partnership. Includes a copy letter from Rowe, 30 December 1985, commencing with an apology for his late reply to Mr Platt's letter 'due to my absence on a Hearing in Hong Kong for 2 months': see Queens Road, Central, Hong Kong, PWR/4/5/93.

Reference and contact details: PWR/4/5/98

Sandycroft Pumping Station and Rising Main, Clwyd

Dates: 1978-1983

Extent: 5 folders.

Scope and Content:

Sandycroft Pumping Station and Rising Main, Clwyd (Flintshire): Alyn and Deeside District Council: thrust bore under railway. Correspondence, reports, notes of meeting, photographs and negatives, tender document, plans, copies of legal documents including statement of claim, diagrams, bore-hole logs, and notes relating to arbitration case between Dewatering Services (G.B.) Co., plaintiffs, v. T.W. Mechanical Headings Ltd, defendants: Rowe acting as expert witness for the latter in this dispute. Includes Sykes Pumps Ltd publicity material. Solicitors: Sidney F. Snape and Co.: Rowe comments in a letter to the latter apologising for delay in replying, saying that 'about this time' (27 July 1981) 'I broke my right wrist which has delayed a great deal of my work'.

Related Units of Description:

See also Sandycroft Industrial Estate, PWR/4/2/63.

Reference and contact details: PWR/4/5/99

Southampton Docks, Hampshire

Dates: 1972-1984

Extent: 9 folders.

Scope and Content:

Southampton Docks, Woolston, Southampton, Hampshire: Fitting Out Quay: George Wimpey and Co. Ltd v. Douglas Victor Poole, 1974-1979; George Wimpey and Co. Ltd v. Vosper Thornycroft Ltd, 1983-1984. Correspondence, plans, site investigation and test data, calculations, notes and A4 notepads, photographs, diagrams, sketches, and reports including volume of photographs and site investigation, relating to arbitration case concerning failure of a sheet piled wall. Includes Rowe's *curriculum vitae* (as part of legal document); letter, 28 June 1984 stating that the Wimpey organisation has finally decided not to appeal against the judgement on the case, which was ruled in favour of Vosper Thornycroft Ltd; copy published articles; and references to the death of Dr Hsieh after a long illness, May 1978. Vosper Thornycroft Ltd: Roger Boorman.

Reference and contact details: PWR/4/5/100

Stable Fold Pumping Station, Worsley, Greater Manchester

Dates: 1976-1981

Extent: 2 folders.

Scope and Content:

Stable Fold Pumping Station, Barton Road, Alder Park, Worsley, Greater Manchester: City of Salford. Correspondence, reports by Rowe and others, test data, notes, jottings, graphs and plots, bore-hole logs by Geo-Research Ltd, some marked 'Ellesmere', and plans, relating to Claim by Turris Construction Ltd against Roscoe and Partners (consulting engineers) concerning excavation problems and alleged damage to property. The Stable Fold site lies between the Worsley Brook and the Bridgewater Canal. Rowe was advising solicitors Berry and Berry, Cocker, Smith and Co., their client being Turris Construction Co. Ltd.

Reference and contact details: PWR/4/5/101

Sudden Valley Sewerage Scheme, Rochdale, Greater Manchester

Dates: 1985-1986

Extent: 3 folders.

Scope and Content:

Sudden Valley Sewerage Scheme, Rochdale, Greater Manchester, Stage 1: Rochdale Metropolitan Borough Council. Plans, and site investigation reports including bore-hole logs (Soil Mechanics), relating to proposed Scheme.

Reference and contact details: PWR/4/5/102

Tin Brook Foul Sewer, Stockport, Greater Manchester

Dates: 1983-1985

Extent: 1 folder.

Scope and Content:

Tin Brook Foul Sewer, Stockport, Greater Manchester: Tunnel Drive Contract. Correspondence, site investigation material and test data (by Geo-Research Ltd, University of Sheffield, and others) including point load and Schmidt hammer testing, plans, maps, notes, Rowe's and other reports, and Rowe's comments on reports by Sheffield University, Geo-Research Ltd, and on his own report the previous year, as requested in April 1985, relating to possible arbitration case concerning contractual claim. Rowe working for J.F. Donelon and Co. Ltd.

Reference and contact details: PWR/4/5/103

Trewhitt Road, Heaton, Newcastle-upon-Tyne, Tyne & Wear

Dates: 1994

Extent: 3 folders.

Scope and Content:

Trewhitt Road, Heaton, Newcastle-upon-Tyne, Tyne & Wear: North Tyneside Council: Heaton Flood Relief Scheme stormwater storage tank: piling claim. Correspondence, photographs, plans, site investigation and test data, piezometer readings, sketches and diagrams, notes and minutes of meetings, calculations, notes, graphs and plots, Rowe's report (marked '5th Draft') and other reports, relating to Claim arbitration concerning failure of cofferdam sheet pile wall and subsequent cofferdam collapse. Includes copy published articles, and publicity brochure. Companies involved in the Claim: Harbour and General Ltd, R. B. Hawkins and Associates (consulting scientists and engineers), Steel Foundations Ltd, Ellis and Buckle (loss adjusters), and others.

