

COMPANY DETAILS : **C & MJ Doring Pty Ltd** ACN No. 002 199 555
BELGRANO
Burder's Lane ABN No. 50 002 199 555
Whitlands,
Victoria 3733 Australia.

Telephone (03) 5729 7668
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COMPANY PRINCIPALS :

CARL DORING

B.E.(Mech) (Syd.), M.Soc.Sci. (Ind. Arch.) (Birmingham)

Carl Doring is a mechanical engineer who has worked in the packaging industry, on mechanical design at PMG Research Laboratories and the Army Design Establishment, on industrial trouble-shooting for Technisearch at RMIT, at CSIRO designing scientific apparatus, and on designing medical instruments and cardiac implants for an Australian manufacturer. While working as a freelance consultant in the 1980s, he was engaged to record several industrial archaeological sites. In 1986/87 he studied at the Ironbridge Institute of Industrial Archaeology and obtained a Masters degree in Social Science (Industrial Archaeology) from the University of Birmingham. Since then he has worked exclusively on heritage-related projects.

MARGRET J. DORING FIEAust, CPEng.

B.E.(Civil) (Melb.), A.R.M.I.T. (Build.), ICCROM (ARC83) (Rome)

Margret Doring is a civil engineer and builder who has worked in the building industry on residential and multi-storey construction, and as a teacher of building construction, architectural history, concrete design, structures, and materials science at the University of NSW and RMIT in Melbourne. In 1982 Margret took up a scholarship to study architectural conservation at ICCROM in Rome, Italy. After returning to Australia she worked in the Heritage Branch of the NSW Department of Planning until 1989. Since 1990 she has worked with Carl Doring on a wide variety of heritage conservation projects.

COMPANY EXPERIENCE & AREAS OF EXPERTISE :

The Company and/or its principals have experience & competence in the following types of heritage conservation work:

- * Preparation of conservation & management plans & policies for places of significance.
- * Preparation of local government heritage studies to identify, assess & document places etc.
- * Preparation of typological and thematic studies.
- * Researching and writing narrative histories.
- * Assessment reports & statements of significance etc. (Including identification, research & analysis of significant elements in the cultural environment.)
- * Documentation & recording of historic places & objects by means of photography & description.
- * Interpretation of historic sites and artefacts to the public.
- * Advising on the adaptive re-use of historic industrial sites and buildings.
- * Advising on appropriate procedures & techniques for the physical conservation of materials and objects, particularly related to the in situ conservation & restoration of historic industrial artefacts, machinery and building elements .
- * Documentation (eg. Schedules of Works) & supervision of conservation, restoration and rehabilitation works on buildings and industrial artefacts/machinery.
- * Archaeological surveys, archaeological excavations (practical excavation work and supervision of excavations), archaeological monitoring (eg. watching briefs over demolition/construction sites) and post-excavation analysis of evidence.
- * Expert witness statements related to heritage conservation and industrial archaeology.
- * Preparation of briefs for and representing clients at NSW Land & Environment Court cases or VCAT cases (planning appeals etc.).

NAME: CARL DORING

Principal of C & MJ Doring Pty Ltd
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ADDRESS: BELGRANO
Burder's Lane Whitlands
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Consulting Engineers
Heritage and Conservation Consultants
Industrial Archaeologists

Telephone: (03) 5729 7668
Facsimile: (03) 5729 7669
E-mail: doring.belgrano@bigpond.com

QUALIFICATIONS:

Bachelor of Engineering (Mechanical), University of Sydney, 1960.

Master of Social Science (in Industrial Archaeology), University of Birmingham and the Ironbridge Institute (of Industrial Archaeology), U.K., 1988.

MEMBERSHIP OF PROFESSIONAL SOCIETIES & ASSOCIATIONS:

Full Member of Australia I.C.O.M.O.S.
Member of the National Trust of Australia (N.S.W.) and (Victoria).
Member of the Society for Industrial Archaeology (USA).
Member of the Australian Garden History Society

COMMITTEE MEMBERSHIPS (& former memberships):

In mid 1997, we moved from Sydney to north-east Victoria. Prior to moving, I was a member of the following committees:

Institution of Engineers Australia (Sydney Division) Heritage Committee.
National Trust (NSW), Industrial Archaeology Committee (for 14 years).
NSW State Rail Authority Heritage Sub-Committee, on Artefacts and Archives.

At present I am a member of the North-East Victoria committee of the National Trust of Australia (Victoria).

INDUSTRIAL ARCHAEOLOGY PROJECTS with C.& M.J. Doring Pty. Ltd.

See the Summary of the company's heritage projects, pages 11 - 15.

