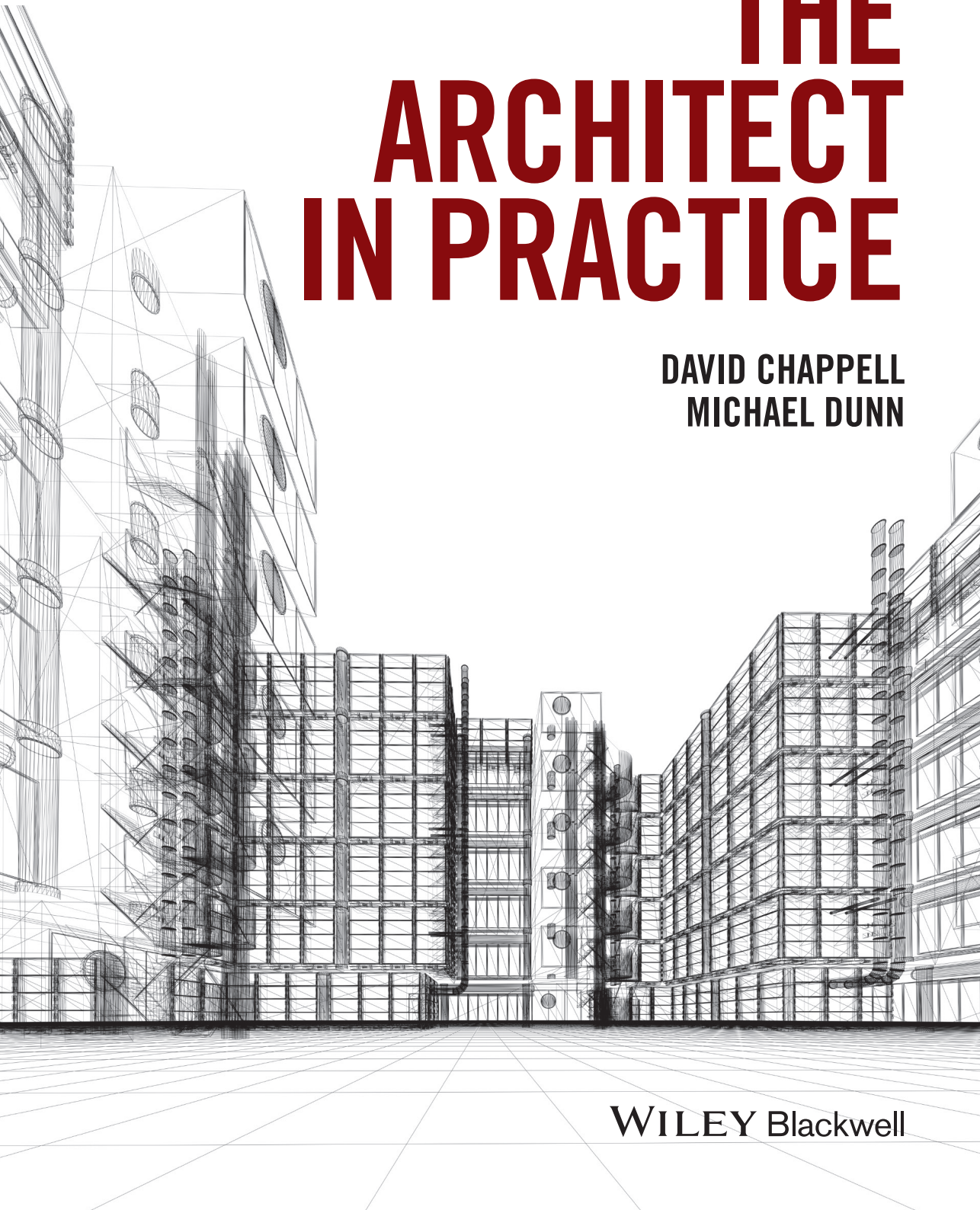


11<sup>TH</sup> EDITION

# THE ARCHITECT IN PRACTICE

DAVID CHAPPELL  
MICHAEL DUNN

WILEY Blackwell





# The Architect in Practice



# The Architect in Practice

Eleventh Edition

David Chappell

Michael Dunn

**WILEY** Blackwell

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# The Inspiration

From a pseudonymous letter of a quantity surveyor to  
the *Builder*, 9 March 1951

'I have great admiration for an architect who does his job well, because he has one of the most difficult jobs in the world. He must be an artist but at the same time in his administration of a building contract be a business man, and in interpreting it even something of a lawyer.'

# The Dedication

To Arthur Willis, Christopher Willis and Bruce George  
and

To the architectural profession

in the hope that the book may encourage that co-operation of which its joint authorship is  
a symbol.





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# Preface

It is often said that architects are poor at business. We suspect that, if true, it is because they enjoy what they do so much. It is not unusual to find architects continuing to work in order to see their buildings constructed long after disputes about fees and other things would have persuaded other professionals to walk away. Architecture is undoubtedly one of the professions that can be enjoyed. It offers a wealth of interest in a variety of fields which few other professions can match, and provides an emotional satisfaction which only the other arts can stimulate. In order to derive the fullest pleasure from it architects must devote themselves completely to its study and practice. The more proficient they become and the greater mastery they can acquire the more complete will be their enjoyment.

Ability to design and skill in draftsmanship or in using computer-aided design equipment will not alone make an architect. Architects should bring the same skill to all sides of their profession, whether it is the initial building survey, feasibility studies, concept design, production information or the giving of professional advice and undertaking the administration of the construction contract. In common with other professions architects owe a duty of care to their clients but they have a greater responsibility than most in that the buildings and environments that they create affect the population at large.

The purpose of this book is to present to architectural students, and perhaps the less experienced practitioners, some indication of the practice and procedure with which they must be acquainted if they are to follow their profession with success. They must find clients to employ them, they must be able to manage an office and be responsible for a good deal of administrative work in connection with construction contracts, and they must know something of finance, law, the general structure of the construction industry and the organisation and requirements of those authorities who exercise so much control over their day-to-day work. Let the readers, therefore, move away from their CAD equipment, lay aside their thick felt pens and settle down to their desk or armchair to study an aspect of their work which is essential to make them efficient architects.

The architect's work is here looked at mainly from the angle of the private practitioner dealing with the JCT forms of contract, though references are made where appropriate to public service practice and to other forms of contract. Architects in private practice are often commissioned to act for public authorities and they must therefore be able to adapt to the differing conditions which this type of work involves.

Since the last edition, some re-ordering and re-structuring of the contents has taken place. The chapters have been arranged in the sequence which looks at

what needs to be in place so that an architect can run a business. Part 1A opens with an introduction to the construction industry and is followed by details of entry to the profession and its regulation. This part deals with employment opportunities, advice on employment and hints for those wishing to set up in practice. Part 1B looks at some basic principles of managing and working in a practice including marketing, insurance and accounts. Part 2 ends the book with the running of a project, the chapters being based around the work stages of the RIBA Plan of Work which has again been revised since the last edition. Each chapter ends with notes and law case citations together with a selected bibliography.

*The Architect in Practice* was first published over 60 years ago in 1952. It was written by two men, one a quantity surveyor and one an architect, both of whom had a flair for writing and who, after working together for some years, came to the conclusion that a textbook on architectural practice was needed. During that time, through ten editions, it has remained a leading textbook used in the education of architects worldwide. This is the first edition which does not have as Quantity Surveyor author a member of the Willis family. The mantle was passed down through three generations and we are grateful to Andrew Willis who has taken that role for the last three editions.

The format of the book was radically changed for the seventh edition in order to make it more accessible to the casual reader. That revised format was well received. The structure of this latest edition has been significantly revised and will hopefully present the reader with a logical layout. As with the previous revisions though the format has changed, the message and philosophy remains the same: here is a book which tries to present to the reader some of the elementary duties that architects owe to their clients and contractors alike, and to endorse the adage that of the many responsibilities borne by an architect, the greatest is the duty of care.

Architectural practice is now much more complex than was the case 60 years ago. There is now a multitude of forms of building contract to choose from, which would take a lifetime to read. It is not possible to write in any detail on such a wide subject: it warrants a set of textbooks on its own. The most helpful thing that we can do is to point the reader to relevant sources for this and other allied subjects.

As usual, this edition has been brought up to date and our commentaries revised where we judged it appropriate to do so. This includes among other things: the need to address the RIBA Plan of Work 2013 both in terms of commentary and the structure to the book, updating our commentary on the RIBA Standard Form for the Appointment of an Architect 2010 (2012 Revision) and employment law and dealing with the impact of BIM. The Joint Contracts Tribunal has reissued all its contracts as a 2011 suite. The new contracts have been revised to comply with the amendments to the Housing Grants Construction and Regeneration Act (as amended) 1996 which place significant further responsibilities on an architect undertaking the role of contract administration. All references to JCT contracts in this book have been updated, where appropriate, to refer to the new contracts. We are pleased to know that this book is used in the Republic of Ireland, Egypt, Nigeria and Malaysia and in this edition,



we have included reference to education, registration and other requirements in these countries.

Finally we hope that our efforts will assist future generations of architects in the way that Arthur Willis and Bruce George assisted our generations.

David Chappell  
Michael Dunn  
January 2015

## **Note**

The Construction (Design and Management) Regulations 2015 came into force on 6 April 2015. This was too late to make any significant amendments to the manuscript which was with the publishers at the time. However, where appropriate and where possible, minor amendments have been made to the manuscript to identify the introduction of this change and through the use of endnotes the reader has been directed to further appropriate reading. Unfortunately, the new Regulations have replaced the role of CDM Co-ordinator with that of Principal Designer. This may well lead to some confusion between the roles of Lead Designer and Principal Designer.



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# Abbreviations and Acronyms

AA CPE	Architectural Association School of Architecture (London) Certificate of Professional Experience
ABE	Association of Building Engineers
AC	Appeal case
ACA	Association of Consultant Architects
ACA 3	ACA Form of Building Agreement 1998 (1999 revision)
ACA SFA	The Association of Consultant Architects Standard Form of Agreement for the Appointment of an Architect 2012
ACEu	Architects Council of Europe
ACAS	Advisory, Conciliation and Arbitration Service
ACE	Association for Consultancy and Engineering
All ER	All England Law Reports
APEAS	Architects Professional Examination in Scotland (Edinburgh)
APM	Association for Project Management
APSAA	Association of Professional Studies Advisors in Architecture
ARB	Architects Registration Board
ARCON	Architects Registration Council of Nigeria
ARCUK	Architects Registration Council of the United Kingdom
BAE	Board of Architectural Education
BBA	British Board of Agrément
BBC	British Broadcasting Corporation
BCIS	Building Cost Information Service
BEC	Building Employers Confederation
BIM	Building Information Modelling
BLR	Building Law Reports
BPF	British Property Federation
BPIC	Building Project Information Committee
BRE	Building Research Establishment
BREEAM	Building Research Establishment Environmental Assessment Methodology
BSI	British Standards Institute
BSRIA	Building Services Research and Information Association
BUILD	Building Users' Insurance Against Latent Defects
CAA	Commonwealth Association of Architects
CABE	Chartered Association of Building Engineers
CAD	Computer-aided design
CATS	Credit Award Transfer System

CAWS	Common Arrangement of Work Sections
CBC	RIBA Concise Building Contract 2014
CBI	Confederation of British Industry
CC	Construction Confederation
CCG	Construction Client's Group
CCPI	Co-ordinating Committee for Project Information
CD81	JCT Standard Form of Building Contract with Contractor's Design 1981
CDMR	Construction (Design and Management) Regulations 2007
CDP Act	Copyright, Designs and Patents Act 1988
CE11	JCT Constructing Excellence Contract 2011 (note that the JCT abbreviate for this contract is CE but because this abbreviation is used for Conformité Européenne the abbreviation CE 11 has been adopted in this book)
CE	Conformité Européenne
CE/P	JCT Constructing Excellence Project Team Agreement 2011
CE/95	RIBA Conditions of Engagement for the Appointment of an Architect 1995
CESMM	Civil Engineering Standard Method of Measurement
CIArb	Chartered Institute of Arbitrators
CIB	Construction Industry Board
CIBSE	Chartered Institution of Building Services Engineers
CIC	Construction Industry Council
CIJC	Construction Industry Joint Council
CIOB	Chartered Institute of Building
CIMAR	Construction Industry Model Arbitration Rules
CI/SfB	Construction Information/Samarbetskommitten for Byggnadsfrågor
CIL	Community Infrastructure Levy
CILL	Construction Industry Law Letter
CIRIA	Construction Industry Research and Information Association
CITB	Construction Industry Training Board
CLD	Construction Law Digest
CLG	Communities and Local Government
ConLR	Construction Law Reports
ConstLJ	Construction Law Journal
CM/A	JCT Construction Management Appointment 2011
CM/TC	JCT Construction Management Trade Contract 2011
CPA	Construction Products Association
CPD	Continuing professional development
CPI	Co-ordinated project information
CPIC	Construction Project Information Committee
CV	Curriculum vitae
DB	JCT Design and Build Contract 2011
DBC	RIBA Domestic Building Contract 2014

---

DCLG	Department of Communities and Local Government
DCMS	Department of Culture, Media and Sport
DEFRA	Departments of Transport, the Environment, Farming and Rural Affairs
DOE	Department of the Environment
DWP	Department for Work and Pensions
ECC	NEC3 Engineering and Construction Contract
ECLG	Environment Community and Local Government
ECTS	European Credit Transfer System
EH	English Heritage
EMR	Electromagnetic Radiation
ENACA	European Network of Architectural Competent Authorities
EPC	Energy Performance Certificate
EPIC	Electronic Product Information Co-operation
EU	European Union
FA	JCT Framework Agreement 2011
GMP	Guaranteed Maximum Price
GN	Guidance Notes
GDPO	The Town and Country Planning (General Development Procedure) Order 1995, with later amendments
GPDO	The Town and Country Planning (General Permitted Development) Order 1995, with many later amendments
HE	Historic England
HO/C	Building contract for a home owner/occupier who has appointed a consultant to oversee the work 2005
HO/CA	Consultancy agreement for a home owner/occupier appointing a consultant in relation to building work 2005
HO/B	Building contract for a home owner/occupier who has not appointed a consultant to oversee the work 2005
HSE	Health and Safety Executive
IC	JCT Intermediate Building Contract 2011
ICSub/NAM/E	Intermediate Named Sub-Contractor/Employer Agreement
ICSub/NAM	Intermediate Named Sub-Contract Tender and Agreement
ICC	ACE and CECA Infrastructure Conditions of Contract (ICC) 2011
ICD	JCT Intermediate Building Contract with contractor's design 2011
ICE	Institution of Civil Engineers
ICWCI	Institute of Clerks of Works and Construction Inspectorate of Great Britain Inc
IES	Integrated Environmental Services
IEE	Institution of Electrical Engineers
IFC 84	JCT Intermediate Form of Building Contract 1984
IMechE	Institution of Mechanical Engineers
ISDN	Integrated Services Digital Network

IStructE	Institution of Structural Engineers
ISO	International Organization for Standardization
JCT	Joint Contracts Tribunal Ltd
JCT 63	JCT Standard Form of Building Contract 1963
JCT 80	JCT Standard Form of Building Contract 1980
JCT 98	JCT Standard Form of Building Contract 1998
JV	Joint venture
KPI	Key performance indicators
LDD	Local Development Document
LDF	Local Development Framework
LDS	Local Development Scheme
LI	Landscape Institute
LLP	Limited Liability Partnership
LPA	Local Planning Authority
MC	JCT Management Building Contract 2011
MP	JCT Major Project Construction Contract 2011
MIPPS	Ministerial Interim Planning Policy Statement
MTAN	Minerals Technical Advice Note
MTC	JCT Measured Term Contract 2011
MW	JCT Minor Works Building Contract 2011
MWD	JCT Minor Works Building Contract with contractors design 2011
NBS	National Building Specification
NEC	New Engineering Contract
NJCC	National Joint Consultative Committee for Building
NPF	National Planning Framework
NPPF	National Planning Policy Framework
NPPG	National Planning Practice Guidance
NRM	New Rules of Measurement (RICS)
NSCC	National Specialist Contractors' Council
NSIP	Nationally Significant Infrastructure Project
OS	Ordinance survey
PAM	Pertubhan Arkitek Malaysia
PAN	Planning Advisory Note
PAYE	Pay as you earn
PERT	Performance Evaluation and Review Technique
PCC	JCT Prime Cost Building Contract 2011
PCSA	JCT Pre-Construction Services Agreement 2011
PD	Permitted Development
PEDR	Professional Experience Development Record
PFI	Private Finance Initiative
PHPP	Passivhaus Planning Package
PI	Professional indemnity insurance
PINS	Planning Inspectorate
PPC 2000	ACA Standard Form of Contract for Project Partnering
PPG	Planning Policy Guidance
PPP	Public-Private Partnership



---

PPS	Planning Policy Statements
PSA	Property Services Agency
QQI	Quality and Qualifications Ireland
RIAI	Royal Institute of the Architects of Ireland
RIAS	Royal Incorporation of Architects in Scotland
RIBA	Royal Institute of British Architects
RICS	Royal Institution of Chartered Surveyors
RM	JCT Repair and Maintenance Contract 2011
RPB	Regional Planning Body
RSAA	Royal Society of Architects in Wales
RSS	Regional Spatial Strategy
RSUA	Royal Society of Ulster Architects
RTPI	Royal Town Planning Institute
SBC	JCT Standard Building Contract 2011
SBC/AQ	JCT Standard Building Contract With Approximate Quantities 2011
SBC/Q	JCT Standard Building Contract With Quantities 2011
SBC/XQ	JCT Standard Building Contract Without Quantities 2011
SEC	Specialist Engineering Contractors
SELECT	Electrical Contractors' Association for Scotland
SFA/92	RIBA Standard form of Agreement for the appointment of an architect 1992
SFA/99	RIBA Standard form of Agreement for the appointment of an architect 1999
SMM	Standard Method of Measurement for Building Works
SNIPF	Scottish & Northern Ireland Employer's Federations
SoS	Secretary of State
SPC 2000	ACA Specialist Contract for Project Partnering
SPD	Supplementary Planning Document
SPG	Supplementary Planning Guidance
SPP	Scottish Planning Policy
SPV	Special Purpose Vehicle
SW/96	RIBA Conditions of Appointment for Small Works 1996
TAN	Technical Advice Note
TeCSA	Technology and Construction Solicitors Association
TPO	Tree Preservation Order
UCAS	Universities and Colleges Admissions Service
UCATT	Union of Construction, Allied Trades and Technicians
UIA	International Union of Architects
UK	United Kingdom
UNICLASS	Unified Classification for the Construction Industry
UCO	Town and Country (Use Classes) Order 1987
VAT	Value added tax
VOIP	Voice Over Internet Protocol
WLR	Weekly Law Reports

Construction Act	Housing Grants, Construction and Regeneration Act 1996 as amended by The Local Democracy Economic Development and Construction Act 2009
Scheme	Scheme for Construction Contracts (England and Wales) 1998 (as amended by the Scheme for Construction Contracts (England and Wales) Regulations 1998 (Amendment) (England) Regulations 2011)
NI Order	Northern Ireland the Construction Contracts (Northern Ireland) Order 1997 as amended by the Construction Contracts (Amendment) Act (Northern Ireland) 2011

# Part 1

## Practice



## A THE PRACTITIONER

# 1 The Construction Industry

### 1.1 Introduction

The construction industry is concerned with the planning, regulation, design, manufacture, fabrication, erection, construction and maintenance of buildings and other structures. It encompasses the disparate activities of building, civil engineering and heavy engineering. These activities can range from minor domestic works costing a few hundred pounds or major building schemes costing tens of millions of pounds to major transportation and other infrastructure projects costing several billion pounds. Whilst there are certain similarities in the principles underlying the execution of each individual activity or project, their scale, complexity and organisation can differ enormously.

Whilst the demarcation between the aforementioned disparate activities is blurred, the majority of architects are involved solely with building projects in their various forms.

### 1.2 Significance of the construction industry

The construction industry is an important part of any economy. In the United Kingdom it accounts for approximately 7% of the nation's gross domestic product or £110 billion per annum of expenditure. Some 40% of this expenditure is in the public sector, with central Government being the industry's biggest client. However, the construction industry's share of the nation's output has declined over the past 20 years.

There are certain characteristics that distinguish construction from other industries including:

- the physical nature of the 'product'
- the product is normally produced on the client's land (i.e. the construction site)
- most products are a prototype (i.e. a one-off design)
- the traditional arrangement which separates design from construction
- it produces an investment rather than something to be consumed
- its activities may be affected by the vagaries of the weather
- its processes include a complex mix of different materials, skills and trades

- typically it includes a small number of relatively large construction companies and a very large number of small firms.

The construction industry is a major employer of labour. It employs over 2 million people in the United Kingdom, from the unskilled through to the highly skilled professional. Therefore, due to its significance, the fortunes of the construction industry provide a good barometer of the nation's economic performance. An active construction industry generally represents a buoyant economy.

### 1.3 A changing industry

The construction industry is sensitive to trends in both the national and international economies, and is affected by such matters as:

- economic confidence
- level of employment
- interest rates
- inflation
- manufacturing output generally
- performance in other market sectors, e.g. retail.

In times of recession people or businesses are usually reluctant to invest. This has a direct effect on the construction industry through a reduction in expenditure on capital projects.

The construction industry continually needs to adapt. It has to respond to advances in technology, changes in government policy and initiatives, and new methods of procurement. This has certainly been the case over recent years.

The demand for improvements in performance is constant and cannot be ignored. Key reviews carried out during the 1990s highlighted the dissatisfaction amongst major clients given the unpredictability surrounding the delivery of projects on time, within budget and to the standard of quality expected. The *Latham Report*<sup>1</sup> identified that this was primarily due to the fragmentation within the process (e.g. separation between design and construction) and the level of confrontation between the parties involved. The subsequent Egan report, *Rethinking Construction*,<sup>2</sup> again recognised the level of dissatisfaction and put forward proposals for improving performance across the industry. It centred around five key drivers:

- committed leadership
- customer focus
- integrated processes and teams
- drive for quality
- commitment to people.

It proposed:

- integrated project processes
- decent and safe working conditions

- improved management and supervisory skills
- replacing competitive tendering with long-term relationships
- that leading public sector bodies become best practice clients.

The report set very ambitious targets which included an annual reduction of 10% in terms of construction cost and a reduction in defects of 20%.

Subsequently, in 1999, the government, recognising the need for improvement in the procurement of government construction projects, launched the 'Achieving Excellence in Construction' initiative.<sup>3</sup> It put in place a strategy for sustained improvement in the procurement process and achieving whole-life value for money from projects.

Particular focus was given to the use of partnering and developing long-term relationships, reducing financial and decision-making approval chains and improving the development of individual's skills. The increased use of performance measurement indicators, value and risk management techniques, and whole life costing was also encouraged. Whilst being a public sector initiative, some major private sector clients sought to set similar objectives.

A parallel initiative by *Constructing Excellence* (see section 1.8.4) sought to achieve a step change in construction productivity through continuous improvement. It focused particularly on innovation, productivity and communicating knowledge of best practice. This was encouraged through promoting networking, collaboration, demonstration projects and the benchmarking of performance.

Many of these aims were reflected in a subsequent review by the National Audit Office *Modernising Construction*<sup>4</sup> in 2001. This also highlighted the need to address more effectively, the operational efficiency over the life of a building.

In 2011, the Government published its *Construction Strategy*<sup>5</sup> and made a damning assessment of the industry, similar to that in the Egan report. Listed amongst many criticisms were:

- the United Kingdom does not get full value from public sector construction
- there is broad consensus, spread across the industry and its customers, that construction under-performs
- there are poor and inconsistent procurement practices leading to waste and inefficiency
- there are low levels of standardisation.

Like the Egan report, the *Government Construction Strategy* stated an intention to achieve significant savings from reducing costs by up to 20%. It identifies a model for the public sector in which:

- the client issues a brief which concentrates on the required performance and outcome
- designers and constructors work together to develop an integrated solution that best meets the required outcome
- contractors engage key members of their supply chain in the design process when their contribution can create added value

- value for money and competition are maintained by effective price benchmarking and cost targeting, by knowing what a project should cost, rather than through lump sum tenders based on inadequate documentation
- supply chains are, where the programme allows, engaged on a serial order basis of sufficient scale and duration to encourage research and innovation around a standardised product
- industry is provided with sufficient visibility of the forward work programme to make informed choices (at its own risk) about where to invest in products, services, technology and skills
- there is an alignment of interest between those who design and construct a facility and those who subsequently occupy and manage it.

The efforts to improve the level of safety within the industry were reinforced by the introduction of the Construction (Design and Management) Regulations 2007 (CDMR). These regulations have undergone a governmental review that was completed in 2011 and the Construction (Design and Management) Regulations came into force on 6th April 2015.

In addition the sustainable agenda has come more to the fore in all projects both large and small. A growing need for a sustainable approach in the planning, design and construction processes exists, together with sustainable supply chains and the need to measure carbon footprints. This has led to a more extensive consideration of the whole life cost for projects in both the public and private sectors, impacting on both the design and procurement processes.

These and other initiatives clearly show there is a willingness for continued improvement in the construction processes (albeit the results have been mixed) which, together with the evermore sophisticated developments in information technology and communications mean that the roles, responsibilities and relationships of all those involved in the industry continue to change. Architects therefore, along with all the others working in the industry, need to keep abreast of all such developments and tailor their approach and services to adapt to the changes.

## 1.4 Clients

A project team comprises the designers and the constructors both working at the behest of a client; the customer and the most important team member. The client commissions a design and contracts for the building works.

Clients appear in many guises. They are the person who engages the consultants (e.g. an architect), they are the “Employer” under many standard forms of building contract (e.g. the SBC) and they generally own the building or facility constructed until such time as they dispose of it. It is the client who pays the fees and the costs to construct the works. In that respect they call the tune, something that should not be forgotten.

Architects, like most other professionals, must have clients in order to practise. Unlike the painter, the author or the poet, they are not at liberty to choose their subject. They may be both client and consultant when, for example, they



design their own house. Otherwise, they are dependent upon commissions from others. This applies whether they are a principal or assistant in private practice, or a salaried officer within national or local government. In the latter case their client would be the council or committee they serve.

Relationships with the client are of prime importance. An architect must not only embark on a process of design (which is something of a personal exercise) but they must also attempt to interpret a client's needs and provide a product that the client wants.

An architect's actions and decisions result in a client spending money. These sums may be substantial. The amount a client ultimately spends may well depend on the skill and efficiency of the architect. Therefore, it is essential that both the client and architect carry each other's confidence. This is particularly so given the architect may have certain responsibilities, during the construction stage under the building contract, to the contractor. It is important the client has confidence that the architect will act professionally and fairly. The old adage, that a good building requires a good client as well as a good architect, is as true today as it ever was.

How does a client choose an architect? It may be in one of several ways. For example:

- the client may approach the Royal Institute of British Architects (RIBA) Client Services and be provided with a list of suitable architects, from which to choose
- the client may search the Chartered Practice area on the RIBA website (see Chapter 9, section 9.1)
- the client may see a building or photograph of a building that they like and research the name of the architect
- the architect may be recommended by a third party
- the architect may specialise in the design of a particular building type which is sought by the client
- it may be as a result of a successful competition for a particular building or project
- it may be from an entry in a directory of architects
- it may be in response, by the architect, to an advertisement in the official journal of the European Union.

## 1.5 Contractors

The contractor, or constructor, is at the hub of a complex construction industry. Contractors are firms which differ greatly in their size and capabilities. Many are small firms whose work may vary from one or two houses and some jobbing work to individual contracts up to perhaps £250,000 in value. However, the bulk by value of most construction work falls to a relatively small number of large firms, often with regional offices, and many carrying out work abroad. Most contractors are limited companies and a number are public companies. Some of the very small contractors could, in theory, operate as partnerships

(see Chapter 5, section 5.2) though this is now quite rare but there must be tens or hundreds which are sole traders.

Traditionally, the contractor is chosen by competitive tender having priced either a specification and drawings or a bill of quantities and drawings. Alternatively, work may have been negotiated with a preferred contractor. In both instances an architect has been engaged by the client. Today the procurement processes and the contractual arrangements entered into are many and varied. It is not unusual for an architect to offer their services to a contractor, who then is the client (e.g. design and build). The services offered are described in Chapter 3, section 3.6 and the architect's relationship with the contractor regarding procurement procedures, programming and construction is covered in Chapters 16 and 20.

Sub-contractors, as their name suggests, are businesses to whom the contractor sub-lets its work. When work is sub-let it is delegated to another with the contractor remaining liable to the client (or 'employer') for the performance of the sub-contractor (e.g. defects in the sub-contracted works) under the building contract.

In general terms work will be sub-let in one of two ways. First, it may be the specific wish of the architect, employer or other member of the design team that a certain facet of the work is to be carried out by a particular company. This may be for a number of reasons that could include a particular expertise, quality based on past performance or simply price. Some of the standard building contracts include provision for the 'naming' or 'nominating' by the employer (generally it will be required by the architect or other design team member) of a particular company to undertake a part of the overall works. However, there is no standard definition of what amounts to a 'named' or 'nominated' sub-contractor; the terms in each contract have to be examined to understand the procedure for the appointment of the sub-contractor and the extent of any contractual liability, for the performance of the sub-contractor, accepted by the employer. The additional liability accepted by the employer would be in exchange for taking away the contractor's choice. Earlier versions of the SBC (e.g. JCT 98) included what were called nominated sub-contractor provisions; these were detailed provisions which allowed the employer to select a sub-contractor and take on liabilities for the performance of that sub-contractor, e.g. delay. However, these were considered somewhat cumbersome and tended to obscure issues of responsibility. They were omitted from the 2005 edition of the SBC. However, in February 2011 the JCT introduced a 'Named Specialist Update', a supplement for use with the SBC. Incorporation of the supplement allows an architect to name a particular company, to be engaged by the contractor, to undertake a specific aspect of the works. The procedures are much simplified and contractual liabilities falling to the employer, for the named specialist, are limited and less onerous. Albeit, the situation becomes complex if the sub-contractor's employment is terminated or the sub-contract repudiated. There are similar provisions within the IC (clause 3.7) for the selection of what are termed a 'named sub-contractor'. The supporting documentation for use with the IC is more comprehensive (e.g. IC Sub/NAM/E) with no similar documentation produced for use with the 'Named Specialist Update'.

Alternatively, the SBC makes provision for the contractor to select a sub-contractor from a list of not less than three names provided by the architect, or other design team member, whose duties and responsibilities do not extend beyond naming (SBC clause 3.8). The list of names would be shown in the bills of quantities or specification. Once selected from the list the sub-contractor becomes a 'domestic' sub-contractor (see below). Neither the contractor nor chosen sub-contractor enjoy the contractual rights previously enjoyed under the old nomination procedure or for that matter the 'naming' procedures under the aforementioned SBC 'update' or the IC 'naming' procedure.

The choice of sub-contractor to undertake the work could be left to the contractor. Such a sub-contractor is known as a 'domestic' sub-contractor; servant of the contractor or a part of the contractor's 'household'. Under the JCT standard forms an architect has no power to object to any names put forward by the contractor as sub-contractors.<sup>6</sup> Their only power might be, in given circumstances, to object to that particular facet of the works being sub-let on the grounds that it was always expected or required that it would be undertaken by the contractor. The position is different under the Engineering and Construction Contract (ECC) contract where the contractor has to submit to the project manager the names of each proposed sub-contractor for acceptance (clause 26.2).

## 1.6 Consultants

### 1.6.1 Architects

Architects are usually the principal or lead designers on a building project and in many cases the lead consultant. They have the difficult task of translating a client's ideas into an acceptable design and then into working drawings. The profession of an architect is subject to an Act of Parliament<sup>7</sup> and is a registered profession. For business purposes no one can call themselves an architect in the United Kingdom unless they are on the register maintained by the Architects' Registration Board (ARB). The only exceptions named in the Act are 'naval architect', 'landscape architect' and 'golf-course architect'. Only those qualified in accordance with the regulations can be admitted to the register. However, it is only the name "architect" that is protected and anyone can carry out the role as long as the name (i.e. architect) is not used.

The word 'architect' is derived from the Greek '*arch*' meaning 'chief' and the word *teckton* meaning 'carpenter or builder'. Therefore, as the name implies, the architect should be the master builder, the leader of the building team. Architects should be qualified to design and specify the construction of buildings and administer the legal contracts which put that into effect. They must possess both the theoretical and practical knowledge to carry out these roles. Their work is a science as well as an art; they must produce a structure as well as create form; and they must combine aesthetic effect with practical considerations. They are required to visualise the interior, as well as the exterior, of the building. They should ensure that the accommodation is properly related to the requirements

of the owner and occupiers, that the form and construction are appropriate to the function and setting for the building, that they comply with relevant legislation and that the design is developed within the client's budget.

Like playwrights, architects are dependent on other people to interpret their designs. Their involvement during the construction of a building is as important to its success as the directions given by the producer and stage manager for a play. This may often be forgotten or not understood by some architects who leave the contractor to act without proper direction. The list of duties identified by Hudson, in the last edition to be edited by him of *Hudson's Building Contracts* (1926), is still considered relevant today<sup>8</sup> and are set out below.

- (i) To advise and consult with the employer (not as a lawyer) as to any limitation which may exist as to the use of the land to be built on, either (*inter alia*) by restrictive covenants or by the rights of adjoining owners or the public over the land, or by statutes and by-laws affecting the works to be executed.
- (ii) To examine the site, sub-soil and surroundings.
- (iii) To consult with and advise the employer as to the proposed work.
- (iv) To prepare sketch plans and a specification having regard to all the conditions which exist and to submit them to the employer for approval, with an estimate of the probable cost, if requested.
- (v) To elaborate and, if necessary, modify or amend the sketch plans as he may be instructed and prepare working drawings and a specification or specifications.
- (vi) To consult with and advise the employer as to obtaining tenders, whether by invitation or by advertisement, and as to the necessity or otherwise of employing a quantity surveyor (Engineers do not so often employ a quantity surveyor).
- (vii) To supply the builder with copies of the contract drawings and specification, supply such further drawings and give such instructions as may be necessary, supervise the work, and see that the contractor performs the contract, and advise the employer if he commits any serious breach thereof.
- (viii) To perform his duties to his employer as defined by any contract with his employer or by the contract with the builder, and generally to act as the employer's agent in all matters connected with the work and the contract, except where otherwise prescribed by the contract with the builder, as, for instance, in cases where he has under the contract to act as arbitrator or quasi-arbitrator.'

It should be noted that usually architects inspect, rather than supervise, work; something which the courts have endorsed.<sup>9</sup> It has been established for nearly forty years that the architect never acts as an arbitrator or quasi-arbitrator under any of the JCT standard contracts. The position would be similar under many of the other standard forms, e.g. ECC.

Architects must have a good practical knowledge of building and allied trades, and must have at least a working knowledge of the more specialised aspects of building, such as mechanical and electrical engineering services. Above all they

must be creative and dedicated to solving the client's problems as expressed in the brief.

The various aspects of the role of the architect are explained in some detail in the following chapters.

### 1.6.2 Quantity surveyors/cost managers

The work and services provided by the quantity surveyor might be described as the financial management of the project, whether it is on behalf of the client or the contractor. The term 'quantity surveyor' does not now reflect the services provided, since these have expanded over the previous decades to cover what might be more appropriately termed *project cost management*. However, this has also extended beyond cost management to include procurement and contract advice.

Traditionally, certainly during the early part of the last century, quantity surveyors were employed to prepare bills of quantities for building projects. Their role was constrained to a specific but important part of the building process. This role was quickly extended to include the preparation of valuations for interim certificates and the preparation of a final account.

During the 1960s the quantity surveyor's role expanded to cover design cost planning. This was an attempt to provide the client with some form of value for money and cost-effectiveness (see Chapter 16, section 16.3). In more recent times greater emphasis has been placed on the need to examine construction costs in terms of a building's or project's life cycle rather than solely in terms of the initial build cost.

Today the work of the quantity surveyor can be summarised briefly as follows:

- preliminary cost advice
- cost planning including investment appraisal and whole life costing
- value management or engineering
- risk analysis
- procurement and tendering procedures
- contract documentation
- tender evaluation
- cash flow forecasting, financial reporting and interim valuations
- final accounting and advice on contractual claims and disputes
- cost advice during use/occupation by the client
- contractor insolvency advice
- technical auditing.

It is advantageous for the quantity surveyor to become fully involved from the outset of a project. Although lip service has been paid to this in the past, designers have often completed the early stage of the development process, relying on a limited input from the quantity surveyor. It is during this stage that the type and size of the project are largely determined and these two factors alone contribute to a considerable portion of the total cost. Quantity surveyors can therefore provide a proper and sizeable contribution during the process of strategic planning

and, by becoming familiar with the particular needs of the client, can properly evaluate, in financial terms, the options that are under consideration.

### 1.6.3 Other consultants

The other members of the design team who may be involved with a project could include any combination of the following:

- structural engineer
- building services engineer
- landscape consultant
- specialist consultants.

#### *Structural engineer*

The function of the structural engineer is to advise on structure, support and design stability. This covers the foundations to the roof and where necessary advice on ground conditions. The structural stability of the building will be their responsibility, which will include advice, specification, design and probably inspection of the works during construction. The findings of any inspection would normally be passed on to the architect, as 'contract administrator', to take, whatever appropriate action, if any, is required under and in accordance with the building contract.

Again they should be appointed early, as their advice will influence the outcome of the final design. In many cases the overall building design cannot be furthered without the basic structural advice and information being available. Some structural engineers will offer drainage and other infrastructure advice, e.g. roads and highways. Alternatively, advice and design input on these matters may be provided by an engineer specialising in this aspect of the work.

#### *Building services engineer*

Mechanical and electrical services can form a significant part of many projects. Building services engineers provide advice, specification and schematic or detailed drawings for the building services. They are sometimes responsible for obtaining tenders from specialist firms (e.g. contractors) for this aspect of the works. Again, they should be an early appointment and have a close involvement to ensure the proper integration of services into the overall design. Failure to achieve effective integration is a frequent cause of delay and disruption during the construction phase leading to disputes, additional costs and at worst litigation.

#### *Landscape consultant*

Landscape consultants are entitled to style themselves 'landscape architects'.<sup>10</sup> Their function is to advise on the external environment from early inception to implementation of the project on site. Early appointment is advisable because the advice will greatly influence the success of a planning application and of the project completion. The services offered range from a strategic analysis of the

wider context, including landscape and visual impact assessments to more site-specific masterplanning, mitigation studies, hard and soft landscape design to detailed landscape design.

### ***Specialist consultants***

On certain projects there is a need for the involvement of other specialist consultants. These can include:

- *acoustic engineers*, e.g. concert venues, theatres and the like or where sound suppression is required
- *theatre consultants*, e.g. all types of theatre work
- *curtain walling engineers*, e.g. special cladding work
- *information technology consultants*, e.g. complex data and communications installations
- *interior or furniture designers*, e.g. special interior designs.

The list of such specialist consultants is not endless but as buildings become ever more complex, more and more such specialists tend to be required. This needs to be considered when preparing fee budgets for a client who will need to be advised of the services required and the benefits they can bring.

### ***CDM co-ordinator***

Under the CDMR, where a project is notifiable, the client needs to appoint a CDM co-ordinator to advise and assist the client with their duties. In particular to co-ordinate health and safety aspects of design work, liaise with the principal contractor and prepare the health and safety file. The Regulations have undergone review and the 2015 Regulations came into force on 6 April 2015.<sup>11</sup>

## **1.7 Clerk of works**

The clerk of works is sometimes employed as an inspector of the works during construction, either directly by the client or through the architect.<sup>12</sup> Clerks of works are responsible for checking that the materials and workmanship conform to the specification outlined in the contract documents. They may be, albeit rarely, authorised to issue instructions to the contractor; under the JCT forms of contract their powers do not extend to the issue of instructions.<sup>13</sup>

While architects are required to undertake adequate inspections to check that a building is erected generally in accordance with the provisions of the contract, their terms of appointment rarely require them to make constant inspections. There is, however, often a need for such constant attention; hence the employment of a clerk of works. An architect when certifying has to act impartially between the client and the contractor. The clerk of works is usually under the direction of the architect and, if the clerk of works is appointed by the architect, the architect is responsible for the clerk of works' actions. However, in most instances, the client appoints the clerk of works and is responsible for the clerk of works' actions.

The clerks of works' duties and limitations should be clearly understood, and it is the responsibility of the architect to see that they are properly instructed. A good clerk of works can be of great assistance to the architect, who should make a point of getting to know them well and gain their confidence at an early stage. They are usually persons of considerable practical experience, having graduated from a particular trade (e.g. carpenter or electrician), and the architect should listen to their advice on practical matters when the occasion demands.

The primary duty of the clerk of works is, as already mentioned, to ensure that the work is carried out in accordance with the contract drawings and specification. Their authority is therefore limited to ensuring that the standard required under the terms of the contract is maintained. They can identify and condemn any work or materials that fall short of this standard. It may be necessary under the terms of the building contract for the architect to support the clerk of works' decision with an instruction, e.g. SBC clause 3.4.

The clerk of works should be on site during the hours that the contractor's operatives work (unless only employed on a part-time basis) and, furthermore, must endeavour to see all aspects of the works undertaken. It is a difficult job to do well, and requires both tact and knowledge. The architect should recognise this and do all that is possible to support and assist a good clerk of works.

The clerk of works can be of further assistance to the architect by taking, for instance, details including photographs, videos or measurements of any work that is likely to be covered up. This applies particularly to foundations and other parts of the works which might be subject to re-measurement for valuation purposes or to aid in the preparation of the 'as built' records. There is a variety of other records which the clerk of works could keep. For example, daywork sheets may have to be submitted for works to be valued on a daywork basis. It will be necessary to confirm that the time and materials shown on the sheets submitted by the contractor are correct, and the clerk of works could offer valuable support to the architect and/or quantity surveyor on this matter. Records of operatives and plants on site and what they are doing, visitors, weather records and the like could prove invaluable if the architect and/or quantity surveyor have to address a contractor's claim for additional time or costs.

## 1.8 Construction industry bodies

### 1.8.1 Professional organisations

Members of the building team all have their professional organisations that act as learned societies with libraries, research facilities and internet websites for members. In some cases they offer recognised educational and professional qualifications. They oversee the conduct of their members and practice within the profession generally. They also provide a central source for social activities and the general dissemination of information by way of journals, lectures, etc. The principal organisations are:

- *Architects*

- Royal Institute of British Architects (RIBA) ([www.architecture.com](http://www.architecture.com))

- Royal Incorporation of Architects in Scotland (RIAS) ([www.rias.org.uk](http://www.rias.org.uk))



Royal Society of Architects in Wales (RSAW) ([www.architecture.com](http://www.architecture.com))  
 Royal Society of Ulster Architects (RSUA) ([www.rsua.org.uk](http://www.rsua.org.uk))  
 Royal Institute of the Architects of Ireland (RIAI) ([www.riai.ie](http://www.riai.ie))  
 Association of Consultant Architects (ACA) ([www.acarchitects.co.uk](http://www.acarchitects.co.uk))

- *Clerks of works*

The Institute of Clerks of Works and Construction Inspectorate of Great Britain Inc. (ICWCI) ([www.icwgb.org.uk](http://www.icwgb.org.uk))

- *Building and construction managers*

Chartered Institute of Building (CIOB) ([www.ciob.org.uk](http://www.ciob.org.uk))

- *Engineers*

Institution of Civil Engineers (ICE) ([www.ice.org.uk](http://www.ice.org.uk))

Chartered Institution of Building Services Engineers (CIBSE)  
 ([www.cibse.org](http://www.cibse.org))

Institution of Electrical Engineers (IEE) ([www.iee.org](http://www.iee.org))

Institution of Mechanical Engineers (IMechE) ([www.imeche.org.uk](http://www.imeche.org.uk))

Institution of Structural Engineers (IStructE) ([www.istructe.org.uk](http://www.istructe.org.uk))

Chartered Association of Building Engineers (CABE) ([www.cbuide.com](http://www.cbuide.com))

- *Landscape*

Landscape Institute (LI) ([www.landscapeinstitute.org](http://www.landscapeinstitute.org))

- *Planners*

Royal Town Planning Institute (RTPI) ([www.rtpi.org.uk](http://www.rtpi.org.uk))

- *Project Managers*

Association for Project Management (APM) ([www.apm.org.uk](http://www.apm.org.uk))

- *Surveyors*

Royal Institution of Chartered Surveyors (RICS) ([www.rics.org.uk](http://www.rics.org.uk)).

## 1.8.2 Contractor organisations

Contractor organisations also have bodies that look after their members and represent their interests. For example, the *United Kingdom Contractor's Group* whose principal objectives are stated as being to influence policies and legislative changes to the construction sector proposed by the UK government and EU institutions; to encourage contractors to work together, especially in areas of health and safety and environmental issues; to promote change and spread best practice; and to work with other groups to offer a single voice for contractors ([www.ukcg.org.uk](http://www.ukcg.org.uk)).

There is also the *Federation of Master Builders* which protects the interests of small and medium-sized building firms. It is an independent and non-profit-making organisation lobbying for members' interests at local and national level ([www.fmb.org.uk](http://www.fmb.org.uk)).

## 1.8.3 Manufacturers trade associations

There are a number of associations representing suppliers and manufacturers from whom useful information and advice can be obtained on the use of material that their members manufacture, supply or use. Amongst these are:

- Council for Aluminium in Building
- Brick Development Association

- British Constructional Steelwork Association Ltd
- British Precast Concrete Federation Ltd
- British Woodworking Federation
- British Cement Association
- Clay Pipe Development Association Ltd
- Copper Development Association
- The Lead Sheet Association
- Mastic Asphalt Council
- Timber Research and Development Association
- Zinc Information Centre.