Reference and contact details: PWR/4/5/104

Ulnes Walton Tip Landfill Site, Croston, Lancashire

Dates: 1983-1984

Extent: 2 folders.

Scope and Content:

Ulnes Walton Tip Landfill Site, Croston near Chorley, Lancashire: Chorley Borough Council: opposition to proposed deposit of hazardous waste in the area. Correspondence with William Waldegrave, MP, Under Secretary of State (copies), copy report by Rowe, notes of meeting and committee papers, photographs, newspaper cuttings, County Surveyor's Response documents, photocopies of photographs, plans, maps including copies of old maps, copy bore-hole logs (some dated 1960s), copy articles, and notes, relating to arbitration case concerning opposition by Mr Den Dover, House of Commons, MP for Chorley, Lancashire, against proposed asbestos tipping by Lancashire County Council. Also correspondence concerning the existing radioactive waste tipping at Ulnes Walton by British Nuclear Fuels Ltd, and possibility of tip extension. Includes a copy of Hansard relating to Parliamentary debate raised by Mr Dover, 15 February 1984, and D.O.E. Waste Management Paper No. 18 - Asbestos Waste, HMSO, 1979.

Reference and contact details: PWR/4/5/105

Vanessa Drive and Spring Chase, Wivenhoe, Essex

Dates: 1979

Extent: 1 folder.

Scope and Content:

Vanessa Drive and Spring Chase, Wivenhoe, Essex: Spring Chase Residents Association. Correspondence and notes relating to arbitration case concerning unfit properties Claim by the Spring Chase Residents Association. Rowe was asked to represent them in the case, and after agreeing had to later regretfully decline due to pressures of work, recommending Mr C.W.[Bill] Isherwood of Edgar Morton and Partner instead.

Reference and contact details: PWR/4/5/106

West Huntspill Acid Effluent Outfall, Somerset

Dates: 1984-1986

Extent: 1 folder.

Scope and Content:

Acid Effluent Outfall, West Huntspill, Somerset: Beechwood Construction v. Royal Ordnance Factory [ROF Puriton]. Correspondence, notes, calculations, and Rowe's report relating to contractual claim concerning plastic pipe collapse. Rowe was engaged by Cunningham, Hart and Co. (loss adjusters) to adjudicate in regard to a difference in expert opinion concerning cause of the pipe damage. In negotiations with the receiver and C.H. Dobbie and Partners. Includes background material to the case going back to 1982. Craigdam Services Ltd.

Reference and contact details: PWR/4/5/107

Weston Favell Transverse Distribution Road, Northampton

Dates: 1974

Extent: 1 folder.

Scope and Content:

Weston Favell Transverse Distribution Road and adjacent housing estate, Northampton. Letter, 22 January 1974, from C.W. Isherwood of Edgar Morton and Partner to C.B. Hill Esq. at Geo-Research Ltd referring to their previous discussion, and giving his extensive observations on 'tufa' [calcium carbonate mineral deposit], 'the nature of tufa, its incidence in soil generally and its effect on building construction...', as 'raised... by... Beddington, Hughes and Hobart, Solicitors...', concerning alleged site investigation negligence in 'failing to mention or anticipate the possible presence of tufa'. Isherwood concludes that 'there were no sufficiently strong reasons' why this presence should have been anticipated 'within particular parts of the housing estate.'

Reference and contact details: PWR/4/5/108

Wisley to Leatherhead M25 Motorway, Surrey

Dates: 1983-1984

Extent: 5 folders.

Scope and Content:

Wisley to Leatherhead M25 Motorway, Surrey: Bridge B14, Woodlands Road, Down Wood embankment. Rowe's reports (some draft), bore-hole logs, piezometer records, site investigation material, maps, plans (some dating back to the 1970s), test data dating back to the 1970s, copy published articles, calculations, jottings, photograph, graphs and plots, relating to arbitration case contractual Claim concerning investigation into problems of bridge and embankment slip. Also 'Fairclough 100 Years of Progress' commemorative booklet, illustrated with photographs, projects covered including Kielder, Thelwall, and Chania (Kenya); and sketches, diagrams and notes probably relating to the M25 motorway and including the Chertsey to Wisley Bridge B1 foundations. Rowe working for Fairclough Civil Engineering Ltd.

Reference and contact details: PWR/4/5/109

**Miscellaneous: Oswald Hardie, consulting engineers;
Metropolitan Water Board**

Dates: 1968

Extent: 1 folder.

Scope and Content:

Handwritten letter from Oswald Hardie to Rowe, 17 January 1968, thanking him for 'the list of jobs for which you have been the consultant...' and making arrangements for Rowe, 'Jones', and Hardie to meet. Also a copy letter from Rowe to S.B. Stubbs Esq. at Taylor Woodrow Construction Ltd and accompanying press cutting relating to legal case involving the latter contractors, the defendants being the Metropolitan Water Board, concerning a 12-storey office block sited by the M3 route at Sunbury-on-Thames, Middlesex, tilting 'due to dewatering of the ground next to it', August 1968.