OTHER INDUSTRIAL ARCHAEOLOGICAL EXPERIENCE:

National Trust of Australia (NSW): On behalf of the Trust I have investigated the significance of old factories and other structures, prepared and/or evaluated proposals for classification of industrial heritage items, and reviewed proposals for conservation and/or re-cycling of industrial relics and buildings of interest to the Trust. (Since 1984).

Stanley Mill, Gloucestershire, UK (woollen mill since c1813): Recording and analysing archaeological evidence of the mill's power transmission systems and its various power sources, including the original five water wheels, a later water turbine, three different types of steam engine, and both D.C. and A.C. electric power. (For English Heritage, in conjunction with the Ironbridge Institute of Industrial Archaeology - 1987).

Quarries and Mines, Snowdonia, Wales: Preliminary survey, examination and identification of machinery and equipment at several abandoned copper mines and slate quarries. Detailed recording of disused aerial ropeway equipment at the Pen-yr-orsedd slate quarry, to facilitate its later removal and faithful re-erection at the Welsh National Slate Museum in Llanberis, Gwynedd. (In conjunction with the Royal Commission on Historical Monuments in Wales - 1987).

Ironbridge Institute of Industrial Archaeology, Shropshire, UK: While studying for a Master's degree at Ironbridge, I took part in the following projects:

- * **Welshpool: Student project** - Surveying & recording Leighton Park Estate, an industrialised mid-Victorian model farm. I also co-ordinated the documentation, and wrote the major part of the final report. (For the Royal Commission on Historical Monuments in Wales - 1987).
- * **Ironbridge: Individual project** - Detailed critique of methods used in the prestigious Ironbridge Gorge Museum for presenting and interpreting industrial technology to the public. (For the Ironbridge Institute - 1987).
- * **Ironbridge & Sydney: Master's thesis** - Operation and management of the Randwick Tramway Workshops, 1881-1961. Based on extensive research of contemporary Workshops correspondence, union newspapers, Parliamentary Reports, etc.. (For the University of Birmingham - 1988).
- * **Overseas Study Tours, 1986, 1987 and 1992:** While away from Australia, I took the opportunity to make several extended study tours, visiting many overseas industrial archaeology and conservation experts, and inspecting major industrial and archaeological sites, and building conservation and re-use projects, in the USA, Canada, UK, Switzerland, Italy, Austria, Czechoslovakia and Germany.

MECHANICAL ENGINEERING EXPERIENCE: (Summary)

1960-67: Containers Limited - Sydney & Melbourne: Methods & Project Engineer, & Quality Control Engineer, in factories mass-producing metal cans or printed flexible packaging. Installed a large air-conditioned photo-etching department and an ink-making department. Designed some of the machinery. Improved production methods and quality control.

1967-72: Commonwealth Public Service, Melbourne: (Engineer Class 1 to Class 3):
PMG / Telecom Research Laboratories. I designed (among other things) an experimental satellite antenna system for outback homesteads, and an innovative welding tool for joining telephone cables.

Infantry Weapons Group, Army Design Establishment, Maribyrnong. Engineer-in-charge of a group working on classified weapons development. I eventually resigned from that position for reasons of conscience.

1973-74: Technisearch Limited, Melbourne: (Subsidiary of RMIT):
Consulting mechanical engineer, undertaking client projects such as load-testing a major concrete building intended for re-cycling, investigating the structure of the historic Commercial Bank dome in Collins Street, and finding the cause of dangerous cracking in an overseas-designed tower crane. I gave expert opinion on the cause of failure of car tyres, gearboxes etc., for legal use in compensation cases. I also designed and commissioned a semi-automatic machine for mass-producing moulded concrete building products.

1974-78: CSIRO Division of Tribophysics, Melbourne:
(Later separated into the Division of Materials Science and Division of Manufacturing Technology). Divisional Engineer in charge of the Drawing Office and Mechanical Workshops. I personally designed numerous items of advanced scientific laboratory apparatus (e.g. a steerable high-resolution electron spectrometer, operating within an ultra-high vacuum chamber; a special-purpose fatigue testing machine; a precision gas pump; etc.). Supervised building maintenance and laboratory safety. The CSIRO Architect and I jointly planned the basic design of a large new Divisional Laboratory complex at Clayton, Victoria, now built.

1978-81: Teletronics Pty. Ltd., Sydney, N.S.W.:
Senior Mechanical Engineer (Research and Development) designing high-technology medical devices, mainly for export. My designs included internationally patented and widely used implantable electrode leads for cardiac pacemakers (still in use), and a one-off high-precision programmable infusion pump for use in therapeutic drug research.