In fact, most manufacturers have an organisation to publicise and promote their particular trade and product.

#### 1.8.4 Other organisations

Other organisations exist which further the interests of their members or standards within the industry. A selection of the more important of these are listed and described below.

***Association for Consultancy and Engineering (ACE)***  
([www.acenet.co.uk](http://www.acenet.co.uk))

This association represents the interests of the consulting and engineering businesses in the UK. It promotes the contribution engineers and consultants make to construction and other industries.

***British Board of Agrément (BBA)*** ([www.bbacerts.co.uk](http://www.bbacerts.co.uk))

The BBA is the UK's major authority offering approval and inspection services to manufacturers and installers supplying the construction industry. Originally set up in 1966 by the Government, the BBA's certification and inspection services are recognised by building control, local authorities, industry insurers and key trade associations in the construction industry. The Board works in conjunction with the European Organisation for Technical Assessments. The European Organisation for Technical Assessment is based in Brussels (Belgium) and develops and adopts European Assessment Documents which are a harmonised technical specification. The European Assessment Document is developed in cases where a product is not or not fully covered by a harmonised European standard. The European Assessment Document contributes to the safe assessment of construction products, enables manufacturers to comply with European legislation, and facilitates the uptake of innovation, research and technical development.

***British Property Federation (BPF)*** ([www.bpf.org.uk](http://www.bpf.org.uk))

This body represents the interests of the property owning and investment industry. Its objectives are stated as:

- improving legislative, fiscal and regulatory conditions that affect the industry and so enhance the benefits the industry can bring to the United Kingdom

- supporting its members in creating value through access to information, through understanding why and how a policy is made, and through the promotion of best practice
- raising the profile of the property industry with political stakeholders, the media, and the public.

***British Standards Institute (BSI) ([www.bsigroup.co.uk](http://www.bsigroup.co.uk))***

This institute has a scope much wider than that of the construction industry. It is the recognised authority in the United Kingdom for the preparation of national standards covering specifications for dimensions, preferred sizes, quality, performance, methods of testing, terms, definitions and symbols and codes of practice. All publications are listed and available through the BSI website. A large number of standards apply to the construction industry. Committees responsible for framing the standards have representatives from contractors, construction professional bodies (e.g. architects, engineers and surveyors) as well as experts in the manufacture of the material concerned. British standards are widely adopted in the Commonwealth countries. The BSI also has an obligation to publish British versions of European standards (these are referenced BS EN), and to remove any conflict between British and European standards.

***Building Centre ([www.buildingcentre.co.uk](http://www.buildingcentre.co.uk))***

This organisation, which is located at 26 Store Street London WC1E 7BT, is backed and supported by manufacturers of all types of building products. It maintains a permanent exhibition where samples of a wide variety of materials can be seen. It is an agency from which names, addresses and often leaflets published by manufacturers can be obtained. It provides a helpful resource when only the brand name of a material is known.

***Building Cost Information Service (BCIS) ([www.rics.org](http://www.rics.org))***

BCIS is the RICS' building cost information service. It was originally formulated for quantity surveyors, who contributed cost and other information and in return were able to use the database when providing cost advice. Its information is now available through online application, data licensing and publications.

***Building Research Establishment (BRE) ([www.bre.co.uk](http://www.bre.co.uk))***

The BRE's main establishment is at Garston near Watford. Through its companies BRE (BRE is the trading name of Building Research Establishment Limited) and BRE Global Ltd, it offers a wide range of consultancy, testing, certification, commissioned research, sustainability and training services across the built environment and the associated industries. It is responsible for Building Research Establishment Environmental Assessment Methodology (BREEAM). It is engaged in research across a wide spectrum of activities associated with building and often publishes its results, details of which are available through their website.

***The Construction Alliance ([www.theconstructionalliance.org](http://www.theconstructionalliance.org))***

The Construction Alliance is a group of the major construction trade organisations working together within the remit of the Strategic Forum for

Construction. The Alliance represents over 13,500 individual companies and organisations involved in the construction industry. The Alliance membership comes from across the UK and represents constructors throughout the supply chain. Member organisations are the Federation of Master Builders, the National Federation of Builders, the Civil Engineering Contractors Association and the Scottish Building Federation.

***Constructing Excellence (www.constructingexcellence.org.uk)***

A sector and supply chain organisation seeking to drive change within construction to improve performance. The aim is to produce a better built environment. Constructing Excellence seeks to bring value to businesses through two key approaches. The first is the 'Think Tank' where it seeks to strategically set an agenda for industry improvement through the collation of empirical evidence on what does and what does not work. It collects evidence by means of innovation and research, demonstration projects and key performance indicators (KPIs), and benchmarking. The second is delivery where, it tries to influence change in an industry sector by means of networks, guidance and training and, leadership and influence.

***Construction Client's Group (CCG) (constructingexcellence.org.uk/sectorforums/constructionclientsgroup)***

The CCG has evolved from the Construction Clients' Forum, a lobbying group, in the early 1990s to an established body aligned with Constructing Excellence. The Construction Clients' Forum became the Confederation of Construction Clients and in 2004 it became the Construction Clients' Group forming part of the British Property Federation. In 2006, the Construction Clients' Group became a sector forum of Constructing Excellence. The CCG seeks to support both private and public sector customers of construction regardless of their core business activity. It does this by promoting best practice and offering a voice for a wide range of 'blue chip' clients. Its members include the BBC, the Westfield Group, the Environment Agency and a number of local authorities. The CCG sees itself as being at the heart of Constructing Excellence and as the body seeking to secure better value for money for all public and private sector clients.

***Construction Industry Council (CIC) (www.cic.org.uk)***

The Construction Industry Council was established in 1988 with five members. Since then it has grown in size and influence and is now the largest body concerned with all aspects of the built environment. It is the forum for the industry's professional bodies, research organisations and specialist trade associations. It aims to develop effective relationships with members and provide an interface between members and the wider industry including Parliament and Government. Its mission is stated to be:

- to serve society by promoting quality and sustainability in the built environment

- to give leadership to the construction industry, encouraging unity of purpose collaboration, continuous improvement and career development
- to add value and emphasis to the work of members.

***Construction Industry Research and Information Association (CIRIA)***  
([www.ciria.org.uk](http://www.ciria.org.uk))

CIRIA is the construction industry research and information association. It is a neutral, independent, not-for-profit body that seeks to link organisations with common interests. It aims to facilitate a range of collaborative activities that help improve the industry. Its work is said to address industry issues, challenges and opportunities to provide business and delivery improvement. It works across the construction industry to identify best practice, develop new approaches and to identify and enable innovation. It seeks to enable industry groups to share knowledge and exchange ideas through events, reports, meetings and web services.

***Construction Industry Training Board (CITB)*** ([www.citb.co.uk](http://www.citb.co.uk))

The CITB was established under the Industrial Training Act in July 1964. This Act is intended to secure an improvement in the quality and efficiency of industrial training, and to make sure that an adequate supply of properly trained people for all levels within the industry exist. The CITB is funded by raising a levy on contracting firms based on the number of employees. In return it is able to offer grants to employers who undertake their courses. A network of advisors is available to provide advice to employers on how to get the best from their workforce.

***Construction Products Association (CPA)***  
([www.constructionproducts.org.uk](http://www.constructionproducts.org.uk))

CPA acts as a single voice to promote and campaign for the construction product manufacturers and suppliers. It works with key policymakers such as the Department for Business, Innovation and Skills, the Bank of England, the EU, the Confederation of British Industry (CBI), the BSI and other trade and professional organisations to highlight the benefits of investment in the built environment. It nominates representatives on government and other committees, and seeks to promote both home and overseas trade. It provides an annual report and weekly information in addition to other technical literature. It publishes economic forecasts on the construction industry and other technical literature, e.g. sustainability.

***Joint Contracts Tribunal Ltd (JCT)*** ([www.jctltd.co.uk](http://www.jctltd.co.uk))

This organisation is composed of representatives from client, architects, surveyors, contractor and sub-contractor bodies. The constituent bodies are:

- British Property Federation
- Construction Confederation
- Local Government Association
- National Specialist Contractors Council Ltd
- Royal Institute of British Architects

- Royal Institution of Chartered Surveyors
- Scottish Building Contract Committee Ltd.

It is responsible for the drafting of the various JCT forms of building contract and supporting documentation including their periodic revision and the issue of practice notes for clarification purposes. Its work also includes considering questions submitted to and through the representative members on the forms of contract.

***National Specialist Contractors' Council (NSCC) ([www.nsc.org.uk](http://www.nsc.org.uk))***

The National Specialist Contractors' Council brings together the common aims of specialist trade organisations within the construction industry and is the authoritative voice of specialist contractors in the United Kingdom. It represents its members by seeking to influence government policy, promoting the need for fair payment terms, looking to improve quality across the industry, promoting training and education, offering expert and legal advice.

***Specialist Engineering Contractors' (SEC) Group ([www.secgroup.org.uk](http://www.secgroup.org.uk))***

SEC is a group of six trade associations comprising over 60,000 firms and a workforce of more than 300,000. It accounts for a significant part by value of construction output. The six associations are the Plumbing and Heating Contractor's Alliance, British Constructional Steelwork Association, Building and Engineering Services Association, Lift and Escalator Industry Association, SELECT (Electrical Contractors' Association for Scotland) and SNIPEF (Scottish & Northern Ireland Employer's Federations). Being an umbrella organisation, SEC believes it can wield greater power and influence, when lobbying government and government bodies, than the trade associations acting alone. It seeks to ensure that the interests of its members are brought before government and form part of government policy. It looks to influence matters such as the supply chain payment charter, late payment in general, the problem of retentions, project bank accounts and the standardisation of prequalification to the benefit of its members.

***Strategic Forum for Construction ([www.strategicforum.org.uk](http://www.strategicforum.org.uk))***

The Strategic Forum for Construction brings together the main bodies in the construction industry. It acts as the interface between government and the construction sector. Its vision is stated to be for the United Kingdom construction industry to achieve maximum value for all clients, end users and stakeholders and to exceed their expectations through the consistent delivery of high quality products and projects. The members are:

- Clients: who are represented by the Construction Clients Group
- Professionals: who are represented by the Construction Industry Council
- Contractors: who are represented by the Construction Alliance
- Specialist contractors: who are represented by the National Specialist Contractors Council and Specialist Engineering Contractors Group

- Product suppliers: who are represented by the Construction Products Association
- Site workers: who are represented by UCATT on behalf of the unions.

## References and notes

1. Latham M, *Constructing the Team* (1994), HMSO.
2. DETR, *Rethinking Construction: The Report of the Construction Task Force* (1998), Department of the Environment, Transport and the Regions.
3. Achieving Excellence in Construction was launched in March 1999 by the Treasury to improve the performance of government departments, their agencies and other public bodies in their role of clients in the construction industry. It put in place a strategy for a sustained improvement in construction procurement performance and in the value for money achieved on construction projects including maintenance and refurbishment contracts.  
The Achieving Excellence initiative set out a strategy with challenging targets for government performance under four headings of (i) management, (ii) measurement, (iii) standardisation and (iv) integration. The key aim was the delivery of best value for money; not necessarily the lowest cost but the best balance of quality and whole life cost.
4. At that time, the Government planned to spend £19 billion on infrastructure works over the following three years and the need for the widespread implementation of good practice in the industry was viewed as key. The National Audit Office produced a report which highlighted the need for change in the procurement and management of new construction, refurbishment, repair and maintenance works.
5. Government Construction Strategy (May 2011), Cabinet Office.
6. SBC clause 3.7.
7. Architects Act 1997 as amended.
8. Furst S and Ramsey V, *Keating on Buildings Contracts* (2012), 9th edition, Sweet & Maxwell, p. 488.
9. *Consarc Design Ltd v. Hutch Investments Ltd* (2002) 84 Con LR 36.
10. See section 20(2) of the Architects Act 1997.
11. The Construction (Design and Management) Regulations 2015 did away with the role of the CDM Co-ordinator and introduced the role of the Principal Designer. Refer to Health and Safety Executive, *Managing Health and Safety in Construction Construction (Design and Management) Regulations 2015 Guidance on Regulations* (2015). The Stationery Office publications.
12. Institute of Clerks of Works, *Clerk of Works and Site Inspector Handbook* (2006), RIBA Publishing.
13. For example, see SBC clause 3.4.

# 2

## Academic and Professional Qualifications

### 2.1 Introduction

This chapter outlines the methods of becoming a fully qualified architect and the routes to register as an Architect in the UK and in Ireland. It contains explanations on approved pathways to obtain academic awards and achieve the appropriate periods of supervised professional practice, as required by the Architects Registration Board (ARB) and the Royal Institute of British Architects (RIBA). It outlines the relevant sections of the recently revised European Professional Qualifications Directive 2013/55/EU and highlights qualification and registration for architects in Ireland and also within other countries.

At the time of writing changes in architectural education are being considered. The RIBA is in the process of undertaking a major review of architecture education which it had commenced in autumn 2013 and which it planned to complete by December 2014. The Department for Communities and Local Government (DCLG) is undertaking a periodic review of the ARB.<sup>1</sup> It has completed phase 1 of the review and is in the process of commencing phase 2, that is, on how best to deliver the regulation of architects. At the same time the Royal Institute of the Architects of Ireland (RIAI) is planning a review of their respective routes to registration. The European Directive is having a significant influence on the changes being considered. Consequently, it is difficult to be precise. The current position and some future possibilities are described in this chapter. Where appropriate, reference is made to the websites for the relevant authorities and bodies concerned with an architect becoming registered.

#### 2.1.1 Key skills

To become an architect, with the ability, knowledge, skills and competence to undertake architectural practice, is a process which combines academic education and professional training. In common with several vocational disciplines, such as Medicine and Dentistry, the process is lengthy and demanding. Despite the hard work and the complexity of the learning programmes, most students find it exciting, stimulating and eventually a rewarding fulfilment of their personal endeavours.



The scope and range of architectural practice enables architects to operate across a wide variety of activities covering design, construction, maintenance, repair, conversion, and conservation of buildings. Whether the architect is engaged in urban planning or the detailed design of a building being an architect can be a rewarding occupation (see Chapter 3).

## 2.1.2 Overview

State authorities, statutory bodies, and professional bodies currently control and influence architectural education and practice in both the UK and Ireland. Often their roles overlap, especially where architecture education and professional training are concerned. The State authorities and statutory bodies are given their powers and operational duties through legislation. In contrast professional bodies are voluntary organisations created by like-minded people and governed by elected representatives in the form of a council, with various committees charged with conducting the affairs of the body.

The common features of the state authorities and professional bodies include:

- standards for entry or membership
- recognition/approval of formal education programmes
- defining professional practice training and precise time periods
- registration of approved persons with the required qualifications
- codes of professional conduct
- requirements for continued professional development.

In the UK ARB is the statutory regulatory body and currently, the keeper of the formal Architect's Register; the RIBA is the principal professional body governed by an elected council drawn from its membership. In Ireland the RIAI is the professional body and in 2008 became the keeper of the register of architects. However, the regulatory powers are devolved to the Minister for the Environment, Community and Local Government (ECLG).

Each of these authorities and bodies take active roles in the assessment and approval of dedicated programmes of architectural education, hence the overlap. The ARB 'prescribes' programmes of architectural education and the RIBA 'validates' programmes of architecture education. The ARB and RIBA jointly agree the 'Criteria'<sup>2</sup> that the programmes must satisfy to gain their respective approvals. The RIAI takes initial responsibility for the approval and 'validation' of programmes of education and subsequently recommends to the ECLG for the granting of 'prescription'.

Within the UK, Ireland and the international schools (see section 2.5.3) running courses recognised by the RIBA, the normal route to membership of the RIBA or RIAI (i.e. to become a 'chartered architect') is the successful completion of an academic qualification, a required period of professional training and then successful completion of the professional qualification examination. There are other routes for membership of the RIBA and RIAI that are described later in the chapter.

In the UK, persons holding the approved qualifications can apply to join the ARB Register. In Ireland, persons eligible for admission to the Register of Architects who are fully qualified and meet the requirements for independent practice can apply for membership of the RIAI.

## 2.2 Relevant bodies

### 2.2.1 RIBA

The RIBA was awarded its chartered status in 1837. The remit of the RIBA at that time was 'the general advancement of architecture and the promotion of the acquirement of the knowledge of the arts and science connected herewith'.

The RIBA's mission statement published in 2005 is:

'To advance architecture by demonstrating benefit to society and promote excellence in the profession.'

An election process forms the representation on the Council of the RIBA which is the charter body, comprising 65 trustees, the large majority of whom are chartered architects. This election process also selects a President. The organisation of the RIBA embraces the RIBA Board which is the group and holding company with an executive structure. The various bodies are:

- RIBA Holdings Ltd
- RIBA Professional Services Ltd
- RIBA Enterprises Ltd
- RIBA Trust.

To uphold its mission statement and vision within this overall structure, the work and activities of the RIBA are undertaken through the following eight main committees:

- Communication Panel
- International Relations Committee
- Practice Committee
- Research Committee
- Education Committee
- Finance Committee
- Membership and Regional Chairs Committee
- Library Committee.

In addition, there are sub-committees, of which the following are relevant:

- Discipline
- Policy and Strategy Task Group
- Client Services and Membership Task Group.

Through its company and committee structure, the RIBA provides, promotes and organises a whole range of initiatives which enhance the built

environment, education and training, competitions, and membership events including:

- programmes of lectures exhibitions and events
- works in schools and community architectural projects
- award programmes, prizes and events to acknowledge excellence
- dialogues with government departments, clients and the construction industry
- awareness and advice for clients
- studies and reports on matters of procurement, energy, conservation, planning
- validates programmes of education and training (see section 2.5.3)
- works with the Joint Contracts Tribunal on forms of building contract
- manages CPD and membership requirements
- curates the British Architectural Library.

### *Membership*

There are two broad categories of membership of the RIBA: individual and practice membership, with sub-categories for individual membership.

#### *Individual membership*

There are four types of individual membership, each with their own eligibility criteria that applicants must meet to be eligible to apply for membership:<sup>3</sup>

- RIBA Chartered Membership for qualified individuals
- RIBA Associate Membership for individuals who have been awarded RIBA Part 1 and Part 2 or equivalent
- RIBA Student Membership for persons studying RIBA Part 1 or Part 2
- RIBA Affiliate Membership for persons who have a personal or professional interest in architecture, but are not eligible for the other three categories of membership.

#### *Practice membership*

The RIBA Chartered Practice Membership is for architectural practices located within the UK.<sup>4</sup>

At the date of writing, there are 40,261 members of the RIBA. Figure 2.1 shows the breakdown of membership from figures provided by the RIBA.

In Scotland, the Royal Incorporation of Architects in Scotland (RIAS) represents and serves the interests of architects. In Wales it is the Royal Society of Architects in Wales (RSAW) and in Northern Ireland the Royal Society of Ulster Architects (RSUA) which undertake similar functions. They are in fact 'regional bodies' of the RIBA which is based in London.

## **2.2.2 ARB**

ARB is the authority established by statute to maintain a Register of Architects, and to regulate the conduct of the architects' profession in the UK. Legally, only

	UK	International	Total
Affiliate	527	95	622
Fellow	259	145	404
Associate Member	564	73	637
Chartered	22,731	4,296	27,027
Student	11,113	458	11,571
<b>Total</b>	<b>35,194</b>	<b>5,067</b>	<b>40,261</b>

**Fig. 2.1** Membership of the RIBA.

persons whose names are on the Register may use the title ‘Architect’ in business or practice. ARB’s duties and functions are defined in the Architects Act 1997. It is the responsibility of the ARB to set the standards of education, training and professional conduct required for registration as an architect. The Criteria contains the education requirements for courses of architecture operating in the UK.

The ARB is also the competent authority in the UK for the implementation and administration of the provisions of the Professional Qualifications Directive 2013/55/EU.<sup>5</sup>

In the document published by DCLG called ‘*Architects Regulation and the Architects Registration Board Call for Evidence Context Document*’<sup>6</sup> at section 2 under the heading ‘Different Models of Architects Regulation’ it outlines three possible models for the future regulation of architects. These have been and are currently the subject of much discussion. The models are as follows.

### ***Statutory regulation by a professional body***

Under this model a professional body is responsible as the regulatory body. The main advantage appears to come from one body undertaking all of the roles associated with professional regulation and membership of the institution. Disadvantages are the additional duties and responsibilities of regulation that would fall to the professional body; the professional body would be classified as a public body and subject to the Freedom of Information Act 2000. The precise nature of the governance and reporting required would need to be evaluated in detail by the DCLG.

### ***Statutory regulation by an independent body***

This involves the provision of statutory protection of one form or another by the establishment of an independent regulatory body under legislation (an Act of Parliament). This is the model typically adopted in regulated professional services such as medicine and law, because the independence and impartiality of the statutory organisation can be more easily defined and maintained. The professional bodies remain at liberty to promote their interests unhindered by the need to avoid conflicts of interest.

***Non-statutory self-regulation***

This approach relies on the professional bodies to drive and maintain standards without the statutory regulation, without protection of title and without protection of function. This third model already exists across the remainder of the construction industry and relies on the ‘Chartered Status’ of a profession to shape education, standards and competency and to differentiate their services from other building designers. Self-regulation exists where there is no statute or legislation. This model would appear to have been rejected under the first phase of DCLG’s periodic review given the conclusion reached was that a case existed for light touch statutory regulation of architects.

The first two models appear still to be under consideration and the outcome of the second phase of DCLG’s review will determine whether there is to be a change.

**2.2.3 RIAI**

The following summary setting out the role and functions of the RIAI has been specially provided by the RIAI.<sup>7</sup> It sets out clearly the operation of the RIAI as both the professional body and the registering body.

‘The Royal Institute of the Architects of Ireland (RIAI) was founded in 1839 as an independent representative body for architects in Ireland. In 2008, with the introduction of registration under the Building Control Act 2007, the RIAI was designated as the registration body for architects and the competent authority under Directive 2005/36/EC, now amended by Directive 2013/55/EU, on the Recognition of Professional Qualifications. Under the Act any person not on the Register who uses the title “Architect” or practices under any name, style or title containing the word “Architect” is guilty of an offence.

As a professional body the RIAI is governed by a 24-member Council elected by the membership. Its objectives are the advancement of architecture and of quality in the built environment, the promotion of high standards of professional conduct and practice, and the development of architectural training and education. In this role it delivers the range of promotional, support and advisory services to members and public usual for a professional body. It is a member of the Architects Council of Europe (ACEu) and the International Union of Architects (UIA).

The RIAI carries out its statutory functions under the terms of the Building Control Act 2007, which sets out routes to registration, admission, appeal and disciplinary procedures, fees and penalties. The Admissions and Appeals Boards and the Professional Conduct Committee all have non-architect majorities. The non-architects are Government nominees, as are the Chairs, each of whom is a solicitor, barrister or former judge. A complaint can be brought on the basis of professional misconduct or poor professional performance. Disciplinary sanctions include censure, fines, suspension and/or

removal from the Register. Appeals against decisions on admissions or conduct can be brought on procedural or substantive matters and any person adversely affected by a decision of the Appeals Board can appeal to the High Court.

As a competent authority under the Professional Qualifications Directive, the RIAI processes applications for registration in accordance with the terms of the Directive 2013/55/EU (previously 2005/36/EC). The RIAI was a founding member of the European Network of Architectural Competent Authorities (ENACA), a forum for information exchange and discussion aimed at effective implementation of the Professional Qualifications Directive in relation to architects.<sup>7</sup>

The RIAI is a professional body as well as a registration body and has a number of grades of membership for which a person can apply. These include:

- Architect – MRIAI or MRIAI(IRL)
- Architectural graduate
- Architectural technologist – RIAI (ArchTech).

RIAI Fellow (FRIAI) is another architect grade but direct applications cannot be made for this grade. Architect Members and Fellows are eligible for registration as architects. The RIAI also has Honorary Member and Fellow grades but these grades do not confer eligibility to register.

It should be noted that the Irish Government introduced amendments to the Building Regulations in 2014, in respect of ‘certification’ by those persons involved in construction.<sup>8</sup>

#### 2.2.4 Other professional bodies

The Association of Consultant Architects (ACA) is a voluntary professional body operated for the benefit of registered architects working in private practice. Their website<sup>9</sup> states that the principal purpose of the ACA is to represent and support architects in their resolve to provide excellence in practice. The ACA objectives are stated as being to encourage excellence in the quality of service that their members offer to clients, and to represent the aims and interests of architects in private practice on issues of practice. It is not a regulatory body. The ACA prepares and publishes forms of appointment in respect of clients, and forms of building contracts and sub-contracts.

The Commonwealth Association of Architects (CAA) is an organisation which states that its aims include the advancement of architecture throughout the Commonwealth, and the acquisition of knowledge of the various arts and sciences connected therewith. In particular; promoting co-operation between members and other equivalent organisations; ensuring maximum contribution of architects to the well-being of society; and encouraging activities on a regional basis. The activities of CAA involve:

- networking and communication-sharing built environment knowledge in member countries throughout a network of individuals
- advancing and influencing the profession

- co-operating with the Commonwealth and other multinational bodies, promoting the contribution of the profession, making architects aware of global issues and trends
- development-channelling support to smaller and less developed communities of architects.

The CAA also operates a process of validating courses of architectural education for recognition of qualifications. This is described later in section 2.5.5.

## 2.3 Architectural education and training

### 2.3.1 UK and Ireland

Currently in the UK and Ireland the majority of those interested in pursuing a career in architecture choose to apply to enter tertiary level academic programmes of architecture education. These are mainly centred on universities and, in Ireland, institutes of technology. Most applicants are likely to have been studying a range of subjects at AS, A and Irish Leaving Certificate level; across a range of arts and science-based subjects. There have been numerous debates over the years, as to which range of subjects best prepares the applicant for architecture. Many architectural schools publish their own preferences for entry to undergraduate courses. Several schools undertake 'portfolio' interviews to judge the applicants' skills and ability to manage the 3- or 4-year undergraduate programme. Some schools will insist on core subjects depending on their faculty requirements. For example, engineering-based faculties are likely to want mathematics, while arts and social science-based faculties will want evidence of art ability and/or creative skills.

Unfortunately, undergraduate architectural education does not suit everyone. Many schools operate open days for potential applicants to view past students' work and talk informally to the tutors and current students, to get a clearer picture of what to expect.

There is an alternative route to qualify, which some individuals find more suitable and attractive. This is a combination of office 'practice-based learning' and short academic programmes, often delivered through distance learning methods, avoiding the need for travel and accommodation. This route suits individuals who cannot afford the financial commitment of full time education and who find that their learning style is best supported in the context of the work environment. One disadvantage of this route is its duration. In order to cover all of the necessary contents of the ARB/RIBA Criteria, more time is needed when compared to the full time study routes. There is a clear advantage in respect of the income from paid employment.

Workplace experience offers a context to learning, which an academic-based programme cannot simulate, and historically was the approach adopted for training architects prior to the introduction of university-based learning. Several schools of architecture offer part time programmes. Approved courses can be sourced through either the ARB or the RIBA.<sup>10</sup>

The potential student should always be mindful that there are a number of courses in architecture which are not recognised by either the ARB or the RIBA. They are intended for those individuals not wishing to 'practise' as an architect. They exist at both undergraduate and postgraduate levels.

### 2.3.2 European directive

When a university wishes to offer a validated, prescribed or accredited programme in architecture education within the UK, it must demonstrate compliance with the ARB/RIBA Criteria. In Ireland, compliance must be with the RIAI requirements. The Criteria and requirements are expanded versions of the articles contained within the Professional Qualifications Directive 2013/55/EU, which covers all regulated professions and replaces the former Architects Directive of 1985. The Directive is complex and the full contents of the relevant articles 46 and 47 are reproduced below. It applies to every EU member state. However, each state is free to decide how and when to implement them. It should be noted that the EU Commission uses the word 'training' when it applies to education. In the UK it is normal to use the word 'training' in the context of professional practice experience (i.e. practical training).

#### *Article 46*

##### **Training of architects**

1. Training as an architect shall comprise
  - (a) a total of at least five years full-time study at a university or a comparable teaching institution, leading to the successful completion of a university-level examination; or
  - (b) not less than four years of full-time study at a university or a comparable teaching institution leading to successful completion of a university-level examination, accompanied by a certificate attesting to the completion of two years of professional traineeship in accordance with paragraph 4.
2. Architecture must be the principal component of the study referred to in paragraph 1. The study shall maintain a balance between theoretical and practical aspects of architectural training and shall guarantee at least the acquisition of the following knowledge, skills and competences:
  - (a) the ability to create architectural designs that satisfy both aesthetic and technical requirements;
  - (b) adequate knowledge of the history and theories of architecture and the related arts, technologies and human sciences;
  - (c) knowledge of the fine arts as an influence on the quality of architectural design;
  - (d) adequate knowledge of urban design, planning and the skills involved in the planning process;
  - (e) understanding of the relationship between people and buildings, and between buildings and their environment, and of the need to relate buildings and the spaces between them to human needs and scale;



- (f) understanding of the profession of architect and the role of the architect in society, in particular in preparing briefs that take account of social factors;
  - (g) understanding of the methods of investigation and preparation of the brief for a design project;
  - (h) understanding of the structural design, and constructional and engineering problems associated with building design;
  - (i) adequate knowledge of physical problems and technologies and of the function of buildings so as to provide them with internal conditions of comfort and protection against the climate, in the framework of sustainable development;
  - (j) the necessary design skills to meet building users' requirements within the constraints imposed by cost factors and building regulations;
  - (k) adequate knowledge of the industries, organisations, regulations and procedures involved in translating design concepts into buildings and integrating plans into overall planning.
3. The number of years of academic study referred to in paragraphs 1 and 2 may in addition be expressed with the equivalent ECTS credits.
  4. The professional traineeship referred to in point (b) of paragraph 1 shall take place only after completion of the first three years of the study. At least one year of the professional traineeship shall build upon knowledge, skills and competences acquired during the study referred to in paragraph 2. To that end, the professional traineeship shall be carried out under the supervision of a person or body that has been authorised by the competent authority in the home Member State. Such supervised traineeship may take place in any country.

The professional traineeship shall be evaluated by the competent authority in the home Member State;

#### *Article 47*

#### **Derogations from the conditions for the training of architects.**

By way of derogation from Article 46, the following shall also be recognised as complying with Article 21: training as part of social betterment schemes or part-time university studies which satisfies the requirements set out in Article 46(2), as attested by an examination in architecture passed by a professional who has been working for seven years or more in the field of architecture under the supervision of an architect or architectural bureau. The examination must be of university level and be equivalent to the final examination referred to in point (b) of Article 46(1).'

### **2.3.3 Training models**

Currently the following routes or models are followed in order to make an application for registration.

***England***

England normally requires 3 years of undergraduate study, followed by a year of practical experience (subject to work opportunities being available), followed by 2 years of postgraduate study, and a further year of professional training experience.

***Scotland***

Scotland requires a 4-year undergraduate period, followed by a year of practical experience, followed by a year of postgraduate study and another year of professional training experience.

***Ireland***

Irish models have several adaptations: 5 years full-time study (no compulsory year of practical experience) followed by 2 years of professional training; or 4 years with a year of practical experience, and a further year of postgraduate study; or 3 years undergraduate study, then a year out in practice followed by 2 years of postgraduate study.

The international courses recognised by the RIBA are mainly 3 years undergraduate study and 2 years postgraduate study.

There is currently some debate surrounding the implications of Article 46. For the first time an EU Directive proposes 2 educational models: (1) 4 years full-time study followed with 2 years professional training; and (2) 5 years full-time study with no further studies. However, at Article 24 within the Directive it states:

‘The functioning of the system of automatic recognition depends on confidence in training conditions which underpin the qualifications of the professionals. Therefore, it is important that the minimum training conditions of architects reflect new developments in architectural education, in particular with respect to the recognised need to supplement academic training with professional experience under the supervision of qualified architects. At the same time, the minimum training conditions should be flexible enough to avoid unduly restricting the ability of Member States to organise their education systems.’

This would seem to suggest that the 5-year model will also have to add on the 2 years supervised training, so the overall period would still remain at 7 years.

**2.3.4 Credit allocation and credit transfer systems*****The European model***

This model for credit allocation and transfer has been in place for many years and is now formally recognised by the Directive. It is as follows:

- A primary degree equates to 180 ECTS (European Credit Transfer System), normally 60 ECTS for each year of the 3-year degree.

- A secondary degree equates to 120 ECTS, normally 60 ECTS for each of the 2 years of the award.

The Directive states that one ECTS credit corresponds to 25–30 hours of study; 60 ECTS credits are normally required for the completion of one academic year.

### *The UK model*

This model uses the Credit Award Transfer System (CATS). For various reasons the UK chose not to adopt the EU models although the UK still bases its system on acquired totals of credits over specified time periods. These are:

- a primary degree of 3 years equates to 360 CATS
- a secondary degree of 2 years equates to 240 CATS.

The UK Quality Assurance Agency for Higher Education provides an explanation and description of the terms ‘credits’ and ‘modules’ as follows:

‘A credit is awarded to a learner in recognition of the verified achievement of designated learning outcomes at a specified level. Module/unit refers to a self-contained, formally structured, learning experience with a coherent and explicit set of learning outcomes and assessment criteria. A learning outcome is a statement of what a learner is expected to know, understand and/or be able to demonstrate after completion of a process of learning.’

### **2.3.5 The Criteria**

In the UK the requirements in the Directive are expanded into greater detail via the ARB Criteria.<sup>11</sup> The revised Criteria came into effect in 2011 and is due for review again in 2016. Following the review of the entry routes to the ARB Register which is planned to be complete 2015 an earlier review of the Criteria may be possible. The Criteria<sup>12</sup> jointly agreed by the ARB and the RIBA is the basis for the schools of architecture to formulate the contents of their programmes of architectural education. Currently, the Criteria refers to the terms Part 1, Part 2 and Part 3, which represent defined levels or thresholds of attainment by a student engaged in the 7–8-year programme. These terms may become inappropriate following the conclusion of the current RIBA review of architecture education; but architecture education and training is an incremental and iterative process and the identification of the Parts is a clear demonstration of that progression.

- Part 1 is normally achieved upon the successful completion of the first cycle. The primary degree is the academic award granted by the academic provider/institution. The actual title of the award is decided by the provider.
- Part 2 is normally achieved upon the successful completion of the second cycle of advanced studies, which builds upon the skills acquired during Part 1.

- Part 3 is commonly recognised in the UK as the final qualification examination and has associated courses to support the candidates taking the examination. Part 3 has designated and required periods of supervised professional practice experience.

In Ireland the requirements of the Directive are embodied in the RIAI Statement of Policy on Architectural Education,<sup>13</sup> and the schools of architecture address the RIAI policy requirements in the formulation of their programmes of architectural education. The terminology of 'Parts' is not commonly used in Ireland; the levels of attainment are represented by the academic awards.

### 2.3.6 Modes of learning

Central to the delivery and processes of architectural education is the architectural studio. Across all of the university-based programmes of approved architectural education this is the central core around which supportive activities are arranged. These can include formal lectures, studio tutorials, seminars, workshops, group work and field study trips. The aim of a creative design environment is pivotal to the studio as a thought provoking context and problem-solving method of education. Similar activities can be found in allied disciplines, such as arts courses.

The student's progression through Parts 1 and 2 build upon increasingly complex studio projects, which extend from simple tasks set out in the first year to the advanced study of a comprehensive design project undertaken in the final fifth/sixth year. Within this process various 'modes of learning' can be identified:

- academic-based learning
- studio/project-based learning
- self-directed learning
- practice-based learning.

Academic-based learning is an extension of the methods of teaching students will have experienced at secondary level education. Formal lectures covering a range of subjects relating to the Criteria, e.g. history, theory, arts, environment, technology, structures, social studies and landscape studies. The arrangement and proportion of these subjects reinforces the aims and objectives of each level.

Studio-project-based learning provides opportunities for students to explore, create and evaluate designs using critiques (Crits) as a means for assessing the progression along the problem-solving journey. Crits can be arranged at intervals during the project to provide guidance to the student and at the close of the period of the project as a final assessment. The Crit is also intended to equip the student with communication skills, both visual and verbal. The students present their work to a range of critics, including tutors, guest lecturers, practitioners, clients and more experienced students from the postgraduate programmes.

Typically, a first-year student should expect to experience 75/70% studio time and 25/30% formal lectures. This changes as each year advances to the point

when at fifth/sixth year level the proportion will have shifted the balance more into studio, say, 80/90%, with the remainder on another assignment, e.g. dissertation or written thesis. Self-directed learning is often taken as implicit, and overlooked as an important component in the overall education of the architect. It involves the student taking charge of their learning in a particular subject or activity. It can include personal research, reading, observation and recording data. With progression through the levels the proportion of self-directed learning increases especially in the postgraduate programmes. Often the student can choose the study subject with the tutor's approval and embark on the learning process with informative guidelines and objectives.

Practice-based learning is embodied into the required periods of supervised professional training experience, in the form of the office context and the observation of the various methods of professional architectural services. A candidate's preparation for the Part 3 final qualification examination relies heavily on this form of learning. In the UK this practice-based learning is recorded by the student and signed off by the office mentor in the form of the RIBA Professional Experience Development Record (PEDR), an electronic-based system.

For persons who have trained outside the UK there is an alternative vehicle for recording professional experience: the Architectural Association School of Architecture (London) Certificate of Professional Experience (AA CPE). The purpose of the AA CPE is to provide an alternative recording format to the PEDR but is summative rather than formative method of evaluation. It is primarily designed to help those who have trained outside the UK and not been logged in to the UK PEDR system. In addition it is directed at assisting those persons who have not followed a direct path into Part 3, or have taken career breaks and not maintained their PEDR records. However, like the PEDR, the AA CPE is designed to provide as much in-depth qualitative analysis of project activity as Part 3 examiners need to inform their decisions about the sufficiency of practical training and experience. The AA CPE is a 'free to use' document developed in 2012 in conjunction with an APSAA<sup>14</sup> working group. While it is an authorised format for AA Part 3 candidates to use as evidence of work and practical training, persons wishing to use it in other institutions must check that their professional studies adviser is content with it.

Across a period of ten years to the present date, the rules and regulations on approved professional training experience have been revised to be more flexible in application. This was agreed jointly between the ARB and the RIBA and was undertaken to recognise the following factors: European and global mobility of architectural graduates, radical changes to the various methods of employment, the recession of the once buoyant construction sector, geographical locations of graduate employment opportunities (jobs follow site/project locations), arrangements between UK offices and offices in different time zones to electronically transfer data at closing time from the UK to enable continuous work on a project and so ensure faster completion of project design and detailing.

The current ARB/RIBA regulations can be viewed at the following websites: [www.architects-register.org.uk](http://www.architects-register.org.uk) and [www.architecture.com](http://www.architecture.com).

## 2.4 Examination of professional practice

In the UK this examination is currently known as the Part 3. It is the gateway to joining the ARB Register of Architects and offers the opportunity to apply to join the RIBA as a Chartered Member. It is the final milestone in the overall pathway of formal education and the required periods of supervised professional practice experience and training. It is the point where a candidate holding the appropriate awards at Part 1 and Part 2 (or ARB recognised equivalents) must demonstrate that they meet all the ARB Criteria at Part 3 and can be deemed by Part 3 examiners to be competent to practise as an architect in the UK under the terms of the Architects Act 1997.

A similar test of competence operates in Ireland. However it is not described as Part 3, instead it is called the Professional Practice Examination.

The ARB website carries the list of approved/prescribed Part 3 examinations and the RIBA website carries the list of validated Part 3 examinations. Currently the largest number of providers is based in the University sector. This may change as a result of the ongoing RIBA and DCLG reviews, and the term Part 3 may also change. The lists must be checked closely as some schools offering Parts 1 and 2 do not automatically offer Part 3. Several of the approved examination centres operate as companies outside academia and these include the AA (London), the Architects Criteria Registration Examination (Belfast) and the Scottish company known as the Architects Professional Examination in Scotland (APEAS) (Edinburgh). The RIBA North West region offer Part 3 with lectures, and operates from Chester and Liverpool.

This is a very short précis of what Part 3 entails and a more detailed guide can be found in the 'Part 3 Handbook'.<sup>15</sup> This book is essential reading for any applicant planning to take Part 3, and any candidate preparing for the Part 3 Examination.

## 2.5 Approval of educational programmes

### 2.5.1 Generally

There are many courses in 'architecture studies' that, when successfully completed, do not enable the graduate to practise as an Architect. Such programmes offer a career in architecture but because they are not validated would prevent a person calling themselves an Architect. Therefore, it is critical that a person enrolls on an appropriate course.

The ongoing review by the RIBA is looking at its validation process and the DCLG review is considering whether the ARB should retain its role in prescribing courses. Therefore the procedures below may change.

### 2.5.2 Prescription of courses in the UK by ARB

Under the powers of the Architects Act 1997, the ARB has a duty to prescribe the qualifications and practical training required for entry on to the UK

Register of Architects. This applies to new qualifications and existing qualifications. ARB does not prescribe courses that are based outside the UK. From 2003 the ARB devised procedures which did not involve visits to the education providers' establishments. There is no inspection of student portfolios and no direct assessment of any student work. Instead, the ARB undertakes a document-based assessment across a very thorough analysis of stated requirements. They rely very heavily on the views expressed by external examiners (usually appointed by the provider) in their reports on examinations at Parts 1, 2 and 3. Providers (e.g. universities) are invited to apply for new qualifications and the renewal of existing qualifications when the period of approval is about to lapse. Prescription is usually for a period of 4 years, shorter time periods are sometimes applied, depending on circumstances of the application.

The complete list of ARB-prescribed Parts 1, 2 and 3 can be found on the ARB website.<sup>16</sup> Currently there are several university schools that do not offer a Part 3 course.

### 2.5.3 Validation of courses by the RIBA, in the UK and Overseas

Education has always been central to the RIBA and, parallel to the practice of architecture, is the centrepiece of the original 1834 Royal Charter. RIBA examinations in architecture were established in 1863; in 1882, the successful completion of these became compulsory for those seeking membership of the Institute. Responding to requests from schools of architecture, as an alternative route to membership, the RIBA developed systems for recognising courses that achieved the standard for exemption from the Institute's examinations. In 1924, RIBA visiting boards were established to evaluate courses and examinations preparing students for professional practice. These visiting boards are the foundation of the current RIBA validation system.

RIBA Boards visit schools of architecture for the purpose of assessing the standard of courses and whether they qualify for exemption from the RIBA examinations in architecture. The procedures usually make provision for the cohort of students to meet privately, no tutors being present, with Board members to give student feedback. Normally, there is an additional mechanism for students to submit written feedback, either by an anonymous questionnaire or a report. Student representation is possible on the RIBA Procedures for Boards.<sup>17</sup>

The August 2014 update<sup>18</sup> published by the RIBA Review Group, among many other things, is recommending the engagement of more practising architects into the education process. Serving on a Validation Board would count towards an architect's CPD requirements (see section 2.13.3). This offers a two-way exchange; the School benefits from the practitioner's experience of what is happening in the profession, and the practitioner gets an insight of the creative ideas emerging from 'budding' architects.

Today, RIBA validation is an evidence-based, peer review system working internationally as a *'critical friend'* to schools of architecture, monitoring courses to improve median achievement, encourage the excellent, and ensure a positive student experience. The current RIBA validation criteria and procedures were introduced in 2011, updated in September 2012, and revised in May 2014. Taken

overall the process includes a combination of documentary submissions from the provider, augmented with visits by panels/boards to the provider. The visits fulfil a number of tasks and include an assessment of the standards of student work across all the years for Parts 1, 2, and 3. Validation normally operates on a five-year cycle, unless there are specific circumstances that warrant an interim visit, e.g. merging disciplines, changes in management and changes in staffing structures.

There are procedures for new courses and overseas courses; the latter is described as 'International Validation undertaken by the RIBA'. It has been a long-established policy of the RIBA (London) to assist the development and ensure the quality of architecture education overseas. The RIBA's list (as at February 2014) indicates that Validated Parts 1 and 2 are available in the following countries (note the figures contained in the brackets represent the number of course providers in each of the countries):

- Argentina(3)
- Bulgaria(1)
- Chile(5)
- China(1)
- Colombia(4)
- Egypt(2)
- Ireland(2)
- Lebanon(1)
- Malaysia(2)
- Peru(2)
- Poland(1)
- Romania(1)
- Singapore(1)
- South Korea(1)
- Sri Lanka(2).

If a graduate from each of these courses wishes to register in the UK with the ARB, they are required to apply for ARB equivalence (i.e. exemption) via the ARB Part 1 and Part 2 prescribed examinations routes. These are operated internally by the ARB but do not apply to Part 3, for which there is no exemption and which has to be taken and passed.

#### **2.5.4 Accreditation of courses in Ireland**

The RIAI accredits programmes in architecture education and architecture examinations in Ireland. Under the Irish Building Control Act 2007, qualifications and examinations in Architecture must be 'prescribed' by the Minister for the ECLG to be recognised for the purposes of admission to the Register of Architects. When the RIAI has granted accreditation to a programme it recommends that programme to the Minister for prescription. The Minister, in considering recommendations from the RIAI takes the advice of Quality and Qualifications Ireland (QQI), the statutory authority for qualifications and quality in Ireland. Once a programme has been prescribed, it can be 'notified' to



the Member States and Commission of the European Union for inclusion in the 'automatic recognition system' for architects; a process which involves both the RIAI as the Competent Authority and the Department of Education and Skills. Currently the RIAI accreditation procedures entail the following stages:

- application by an education provider to have a new architecture programme accredited, or for an existing programme to be renewed, or for an existing programme to be accredited for the first time
- a sequence of documentary submissions and the appointment of a Visiting Board by the RIAI Board of Architectural Education (BAE)
- a pattern of visits to the relevant provider
- the preparation of a report, which contains recommendations to the BAE.