1981-85: Consultant Mechanical Engineer (C. & M.J. Doring Pty.Ltd.):
I was engaged by various clients to design new devices or improve existing devices (mainly innovative medical or scientific equipment), and to review equipment designed by other engineers. I also advised clients on the technical aspects of disputed patents, and investigated and overcame the causes of equipment failures. Typical projects included the design of a highly stable temperature-compensated mounting for an extremely precise (sub-micron) measuring instrument being developed by CSIRO, and advising on the improved design of a life-support machine for a major Sydney hospital.

NAME: (Ms) Margret Jennifer Doring.

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QUALIFICATIONS:

Associate Diploma of Building, Royal Melbourne Institute of Technology, 1975.

(Awarded the Institute of Building Medal for top student at RMIT.)

Bachelor of Engineering (Civil) (Hons), University of Melbourne, 1978.

Certificate of ICCROM, ARC83.

(Awarded the 1982 National Trust / Daryl Lindsay Scholarship to study at the Architectural Conservation Course, International Centre for the Study of the Preservation and Restoration of Cultural Property, Rome, Italy, 1983.)

MEMBERSHIP OF PROFESSIONAL SOCIETIES & ASSOCIATIONS:

Fellow of the Institution of Engineers Australia (Certified Professional Engineer).

Full Member of Australia I.C.O.M.O.S.

Member of the National Trust of Australia (N.S.W.) and (Victoria).

Member of the Society for Industrial Archaeology (USA).

Member of the Australian Garden History Society

COMMITTEE MEMBERSHIPS - Past & Present:

In 1997, we moved from Sydney to north-east Victoria. Prior to moving, I was a member of the following committees:

Institution of Engineers Australia (Sydney Division) Heritage Committee (1983 - 1997).

National Trust (NSW) Historic Buildings Committee (1989 - 1997).

National Trust (NSW) Liaison Committee with the Road Transport Authority (1984 - 1994).

National Trust (Victoria) Industrial History Committee (in Melbourne - 1989).

Warren Centre (Sydney University Centre for Advanced Engineering) Committee studying adaptation and recycling of buildings (Planning Committee 1988).

Convenor of the Technical Advisory Group on Materials Conservation, a NSW Heritage Council sub-committee. (1985 - 1988)

Since moving to Victoria, I have been a member of the committee of the North-east Victoria division of the National Trust of Australia (Victoria).

HERITAGE AND CONSERVATION EXPERIENCE:

1972 to 1982: Varied employment on the rehabilitation and restoration of domestic buildings in Melbourne and Sydney, and in 1980 & 1981, research and tutoring in architectural history at the University of New South Wales.

December 1982 - July 1983: Architectural conservation studies at ICCROM, Rome.

Sept. - Oct. 1986: Returned to ICCROM to attend the course "Preventive Conservation in Museums".

May 1984 - January 1990: HERITAGE BRANCH, NSW DEPARTMENT of PLANNING.

Heritage Branch was the servicing organisation for the Heritage Council of NSW. I was employed as an engineer and architectural conservationist & worked with planners, architects, historians and archaeologists in administration of the NSW EP&A Act and the NSW Heritage Act with respect to heritage conservation. I acted as conservation specialist for the whole of southern NSW, from the southern suburbs of Sydney to Wentworth, and as engineer, with responsibility for matters of an engineering nature, over the whole of the State. My work in the Branch included the following:

- * identifying heritage sites, buildings and works in NSW, assessing their significance, and identifying and promoting appropriate action for the sites and items, either legislative, or by developing concepts and methods for their conservation and future development;
- * assessing applications and nominations under the Heritage Act, and preparing reports and making recommendations to the Heritage Council, the Director of the Department of Planning and the Minister for Planning, on appropriate actions to be taken;
- * designing and preparing briefs for a range of conservation and recording projects, supervising consultants carrying out the subsequent projects, (for architectural, engineering and archaeological studies and conservation plans), and then assessing the resulting reports;
- * consultation, negotiation and liaison with officers of the Department of Planning and other Departments and instrumentalities, local councils, heritage organisations, site owners, developers and architects, about the protection, development and management of heritage sites in their control;
- * representing the Department and the Heritage Council on liaison, technical and management committees, providing conservation and engineering advice;
- * preparing ministerial submissions and parliamentary and other briefing notes, preparing briefs for and giving evidence at Commissions of Inquiry;
- * preparing documentation for the heritage input to Director's requirements for Environmental Impact Statements. Assessment of and preparation of Director's Examinations for a number of heritage related EISs.
- * developing and writing standard conservation policies, specifications and briefs for the conservation of heritage items, and for recording threatened sites, buildings, structures and artefacts;
- * designing, contracting and supervising structural intervention works to prevent the collapse of an important heritage building. Overseeing various conservation and/or development projects affecting heritage items.