Recommendations cover a range of options in respect of the programme. The following extract is taken from the RIAI Visiting Board Procedures dated 25 January 2008:<sup>19</sup>

### **'5.0 Approval.**

#### **5.1 Provisional Approval**

Having completed its review of a course seeking accreditation for the first time the Visiting Board will recommend to the BAE that the course be accorded or refused Provisional Approval. Provisional Approval is dependent on the Board forming the view that the course if implemented as planned will meet the RIAI criteria.

If the Board considers that the course as planned would not meet RIAI criteria, but with adjustment it might do so, it may issue an Interim Report indicating to the school the areas in which improvements need to be made and the steps that might be taken by the school, and may propose a provisional date for a further Visit.

This sequence of Visit and Interim Report may be repeated until such time as the Visiting Board considers that it can make a definitive recommendation to the BAE.

**It is the view of the RIAI that Provisional Approval should be in place before the first intake of students into the course.**

#### **Section 5.2 Final Approval**

A course which has been accorded Provisional Approval will be visited annually by a Visiting Board, at a time to be agreed, until the first cohort of students has completed the course. Where circumstances warrant, such annual visits may be carried out by a reduced Visiting Board.

Following the visit at which the work of the first cohort of graduating students has been reviewed, the Visiting Board will prepare its Final Report and recommend to the BAE that the course be accorded or refused RIAI Approval.

### Section 5.3. Continued Approval

A course is normally granted Approved status for a maximum period of five years. The academic year during which the next accreditation visit will fall due is indicated in the Visiting Board's Final Report. An Educational Institution should notify the RIAI of any significant changes in circumstances concerning the course which occur in the intervening period.'

The process of visits can take place in two phases. A phase 1 visit is undertaken during the operation of the school at a point where the visiting board can observe the school in action and meet with students, staff and senior management of the academic institution. It is the opportunity for the board to review resources, facilities, library provision and staffing levels. A phase 2 visit normally occurs upon completion of the academic period when the board looks at the assessed output from the students, obtains feedback from the external examiners and can view a range of portfolios across a sequence of academic years, since the previous visit. Following the completion of the two phases of visits, the visiting board prepares a report with recommendations to the BAE. Decisions by the BAE are then presented to the RIAI Council, normally for ratification.

### 2.5.5 The CAA validation processes

The CAA validation process involves qualifications in architecture for recognition by the CAA across the globe.

In 1965 the Commonwealth Board of Architectural Education (CBAE) was established to set standards in architecture education and to provide a mechanism for the inter-recognition of qualifications on a Commonwealth basis.

The CAA Education Committee, which replaced the CBAE in 1989, was replaced by the CAA Validation Panel in 2000 and the system is now managed by the chairperson of the Panel with an executive committee who report to the CAA Council via its education committee.

The CAA publishes '... a List of Schools of Architecture whose qualifications it considers after inspection, to be a sufficient standard to recommend to National Authorities that they be accepted for recognition as meeting the academic requirements appropriate for registration, accreditation, or acceptance as an architect.'<sup>20</sup> The means of production and maintenance of this list is a peer review process that assesses output standards against minimum criteria and is widely known as the CAA validation system.

In 2008, the CAA signed the Canberra Accord with the US, China, Canada, Australia, Mexico and Korea for mutual recognition of qualifications. From 1 January 2010, this Accord recognised the substantial equivalencies of the accreditation systems of the signatories. CAA directly validated qualifications now receive over 90% of credits in the National Council of Architectural Registration Board's Education Evaluation Services for Architects (EESA) evaluation for recognition in the US. The principal feature of the validation system is the formation of visiting boards to schools of architecture (or national/regional

authority) at the invitation of CAA member institutes. Board personnel consist of two CAA representatives (in region and out of region) drawn from the CAA Validation Panel, with other members nominated by the relevant national authorities.

The CAA website states that there are benefits for students referring to improved transferability of qualifications for graduates wishing to continue with their studies in other CAA member countries, and opportunities for student or full membership of other CAA national associations. The CAA adds that their procedures are sensitive to the wide range of countries and situations in the Commonwealth. It places equal importance on establishing standards and the need to preserve and encourage diversity, innovation and development.

## 2.6 Practising in the United Kingdom

### 2.6.1 Registration

Currently, there exist three main routes to registration as an architect in the UK. These are categorised under the holding of qualifications and the various origins of those qualifications. Each of the routes described in this section may alter following completion by DCLG of phase 2 of its ongoing review.

#### *Route one*

This relates to applicants who hold qualifications obtained within the UK. This includes the successful completion of the Part 1 and Part 2 qualifications, together with the completion of the required period of professional experience/practical training in architecture; and the successful attainment of a prescribed Part 3 qualification in professional architectural practice. This is the mainstream registration route for persons who have engaged in formal architectural education with prescribed providers, e.g. universities. Completion by full-time education plus the required periods of professional training can take 7–8 years overall.

#### *Route two*

This relates to entry via the European Union Automatic Recognition System. Each of the member states of the European Union (EU) lists the qualifications that it recognises for architecture in their domain. A central list of all the qualifications existing in Europe are held by the Commission and these are normally described under an Annex to Directive 2013/55/EU. Not listed centrally are the additional requirements which each of the member states expects a candidate to achieve for entry to their respective professions. Contrary to common belief, the majority of the member states do require an additional period of experience or a professional qualification in architecture. The ARB require a certificate from the home member state's competent authority confirming that an individual has all that is required otherwise automatic recognition would not apply. Further information can be found on ARB's website.<sup>21</sup>

**Route three**

This deals with entry for holders of qualifications outside the UK and outside the provisions of the EU Directive 2013/55/EU. Applicants in this position are required to pass 'equivalent' examinations to the examinations operated by the ARB for Part 1 and Part 2. If successful in achieving the equivalent examinations, then the applicant has to obtain the approved period of professional training and take a Part 3 examination at an ARB-prescribed centre.

**2.6.2 The ARB application process**

When the applicant has met the requirements for registration via the appropriate route, the process requires completing a registration form available from the ARB, submission of documentary evidence with a precise description of awards held, the signing of a declaration of truth and an initial registration fee.

The fee covers the costs of the admission process. The application is then considered by the ARB Registration Department, a process that takes place on a regular basis. Successful applicants are notified once decisions have been taken. The application process can take 6–8 weeks and will depend upon the accuracy of the information submitted. Additional time may be required if information is needed from another competent authority.

Following successful admission to the Register, architects are required to undertake specified actions and compliances, including:

- payment of an annual registration fee
- notification to the ARB of any change in name or address
- compliance with the ARB standards of conduct.

Confirmation of professional indemnity insurance is required initially, but not annually; however, it is an expectation under the Codes. At the time of writing there are more than 34,000 registered persons on the ARB Register, changes to the Register can occur on a daily basis.<sup>22</sup>

**2.7 Practising in Ireland****2.7.1 Criteria**

'Membership of the Royal Institute of the Architects of Ireland is open to fully qualified architects who meet all of the requirements for independent practice in Ireland, and are eligible for admission to the Register of Architects established under the Building Control Act 2007.

Under section 14(4) of the Building Control Act 2007, any person who is a member of the RIAI is eligible for admission to the Register. Similarly, under section 14(2) all persons on the Register are eligible for RIAI membership and registration or registration only. The RIAI requires that all architect members of the Institute are registered in the interests of consumer protection.<sup>23</sup>

Route	Explanation
Member/Register Route A1	People who have a prescribed qualification or an accredited non-EU qualification in architecture and who have already passed a prescribed postgraduate examination in professional practice
Member/Register Route A2	People who have a prescribed qualification or an accredited non-EU qualification in architecture and who are applying to take the RIAI Examination in Professional Practice
Member/Register Route B	People who have a prescribed qualification or an accredited non-EU qualification in architecture and at least 2 years of approved postgraduate practical experience, and have passed a postgraduate professional practice examination in another jurisdiction
Member/Register Route C	People who have a prescribed qualification or an accredited non-EU qualification in architecture and who have acquired 7 or more years of postgraduate practical experience
Member/Register Route D	Nationals of EU member states, Iceland, Lichtenstein, Norway and Switzerland with qualifications in architecture from EU member states other than Ireland and who meet the requirements of EU Directive 2013/55/EC (formally 2005/36/EC) on the recognition of professional qualifications
Member/Register Route E	People who have been performing duties commensurate with those of an architect in this state for 10 or more years prior to 1 May 2008 may apply for technical assessment under section 14(2)(h) of the Building Control Act 2007.
Member/Register Route F	The Building Control Act 2007 provides for a Register admission examination which can be taken by people who are at least 35 years of age and have at least 7 years of practical experience performing duties commensurate with those of an architect in this state. The examination became available from January 2010.

**Fig. 2.2** Routes to registration/RIAI membership.

## 2.7.2 Admission routes

Currently, there are seven routes to registration/RIAI membership that are set out in Figure 2.2.

The route chosen depends upon the applicant's qualifications, training, jurisdiction and relevant experience.

## 2.8 Practising in Egypt, Nigeria and Malaysia

### 2.8.1 Practising in Egypt

#### *Education*

The RIBA list of international schools carries two entries for courses located in Egypt (see section 2.5.3). Generally, the total duration of studies is four years at Part 1 and two years for Part 2. There are variations in respect of fulltime studies

and part time studies at Part 2 level. There are two providers named on the UIA database.

### ***Regulation/Registration***

The database compiled by the UIA carries the following information:

The Regulatory Body in Egypt is the Architecture Branch of Engineering Syndicate. The title 'Architect' is protected by law. In addition to the requirement for academic qualifications (i.e. Parts One and Two) there is an obligation to hold two years of internship, which is defined by the Society of Egyptian Architects, but it is essentially practical experience. It is compulsory, structured, monitored, and recorded. The categories include: project and office management, design and design documentation, construction documents, contract administration and computer/electronic filing. There does not appear to be a compulsory examination by an external body. Continued/continual professional development exists but is not compulsory, and is inspected by the Society of Egyptian Architects.

### ***Ethics***

There exists a Code of Ethics which is constituted by the Society of Egyptian Architects. The Code covers general obligations, obligations to the public, obligations to the client, obligations to the profession and obligations to colleagues.

### ***Practice and functions***

Functions of the architect in practice include: design of buildings, design of installations, feasibility studies, drafting of technical documentation related to the design, control of construction costs, supervision and co-ordination of the construction/completion of the specified project, design of urban infrastructure, urban planning and development, design of interiors, furnishings, fittings and objects, consulting and technical expertise and conservation. The professional body stamps the project, local authorities have to check the architect is authorised to practise and that the architect has a licence which may have to be presented upon request. Liability is defined by law and the duration is ten years. Professional indemnity insurance is not compulsory.

## **2.8.2 Practising in Nigeria**

### ***Education***

The duration and stages of architectural education are similar to the pattern in the UK. Four years of undergraduate study followed by two years of post-graduate studies. The body in charge of the standards of education in Nigeria is the Architects Registration Council of Nigeria (ARCON). The supervision is undertaken by the Nigerian Institute of Architects. There are six providers named on the UIA database. A period of internship of two years is required in addition to the academic qualifications. It is compulsory, structured, monitored and recorded. The categories include: project and office management,

design and design documentation, construction documents, facility management and building. The ARCON and the Nigerian Institute of Architects define the internship requirements, control and supervise it. There is a compulsory examination which is organised by the Nigerian Institute of Architects.

### ***Registration/Regulation***

Architectural practice is regulated by law and the registration body is ARCON. The title of 'Architect' is protected by law as well as the functions of an architect. In operation the professional body stamps the project(s), local authorities have to check whether the architect is authorised to practise, and can request the presentation of the architect's licence.

### ***Ethics***

The Nigerian Institute of Architects constitutes a Code of Ethics which establishes the following: general obligations, obligations to the public, obligations to the client, obligations to the profession and obligations to colleagues. Membership of ARCON and the professional body are both compulsory.

### ***Practice and functions***

These include: design of structures, installations, urban infrastructure, urban planning and developments, territorial planning and development. The architect's liability is not defined and professional indemnity insurance is not compulsory.

## **2.8.3 Practising in Malaysia**

### ***Education***

Standards for architectural programmes are governed by several bodies. The state authority in the form of the Ministry of Education, respective universities and the Board of Architects of Malaysia. The duration of studies depends on the applicant's entry qualifications; six years after 'O' level qualifications and five years after 'A' level qualifications are attained. There are four providers named in the UIA database.

A minimum of two years internship is compulsory after the completion of the Part 2 postgraduate studies. The categories of experience include the following: project and office management, design and design documentation, construction documents, contract administration and dealing with clients. The Board of Architects of Malaysia controls and supervises the internship. There is a compulsory examination operated by the Board of Architects of Malaysia.

### ***Registration/Regulation***

Practice is regulated by law (various acts), inscription on the register of the Board is compulsory, and the functions of the architect are protected by law. The professional title is 'Professional Architect' (ar) and architects are granted

a licence which may have to be presented upon request. Copyright is protected by law.

### ***Ethics***

A Code of Ethics is operated by two bodies, that is, the Board of Architects of Malaysia together with the Institute of Architects. Membership of the statutory body Lembaga Arkitek Malaysia is compulsory, as is membership of Pertubuhan Arkitek Malaysia (PAM). The obligations under the Code include: general obligations, obligations to the public, obligations to the client, obligations to the profession and colleagues.

### ***Practice and functions***

These include: design of buildings, structures, installations, feasibility studies, drafting of technical documents related to design, control of construction costs, supervision and co-ordination of the construction/completion of the design, design of urban infrastructure, urban planning and development, landscape design supervision and co-ordination of projects, design of interiors, furnishings, fittings and objects, consulting and technical expertise, conservation and project management.

Continued Professional Development is compulsory and is inspected by two bodies; the Board of Architects of Malaysia and PAM.

The Architect's liability is defined and there is an unlimited duration of liability; however, professional indemnity insurance is not compulsory.

## **2.9 Maintenance of standards, regulation and codes of conduct**

### **2.9.1 General**

In general terms, client protection has become a vast subject and writing about it is quite capable of filling several lengthy publications. The topic has become central to almost every facet of current society, in respect of commercial and professional services. It affects architects as professionals producing designs and projects, allocating client's monies to third parties, like contractors, and proffering advice to clients.

To uphold client protection the various bodies that are relevant to the governance of the architectural profession devised standards of services and behaviour. These have become widely known as Codes of Conduct. In operation the professional person is obliged to comply with the requirements set down in the Codes. In the UK both the ARB and RIBA each have a code: the ARB code is entitled 'Standards of Professional Conduct and Practice' and the RIBA code called the 'Code of Professional Conduct'.

In Ireland the RIAI maintains the Register. It has a Code of Conduct and it has various regulatory responsibilities under the Building Control Act 2007. Each of these codes are described in more detail below.



## 2.10 ARB's standards of professional conduct and practice

### 2.10.1 Introduction

The Code only applies to registered architects. This Code includes an important preamble which is essential reading and is as follows.

‘As an architect you are expected to:

1. Be honest and act with integrity
2. Be competent
3. Promote your services honestly and responsibly
4. Manage your business competently
5. Consider the wider impact of your work
6. Carry out your work faithfully and conscientiously
7. Be trustworthy and to look after your clients' money properly
8. Have appropriate insurance arrangements
9. Maintain the reputation of architects
10. Deal with disputes or complaints appropriately
11. Co-operate with regulatory requirements and investigations
12. Have respect for others.’

The remainder of the Code is made up of eleven standards which are set out below.

### 2.10.2 The standards

The standards are:

*Standard 1: Honesty and Integrity*

- 1.1 You are expected at all times to act with honesty and integrity and to avoid any actions or situations which are inconsistent with your professional obligations. This standard underpins the Code and will be taken to be required in any consideration of your conduct under any of the other standards.
- 1.2 You should not make any statement which is contrary to your professional opinion or which you know to be misleading, unfair to others or discreditable to the profession.
- 1.3 Where a conflict of interest arises you are expected to disclose it in writing and manage it to the satisfaction of all affected parties. You should seek written confirmation that all parties involved give their informed consent to your continuing to act. Where this consent is not received you should cease acting for one or more of the parties.
- 1.4 Where you make or receive any payment or other inducement for the introduction or referral of work, you should disclose the arrangement to the client or prospective client at the outset.’

This is very similar to Principle One of the RIBA Code (see section 2.11). It requires architects to act with complete honesty at all times and it is to be

noted that architects must not make or support statements which are contrary to their professional opinions. This alone would preclude an architect who was instructed by the client to issue (or withhold) a certificate of practical completion, from doing so if the architect had a different view. The novation or consultant switching of an architect in a design and build situation is an example of a conflict situation which is only acceptable when both employer and contractor have full knowledge and agreement. It is worth comparing the content of Standard 1.4 of this Code with the Notes at 1.6 to Principle One of the RIBA Code. Reading Standard 1.4, it appears that 'inducement' is not a breach of the Code, provided all parties are made aware of it. Contrast this with the RIBA Note 1.6 which informs members 'not to offer or take bribes.' The word 'bribe' is described in Collins English Dictionary as '*To promise, offer, or give something, usually money, (to a person) to procure services or gain influence.*'

*'Standard 2: Competence*

- 2.1 You are expected to be competent to carry out the professional work you undertake to do and if you engage others to do that work you should ensure that they are competent and adequately supervised.
- 2.2 You are expected to make appropriate arrangements for your professional work in the event of incapacity, death, absence from, or inability to work.
- 2.3 You are expected to ensure that the necessary communication skills and local knowledge are available to you to discharge your responsibilities.
- 2.4 You are expected to keep your knowledge and skills relevant to your professional work up to date and be aware of the content of any guidelines issued by the Board from time to time.'

This standard is of particular relevance to the sole practitioner who may be tempted to take on commissions which are too large or complex. Such a practitioner may often have a reciprocal arrangement with a similar practitioner for holiday and sickness cover. Special care must be taken that the liability and insurance aspects of such cover are dealt with in a proper agreement.

*'Standard 3: Honest Promotion of Your Services*

- 3.1 You are expected to promote your professional services in a truthful and responsible manner.
- 3.2 In advertising and promoting your professional services you should comply with the codes and principles applying to advertising generally. These include those of the Advertising Standards Authority or any other body having oversight of advertising standards in various media.
- 3.3 The business style of a practice should not be misleading.
- 3.4 If you are a principal in a practice you are expected to ensure that all architectural work is under the control and management of one or more architects, and that their names are made known to clients and any relevant third party. You should notify your client promptly of any change in the architect responsible for the work.'

It has been said that it is misleading for a sole practitioner architect to be styled 'X and Associates', simply on the strength of occasionally working closely with

other disciplines. The point may be debatable, but it would certainly be misleading for a sole practitioner to be styled 'X and Partners'. Difficult questions of control may arise in multidisciplinary offices wishing to offer an architectural service.

*Standard 4: Competent Management of your Business*

- 4.1 You are expected to have effective systems in place to ensure that your practice is run professionally and that projects are regularly monitored and reviewed.
- 4.2 You should ensure that you are able to provide adequate professional, financial and technical resources when entering into a contract and throughout its duration. You should also, where appropriate, ensure you have sufficient suitably qualified and supervised staff to provide an effective and efficient service to clients.
- 4.3 You should ensure that adequate security is in place to safeguard both paper and electronic records for your clients, taking full account of data protection legislation, and that clients' confidential information is safeguarded.
- 4.4 You are expected to ensure that before you undertake any professional work you have entered into a written agreement with the client which adequately covers:
  - the contracting parties;
  - the scope of the work;
  - the fee or method of calculating it;
  - who will be responsible for what;
  - any constraints or limitations on the responsibilities of the parties;
  - the provisions for suspension or termination of the agreement;
  - a statement that you have adequate and appropriate insurance cover as specified by the Board;
  - your complaints-handling procedure (see Standard 11), including details of any special arrangements for resolving disputes (e.g. arbitration);
- 4.5 Any agreed variations to the written agreement should be recorded in writing.
- 4.6 You are expected to ensure that your client agreements record that you are registered with the Architects Registration Board and that you are subject to this Code; and that the client can refer a complaint to the board if your conduct or competence appears to fall short of the standards in the Code.
- 4.7 You should make clear to the client the extent to which any of your architectural services are being subcontracted.
- 4.8 At the end of a contract (if requested) or otherwise upon reasonable demand you should promptly return to a client any papers, plans or property to which the client is legally entitled.

This Standard sets out very clearly what actions the architect should take and has an affinity to Principle Three of the RIBA Code. It sets out very clearly how architects should order their relationships with their clients. If properly

completed any of the RIBA terms of engagement would satisfy the criteria set out at 4.4. For architects to let clients know that the ARB is the disciplinary body in case of unacceptable professional conduct or serious professional incompetence seems like inviting trouble where some clients are concerned. It may provide support for architects, to insist on a fee payment, from certain clients who hitherto expect the architect to speculate with no charge for professional services at the outset.

*'Standard 5: Considering the Wider Impact of your Work*

- 5.1 Whilst your primary responsibility is to your clients, you should take into account the environmental impact of your professional activities.'

Within the UK, various statutory bodies play a significant role in the environmental impact of a development, including planning, the environment and heritage. This standard should be compared with the Code for Landscape Architects (see Chapter 3, section 3.9) which is very specific on environmental matters.

*'Standard 6: You should carry out your professional work faithfully and conscientiously and with due regard to relevant technical and professional standards*

- 6.1 You are expected to carry out your work promptly and with skill and care and in accordance with the terms of your engagement.
- 6.2 You should carry out your professional work without undue delay and, so far as is reasonably practicable, in accordance with any time-scale and cost limits agreed with your client.
- 6.3 You are expected to keep your client informed of the progress of work undertaken on their behalf and of any issue which may significantly affect its quality or cost.
- 6.4 You should, when acting between parties or giving advice, exercise impartial and independent professional judgement. If you are to act as both architect and contractor you should make it clear in writing that your advice will no longer be impartial.'

Clause 6.4 is important. Architects can find themselves in questionable circumstances when involved in design and build methods of development and when novated to the contractor.

*'Standard 7: Trustworthiness and Safeguarding Clients' Money*

- 7.1 You are expected to keep proper records of all money held by you which belongs to a client or other third party, and to account for it at all times.
- 7.2 You should keep such money in a designated interest-bearing bank account, called a "client account" which is separate from any personal or business account.
- 7.3 You are expected to instruct the bank in writing and ensure that all money in the client account is held as clients' money, and that the bank cannot combine it with any other account, or exercise any right of set-off or counterclaim against it.

- 7.4 You should ensure that money is not withdrawn from a client account to make a payment unless it is made to or on behalf of a client on the client's specific written instructions.
- 7.5 Unless otherwise agreed by the client, you should arrange for any interest (or other benefit) accruing from a client account to be paid to the client.'

If considering the management of clients' money architects should take clear professional advice from specialist advisers. Architects would be well advised never to hold money on behalf of others. There is seldom sufficient reason to do so and the process can be misinterpreted.

*'Standard 8: Insurance Arrangements*

- 8.1 You are expected to have adequate and appropriate insurance cover for you, your practice and your employees. You should ensure that your insurance is adequate to meet a claim, whenever it is made. You are expected to maintain a minimum level of cover, including run-of cover, in accordance with the Board's guidance.
- 8.2 The need for cover extends to professional work undertaken outside your main practice or employment.
- 8.3 If you are an employed architect you should, as far as possible, ensure that insurance cover and/ or other appropriate indemnity arrangements are provided by your employer.
- 8.4 You are expected to provide evidence that you have met the standards expected of this Standard in such form as the Board may require.'

Clauses 8.2 and 8.3 carry 'health' warnings for employed architects who may wish to undertake additional personal work, outside their main activities for their respective employers. The principal duty is laid on architects who are either sole practitioners or employers. They must ensure adequate cover for themselves and their employees. The duty extends to employees to ensure, so far as they can, that their employer has PI cover. Many architects carry on professional services outside their main occupation and they should be covered for every kind of work they may perform, i.e. this mean taking out their own PI cover. Architects practising as property surveyors, even as a side line, must have proper insurance in place.

Architects working as sole practitioners can face considerable difficulties in satisfying the requirements, because insurance for them may be difficult to obtain or obtainable only at a high premium. ARB guidelines point to architects having appropriate run-off cover after ceasing to practice. This can be particularly difficult for a sole practitioner on retirement, because the money to fund the increasing costs of premiums may not be available. The availability of professional indemnity insurance cover and the costs of that cover are dependent on market forces in the commercial sector of insurance. See Chapter 10 section 10.5.

*'Standard 9: Maintaining the Reputation of Architects*

- 9.1 You should ensure that your professional finances are managed responsibly.

- 9.2 You are expected to conduct yourself in a way which does not bring either yourself or the profession into disrepute. If you find yourself in a position where you know that you have fallen short of these standards, or that your conduct could reflect badly on the profession, you are expected to report the matter to the Board. For example, you should notify the Registrar within 28 days if you:
- are convicted of a criminal offence;
  - are made the subject of a court order disqualifying you from acting as a company director;
  - are made the subject of a bankruptcy order;
  - are a director of a company which is wound up (other than for amalgamation or reconstruction purposes);
  - make an accommodation with creditors (including a voluntary arrangement);
  - fail to pay a judgment debt.
- The above are examples of acts which may be examined in order to ascertain whether they disclose a wilful disregard of your responsibilities or a lack of integrity; however, this list is not exhaustive.
- 9.3 In appropriate circumstances, you should report to the Board and/or other public authority another architect whose conduct falls significantly short of the expected standards. If you are in doubt as to whether such a report is required, you should consult the Board for guidance.
- 9.4 You should not enter into any contract (other than in a settlement of a dispute) the terms of which would prevent any party from reporting an apparent breach of the Code to the Board.
- 9.5 If you are subject to an investigation by the Board you are expected to use your best endeavours to assist in that investigation.’

Given the prevailing economic climate, financial difficulties may not be in the architect’s control, for example, the immediate and unplanned collapse of financial support from a lender upon which the practice has relied in order to trade.

*‘Standard 10: Deal with Disputes or Complaints Appropriately*

- 10.1 You are expected to have a written procedure for prompt and courteous handling of complaints which will be in accordance with the Code and provide this to clients. This should include the name of the architect who will respond to complaints.
- 10.2 Complaints should be handled courteously and promptly at every stage; and as far as practicable in accordance with the following time scales:
- a. an acknowledgement within 10 working days from the receipt of a complaint; and
  - b. a response addressing the issues raised in the initial letter of complaint within 30 working days from its receipt.
- 10.3 If appropriate, you should encourage alternative methods of dispute resolution, such as mediation or conciliation.’

This Standard is a key factor in the concept of client protection which underpinned the creation of ARB.

*'Standard 11: Co-operation with Regulatory Requirements and Investigations*

- 11.1 You are expected to co-operate fully and promptly with the Board, within any specified timescale, if it asks you to provide information which it needs to carry out its statutory duties, including evidence that you are complying with these Standards.
- 11.2 You should notify the Board promptly and in writing of any changes in the details held about you on the Register, including your address. Under the Act, architects who do not tell the Board of a change of address may be removed from the Register.'

*'Standard 12: Respect for Others*

- 12.1 You should treat everyone fairly and in line with the law. You should not discriminate because of disability, age, gender, sexual orientation, ethnicity, or any other inappropriate consideration.'

## 2.11 RIBA code of professional conduct

### 2.11.1 Introduction

The current code has been in force since 1 January 2005. It contains three Principles which are expanded and supported by nine detailed Guidance Notes. The full information can be viewed at the RIBA website.<sup>24</sup> The following is a list of the Principles and Titles and numbers of the Guidance Notes.

### 2.11.2 Principle 1: Integrity

*'Members shall act with honesty and integrity at all times.'*

Where members (the Code only applies to members of the RIBA) are acting between parties, they must be impartial. So, for example, they must interpret the building contract fairly between client and contractor. If called upon to decide the line of a boundary between neighbours or any other matter where both sides look to them for expert judgement, they must give an honest opinion. This provision does not, of course, prevent them from representing the client in any such dispute against an opponent. The architect's duty to act fairly will arise only when both sides are relying on his or her judgement. This is related to members' duty not to allow themselves to be influenced by their own or others' self-interest.

Members must undertake not to make or acquiesce in any statement in which they do not believe or which is misleading or unfair or otherwise discreditable to the profession. This undertaking should be a matter of stating the obvious. It should go without saying that a member of any profession should be a model of the highest integrity.

Members' other business interests are covered by this Principle. If they are such as might lead the client or employer to question the architect's integrity because they are or appear to be related to the subject of the commission, the architect is obliged to disclose them in writing before being engaged by the client. Obvious examples of such situations are cases where the architect already

acts for a contractor in some other matter and the client may wish to employ the contractor to carry out building work, or if the architect owns land adjacent to the client's property and over which it will be necessary to agree an easement. The architect must withdraw unless the client or employer accepts the situation in writing.

If any potential conflict of personal or professional interest arises which is not specifically covered in the code, the architect must do one of three things:

- withdraw from the situation, or
- remove whatever is causing the conflict of interests, or
- inform the client and anyone else concerned and obtain the agreement of all parties to the architect's continued engagement.

The requirement that members should respect the confidentiality and the privacy of others is no more than should be expected of anyone, let alone a professional person.

### 2.11.3 Principle 2: Competence

'In the performance of their work Members shall act competently, conscientiously and responsibly. Members must be able to provide the knowledge, the ability and the financial and technical resources appropriate for their work.'

A high standard of skill, care and knowledge is expected. Impartiality is again stressed.

Members should make sure that they have the resources to carry out commissions and provide a proper service. Student members should seek guidance from architects if they intend to undertake commissions themselves. Employees are expected to give prior notice to both parties before accepting an engagement elsewhere.

Before entering into an agreement, members must clearly set out the terms including what services will be provided, responsibilities, any limitation of liability, how fees will be calculated, how the agreement may be terminated and the adjudication provision operates. All such agreements should be in writing and it is sensible to use the RIBA terms of engagement, as appropriate, not least, because they contain clauses of benefit to the architect.

The onus is placed on members to keep clients informed of project progress and to use reasonable skill and care to meet agreed time, cost and quality requirements.

### 2.11.4 Principle 3: Relationships

'Members shall respect the relevant rights and interests of others.'

The guidance to this principle addresses broader issues such as respect for the beliefs and opinions of others, social diversity and fair dealing. Members should have regard to the effect of their work on the wider community and the environment.



Members are expected to comply with good employment practice and where they take part in a competition, they should ensure that it is reasonable and transparent.

Finally, effective procedures must be in place to deal with complaints.

### 2.11.5 Guidance Notes

Guidance Note Number	Contents
GN1	Integrity, conflicts of interest, confidentiality and privacy, corruption and bribery
GN2	Competition
GN3	Advertising (including advice on business names, RIBA crest, RIBA affix, etc.) revised in July 2007.
GN4	Appointments (including suspension, taking over from a previous architect and fee quotations) recently updated to take into account the RIBA's new suite of appointment documents.
GN5	Insurance
GN6	Continuing professional development
GN7	Relationships (including supplanting or taking over from another architect)
GN8	Employment and equal opportunities
GN9	Complaints and dispute resolution

## 2.12 The RIAI code of conduct

The RIAI published the current Architects Code of Professional Conduct in July 2013, which is established under the terms of the Building Control Act 2007. It is set out in three Principles, each of which is expanded with detailed notes and explanations. The three Principles are:

- Principle 1 General obligations
- Principle 2 Obligations to clients and employers
- Principle 3 Obligations to the profession.

Full details can be found on the RIAI website.<sup>25</sup>

## 2.13 Continuing professional development

### 2.13.1 General

The location of this section at the end of the chapter is synonymous with the pattern of architectural education and professional training and continuation of those learning activities into everyday professional life.

Since the publication of the tenth edition of this book five years ago the ARB has chosen to simplify the details of their requirements into broad headings; continuing professional development (CPD) is an implied part of the ARB Code. Taking the opposite approach, the RIAI has increased the specific detailed requirements for CPD and has increased their demands for architects to record, reflect and evaluate what has been gained by undertaking their CPD. The RIBA has retained their CPD requirements relatively unchanged across the five years.

### 2.13.2 The ARB and CPD

The position that the ARB adopts requires architects to demonstrate their competence to practice as an 'architect' for the reassurance of the client and the public. The obligations stem from the Standard 2 of the ARB Code of Conduct, and Section 9 of the 1997 Architects Act. When architects renew their annual registration they are automatically deemed to have confirmed that they are competent to practise. CPD activities are not limited to attending formal courses, lectures or seminars, but can include work-based learning, professional activities and self-directed learning. Maintaining competence does not rely solely on CPD, but could include an active engagement in practice, teaching and the study of architecture.

The following paragraphs are extracted from the ARB Guidance on CPD.

'Records as to how competence is maintained do not have to be in any particular format, neither do architects, or those intending to register, need to duplicate records that they maintain for other bodies, or for their employers.

Whatever form of planning and recording is chosen, it should aim to:

1. Thoroughly review and evaluate the learning activities undertaken, identifying where future learning needs are required.
2. Show that you (the architect) have planned how these learning needs are to be met, including the activities to be undertaken, the necessary resources needed, the appropriate timescales, and how the successful outcomes will be recognised.
3. Record and evaluate what activities have been undertaken, adding in any valid unplanned learning opportunities which have arisen.

Architects who decide to leave the Register are advised to record any activities they undertake whilst they are unregistered, in the event that they may wish to return to the Register at a future point.

### 2.13.3 The RIBA and CPD

The RIBA stipulates that members are obliged to do a minimum of 35 hours annually, of which 20 hours must come from the ten topics identified in the RIBA CPD Core Curriculum, (two hours per topic per year). The member is further obliged to award points to those activities, reflect upon them and record them. The points are graded into 4 categories of learning and awareness. The RIBA has an indicative CPD cycle which has 10 subsections. They also refer to

‘structured’ and ‘unstructured’ informal CPD. Their website indicates 15 examples of this structured CPD and 13 examples of unstructured CPD.

This is a broad overview of the RIBA requirements for CPD. Further information and details can be found at their website.<sup>26</sup>

#### 2.13.4 The RIAI and CPD

The RIAI policy on CPD is summarised under 7 headings as follows:

- Application
- Standards
- Requirements
- Recommendations
- Sanctions
- Confidentiality
- Supports.

The minimum level of RIAI involvement is 40 hours of CPD, of which 20 hours must be ‘structured’ CPD and the balance of 20 hours is designated ‘unstructured’. Their CPD cycle runs from 13 November in any one year, to the 12 November the following year. One hour of learning time equates to 1 CPD point. The RIAI policy has listed 24 ‘structured’ activities, and 5 ‘unstructured’ activities. Each activity has to be reflected upon, and recorded electronically using the RIAI system, i.e. RIAI CPD Engage.

The above is a broad overview of the RIAI requirements for CPD and further details can be found on the RIAI website.<sup>27</sup>

## References and notes

1. The DCLG undertook a consultation review between April and May 2014. It published its call for evidence in April 2014. A copy of the document can be obtained from the ARB website at [www.arb.org.uk/periodic-review](http://www.arb.org.uk/periodic-review). This document sets out the detail for the two-stage review. The DCLG published the outcome to phase 1 on 16 April 2014 and updated the outcome on the 13 November 2014. The DCLG said:

‘The department received a strong response to its call for evidence as to whether or not regulation of the architect profession should continue and has concluded, that there remains a case for continued light-touch regulation based on protection of title.

The department will now move to phase 2 of the review, working with all parts of the profession to identify opportunities to simplify the role of the regulator. This will focus on ensuring a level playing-field for UK architects to compete in the European Union and beyond and supporting consumer protection legislation in a way that minimises the burden for architects and schools of architecture, and avoids overlap with the role of professional bodies.’

2. [www.arb.org.uk/important-arb-criteria](http://www.arb.org.uk/important-arb-criteria)

3. Refer to [www.architecture.com](http://www.architecture.com) for a detailed list of the eligibility criteria for the four types of individual membership.
4. Refer to [www.architecture.com](http://www.architecture.com) for a detailed list of the eligibility criteria for practice membership.
5. <http://ec.europa.com>
6. [www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/304271/ARB\\_doc.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/304271/ARB_doc.pdf)
7. Check [www.RIAI.ie](http://www.RIAI.ie) for full details of the current Code.
8. Further details can be found at [www.irishstatutebook.ie/2014/en/si/0009.html](http://www.irishstatutebook.ie/2014/en/si/0009.html)
9. [www.acarchitects.co.uk](http://www.acarchitects.co.uk)
10. Courses validation by the RIBA can be found on [www.architecture.com](http://www.architecture.com)
11. [www.arb.org.uk/important-arb-criteria](http://www.arb.org.uk/important-arb-criteria)
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13. [www.riai.ie/education/policy\\_standards](http://www.riai.ie/education/policy_standards)
14. Association of Professional Studies Advisors in Architecture [www.apsaa.org.uk](http://www.apsaa.org.uk)
15. Brookhouse S, *Part 3 Handbook* (2014), 3rd edition, RIBA Publishing.
16. [www.arb.org.uk/schools-and-institutions-of-architecture](http://www.arb.org.uk/schools-and-institutions-of-architecture)
17. [www.architecture.com/RIBA/Becomeanarchitect/Qualifications/Validationprocedureandcriteria.aspx](http://www.architecture.com/RIBA/Becomeanarchitect/Qualifications/Validationprocedureandcriteria.aspx)
18. [www.architecture.com/Files/RIBAProfessionalServices/Education/Validation/RIBAEducationReviewAugust2014update.pdf](http://www.architecture.com/Files/RIBAProfessionalServices/Education/Validation/RIBAEducationReviewAugust2014update.pdf)
19. The full procedures document can be found at [www.riai.ie](http://www.riai.ie) under the education section.
20. See [www.comarchitect.org/val\\_main.htm](http://www.comarchitect.org/val_main.htm)
21. [www.arb.org.uk/how-to-register](http://www.arb.org.uk/how-to-register)
22. [www.arb.org.uk](http://www.arb.org.uk) -registered architects list.
23. Register and member admission routes at [www.riai.ie](http://www.riai.ie)
24. [www.architecture.com/RIBA/Professionalsupport/Professionalstandards/CodeOfConduct.aspx](http://www.architecture.com/RIBA/Professionalsupport/Professionalstandards/CodeOfConduct.aspx)
25. [www.riai.ie/images/uploads/RIAI\\_CodeofConduct\\_26July2013.pdf](http://www.riai.ie/images/uploads/RIAI_CodeofConduct_26July2013.pdf)
26. [www.architecture.com/cpd](http://www.architecture.com/cpd)
27. [www.riai.ie/cpd/cpd\\_policy](http://www.riai.ie/cpd/cpd_policy)

# 3

## Employment Opportunities

### 3.1 Introduction

Many years ago, most architects were employed either in private practice or in local government. There were a relatively small number of architects employed in other areas, but they were the minority. Moreover, architects in private practice tended to be considered 'real' architects shouldering the full range of architectural responsibilities while those in the public sector were said to lead a sheltered life in which they only exercised a part of the architect's role. Indeed, it was said that some architects in local authorities spent their whole careers producing window details and the like, never venturing onto site at all. Although that was no doubt an exaggeration, the general idea was that there were more opportunities in private practice to develop the range of architectural skills.

In the intervening period, things have moved on. Undoubtedly, the kinds of responsibility shouldered by architects in each area of employment are not identical, but if exercised properly, the architects' duties call for similar qualities and skills in the public sector as in the private sector. Indeed, many such public sector offices have effectively been made into self-contained 'private' firms offering their services to a broad spectrum of clients. Moreover, it is now generally accepted that a great many opportunities exist for architects outside the usual fields of employment.

Other areas of employment have always existed, but architects have tended to ignore them in favour of the more traditional architectural work. However, the uncertain economic situation in recent years is forcing many architects to seek work outside the construction industry where their hard-won skills may be of little value. In other cases, architects are looking more seriously at applications of architectural skills within the industry. In some of these occupations the architect is employed largely in a traditional way, in other cases just one facet of the architectural 'package' is practised, for example, the services offered are restricted to design, project management, drawing ability and so on. One of the great advantages of an architectural education has always been that, because it is so broadly based, the architect has the chance to examine in some detail a great many employment possibilities.

The following brief summary is an indication of employment options. It cannot be comprehensive because the range of possible opportunities is as great as individual ingenuity can contrive.

## 3.2 Private practice

Most lay people still think of architects as being employed in private practice. An architect will opt for private practice for many reasons:

### *Because the type of work is likely to be varied*

This is the kind of statement which scarcely bears examination. There are certainly practices both large and small which handle an amazing variety of work, but most practices tend to have certain project types in which they profess particular expertise and they get commissions for work for which they have a reputation. Even in a large office handling different project types, the individual architect will often find that he or she is always given a particular kind of work to do.

### *Because of the particular type of work*

There are some private firms which tackle projects which an architect would not encounter elsewhere. These might include very large and prestigious buildings, or buildings under the direction of a famous and much sought after signature architect or highly specialised building types. Although many organisations such as banks, media companies, hospitals, railways and airports may have their own property departments, the range of work undertaken by such departments may be confined to refurbishments, alterations and extensions. In practice, the design of a new media centre, hospital and so on is rarely left to the 'in-house' architects. Therefore, an architect seeking to gain experience in such specialised buildings usually has to join those private firms which specialise in them.

This is not really the place to enter into a long discourse, when say looking to design a new hotel, about whether a client is better to engage a private firm which specialises in hotels or whether a firm which has no previous hotel experience would actually produce a refreshingly different solution to an old problem. In theory, every architect can design any building after going through the appropriate processes of briefing, analysis and synthesis. In practice, time is money and the architect with previous experience of a particular building type will most likely design the next such building commissioned by a client.

### *The opportunity to become involved*

This is very closely related to the next reason ...

### *The opportunity to take responsibility*

Certainly, in the small-to-medium-sized office an architect usually will be encouraged to take responsibility for work, site inspections, and even management of staff, provided he or she can demonstrate the appropriate ability. In larger offices, there may be more bureaucracy at work, but even there, an architect prepared to work hard and gifted with ordinary competence can enjoy a fulfilling life. With greater than ordinary competence or a real flair in some field, there is no reason why the architect should not rise to the top of the firm in due

course. Although the authors have not seen statistics, many years of observation suggests that it is more likely that a competent hardworking architect will advance their career by staying a number of years in a private office than if the same architect stayed for the same number of years in a public sector office.

### *The opportunity for advancement*

This is closely linked to the last reason. An architect who feels involved in the firm's fortunes, who takes on responsibility above that which is indicated in the job description (if any), who demonstrates ability and who attracts a following of satisfied clients is almost certain to rise to the top of any private firm. This is because a firm owes its existence to satisfied clients who return with new commissions. A private firm cannot afford to carry passengers, because they must be paid for out of the income generated by the rest of the staff. A really first class architect, generating more than his or her fair share of fee income for the firm, attracting and keeping clients, eventually becomes the key player in the firm and if that architect were to leave, the firm may be hard pressed to survive. That scenario is more common among small practices, but the principle holds good in any practice. It is possible for an architect employed in a private practice to become the firm or a very sizeable portion of it in the sense that without that person, the firm may fail for lack of work.

In 2013, 20% of all architects in the country worked as one-person practices and 55% of architects worked in practices which fall into the category of medium to small employing 2–30 persons. Practices employing more than fifty architects account for 14% of all working architects.<sup>1</sup> Some architects prefer the small office because of its friendly atmosphere. It by no means follows that a small office is friendly and a large office unfriendly. Indeed, a clash of personalities which can be absorbed within a firm employing fifty could be disastrous in an office of only five people. The larger office may also offer certain advantages in the form of back up and benefits which may not be available in a small office. There may be greater freedom in a small office, but there is less flexibility to meet sudden surges in workload. The most notable point about a private office is that there is always the pressure to earn the income to pay the bills. For the architect at the bottom of the hierarchy, the pressure is more noticeable in the smaller firm where the key policy decisions can readily be seen in a fairly crude way. Such pressure gives many people a sense of excitement and a rush of adrenalin. We suspect that it is an important, if perhaps unrecognised, factor in the decision to work in private practice.

### *Satisfaction*

We know of no architects who opt for private practice as a way of ensuring job security. Private practice usually suffers badly whenever there is a recession, because it depends directly on individual clients being prepared to invest money in building work. The public sector is usually thought of as more secure employment, but anecdotal evidence suggests that many architects find public sector employment more stressful than private practice. This may be because working in private practice puts the architect in closer relationship with the

client, there is usually less bureaucracy and often a greater sense of achievement. This is often the attraction of working in a small, rather than large architectural practice.

### 3.3 Local authority

In 2008, about 8% of all architects were employed in local government or in government departments.<sup>2</sup> That figure is now 7%, showing a steady decline.<sup>3</sup> After the 1974 reorganisation of local government, most County Councils and District Councils appointed an architect as one of the chief officers at the head of a department. The size of department and the precise responsibilities varied with the authority. That was followed by a policy of making the architects' department a separate entity from the other council departments, economically more accountable than before and often able to take on commissions from other organisations. In some instances, a department was made completely independent and became a private practice rather like any other except that its birth took place under unusual circumstances. In other instances, the architects' department has ceased to exist altogether, certainly as an identifiable unit. Some departments seem to exist simply to place commissions with firms of architects for local authority work.

The character of local government offices varies greatly and so does the scope of the work. Some operate, as noted above, as large departments under the leadership of a chief officer responsible to the council. In other cases, the department may be part of the surveyor's or engineer's department, or it may be part of the council's building department.