January to July 1989: HISTORIC BUILDINGS COUNCIL of VICTORIA.

Following an invitation from the Director of the Historic Buildings Council in Melbourne, I was granted extended leave to join the Historic Buildings Council staff for six months. The work was similar to that described above and involved administration of the Historic Buildings Act over the northern and eastern suburbs of Melbourne and the whole of eastern Victoria.

HERITAGE AND CONSERVATION EXPERIENCE: (Continued)**1984 to 1990: MAJOR PROJECTS - Heritage Assessment, Conservation Policy, Guidelines & Recommendations.**

- * **"New Works", Lakes Entrance, East Gippsland:** (harbour entrance works built 1870-1889, altered 1902 & 1913). Historical Research, heritage assessment and Registration under the Historic Buildings Act. (1989)
- * **New Commonwealth Offices on the former "Australian Gas Light" site at Haymarket, Sydney:** Heritage assessment, advice, Heritage Council reports, and negotiations with the Commonwealth Government regarding conservation of heritage items on the site, and their relationship with the proposed developments. (1987 - 1988).
- * **Walsh Bay Finger Wharves, Shore Sheds and Bond Stores:** Heritage assessment and Conservation Guidelines. (1984/5 and 1988).
- * **Boydton Conservation Plan:** Brief, commissioning, assessment & advice. Reports and recommendations to the Heritage Council. (1985 - 1988).
- * **Coolangatta Historic Village, Berry, NSW:** Conservation plan etc. as above.
- * **Walter Burley Griffin Incinerator, Pyrmont:** Industrial archaeological recording project brief. Conservation Plan brief and supervision. Reports and recommendations to the Heritage Council and Sydney City Council. 1988.

1984 to 1989: MAJOR PROJECTS - Environmental Impact Statements.

- * **Historic Echuca Road/Rail Bridge, Echuca Wharf & Moama Historic Precinct:**
This work included prior heritage assessments, recommendations for conservation orders, representations to the Minister, negotiations with the Victorian Government and assessment of EIS's prepared by V/Line and the Victorian Road Construction Authority. Also preparation of a brief for and supervision of a Conservation Plan prepared by the (then) NSW D.M.R. (1984 et seq.)
- * **Johnson's Overall Building, Infill Building & Brooklyn Hotel, Grosvenor Place, 229-235 George Street, Sydney:**
Assessment of the EIS and preparation of the Director's Examination and advice to the Minister. (1987)
- * **Woolloomooloo Finger Wharf & Proposed Woolloomooloo Bay Marina:**
Assessment of an EIS proposing demolition of the Wharf. Preparation of a Director's Examination opposing demolition. Subsequent heritage assessment. Proposals to the Heritage Council and Minister for the application of a conservation instrument. Preparation of comprehensive Conservation Guidelines for use by the Maritime Services Board and the (then) developer. (1987 and 1988).

1984 to 1989: MAJOR PROJECTS - Conservation, Restoration and Structural Intervention Works.

- * **Barn at the Macarthur property "Bella Vista", Kellyville:** Structural intervention to prevent collapse.
- * **Former Police Inspector's Residence, Deniliquin:** Supervising schedule of works and rehabilitation/restoration works.
- * **"Dredge's Cottage", Queen St., Campbelltown:**
Heritage Assessment, conservation guidelines, and negotiating subsequent restoration works.

HERITAGE AND CONSERVATION EXPERIENCE: (Continued)

1990 to Now: MAJOR PROJECTS COMPLETED with C & MJ DORING Pty Ltd

See the Summary of the company's heritage projects, pages 11 - 15.

1983, 1986, 1987, 1992: OVERSEAS STUDY TOURS

I have made four work-related overseas study tours, to attend ICCROM in 1983 and 1986, and an international conservation congress in London in 1987. I also attended seminars, visited overseas conservation experts, and inspected major conservation and re-use projects and industrial and archaeological sites in Italy, Switzerland, USA, UK and Canada.

In 1992 I re-visited Italy, Switzerland and the U.K., and studied heritage and industrial archaeological sites in Austria, Czechoslovakia and Germany.

In 1986 the NSW Government was re-developing Darling Harbour, and the Director of the Department of Planning asked me to report on the heritage conservation aspects and success of similar developments overseas. In the United States and Canada, I visited and studied the Baltimore Harbour Scheme, New York's South Street Seaport on Manhattan Island, the Boston Navy Yard, and Queen's Wharf in Toronto.

Later, in London in 1987, I was able to make a study of the conservation and regeneration of London Docklands, and the work of the London Docklands Development Corporation, backed up by a comprehensive tour of the development area conducted by the Development Corporation.

OTHER PROFESSIONAL EXPERIENCE:

1972-73: Hansen & Yuncken Pty. Ltd., Melbourne (Builders):

Supervising building additions and alterations I had designed in consultation with clients.

1973-75: K.G. Hooker Builders Pty. Ltd., Melbourne:

Assistant and/or Acting Site Manager on the Earth Sciences Building project at Melbourne University, from setting out stage to completion of the 5-storey concrete structure.

1976: Royal Melbourne Institute of Technology and Technical College:

Part-time lecturer in Building Construction & Structures in the Architecture Faculty. Correspondence Tutor in Building Construction to about 80 external students.

1977-78: Full-time student at the University of Melbourne:

On the strength of my honours performance at R.M.I.T. and my work experience, I was admitted to the third year of the Civil Engineering degree course.

1980-81: University of New South Wales:

Tutor in Building (Materials) Science, Building Construction, Structures, and the History of Architecture and Building in the School of Building, Faculty of Architecture. Lecturer in Structures 3 (Concrete Design) in 1981.

1982: Royal Melbourne Institute of Technology:

Lecturer in Construction & Building Science (Materials) in the Department of Building, Faculty of Architecture. I developed a 3 year course in Materials Science for the then new B.Sc.(Building) Degree at RMIT.

As consultants in industrial archaeology and architectural conservation, Carl and Margret Doring, practising as C & MJ Doring Pty Ltd, have undertaken numerous heritage projects, including:

Tooheys' Brewery Malthouse, Albion Street, Sydney, NSW (built 1902):

Recording the Malthouse building just prior to its demolition, and preparing a detailed account of its former malting equipment & processes and a history of its operation. For Pennant Holdings Ltd. & the Heritage Council of NSW. 1985.

"Mastertouch" Pianola Roll Factory, Petersham, NSW (machinery dating from the 1920's):

Assessment of the monetary and heritage value of the machinery at the Mastertouch factory in Sydney. For the National Film and Sound Archives, Canberra. 1986.

Tramway Workshops, Randwick, NSW (built 1881-1926): *

Recording the Workshops prior to a major program of demolition and redevelopment. The record included descriptions and photographs of buildings and historic equipment, and identification and annotation of archival drawings and archival photographs of the Workshops. Prepared for the Urban Transit Authority, 1986-87.

Carl Doring prepared a detailed account of the history and operation of the Workshops, presented as his master's thesis to Birmingham University and the Ironbridge Institute of Industrial Archaeology, UK., 1987-8)

Dowling Street Tram Depot, Sydney (built 1908-1912): *

Recording the largest tram depot in Australia before demolition, describing its construction, and writing its history, including its operation and tram maintenance function. For the Heritage Council of NSW & Brenmoss Pty.Ltd. 1988.

Newport Railway Workshops, Melbourne (built 1888-1926): *

Heritage Study of more than 50 workshop buildings and hundreds of items of equipment, describing all buildings and significant items of equipment in text and photographs, explaining their function, assessing their heritage significance, & making recommendations for conservation and/or future use of the most significant buildings and equipment. For Victorian State Transport Authority and the Historic Buildings Council of Victoria, 1988. Also a summary of heritage assessments and recommendations, to support Statutory Registration of the most significant Workshops buildings and equipment. For the HBC, 1990 and 1993. (The main buildings and equipment were added to the Victorian Register of Historic Buildings, as Item 1000, in 1994.)

UNSW Campus - Former Tramway Workshops, Randwick, NSW (built 1881-1913):

Industrial archaeological and historical input to a Conservation Plan for part of the former tramway workshops, now a campus for University of NSW. In conjunction with Knox & Tanner, for the University of NSW, 1989.

Waterloo Workshops, Depot and Pumping Station, Sydney (built 1922-1936):

Assessment of the heritage significance of the buildings, and recommendations on conservation and statutory protection. Supervision of photographic recording. For Sydney Water Board, 1989.

Walter Burley Griffin Incinerator (1937), & adjacent 1912 Council Incinerator, Pyrmont, Sydney: *

Researching the history of construction & operation of the incinerators, assessing their heritage significance, and photographing equipment and interiors. Preparing a report on the buildings and equipment, in conjunction with John Gollings, who photographed the exterior of the Walter Burley Griffin building. For architects Lawrence Nield & Partners with clients Balmain Breweries Ltd, & the Heritage Council of NSW, 1989.

Walsh Bay Finger Wharves, Shore Sheds & Bond Stores, Sydney:

Advising on the conservation (mainly in-situ, for restoration and interpretative display) of bale-elevators, water-powered lifts, hydraulic pump, gantry cranes and other industrial artefacts throughout the sites, in accordance with the Heritage Council's Conservation Guidelines. For C.R.I. Ltd., 1989.