The work of an architect in local government is basically the same as that of the architect in private practice. The council will in effect be the client although the relationship between council and architect will be that of master and servant. In practice, for the day-to-day running of a local authority office, the architects treat individual local authority departments as their clients. This certainly helps to separate duties and allegiances even though both architect and client are employed and paid by the same body. The architect will be governed by the council's standing orders. However, in carrying out duties, the architect must always remember the obligation to behave in a thoroughly professional manner particularly when called upon to carry out duties under the building contract, e.g. certifying or giving extensions of time. The council should not prevent the architect from acting in a professional way, in fact the council has a positive duty to ensure that the architect carries out his or her duties properly.<sup>4</sup> In dealing with third parties, particularly contractors, architects must be scrupulous to ensure the contractor is aware that they are not acting as the employer under the building contract, but as the architect and those actions attributable to the employer should be carried out by designated persons preferably from a separate department of the local authority

Architects in local government have certain advantages. If the authority is of reasonable size, they have the authority's other departments, e.g. legal, public health, building control, planning and so on, available for advice. In the larger



authorities, the architects' departments may contain other specialists such as quantity surveyors, mechanical and electrical engineers, structural engineers, landscape architects and interior designers, although now less common than used to be the case. Architects operating in that kind of office will in effect be working in a multidisciplinary environment able to call upon any assistance necessary.

It is sometimes said that local government offices do not offer as much scope as do private practices. The truth, of course, is not quite so simple. Many offices have a high reputation and such offices will tackle all the authority's prestige works. Smaller offices may confine themselves to fairly routine tasks or smallish projects, handing out the occasional large project to a private firm on a consultancy basis. Any architect contemplating working in local government must make appropriate enquiries first. It must never be forgotten that not all architects want to design very large and prestigious projects; many feel more at home working on smaller projects. A particular feature of working in local government is that architects who put in a number of years service with the same authority will build up an understanding of the philosophies of, and relationships with, the departments who regularly require building work. There is the opportunity to make considerable progress through the development of briefs for particular purposes. Such architects have a unique opportunity to evaluate the performance of existing buildings and to feed back the information into current design.

There are also many opportunities for architects in the planning departments of local authorities to influence design and planning on a larger scale, perhaps through structure plans or local plans or through involvement in town design, listed buildings, conservation areas and the like. Very often, such architects are also members of the Royal Town Planning Institute (RTPI). The opportunities for advancement may be slower and along more rigidly defined lines than is the case in private practice, but the staff will be divided into recognised grades. Each has a maximum and minimum salary and regular annual incremental increases. Promotion may be based upon seniority as well as technical and administrative ability. There are well defined conditions of service which include such matters as holidays, sick leave, pension and hours of service.

### **3.4 Other public sector organisations**

Other public and semi-public organisations such as universities, health authorities and trusts tend to offer rather specialised experience. Architects are often employed in-house, sometimes within a property services department and they are closer in organisational structure to a local government office than a private practice. They offer a unique opportunity to develop expertise in a particular building type. This can be a very satisfying experience. For example, many architects gain enormous satisfaction from a professional lifetime spent in the rapidly developing world of healthcare. The principal disadvantage of such sectors stems from the same root: the difficulty in moving to an office carrying out different kinds of projects unless the particular expertise is required. Another

disadvantage is the tendency of such organisations to put major projects in the hands of private firms.

In this category, it is also possible to group retail chains and hotels which very often employ their own architects to deal with minor building works, investigation of defects, maintenance and to liaise with independent consultants. It is possible to gain considerable experience in dealing with a wide variety of building structures in such offices. The buildings can vary from the very old and historic to the brand new.

Ecclesiastical authorities generally entrust new building to private architects. There are limited openings for the post of diocesan surveyor to carry out church inspections and maintenance work. The Church of England has a well-organised system. The Roman Catholic, Methodist and other Nonconformist Churches have less official posts, much work being undertaken on an ad hoc basis as required.

Some housing associations have their own architects departments, but most work is carried out by independent consultants and increasingly on a design and build basis by contractors.

### **3.5 Large companies**

Some large companies have their own architects departments. The work tends to be highly specialised, but it very much depends on the company. The atmosphere is more commercial than in local government, but there are similarities, particularly in the way in which the architect works for the employer rather than in an independent capacity for a client. The career structure and conditions of service are also likely to be better defined than in many private offices. Work within one company can vary, i.e. laboratories, warehouses, offices and housing for employees. Sadly, as all companies look for ways of cutting costs, the number of 'in-house' architects is certain to fall. Some companies have overseas branches and the chance to travel is attractive to some architects.

### **3.6 Contractors**

There are some large contractors which employ their own architects. The quantity surveyor has always had a place in contracting and it seems natural that the architect should be involved also. Architects, however, have a poor reputation among building contractors and they are more likely to be employed in a design capacity than in a practical quality control role. They are not seen as having much business sense. The majority of medium-sized contractors carrying out design and build work will engage private firms of architects on a project basis, because it is more cost effective than maintaining an architect's department. Some of the larger contractors, however, do maintain departments of their own and very often having the facility to inject major capital sums into computer-aided design (CAD) and other expensive equipment, they can create a stimulating and exciting environment in which to work. All contractors suffer

from credit squeezes and maintaining an architects' department is not as cost effective in a recession as buying in, probably at cut price rates, the services of private architects struggling to make ends meet. Therefore, it is becoming less common for contractors to have their own departments.

Although architectural designs emanating from contractors have aroused adverse comment from time to time, there are many good examples. In addition, there is often a good opportunity for quality control and detailed administration. This is particularly the case because changes to the design are very significant to contractors when it is they who pick up the cost not, as is usual, the building owner. There are opportunities for architects who are sufficiently flexible. Indeed, there is no reason why an architect should not rise to director level.

Many architects dislike the idea of working for a contractor because they feel a split duty between the contractor, as their employer, and the ultimate purchaser of the building. In practice, this need not be a problem. The contractor's objective is to construct a building which satisfies the requirements as laid down in the contract and to make a reasonable profit. In addition, the contractor wants the purchaser to be happy with the building. Very few contractors are rogues. Some may be hard businessmen, but many are just the opposite – hence the large number of bankruptcies in the industry. There are two things to remember.

- A contractor who has architects as employees should not ask them to act contrary to their professional judgment. That is probably why the architect was appointed in the first place. However, it is known for a contractor to employ its own architect as a selling point for its services, but to expect the same architect to conform to practices with which the architect may not be comfortable.
- An architect employed by a contractor cannot give the contractor's client independent advice.<sup>5</sup> An architect must always make the position clear to the client. It is especially important when it may appear that the architect is acting in the capacity of an independent consultant. This can happen, for example when the contractor undertakes a design and build project and the architect is involved in meeting the client to settle the brief.

Every architect should spend some time, if possible, working in the office of a medium-sized contractor. Architects rarely understand contractors. They may think that they do, but understanding follows from closely identifying with them on a day-to-day basis. There is much practical experience to be gained together with an indefinable empathy with the contractor's difficulties which will be useful throughout the architect's career. It also gives an insight into why contractors can become irritated by architects.

### 3.7 Manufacturers

Product design and development has traditionally had a valuable input from architects. Furniture design is a good example where many architects try their hand. Some classic pieces of furniture are named after the architect who

designed them. A less common area of employment is in the field of building components. There is a multitude of products which would, and in some cases do, benefit enormously from architectural input: electrical fittings, ironmongery, floor wall and ceiling tiles and panels, glazing units, doors, windows, etc. In many instances, a relatively common building component might be improved by an experienced architect. The number of architects who work in this field is small and it is usually an interest which develops in the course of performing general architectural services.

### 3.8 Academia

There are good opportunities for architects in schools of architecture if they have an interest in teaching. Interest is the most important thing, but the ability to explain difficult concepts in a simple way is necessary for a good lecturer. Most schools advertising for staff lay stress on skill in design, but they also expect a prospective lecturer to offer one or two other subjects about which they feel confident to lecture. A lecturing post, therefore, will usually involve a number of hours lecturing every week together with studio, workshop and some administrative responsibilities. There are some who regret the emphasis on design skills and argue that while design is the distinguishing architectural skill, every school should have some lecturers whose principal skills lie elsewhere, e.g. in construction, building procurement, professional practice and building sciences. It is probably important that these people are also qualified architects.

There are also openings for lecturers in other construction disciplines such as surveying or building and besides universities, there are many colleges of building where architects can make a valuable contribution.

The working environment is quite different from that in other employment areas. The sense of cooperating with colleagues on a project is missing of course and friendships may not be formed easily. Lecturing is, by definition, usually a solitary occupation albeit with a changeable group who may or may not interact.

Starting salaries are often considered to be low compared with salaries for architects of equivalent experience in other fields, but salaries in the newer universities may be higher than in older establishments. It actually varies with the economic climate. As a result, lecturing tends to attract younger members of the profession, because as an architect gains experience outside teaching, he or she cannot afford to take a drop in salary in order to make the move from, say, private practice to teaching. Experience in practice is the great difference between the requirements for a lecturer in Architecture and a lecturer in, say, Mathematics or History. The budding lecturer should, therefore, gain as much experience as possible before becoming a full-time teacher. Most posts have opportunities for research and consultancy work.

Architects who do not wish to take up lecturing as a full-time career, but who are interested nonetheless, can often contribute useful practical input by doing part-time lecturing. The financial rewards tend to be modest, but there is a great deal of satisfaction to be gained.

### 3.9 Other specialisation

All professionals tend to specialise in one way or another as they gain experience. This is for the perfectly natural reason that they realise that their own profession is not just doing one activity, but it is a collection of activities which are performed to different degrees. There are many opportunities for architects to specialise within the profession. For example, architects may specialise in a particular building type. Many architects specialise in housing or schools or hospitals, industrial buildings and so on. They may also specialise in the tasks they do. For example, they may do only design, or production drawings, or survey work, or contract administration, or model making, or perspectives, or information technology. In the early days of CAD, some architects even specialised in putting other architects' designs onto the computer. That specialism has largely vanished now that most architects are expected to have CAD skills. These are to some extent fairly obvious ways in which architects can specialise. There are other less obvious specialisms: investigating defects, expert witness work, contractual advice, adjudication and arbitration are examples.

Architects, or sometimes persons studying Architecture who have completed only part of the course, opt to qualify in another discipline such as planning or landscape architecture. A basic architectural education is an extremely good foundation for either profession. The landscape architect is bound by the Objects of the Landscape Institute (LI), as set out in the Royal Charter of the Landscape Institute Paragraph 5(1) 'to protect, conserve and enhance the natural and built environment for the benefit of the public'. The aims of the architect and the landscape architect are very closely related as one might expect. 'Landscape architecture' is defined by the Landscape Institute Charter in Paragraph 5(2) as:

- a. The application of intellectual and analytical skills to the assessment and evaluation of the landscape and its character and the resolution of existing and potential conflicts through the organisation of landscape elements, spaces and activities based on sound principles of ecology, horticulture, design, planning, construction and management;
- b. the planning and design of all types of outdoor and enclosed spaces;
- c. the determination of policies and planning for existing and future landscapes;
- d. the appraisal and harmonious integration of development and the built environment into landscapes;
- e. the conservation, modification and continuing management of the landscapes of town and countryside and sustaining their characteristic features and habitats;
- f. the promotion of a greater knowledge and understanding of materials and technology to enhance the appreciation of and resolution of practical landscape issues and problems; and
- g. the promotion of a better understanding of the principles and purposes of natural, biological and physical systems affecting or relating to the landscape.<sup>6</sup>

Architects cannot help but attain some degree of specialisation as they gain experience, because the range of skills required of the architect is just too great now and each particular skill is becoming so complex. To many architects, however, the most satisfying element in their work is the chance to be involved throughout the production of a building. These architects will always fight to retain a degree of broad architectural activity against which to practise their specialisms.

### **3.10 Adjudicator, arbitrator or expert witness**

None of the activities in this section can really be pursued as a full-time occupation. Architects sometimes combine all three roles and manage to make a reasonable living, because they are good and in demand. For most architects, however, these particular activities will be followed alongside practice in the more traditional architectural role.

Following the coming into force of the Construction Act and Northern Ireland Order, adjudication has become very popular as a dispute resolution mechanism and it has largely replaced arbitration as the dispute resolution procedure of choice for contractors. It appears that the number of adjudications may have peaked, but there are currently about 1,100 nominations a year, having dropped from a peak of over 2,000. Although in theory any architect can be an adjudicator, in practice adjudicators must have certain qualities. They must have experience in the construction industry sufficient to make them wise in the ways of the people they are likely to encounter. In addition, they must have technical and legal expertise. They need not be qualified lawyers, but they must understand rather more than the basic principles of contract law and be capable of understanding the reports of trial judgments which are frequently cited to support the case being argued. Above all, adjudicators need to be skilled in assimilating facts quickly and applying logical analysis in order to reach a decision. There is no place for gut feelings or architects keen to do 'justice' even in the face of contrary evidence.

There are courses for architects wishing to become adjudicators, but care must be taken in choosing the right course. Some courses are little more than a brief survey of the relevant legislation and a few 'watchpoints'. Even the best and most comprehensive courses cannot produce an adjudicator from an architect overnight. In practice, although adjudicators can be named in the contract or agreed between the parties when a dispute arises, most are appointed by a nominating body to which one of the parties has made an application. Therefore, an architect wishing to practise as an adjudicator must apply to such a body and be accepted onto its register. There are currently more than twenty nominating bodies, but most nominations are made by just three or four of them, for example, RIBA, RICS, CIArb who maintain panels of adjudicators which are generally available for inspection on their websites.

Some architects practise as arbitrators in the UK and internationally. Many arbitrations deal with very large disputes involving substantial sums of money. This role requires rather different skills to those exercised by adjudicators.

Arbitrators have the luxury of more time in which to consider the issues in dispute, but they are more likely to have to decide complicated procedural questions. Unlike the decision of an adjudicator, the award of an arbitrator is both final and binding unless, rarely, appealed to the court. The Chartered Institute of Arbitrators runs training courses for prospective arbitrators. Most arbitrators belong to panels of arbitrators held by the construction professions. With the widespread use of adjudication, arbitration seems to be less popular and adjudication is being used to decide matters for which the adjudication process is quite unsuitable. Large claims and allegations of professional negligence ought to be confined to arbitration or litigation.

The role of the expert witness has undergone change since the implementation of the Woolf Report<sup>7</sup> and the subsequent revision of the Civil Procedures Rules. Essentially, anyone can be an expert if they have the required expertise in the appropriate area. In practice, most architects who practise in this field tend to be expert, not only in their chosen subject but also, in the job of being an expert.<sup>8</sup> There are particular skills involved and experience is important. Part 35 of the Civil Procedure Rules is essential reading for an expert witness, because it sets out the rules governing the conduct of an expert in relation to litigation. It should be noted that experts who give opinion evidence are no longer immune from actions for negligence.<sup>9</sup> Both parties to a dispute tend to choose experts (although the appointment by the court of a single expert is becoming more common.). The function of an expert, however, is not to act as an advocate for the case of the party paying his or her fees but to assist the court or the tribunal to find the truth. Experts must never be partisan – a difficult and delicate problem when receiving a fee from just one of the parties. Having said that, a party is unlikely to engage an expert who finds serious fault with their case. Although there are courses available for budding expert witnesses, nothing can really compare with the experience of being cross-examined in court by counsel. Good experts are difficult to find and most construction lawyers are constantly looking for architects willing and able to produce good reports and give convincing testimony.

## References and notes

1. Mirza & Nacey Research, *Architectural Earnings: A Survey of the Earnings and Benefits Received by Architects and Technologists* (2013/14), The Fees Bureau/Mirza & Nacey Research Ltd, Arundel.
2. Mirza & Nacey Research, *Architectural Earnings: A Survey of the Earnings and Benefits Received by Architects and Technologists* (2008), The Fees Bureau/Mirza & Nacey Research Ltd, Arundel.
3. Mirza & Nacey Research, *Architectural Earnings: A Survey of the Earnings and Benefits Received by Architects and Technologists* (2013/14), The Fees Bureau/Mirza & Nacey Research Ltd, Arundel.
4. *Perini Corporation v. Commonwealth of Australia* (1969) 12 BLR 82; *Croudace Ltd v. London Borough of Lambeth* (1986) 6 Con LR 70.

5. Principle 1, Guidance Note 1.6, RIBA Code of Professional Practice, effective from 1 January 2005.
6. The Charter was revised in 2008, but this definition was unchanged. Further reference should be made to [www.landscapeinstitute.org](http://www.landscapeinstitute.org) which lists all the registered chartered landscape architect practice in the UK.
7. In 1994, the Lord Chancellor instructed Lord Woolf (the Master of the Rolls) to report on options to consolidate the existing rules of civil procedure. On 26 July 1996, Lord Woolf published his *Access to Justice Report 1996* – ‘the Woolf Report’.
8. The courts do not always look kindly on ‘professional experts.’ See *Royal Brompton Hospital NHS Trust v. Frederick A Hammond and Others* [2000] EWHC Technology 39 (18 December 2000) at paragraph 25.
9. *Jones v. Kaney* (2011) 135 Con LR 1.



# 4 Employment

## 4.1 Finding employment

### 4.1.1 Self-assessment

Whether the architect is newly qualified looking for a first appointment or an experienced architect seeking a change, obtaining employment is not easy. It is relatively easy to get a job (depending on the current economic climate), but it is not easy to get the right job. To a large extent, the principles of getting a job are the same whether the person concerned is an architect, solicitor or a financial director. But the aspirations of an architect are unique and demand a rather different approach to job hunting. For the most part, the principles of job seeking are widely known and widely neglected. In the last analysis the successful outcome depends upon the person and their particular talents, experience and personality; neglect of the principles will put the job seeker at a severe disadvantage. Most architects have experienced the interview at which the 'whizz-kid' gets the coveted job. Often, they fail to fulfil expectations and quickly whizz off to another, better, position somewhere else. The common denominator is that this type of person knows how to set about finding a post, applying for it and making a good impression at interview. The art of finding employment is very much the art of self-presentation. Sadly, it has nothing to do with how well the person can do the job.

Just as a salesperson cannot market a product effectively unless they know all about it, architects cannot market themselves unless they know their strengths and weaknesses. Architects should be adept at the art of selling. After all they are regularly called upon to make presentations of schemes to clients. The first step is to sit down and carry out a self-appraisal (Figure 4.1) so that the prospective job seeker thoroughly knows the 'goods' he or she is selling. It is a good idea to do it in note form following the headings below.

- *Formal qualifications.* This should be easy: degrees, diplomas, certificates and memberships of professional bodies. Listing of minor institutes, which may give the right to certain affixes on payment of an annual subscription, should be avoided. They tend to dilute an architect's principal qualification by giving the impression that the architect is scratching around to find something to put down.

- Formal qualifications
  - Experience
    - Most recent appointments
    - Duties in each post
    - Achievements
  - Talents
  - Personality
  - Career objectives
    - Job satisfaction
    - Pay
    - Advancement
    - Responsibility
    - Ancillary
      - Location
      - Security
      - Working hours
      - Opportunity for initiative
      - Personality of directors or partners
      - Type of work
      - Design philosophy
- 

**Fig. 4.1** Self-appraisal.

- *Experience.* It does not pay to be vague. If qualification is recent, experience will be slim, but the most should be made of it. It is useful to put down experience as follows:
  - most recent appointments (say, during the last five years)
  - duties in each post. This is not nearly so important as achievements
  - achievements. This heading repays careful thought. It is an important selling point. Architects should consider whether they have played a significant part in a ‘really good’ building or brought a contract back from the brink of disaster or introduced a system which made the office more cost effective. In other words: whether they have ever done anything which makes them stand out in a particular field. It is not uncommon to become quite depressed about this section of a self-appraisal. Architects may feel that they have achieved very little. What they are probably feeling is that they have not achieved as much as they would have liked; not the same thing at all. Architects who slowly and carefully go through all the work they have done are often surprised at the extent of their achievements.
- *Talents.* These are the things that the individual architect does best. To identify talents it is necessary to look at what one most and least likes doing. We all tend to enjoy doing the things at which we are most talented.
- *Personality.* Relationships with colleagues, persons in authority and team members are important as is the way in which an architect deals with contractors, manufacturer’s representatives and officials of public bodies. An architect should consider his or her most vulnerable points. It might be age

or youth and inexperience or difficulty in mastering some new technique or aspect of architectural practice. Some architects, for example, feel very exposed when they have to carry out a site inspection. It is important to acknowledge such things at this stage so that the architect can be prepared if questions concerning them arise during interview.

- *Career objectives.* The next step is for the architect to decide what he or she really requires from a career. Presumably, an architect chose the profession in the first place, because of a desire to participate in the creation and maintenance of a delightful, satisfying and sustainable environment for the benefit of everyone who will inhabit or pass through it. Ultimately, that should be the aim. All actions should be carried out with that end in mind. Efficient management and competent design work are not ends in themselves. Few people actually sit down and plan their careers, but it pays to do so even if things do not work out according to the plan. It is not unknown for architects to drift into satisfying, well-paid appointments, but it is not the norm. The following are a few headings to guide the thoughts.
  - Job satisfaction. Most architects want this, but it means different things to different architects. What kind of architectural work is wanted? Very large or very small projects, mainly designing, contract administration, technology, new work or refurbishment? It is important to try to define one's ideal post.
  - Pay. Consideration should be given to how much money will be needed to justify a move. Sometimes an architect will be prepared to accept the same salary, or less, in order to secure just the right job. It is important to decide how much money is actually needed and what difference it would make if the job was three hundred miles away. The two vital ingredients of a good job are job satisfaction and pay.
  - Advancement. An architect must consider whether it really matters. Most people have a desire to progress, but not all. Usually, something must be relinquished to secure promotion. For example, an architect may have to stop active design work in order to concentrate on an exclusively managerial role. Although the absence of good prospects may suggest that a job is not worth having, it is generally true that a good architect will create prospects.
  - Responsibility. An architect who wishes to take full responsibility for the practice is aiming for the top of the tree. Such an architect must decide whether status matters more than the opportunity to practice particular skills.
  - Ancillary. There may be many other things which an architect may include on the list of ideal job attributes. They may be important, but the question must be asked whether they are as important as job satisfaction and pay. If requirements are kept simple, securing a job will be easier. Among other things which might influence the job seeker are:
    - location
    - security

working hours  
opportunity for initiative  
office environment  
personality of directors or partners  
type of work  
design philosophy.

Completing this checklist should clarify the thoughts and, incidentally, reveal certain facets of the architect's character which were unacknowledged before. The complete self-appraisal is the unrefined raw material which must be used to find employment.

#### 4.1.2 Opportunities

By this time, architects should have a clear idea of their own capabilities and the kind of post being sought. The next stage is to consider how to set about locating the sort of job vacancies required. It is always possible of course that someone will telephone unexpectedly and offer just the job required. Although this happens more regularly than might be thought, the main ways of locating vacancies are:

- reading advertisements in the professional, technical or local press or on websites
- making speculative approaches to potential employers
- by word of mouth, through contacts in other offices and recruitment consultants.

It is possible to persuade an employer that there is a need for just the kind of architectural expertise being offered. A number of architects have found their niches in this way. There are techniques to help job seekers achieve success.

#### 4.1.3 Answering advertisements

This is probably the way in which many architects find employment. Besides looking at the obvious professional press, the less obvious construction journals should not be neglected. They occasionally have advertisements for architects and they may also advertise posts which are not aimed specifically at architects. National and regional newspapers are a fruitful source of jobs. Some small practices rarely advertise beyond regional level. Some large organisations have their own magazine or journal in which they advertise vacancies before they appear nationally. Local authorities, in particular, sometimes have a policy about advertising 'in-house' as a first step. Of course, it is impossible to keep abreast of all such advertisements, but an architect with a clear idea of the post being sought will be rewarded by scanning as many relevant publications as possible. It should be remembered that advertisements on a national scale will almost certainly attract more applicants than regional advertisements.

Most practices and other organisations include advertisements for job vacancies on their websites. Some have a standing open invitation to architects to

apply. It is increasingly common for the first approach to be made to prospective employers through their websites. This is particularly true in the case of new graduates.

The kind of advertisement encountered will vary widely. Some give masses of information, others hardly anything at all beyond the job title. A salary may or may not be quoted. Large organisations commonly ask the reader to write for further details and an application form while private practices usually ask for a curriculum vitae (CV). The techniques for preparing these are discussed in section 4.1.6. The first rule of answering advertisements is to do exactly as they say. It is pointless sending a CV if they want an application form completed. It simply creates a bad impression. A firm which has its own application form usually does so because it always wants to see the information presented in the same order. Some firms still ask applicants to fill in forms or write to them in handwriting. It may seem a trifle weird in the age of e-mails and texting, but the instruction must be followed. Generally, employers are just trying to find out if the handwriting is decipherable, but it is possible that they have retained a graphologist to comment on the applicant's personality. There are some employers who believe that character can be read in handwriting: a clear neat hand indicates a logical neat person, etc. Without passing judgment on such theories, all that can be said is that one's usual hand should be employed and care should be taken that it is legible. Otherwise, it is better to send the application in typescript by e-mail or post as directed.

If a CV is required, it should be sent with a covering letter. If there is an application form, it should be returned when completed with a covering letter in which the opportunity should be taken to briefly emphasise a couple of key points. If selection is to be by means of a completed application form, it makes little difference whether the form is returned immediately or just before the closing date, because usually all applications are considered together after the last date. Private practices asking for a CV will seldom state a closing date. It often pays to submit promptly.

Some forms invite the applicant to telephone for an informal chat. If the architect is confident of a good telephone manner and is quick thinking, it makes sense to telephone. Some posts are virtually secured on that basis, making the interview a formality. The architect telephoning a prospective employer should have some notes prepared as if for an interview, with questions ready. To approach the informal telephone chat casually can be fatal. It should be remembered that the telephone can magnify vocal mannerisms and the listener concentrates on the voice, because there is nothing else. There may be a bad line, the person on the other end of the telephone may be preoccupied and, therefore, seem abrupt and a thousand and one things can conspire to upset the friendly chat. In a face to face meeting, the participants can relate much better.

#### 4.1.4 The speculative approach

It may be thought that writing to a firm of architects to offer one's services is a waste of time. Whether or not that is true will depend on the firm and its circumstances when they receive the letter. There are four possible scenarios.

- The approach may be rejected out of hand or ignored. The rejection letter, if any, may say that the firm is impressed with the letter, have nothing available at the moment, but will keep the writer in mind if there is anything in the future. The chance of any future contact in such instances is negligible.
- The firm may be about to advertise a vacancy and they may decide to interview the writer before incurring the expense of inserting the advertisement in the press.
- The firm may be sufficiently impressed to create a post especially to suit the writer's expertise (This does happen quite frequently for good applicants).
- The firm may be sufficiently impressed to interview the writer which may lead to a post in the future when they have the right opening. Those in management positions do not usually enjoy the hassle of large scale interview sessions. They do not like to waste the time and the money. If they have a post and they know of someone who can fill it, they will often contact that person.

The reason for making a speculative approach may well be that the architect knows the firm by reputation, admires their work and, therefore, wants to join them, even though they are not advertising any vacancies. There is nothing demeaning about a speculative approach. The recipient should be flattered. Some firms never have any need to advertise, because architects are anxious to join them.

Anything which looks like a mass-produced application should be avoided at all costs in these circumstances. Each application should be given an individual bias. At the very least, the letter should be addressed to the person in the firm who deals with staffing. This is easy to discover by means of a telephone call to the firm's receptionist. Even in this age of apparent informality, it is still prudent to address the letter 'Dear Mr/Mrs/Ms ...' and finish it by 'Yours sincerely'. Even if the approach is by e-mail, which is not a good idea for a speculative approach, it should be formal until the recipient signals some relaxation. 'Hi Mary' and finishes such as 'Best' or even 'Kind regards' must be avoided.

The letter should be brief and to the point. There are no hard and fast rules about whether a CV should be included. Generally, it is probably better not to send a CV. The letter should give just enough information to convince the recipient that it is worth while meeting the writer. The sole purpose of the letter is to secure an interview. It is the purpose of the interview to secure the post. Therefore, the first few lines of the letter deserve a great deal of thought if quick despatch into the waste basket is to be avoided. Starting a letter: 'I am writing to enquire whether you have any vacancies for an architect' invites rejection in all but the most patient of recipients. 'I am just the architect you have always wanted' is more interesting, but too presumptive.

Speculative approaches should not be attempted by telephone. In communications, a telephone conversation is halfway between a letter and a face-to-face meeting. In a letter it is possible to say as much or as little as one wishes. It is impossible to be drawn into a hurried response. During a meeting what is said can be moderated or emphasised by gesture or facial expression and silent

signals can be received from the interviewer who will have set aside an uninterrupted period for the interview. In comparison, the telephone can be a very coarse instrument of communication. Its danger lies in the fact that it seems to convey a better picture of both parties whereas in fact it gives only a partial picture and that perhaps might be the worst part. Moreover, the applicant may catch a normally good natured individual at a very bad moment.

In considering a speculative approach, the one-person practice should not be ignored. Many large firms have developed from a modest start. An architect who is willing to work hard on a low starting salary and possibly introduce new clients will often be welcomed by a sole practitioner. It pays to carry out some research: how long the practice has existed, the experience and character of the principal and the kind of work being carried out. Some sole practitioners prefer to stay that way, but we know from experience that many would love to get rather bigger if only so that there is someone else to share the load and off whom to bounce ideas. If the applicant has the ability to attract work and dreams of having a practice with several architects and technicians, a letter sent to a youngish sole practitioner could mark the start of a fruitful career.

Speculative approaches should never be sent by e-mail, because it is too often employed to send informal notes and memos and they are easily ignored.

#### 4.1.5 Contacts

Everyone has contacts. Every architect has contacts in the architectural world and many elsewhere in the social media. If it becomes known that a talented architect is seeking another appointment, the results can be surprising. There may be an approach from a firm who the architect had not thought of approaching previously, because the architect may have seemed settled for life. More often, a contact can sometimes tell of opportunities which have not yet been advertised, thus enabling a speculative approach to be made.

There are a number of other avenues for job seekers. For example, most universities, local authorities and large organisations have websites on which they list job vacancies. Recruitment consultants can be very effective and they are much used, but it is important to keep up the pressure and to remember that their objectives are not quite the same as the architect's objectives. Some recruitment consultants are commissioned to search for and find suitable applicants. They may carry out the initial weeding out of unsuitable applicants. They collect their fees from the employer usually based on an applicant securing a post. They are always on the lookout for architects seeking new posts and they welcome approaches. The more people they can successfully place and the higher the salaries, the more money they make. There are many recruitment consultants who carry out their jobs with the utmost professionalism. Unfortunately, there are others who will try to place the architect in any kind of job so as to secure the commission. Other than by recommendation, it is probably safest to try those recruitment consultants who specialise in the architectural and construction markets.

### 4.1.6 Career history and CV

CV stands for 'curriculum vitae' – the story of a life. What most firms actually mean when they ask for a CV is a career history. They do not want to know about early childhood or anything which is not absolutely relevant to the application. Even though a career history may be submitted, it is diplomatic to head it 'Curriculum Vitae' if that is what is requested.

Ideally, the CV should occupy no more than one sheet of A4 paper. Most CVs take up more than one page, but long CVs become very tedious to read, particularly if the recipient is faced with reading, and trying to compare, several of them. The CV should be written to suit the post for which an application is being made. The layout should be clear, it should be typed and the following should be borne in mind.

- Age discrimination is unlawful.<sup>1</sup> Except in special employment circumstances, of which architecture is not one, an employer may not advertise for persons older or younger and words which may be associated with different ages are unlawful. Therefore, an employer cannot seek a 'mature' architect although seeking an 'experienced' architect or 'an architect of at least five years experience' appears reasonable to fill particular roles. An advertisement requiring 'an exciting young architect with new ideas' is unacceptable. Nevertheless, an employer may often have a clear idea of the age category of the applicant being sought. If age may be a problem, the date of birth should be omitted. Employers often have a preconceived notion about a fifty-year-old as opposed to a thirty-year-old applicant. At fifty, a person is less likely to move again, but experience and skill is evident and energy and enthusiasm can be just as marked as in a much younger person. The only disadvantage with older persons is that they may be slower than their younger colleagues and that is by no means always the case. Once an interview is secured, an employer's misapprehensions can be corrected.
- Degrees and professional qualifications should be included, but not usually school examination results. The exception is if the school examination results show an aptitude for something which is not strictly architectural, but which could prove useful to a potential employer. An obvious example is an examination result which indicates proficiency in a foreign language.
- The current appointment should be described first followed by the next most recent and so on. Ten years ago is ancient history. Any posts held earlier than ten years ago should simply be listed.
- Achievements must be emphasised rather than duties and brevity is the watchword.
- Titles of some posts may be obscure and there is nothing wrong with amending them to make them more comprehensible to the reader. For example, 'Deputy Chief Architect', if true, is easier to understand and creates a better impression than 'Architect Grade ABC'.
- If the architect is currently self-employed, the prospective employer may wonder why the decision to change to employment. The thought may arise



that the architect's business has failed. A convincing reason for giving up self-employment should be stated.

- Generally, however, it is best not to include reasons for wishing to leave the current or last post. If appropriate, reasons can be discussed at interview.
- It is a mistake to include details of present salary. Architects are worth an objective amount, not merely £3,000 more than the last salary. They may have been underpaid.
- 'Additional information' should only include items which are strictly relevant. The fact that an architect is a keen fisherman is not relevant; it may suggest a loner. Involvement in local societies, however, indicates public spiritedness and possibly contacts which may be useful in the future.

The above is only a guide and there may be good reasons to ignore some of the advice. The individual use of judgement is all important. Applying for a new post should be approached with the same skill and care which is applied to any important task. There are few things more important than a career in view of the length of time spent working in it, but it is surprising how many applicants dash off an application in a few minutes. The recipient will probably give it the same sort of cursory treatment.

#### 4.1.7 The application form

Many application forms are exceedingly badly arranged. The form should be used for the applicant's own advantage. It may sound trite, but it is important to read every bit of information about the post before starting to complete the form. All questions should be answered in the spirit of the information given, using the same words if possible. For example, if the information calls for an architect with a 'flair for design', the same phrase should be included in the application form. The form should be completed neatly, but it is important to fill the available space adequately. Additional sheets should be attached to detail experience if the space is too small (it usually is) but repetition of the same things in a slightly different way is just irritating to the reader. Most application forms are straightforward, but some forms have one or more questions which are difficult to answer. A selection of such questions and outlines of possible answers are given below. The details, of course, will depend upon the individual.

##### *What do you consider are your greatest strengths and weaknesses?*

This offers both a chance and a trap. There is no place for modesty. Strengths should be clearly stated, whether they are the much sought after 'flair for design' or project management or the restoration of old buildings. If there is space, examples should be given. This is an opportunity for the architect to emphasise achievements. For example: 'I directed the design team on XYZ Building'. That can be very effective if XYZ is a well-known project. The second part of the question is a trap. It is an invitation for the applicant to give the firm a reason for exclusion from interview. On no account must such things as 'I tend to get bored with office work' or 'I dislike being told what to do' be put down. They may be true, but they will not help secure an interview. It is possible to turn

such a question to advantage by stating as faults what others will probably see as good points. For example: 'I tend to concentrate on detail, but I am capable of seeing the broad picture' or 'I become frustrated if all members of the team are not pulling their weight. I tend to deal by face-to-face discussion with the person involved'. It is not suggested that these 'weaknesses' be invented; merely that the architect should take something about which he or she is a shade too fanatical, state it as a weakness (which it is) then say how it is overcome.

***What has been your greatest disappointment?***

Once again, this is a potential trap. It will be fatal to say: 'I have not got as far as I would have wished in my career', or 'I failed to solve the cladding detail on XYZ Buildings and there has always been a problem with water ingress'. The same technique should be used as for 'weaknesses' above. The perfectionist is always bitterly disappointed that a near perfect conception is not actually perfect. The architect's greatest disappointment might be that an award-winning design had a minor flaw or there was an absence of technology to achieve the whole concept.

***Why are you applying for this post?***

This is another opportunity to relate achievements and show how they apply to the particular post. The most appealing aspects of the firm or organisation should be stressed, e.g. reputation for good design, efficiency, new technology, etc. These points will impress the prospective employer who will be equally unimpressed if the reasons include nearness of office to home or the need for extra money.

***What are the major ways in which you consider that you can contribute to the work of this organisation?***

As the last answer.

***Reasons for leaving your present post?***

Being fired, made redundant or major policy disagreements with the boss are *bad* reasons. Anxiety to further a blossoming career in the firm to which application is being made is a *good* reason.

***Which of your duties gave you the most satisfaction?***

This is another opportunity to state achievements. Care must be taken to avoid the danger of appearing to be too much of a specialist, unless that is what the advertiser requires.

***If you are offered the post, where do you see yourself in ten years' time?***

This is always a difficult one. It really is a silly question if taken at face value. But the totally honest answer that the applicant has absolutely no idea is probably a mistake. The safest way is to stick to generalities, stressing progress so far and

concentrating on personal development as contracts administrator, designer, technologist, etc., which is seen as continuing in a logical progression depending on the opportunities offered.

***Describe, in detail, how your experience relates to this post?***

This question often appears in a very much longer form. It is not an invitation to submit a life story. It is important to be clear and to the point. Those achievements which relate most closely to the new post should be set out. Many architects ramble in trying to answer this question. 'In detail' simply means that the prospective employer wants actual examples to be quoted.

There are a few further points to remember about application forms.

- *Health.* Unless the applicant is disabled, health should be stated as excellent. Past operations and treatments, if successful, should be ignored. This used to be a fairly standard question, particularly in the case of large organisations. These days, questions about health may only be asked if they are strictly relevant to assess whether the applicant can carry out duties associated with the post or where there is some other good reason for asking.
- *Leisure activities.* The employer is looking to see that the architect is a well-balanced personality with the ability to mix easily. A brief statement regarding any involvement with a couple of sports and group pastimes is better than a complete list of all activities.
- *Interests.* This is the architect's opportunity to show involvement with local branches of the RIBA, RSA, RSAW or RIAS and memberships of other societies. Private firms encourage members of their staff to develop a wide circle of acquaintances; it promotes work. All honorary posts or public duties should be included, such as Justice of the Peace or Chairperson of the local civic society.
- *Documents.* Drawings, photographs and diplomas should not be included with the application even if (rarely) they are requested. If appropriate, it should be made clear that these documents will be brought to an interview.
- *Projects.* The types and values of projects together with achievements should be stated.
- *Expertise.* Areas of expertise which are necessary or useful adjuncts of architectural practice should be stated, e.g. CAD, BIM, ecodesign, models, perspectives, expert witness, adjudications.
- *Referees.* Referees should be as senior as possible. It is a mistake to choose people merely because they are friends. The opinion of the person sitting next to the applicant in the drawing office is of little value. The most senior architect in the applicant's current employment, if well briefed, will be best placed to give a good reference. It is the kiss of death to include the name of a referee without permission besides being grossly discourteous. Architects are sometimes afraid that they will get a poor reference, because of some incident in the past. The law provides some reassurance. The employer, in writing a reference, assumes responsibility and the employee relies on the employer's skill and care in its preparation. It is not sufficient that the

employer believes what is said to be true. The employer must have exercised reasonable skill and care in checking the truth of any allegations.<sup>2</sup>

#### 4.1.8 Before the interview

The whole purpose of filling in application forms, producing curricula vitae and sending letters to prospective employers is to obtain an interview where applicants can demonstrate to the employer that they are the person most suited to the posts advertised. It is a matter of matching skills and experience to the employer's requirements. To be effective, applicants must be fully prepared.

The first thing to remember is that the employer must have been sufficiently impressed by the application to consider offering an interview. Finding the right post is a two-way process. Both parties should be finding out as much as possible about each other, because:

- something discovered may influence the applicant's decision to join the firm
- the applicant needs information on which to base questions
- an employer will usually be impressed that an applicant has taken trouble to do research.

Among the things which an applicant will want to know are:

- what is the firm's policy on hiring and firing?
- for how long has the firm been established?
- the ages and experience of the partners or directors.
- the buildings they design.

Apart from consulting the many standard reference books listing or outlining the work of architectural practices, the applicant should not neglect to enquire of past clients and employees, local chambers of commerce and the RIBA at local and national level. It is important to visit the buildings produced by the firm to get to know something about them.

A list of points needing clarification at the interview should be prepared. The chances are that most of the points will be covered by the employer, but experience shows that without a list of questions, the applicant often forgets to ask something important. A checklist of such points is shown in Figure 4.2. It should be used as a guide only.

Very little can be done about the timing of the interview. If one appointment only is to be made, there could be up to seven interviewees. It is common to take candidates in alphabetical order. A candidate whose name begins with either ABC or XYZ will probably be seen either first or last respectively, which are supposed to be the best positions. Sometimes other considerations affect the order, such as distance of travel. The middle of the list is supposed to be the worst place, because a candidate in this position becomes confused with other candidates in the mind of the interviewer. Someone in that position has to impress a bit more if they are to secure the post. Most architectural posts call for the architect to take along visual material. There are exceptions, of course, if the post is purely administrative or concerned with contracts. Some architects refuse to take examples of work to an interview as a matter of principle, presumably with

- 
- Hours of work
  - Holidays
  - Salary and bonus
  - Fringe benefits, car, mobile telephone, health scheme, insurance, pension, sabbatical
  - Prospects for advancement
  - Office organisation and range of disciplines
  - Clarification of job description
  - Particular office expertise
  - Current workload
  - Possibilities of working in other branches
  - Initial programme of work for the successful applicant
  - The design philosophy of the office. Do they believe in a house style?
  - Use of computers
  - Any particular method of working?
  - Company policy about staff doing spare time work
  - Is it a new appointment? If not, what happened to the previous holder?
  - Any particular problems associated with the post?
  - Flexible working
  - Working from home
- 

**Fig. 4.2** Checklist of points to clarify at interview (note that it is not possible to be specific because of the wide range of posts for which an architect might apply).

the view that, being architects, they have no need to show their quality – it is taken for granted. That is a very mistaken view. Whether or not requested, the architect should always take along visual material to show, not only competence but also, that their approach to problem solving is what the firm requires. Some or all of the following may be taken.

- *Drawings.* Nowadays, a firm should accept drawings in electronic form, whether sent in advance by e-mail or brought to the interview on disk. Whichever method is chosen, care should be taken that the office has the facility to read and display the material, otherwise the architect must bring suitable equipment. Drawings are still taken to interviews in hard copy. If so, they should be flat not rolled and prints not negatives. Drawings should be chosen to suit the post. For example, if the firm does a lot of housing, the drawings should be domestic in character; if the post is for an architect to design warehouses and factories, then industrial work should be taken. Unless the work is specialised, it is always a good idea to take along a brief selection of other work to show the breadth of expertise. The newly qualified will have to take one or two projects produced during training, but they must be prepared to face keener criticism of such work and they should have answers ready to the inevitable question: ‘Why did you do that?’ Unless the post particularly indicates otherwise, only one or two production drawings should be taken, but they should be good. There is nothing wrong with taking drawings produced by others provided the architect makes that fact

clear. The drawings may show the extent of a building on which the architect had an important role as leader or co-ordinator of the design team. An architect in that situation must be prepared for keen questioning.

- *Photographs.* They must be first class large prints, but the architect will have to work hard to demonstrate a key role in the building if there are no supporting drawings.
- *Glossy brochure about the architect's work.* In theory, this is very good, but it does give the impression that the architect makes a career of attending interviews.
- *Complete file of correspondence concerning the post.* This must be taken. A copy of the career history or the application form must be included together with a list of points to raise and questions. Some architects think that it is bad form to take notes to an interview, they are mistaken. The interviewer will certainly use notes. An applicant who also uses notes will appear well organised and confident.

The above is merely a guide. There is no point in taking a portfolio of drawings if the last post was administrative and the application is for a similar post. One last thing which can be done in preparation for interview is to take along a 150-mm scale rule and a soft pencil. It is useful to be able to demonstrate one's abilities by doing a quick freehand sketch if asked an appropriate question.

#### 4.1.9 The interview

The applicant should arrive about a quarter of an hour early. Later, and there is little time to compose oneself. It is useful to arrive with a quarter of an hour in hand, if only to absorb the atmosphere. There are often examples of the firm's work on display in the reception area. If it is one of those interviews where it is necessary to wait with the other interviewees, it is always better to listen rather than talk so as to assess the strength of the competition.

Some firms will pay basic expenses. Local authorities and large firms will have a special form for claiming expenses. Smaller firms are unlikely to have a form, but they will normally pay basic expenses, in which case it is usual to list expenses and leave them with the secretary. It is not something to bring up at interview.

There are two basic types of interview:

- one-to-one
- committee or panel.

The one-to-one interview offers the best chance to establish a relationship with the interviewer and, therefore, the best chance of obtaining the post. A committee interview can be very difficult. There is usually a chairperson, and each member asks questions in turn. When answering questions, it is important to reply directly to the person asking the question. Although difficult, the applicant should try to remember the names of the committee members as they are introduced and to use them during the interview. It is difficult to be sure of the relationships between members of a committee. They may be more interested

in impressing one another than in the candidate. The interviewer will usually be an architect if a post as an architect is the subject of the application, but not invariably so. Other panel members may be personnel or managerial, related construction disciplines or, in the case of a local authority, councillors.

The *RIBA Handbook of Practice Management* sets out some useful guidelines for interviewing from the point of view of the employer. It also forms a useful guide for applicants, because they know the kind of things the employer is looking for.

Interviews may be structured or unstructured. The first follows a pattern set by the interviewer, the second rambles and gives the applicant the opportunity to set the pattern. The latter form of interview is very common, because interviewing is a skill which few employers bother to learn properly. A typical interview often runs as follows.