Wangi Power Station, Wangi Wangi, NSW (built 1949-1960): #

Heritage Study, including researching and preparing a history and description of the design, construction and operation of the power station, assessing the heritage significance of the building and plant, and developing conservation policies for the building and significant plant. For the NSW Electricity Commission, 1990.

Honeysuckle Point (Civic) Railway Workshops and Lee Wharves, Newcastle: #

Heritage Study, with history, photographic record, architectural and functional description, assessment of significance and preliminary structural appraisal of brick workshops buildings (built 1874-1917) and adjacent wharf buildings (built 1910-1950), and recommended Conservation Policy for adaptive re-use. For the NSW State Rail Authority & the Maritime Services Board, 1990.

Centennial Park Reservoir No.1, Sydney (built 1899): %

Heritage assessment and recommendations for immediate and long term conservation action and statutory protection. Heritage and structural critique of Water Board proposals for remedial works, and subsequent recommendations for amendments to the proposed works (most were adopted). For Sydney Water Board, 1990. Preparation of a detailed Conservation Plan for the Reservoir, for the Sydney Water Board, 1992/3.

Corrimal (Coal) Mine - Shaft Head Frame & Winding Gear, Wollongong (c1908):

Photographic record of a timber headframe and associated winding gear, with assessment of its heritage significance & recommended Conservation Policy, in conjunction with structural assessment, measured drawings & proposals for structural repairs by Hughes Trueman Ludlow. For BHP, 1990.

Ryde Pumping Station, Ryde, NSW (built 1891 & 1921): %

Heritage study of the Ryde Water Pumping Station (still serving the northern suburbs of Sydney), with assessment of the heritage significance of the present (1921) and former (1891) pumping station buildings, other minor buildings, and surviving documents and machinery. A Conservation Policy formulated to guide future use and development of the site. For the (Sydney) Water Board, 1990.

Windsor Reservoirs, Fitzgerald Street, Windsor, NSW (1889): %

Heritage study, to assess the heritage significance of in-ground (brick) and elevated (cast-iron) reservoirs, being now-disused elements of the 1889 Windsor Water Works. Including a proposed Conservation Policy for the reservoirs, to be implemented prior to disposal of the land on which they are sited. For the Water Board, 1990.

The Coach House, Kendall Lane, and the A.S.N.Co. Building, George St., both in The Rocks, Sydney:

Industrial archaeological survey and assessment of both sites. For Sydney Cove Authority, 1990.

Crown Street Reservoir, Sydney (built 1859): %

Heritage assessment of Sydney's first water supply reservoir, and recommendations for specific conservation action. For the (Sydney) Water Board, 1991.

Woronora Dam, Woronora River, NSW: %

Heritage study, to identify and assess items of heritage significance at Woronora Dam site (the dam, relics of construction works and the construction township), and to assess the impact of a proposed new water treatment works on the identified heritage items. With Sinclair Knight & Partners, for the Water Board, 1991.

West Wallsend Coalfields Study, Lake Macquarie, NSW:

Heritage study of a large area (around 5000 hectares) south-west of Newcastle, encompassing a number of disused coal mines and their associated townships and villages, to identify items of heritage significance which should be taken into consideration in future planning for the area. For a public company, 1991.

Honeysuckle Project - Historical Survey, Newcastle City Waterfront, NSW: #

Historical, industrial archaeological and architectural heritage survey of the Newcastle City waterfront and railway land, from Watt St. at the east end of the City to Tighe's Hill on Throsby Creek. For NSW Government Property Services Group, 1991.

Locomotive Roundhouse, Railway Workshops, Rockhampton, Qld (Built c1923):

Assessment of significance and formulation of a conservation policy for a disused roundhouse (since conserved and converted to workshop offices in line with our recommendations). For Queensland Dept. of Transport, 1991.

Former Tram Station, Randwick Racecourse, Sydney (built 1900, extended 1907-09): *

History and recording of the former multi-platform tram station at Randwick Racecourse, later used as a bus terminus. In conjunction with Robert A. Moore Pty Ltd, architects. For NSW State Transit Authority, 1991.

Bushells Building, Harrington Street, The Rocks, Sydney:

A report on the history, function and heritage significance of the former Bushells tea factory/warehouse and its remaining machinery, including recommended appropriate future conservation management for those items. In conjunction with Robert A. Moore Pty Ltd, for Sydney Cove Authority, 1991. Since then, we have been asked to provide advice on identification and interpretation of industrial equipment remaining at the former tea factory, for Savacombe Pty Ltd and Tanner & Associates, 1999.