- The interviewer chats for a few moments to help the applicant relax.
- A description of the firm is given.
- A description of the post is given.
- The interviewer asks questions relating to answers on the application form.
- The applicant is asked half a dozen 'technical' questions.
- The applicant's portfolio is examined, with more questions.
- The applicant is given time to ask questions.

Arrangements vary greatly. The interview may take place across a desk or around a conference table or sitting in easy chairs with coffee. Quite a lot depends on the type of job for which the applicant is applying. An interview for a first post might well take place formally across a desk. Progression to more senior posts is marked by a steady decrease in formality, because the interviewer wants to get to know the applicant thoroughly. That is particularly true in the case of posts which may lead to partnerships. The applicant must:

- speak slowly and clearly
- look at the interviewer, do not look down
- resist any temptation to wave hands around to make a point
- be enthusiastic
- always pause to think before answering, not just after a difficult question.

Applicants should be wary of making a gift of their expertise. If asked to solve problems, they should try to show that they know how to set about solving it without actually doing so. Applicants should always open portfolios even if not asked to do so. A useful opportunity comes at the end of the interview when the interviewer asks for further points. It strikes a strong note to preface answers by 'yes' or 'no'. Answers should be elaborated, but not too much. No opportunity to display experience, achievements and skill should be missed. Although it is helpful to ask questions which show that the applicant has studied the firm's work, it does not pay to be too critical unless the decision has already been made that the post is not wanted.

Interviews really are two-way affairs. They may not seem that way in practice, but they are. Applicants must decide whether they want the posts. If they are good at what they do, employers will be anxious to impress them. An applicant's

approach should be positive, stressing achievements and interest in the post applied for.

Every interview contains awkward questions. The ability to deal with them depends on experience and confidence. The interviewer should always be humoured. It is never appropriate to say that a question is silly. If really at a loss for an answer, the interviewer should be complimented on devising such a difficult question and the admission should be made that the applicant is beaten. The device is particularly effective in a panel interview. Although awkward questions can never be entirely foreseen (that is one reason why they are awkward), the following is a selection of such questions which regularly make their appearance at interviews.

***Why do you want to leave your present post?***

Furtherance of career and joining the firm to which one is applying are acceptable answers, being fired, made redundant or seeking more money are less so.

***Do you think that you are too old/too young/too inexperienced for this post?***

Given that age discrimination is unlawful, this is a naughty question. The answer to this is simply to stress interest in the post together with achievements and skills.

***Given the opportunity, how would you reorganise this firm to make it more efficient?***

This is a really silly question. The only reason for asking it is to see if the applicant is silly enough to attempt an answer. The only sensible response is to express delight in the question and ask for sufficient time to study the firm in order to give a worthwhile answer. This sort of question does give applicants an opportunity to explain how they reorganised some aspect of their present firm.

***Who is your favourite architect?***

It is important to be ready for this question and to say who and why. Jargon should be avoided. The 'why' is more important than the 'who'. It should not matter that the architect is not a favourite of the interviewer. Effective things to admire are attention to detail and planning.

***Why did you stay so long at your last firm?***

It is important to emphasise the additional responsibility taken on over the years and progress within the firm. It is unwise for the applicant to say that he or she was on the point of leaving many times, but stayed after being offered more money. Among other things, the current application could be seen as just a ploy to increase the salary yet again. This question inevitably leads to the one about reasons for leaving at this stage. The reasons can only be that it seems to be the right career moment. Be warned, however, that employers will want to know why such a long serving member of staff does not warrant a partnership in the



current practice. The applicant may or may not know why, but it is unwise to directly criticise the current firm.

***It seems to us that a person with your particular skills/experience/ qualifications should be ... (doing something else)***

This is tricky. It may also be true. On the basis that an applicant for a job wants the job, the only answer is to say why the job is wanted and to emphasise interest in it.

***Why do you think you are the person for this post?***

Another opportunity to stress achievements in the previous post and to relate them to the requirements of the new post.

***How would you motivate others?***

Books have been written about this. It is useful to read one of them. Put very simply, motivating someone else involves getting them to want to do what the motivator wants by letting them see it is in their own best interests.

***What salary are you looking for?***

This is a question to be avoided if possible. It is up to the employer to make an offer, but in any case salary discussions should not take place until the end of the interview. As a general guide, it does not usually pay to accept less than desired for the promise of something indefinite such as promotion in two or three years time. Bonuses too, have a habit of disappearing unless the percentage is written in as a definite part of the remuneration package. If there is no alternative but to state a salary, it is best to state a range although be aware that any offer will probably be at the bottom of your stated range. If the applicant is confident of commanding a particular salary, it should be stated, but not tentatively.

The list of awkward questions is endless. In addition, applicants may be asked to sit what amounts to a short examination, spot mistakes in a drawing or undergo a psychometric test. It is important to cooperate fully with the employer's whims unless the applicant has already decided that the job is unsuitable. Remember, what may seem a silly waste of time may be something in which the employer puts the utmost faith. Of course, that itself may say something about the likely relationship with the future employer.

As in any other meeting, misunderstandings can arise during the course of an interview which can be the reason why the post is not offered. To overcome the possibly, it is sensible to ask a question at the end of the interview which exposes any reservations on the part of the interviewer. It can be phrased in different ways, but it should be something like: 'Did any points arise during the course of the interview which lead you to believe that I am not suitable for the post?' The question is something of a trap for the interviewer. If the answer is 'No', the post should be secured. If the answer is 'Yes', the applicant has the opportunity to correct the misunderstandings. The employer cannot really refuse to give an answer, but if the answer is neither yes or no but simply a confused mumble,

it is usually because the employer is not going to give the post to the applicant, but does not want to say so at the interview.

#### 4.1.10 After the interview

If all the candidates are being interviewed on the same day, it is common practice to announce the result shortly after the last interview is completed. In other cases, the result will be made known by post. No applicant should have to wait longer than about a week. If there is no word after two weeks it may be that:

- the post has been offered to another candidate and the employer is waiting for an acceptance before notifying the others; or
- the employer is unsure whether any applicant is suitable; or
- points raised during the interview have caused the employer to rethink some basic office policy.

It is not good policy to telephone to find out the situation. The employer may be embarrassed and forced into making a quick decision which is unlikely to be favourable. A carefully worded letter, on the other hand, which emphasises interest in the post and in the firm, may just tilt the balance. Even if the post has been offered to someone else, it may be turned down and the letter pushes that applicant's name to the front of the list of alternatives.

## 4.2 Acceptable job titles

The use of the title 'Architect', when applied to a person carrying on a business is governed by the Architects Act 1997 (see also Chapter 2, section 2.2.2). Such a person must be registered and, therefore nowadays, qualified. The RIBA used to publish a Practice Note (No. 2), setting out job titles and descriptions which are acceptable and unacceptable. The note is no longer available, but the list is worth repeating here. The titles are as follows:

#### *Acceptable Titles*

- Chief Architect
- District Architect
- Principal Architect
- Project Architect

#### *Acceptable Descriptions*

- Chartered Architect
- Experienced Architect
- Architect at B/C/D level of responsibility

Each of the above titles or descriptions adds something to the basic 'Architect' so as to indicate the status or job. The professional status, however, is not in doubt.

#### *Unacceptable Titles*

- Assistant Architect
- Senior Assistant Architect
- Chief Assistant Architect

*Unacceptable Descriptions*

- Registered Architect
- Qualified Architect
- Fully Qualified Architect

Each of these titles or descriptions detracts from the status of the architect. The descriptions suggest that it is possible to be termed 'Architect' while at the same time being unregistered, partly or wholly unqualified. To qualify 'Architect' by 'Assistant' indicates that the unfortunate title holder is somehow less than an architect. Some titles are of course unlawful such as where a job advertisement calls for the post of Architect, but the requirements are clearly for a person who need not be registered. Such phrases as 'Architect at or about qualification standard' fall into this category. So do 'Student Architect' and 'Trainee Architect' as a matter of law.

## 4.3 Employment

### 4.3.1 Employed or self-employed?

For tax purposes the Inland Revenue have strict rules to prevent the use of self-employment as a device when the situation is really one of employment.

The very first thing which an architect should be sure about is whether he or she is an employee. It is possible to work on an employed or self-employed basis. An employee enters into a *contract of service*; someone who is self-employed enters into a *contract for services*. The difference is very important.

- Employment law applies only to employees.
- Statutory rights apply only to employees.
- Duties at common law will be implied only in an employment situation.

It may seem obvious into which category a person falls, but that it not always the case. Often the situation is straightforward. An architect working for a client in return for a fee is self-employed whereas most architects working in practices for a salary are employed. A self-employed person is sometimes referred to as an independent contractor. If the matter comes before the courts, they will look at the actual situation rather than the title.<sup>3</sup> Thus a person referred to as a 'consultant architect' may be held to be employed while a 'project architect' may in reality be self-employed. In order to resolve the issue in situations where there may be some doubt, the courts have devised some tests which can be applied. Briefly, they are as follows:

#### **Control**

If the employer has control over the architect's method of working, the architect is an employee. The greater the degree of control, the greater the likelihood that the architect is an employee. Although this is quite a good test where the work is of a manual nature, whether skilled or unskilled, it is less satisfactory in the professional context where even an employee must have quite a lot of freedom to exercise his or her profession. The test is relative, therefore, and the amount

of control exercised over a particular architect must be compared with the usual degree of control exercised in architectural practice.

### ***Equipment***

Architects who provide their own equipment are probably self-employed. The test is not definitive, because some practices may provide equipment for self-employed architects.

### ***Integration***

Architects who are integral parts of a business are likely to be employees. This test is probably more telling than the last so far as professional people are concerned. Thus it is easy to see the difference between an architect who freelances, self-employed, but working perhaps for a day or two a week for several practices, increasing or decreasing involvement to suit varying office workloads and the permanent staff member. It used to be common for some self-employed architects to work permanently for one office. The situation was mainly for the benefit of the office, because there was seldom any long-term commitment on either side. An architect who carries out services for several practices is likely to be self-employed.

### ***Risk***

An architect who carries some financial risk is likely to be self-employed.

### ***Multiple tests***

This is probably the best test. If the other tests are inconclusive, the questions to ask are: does the architect work for an agreed salary? Is the degree of control such that there is a master and servant situation? Are the other provisions of the contract consistent with employment? For example, who is responsible for paying the architect's tax? Is there a company pension scheme to which the architect belongs? Who owns the drawing equipment which the architect uses? The situation has been muddied to a certain extent by the introduction of new regulations which refer to all employees as 'workers'.<sup>4</sup> However the term and the regulations do not apply to genuine self-employed architects.

Before the introduction of the stricter Inland Revenue rules referred to above, there was a growing tendency for architects to be employed on a self-employed basis. This was possibly because of the uncertain economic climate. The position used to be that an employer took less risk by using self-employed persons, because they were not protected by statute like an employee.

There are advantages to being self-employed. Architects in this situation pay tax on a different system and there is greater scope for claiming expenses against tax. In addition, many architects like the freedom which self-employment brings. It should also be noted that if a self-employed architect is negligent and the practice has to make a claim against the insurance policy, the insurer does not waive rights of subrogation, as is usual in the case of employees, and the self-employed may face the prospect of a personal claim from the insurer.

### 4.3.2 Employment contract

A contract of employment may be written or oral. The principal problem with an oral contract is the problem with all oral contracts; the parties may have conflicting recollections of the terms. The contract can also be implied as the result of the conduct of the parties. Some firms, so it is said, still engage staff with a shake of the hand. There is nothing illegal in this and if the firm is equally relaxed about all aspects of its relations with employees, it may be the ideal environment for some. In general, however, a written contract of employment is an advantage, because both sides then know for certain the basis of the relationship, at least in respect of the main issues. In the absence of expressing terms between employer and employee, the general law will imply that the employer has a duty to:

- pay the employee
- provide work, if without work the employee would be unable to earn money
- reimburse the employee for reasonably incurred expenses in carrying out duties
- take care for the employee's health and safety
- provide a grievance procedure
- act in a spirit of mutual trust and confidence

and that the employee

- must provide personal service (i.e. not delegated) service
- must obey the employer's lawful instructions
- must take reasonable care when about the employer's business
- must have reasonable care for the employee's own safety and for that of the employee's colleagues
- must show good faith in revealing to the employer that which should be revealed and in safeguarding confidential information.

In addition there is much statutory law which governs the employer/employee relationship and which has now almost supplanted the common law for most purposes.

### 4.3.3 Written statement

The employer must give the employee a 'written statement' of the principal contract terms not later than two months after commencement of employment. The statement, however, is not the contract and, if appropriate, the employee can contend that the statement attempts to modify the terms of employment. The statement can become the contract of employment if both employer and employee so agree. The fact that the employee may be asked to sign a written statement is not thought to indicate anything other than acknowledgement of receipt of the statement. Many employers are slow to issue the statement because there is no effective sanction. An industrial tribunal may make a decision on the points in dispute, but that is all. The statement must be given to the employee personally, but it need not be issued at all if all the points have been covered

already in a written contract of employment. It is not sufficient, however, for the employer to pin the statement to a notice board or to refer to standard conditions.

The statement must contain the following.

- The identities of the employer and employee.
- The job title.
- The date of commencement of employment and whether a previous period of employment counts as part of the period of continuous employment for statutory purposes.
- If the employment period is known, the end date must be stated.
- The period of notice required to bring the contract to an end. The statement may stipulate any period, but if it is less than the statutory minimum, the statutory minimum will apply. If no period is stipulated, the statutory minimum does not apply and reasonable notice must be given (unless a fixed term contract is in force).
- Rate of pay and interval between payment.
- Hours of work.
- Place of work.
- Holiday entitlement, including public holidays and the method of calculating holiday pay (see section 4.11).
- The identity of the person dealing with grievances.
- Method of complaining about the handling of a grievance.
- Method of complaining about disciplinary or dismissal decision.

The statement need not deal with the following, but it must state where the information is to be found.

- Rules regarding absence from work due to sickness or injury and any sick pay provision. There is no right to sick pay under the general law, but most employers make some provision. An employer is obliged to pay statutory sick pay for twenty-eight weeks in any year after which responsibility for payment of statutory sick pay lies with the Department of Health and Social Security.
- Disciplinary and dismissal procedures. In Northern Ireland, this must be included in the statement.
- Grievance procedures.

It is also useful to include details of the pension scheme and whether a contracting out certificate is in force. The employee may be referred to another document.

## 4.4 Job description

Job descriptions are often included in job advertisements. They may be brief in the extreme, for example *'Project Architect with flair for design required'*, or they may be extremely detailed. Although in general it might be assumed that architects know what they do, there is a tremendous range of functions in practice,

depending on the kind of practice, the kind of work, the position of the architect in relation to other members of the office. It is comparatively rare for a detailed job description to be included in a contract of employment for an architect.

The general rule is that the more senior the post, the less need there is for a job description. So the lowest paid member of staff doing relatively unskilled work might have a very long job description setting out the varied tasks which might be requested of that person. The highest paid member, director or senior partner will have no job description because, at that level of responsibility, the person writes his or her own description day by day. The job, for such people, is whatever they make it.

The employment contract should contain some description of the general nature of the work. Professionals cannot expect their contracts to spell out every detail of their duties.<sup>5</sup> Those duties, however, will not be held to extend beyond the duties normally associated with the proper performance of the functions indicated. Thus an architect cannot refuse to do something on the basis that it is not in his or her contract of employment if it is consistent with an architect's normal duties. From the employer's point of view, it is useful to include a general phrase requiring the employee to carry out other activities which are reasonably incidental to his or her principal job. Part of the job description in the employment contract may be that an architect is required to work at another branch office at the discretion of any director or partner. Without such a clause, the architect cannot be compelled to move.

A simple form of job description was pioneered in the 1961 survey *The Architect and His Office*<sup>6</sup> (Figure 4.3). It graded all architectural staff in four grades: A, B, C, D. Each grade carried a brief description of the qualities required and the person's responsibility. Thus an architect seeing that a firm was advertising for a post grade C would have a good idea of the kind of person being sought. It also formed the basis of the salary structure. Some kind of job description is essential if the office carries out job evaluation (see section 4.7).

## 4.5 Hours of work

The hours which an architect is expected to work should be detailed in the contract of employment although this is seldom the case. They must, however, be specified in the written statement (see section 4.3.3), there are basic statutory provisions about actual hours. There really is no such thing as 'normal' office hours. In London, the usual start is 9.30 am, elsewhere 9.00 am is common, the normal week being thirty-five and thirty-seven and a half hours, respectively. On 1 October 1998, the Working Time Regulations 1998 came into force.<sup>7</sup> Essentially, they provide that a worker must not work more than 48 hours including overtime in a seven-day period. In order to arrive at the figure an average is taken over 17 weeks. An employee can agree to work more than 48 hours, but the agreement must be in writing and the employee can terminate it on written notice.

It is very uncommon for any professional to keep strictly to the specified hours of work and architects are no exception. Whatever may be the appointed hours

Type of work which can be handled	Knowledge and initiative	Influence on others	Responsibility
<p>'A' level Perform simple jobs offering little or no alternative methods. Simple analysis of problems for which logical answers are readily obtainable.</p>	<p>No initiative required.</p>	<p>Able to understand and execute simple instructions. A minimum influence on the work of others.</p>	<p>Responsible for making minor decisions. All work closely supervised.</p>
<p>'B' level Perform work offering a limited number of alternative methods. Solve problems for which logical answers are not readily apparent and which will have some effect on the other aspects of the job.</p>	<p>Limited initiative required. Limited research into common technical literature required. Knowledge of the more common types of materials.</p>	<p>Able, to understand and execute instructions covering a limited field. Able to give simple clear instructions.</p>	<p>Responsible for making decisions affecting his work only, which must be reported to his senior. Parts of his work closely supervised.</p>
<p>'C' level Perform work offering a variety of alternative methods. Solve problems for which answers are not apparent and which will have considerable effect on other aspects of the job.</p>	<p>Initiative is required. Considerable research into all technical literature required. General knowledge of all types of materials.</p>	<p>Able to understand and execute instructions, covering a wide field. Able to give instructions to allocate work among and to control the work of, up to 5 or 6 others working as a team and to co-ordinate their activities.</p>	<p>Responsible for making decisions for all the work of his team within the framework laid down. Receives general supervision.</p>
<p>'D' level Perform work offering an infinite variety of alternative methods. Solve problems for which considerable thought is required to produce logical answers, the solution to which will have a profound effect on the whole design.</p>	<p>Considerable initiative is required. Considerable basic research is required into fields not normally covered by normal technical literature. Wide detailed knowledge of all types of materials.</p>	<p>Able to initiate a plan of working and check progress, able to convert plan into a practical method of working and give the necessary instructions. Able to control and co-ordinate the work of a number of teams working independently.</p>	<p>Responsible for submitting and agreeing design policy with the principal within the framework laid down by the office. Receives administrative supervision only.</p>

Fig. 4.3 Grading table for architectural staff (Courtesy of RIBA Publishing).



of work, architects will tend to work longer. More about this later (see section 4.6). In many places, some form of flexible working hours is operated. There was resistance in some quarters, but it is the norm in many local authorities and it is becoming acceptable elsewhere. In principle, an employee is required to work during a 'core' period from perhaps 10.00 am to 3.00 pm each day together with other hours to choice or as agreed with the employer. The overriding rule is that the employee must put in an agreed minimum number of hours every week or month. There are obvious advantages for the employee but the practice does not appear to be widespread. The contract should state the office policy regarding the accumulation of hours into additional days leave.

An employee now has a statutory right to request flexible working hours for any reason. Prior to 30 June 2014, an employee (male or female) could only request flexible working hours to care for a child or an adult and had to have worked for the same employer for a continuous period of at least 26 weeks. Various criteria had to be satisfied and a proper application had to be made to the employer. The employer was obliged to consider any properly made application and to meet the employee no later than 28 days after the application. The employer's decision had to be given to the employee no later than 14 days thereafter. The new provisions extend the right to any employee for any reason.<sup>8</sup> The strict timetable imposed on employers is removed and employers must simply deal with the request in a reasonable manner. The Government has published guidance about what a 'reasonable manner' might mean.<sup>9</sup> A refusal, which must be substantiated, must be based upon a sound business reason.

## 4.6 Overtime

Attitudes to working overtime vary tremendously. Most architects will be expected to work overtime at some times when there is a heavy workload or when there is a temporary crisis which demands attention. The way in which overtime is handled will depend on the particular office. Although, particularly in difficult times, it is better to be somewhat understaffed, it is not a good idea for anyone to work regular overtime. Everyone needs time to relax and recharge batteries otherwise tiredness becomes normal and mistakes occur.

Some offices repay overtime by offering time off in lieu. This can be useful to the employee, but if all members of staff exercise the option, there may be times when the office is seriously understaffed. In addition, those architects who work most overtime usually find difficulty in finding a space in their workload to enable them to take normal holidays, let alone time off in lieu. No architect should allow this kind of situation to develop. Overtime should always be paid with time off in lieu as an alternative.

Some offices do not pay for overtime and still the staff work extra hours. This reflects well on the commitment of the staff and badly on the practice. Overtime payment should be on a higher scale than normal, to reflect the unsocial hours and the fact that it is over and above what an architect can reasonably be expected to work. Fair rates are usually taken to be one and a third times the normal hourly rate to twice the normal hourly rate if the hours are especially late

or during the weekend. It is not unknown for an office to pay only normal rates, however much overtime is worked. It has also been known for an office to stipulate that no overtime will be paid until the employee has worked in excess of a stated number of hours overtime on any one day. It is common for managers or senior staff not to be paid for overtime (except in exceptional circumstances), a reasonable amount of additional hours being expected as part of the role which is reflected in the overall salary package.

Some architects will work overtime without requesting payment in order to gain advancement in the firm: whether or not that is a good idea will depend on circumstances.

## 4.7 Salary

Starting salaries should be settled at the time of interview. What should also be settled, and this is sometimes overlooked, is the frequency and timing of salary reviews. Every employer is obliged by law<sup>10</sup> to issue full-time employees with an itemised statement of pay setting out the gross salary, details of all deductions and the net amount payable. Remuneration is the 'consideration' which the employer gives for the employee's service.

In addition to the basic salary, many firms operate a bonus or profit-sharing scheme. If the term 'bonus' is used, it is possible that the employer thinks of it as an occasional, rather than a regular thing, something with which the employer can reward exceptional endeavour. In law, a contractual promise to pay a bonus as part payment for work done will be enforceable although the amount of the bonus will depend on the terms laid down. A profit-sharing scheme is probably the most satisfactory arrangement. What constitutes 'profit' should be clearly stated and the sharing may take place on the basis of a points system - a greater number of points represents a greater share. Points may be allocated for length of service, salary or status or in any other way deemed fair or set out in the contract of employment.

*Job evaluation* is a technique which is sometimes used to relate each post and its pay to every other post. There are two stages:

- every post must be given a rank
- appropriate salaries must be attached to each post.

The system is said to have many advantages. It should produce a pay structure within the practice and an overall level of pay which is clearly recognised as being reasonable in itself and in comparison to external pay levels. In addition, the employees should feel secure from arbitrary changes in the pay structure and the practice has a method of fixing rates of pay for new posts.

It is quite difficult to grade the work of professionals. Job evaluation is usually based on a points system which is most appropriate to manual work. Although there is no reason why such a system should not work when applied to professionals, a considerable amount of subtlety is required. It is the post and not the individual which is being graded. Points are normally given for effort, skill, experience, qualifications, working conditions, etc. It is open to a practice to

establish its own criteria so long as they can be seen to be fair and reasonable when applied to all members of staff. The job description is discussed in section 4.4.

## 4.8 Benefits

This is an important part of the remuneration package. Indeed, in some instances it may be a significant factor in determining whether an architect takes one post in preference to another. The most highly prized benefit is still a company car, particularly the more expensive kinds which architects may covet but be unable to buy themselves, even though the tax penalties are increasing, particularly for larger cars. Indeed, the tax disadvantages now make company cars less desirable. Firms have varying policies. In many practices it is still quite rare for an architect below the status of associate to be given a company car. An alternative is the 'pool' car where architects may have the use of a car, but they must take whichever car is available on that particular day.

As an alternative, a firm may require employees to provide their own cars for use on firm's business and give an annual car allowance or monthly running and depreciation allowance together with a realistic mileage payment. In such cases, the employer may sometimes provide an interest free loan facility. Problems can arise with this kind of provision. Employees who have major repairs to finance can find themselves in breach of contract if they are unable to afford the repair. If car use is essential, the car should be provided by the firm, either personally to the employee (as is common in other parts of the construction industry) or in a pool. Company arranged car leasing facilities for employees is becoming more common. It is also becoming usual for mobile telephones to be provided and laptop computers. Whether this last really is a perk is open to question.

Some firms automatically enrol all employees in a medical insurance scheme. This can have obvious benefits for the employees and the great advantage for the employer is that hospital procedures can be carried out quickly and, in the case of non-life-threatening conditions, to suit the employee's office commitments. Points to note are that it is usual for these schemes to exclude cover for any illness even remotely connected with a previous illness in the same employee. For example, an employee who has had investigations for a stomach ulcer prior to enrolling on the scheme might well find that cover is excluded for any abdominal ailment. The actual extent of expense which will be reimbursed should be carefully checked. Such insurance counts as a benefit for tax purposes. (see Chapter 10, section 10.7).

Parking is often a problem in centrally situated offices and a parking space is a valuable provision. An alternative is for the office to provide season tickets to local car parks. Some offices provide only minimal parking for the principals and a couple of visitors and staff have to make their own arrangements. City centre parking on a daily basis is expensive. Some architectural practices have located in semi-rural areas to take advantage, among other things, of the easier parking.

## 4.9 Professional activities

All employees should be encouraged to take part in professional activities, but some firms are not supportive of such things and what should be regarded as commonplace has almost come to be regarded as an extra benefit. The degree of encouragement often depends upon the principal and his or her mood on a particular day. The particular economic climate is also of prime importance. The following may be said to fall into the category of professional activities of varying degrees of importance.

### *Continuing professional development*

Every employee should be allowed some time each year to go on courses either in or out of the office. Employers vary considerably regarding whether they are prepared to continue paying salary during days off for this purpose. The imposition of compulsory CPD by the RIBA on its members is particularly significant in this regard (see Chapter 2, section 2.13.3).

### *Examinations*

Students require time off to sit their Part 3 examinations. They also need time for study and attendance at short courses during the period immediately before examinations. Architect employers must allow attendance at examinations, they should allow attendance at appropriate short courses, but pure study time is probably best left to the student to organise.

### *Sabbaticals and study trips*

Sabbatical leave is recognised as an important constituent of some posts, particularly in education. It refreshes the mind and generates ideas. Above all, it plays an important part in the development of the employee. Study trips also assist the employee to develop a particular interest. It is rare for offices to allow such trips, except of course during the employee's own holiday period. Where an office does allow or even encourage such trips, the effect on salary payments should be clarified in advance.

### *Professional subscriptions*

It is relatively unusual for an employer to reimburse an employee's subscription to a professional body. This kind of provision is generally regarded as a benefit for architects of high status such as associates.

### *Journal subscriptions*

It is even rarer for an employer to reimburse professional journal subscriptions, but virtually all offices subscribe to a range of journals for the benefit of staff as a whole.

### *Attendance at branch meetings*

Architects should be as active in the local professional branch as their other commitments allow. It is a way of keeping up to date, not only in regard to

technical matters, but also as far as professional matters are concerned. Most branches have a series of sub-committees and they are usually desperate for members. It is a useful way of getting to know other architects in the area and of finding out what is happening in other offices. Most of these meetings take place in the evenings and, therefore, time off is not required. Where an employee is particularly active in the local branch, it makes sense for the office to allow time off to attend any special meetings during the day. Apart from other considerations, it is a useful piece of exposure for the practice and a means of keeping the practice tuned into what is happening elsewhere.

## 4.10 Expenses

Expenses are often linked to remuneration. That is wrong. Employees are not expected to make a profit out of expenses, but neither are they expected to make a loss. The intention should be that they are reimbursed, no more, no less.

The general law implies a term in every contract of employment that the employer will indemnify the employee against any expense reasonably incurred in the performance of their duties. Within that statement, however, there is considerable scope for differences in application. Thus, although there is not strictly any necessity for details of expenses to be set out in the contract of employment, it is worth doing so that both parties are perfectly clear at the outset. The key word is 'reasonable'. An expense will be reasonably incurred if authorised or, if prior authority is not possible, if it is justified by the circumstances. This latter category causes most trouble and there is much to be said for giving guidelines, if not in the contract itself, as soon as possible thereafter. The most common expense is travelling. The preferred mode of transport should be stipulated by the office: car, train, bus or taxi. Most probably, the type of transport authorised will depend upon the length of journey and whether or not a client is in the party. Where cars are involved, the mileage rate should be stated as should the class where rail travel is involved. Taxis are normally reserved for transport between airport or station and office or hotel and for emergencies.

The employee must be reimbursed if he or she incurs expense in entertaining clients. In some offices, only partners are permitted that sort of expense account. The company policy should be made clear.

The type of practice and the location of its work will determine how often an employee may be away from his or her office base on business. The rates of subsistence payments in such cases should be sufficient to ensure a fair standard of accommodation and meals.

It is essential for employees to properly record all expenses so that the practice can recover from the client if appropriate. However, the fact that an office cannot recover certain expenses from the client should not preclude payment to the employee. Expense repayments should be prompt. Some firms get the free use of money by making employees wait several weeks before payment. Expense repayments should ideally be *on demand* and there is no good reason why not *in advance* if the anticipated expense is likely to be more than the employee wishes or is able to advance from his or her own resources.

## 4.11 Leave

It used to be the case that there was no automatic right to paid holidays either in statute or at common law. An employee's holiday entitlement was, therefore, whatever was agreed with the employer. Legislation, however, now provides that all employees are entitled to 5.6 weeks paid leave every year. The employer can include statutory holidays as part of the statutory entitlement. Most workers who work 5 days a week must receive 28 days paid annual leave. This is calculated by multiplying the 5 days by 5.6.<sup>11</sup> Even part-time staff now have leave entitlement, it is in proportion to full time employees.

Leave must be included in the 'written statement' (see section 4.3), but it is preferable to have the details recorded in the employment contract. Holiday entitlement is often in excess of the minimum and commonly includes all public or bank holidays together with twenty or twenty-five additional days to be taken during the holiday year. This normally runs from January to December or from April to April (the financial year). It is generally stipulated that the holiday days must be taken within the holiday year to which they relate. Some firms allow a few days to be carried over to the next 'year' or give payment in lieu.

Payment in lieu of holidays is not generally encouraged by employers and it is not a statutory entitlement unless the employee is terminating employment, because it tends to encourage employees to forego holiday entitlement which every working person needs. It is better to allow a few days to overlap into the next period if pressure of work has prevented the taking of holidays at the appropriate time. Obviously, chaos would ensue if employees enjoyed untrammelled power to save their entitlement from one year to the next until perhaps they could take six months off to tour the world. Not that such an idea is bad in itself, but there are other ways of accomplishing that kind of ambition. The taking of holidays should be tempered by the need to keep the office running smoothly.

It is good practice for an office to have all the rules regarding holidays, as other things, clearly set out. There are few things worse than the office which is full of unwritten (and therefore, constantly changing) rules. Many offices close down completely from Christmas to New Year. Employers should make clear whether this period is included or additional to the annual leave. Additional days are often added onto the annual holiday to reward long service with a firm.

In addition to holidays, there are other kinds of leave which may affect the employee architect. They are:

- maternity leave
- paternity leave
- compassionate leave
- leave for public duties
- unpaid leave and sick leave.

### 4.11.1 Antenatal care and maternity leave

This is subject to statutory regulations which change from time to time. A woman expecting a baby is entitled to have time off to receive antenatal care.

This right does not depend upon the length of service or the number of hours worked. A certificate of pregnancy must be produced for all appointments after the first. The employee is entitled to be paid as usual. A pregnant woman is entitled to maternity leave. To qualify for maternity pay and the right to return to work:

- the reason for absence must be pregnancy
- there is no qualifying period of work
- not later than the beginning of the 15th week before her estimated week of childbirth she must inform the employer that she is pregnant and state the week the baby is expected to be born and when she wants her maternity leave to commence (she is not bound by this statement and can change her mind about the start date of her leave if she gives 28 days notice, unless it is not reasonably practicable)
- she must produce a medical certificate if required.

A woman is entitled to a total of twenty-six weeks maternity leave irrespective of length of service. Women who have completed 26 weeks of continuous service with the employer by the beginning of the 14th week before the estimated week of childbirth are entitled to take an additional 26 weeks maternity leave immediately after the end of the ordinary maternity leave. Statutory maternity pay is payable for up to 39 weeks. There is no longer any requirement to give notice of intention to return to work, unless the woman intends to return to work before the expiry of the full maternity leave. If that is the case, eight weeks notice of return is required. The employer is not entitled to request written notice of intention to return to work.<sup>12</sup>

#### 4.11.2 Paternity leave

To qualify for paternity leave the person:

- must expect to be responsible for the child's upbringing
- must be the biological father of the child or must be the husband or partner of the mother (leave may also be available to a female employee who is in a continuing relationship with the baby's mother)
- must have completed 26 weeks of continuous service with the employer by the beginning of the 14th week before the baby is due not later than the end of the 15th week before the expected week of childbirth, must inform the employer of an intention to take the leave, stating when the baby is due, whether one or two weeks leave is required and when the leave is required to commence
- must produce a self-certificate regarding eligibility on the employer's request.

The leave cannot be taken in odd days.<sup>13</sup> It must be taken within 56 days of the birth. It can be one or two consecutive weeks. The man is not entitled to normal pay, but he is entitled to statutory paternity pay.

### 4.11.3 Parental leave

The Employment Relations Act 1999 gives employees with one year's service the right to take up to 18 weeks unpaid parental leave up to the child's fifth birthday (18 weeks to the child's eighteenth birthday if the child is disabled). This applies to both natural and adoptive parents. In the case of adoption, leave may be taken during the five years following the adoption or up to when the child reaches the age of 18 whichever is the sooner. An employee may take up to 4 weeks in any one year. Leave must be in whole weeks. A part-time employee working two days a week would be entitled to a total of  $18 \times 2$  days.

### 4.11.4 Compassionate leave

An employee has the right to compassionate leave (time off for dependents) of a day or two to deal with various emergencies. However, there is no right to payment; it is entirely at the discretion of the employer. The right may be exercised when a dependent dies, falls seriously ill, suffers injury, gives birth or when care arrangements break down. The right may also be exercised in the case of a problem with a dependent child during school hours.

Many firms lay down useful guidelines in their employment contracts and they will allow paid leave for such things as death, serious illness or accident to a close relative. In general, such leave is dealt with on an ad hoc basis depending on the particular circumstances. Some employers lay down a maximum compassionate leave allowance in any year. Such a provision is comparatively rare because it can be considered by some employees to be an entitlement which must be taken before the end of the year on sometimes flimsy grounds. Most firms are generous once they know that the need is genuine.

### 4.11.5 Leave for public duties

Legislation stipulates that certain persons holding official posts must be allowed time off from work to attend to their duties. A common example of this is the trades union official who is entitled to a reasonable time off with pay to attend to union affairs. In most other cases, however, time off must be granted, but it need not be with pay. Common examples are JPs and members of statutory tribunals, members of the local authority or other authority, members of tribunals, members of juries and school governors. Although, because it is a statutory requirement, there is no necessity to include references to such leave in an employment contract, many firms include a statement on the position for the avoidance of doubt. Employers can be quite generous in continuing to pay employees, less only any attendance allowance, for carrying out official duties. This may also reflect the recognition that it does the firm no harm at all to have one or more of its employees in the public eye (see Chapter 9).

Specific trades union members are allowed to have reasonable leave for all trades union activities (except industrial action). Unlike trades union officials, however, ordinary members must take the time off without pay.



There is a further situation in which an employer must allow time off with pay. That is in the case of an employee whose post becomes redundant. Reasonable time off with pay must be allowed for the purpose of seeking alternative employment.

#### 4.11.6 Sick leave

Although the general law gives no right to sick pay, legislation fills the gap and most firms have quite detailed provisions of their own. If they are not in the contract of employment, they must be included in the written statement. The employer is obliged to pay statutory sick pay for a period of up to twenty-eight weeks of sickness in any three-year period. Certain procedures must be carried out and it is usual to make compliance with the procedures a condition of employment. This is because strict adherence to the procedure is necessary if the employer is to be able to reclaim any sick pay under the entitlement from the Department for Work and Pensions (DWP). There are some detailed conditions surrounding the entitlement to statutory sick pay which repay careful study.

An employer will often undertake to pay an additional amount to bring the Statutory Sick Pay up to an employee's usual salary. Such payment is sometimes linked to length of service and commonly consists of one or more months at full pay and an equal number of months at half pay. The more generous schemes provide for an employee to be paid six months half salary if a period of illness occurs after a qualifying period of two years. Less than two years' service gives rise to a reduced entitlement. This kind of provision is more likely in larger offices where the absence of a member of staff for a prolonged period is not likely to be more than inconvenient. The chances of several architects taking several months off for sickness at the same time are so unlikely as to be suspicious.

Subject to what may be included in the employment contract, there is nothing to prevent an employer terminating employment on the grounds of prolonged absence due to sickness. Some employers set out the relevant criteria in the employment contract, but it is rare. Where criteria are set out, they often include the right of the employer to ask for an independent medical examination of the employee after absence from work for a specified period or at the employer's discretion.

### 4.12 Disciplinary and grievance procedure

Every office must have a disciplinary and grievance procedure which must be listed in or referred to in the written statement to be provided within 13 weeks of becoming employed. ACAS has produced codes of practice which firms may adopt.<sup>14</sup> The general principles are:

- the procedure should be described in writing
- the person who may operate the procedure should be specified

- possible action should be specified
- except in the case of gross misconduct, a first offence should not incur dismissal
- the employee should be informed of the complaint and he or she is entitled to representation
- there should be a warning procedure including at least one oral and one written warning followed by a sanction less than dismissal before dismissal actually takes place
- there should be an appeal system.

The grievance procedure should state whom the employee should approach with a complaint and to whom appeal may be made.

The procedures may be contained in the office manual. Less commonly, they are spelled out in the employment contract. Some firms appear to be a trifle coy about this as if admitting that a procedure exists is tantamount to encouraging disputes.

### 4.13 Notice and dismissal

Every employee must be aware of the period of notice required to end the employment contract. If the period is less than the statutory minimum, the statutory minimum will apply. Most firms give reasonably detailed terms governing the termination of employment, but it should be noted that such terms cannot override statutory provisions. The statutory periods of notice which must be given by the employer range from one week if the employee has been continuously employed for more than one month, but less than two years and, thereafter, one week for every complete year worked up to a maximum of twelve weeks. The employee, on the other hand, has a statutory obligation to give one week's notice of termination. If the contract stipulates a greater period, the employee will be in breach of contract if he or she gives less.

There is confusion between unfair and wrongful dismissal. The terms are often used as if they were interchangeable. There are in fact four circumstances in which employment can be terminated:

- wrongful dismissal
- unfair dismissal
- fair dismissal
- redundancy.

Wrongful dismissal is a breach of contract, for example, if insufficient notice is given, i.e. procedural. Damages are available at common law. Unfair dismissal, however, is enshrined in statute and it refers to the situation when the correct notice is given, there is no breach of contract, but the reason for the dismissal is considered by statute to be unfair. In this case, the employee's remedies are prescribed by statute. Fair dismissal is when the correct notice is given, there is no other breach of contract and the reason for dismissal is considered to be

fair. Redundancy comes into a special category which lays down the particular statutory rights of the employee in such a situation. Dismissal will not be wrongful or unfair if the employee is guilty of gross misconduct or is unable to carry out the work properly. Some contracts attempt to set out precisely what may fall into these categories to avoid disputes later, but those contracts are rare in architectural practice.

#### 4.14 Spare time practice

Many architects engage in spare time practice during the period they are employees. It may be a means of obtaining extra cash or a means of starting up in practice with a client nucleus. The general law will imply that an employee may so practise unless there is a term in the contract expressly forbidding it.

The employer's attitude, however, may be less than enthusiastic, either directly forbidding spare time practice or hedging it around with so many rules that it is not a practical proposition. Reasonable conditions are:

- the employee must inform the employer in advance
- the employee must have professional indemnity insurance cover appropriate to the spare time work
- the clients must be informed that the employee is carrying out the work in a personal capacity
- the clients must not be existing clients of the firm
- private work and associated site visits and meetings must not be carried out in office hours or making use of office equipment or materials unless prior permission has been obtained
- the firm's interests must not be affected in any way.

Many firms encourage employees to introduce work into the firm. Again, it is preferable if the policy is clearly stated. Very small jobs may not be welcome. Employees introducing work will expect something on top of their usual salary for their trouble. Some employers reward the employee by a special payment related to the final profit on that particular project. Provided that the method of calculating the payment is known to all, it is a sensible way to proceed, because it associates the employees with the firm, it links the futures of firm and employee and paves the way for closer association in due time.

There is a great advantage to an employee in bringing all work into the office rather than carrying on spare time practice. The employee will have the protection of the office professional indemnity insurance rather than having to go to the expense of obtaining personal cover (see Chapter 10.5). Private work is carried out at the employee's risk. If the employee is negligent in his or her own work, the client will look to them for damages. Such employees should carry their own insurance to cover their spare time practice. The reality is that such cover may not be easily affordable. All may be well during the time the architect is employed and is not considered worth suing by clients. The situation may be different if the employee later sets up in profitable practice and earlier negligence results in a claim for significant damages.

There are two matters which are closely associated with spare time practice: copyright and confidential information. In general, copyright in work prepared by an employee belongs to an employer.<sup>15</sup> Employees should be aware that permission must be obtained from an employer to produce copies of their drawings to take to interview for the purpose of securing other employment. Employees, of course, retain copyright in work which they produce during their spare time.

Confidentiality is a difficult area. Information which an employee may gain in employment was considered in *Faccenda Chicken Ltd v. Fowler* [1986]<sup>16</sup> to fall into three categories:

- information well known to people in the industry
- confidential information which becomes part of the employee's own skill and knowledge
- information of such confidentiality that it cannot be used lawfully to benefit anyone other than the employer.

Information in the third category can never be divulged by an employee even after leaving the employment. The second category of information cannot be protected when an employee leaves, but to reveal such information while still in the original employment would be a gross breach of trust and entitles the employer to damages. The problem lies in correctly identifying what information falls into which categories. It is probably for this reason that some firms purport to state the type of information which is considered to be highly confidential in the employment contract. An employee, of course, will be bound by such terms.

Some architects in employment, usually those with considerable responsibility and possibly access to information regarded by the practice as highly confidential, may have a restraint clause in their contracts. Such a term may try to restrict an employee setting up in practice within a certain distance of the previous employer for a period of time. Terms in contracts which attempt to restrict future employment are basically void at common law as being in restraint of trade. But such terms may be valid and enforceable if:

- they are reasonable between the parties
  - (a) the restriction must protect the employer's legally recognised interest: protection of trade secrets; and/or protection of business connections
  - (b) the restriction must be no greater than necessary to so protect: in respect of the period of restriction; in respect of the geographical restriction
- they are reasonable in the public interest, for example, they do not deprive the public of special skills which the employee may possess.

Where a restriction is placed on ex-partners, the same principles generally apply, but it is considered reasonable to enforce stricter time periods and geographical areas.

## 4.15 Monitoring of telephone calls and e-mails

In general, interception is unlawful and possibly criminal if done without the consent of both sender and receiver of the communication. However, there are wide exceptions set out in the legislation. An employer may intercept and monitor calls and e-mails made on equipment belonging to the business in relation to that business. There is substantial legislation which affects the situation and about which architects, whether acting as employers or employees, should be familiar.<sup>17</sup>

There are many reasons why an employer may wish to monitor calls made by employees. For example, the employer may wish to ensure that an employee is not using business time and telephones to make private calls. The policy of a practice with regard to private calls should be clearly spelt out to all employees. It may be that an employee is away sick or on leave and the employer wishes to check that there are no important e-mails or voicemails lying unanswered. All employees should be notified in advance if telephone and e-mail monitoring is proposed. Such notification is best done in the staff handbook, if provided, or otherwise in a written note. The Regulations set out specific circumstances where interception of communications by an employer is lawful:

- to establish the existence of facts
- to ascertain compliance with regulatory practices and procedures
- to ascertain or demonstrate employee standards
- in the interests of national security
- for the purpose of preventing or detecting crime
- for the purpose of detecting or investigation unauthorised use of the telecommunication system
- to ensure the effective operation, or as an inherent part, of the system
- to determine whether communications are relevant to the practice
- for the purpose of monitoring communications with confidential anonymous counselling or support services.

The Regulations prescribe various conditions which must be satisfied. Any employer contemplating intercepting and monitoring telephone or e-mail communications should seek legal advice first in relation to their particular circumstances.

## 4.16 Discrimination

The Equality Act 2010 consolidated and replaced the previous legislation concerning discrimination.<sup>18</sup> The Act introduces something it refers to as 'Protected Characteristics'. They are:

- age
- disability
- gender reassignment
- race

- religion or belief
- sex
- sexual orientation
- marriage and civil partnership
- pregnancy and maternity.

Regulations against age discrimination affect both old and young. A practice must not have any policies or rules which have the effect of disadvantaging persons of any age. Advertisements which state 'Young, ambitious architect required' or 'A mature and experienced professional is sought' are equally unlawful. There are a number of sensible exceptions including where a particular age group is most appropriate for certain kinds of employment or in relation to redundancy schemes.

It is unlawful to discriminate against disabled people in employment situations. The Act applies to both mental and physical disablement and gives detailed guidance about what constitutes disability for the purposes of the Act. Discrimination is lawful only in very specific circumstances, for example to safeguard health and safety.