Vales Point "A" Power Station, Lake Macquarie, NSW. (Built 1949-1960):

Heritage Study, including history and description of the construction and operation of the power station, assessing the heritage significance of the building and plant, and developing conservation policies for the building and plant. For NSW Electricity Commission (now Pacific Power), 1991-92.

Enfield Tram/Bus Depot, Enfield (Sydney), NSW: (Built 1912): *

Heritage Study and Conservation Policy for the 1912 Enfield Tram Depot (converted to bus depot 1948-50), prepared after cessation of bus operation but prior to sale of the site. For NSW State Transit Authority, 1992.

Bunnerong Power Station Switch House, Sydney, NSW (Built 1929):

Heritage Study of the surviving Switch House from the demolished Bunnerong Power Station. The study included preparing a history and description of the Switch House, assessing the heritage significance of the building and plant, and developing conservation policies for the building & significant plant. For NSW Electricity Commission (aka Pacific Power), 1992-93.

Boulton & Watt Steam Engine, Powerhouse Museum, Sydney: (Built 1784):

Advising the Museum on the appropriate method of repairing and strengthening the massive flywheel on this historic engine without further damage to the original fabric of the machine, and designing the mechanical parts needed to carry out the repair. For Powerhouse Museum, 1992-93.

City of Lake Macquarie, NSW, Heritage Study: *

In conjunction with Suters Architects Snell & John Turner, historian. C & MJ Doring did the field survey work, researched & assessed the archaeological, architectural and historical significance of relevant commercial, industrial and domestic buildings and sites, railway stations, mines, mining towns, rural settlements, etc., prepared an inventory with description and assessment of more than 500 significant items, and wrote several chapters of the report text. For City of Lake Macquarie, 1992-93. All the items were included in the published Heritage Study Inventory. About 280 of the most significant items were included in an LEP Heritage Schedule.

Former Lambton Colliery, Redhead, NSW (established c1890):

Provide evidence as expert witnesses, to Land and Environment Court hearings in relation to a proposal to demolish the historic Lambton Colliery, Redhead. For the City of Lake Macquarie, 1992.

Nestles Factory Complex, Abbotsford, NSW: (established 1917):

Assessing the heritage significance of goods lifts, boilers & machinery in the buildings after Nestles had vacated the site. As part of a Conservation Plan prepared by Philip Cox, etc. & Partners, for Nestles, 1993.

Eveleigh Railway Workshops, Sydney (established c1888):

Heritage assessment of workshop equipment & formulation of a Conservation Policy for the Carriage Workshops, in conjunction with architects Schwager Brooks. For the Department of Planning, 1993.

Goat Island, Sydney Harbour (1826-1993):

Heritage assessment of maritime workshop equipment and formulation of a Conservation Policy, in conjunction with Schwager Brooks. For the NSW National Parks & Wildlife Service, 1993.

Midland Railway Workshops, Midland, Perth, W.A. (1904): @

Heritage assessment & inventory of more than 600 significant artefacts, items of machinery and building details at the Workshops, assessment of the Workshops as a whole and the various Workshops buildings, in conjunction with Heritage & Conservation Professionals (architects) and Ken Adams & Associates (planners). For Westrail and the Central Midland Planning Taskforce, 1993-94.

Also follow-up advice on which machines should be kept for museum display (2001).

Cock's Eldorado Gold Dredge, Eldorado, Victoria (1936): +

Conservation Plan, Interpretation Policy & Schedule of Works for conservation of the Dredge, prepared for the Department of Conservation & Natural Resources, Victoria, 1994-5. In 1999 we were engaged to devise a suitable method for replacing a rotted timber frame supporting a heavy tailings chute on the Dredge, and write a specification for the method to enable tenders to be called for the work. With Robert Whytlaw & Associates, consulting structural engineers, for Parks Victoria, 1999/2000. Also inspection of replacement work, 2001.

Rope Drive Crane at the former Honeysuckle Point Railway Workshops, Newcastle NSW (1885): #

Conservation Plan, Schedule of Works and supervision of the subsequent restoration works. This extremely rare piece of pre-electricity equipment can now be operated for demonstration purposes in its original configuration. For NSW Public Works Department & Honeysuckle Development Corporation, 1995-6.

Broadmeadow Locomotive Depot, Newcastle, NSW (established 1922): #

Heritage assessment, Conservation Policy and Planning Survey of the Depot. With Gardner Browne, Newcastle, (Planner), for the NSW Property Services Group, 1995.