The Act applies in cases of discrimination against transsexuals provided that the individual 'intends to undergo, is undergoing or has undergone gender reassignment.' The requirement to be under medical supervision before the transsexual can be protected has been removed.

Discrimination against a person on the grounds of race, colour or nationality or ethnic or national origins is also outlawed. Indirect discrimination is also forbidden and the Act applies equally to fellow employees. Exceptions to the provisions are allowed, for example, if a particular racial group would have difficulty in doing certain work or if certain work could only be performed by a certain group. Stirring up hatred against an individual on race or religious grounds is a criminal offence.<sup>19</sup>

The Act defines religion as any religion or lack of religion. Belief is any religious or philosophical belief or lack of belief. There could be some dispute about whether certain activities amount to a religion or belief under the Act.

An employer may not discriminate against a person on the grounds of that person's sex, i.e. whether man or woman. A woman may not be treated less favourably simply because of her sex.<sup>20</sup> Pay and conditions of service are covered. The Act of course does not apply where the reason for differences in pay are due to such things as differing job responsibilities. The Act has particular application to the recruitment of staff and to any benefits. Indirect discrimination is also unlawful, for example if criteria are laid down which favours one sex. An exception is made in the case of occupations where decency or physiology dictates that only a man or a woman can do the work.

The Act permits freedom in the expression of a person's sexual orientation (to an extent equal to that of a heterosexual) in employment. This is similar to, but not the same as, the position in regard to sex and race discrimination.

Married people or people in civil partnerships are protected against discrimination.

Women are protected by the Act against discrimination due to pregnancy or other reasons connected with maternity for the period of the pregnancy and for the period of any statutory leave.

It is automatically unfair to dismiss a worker for joining, being a member of, refusing to join, or refusing to remain a member of a trades union.<sup>21</sup>

## References and notes

1. The Equality Act 2010 came into force on 1 October 2010 and replaced the various existing acts and regulations.
2. *Spring v. Guardian Assurance plc and Others* [1994] 3 All ER 129.
3. *Ferguson v. John Dawson* [1976] 1 WLR 1213.
4. The Working Time Regulations 1998 as amended on 1 August 2003.
5. *Sim v. Rotherham MBC* [1986] IRLR 391.
6. RIBA, *The Architect and His Office* (1962), RIBA Publishing Ltd.
7. Based on the European Union Working Time Directive, the Young Workers' Directive and health and safety measures. The Regulations have been amended or associated legislation has been introduced in 1999 (twice), 2000, 2001, 2002 (twice), 2003 (four times), 2004 (three times), 2005 (three times), 2006 (six times), 2007 (six times), 2008 (twice), 2009 (three times), 2010, 2012 (twice) and 2013.
8. Children and Families Act 2014.
9. This can be viewed on [www.gov.uk/flexible-working/overview](http://www.gov.uk/flexible-working/overview)
10. Employment Act 1982.
11. Working Time (Amendment) Regulations 2007.
12. Employment Act 2002. Further information can be obtained from [www.gov.uk](http://www.gov.uk)
13. Employment Act 2002. Further information can be obtained from [www.gov.uk](http://www.gov.uk)
14. The Code is issued under S. 199 of the Trades Union and Labour Relations (Consolidation) Act 1992. It was effective from 6 April 2009.
15. Copyright Designs and Patents Act 1988.
16. [1986] 1 All ER 617.
17. Data Protection Act 1998, Human Rights Act 1998, Telecommunications (Data Protection and Privacy) Regulations 1999, Regulation of Investigatory Powers Act 2000, Telecommunications (Lawful Business Practice) (Interception of Communications) Regulations 2000.
18. The Equality Act 2010 revokes the Equal Pay Act 1970, the Sex Discrimination Acts 1975 and 1986, the Race Relations Act 1976 and the Disability Discrimination Act 1995. It also replaces a great deal of equality legislation contained in other acts and secondary legislation.
19. Race and Religious Hatred Act 2006.
20. Sex Discrimination Act 1975.
21. S. 137, Trade Union and Labour Relations (Consolidation) Act 1992.

# 5 Types of Practice

## 5.1 Sole principal

When a person engages in business for profit and does not create a partnership or incorporate as a company then he or she operates as a sole principal. The business and the individual are inseparable; there is no legal distinction between the individual and the business. The assets of the individual are the assets of the business. The individual is personally liable for the obligations and liabilities (e.g. debts) of the business.

Other professions as well as architects utilise this means of setting up in business, e.g. doctors, lawyers, accountants and dentists. There is nothing to prevent the sole principal from engaging employees. Practising as a sole principal does not mean you are working alone, it simply means that you are solely responsible for the business. The employees could be both secretarial support and technical staff, e.g. another architect.

A sole principal may use their name to trade or they may use a business or a 'trading' name. Business names must not include 'limited', 'Ltd', 'limited liability partnership', 'LLP', 'public limited company' or 'plc' or be the same as an existing trade mark. As the trading or business name is distinct from the principal's legal name they should include their own name and business name on all invoices and letters.

Sole principals like partnerships are not required by law to produce annual accounts or to file accounts for inspection. However, annual accounts will be necessary for personal tax returns and possibly vat.

Choosing to start a business as a sole principal may look daunting and carry a significant degree of risk but it does have certain advantages. The principal can set their own working hours and schedules as well as conducting affairs as they like. They maintain full control of the profits of the practice. However, there are disadvantages. There is no set salary for the principal and at times there may be a lack of cover due to an unexpected emergency and illness. It may prove difficult when the principal wants to go on holiday and there are looming deadlines or they have a project on site.

As the business grows, it may be beneficial to change the structure to a partnership or to a limited company. Spreading the workload and removing some of the risk (setting up in practice is considered in more detail in Chapter 6).



## 5.2 Partnerships

### 5.2.1 Partnership

Statistics, taken in 1989,<sup>1</sup> suggested that nearly 40% of architectural practices were in the form of partnerships. Since then the number of partnerships has significantly reduced. By 2013, the figure had reduced to 9%,<sup>2</sup> obviously as a result of companies sensibly opting for limited liability (see sections 5.2.3 and 5.3.2). Partnership is defined by the Partnership Act 1890 as ‘the relationship which subsists between two or more persons carrying on business in common with a view to profit’. It is important to remember that simply sharing accommodation or staff with another on financial terms is not ‘carrying on business in common’. If the courts have to decide whether in any particular case a partnership exists, a crucial factor is whether or not the parties share the profits or losses. As a general principle, if they do, it is a partnership.

Partners are jointly and severally liable for the acts of the partnership. Thus, they are liable both as a group and individually and one partner is liable for the act of his or her partners, provided only that the act was carried out in the course of the partnership business. Normally, in the case of partnership contract debts such as the purchase of IT equipment, the partners are only jointly liable.

Actions against architects are not uncommon. A party seeking damages can pursue all the partners or individual partners in turn or any combination of partners until the damages are recovered in full. This can be disastrous to both the partnership and to the individual partner, because the sums of money involved can be quite beyond the means of a private person and, in the absence of adequate insurance, bankruptcy may be the outcome. In the case of a simple contract debt, the party requiring payment is only entitled to choose one of the options. Invariably, a party seeking recovery of a debt or of damages against a partnership will take action against all the partners together.

A partner is responsible to the full extent of his or her personal wealth for the acts of the partnership. That is irrespective of a partner’s particular partnership share. To take an example: if partner A has a one-third share and partner B has a two-thirds share and partner B is not available to pay the appropriate share of a debt, partner A will be obliged to pay the whole amount. If the firm is worth less than the amount of the debt, partner A will have to make up the difference. If partner B subsequently becomes available, of course, partner A can sue for the appropriate amount to cover partner B’s share. If all partners are available to pay, they will normally contribute according to the proportion of their share holding (see also Chapter 10, section 10.5).

A partnership usually has a written partnership agreement. Although it is not strictly necessary, it can save disputes about trivial things getting out of hand. Written evidence of the agreement is not necessary in order to indicate the existence of a partnership to third parties (who would not know, in any case, that a written agreement existed). It can be seen from the firm’s notepaper, bearing the name of the firm and probably the names of the individual partners. As far as third parties are concerned, it is usually sufficient if the architect either states

that he or she is a partner (whether or not this is true) or acts as though that was the case.<sup>3</sup>

The advantages of a partnership are as follows.

- When the business expands beyond a certain point (which will vary depending on the architect concerned), a sole principal will not have full knowledge of every project nor the ability to give proper supervision. A choice must be made, either to have a very experienced architect at high salary to help with the administration or to have a partner to share the burden, not necessarily on equal terms, but on terms satisfactory to both parties. A partner will have a real interest in the success of the business and an incentive to contribute to the utmost.
- Economy in expenditure can be effected by the pooling of accommodation, equipment, or staff by partners. Whereas one principal might not have enough work to employ three assistants, two jointly might be able to do so. The two partners and staff of three might be accommodated in two rooms, whereas as separate businesses they would likely need four. Of course, both staff and accommodation can be shared without any partnership existing. Each principal would have his or her own work, the time of staff being recorded and their salaries allocated accordingly (see section 5.5).
- Two or more partners should be able to generate more ideas and attract more work together than the sum of such ideas and work if operating separately.
- There may be more capital available for expansion.
- A partner establishes a goodwill value to a business (more about goodwill later). If an architect is in practice alone, there may be virtually no goodwill value, because if such an architect dies or retires, existing clients are little more likely to continue with a totally new architect who may take over the business than they are to go to another architect's practice. In both cases they are venturing into completely new territory. A new and younger partner, however, will be able to maintain a continuity of personnel and establish a relationship, even if not primary, with all the firm's clients.

Goodwill is difficult to define. It is the benefit which a practice acquires by virtue of its prestige and the fact that clients return for further commissions. A partnership should not be thought of as stationary. At any time there may be partners leaving or joining and the workload will vary according to the economic climate. All this has a bearing on the goodwill. It used to be the custom for a new partner to have to buy a share in the partnership by bringing in a large capital sum. It was known as 'buying a share of the goodwill'. For example, if there was a partnership consisting of two partners A with a 60% share and B with a 40% share and a new partner C joined. C might buy 20% of the goodwill: 10% from partner A and 10% from partner B. Therefore, the new partnership would be A with 50%, B with 30% and C with 20%. Figure 5.1 shows one method of calculation.

If a new partner could not afford to put up the initial capital sum or obtain a suitable bank loan, it was sometimes agreed that payment could be made on an instalment basis – a certain fixed sum every year for a given period. As a

Profits	Year 1	£60,000
	Year 2	£95,000
	Year 3	<u>£115,000</u>
Total		£270,000
Average: $\frac{270,000}{3}$	=	£90,000
Value of goodwill: £90,000 × 2*	=	£180,000
Existing partners' share:	A at 60%	= £108,000
	B at 40%	= £72,000
New partner buys, say, 20% share at cost of $\frac{20 \times 180,000}{100}$	=	£36,000

A and B might sell 10% each, thus receiving £18,000 each.  
If the following years' profits were £100,000, the partners would share as follows:

A at 50%	=	£50,000
B at 30%	=	£30,000
C at 20%	=	£20,000 (new partner)

\* The multiplying factor is somewhat arbitrary, but it is not less than 1 and seldom more than 2.

**Fig. 5.1** Buying a share of the goodwill.

result, many partners lived in near poverty for years until they paid off the capital sum required and they only attained a comfortable income late in life. It is now becoming common for goodwill to be given a nil value. More emphasis is placed on attracting a person with the right professional attributes into a partnership. The chances of doing this are obviously increased if the incoming partner is not required to contribute a substantial amount to the existing partners. The new partner is given an appropriate share in the partnership and the actual income which the share will generate will clearly bear a relationship to the total fee income over the year.

The new partner, in return, will be expected to leave a proportion of earnings in the practice to act as working capital. It has to be said that existing partners who may have been obliged to purchase shares in the partnership are not always receptive to this approach, because it denies them the chance to sell their own shares to a new partner. Against this must be weighed the consideration that new partners are the lifeblood of any practice and without them income can decrease and existing partners' shares may decrease in value. In essence, the modern approach is a change from looking at capital gains to increases in annual income.

It is obviously advantageous if partners have similar views regarding the general philosophy of a partnership, but there is merit in healthy differences regarding the methods of attaining desired ends. Partners should have the utmost trust

and confidence in one another. This suggests that they should know one another quite well before the final step of partnership is taken. It is, therefore, most common for a firm to take its new partners from its own staff, whose capabilities and suitabilities are known and have been judged over a lengthy period.

If a new partner is introduced to facilitate a continuance of the business, age is a factor which must be taken into consideration. 'A' (aged fifty) might take a partner aged, say, thirty-five. In ten or fifteen years' time, 'A' retires and the new partner continues the business, looking for a successor and so on. Life, and partnership, never works out quite so neatly, but that is the theory.

It is usual that the rights and duties of each partner are set out in the form of a legal agreement drafted by a legal adviser experienced in that kind of work. Although the agreement (which will be in the form of a deed) can be as long or as short as the partners wish, it is advisable to include any matter which might be anticipated can cause problems. Typical heads of terms (and brief comments) include the following.

- *Name of the firm.* This must not be objectionable or misleading, but it may include the names of former, but now departed, partners.<sup>4</sup>
- *Place of business.* This will often state that it is to be as agreed from time to time, but it can be useful to insert the address of the offices at the time the agreement is signed and also whether the property is owned by the partners in equal shares or in proportion to their partnership shares, whether it is leasehold and any other significant points.
- *Date of commencement.* The date of commencement of the partnership.
- *Value of goodwill.* This will be stated or may be given as 'nil'.
- *Amount of capital provided by each partner.* This is the capital that each partner has contributed to the firm at the date of the agreement in order to provide working capital and each partner has the right to take out that capital either on leaving or before that time. Usually, there are detailed provisions about the withdrawal of capital introduced.
- *Treatment of work in progress.* This can be an important matter in connection with taxation and an accountant's advice is essential.
- *Duties of partners.* This sets out the duties of partners which are fairly standard, but there may be particular duties or exclusions which should be stated here for the avoidance of disputes in the future.
- *Proportions of profits or losses between each partner.* Essentially, the shareholding at the date of the agreement. This, of course, may change during the period of the partnership if one or more partners seek to increase or reduce their shareholdings.
- *Amount of cash drawings per partner per month.* This provides cash flow for individual partners and it is usually stated as a top limit and the partners agree on the drawings from time to time. Of course it is open to the partners to agree a change in the top limit, but if there is no agreement to change, it remains as stated in the agreement.
- *Banking arrangements.* The bank or banks used by the partnership, cheque mandates, etc.

- *Partnership accountants.* Not essential to name a firm, but sometimes useful to state a name in case there is no agreement later.
- *Partnership solicitors.* Not essential to name a firm, but sometimes useful to state a name in case there is no agreement later.
- *Termination provisions.* Any special provisions should be set out including the mode and time of payment of any money due, the length of the partnership, etc.
- *Outgoing partners.* Normally, the resignation or departure of a partner will terminate the partnership. If that is not desired, provisions should be set out as well as the mode and time of payment of money due to the outgoing partner.
- *Power of attorney.* Circumstances in which exercised and by whom.
- *Partner insurance.* Against financial liabilities of the other partners after the death of any partner. It can be a heavy burden on a partnership in the case of a sudden death and demands for repayment of capital and all other money due.
- *Professional indemnity insurance and any other professional requirements.* There must be provision for the partnership to obtain and maintain this cover and cover retired partners.
- *Partnership benefits.* This should list all the benefits which the partnership is to provide for the partners, e.g. cars, telephones, travel, health insurance.
- *Arbitration of disputes.* This private system of dispute resolution is better than arguing in open court to the delight of the partnership's competitors and the dismay of its clients.

In fixing the amount of drawings, it must be remembered that the firm is assessed income tax on the basis of its profits. The cash drawings must allow for this and it is good practice for the partners to set aside an appropriate amount for tax every month as they make drawings. The advice of the firm's accountants should be sought on this and other aspects of the agreement. Unless the agreement specifies a period of notice, a partnership agreement may be terminated by any partner simply by giving notice to that effect. All partnerships are terminated by death and by the taking of a new partner or the retirement of an old partner unless the partnership agreement expressly stipulates to the contrary. This is one of the essential differences between a partnership and forms of corporate body which continue although the persons constituting the membership may change.

Termination of a partnership does not remove liability from any of the partners and it is usual for partnerships to maintain professional indemnity insurance in respect of retired members. Problems can arise if all the partners split up and there is no continuing partnership to carry on insurance premium payments. In these circumstances, some insurers may offer special deals (see Chapter 10, section 10.5).

Many practices use the designation *Associate* to signify that the particular member of staff has attained a status which is higher than other members of staff, but short of partnership. Often, it is an indication that the person concerned will eventually become a partner. Although it is usual to list the names

of associates on the letterhead, it is good practice to separate the associates from the partners in some distinct form so that there is no doubt in the public mind that an associate is not a partner. It is an important safeguard as far as the associate is concerned who otherwise could be liable as a partner if a court decided that the associate had held him or herself out as such.

Associates are normally appointed by letter, but some firms like to give the arrangement some additional solemnity by having a deed prepared. Associates do not have any share in the partnership profits except they may have a share in a bonus scheme like other members of staff and they often receive extra benefits which may take the form of a better than average car, health care package and so on.

Salaried partners suffer the worst of both worlds. They can be considered to be full partners if there is a question of liability and certainly in the eyes of the public it is likely that such would be the case. On the other hand, they normally receive a very small share in the profits on top of their salary. It is a position to be avoided, because they are often undifferentiated from other partners on the letterhead and, therefore, they are just as likely to be the subject of legal action. Although the partnership agreement may contain an indemnity for all salaried partners from the full partners, the indemnity will be of no avail if there is a large claim which devours the assets of the firm and the individual partners and the professional indemnity insurance does not cover it.

Sometimes, a person is designated *consultant* on the letterhead. The reality is often that the architect is a retired partner of long standing who is kept on the letterhead to reassure clients that there is continuity in the partnership. The consultant, more often than not, will be paid a small retainer. A consultant, in these terms, may be called in by the remaining partners occasionally in order to contribute a recollection of an old project or perhaps to deal with some particular small matter which can be kept within precise boundaries.

### 5.2.2 Limited partnership

In this form of partnership, at least one partner must be responsible for all the liabilities of the partnership. In an architectural practice, this partner must be an architect. There can be one or more additional partners who contribute capital to the partnership and whose liability is limited to the amount of capital they contribute, provided that they have no part in the management of the partnership. Such partnerships must be registered under the Limited Partnership Act 1907.

This is a comparatively little used form of partnership whose chief advantage appears to be the possibility of using funds injected by the limited partners for which they receive appropriate shares in the profit.

### 5.2.3 Limited liability partnerships

The Limited Liability Partnership Act 2000 came into force in the UK, except Northern Ireland on 6 April 2001. Practices in Northern Ireland were able to operate through the medium of a limited liability partnership (LLP) when the

Limited Liability Partnerships Act (Northern Ireland) 2002 came into force on 13 September 2004. This is suitable for professional firms that wish to act and generally organise themselves flexibly and have the tax status of partnerships, but without the burden of joint and several liability. Therefore, the new LLP combines certain crucial structural features of both a company and a partnership. The general intention being that the LLP will have the internal flexibility of a partnership but have external obligations equivalent to those of a limited company. In common with partnerships, the members of an LLP may adopt whatever form of internal organisation they choose. However, they are similar to limited companies in that the members' liability for the debts of the business will be limited to their stakes in it and, therefore, they will be required regularly to publish information about the business and its finances (including the disclosure of the amount of profit attributable to the member with the largest share of the profits). Also, they will be subject to insolvency requirements broadly equivalent in effect to those that apply to companies. Ten percent of all architects' practices are now LLPs.

An LLP has a separate legal personality from its members. In this it is very like a limited company. Like a limited company, it must file returns with the registrar at Companies House. The Partnership law does not apply to LLPs, but substantial regulations have been published which stipulate the extent to which the Companies Acts apply to LLPs.<sup>5</sup>

Other features of LLPs are as follows.

- Any member may cease membership on reasonable notice, but is still regarded as a member by the public unless proper notice has been given to the registrar or the public has notice of the cessation of membership.
- Incorporation documents must state the company name, the registered office, names and addresses of members and specify the designated members (of which there must be at least two).
- Designated members are responsible for administrative duties of the LLP and for filing accounts with the registrar.
- The name of the company must end with LLP or llp.

## 5.3 Incorporation

### 5.3.1 Unlimited liability company

This kind of company understandably finds little favour with architects' practices; very few firms are set up in this form.<sup>6</sup> The principal advantages are that a director of such a company is free from liability after a period of twelve months has expired from leaving the company and there is no requirement for filing reports with the companies registrar. There are, however, some formalities. An unlimited company is one stage removed from a partnership. The members of such a company are liable to contribute in the proportion of their share holdings if the company's assets are not sufficient to pay debts. There may be a maximum of 50 members.

### 5.3.2 Private limited liability company

Limited liability is possessed by a company where the liability of the members is limited to the nominal value of the shareholding, hence the name. If the company is faced with a debt which is greater than the company's assets, the company can be wound up and the shareholders have no further liability. The situation may sound attractive to architects as a protection from liability and indeed that is probably the chief reason for the growth in limited liability companies in architectural practice. In 1989, limited liability companies formed about 7.5% of all practices. In 2013, this figure was 60% with a further 10% operating as LLPs<sup>7</sup> (see section 5.2.3). Although there was no legal reason why architects should not form limited liability companies, the idea was frowned upon by both the Architects Registration Council of the United Kingdom (ARCUK) and RIBA until 1981. Trading with limited liability is not without its problems, of course, and the Insolvency Act 1986 provides severe penalties for directors who continue to trade whilst insolvent. The court has power to order them to contribute to the company's debts out of personal assets. There are other measures the court may order against culpable directors for example after liquidation, a former director may not be involved in the formation of a company with a similar name for a period of five years. A person may also be disqualified from acting as a director of any company for between 2 and 15 years.<sup>8</sup>

The principal difference between a limited company and a partnership is that when the shareholders (members) form a company, they are creating a separate legal entity. If the shareholders are also directors, they are employees of the company. Directors are paid a salary by the company and if the year end shows a profit, a dividend may be declared and shareholders share in the dividend according to the amount of their shareholding. In the case of architectural practices formed as limited companies, it is likely that the directors will also be the shareholders holding a similar percentage of the shares as they would have done in the case of a partnership. It is quite possible, however, that some shares may be held by persons not employed by the company or for some directors not to hold shares at all.

The advantages of a limited liability company are as follows.

- Except in exceptional circumstances, the directors are not personally liable for the debts of the company.<sup>9</sup> The legal entity of the company is separate from the directors and the individual shareholders.
- It is more flexible than the partnership, because trusted members of staff can be promoted to help run the company as a director on a salary without giving them a part of the company, i.e. shares.
- Directors can be removed with far less difficulty than is the case with a partner.
- The company does not dissolve when a director leaves or when shares change hands. Therefore, there are less complex legalities involved. The company simply continues as normal.
- Companies attract capital more easily than do partnerships. This is important if expansion is planned. This is because other firms are used to doing business with companies.



- Companies, but not partnerships, are internationally recognised and, therefore, in a better position than partnerships to develop business overseas.

There are disadvantages.

- A company is governed by the Companies Act 2006 which replaces most of the Companies Acts 1985 and 1989. A company comes into existence only after registration by the Registrar of Companies. From that time, it can act only in accordance with the Acts. If the company carries out transactions before registration, they may be treated as the transactions of a partnership.
- Every company must file accounts with the Registrar where they are open to public inspection whereas partnership accounts are private to the partners.
- A company registered under the pre-2006 Companies Acts may have an 'objects clause' in the Articles of Association of the company. This clause sets out the purpose of the company and what its powers are. A company which attempts to do something which is not included in the clause is said to be acting *ultra vires* (i.e. beyond its powers). Such actions can lead to many problems, for the company itself and for those who trade with it. The Companies Act 2006 now stipulates that unless a company's articles specifically restrict the objects of the company, its objects are unrestricted. Companies registered under the earlier Acts may amend their object clause by following a prescribed procedure.
- There are certain formalities associated with the running of a company.
- The dissolution of a partnership can be a fairly simple, though traumatic, process, but a company must be wound up. This can take a long time.
- No discretion can be exercised over the apportionment of dividends. They must be divided strictly in accordance with the shareholding.
- In general, a director's tax position is not as good as that of a partner's, because a director normally pays tax on the PAYE system and there is no opportunity to take the benefit of some advantageous 'self-employed' tax concessions. This situation, however, is subject to change depending on government policy.
- A client may dislike doing business with architects practising as a limited company (even though the client may also be a limited liability company) because even now it is considered by some to be unprofessional.

Although the shareholders together wield power over the way a company is run and they have the power to dismiss a director, they must act within the Companies Acts and the company's objects clause and a single shareholder has no power to bind the others by any of his or her actions. A company can be tailor made by a solicitor quite inexpensively. It is even cheaper to buy a company 'off the shelf'. Such companies are ready formed. All the paper work is complete and they generally have a code name. The objects clauses are drafted for various purposes in fairly broad terms and after purchase it is a relatively simple matter to change the name. Some key points in relation to private limited companies are as follows.

- They must have a minimum of one director (public companies must have two).

- A private limited company need not have a company secretary although it is useful to have one.
- A private company cannot offer shares to the public.
- There is no limit on the number of members.
- There must be a Memorandum subscribed to by at least one person taking at least one share. Each member must take at least one share each.
- The Memorandum must be in the prescribed form.
- The name must have 'Limited' as the last word.
- The name must appear in full on business correspondence, notices, cheques, invoices, receipts and websites.
- The name cannot be registered if there is another company of the same name on the index, if the name suggests a connection with government or local authorities, if it is offensive or if it would be a criminal offence.
- Business correspondence, including e-mail if its paper equivalent would be caught, must also include the registered number, place of registration and registered office address.
- There must be Articles of Association signed by the subscribers.
- The company can use another name with which to trade, provided that the company name also appears on correspondence.
- A register of directors must be kept and the registrar must be notified of changes.
- There must be a qualified independent auditor.

### 5.3.3 Public company

A more recent development has been for some architectural practices to carry on its business as public companies and, indeed, a few large practices have already taken this route. It is important, of course, that control of the company remains in the hands of architects. That is something which is much more difficult to ensure in the case of a public rather than a private company. The essential difference between private and public companies is that members of the public can buy and sell the shares of the latter. In theory, it is possible for a publicly quoted company to be completely controlled by people who are not architects. Since, however, that would fall foul of the Architects Registration Board (ARB) which insists that an architectural practice should be controlled by architects, such a move would be self-defeating. It is clearly a valuable asset for a company to be able to describe itself as 'Architects'. Any kind of agreement to restrict the number of shares on sale to the public (e.g. keeping 51% for architect directors) would be frowned upon by the Council of the Stock Exchange.

Members of the public who buy shares receive a share of the profits each year depending on the dividend announced. Therefore, trading as a public company is a useful way of generating finance for expansion. The regulations with regard to public companies are more stringent than is the case with private companies. For example, the nominal value of its allotted share capital must be not less than £50,000. In addition, a public company must put the status or the letters 'PLC' after its name. A public company is normally formed after

a period as a private limited company. Floating a company is a specialised operation. It is not essential in order to be a public company, but it is a means of attracting more investors. In order to achieve a successful flotation, the prospective shareholders must be convinced that the company has a good chance of giving a worthwhile return on money invested. Some kind of track record is essential.

## 5.4 Co-operative

Although some practices operate as co-operatives, the members must have particular views in common. To operate in this way could be said to be making a social statement as much as acting as a business. Control is on the basis of one member equals one vote. Responsibility and rewards are shared. If it is intended to register under the Industrial and Provident Societies Acts<sup>10</sup> a co-operative must have a minimum of three members. If there are less than three members, they must practise as a partnership or a limited or unlimited company. If the co-operative faces large debts to the extent that liquidation is necessary, the liability of individual members is confined to the amount of their share holdings. In April 2014, the amount of shareholding allowed to any member increased to £100,000.<sup>11</sup>

## 5.5 Group practice

This is a comparatively recent development. The idea is that independent firms of architects associate themselves to mutual benefit, but they do not share profits neither do they have joint responsibility to their clients. They may share staff and offices, telephones and other overheads, dividing the expenses on an agreed basis. The firms may well be situated in different localities, indeed this is often an advantage in easing the pressure by sharing the load. If one practice is badly affected by recession, another in the group may be able to share out tasks. It is a very worthwhile form of practice, provided that all parties are committed to the same ends. There are seven common types of group practice.

- *Group association*: a loose association of firms for the purpose of sharing experience and knowledge. Each firm has a clearly separate identity as far as clients are concerned.
- *Shared facilities*: No real association other than sharing accommodation, equipment and, occasionally, staff.
- *Single project group practice*: Usually formed for the purpose of carrying out a specific commission, because it is too large for any of the firms to tackle it individually. When the purpose of the association has been accomplished, it automatically comes to an end.
- *Group coordinating firm*: Another way of carrying out a large project is for one of the firms involved to act as coordinator and the other firms to

take responsibility for specific parts of the scheme. Obviously, this kind of arrangement can only work for large projects where the parts can easily be identified. The coordinating firm normally takes overall responsibility so far as the client is concerned.

- *Group partnership*: a partnership composed of individual firms which continue to practise separately, but which combine on certain large or complex projects on a regular basis.

The distribution of liabilities can be extremely complex in any kind of group practice. It needs very little imagination to see that some forms are more risky than others. In any project the final stages use less architectural staff and whatever arrangement is contemplated must be carefully planned so all parties know the extent to which they are likely to be involved and, more important, what will happen if the forecast involvement has to change due to unforeseen circumstances. Whenever group practice is contemplated, it is essential to take proper advice from someone experienced and knowledgeable in the pitfalls to be avoided.

Among matters to be considered are:

- whether a special vehicle should be set up such as an LLP, a partnership or a limited company
- whether there is likely to be a problem in the future if one of the parties wishes to end the arrangement, e.g. lease on property
- whether a separate PI insurance policy should be maintained – at least current insurers will have to be informed
- whether separate financial provision is required and whether legal formalities such as novation will be needed if existing clients will be affected by the association.

Perhaps the most difficult issue is commitment. The loyalties of the participants will firstly be with their respective firms. However, making a new venture work usually depends on all parties being committed one hundred per cent. The extent to which these and other matters become crucial will depend on the form of association required.

## 5.6 Developer/architect/contractor

Subject to the provisions of the codes of conduct (ARB's Standards of Conduct and Practice and, if the architect is a member of the RIBA, Code of Professional Conduct: see Chapter 2, sections 2.10 and 2.11) an architect can practise in any combination of the above. An architect may even act as an estate agent. It is to be welcomed as giving the architect greater flexibility, but an architect choosing to practise simultaneously in two or more of these activities must take great care that his or her professional integrity is preserved. It is important that a client properly understands that, for example, such an architect cannot act as a contractor for a development and at the same time give truly independent advice on that same development as the client's architect.

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## References and notes

1. 'Census of Private Architectural Practices 1988' (1989), RIBA Market Research Unit.
2. Information kindly provided by the Royal Institute of British Architects who are the copyright holders.
3. S. 14 of the Partnership Act 1980.
4. See the Business Names Act 1985, amendments and subsidiary regulations for further information.
5. See The Limited Liability Partnership Regulations 2001, SI 2001 No. 1090; The Limited Liability Partnership (No. 2) Regulations 2002, SI 2002 No. 913; The Limited Liability Partnerships (Application of Companies Act 2006) (Amendment) 2013, SI 2013 No. 1947 and several others all viewable on [www.legislation.gov.uk](http://www.legislation.gov.uk)
6. See s. 3(4) of the Companies Act 2006.
7. Information kindly provided by the Royal Institute of British Architects who are the copyright holders.
8. Company Director Disqualification Act 1986.
9. *Williams and Another v. Natural Health Foods Ltd* [1998] 2 All ER 577.
10. The Industrial and Provident Societies Acts 1965, 1967, 1968, 1969, 1975, 1978, 2002.
11. The Industrial and Provident Societies (Increase in Shareholding Limit) Order 2014 SI 2014 No. 210.

# 6

## Setting Up in Practice

### 6.1 Sole principal

For the purposes of this chapter, it is assumed that the architect wishes to set up in practice as a sole principal. A practice run by a sole principal, of course, does not necessarily mean that it is a one-person practice. The sole principal may indeed work entirely alone or may employ several staff of various kinds. Many architects carry on practice as sole principals. Precise figures are not available and the numbers fluctuate greatly depending upon the financial climate. When salaried architects become unemployed, it may be difficult to find alternative employment, and they sometimes take the opportunity to set up in business as a sole trader as a means of earning a living. In 2008, it was estimated that about 14% of all architects practised as sole principals.<sup>1</sup> We would expect that the percentage would have substantially increased during 2009 and 2010 due to the economic situation.

It is probably the most difficult form of practice, but it is potentially very rewarding both personally and financially. An architect contemplating this form of practice must have considerable reserves of self-reliance and an iron nerve to face alone all the problems of architectural practice. Most of these problems will have little to do with architecture. They will concern the business. Even though an architect in this situation may have no shortage of friends with whom to talk over important decisions, such as whether expansion should take place or what to do with a difficult client, these friends have nothing riding on the correctness of the decision and their advice has to be weighted accordingly. Even senior members of staff do not have the same worries as the principal and, if asked for their opinions, will not be coming from, or looking towards, the same place as the principal. Many sole principals say that it is a lonely life.

### 6.2 The decision

Something has been said about an architect's motives for setting up in practice in Chapters 3 and 5. The fact is that many architects do set up in practice as sole principals. The following are factors to be borne in mind.

- In times of recession an architect might set up in practice alone as the only way of getting employment. If successful, the architect continues, but if not,

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he or she may look for opportunities in employment again when the recession is over.

- For many young architects sole practice is something to which they aspire, because it gives them the opportunity to be fully in control of the design rather than simply act as part of a team.
- A really successful sole practitioner cannot remain alone for very long. The workload will become too great and some form of partnership or formal company structure becomes necessary.
- Some architects become sole practitioners by purchasing a practice from a retiring architect.
- Sometimes an architect moves from being a member of staff into partnership as a temporary measure for two or three years, until the existing sole practitioner retires, and then becomes a sole practitioner.

Obviously, it is impossible to deal with all the many and varied circumstances which will push or persuade an architect to become a sole principal. This chapter assumes that an architect is in salaried employment and has ambitions to found a completely new firm. However, many of the factors to be considered will affect architects moving into sole practice in all of these situations.

### 6.3 Timing

As noted above, sole practice can be a very lonely business. Therefore, an architect choosing this mode of practice must have a strong will and should not easily be discouraged. The timing of the decision is sometimes thrust upon the architect as in times of financial recession when architectural posts may be made redundant. Ideally, the architect should have already worked in two or three offices on a variety of work. It is important to see how different firms do the same things in entirely different ways. Working in just one firm may lead to the conclusion that the way that firm does things is the only sensible way. Alternatively, one may conclude that nothing is done properly, but with no experience of how others firms tackle the same tasks, it is difficult to reach a proper conclusion. Such things vary from methods of office practice to keeping adequate records of work in progress.

Working on different projects builds a useful collection of experiences in dealing with problems on site and elsewhere: for example, in the local authority planning and building control departments. Although one can never have enough experience, for an architect to move from a successful Part III examination straight to sole practice is inviting disaster. The architect must want to go into sole practice. The desire to do this appears to be strongest when the architect is young, fresh from a school of architecture and not too experienced in the ways of the architectural world. The best age is probably somewhere between 30 and 35 when enthusiasm and energy has not yet been diminished by the realities of life.

No architect can walk out of employment and straight into his or her own office with everything in place and a client waiting with an interesting project.

Sometimes, an architect is tempted to take the plunge because a client comes along and says that if the architect had their own office, the project would be theirs, but that is comparatively rare. What usually happens is that an architect, in working for a firm, builds up a rapport with a number of clients who indicate that if the architect ever went into practice alone, they would give him or her their future projects to design. Obviously, architects should not attempt to poach clients which would raise serious professional conduct questions. Another common situation is when an architect does spare time private work until the volume of such work makes it worthwhile to do it full time. This kind of activity, known as 'moonlighting', does not usually go down very well if the architect is working for a private firm. However, if the architect is working for a large organization or local authority, the practice may not be a problem. In each case, the architect must carefully check the firm's or the local authority's position on this kind of work (see Chapter 4, section 4.14).

## 6.4 Practical points to decide

It is fashionable to talk about a 'business plan'. A business plan involves two essentials:

- deciding the ultimate aim of the practice, and
- setting down the means of getting there.

A great deal of print has been expended on business plans, much of it unhelpful. In the case of an architect starting a new practice the first essential will itself probably be divided into two parts. The first part will be to decide the form of the practice in the first instance and then, when the practice has been operating for a year or so, to decide the second part: the ultimate form of the practice. It is dangerous to generalise, nevertheless it makes no sense for an architect just about to start a one-person practice to write a business plan demonstrating how the practice will evolve into a multi-million-pound firm employing 200 architects and support staff in ten years time. It is important for the architect to experience being responsible for a practice, dealing with accounts and marketing and the employment of staff. It may not be the experience expected. There may be too much business and not enough architecture and life as an employed architect may seem the new ideal. There are numerous instances of architects going back into salaried employment because they realised that sole practice was not for them. However, once the architect has decided that being in charge of his or her own destiny is a good feeling and all the other necessary activities are actually quite interesting; then is the time to look to the future and make some decisions about the long-term future. That is the time to draw up the business plan. It is worth noting in passing that most multi-million-pound architectural practices do not start from a one-person practice.

Some of the decisions which are made at the very beginning are in any case fairly long term in nature. Below is a list of important decisions that must be made at the beginning. Later, when the business plan is produced, some of these decisions may be changed in the light of experience.



### ***Alone or with others***

The first thing to decide is whether to go entirely alone or with another architect. That will have an important effect on other decisions. When going into business with another person, it is of utmost importance that the two or more people trust one another. It is easy to get on together when things are going well but hard times will test the best of friendships. Hanging around together as students and having the same tastes in architecture is not necessarily a good basis for a long-time working commitment.

### ***Mode of practice***

Different types of practice have been considered in Chapter 5. The options for the sole principal are simply sole practice as an individual or forming a limited company. It is important to get advice from accountants about the financial implications, but the advantage of forming a limited company is that generally it is the company which will be liable for breaches of contract or negligence because all contracts will be with the company, not with the individual architect. If the company cannot pay its debts, it may end in liquidation, but the architect's own possessions are not normally at risk and, provided that the architect was not contravening the Companies Act 2006, a new company can be started. If a sole trader gets into trouble, creditors can call upon the architect's personal possessions: house, car and so on. This may mean financial ruin.

### ***Value added tax (VAT)***

Accountants will advise about the thresholds for registering for VAT.<sup>2</sup> If the practice is aimed at commercial clients, they can reclaim VAT and it is not an issue. Private clients cannot reclaim the VAT and having to add VAT onto fees may make the difference between securing a commission or it being given to another architect. On the other hand, a firm which is not registered for VAT signals that it is not receiving enough money to make registration compulsory and might be considered too 'small' by some clients. Another advantage of being registered of course is that VAT paid on goods for the firm such as computers and desks is reclaimable. See Chapter 11, section 11.11.

### ***Location***

A big decision is where to locate the practice. In a broad geographical sense, that is often decided by where the architect lives and where current work exists. Architectural practices rarely receive commissions from people who pass the office and decide to pop in on the spur of the moment. Anyone visiting will have made an appointment. More precisely, it must be decided whether to locate in a town or in a more rural setting. The advantages of a rural location are pleasant surroundings, ample car parking, healthier lifestyle and freedom from traffic problems. Disadvantages are remoteness from other professional offices, difficulty of access, particularly in the winter months, no opportunity to market the practice through presence in the town centre and unpopularity with staff who may want to go shopping in their lunch break.

**Premises**

The ideal might be a property where the practice can occupy, say, two rooms with the possibility of expansion in the future into other rooms in the same building. Realistically, a new practice will not be able to afford much in the way of premises and taking a room in a business centre can be a useful way to start. There are some excellent centres in every town, some of them in brand new and some in nicely refurbished old properties. The important thing is that calls pass through a central reception which can give and take messages. In some centres incoming calls can be answered by reception in the name of the particular firm being called. There are also typing and copying services and the possibility of hiring a meeting room. Alternatively, the architect may know a fellow professional in another discipline or a contractor who has one or two rooms to spare.

**Rent or buy**

It is unlikely that a new practice will have the capital to invest in purchasing a property outright. Therefore the choice is whether to purchase premises with the aid of a mortgage or simply to rent. In most cases, it will be simpler to rent until it becomes clear that the practice is financially viable.

**Start date**

It is vital to choose a start date and to arrange everything towards that date. A programme is essential, to identify what needs to be done and by when, preferably on the computer and on which the critical path or paths are identified. Everything must be in place by the start date and activities which are particularly important, such as securing premises, should have some float built in. Nothing gives a worse first impression than informing potential clients that the business will be up and running on a certain date and then to have to make excuses when the business is not quite up and certainly not walking, let alone running. Potential clients are bound to question whether the practice will get their project finished on time if it cannot effectively handle its own.

**Bank**

The choice of bank requires careful thought. Personal recommendation by friends and relatives is useful. Before making the choice, it is essential to make a list of all the potential bank services that are considered important to the practice. Most of the major banks have a person in every bank who deals with business accounts. A meeting with the bank's business manager is the opportunity to go through the list of required services and see what else the bank may offer. Check things like the time taken to clear cheques by express clearance, online banking and overdraft facilities. Although a good personal relationship with the business manager is helpful, it should not be forgotten that all banks tend to move senior personnel from bank to bank every few years to avoid the kind of cosy relationship developing which could result in difficulties for the bank at some point. A new practice must be wary of offers of bank loans. Although it is obvious, people tend to forget that loans must be repaid at some point and

there is a danger of paying interest on a loan almost in perpetuity because the income is just insufficient to pay the loan back.

A particular danger which the business manager may not be keen to emphasise is that when a bank gives a loan, it invariably requires some kind of guarantee for repayment. If the architect intends to practice as a limited company, the bank will invariably ask for a personal guarantee from the director or directors for repayment. If the practice does badly and the company is forced to liquidate, the bank will call on the director to pay the amount guaranteed. It is unfortunately common for that to result in serious financial hardship for the director at a time when the income has disappeared. Therefore, the rule should be not to take out a loan and not to give a personal guarantee. It is sensible to arrange a modest overdraft, but not at the expense of any personal guarantee otherwise the benefits of a limited liability company are significantly reduced.

### ***Accountants***

Ideally, the practice will stay with the same accountants for a lengthy period, so it is important to choose accountants who will take an interest in the company and guide it in making the right financial decisions during its lifetime. There are a number of sole practitioners in accountancy and undoubtedly they will be cheaper than a larger firm. However, a larger firm will be able to offer specialised tax and other services which a small practice cannot offer. In addition, a larger firm is more likely to have more influence when called upon to deal with statutory authorities. Once again, a meeting with the relevant partner or director is necessary to establish a rapport, to ascertain the services required and what the accountants can provide.

### ***Solicitors***

Solicitors are necessary to deal with the acquisition of premises, leasing and other kinds of agreements. However, the solicitors who can provide that services may not be able to assist the practice in developing its own appointment documents, dealing with employment issues and advising on building contracts. There are, of course, very large firms of solicitors who have departments which can deal with each of those topics, but it is fair to say that most solicitors are known for a particular area of the law in which they tend to specialise. Large firms often charge large fees. There is something to be said for choosing a relatively small firm to deal with everyday matters of purchase of property or rental and another more specialist firm to draft terms of engagement if the various RIBA documents are not thought suitable. However, when it comes to advice on building contracts, adjudication and arbitration, there are relatively few solicitors in this area who thoroughly understand the subject. Some of them may reside in firms of solicitors, there are barristers who specialise in this field and one should not overlook the numbers of construction professionals who profess an expertise in this area. It is important to be careful before engaging a firm of solicitors which advertises as having an expertise in construction law and an informal exploratory visit, similar to those paid to the business bank manager and the accountant is advisable.

### *Professional indemnity insurance*

Of course it is necessary to have professional indemnity insurance (see Chapter 10, section 10.5). The architect setting up in practice for the first time will be unlikely to have much, if any, experience of it. Three things must be decided:

- the limit of indemnity
- the people to be covered
- the risks covered.

The lowest indemnity is normally £250,000 which should suffice for the start of a new practice although £100,000 is possible. Obviously the premium will rise in accordance with the extent of cover. If it is known or anticipated that the practice will be dealing with projects worth £1,000,000 or more, the indemnity must be adjusted. It is worth remembering that if the project is worth £500,000, the architect would have to be found liable for almost total rebuilding for an indemnity of that sum to be needed.

The people to be covered will be the company (if a limited company) and any employees including directors.

The risks to be covered must be discussed with a good insurance broker. Policies vary in what they cover. Some policies will insure against claims for negligence only; they do not insure against claims for breach of contract. It is also possible to incorporate insurance cover for the recovery of outstanding fees.

The insurers will require a detailed proposal form to be completed and the answers must be scrupulously honest. Indeed more than that, the insured has a duty of utmost good faith. That is a duty to make full disclosure of all material facts which might influence the insurers in deciding whether or not to enter into a contract of insurance with the practice whether expressly requested or not. Failure to do so may entitle the insurers to treat the contract as void.

### *Identity*

The architect should give a great deal of thought to the way in which the identity of the practice is to be communicated to clients. This will include the design of stationary, the design of the premises (so far as that is possible), logos, websites, signboards, business cards and so on. There should be no suggestion that everything has been thrown together at the last minute. All the documentation used by the practice should be carefully considered and available from the commencement of business. Architects are not generally noted for their flair for business and, therefore, it pays to have proper business procedures in place for everything from filing documents to issuing reminders to late payers. Needless to say, a proper letter of appointment should be submitted to every client as soon as a commission becomes a possibility.

A lot of valuable information and advice can be obtained from the British Library Business and Intellectual Property Centre<sup>3</sup> and the Government websites.<sup>4</sup>

## 6.5 Business plan

After the practice has been trading for a year or so, it is time to produce a business plan. It is said that architects are resistant to business plans. That could be because many architects do not know what is meant by a business plan and suspect that it may be just another example of someone with time on their hands dreaming up an unnecessary thing to do. That is perfectly understandable. But just as an architect would be surprised if it was suggested that a complex building could just be designed as it was built, so it is surprising if an architectural practice was able to develop from one or two people into a company employing 30 staff without a plan. The sole practitioner should have a vision of where the practice should be in the future. The business plan is the way to get there. It should be as brief as possible, highlighting the important things and leaving the detail to be decided later. The plan must be something that can be referred to and the progress checked against. It should not be waffly with vague expressions of intent.

The first thing to do is, in light of the experience gained, to decide the goal. Not the ultimate goal: that would be unrealistic and require the making of too many assumptions about the unknown. However, it is not unrealistic to set a point in the future, perhaps 5 or 10 years on, and decide where the practice ought to be at that point. The main purpose of a business plan should be to provide a route map for the practice. Business plans serve other purposes of course and are necessary if the practice is thinking of asking a bank to lend money. There is no special form for a business plan. The outline below is merely a suggestion to be adjusted as suits the particular practice.

### *The current position*

This should set out all the facts about the practice at the time the plan is drawn up. It should include a description of the premises, the furniture, a list of all the advisers (accountants, solicitors, bank, etc.), whether registered for VAT, numbers and qualifications of staff, etc. This is the place to include the current financial position: latest accounts and indication of profitability.

### *The client base*

Numbers and types of clients, percentage of repeat business, types of work undertaken.

### *The practice philosophy*

This is where the architect sets out the current design philosophy of the firm and its general approach to its work and services.

### *The five- or ten-year goal for the practice*

Kind of premises, numbers of staff, types of client and projects, geographical coverage, changes in philosophy, profitability and gearing.

### *SWOT analysis*

This is an analysis of strengths, weaknesses, opportunities and threats. This is a well-established method of assessing a firm's present position and what it should be doing in the future. For anyone who has never experienced this before, the process is to examine the practice under each heading and list the results. Under 'strengths' there may be '70% repeat business'. Under 'weaknesses' there may be 'lack of financial control'. Under 'opportunities' there may be 'increased demand for a practice specialism' and, under 'threats there may be 'a major client has decided to use another practice'. Those are just examples of course; every case will be different. Once the list is done, it is important to attempt some assessment of the overall picture, some of the factors might cancel each other and a threat may be transformed into an opportunity.

### *The way forward*

This could be given a more pretentious title, but 'the way forward' accurately indicates the point. This section, which can be split into different parts, should build on the facts and analysis to set out a programme for the future aimed at achieving the goal. An important part of this will be projected cash flow and budget forecasting and desired profit and loss accounts (see Chapter 11 for more details of this aspect). It should also indicate at which points further staff should be employed and the kind of staff required, if different or enlarged premises are needed and when that should occur. It is important to include a visual programme indicating the key milestones which trigger each projected change. Improvement in business practice should be indicated such as the need to keep better records of time spent on projects, management of fee recovery and new ways of marketing the practice.

Obviously, it is important to revisit the business plan on an annual basis and to review and amend the way forward in light of developments. A danger is that once a business plan has been prepared with all the effort and soul searching that entails, it is looked upon as a sacred document which must be followed. It should never be forgotten that the best laid plans go astray and an opportunity, such as the chance to take over another practice because the principal wants to retire, may come along and the practice should not be afraid to significantly amend its plan if mature reflection indicates that is the astute thing to do.

## **6.6 Enlarging the practice**

Once the practice reaches a significant size, say six or seven people strong, it starts to get too much for one person to control. Six people is not significant in terms of a practice size from a profitability point of view, but it is significant in terms of control. Possibly the founding architect envisaged a lifetime of designing buildings alongside like-minded colleagues. However, there is a point when the number of staff cannot be controlled easily and still allow the principal to spend much time engaged in design work. In short, the responsibility of running a practice becomes an unacceptable burden.

Of course, there are some practices of reasonable size where the sole principal is apparently carefree and engaged full time in designing buildings. That can only be because the full responsibilities of practice are either not understood or simply brushed to one side. In most medium-sized practices, a sole principal is engaged full time in running the practice and chasing work and relies on the staff to produce the architecture: a situation unlikely to have been envisaged at the outset.

For someone starting a practice, this problem will not immediately present itself and the usual scenario is that, as staff is engaged, it gradually evolves, with the principal doing less and less productive work. The question is unlikely to feature strongly in the business plan noted above and produced after about two years of practice because the architect, who at that stage may still be the only architect in the practice, may not recognise it as a problem.

As a practice increases in size, the principal should be alive to the potential in staff members. If it is intended to invite someone to be a partner in the practice, with joint and several liability for claims against the partnership, that someone must be compatible with the principal. Partnership is discussed in Chapter 5 along with other forms of trading. Partners are required to show the utmost good faith and they should get on well with each other. Partnership is often likened to a marriage. The usual alternative is to establish the firm as a company (if this is not already the case) and to take someone on as a director; this is easier to disentangle if things go wrong with the arrangement, but to work, it again requires complete trust between directors. Practices usually decide to make people partners or directors when the practice is doing well and prospects for the future are looking good. It is easy for partners or directors to get along when profits are good. The testing time is when the practice starts to make a loss. There is no easy way to choose a fellow director just as there is no easy way to choose a spouse. The only solution is, assuming a good overall impression, to give the prospective person more responsibility and to try to get to know them better before making the decision.

Once there are two partners or directors and practice continues to prosper, others will be appointed and the structure of the practice will require serious consideration. Assuming that it is a private limited company, the question of shareholding must be addressed. A director need not be a shareholder and vice versa, but in architectural practice, it is normal for all shareholders to be working directors although not all directors may be shareholders. It is good practice for each director to have some shareholding, even if modest, because it gives each director an interest in the profitability of the firm.

In some larger practices, each director is responsible for a certain section of staff and for the work it produces. In other cases, each director is responsible for different aspects of the practice: finance, marketing, employment and so on. In other practices, directors may specialise in the design of different kinds of buildings, construction and building contracts. In multidisciplinary practices, it is usual to have directors of the various disciplines. Although there are general models of practice structure, each practice is unique and its structure should evolve as a result of the application of the business plan (updated on a regular basis) to the practice.

Other considerations of a larger practice, such as larger premises, more specialised advisers and proportion of support staff to architects are a consequence of increases in staff and workload.

## References and notes

1. Mirza & Nacey Research, *Architectural Earnings: A Survey of the Earnings and Benefits Received by Architects and Technologists* (2008), The Fees Bureau/Mirza & Nacey Research Ltd, Arundel.
2. From 1 April 2014 the UK VAT registration threshold rose from £79,000 to £81,000. This represents the amount of sales a company or sole trader can make annually in the UK before they are required to register for VAT and UK VAT is then charged at 20% on taxable goods or supplies.
3. [www.bl.uk/bipc/aboutus/index.html](http://www.bl.uk/bipc/aboutus/index.html)
4. [www.gov.uk/starting-up-a-business](http://www.gov.uk/starting-up-a-business)



## B PRACTICE MANAGEMENT

# 7 Management Principles

### 7.1 Objectives

There are broadly two kinds of objectives: the objectives of the firm and the objectives of the individual. As a rough guide, the most successful firms are those in which the objectives of the firm and its employees most nearly correspond, because they can all go forward together without jostling for advantage.

The objectives of an architectural practice might well be to enjoy and to produce fine architecture, contribute to the environment, and make a reasonable profit. The architects in the practice will have joined because they have similar objectives and they are also perhaps, looking for career advancement. A good manager will ensure that these personal goals are capable of satisfaction within the overall framework of the practice objectives.

Many large organisations have problems, because the members of staff have rather different objectives from those of the organisation. It is not uncommon to encounter the kind of individual who considers that his or her objective is achieved if the pile of papers in the 'IN' tray can be transferred to the 'OUT' tray by the end of the day. In the context of that firm, the objective may be valid, but everyone should ask the question 'Is what I am doing assisting in achieving the objectives of the organisation?' Sometimes, it is difficult to see how particular tasks are helping to achieve objectives. In such cases, the employee should ask the manager for an explanation (see section 7.5).

Objectives, of course, both for individuals and organisations are long and short term. A short-term objective for a practice might be to complete a particular project. In the shorter term, completing a stage, such as the client's acceptance of Concept Design, may be crucial. Longer-term objectives are probably associated with expansion, specialisation, movement to better premises, etc. It is clear that the longer-term objectives can only be achieved if the shorter-term objectives are secured first. Personal objectives have similar structures. It is important that the individuals are aware of the organisation's objectives so that they can appreciate why certain steps are taken and hopefully everyone can pull in the same direction.

Achieving objectives can involve admitting mistakes, indeed must do so. Whoever first decided that it was a weakness to admit mistakes was very misguided. Everyone makes mistakes and it is only by acknowledging a mistake that progress can be made. For example, it is essential to know how to put a

cost on a project so that appropriate fees can be charged. In order to achieve this objective, careful historical records must be kept to indicate just how well the practices' own cost and time targets are achieved. An essential part of these records are staff time sheets. It is not unknown, however, for some architects to put down a proportion of their time to other work when they begin to see that they are in danger of exceeding the budgeted figures. The only clear result is that the practice builds up a set of unreliable records and it will continue to underestimate time periods, project after project, until the laying off of time against other projects ceases (see Chapter 11, section 11.14).

Every practice should have a policy of admitting mistakes, including those of the partners or directors, so that something can be done about them. Once a mistake is admitted, there should be commiserations, lessons should be learned then the mistake should be forgotten and the concentration should be on objectives. Every architect should learn to take decisions on the basis of the practice objectives, if a mistake is made, an admission will save much time and files of internal memos. Architectural practices who try this approach experience team work, often for the first time. There really is no place for a practice with an infallible sole principal and six frightened assistants. Common objectives should eliminate this problem.

If the objectives are clear, the best route towards them may be difficult to find. If the objectives are not defined, everyone will be setting off in different directions.

## 7.2 Leadership

Architects are called upon to practise leadership in different ways. In a small way, it is required in chairing a meeting. A principal, partner or director has to exercise leadership. If the office is large enough, a group leader is aptly named.

In the long run, the best leaders are low profile. There is much inconsequential verbiage written about leadership. A good leader really has only two functions:

- to decide objectives for those being led
- to set the pace.

The importance of objectives has already been discussed. Deciding objectives is a clear function, if difficult to carry out. Setting the pace is more complex. How a leader sets the pace depends on many factors including the objective to be achieved, the circumstances, the personalities of others and, not least, the personality of the leader. This is what is sometimes referred to as leadership style. Some architects with large outgoing personalities like to lead from the front, building up an office image which is essentially their own image. This is not necessarily, or even usually, effective. It results in a practice which is essentially one person plus helpers. In the absence of the leader, things tend to slow or even stop.

The real art of leadership is to appear to be following, hence the phrase 'leading from behind'. A good partner or director will ensure that everything is in place to make it as easy as possible for project architects to carry out their

tasks. A good leader must also be a good facilitator, prepared to do the things which would distract the architects from their essential tasks. Good leaders put forward their ideas in such a way that the project architects think they are their own. The true measure of successful leadership is the performance of the leader's staff who do not realise they are being led.

## 7.3 Communication

Communication is the most vital aspect of management. Ineffective communication will render the most splendid ideas useless. Communication is a two-way process. Many of the problems associated with building contracts result from failure on both sides. The general principle is that if a message is misunderstood, it is the fault of the originator. It is in the nature of the profession that architects can only get their concepts realised if they communicate them effectively. So architects must be excellent communicators. Good communication involves:

- clarity
- certainty
- brevity
- comprehensiveness.

### 7.3.1 Clarity

Architects should look at their drawings, specifications, reports and letters as though they were the recipients. Many architectural drawings need second sight to decipher. Preparing production information (see Chapter 18, section 18.3) requires the application of a mind which having analysed the problem can synthesise the solution to produce easily digestible information. It is not easy. Eccentric and flamboyant drawing styles did not help matters. One of the advantages of CAD is that it has eradicated strange drawing styles.

### 7.3.2 Certainty

This quality goes arm in arm with clarity although there is a distinction. When the architect communicates with the contractor or client there should be only one interpretation possible.<sup>1</sup> Very often a message, which may be a model of clarity in itself, may be capable of two meanings when read in context with other messages or with the project as a whole. The architect should take care, therefore, that any communication, drawn, written or spoken is incapable of misinterpretation. The message may be uncertain in itself, of course, as in such phrases as 'as soon as possible' or 'when convenient' or 'quality'. It has become fashionable to talk about 'quality products' or a pub serving 'quality food'. Such phrases are meaningless. 'Quality' is a characteristic or an attribute. Unless it is qualified, it means nothing. But 'good quality food' or 'poor quality products' get the message across: provided one understands 'good' and 'poor' in this context. Even if a time period is specified, uncertainty may still exist as in 'You have

seven days to respond'. Does that mean seven days from the date of the letter, or from the receipt of the letter, or seven days from some other date which may be implied when the phrase is read in context with the rest of the letter? However, 'You must respond by close of business on 3 September 2009' is difficult to misunderstand.

### 7.3.3 Brevity

It is difficult to be brief. Extra words are added to a sentence or clause and extra lines are added to a drawing to make the meaning clearer. Often they make the meaning more obscure. This is in part, because it is more difficult to read, but also because the multitude of documents means that people get tired of reading and give most attention to short, easily understood messages. The popularity of e-mails and texts is testimony to that. To be brief in a written document involves writing out the message as clearly, with certainty and briefly as possible, then carefully editing out the superfluous, doing some re-arranging, then writing it out again. It will take the architect longer to prepare the document, but it should save time in the long term, because the contractor should be able to act on the document without any, or too many, questions. Hence the comment: 'If I had longer to write it, I could have made this letter shorter.'

### 7.3.4 Comprehensiveness

It is very common to assume that a recipient knows more than actually is the case. The golden rule is to assume that the recipient knows very little and to proceed accordingly. This will involve more time in preparation, but again it should save questioning time and it is also useful when drawings or other documents have to be consulted long after they were produced. Brief messages in the style of 'Got your message, and agree your suggestion' are unfortunately quite common. The only thing one can say is that they encapsulate in one document an ignorance of three of these principles, thus making the fourth, brevity, another fault. Messages of this kind are not the hallmark of the busy executive architect, but are careless almost to the point of negligence. These principles hold good not only between architect and contractor, but also between architect and fellow consultants and between the project architect and the other architects in a particular group. Regrettably, architects' drawings are not always good examples of communication documents. The eminent architect, Sir Edwin Lutyens, once said that a drawing should be like a letter to the builder telling him exactly what is required, not a pretty picture to impress an idiotic client; not very complimentary to his clients, but very true for all that.

## 7.4 Delegation

It is common to hear architects say that the architect above them in seniority does not know how to delegate. Grumbles of this sort usually indicate that the architect in question insists on keeping an eye very firmly on everything that is

going on. That architect, however, will probably say that since he or she takes the responsibility in the end, such close supervision is justified. That kind of response puts the cart before the horse. Delegation is a key function of management and the art of delegation is to know what to delegate, when and to whom. Of course the senior takes overall responsibility; that is one of the reasons for the larger salary cheque.

The rule is to delegate work to the least qualified/paid person who is capable of doing the work. It is important to understand the principle properly. It does not mean that work should always be delegated to the least paid or least qualified. The important criterion is that the person should be capable of doing the work. Therefore, if the quality required is of a very high order it might well be that the person capable is actually the best qualified and highest paid. If there are three people who can do the work adequately, the least qualified and least paid should be chosen. To do otherwise is to squander talent and money.

Delegation encourages people to take responsibility. Architects in control of staff may be reluctant to delegate because they think that the task will not be carried out properly. What they really mean is that it will not be carried out precisely in the way they would have tackled it. In fact it could be carried out with greater efficiency.

An example will make it clear: there may be a meeting scheduled at which an important client will meet the contractor to settle some crucial matters relating to a large contract. The senior architect may well feel an obligation to attend even though there is a very competent project architect dealing with that contract. The truth is that if the senior architect delegates the attendance at that meeting, the preparation for it and report after the meeting will receive the kind of attention the senior architect is unlikely to be able to give it. The senior architect should delegate attendance to the project architect (with reasonable notice) with the message that whatever he or she agrees will be backed. The project architect will appreciate the confidence and is likely to spend long hours, not all of them office hours, in preparation to make sure of achieving the best possible outcome. The senior architect will be freed to do non-delegable work.

An important rule is not to delegate work and then interfere. A manager who does that has lost his nerve. Architects in positions to delegate work should pick the right person and then demonstrate total confidence in the delegation. They will rarely be disappointed. If they are, it will usually reflect their bad judgment.

## 7.5 Motivation

Motivation is in two parts: motivation of self and motivation of others. Self-motivation is very complex. It may depend on the solving of a problem or the desire to improve an already satisfactory situation. The desire for status, money, power, social position, security, happiness, acknowledgment, service, etc. falls in either or both of those categories. Without a strong motive, little is achieved. A common term for a person with a strong motivation is 'self starter'. It describes the situation very well. Most professional activity is motivating for

the participant; possibly none more so than architecture. It offers challenge and the opportunity to rise to the occasion.

An unmotivated architect will probably stay in the same office for the whole of a working life, maybe doing unrewarding work and progressing slowly, if at all, at the whim of others. If such a person changes offices or progresses more quickly, it will be as a reaction to some external pressure. To that kind of person, the professional challenges which motivate others may simply be depressing, particularly if they are beyond that architect's capabilities. Of course, not every architect who stays in the same office is unmotivated. The motivation may be to achieve some personal objective in that office.

A self starter will determine his or her goals in life, long and short term, and create the appropriate internal pressure required to attain the goals. In fact the unmotivated architect noted above is not really unmotivated; it is just that the motive is not the accepted kind. It may be to drift along to retirement with the minimum of fuss because the architect in question has some extra-office activity to which work is just a necessary interruption. Self-motivation in this context, however, is generally taken to mean the ability of an individual to drive him or herself without the necessity for any external pressure.

The motivation of others is very difficult. The secret is to discover the individual goals of team members. Motivators are generally seen as achievement, recognition and advancement. Whether an individual acts in particular circumstances depends largely upon whether the action is seen as resulting in the desired outcome. The art of motivation, therefore, is to let the individuals see that their actions are achieving the desired end. The carrot is more effective than the stick. The golden rule for motivating others can be summarised as follows:

- find out what they want
- show them how to get it by doing what you want
- ensure they are not disappointed due to your fault.

## References and notes

1. See *Cantrell v. Wright & Fuller Limited* [2003] EWHC 1545 (TCC) paragraph 24 and the judges' subsequent comments on the lack of clarity in the architect's letter; see paragraph 194.

# 8

## General Office Practice

### 8.1 Introduction

There are certain basic skills which every architect should have in addition to specific professional skills. This chapter addresses the basic office skills which are essential to everyone who works in the office environment. Architects are usually left to acquire these skills as part of their practice experience. That is not the best way of learning. All architects should have a thorough understanding of good office practice before they enter the office in which they are to work and in which very bad office practice may be the order of the day. What follows is simply an outline of the key areas in which the architect should be proficient in the office. Some are relevant only to architects, some are of wider application.

### 8.2 Telephone, facsimile (fax) and e-mail

#### 8.2.1 Telephones

A telephone is essential. There is sophisticated equipment available today which will allow virtually any installation appropriate to the office organisation. Specialist communication IT experts can advise practices about the most appropriate system. The traditional systems use normal and Integrated Services Digital Network (ISDN) landlines. This is the most reliable telephone system offering high voice quality, the technology is tried and tested, readily available and not too complicated. Disadvantages are that there are comparatively high costs to set up and operate, and wireless telephones emit high Electromagnetic Radiation (EMR) which the World Health Organisation has suggested may be detrimental to health. ISDN lines are costly to install and maintain and hard-wired telephone handsets are preferable.

Some architects who work entirely alone operate by using some type of mobile or smart phone. The great advantage is that it can be used anywhere there is a signal. Even the simplest of such phones can be internet-enabled and, of course, there are ever more sophisticated versions coming onto the market all the time. Many have the added advantage of a built-in camera which can be very convenient when on site inspecting the works and recording defects. So a sole practitioner can access software applications and the internet virtually anywhere. A

disadvantage is that such phone devices do emit high levels of EMR. It is possible to operate in this way, but thought should be given to the next stage in a practice's development and the need to get a more substantial system. Ideally, the devices should be integrated with the main telephone system to prevent it becoming a standalone device.

Voice Over Internet Protocol (VOIP) systems rely upon good and consistent broadband quality. Office handsets are connected to the internet instead of telephone landlines. There are great advantages with this type of system including flexible connectivity between handsets in different locations and the integration of mobile phones, comparatively low installation and running costs, web-enabled handsets, wireless phones and use of computers as phones. The big disadvantage is that the whole system is dependent upon broadband connectivity and quality which are not guaranteed.

Both landline and VOIP internet enabled systems can be set up to be used with multiple locations: phones can be transferred from one location to another seamlessly and mobile phones can be integrated. There are various other types of internet software which can be used for video communications, such as Skype, but its effectiveness is dependent upon the broadband connection.

Telephone calls should be made and answered promptly and they should be kept as brief as is consistent with the objective of the call. This is always important, because phone calls can be costly, but it is particularly important if there are few lines and there may be a risk that outside callers cannot communicate with the office. A competent telephone operator with a good voice and manner is a boon to any office. Such a person is the practice so far as callers are concerned. If the first impression is not good, they will not call again.

There are some basic rules for good telephone management. They include never keeping anyone waiting and keeping a record of incoming calls and messages if the intended recipient of the call is unavailable. Architects should always keep a written record of phone calls. The degree of detail in the record will depend on the importance of the call, but the minimum must be the name of the caller and the time of the call. Most phone calls will warrant more detail than that. Virtually all office phones now incorporate voicemail facilities as a matter of course, although most people would still prefer to leave messages with a human receptionist.

A particularly annoying habit, so far as the recipient is concerned, is to have a secretary or the switchboard place a call. At the very least, it sends a clear message that the caller is much busier and his or her time is much more valuable than the person called. An excuse often given for the practice is that telephoning and getting a busy number or discovering that the particular person is out is time-consuming and much better carried out by someone who is costing the firm less than the architect. At first sight there seems to be some merit in that argument, but it is axiomatic that when the switchboard has eventually made contact with the required person and got that person waiting on the telephone, the original caller has vanished from the desk and cannot be traced for several minutes if at all. Before indulging in such annoying one-upmanship, the architect should judge the likely reaction of the person receiving the call. A suitable reaction might be to hang up.



Except when returning a call, the person telephoning is doing so with an aim in mind, a particular reason for calling. Courtesy requires that such a person must do the waiting, not the person called.

Although mobile phones are a real boon to the sole practitioner, they must be used with consideration for others. Under the right conditions, listening to one side of another's animated mobile phone conversation may be a source of amusement to while away a tedious train journey, but usually such things are merely irritants. Save for the most pressing of reasons, there can be no excuse for leaving a mobile phone switched on during a meeting. Even then, the permission of the chairperson must be obtained and not assumed. To leave the phone on in normal situations shows the most flagrant disregard for the time of others. It sends everyone a message that the offender believes that he or she is the busiest and most important person present. Some companies arrange important meetings away from the office precisely because they do not want the participants interrupted by telephone calls or urgent consultations. To take a mobile phone into that environment defeats the object.

Over recent years, everyone has been plagued with speculative phone calls. Often there is a few seconds silence on the other end while the automated system, that has rung several people at the same time, decides to connect you and the caller. Take advantage of the silence to hang up. A more recent feature is the recorded message played as soon as the phone is answered, again just hang up. It is sensible to register the telephone number with the telephone preference service.<sup>1</sup>

### 8.2.2 Facsimile (fax) and e-mails

Although faxing was hugely popular a decade ago it has now almost vanished as a regular means of communicating documents. It has been replaced by the sending of scanned documents by e-mail. Some practices still have a fax machine for the rare occasions when there is some kind of server malfunction and e-mailing is not possible. Faxed documents are poor in quality compared to scanning. One still comes across references to faxes,<sup>2</sup> but strangely not e-mails, as a means of communication of notices in the bespoke appointment documents which solicitors draft for many large companies intending to commission architects.

Most communication is carried out by e-mail which is now even accepted as good service of a notice<sup>3</sup> and a means of forming a contract.<sup>4</sup> A court has held that a series of e-mails authenticated by an online signature was sufficient for a guarantee even though a guarantee must be in writing and even though the signature in that instance was simply 'Guy'. The court accepted that business is transacted by e-mail some of which is very informal in nature. So far as the signature was concerned, the court held that it could be initials, first name or even a nickname (presumably if everyone knew who that was) would suffice as the signature.<sup>5</sup> However, care must always be taken to check that the particular contract in use allows e-mails. Some contracts, such as SBC, require that the parties first agree a communications protocol. In practice, that requirement seems to be ignored.

Unfortunately, the ease with which an e-mail can be sent encourages the sending of messages about the most trivial matters. Despite the cautions at the end of many e-mails to think carefully before printing, it is as essential to retain printouts of all e-mails, which are other than trivial, as for other correspondence. E-mails are often treated by the sender as though they were the equivalent of the spoken word. They are not oral exchanges. When printed off they are exchanges in writing. Even if not printed, a record can be stored electronically and referred to in court. It is important to write e-mails with the same restraint as if writing a letter to be sent in the post. The content of a carelessly written e-mail can not only be a source of great embarrassment to the sender when presented as part of evidence, it can colour the view of the court about the character and attitude of the sender. Examples of what should not be put in e-mails can be read in two recent judgments.<sup>6</sup>

The paperless office dream is a myth. Even so, the electronic version should be stored just like any letter and not left on the hard drive of various desktop and laptop computers which have ceased functioning. E-mail is really valuable for the transmission of large quantities of text and diagrams, drawings and scanned letters from one place to another. The system is especially useful, because the recipient can make alterations to drafts and return them quickly by the same means. There are limits to what can be sent by e-mail, but the transference of large numbers of documents can easily be achieved by the use of drop boxes, particularly if the documents are to be sent to several people. The idea is simple; the sender deposits the documents in an online drop box and sends the intended recipients the code (i.e. the key to the box). Once possessed of the code, the recipient can access the box and download the documents. These are useful on projects which require access, by the project team, to large quantities of documents.

An architect should remember that an e-mail sent is essentially the same as a letter. It is, when printed out, documentary evidence of something. Too often, e-mails are considered to be the equivalent of the spoken word of which, of course, usually there is no record. The sender of an e-mail should take as much care as if composing a letter to be sent through the post. There is a growing practice of sending letters by e-mail and by post. If urgent, there is good reason to send a letter by e-mail. If not urgent, the letter should be sent by post. It is usually wasteful to do both.

### **8.3 Information technology**

Many architectural activities that were formerly paper-based are now replicated or replaced by computer applications. Although it is beyond the scope of this book to describe them, or indeed information technology generally, in any detail, the architect should be familiar with them and they warrant a brief mention. Recent exciting developments include the availability of handheld devices for computations in the office and on site by using an 'App' to record defects and other information to view back at the office or to be shared with the contractor and others.

E-mail and computer-aided design (CAD) are described elsewhere in this chapter, but there are other common applications. Word processing software is used by every practice these days. The key advantages are that everyday typing is more efficient, corrections and edits are readily made and standard documents of all kinds can be manipulated and electronically stored for amending and issue. Word processing packages today are becoming more and more sophisticated with the facility to control text in a variety of ways, to check spelling and grammar and to reference text. Crucially, it is possible to search thousands of files within seconds to find a particular word or phrase.

Spreadsheet programmes allow arithmetic and logic operations on numeric data to be performed and they are now available for a wide variety of tasks. Databases are effectively computerised filing systems, which enable data to be manipulated and produced in many different ways to suit different purposes. Therefore, records can be stored for retrieval against different designated criteria. Project planning software is a boon for architects who have to decide the appropriate amounts of extension of time. It allows logic links to be inserted with lead and lag times and the appropriate resources for each activity. This method of working out the amount of extension of time due to the contractor has received judicial approval<sup>7</sup> and every architect's office should have the software. It is also useful to monitor progress as the work progresses.

The quality of printers available now allows inexpensive documents of excellent quality to be produced. For improved presentations there are easy-to-use desktop publishing and presentation programmes available. Online printers can be used to print documents from AO size to leaflets all to a professional standard with next-day delivery.

## 8.4 Letter writing

The object of writing a letter is essentially to convey what is in the mind of one person to the mind of another, albeit the writer may not always wish to be entirely frank and open in the communication, and at the same time to make a permanent record of the communication. The other person is obviously not present to be addressed 'face to face'; therefore, the writer must convey what would be clear from facial expression or tone of voice by the skill of combining words. Without embarking on a full exposition of the subject a few suggestions may be made.

- Be sure that the points made are clear.
- Be as brief and simple as possible. Do not use two words if one will do. Avoid long words and convoluted phraseology.
- Start a new paragraph whenever a new point is to be made even if the paragraph is only two lines long. Do not split a point into more than one paragraph.
- If the letter becomes very long, consider whether it might be better to put the contents in the form of a report or schedule with a short covering letter.

- Be sure to write with the reader in mind. Technical terms may provide a useful short cut when writing to like disciplines, but they should be strictly excluded when writing to non-technical persons. Despite what some architects may think, trying to impress a lay client with difficult words and concepts does not succeed.
- Avoid commercial and business clichés, journalese, Americanisms, slang and jargon.
- Avoid spelling mistakes and bad grammar. They give a poor impression to the reader.
- Avoid the impersonal. 'It is regretted' means nothing. Regret is a personal sentiment; if regret is felt, say 'I regret' or 'We regret'. It may or may not be prudent to say 'the Board' or 'the directors' regret.
- Be definite. Do not say 'this appears to be correct'. If satisfied that it is correct, say so.
- Standard reference books are available which can prove useful in ensuring that well-written letters are sent out.<sup>8</sup>

Some care should be taken over forms of address. Traditionally, men have been addressed as Esquire and women as Mrs or Miss. Today the mode of address is more likely to be Mr, Mrs, Miss or Ms. Whatever form is adopted, qualifications and honours should not be forgotten. When opening a letter, the usual form is 'Dear Sir' or 'Madam' and the ending 'Yours faithfully'. Depending how well the parties know each other these forms may become less formal, but in a business letter it is unwise to go beyond Mr, Mrs, Miss or Ms and ending 'Yours sincerely'.

Unfortunately, it has become almost the norm for people to write to each other using first names only. At one time such a mode of address was reserved for friends. It is not just a generational thing. The use of first names in a business environment can mislead some participants as to the nature of the relationship. If it is purely business, it is better to keep it that way. Remember that letters sometimes end up in court and too much familiarity may come to be regretted.

## 8.5 Reports

The architect may be specifically asked to write a report, or may decide to do so when a letter looks like becoming long-winded. The art of report writing is a considerable subject on its own, but a few words of guidance are offered by way of assistance.

- Remember who is going to read the report. If it is to be a technical person then technical phraseology is quite acceptable, probably inevitable; the reader will understand what is being said. If the reader is to be a non-technical person or a lay committee, they will be completely at sea unless the report is written in language they can understand.
- Plan the structure of the report. There is nothing worse than a report which is clearly the thoughts of the author just as they have arisen, put down on

paper without any consideration as to logical order, often called a 'stream of consciousness'.

- A report should start with an introduction setting out the subject matter and, if appropriate, who the writer is and his or her qualifications. Then follows the body of the report: it is most logical and effective to note the facts first before going on to matters of opinion. The report should end with a conclusion and usually a request for instructions. It should be signed and dated.
- Adopt a simple and consistent system of numbering. For example:
  - 1.00 *Introduction*
  - 1.01 My name is ... etc, etc.
  - 1.02 I am asked to report on ... etc, etc.
  - 2.00 *Extensions of time*
  - 2.01 Extensions have been granted as follows.
- Take care with the English, the punctuation and the spelling. A good report reads well; bad English, poor punctuation and a plethora of wrongly spelled words give the worst possible impression.
- Report on that which has been asked for. Cut out all unnecessary verbiage; it may add to the bulk of the report, but it adds little or nothing to the content. Better a short, pithy report than a long rambling version, which runs the risk of boring the reader and thus never being read.
- Read over the final version very carefully; much may hinge on your efforts.

There are several useful books available on the subject of report writing.<sup>9</sup>

## 8.6 Filing

### 8.6.1 Correspondence and reports

Once the letters and reports have been written, the office copies together with letters, reports, facsimiles, etc. received have to be filed.

The secret of good filing is to ensure that any document can be found quickly. Much time and cost, to say nothing of frustration and temper, can be expended in trying to trace a wrongly filed document.

The complexity of the filing will depend largely on the complexity of the project. A simple project will probably warrant a single file. More complicated ones may require a series of files for, say, architect, client, contractor, quantity surveyor, engineer, etc. Other files will be required for special matters such as partners' personal file, insurances and professional bodies.

As well as letters, the files should contain such things as reports, telephone messages and internal memos. These will help to complete the history of the project and they may prove to be invaluable later, particularly in legal matters where the side with the best records is going to be at a great advantage. It is worthwhile thinking carefully about what and how material is to be filed before putting a filing system in place.

Typical files for a medium-to-large project might be as follows:

- Correspondence: Client, funder, etc.
- Correspondence: Statutory undertakings, planning, building control
- Correspondence: Consultant quantity surveyor
- Correspondence: Contractor
- Mechanical and electrical services
- Structural
- Landscaping
- Clerk of works' reports
- Site meetings
- Architect's instructions
- Certificates, valuations
- Financial reports
- Copy of the contract documents.

Another system which should not be overlooked is electronic data storage. There are many advantages to storing all data this way. Only one of these is saving space. Obviously, enormous quantities of information can be stored on hard disk, on CD-ROM and memory sticks. Technology has advanced to the stage that documents of all kinds can be scanned onto disks very rapidly. The documents can be retrieved and read on a monitor in an instant. Moreover, the system can be arranged to search for and display all documents of a particular kind or documents which deal with a particular topic. In short, it is easier to find a piece of correspondence after it has been stored electronically than before. The material can be guarded so that 'read only' access is available, or it can be manipulated in any convenient way. Obviously care must be taken with certain data relating to individuals and the Data Protection Act 1998 and its related regulations must be observed.

Electronic filing systems should mirror the same structure and naming system as the hard copy filing system. Each document should include the file path. This can be most conveniently put in the footer for a report or in the 'our reference' for correspondence.

There are some warnings. Electronic data is much more ephemeral than something on paper. It is essential to keep back-up copies of the data, because disks, even hard disks can corrupt without warning and it is also possible to corrupt a disk physically, for example, by trying to remove it while the computer is trying to read from, or write to, it. Some practices back up all their documents by storing the data on a cloud where data can be uploaded onto an online server and accessed from other computers. However, such systems are not failsafe and it is important to check the stability of the company controlling the server. Emergency downloading of huge quantities of data because the server is about to go out of service is not usually practicable.

Even though documents may be scanned and consigned to disk in some form, the original documents should not be destroyed straight away. There are some documents which must never be destroyed; for example, contracts and various statutory permissions. It could be argued that ordinary documents, such as correspondence associated with administering a building contract, should

never be destroyed. There is always a risk that a document will be needed many years after the building is completed. Most architects, however, would probably feel comfortable destroying original correspondence six years after the issue of the final certificate if the contract was executed under hand and twelve years after if the contract was executed as a deed. The fact that copies are still held electronically should suffice to deal with any queries after that date. Nowadays, there is no excuse for destroying all trace of any document.

### 8.6.2 Drawings

The virtually universal use of CAD or Building Information Modelling (BIM) has led to a decreased use of paper drawings in the office where all work and examination of drawings is done on screen. Such drawings will be stored digitally with, but separate from, other files. It is still easiest to examine a drawing in hard copy rather than on a screen and there is still the occasional small practice which is not prepared to completely forsake traditional methods. However, such practices are a dying breed. For site use, especially where small contractors are concerned, drawings in hard copy are essential but will be printed out by the architect at the time of issue. Medium to large contractors will receive their drawings by electronic means and only if absolutely necessary will drawings be printed out. In the modern architect's office, the sight of a drawing is becoming something of a rarity, except perhaps when pinned up on the wall for reference purposes.

When a drawing has been revised after issue for any purpose, the out of date edition should be clearly marked 'superseded' and digitally filed separately for later reference if necessary. A separate 'drawing issue' file must be kept for every project and filed with that project on completion. A frequent problem is that when the contract documents are to be prepared, the architect finds that the drawings on which the contractors tendered and which must, therefore, or with agreed amendments, become the contract drawings, have been altered and updated. Problems of this kind can be avoided if a set of drawings is stored electronically at tender stage especially for the purpose of preparing the contract documents in due course.

When a project is finished, the drawings should be brought up to date as an as-built record, even if not issued, and suitably filed. That is a counsel of perfection, but it will pay dividends later if it is observed. Such records will be invaluable if questions arise about what was actually done on site.

## 8.7 Office-based meetings

See Chapter 20, section 20.2

## 8.8 Drawing office practice

Although the use of computers to produce drawings is virtually universal (see section 8.9), some practices still rely on hand drawing at least for some

drawings. Every architect should study the relevant British Standard on drawing practice whether using computers or the traditional method.<sup>10</sup> Where, as in the construction industry, clear communication is all important, there is no room for an architect who employs exceptionally personalised drawing techniques. One of the by-products of CAD is to eradicate idiosyncratic draughtsmanship although some might regret its passing. Many of the mistakes which occur on a construction site undoubtedly stem from a misreading of drawings and any attempt to co-ordinate symbols, hatching and representational methods of all kinds is to be welcomed. An exception may be made for drawings which are purely for the purpose of explaining the proposals to a client. It is not proposed to dwell especially on this type of drawing, because this is one thing which architects quickly learn to do very well.<sup>11</sup>

Certain basic information must be included in every drawing:

- firm's name
- address and telephone number
- project title
- drawing title and purpose (e.g. 'For construction' or 'For approval')
- drawing number with revision number if appropriate
- scale
- date drawn and dates and descriptions of revisions if appropriate
- name or initials of drafterperson
- north point on plans.

It is common for a practice to have the basic information and the firm's logo if applicable stored ready to be incorporated into the CAD information. Where grid lines are used to position structural elements or for modular purposes, they should be carefully referenced. It is usual to use numbers along one axis and letters along the other. Vertical positioning is best done by levels referenced to a datum. Such horizontal and vertical references must be used consistently, not only by architects, but by other consultants also.

If all parties creating or using the drawings stick to this system of referencing, the chance of errors due to ambiguous descriptions will be minimised and time saved. Thus the vague: 'wall next to splayed abutment opposite general office on second floor' becomes more simply and accurately: 'wall between refs R4 and 5 on floor level 10.600'. The 'general office' will be unidentifiable during building operations (and perhaps after practical completion) except on a drawing and what constitutes a 'splayed abutment' is anyone's guess.

Time and clarity are served if symbols are used to show such items as WCs, washbasins, kitchen units, etc. Some offices adopt the practice of using standard details. This can be very useful for items which recur, such as access panels, cills, lintels, eaves, door frames and casings, windows, architraves, skirtings, etc. Although the same standard details will not be suitable for every project, architects should resist the temptation to design a totally fresh detail for everything on every project, bearing in mind that standard details should evolve over the years to represent the very best detail which that office can produce for a particular situation.



When a drawing is amended it should be obvious from a numbering change (e.g. No. 1/103 to No. 1/103A) and a note on the drawing should state precisely what change has been made to the drawing.

### 8.8.1 Dimensions

Dimensions form one of the most important items of instruction to the quantity surveyor and later to the contractor. Incorrect dimensions are a constant source of problems on site.

A block plan must give overall dimensions of the building, setting out dimensions for all foundations and walls, together with their thicknesses. In practice, many architects do not understand what information a contractor needs in order to be able to set out properly on the site, yet most standard form contracts make the architect responsible for producing that information and probably such responsibility would be implied if not expressed.<sup>12</sup> The contractor needs to be able to locate at least one, and preferably two, base lines on site. To do that each point at the end of the base line must be securely fixed, by triangulation, from an already established known point (see Figure 8.1 below).

If a building has a steel or reinforced concrete frame, the setting out of the centre lines of stanchions should be shown on the foundation plan. The contours of the site should be shown and the levels of foundation bottoms, with positions of steps indicated. Levels should be referenced to an established datum. A key on the drawing should make clear the difference between existing and proposed levels. A simple system is to put each existing level in a small box or show it in a different colour.

Floor plans should show levels, detailed dimensions of rooms, corridors, thicknesses of walls and partitions, widths of openings, etc. Care must be taken that dimension lines are not capable of confusion with lines representing part of the building. It is usual to show the extremities of each dimension by a clear arrowhead, cross, dot or other symbol. Figures must be clearly printed, particularly the stop separating the metres from decimal parts.

In a new building, the quantity surveyor and the contractor should have no doubt about the exact heights of, and dimensions between, walls in both directions of all rooms, including all recesses, cupboards formed by partitions, passages, etc. Where working between existing walls, it may be necessary to leave one of a series of dimensions to be verified on site, but all others should be given.

The finished floor and roof levels should be shown on the plans as well as on the sections, and it should be clear what allowance the contractor is to make for the difference between structural and finished surfaces. All doors and windows must be referenced so that they can be easily found in appropriate schedules.

Sections should be drawn through portions of the building where floor or roof levels vary, at the intersection of parts of the building, through staircases and any other places which are not shown elsewhere. To explain really difficult parts of the construction, 3D views should be used. The position at which sections are taken should be clearly marked on all floor plans. Floor levels and heights



flashings and weatherings, vent pipes, rainwater pipes and the stepping to foundations. Windows and doors can be numbered on elevations as well. The golden rule of never showing anything on one drawing that can be found elsewhere may save a little time, but it sacrifices the very useful extra check provided by the inclusion of such details. As BIM becomes more widespread these problems in theory should be consigned to the past. Nevertheless, it must not be forgotten that the reality of building is often a man on a muddy site clutching a crumpled drawing.

It is sensible to include a note on each drawing that figured dimensions are to be followed in preference to scaled measurements. The need for figured dimensions can be reduced considerably if grids are used to represent not only locations, but also standard dimensions. 300 mm is a common grid measurement.

## 8.8.2 Lettering

An advantage of CAD is that lettering is clearly printed. It is essential to choose a style and size of lettering appropriate to the drawing and to remember that the purpose of the drawing is, usually, to show the contractor what is to be done in order to produce the building on site. Architects still have to produce drawings by hand from time to time. Neatness and clarity in lettering are essential and, to achieve the best results, the letters should not be too large and should be evenly spaced out. However, CAD has replaced the need to produce drawings in the traditional way in most circumstances.

## 8.9 Computer-aided design

### 8.9.1 Information modelling

Most offices now use computers for the production of drawings, but there are few offices in which computers are the only design tool and there is still the rare office which does not use CAD at all. Some systems are easier than others; it is generally agreed that working in CAD is slower in the initial stages of producing the drawings, but that it is far easier to make amendments to the drawings and the way that the system works means that amendments to one drawing are reflected throughout all related information. This clearly removes the old problems of trying to remember every drawing affected when amendments were carried out on one.

The only way to learn to use CAD and to understand the possibilities is to sit at the computer and experiment after the initial period of instruction in the particular system. At the current state of the art, computers are not capable of thinking for themselves. The old adage 'rubbish in, rubbish out' is still true. The computer will only do what the operator instructs. It is unlikely that computers will ever replace the pencil and paper approach of the designing architect who wants to scribble around testing various design approaches (although many architects would disagree). But computers are very useful for testing a design once produced. They can reveal the design in three dimensions from

any chosen viewpoint as a means of design visualisation, through to construction information and building maintenance, and they can be programmed to produce a virtual reality impression of a walk through the building if sufficient data are input into the system.

BIM is changing how buildings, infrastructure and utilities are planned, designed, built and managed and most medium to large scale practices are upgrading their systems to a BIM system. Essentially, it is a computer-based process which enables the sharing and importantly the co-ordination of building information. If basic design information is put into the computer at an early stage, it can eventually form the basis of computer drafted production information. Computer images can be combined with programmes which allow investigation of acoustics, heating, insulation, day lighting levels and so on. There is also the benefit of being able to plot all services, integrate specification details and reproduce perspective views to identify possible conflict areas.

BIM is moving forward very quickly and highly sophisticated software enables full interrogation of designs at an early stage. No architect can afford to ignore these developments. Chapter 12, section 12.3 gives further explanation of BIM.

### **8.9.2 Environmental modelling**

There is a performance gap between design aspirations and the actual monitored results of building in terms of energy use, water use, indoor climate conditions (temperature, humidity, acoustics, daylight, etc.). It is becoming increasingly important for architects to understand building physics and design for the health and wellbeing of occupants. Software tools such as PHPP (Passivhaus Planning Package) and IES (Integrated Environmental Services) are being used by some practices in order to more accurately assess a building's performance particularly at the early design stages in order to inform massing, orientation, layout and building envelope. Both PHPP and IES are available as plugins to provide designers with a tool to very quickly analyse the performance of an initial design.