Former Botany Water Pumping Station, Kingsford Smith Airport, Sydney, NSW (built 1856): *

Archaeological excavation, recording, and conservation policy, for the surviving ruins of the 1856 Water Pumping Station and associated Engine Pond, done in part with Anne Bickford. For Federal Airports Corporation, 1993-6.

City of Newcastle Archaeological Management Plan:

Collaboration with Suters Architects Snell, historian John Turner and historical archaeologist Siobhan Lavelle, on preparation of an archaeological management or zoning plan for Newcastle's CBD. For the City of Newcastle and NSW Heritage Office (formerly Dept of Planning). Stage 1, 1993/94 and Stage 2, 1995/96.

Survey of Wool Handling Equipment in the Farmers & Graziers Woolstore, Ultimo, Sydney (built 1895):

Survey of the wool handling equipment in the late 19th Century, multi-storey Woolstores in inner Sydney, before the building was converted to residential units. For Schwager Brooks & Partners Pty Ltd, 1996.

Survey of Light Engineering Machinery in Inner Sydney:

Collaboration with Meredith Hutton, Historical Archaeologist, on a pilot survey to find any surviving light engineering workshops in inner Sydney which still retained some vintage and historic machinery. For the National Trust of Australia (NSW), 1997.

City of Albury Water Pumping Station:

Collaboration with architect Ken Young on an historical, architectural and industrial archaeology study of the Albury Water Pumping Station and Electricity Generating House, 1997.

Walsh Bay Wharves, Miller's Point, Sydney (built 1906 to 1921):

Preparation of an expert witness brief and advice to be presented to the NSW Land & Environment Court at an appeal against the proposed demolition of parts of the wharves. For the National Trust of Australia (NSW), 1999.

Wangaratta Water Tower (built 1903): +

Heritage Assessment of the Millard Street, Wangaratta, Water Tower, for the North East Region Water Authority, 1999, and a conservation plan for the tower, 2000.

Rural City of Wangaratta Heritage Study - Stage 1:

In collaboration with historian Michele Summerton, we carried out a preliminary (Stage 1) survey of the entire Rural City of Wangaratta, identifying about 1000 potential heritage items, while Michele prepared a thematic history of the municipality. For Rural City of Wangaratta and Heritage Victoria, 1999/2000.

Headlie Taylor Blacksmith Shop, Henty NSW: =

A conservation plan for the Henty (NSW) farm blacksmith shop in which Headlie Taylor developed a prototype wheat harvesting machine during c1913-1915, a machine which later became the famous Sunshine Header. The study included an inventory of several hundred items found on the site, prepared with the assistance of Bruce Ferguson. For the Museum of the Riverina (Wagga Wagga) and NSW Heritage Office, 2000/2001.

Bairnsdale Water Pumping Station and Reservoirs (built 1888, 1906, 1927): +

We prepared a heritage assessment and conservation management plan for the former water pumping station on the Mitchell River at Bairnsdale. For the East Gippsland Shire & East Gippsland Water, 2001.

Work to date (May 2004) :

We have completed the Stage 2 Heritage Study of the Rural City of Wangaratta. We have researched and assessed the 1000-plus heritage items identified in the study, and selected those of sufficiently high significance to warrant protection under the local government planning scheme, or, in a few cases, on the Victorian Heritage Register.

KEY to Libraries which hold copies of our reports:

- * NSW State Library (Mitchell Library)
- # Newcastle branch of the Mitchell Library - should be in the catalogue.
- % Sydney Water (library?) still holds copies intended for the NSW State Library
- @ Battye Library (the State Library of W.A. in Perth)
- + State Library of Victoria (Latrobe Library)
- = Wagga Wagga Library (and the National Library) and the Museum of Victoria

Published Journal Articles:

Doring, Margret J., *Sydney's Queen Victoria Building - The Last 20 Years*. The Chartered Builder - The Official Journal of the Australian Institute of Building, Volume 32, Spring 1981.

Doring, M.J., *The Role of Government in the Conservation of Engineering Heritage*. Proceedings of the IEAust. Second National Conference on Engineering Heritage, Melbourne, May 1985.

Doring, C & M.J., *Coal, Railways, and the Heritage of Newcastle - The Impact of Coal Mining & Rail Transport on the City's Heritage*. IEAust. Transactions of Multi-Disciplinary Engineering, Special Issue: Engineering Heritage, Volume GE23, 1999. (Paper first presented to the IEAust. First International and Eighth Australian Engineering Heritage Conference, Newcastle, Australia, 1996.)

Doring, Margret J., *Mountains of Memory*. Historic Environment, Vol.17 No.2, 2003 (the refereed journal of Australia ICOMOS). (Paper first presented at the U.N. International Year of Mountains - Celebrating Mountains Conference, Jindabyne, Australia, 1993.)