An important and often undervalued part of the design of buildings is a consideration of the way in which the internal climate conditions of a building impact upon the health of the users. The internal climate is dependent upon the way in which materials and components are chosen and integrated. Building biology is the science of creating healthy, life-enhancing buildings which work with natural systems and resources: a holistic study of the man-made environment, human health and ecology.

### **8.10 Presentation**

The way in which architects choose to present proposals to clients is largely a matter of personal choice. The truth is that whatever works is right. A client's capability to understand a scheme should never be overestimated. Many otherwise highly intelligent people find difficulty in understanding plans,

sections and elevations, which is why models, perspectives and virtual reality productions are so popular. Despite the fact that computer programmes can produce all kinds of interesting images, most clients still like to see a model. They like to be able to take it away and get a real understanding of the three-dimensional qualities of the building. It is useful for architects to get into the habit of producing simple working models. Models which clearly explain the scheme at the stage it has reached are worth any number of drawings to a client.

When making a presentation to a client, a model should be the basis so that the client can quickly get an idea of the scheme. Then plans can be used to elaborate and freely drawn perspectives used to show what it will actually look like. Software is available which enables the production of photorealistic images for presentation purposes. Sections and elevations are of little use to a client. A building never looks like its elevations and sections are too complex for the average client to understand. It is easier to make a quick sectional model to explain any complex parts of the building and many times more effective. The virtual reality walk, mentioned above, through the building can also be invaluable to a client who may have difficulty visualising the building with all its floor, wall and ceiling finishes by means of drawings and models alone.

Plans should be clearly drawn with the room name printed in each room. The use of a key at the side of the drawing together with a number in each room can be irritating. It is helpful to include a drawn scale on the drawing and also one or two dimensions. Any part of the building which is especially important or which needs particular consideration should be drawn out to a larger scale and a separate model prepared, if possible.

Some architects produce highly intricate drawings and involved renderings to impress the client. The client may well be impressed and also confused. If the client fails to understand the drawing, approval could be given for something which may be a source of disappointment and aggravation when built.

## 8.11 Reproduction

It is becoming uncommon for drawings to be reproduced on paper. They are usually consulted solely on the computer screen and exchanged electronically between consultants, contractors and sub-contractors. If drawings in hard copy are required they are usually produced by computer printout directly from file. Drawings, even up to A0, are often printed by photocopier.

## 8.12 Work programming

Programming of any kind is a difficult business. Programming a project in an office is complex because there are so many imponderables. Yet there is a need to programme such work, otherwise when the client asks, 'Will it be ready to go out to tender in two months?' the architect has no way of answering.

The basis for planning any project should be the RIBA Plan of Work (see Chapter 12). The stages usefully split up the work to be done. The next thing is

probably to decide whether the project deserves one, two or more people working on it for any or all of the stages. For example, it is quite possible that a project may need only one person in the early stages and expand to require more people at stage 3. The question, of course, is how many people and for how long.

The only safe way of getting to this answer is to consult historical records and look at the fees. In most cases, the fee will depend on how long the architect estimates their involvement. Every office should have time sheets for this very purpose. Only by looking at the time needed to carry out a comparable project can an estimate of future time requirements be formulated after adjustment to take account of any differences. Work programming is a serious matter where failure can result in disaster for the practice. All members of staff, including partners or directors, must realise that the accurate completion of current time sheets is essential. Practice management software allows for the recording of timesheets and can assist in work programming and the invoicing process as well as preparing time and fee estimates for future projects (see Chapter 11, section 11.14).

## **8.13 Sources of information**

### **8.13.1 Basic library**

Every practice needs a basic library. The extent to which an architect must refer to and rely upon technical information cannot be overemphasised. The size and complexity of the library will depend upon the size and needs of the practice.

Much technical information is now available online. Indeed, most information appears online well before it appears in print. However, care must be taken when considering information generally available online. It cannot always be relied upon, but it is invaluable for such things as legislation and good practice guides and regulations. It is important to organise an online library as one would a library in hard copy. Bookmark management software is available to assist in organising and maintaining important links to the latest relevant information so that it can be accessed quickly. There are numerous online information systems which provide access to the latest standards, regulations and technical literature for an annual fee. In the case of larger practices, this has largely replaced most of their technical library.

However, nothing compares with a paper copy when the need arises to study a document at length or incorporate part of the content in drawings or specifications. Moreover, when making use of technical information or acting in accordance with regulations of various kinds, it is wise to make sure that a copy of the relevant information or regulation, dated, is filed in the job file. That is because if it is later alleged that an architect has designed negligently, it is a good defence (usually referred to as the 'state of the art' defence) to be able to demonstrate that the architect designed correctly in accordance with what was known at the time. It can be exceedingly difficult to find technical information which is out of date by several years and which may be the only proof of what the 'state of the art' was at the time the project was designed. It is good

practice to keep copies of all technical information used on a project together with the files on that project. Such contemporary information can be quite crucial in subsequent legal proceedings when the precise circumstances surrounding the choice of product may be forgotten and the relevant technical information may be unobtainable from the original manufacturer. The ability to produce technical information contemporary with the period of the design process may prevent a claim for negligence succeeding.

Despite the internet, it is useful to have various kinds of information on hand. Although large office libraries may be a thing of the past, not everything is available on the web and it is a mistake to try to rely exclusively on what may be available online. Enquiries among a selection of practices of various sizes confirm that most practices have libraries even if they are not as extensive as they were ten years ago. First there will be technical books on such matters as design, building construction, and contract law. Textbooks, particularly those dealing with the law and technology, have a habit of becoming out of date very quickly and, despite the inevitably high costs, have to be replaced as it is essential that all references are kept up to date. However, certain kinds of books do not become out of date. If the practice specialises in or is involved in work to old buildings, reference books on old methods of construction by their very nature do not become out of date.

Technical information on products is now mostly to be found on the manufacturer's websites. Before relying on such information, architects should make direct enquiries of the manufacturer with information about the circumstances of proposed usage and expressly ask if the product is suitable. Again, such exchanges, together with copies of the original literature printed out from the web should be retained as paper copies in the project file. Some manufacturers still provide printed brochures and they can be stored in open-ended boxes for ease of retrieval if desired. Care must be taken whenever a hard copy is being consulted. There is a great temptation to take information which is two or three months old and assume, often quite wrongly, that it is still current; some material will almost certainly have been withdrawn and new introduced with concomitant numbering alterations.

A third category of information that needs to be available is certain government and statutory publications. Any set of regulations or piece of legislation which is referred to constantly should be available in hard copy or copies. For example, every office should have a copy of the Construction (Design and Management) Regulations 2007 (CDMR)<sup>13</sup> and the relevant pages of the Construction Act and Scheme. It is surprising how many architects are still unaware of the Act.

A question which is asked from time to time is how one should rank the various sources of information in terms of the most reliable/authoritative downwards. This is a very difficult question, because no matter how one sets out a list, there will be some categories which will contain important authorities together with lesser references. What follows is, therefore, a very general grouping:

1. Statutes, statutory instruments, regulations (always the most authoritative)

2. Case law and the decisions of various tribunals (these often interpret statute and contracts)
3. Government published or authorised codes and guidance
4. Books, journals and conference papers (standard of authority varies greatly)
5. Online sources (treat with care unless a recognised source, e.g. Government source).

### 8.13.2 Classification and proprietary systems

#### *Classification*

There are three systems of classification in general use in the UK. Not all of these systems will be in use by every practice and indeed some practices may not use any system. However, it is useful to know what systems are available.

#### *CI/SfB*

This is still used as a system of classification in some proprietary office library systems. It originated in Sweden; the letters SfB stand for *Samarbetskommitten for Byggnadsfragor* (the name of the Swedish committee concerned). Using this system it is possible to give any book, catalogue, official bulletin or pamphlet used by architects a classification according to its contents. The classifying symbols are easily remembered, and frequent use will enable the architect quickly to find the material wanted.

The SfB system classifies information into four main tables:

- Table 0 – Built environment
- Table 1 – Elements
- Table 2/3 – Construction form and materials
- Table 4 – Activities and requirements.

Tables 1 and 2/3 include most technical and trade literature while tables 0 and 4 include most technical references, textbooks, official publications and regulations. Much technical and trade literature has an SfB classification already printed on it, and this greatly facilitates the incorporation of such material into the library.<sup>14</sup>

#### *Electronic Product Information Co-operation (EPIC)*

EPIC is an internationally recognised classification for construction projects. It originates from a European Committee of organisations which provide product information. Although EPIC is probably mainly used in the UK to classify information intended for other countries, information originating in other countries may also be classified according to this system.

#### *Unified classification for the construction industry (Uniclass)*

This system was developed by the Construction Project Information Committee (CPIC) representing all construction professionals based on principles set out in the International Standards Organisation (ISO) standard which deals



with classification of construction information. It is closely related to EPIC, from which it draws some bases. Initially it incorporated CAWS (Common Arrangement of Work Sections for building works). Support was given by the DOE Construction Sponsorship Directorate and the project was led by NBS Services after industry-wide consultation. It is particularly useful where it is desired to arrange files in computer databases. Uniclass2 was developed in 2013<sup>15</sup> (see Chapter 19, section 19.2).

### ***Proprietary systems***

The need to keep a library up to date is all important and great care has to be taken with incoming information, including allocating an SfB, EPIC or Uniclass2 reference if one is not provided. It is also necessary to keep the office index up to date, as it is of little use having information stored on a shelf or elsewhere without having the facility to find out firstly whether what is sought is available and second, if it is, where it can be found.

All this can be very time-consuming and there are a number of commercial undertakings which provide an information service for architect's offices as noted earlier. They obtain the trade and other information, provide files and shelving to keep it in, give a regular updating service to the library and, in some cases, an information advisory service by e-mail, telephone or post. However, remember that these firms have to operate at a profit. Some charge a fee to the firms whose trade literature they circulate, while others charge a fee to the offices receiving the service as well. In each case the trade literature supplied will not be all-embracing, as there will be firms who will rely on advertising their products directly to the profession and the industry. All such firms, however, will include favourite product information if so requested. There are also Online services and CD-ROM provisions such as the RIBA Product Selector.

### **8.13.3 Information technology**

As noted earlier, vast amounts of reliable information are now available through the internet and the web including Acts of Parliament, Statutory Instruments and recent law reports.

### **8.13.4 Selected project records and feedback**

It will be found very useful to keep a record of all notes and data about a project in a separate file, with a simple history sheet in front to summarise what stage has been reached. The various stages of the work (e.g. sketch plans, applications and approvals) should be listed and the dates on which action was taken inserted against them; references and file numbers should be added as appropriate. This will not only save a considerable amount of hunting through files, but it will also make it that much easier if it becomes necessary to hand the project over to someone else. A specimen project history sheet is shown in Figure 8.2. Where the office computers are networked, such information is readily entered as a

PROJECT HISTORY SHEET			
Project .....	Project No .....		
Address .....			
Client .....			
Address .....			
Tel No .....	Fax No .....	E-mail .....	
Local authority .....			
Adjoining owner(s) .....			
Party wall surveyors .....			
Date of instructions .....			
Final design approved .....	Estimated cost .....		
Production drawings commenced .....	Completed .....		
Application for planning consent .....			
Approval received .....	Reference .....		
Application for Building Regs. approval .....			
Approval received .....	Reference .....		
Application for approval of means of escape .....			
Approval received .....	Reference .....		
Quantity surveyors .....	Tel No .....	E-mail .....	
Consultants .....	Tel No .....	E-mail .....	
.....	Tel No .....	E-mail .....	
.....	Tel No .....	E-mail .....	
Bills of quantities commenced .....	Completed .....		
Tenders invited .....	Tenders received .....		
Successful contractor .....	Tel No .....	E-mail .....	
Address .....			
Contract amount .....		Date of contract .....	
Named sub-contractors and suppliers			
.....			
.....			
.....			
Agent/foreman .....	Tel No .....	E-mail .....	
Clerk of works .....	Tel No .....	E-mail .....	
Starting date .....	Completion date .....		
Rectification period commences .....	Expires .....		.....
Final account certified .....	Amount .....		

Fig. 8.2 A specimen project history sheet.

computer file and thereby immediately available for inspection by any person in the office who is, or may become, involved in the project.

When the project is complete, all the office information (files, drawings, bills of quantities, etc.) becomes history, but for some years at least, important history. Careful decisions will need to be made as to what is destroyed and what is kept (see section 8.6 for more information on filing material).

Much time and effort is put into every project and as much use as possible should be made of the information which arises, hopefully to save similar efforts next time. For instance, the possibility of standard detailing for another occasion may arise, specification information may be able to be reused, never forgetting the need to check and amend if necessary. The quantity surveyor will usually have made a cost analysis of the tender and will have provided the architect with a copy so that cost information arising from the project can be utilised (after suitable updating) if a similar project is being considered. Finally, the

needs of the lawyers should not be overlooked. If an architect is unfortunate enough to be involved in a project which has ended in adjudication, arbitration or the courts the information he or she holds may be vital to their client's case. It is an established truism that the side which presents the best records is the side most likely to win – all other things being equal of course. There is little comfort in knowing you are right but not being able to prove it.

### 8.13.5 Legal/administrative

#### *Textbooks*

Every practice should have a comprehensive set of textbooks dealing with the law relating to architects and construction and also with what might be described as the business side of architectural practice. Architects are neither expected to be lawyers nor tycoons, but they are expected to have a fairly detailed understanding of the law as it affects them and to be able to understand and apply basic business techniques. An architect must be able to advise the client on choosing the correct form of contract and understand the principles behind such matters as extensions of time, interim payments, liquidated damages, variations, termination and the like. It is also conceivable that the client may need some initial advice on easements, boundaries, party walls, rights of light and basic obligations during the progress of the building contract. In some of these areas all that is required of the architect is to know enough to appreciate when it is appropriate to consult, or advise the client to consult, specialised legal, management or other practitioners.

The criticism most often levied at architects is in this area of business and law. It should be obvious that the person administering the contract should be at least competent in these necessary skills. It should not be something merely left to be picked up as the architect does the job. Although everyone needs practical experience, it is only useful as a way of tempering theoretical knowledge. Without the theory first, there is nothing to temper and the architect simply amasses a motley collection of information, often inaccurate and certainly incomplete. The groundwork should have been laid in the schools of architecture. Schools vary in the time they devote to these topics, but in any event and at best they can only provide a framework which the student or young architect must flesh out by private reading.

There are two kinds of textbooks: the simple and the complex. Serious legal textbooks will not only state the law, but also give copious references together with an in-depth discussion of difficult points. This kind of book is fine for the lawyer. It is also useful to have on the shelf as a reference for the architect who takes a keen interest in such things. For most architects, however, an altogether simpler approach is welcomed and, generally, it is all that is necessary. Architects need to know what they should be doing and why they are doing it. The same thing can be said about management textbooks. Every office should have a standard text, but also numerous easy to read guides.

Standard forms of building contract loom large in the average architect's working life and architects should be expert in this particular field. Guidance

and explanatory texts dealing with all the standard forms should be on every practice shelf. It must never be forgotten that architects who cause their clients to suffer loss through ignorance in administering a contract may be liable for professional negligence. Thus architects who made several errors when certifying, including deducting liquidated damages in the certificate and deducting them before the contract completion date had been reached, narrowly escaped suffering the consequences of these errors. In passing, the court considered that the architects in question were 'doing their incompetent best'.<sup>16</sup>

Specific topics which should be covered by appropriate textbooks are set out below.

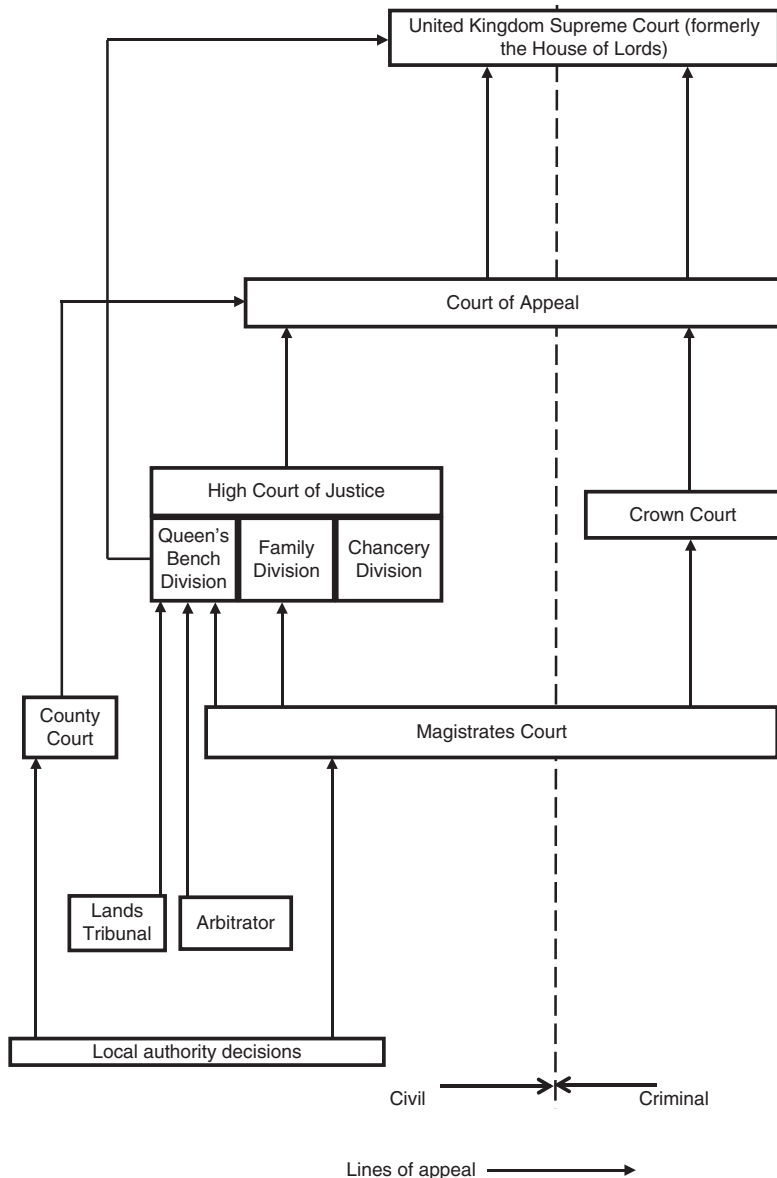
- *Law*
  - A simple general exposition<sup>17</sup>
  - A construction law book<sup>18</sup>
  - A good book on contract law<sup>19</sup>
  - Some books on specific topics such as planning law,<sup>20</sup> design liability,<sup>21</sup> warranties<sup>22</sup> or accessibility.<sup>23</sup>
- *Standard forms of building contract*
  - One or two general texts<sup>24</sup>
  - Texts dealing with specific contracts, such as SBC, IC,<sup>25</sup> MW.<sup>26</sup>
- *Management*
  - One or two standard management texts<sup>27</sup>
  - Some texts with special relevance to managing a practice, managing contracts, etc.<sup>28</sup>
- *Professional liability*
  - One or two texts.<sup>29</sup>

### ***Acts of Parliament***

Acts of Parliament do not normally make easy, or even engrossing, reading. Indeed, it sometimes taxes the courts to decide upon the true meaning of the words used. Nevertheless, there are some Acts which a practice must have on its shelves.<sup>30</sup> Care must be taken to keep the Acts regularly updated. Statutory Instruments and Regulations are regularly issued under powers conferred by Acts of Parliament and it may be the Regulations which are most important so far as the busy architect is concerned.<sup>31</sup> It is essential that, in the absence of a librarian, someone in the practice is given the responsibility of making sure that the Acts, Instruments and Regulations are up to date.

### ***Selected law reports***

The English legal system depends in large measure on the doctrine of judicial precedent. That means broadly that, in general, a court must follow the decision of previous courts in similar circumstances. To be precise, a court must follow the *ratio decidendi* (the reason for the decision). There may be many other things which a judge will say in the course of giving judgment, but it is only the ratio which is binding. The other statements may have persuasive force on another court, perhaps depending on the standing of the judge uttering them.



**Fig. 8.3** Court hierarchy.

The idea behind the doctrine is to impart some degree of certainty into the law. However, there is considerable scope for a court to depart from a previous decision if it is considered that aspects of the earlier case are significantly different from the case being tried. When a court decides not to follow a previous decision, it is said to ‘distinguish’ the earlier case. The courts may do this to avoid injustice in a particular case.

The general rule is that every court binds a lower court by its decisions. The hierarchy of the courts is shown in simplified fashion in Figure 8.3. Up until 1 October 2009, the House of Lords was the highest court of appeal in the

UK. From 1 October 2009 the function was taken over by the United Kingdom Supreme Court. It covers all civil law cases in the UK and all criminal cases in England, Wales and Northern Ireland. A decision of the Supreme Court is binding on all other courts, but it has the right to depart from its own decisions in future cases for very good reasons. It occasionally does so. The Court of Appeal binds itself and all courts below. Most construction cases are dealt with and disposed of, if not appealed, by specialist judges who deal with cases which have a high technical content. Their work is not confined to construction cases, but the construction industry is the major user of their services. This used to be called 'Official Referees' Business', but it is now referred to as the 'Technology and Construction Court', a division of the Queen's Bench.

In order for this system to work, it is essential that reports of the judgments in decided cases are easily available. Law reports have been available for about seven hundred years in various forms. It is perhaps a peculiarly English trait that, in spite of the importance, there is no official system of law reporting. Reporting depends on private enterprise. The nearest thing to an official set of reports is 'The Weekly Law Reports' published by the Incorporated Council of Law Reporting since 1965. There are many other series, such as the 'All England Law Reports', 'Lloyds' Law Reports', 'Times Law Reports', etc. and some decisions are reported on the Court's website and they can be read and downloaded free of charge.<sup>32</sup> There is a multitude of cases available on subscription-only websites. Not all decisions are reported and until comparatively recently, many decisions of importance to the construction industry went unreported.

It is unrealistic to expect architects to read every law report or even to read all the reports relating to construction. However, architects should be aware of legal decisions which might affect them and they should know where to lay their hands on the full report of the judgment. Architects should, of course, be wary of attempting to identify the *ratio* in each case. Sometimes it is obvious, but courts sometimes have grave difficulty in this regard when examining the judgment of higher courts which they are expected to follow. Nevertheless, the reports can provide valuable insights in certain circumstances.

There are now a number of series of reports which are concerned only with construction cases. No one series covers all the cases:

- *Building Law Reports* (BLR): Fully indexed series, usually giving full judgments and each case is prefaced by a brief resume of the key facts and decisions together with a useful commentary on some of the features of the case in question. Published by Informa Maritime & Professional (paperback with annual hardback volume).
- *Construction Law Reports* (Con LR): Fully indexed series, usually giving full judgments and each case is prefaced by a brief résumé of the key facts and decisions together with a useful commentary. Concentrates, although not exclusively, on the judgments of the Technology and Construction (formerly Official Referees) Courts. Published by LexisNexis (hardback).
- *Construction Law Journal* (Const LJ): Fully indexed series, generally giving full judgments and each case is prefaced by a brief résumé of the key facts and decisions. Each issue also contains articles on some aspect of

construction law and contracts and book reviews. Published by Sweet & Maxwell (paperback).

- *Construction Industry Law Letter* (CILL): Fully indexed series, giving brief reports on cases of interest together with short commentary. Also contains occasional articles on construction law topics, details of Acts of Parliament, standard contract amendments, etc. Published by Informa Maritime & Professional (paperback with hardback binder).

CILL is probably the most useful for a busy architect, but the practice should back up these 'immediate' quick reports with one or more of the other series in order to be able to refer to the full judgment of a particular case.

References to law reports (there are some references given in the notes to other parts of this book) are given by means of a standardised abbreviation system. The abbreviations referring to the reports noted above are given immediately after the titles in each case, but in addition it is necessary to include further information to enable location of the precise report. Usually that is achieved by giving the volume number and the page number. Therefore, '50 BLR 1' refers to volume 50 of Building Law Reports, page 1. (Cases in later volumes of BLR are cited with the volume date thus '[2000] BLR 764'. CILL has a slightly different system.)

### ***Professional publications***

Professional journals offer a quick way of keeping up to date with construction law and standard contract amendments. Many of them offer a regular series of updates on these matters. 'Building', the 'Practice' part of the 'RIBA Journal' and in Northern Ireland the 'RSUA Practice Bulletin' are all valuable in this respect. Specialist construction law journals such as 'Construction Law Journal' are filled with useful articles.

### **8.13.6 RIBA information line**

This information line was instituted by the RIBA on 1 May 1995, since when it has become extremely popular. It is operated by expert staff of the information unit of the British Architectural Library. The service is available only to RIBA members. A broad range of architecture and architectural practice matters are covered and details of books, articles and seminars can be sent by e-mail, fax or post. The unit can call upon the services of a panel of specialist advisors. The advisors, who are unpaid, are prepared to discuss the member's problem by telephone on a without liability basis. The service is free to members who may then commission the advisor on a consultancy basis if the query warrants it.

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32. An excellent website for recent law reports, legislation and other related material is the British and Irish Legal Information Institute which has a fully searchable website at <http://www.bailii.org>. It covers the UK and Europe and it has links to similar databases in other parts of the world.

# 9

## Marketing

### 9.1 Active marketing

It is often, and correctly, said that the time to concentrate on marketing is when the firm is busy; which of course is the very time when no one has the time to give to marketing. The reason why marketing should be carried out when work is coming in and everyone is busy is that the effects of marketing usually take some time to work through. It can easily be a year after the event that a commission happens. If a firm waits until work is falling off, any initiative may be too late to achieve useful results.

The first thing for any architect to realise is that marketing any professional service is not like selling baked beans. An altogether different approach is necessary. Not very long ago, the only acceptable way for an architect to attract work was through existing clients. Apart from a brass plate with letters of a prescribed size, there were few ways the architect could advertise the existence of the practice. The situation now is vastly changed and a wide range of activities are allowed by the RIBA and ARB Codes of Conduct.

Every practice must develop an appropriate marketing strategy for that business. Very large firms may employ one or more full-time marketing people to keep it in the public eye and follow up particular opportunities. The majority of businesses, however, must rely on the 'part-time' efforts of their own staff. Some architects have the gift of attracting work. They can go to an event and come back with three new commissions. Such architects are worth their weight in gold and they need never do any architectural work themselves. Such individuals, however, are quite rare. Therefore, specific marketing objectives must be set so that all the staff in a firm are pulling in the same direction.

There are some very simple straightforward things that every business can do:

- Chartered Practice scheme
- architects' signboards
- lectures and articles
- direct approach.

#### 9.1.1 RIBA Chartered Practice scheme

A firm can register as a Chartered Practice for a modest fee. At the time of writing, the subscription for a sole practitioner was £150 for an 18-months

membership rising in stages to £1,050 per 18 months for businesses of more than fifty persons. Certain criteria must be satisfied before a firm will be accepted for membership. The criteria have been made much stricter than previously, but the criteria are little more than one might expect from a properly organised architectural firm in any event. Full details can be obtained from the Chartered Practice Manual which can be downloaded from the RIBA website.<sup>1</sup> There are currently something over 3,000 firms registered in this way. This is an increase in numbers from under 3,000 mentioned in the previous edition and is probably a result of an improvement in the current trading conditions.

Not only does RIBA Client Services promote architects in a general way, it also responds to around 1,000 queries each year from prospective clients seeking an architect for a particular project. It is important to understand that the RIBA Client Service Team only nominate Chartered Practices. Whatever might be thought of this approach, the pragmatic response is to register as a Chartered Practice. Chartered Practices also have a substantial entry in the Directory of Practices which enables a firm to give its full details together with the kind of commissions it undertakes. It is available to be searched on the RIBA website. The scheme offers numerous opportunities for marketing the specific business as well as the general advertising undertaken by the RIBA for Chartered Practices as a whole.

### 9.1.2 Architect's signboards

Many firms have standard signboards which are erected in a prominent position on new development. If the development is of any size, the architect's board will be just one of many professionals' boards and there will be boards giving the particulars of the main contractor and possibly some of the principal sub-contractors. It must be remembered that such boards require planning permission (see Chapter 17 section 17.2) and the architect is usually responsible for approving, if not actually designing, the layout of such boards. The requirement for a board to be displayed on a site must be included in the bills of quantities or specification for a project. It will be the responsibility of the contractor to erect the board and for its removal at completion. Obviously, the erection of the board is something which would need to be discussed with the client as they may well have requirements for the design and images shown on the board. The RIBA has approved the sizes and layout for architects' signboards, details of which are on the RIBA website.

An architect now has the right to insist that the firm is identified as the architect of the project in any published material illustrating the building and to be credited with the design in permanent form on the outside of the finished building.<sup>2</sup> Although there may be isolated instances where the architect definitely does not wish to be remembered as the designer of a particular building, in most cases it is a valuable means of additional publicity, but the architect must assert the right for it to be effective.

### 9.1.3 Lectures and articles

Although it may be difficult for a sole practitioner to find the time to give lectures or write articles, many firms have members who can give short talks and others who can put together an interesting article on aspects of architecture in general and the work of the firm in particular. Many organisations, such as civic and amenity societies, chambers of commerce and the like have difficulty in finding speakers and interesting topics for lunchtime or evening meetings. There is nothing to prevent a firm from writing to such organisations offering a talk on architectural matters of interest.

Although speaking in public can be daunting at first, practice makes perfect and provided a speaker is properly prepared with notes and possibly slides, the experience can be enjoyable for all parties. This is a good way of putting the firm's name in front of a wider public. An article is a more permanent record and likely to reach a wider audience provided it appears in an appropriate magazine, local paper or journal. An article in the business section of the local newspaper about the business or an ongoing local project will help promote the business and place its name in the minds of members of the local business community. People and clients are no different in that they want to be associated with buoyant and successful businesses. When speaking to or writing for people who are not architects, care should be taken to make the talk or article accessible in plain English and entirely devoid of 'architectspeak'.

### 9.1.4 Direct approach

Architects may now approach a client direct before there has been any initial enquiry. For example, an architect may hear that a company is expanding and looking at sites for additional factory production. There is nothing to stop the architect from writing to the company offering their services in finding a suitable site and designing the factory. Anecdotal evidence suggests that commissions are obtained in this way. Some basic research is required before writing to ensure that another architect has not already been commissioned, that a sufficient understanding of the potential client's business has been grasped and of its future requirements.

## 9.2 Brochure

It has been suggested that a client will spend only seven seconds flicking through a brochure.<sup>3</sup> This does not tend to promote confidence that a brochure will contribute much to assist in getting work. Pressing a brochure on an unwilling client is likely to be counter-productive.

A brochure is not normally produced for wholesale distribution. It should explain who's who in the firm, when the business was established and the kind of services offered, preferably with illustrations of the type of work undertaken. Special areas of expertise should be highlighted. In addition it is now common

for businesses to include testimonials from clients expressing how happy they are with the services provided.

Most importantly, however, the brochure should clearly explain the benefits to a prospective client of employing that particular firm. Although the brochure should be well designed in layout and typeface, it should avoid being too pretentious. It should be easy for a prospective client to find their way through to the information required (remember the seven seconds - quite a long time actually). A copy of the brochure should be available in the waiting area of the business' office. It should be taken and left with a client following a presentation. In other words, it should be used selectively. It used to be the case that a brochure was expensive to produce and print. It is now quite cheap to produce a full colour brochure printed on good paper, because it can be laid out on an office computer and copies printed when required. Updating the brochure has become relatively simple. Now that most businesses have websites it is generally possible for clients to download an electronic version of the brochure or simply read it on their computer screens.

It is a good idea for a business to have two brochures: one, a full colour document setting out everything about a firm and its projects for those times when a client asks for full details; the other, a folded A4 sheet setting out basic information about the firm, brief lists of projects and clients and evidence of the benefits that the firm can bring. The small brochure is useful for carrying around in a briefcase and for distribution before or after giving a talk. It can direct potential clients to the firm's website.

### 9.3 Website

Most people will use the internet to research topics, obtain information and possibly communicate with others. They will use a search engine such as Google, Yahoo or Bing. Potential clients, other businesses and consultants are no different. It is likely that most businesses today would probably look to establish a website before creating a brochure. More importantly most people would expect a business to have a web presence. A business' website is an important marketing tool to promote the business; to attract new clients; and to keep existing client's informed or updated about the business. A website generally has no geographical limits and is accessible 24 hours a day, 7 days a week and 52 weeks a year.

The website should present a professional image and reflect the branding of the business. Therefore, it needs to be designed correctly from both a visual perspective and content. It is important that the architect's website is picked up at the head of the first page on a search engine's list; it is of little benefit being located at page 10 as most clients will have lost interest before they have read the previous nine pages.

The site can include information about the business such as:

- the address for the office or offices together with contact details including e-mail addresses and possibly directions to those offices
- contact name and details for enquires, e.g. e-mail address

- the sectors in which the business works (e.g. education, hospitals)
- the services offered, e.g. feasibility studies, planning applications, contract administration, full architectural services
- accreditations, e.g. RIBA Chartered Practice
- corporate and social responsibilities
- details about the staff, e.g. their position, experience and expertise
- opportunities for employment
- details of past and current projects
- testimonials.

A website allows businesses to, easily and relatively cheaply, publish newsletters, technical updates and commentaries on recent events in the profession. Possibly even to run a blog (i.e. an abbreviation of 'weblog').

The site can include a lot more detail than could readily be set out in a brochure. However, to be effective the site must be easy to navigate and not too 'busy' in terms of flashing images or pictures. Those visiting the site should find it simple to locate what they are after. They should be sufficiently impressed to want to follow up with an enquiry to talk with someone.

The site needs to be easy to keep updated so that it reflects the present business position. It is important that the site is updated; it will give the wrong impression if the content of the site is 6 months or more out of date. That then becomes a bad advert for the business and may possibly deter enquiries.

## 9.4 Social media

Social media refers to the interaction between people using an electronic platform as a means of communication. For example the creation of a blog allows casual dialogue and discussions to take place on a specific topic or opinion between a numbers of individuals, e.g. construction professionals. The word 'blog' is simply a truncation of 'weblog'.

Social media is rapidly developing and changing, meaning the mix of opportunities available to engage with a wider audience is increasing. The difficulty is, as always, getting the right message, to the right audience, at the right time. Trends within construction marketing tend to show more digitally integrated and client focused strategies by the larger firms. As always client needs should be informing the strategy adopted. Architects should be trying to discover what their client's want; do they want to engage in real-time with you on a regular basis? Not all clients will but others may and therefore the use of social media has to be targeted. Some of the more common platforms for individuals to communicate electronically are as follows.

- Facebook: the largest social network site. Users create a personal profile and can add other users as 'friends', and exchange messages and information.
- Twitter: a social network/blogging site that allows individuals to communicate through the exchange of short messages of up to a 140 character limit.
- LinkedIn: a site where professionals with similar areas of interest can share information and converse. It can support the formation of groups. It is

designed specifically for professional networking, e.g. finding a job, discovering sales leads, connecting with potential business partners, rather than simply making friends and sharing photos and music.

These social network sites permit an individual to maintain a profile and create contacts using electronic methods of communicating. Architects could link up with other individuals in the construction industry who work in similar fields, e.g. health. They could explore possible business opportunities and also share information. These sites offer architects an opportunity to promote themselves and their practice.

## 9.5 Advertising

Since 1986 architects have been able to advertise their services, but whether it is wise to do so will depend on the circumstances. There is still a feeling amongst some architects that advertising is not something a professional does. This view is probably outdated and held by an ever-decreasing minority. However, advertising must comply with the RIBA Code of Conduct Guidance Note 3. Many of the larger firms employ specialist marketing personnel or engage specialist service when the need demands. It may be worthwhile for a small business to advertise in the local newspaper, or in an appropriate magazine, extolling the virtues of the business' services and the projects undertaken. Obviously, a firm should ensure that it is included in every possible list, from Yellow Pages to local business directories, including those on the web, so that the name and telephone number is always available to anyone looking for an architect. Advertising is something that should be used with a degree of caution. The time, effort and cost invested should have the potential to show benefits in equally proportionate returns. Those who take it seriously should look to try and measure, if at all possible, the benefits received from particular advertising exercises. If they do not prove to be cost effective then they should not be repeated in the future.

Looked at in a broad sense, advertising can be fruitful. The publicity a firm can get from the official opening ceremony of a prestigious building or for assisting in fund raising for a charitable building may be immeasurable. The firm can raise its profile by offering to organise the foundation laying or opening ceremonies or by becoming involved in the design of a commemorative brochure. A relatively poor client might want some assistance in putting together a fund-raising leaflet and the firm could well donate the services of a member of staff to draw a suitable pen and ink perspective for use in the brochure. Advertising can also be carried out by the setting up of exhibitions at galas, meetings and locations such as libraries and museums provided the subject matter is local and topical.

## 9.6 Contacts

This is probably the most productive method of attracting or generating work. In the most basic form, the architect looks to relatives, friends and acquaintances to provide commissions and to provide introductions to other sources

of work. It is surprising how often one reads of old acquaintances achieving positions where they can be a useful source of work or further contacts. However, suddenly renewing an old friendship which has long since lapsed does not usually send out the right message. The answer is to cultivate as wide a circle of friends and business acquaintances as possible; this is where social media could help. It may seem a matter of luck more than anything else but those individuals who put in the effort in developing a wide and varied spectrum of contacts do generate work. Members of a business can increase their scope of contacts by attending functions and seminars, and by joining clubs and organisations of a social, religious, sporting, civic or political nature. That is not to say that an architect should join a club or social media forum for the sole purpose of getting work. The likely outcome is that such an architect will not secure any work but there will be no other enjoyment either. Developing contacts has to be viewed as a long-term venture, accepting that some efforts will fail to be fruitful.

Civic societies and conservation panels are a useful way of getting to know the local planning officers. Some architects make a practice of frequenting a local pub or club where solicitors, accountants and insurance brokers gather. Sometimes a new commission might be obtained in that way; not usually directly, but because when the solicitor or accountant is trying to think of an architect who can carry out a particular project on behalf of a client, the architect comes to mind.

It is also important that the architect cultivates more than a single point of contact with a client. That point of contact may retire, move elsewhere or die. The architect does not want the flow of work to dry-up simply because that person is no longer with the client firm. However, if the contact does move elsewhere it could possibly open up new avenues for work.

## 9.7 Competitions

Competitions as a way of getting business should not be overlooked although it is not usually a primary source of securing work. Very often winning a competition can be the start of a successful career for a young architect. Whether an office will enter for a competition depends very much on the volume of work in the office and the enthusiasm of its members. The RIBA website includes detailed information for architects thinking of entering a competition and for clients considering selecting an architect or a design by competition. The RIBA Competitions Office is based in Leeds. It organises competitions for specific client requirements. Two distinct types of competition are identified: finding the right architect and finding the right design solution. Under these broad headings, there may be several variations.

The various types of competitions depend on the particular requirements of the promoters. In the first place, the competition may be single or two-stage. In a single-stage competition, the competitors are required to submit fairly complete small scale drawings sufficient to describe their designs, but in a two-stage competition, they are required to submit simple line drawings for the first stage, indicating the broad outline of the scheme. From these entries, a shortlist is



drawn up and the competitors on it are invited to submit a developed entry similar to the submissions in a single-stage competition. An obvious advantage of this method is that a relatively small number of entrants are expected to devote significant amounts of time and effort. A variant is where the second stage consists of the competitors selected from the first stage together with a limited number of competitors specifically invited to submit schemes at the second stage. Persons invited to submit at the second stage only must be named in the conditions so that other competitors know the calibre of persons they are up against.

Another type of competition is the 'Ideas Competition', which is intended to solve particular problems. This kind of competition is sometimes set by manufacturers or the professional press as well as by some clients, in order to air specific issues or to encourage rising architectural talents.

Competitions may be open or limited. Open competitions are those which may be entered by any eligible architect. Sometimes clients will promote a restricted competition and invite architects of established and recognised merit, or entrants may be limited to architects from within a particular geographic area. Architects who are invited to submit designs or who are successful in proceeding to a second stage receive an honorarium. All winners should receive an appropriate premium and the author of the design placed first should be appointed to carry out the work. The premium is then subsumed into the fee for the project.

The assessors should be approved by the President of the RIBA and they are debarred from competing. Nor may an architect assessor take a commission to carry out the design in the event that no submitted entry is satisfactory.

There are opportunities for architects to compete worldwide in architectural competitions and international reputations have been made in that way. Such competitions are often advertised in the architectural press.<sup>4</sup>

## 9.8 Frameworks

Many government and public sector organisations, universities and large organisations which undertake building works on a regular basis set up frameworks for the appointment of consultants and contractors. In many instances frameworks are used to offer a simple and easy way of complying with the EU tendering regulations.

Securing a place on a framework for architect services can be both a costly and time-consuming exercise for a practice; and once a place has been secured that in itself does not necessarily guarantee a flow of work over the duration of the framework. Therefore, a practice should consider whether the efforts required to win a place on, say, the local university framework is going to be worthwhile and likely to result in any work in the forthcoming years.

## 9.9 Retaining clients and recommendations

The best way of building a business is to keep every client who commissions work which is not a one-off. There is nothing as comforting as repeat business. It shows that the client is satisfied with the service supplied and it provides a

solid base from which the business can develop and grow. A satisfied client will recommend the firm to others and, in due course, there will be no necessity for a great deal of active marketing, because old and new clients will be anxious to commission work. Although such devices as regular mailshots, parties and regular correspondence on matters of interest help to show clients that their architect is concerned for their interests, the very best way of keeping clients is for the architect to provide a first class service.

An architect is unlikely to want to turn away work but they should always be conscious of securing a high percentage of their work from a single client. This is not necessarily healthy for the business should that client move to another architect or stop commissioning work. It is always prudent to try and ensure a good spread of clients but the realities of business do not always make this possible. Therefore, architects should be aware of the risk and the rectification of any imbalances should form part of the practice's business plan (see Chapter 6, section 6.4).

## References and notes

1. [www.architecture.com](http://www.architecture.com)
2. The Copyright, Designs and Patents Act 1988, Section 77.
3. *Architects' Journal*, 13 December 1989, p. 69.
4. Collyer S, *Competing Globally in Architectural Competitions* (2004), Wiley.

# 10 Insurance

## 10.1 Introduction

The topic of insurance is important to all professionals and architects are no different. It is a necessary requirement in the running of a business and in the administration of a building contract. Insurance is simply an arrangement by which a company or the state<sup>1</sup> undertakes to provide a guarantee of compensation against a specified loss, damage, illness or death in return for payment. The arrangement is simply a contract between the insurer and the insured (i.e. the policy) and the payment is the premium. Certain types of insurance are more important to some architects than others. For example, the insurance of the business premises or the insurance to cover an employer's liability falls squarely with the partners or directors of the business. In contrast professional indemnity insurance should be of interest to all practising architects. What follows is of necessity a brief summary of the main categories of insurance of which a practising architect should be aware and will likely have to address during their professional career.

Insurance is a complex subject matter and where necessary an experienced broker should always be consulted. There are, however, four important principles which should be understood by anyone dealing with insurance:

- *uberrimae fidei*: of the utmost good faith
- *subrogation*: standing in the place of another
- *insurable interest*: a recognised interest in the subject matter to be insured
- *level of indemnity*: the amount the insurance company will pay out against a claim or claims.

### ***Uberrimae fidei***

'*Uberrimae fidei*' or '*uberrima fides*' is Latin for 'utmost good faith'. Insurance contracts are the most common type of '*uberrimae fidei*' contract. Because an insurance company agrees to share the risk of loss with the insured, it is important that the insured acts in good faith by disclosing all information that affects the insurance company's level of risk. Full disclosure allows the insurer to protect itself by charging the insured a premium that accurately reflects the level of risk it is undertaking. If the risk is considered too great the insurer may refuse to offer cover. Therefore, the basic principle is that the party seeking insurance

must disclose all material facts whether the insurer has specifically asked for them or not. Failure to make such disclosure can render the policy voidable at the option of the insurer. Most insurers require the completion of some form of questionnaire which places the onus on the insured to disclose the relevant particulars. Thus for example an architect must reveal all circumstances from the past that might lead to a future claim or material facts (e.g. the nature of work undertaken) which might increase the risk of a claim being made against the architect, when seeking professional indemnity insurance.

### ***Subrogation***

‘Subrogation’ is the legal doctrine whereby one person takes over the rights or remedies of another. Within insurance contracts the taking over of such a right is a matter of contract (e.g. a term of the policy) and as such can also be readily waived by the insurer by a term in the contract. The basic premise is that where the insurer makes a payment on an obligation which is the primary responsibility of a party other than the insured, then the insurer is subrogated (substituted) for the insured to recover any claims or remedies that the insured may have against the party responsible. A simple example should make this clear. Where a firm of architects has professional indemnity insurance (see section 10.5), an employee may perform a negligent act (e.g. when specifying a product or administering a building contract) which results in the practice being sued for negligence by its client. If the insurer pays out in respect of the claim, it is entitled to stand in the place of the firm and take action against the employee to recover the full amount paid out. To avoid this distressing situation, most professional indemnity policies contain a waiver of subrogation in favour of the firm’s employees. In other words, the insurer agrees not to exercise its right of subrogation against any employee whose negligent action lay at the root of the claim against the business.

A further illustration would be under a building contract where the employer is responsible for insuring the existing structures within which the works are being undertaken. Such insurance, as is the case within most JCT contracts, has to be taken out in joint names. Joint names insurance is insurance which covers the identical interests of two or more parties in the subject matter of the insurance under a single policy. Under a joint names insurance policy, the insurer will have no right of subrogation against any of the insured parties, even where an insured party has caused the loss for which the insurer has had to pay out. Therefore, many employer’s insurers refuse to underwrite a joint names policy that would include the contractor, as to do so would mean the insurer would have to forgo its right of subrogation against the contractor if the contractor were liable for causing the loss, e.g. a fire started by the negligent act of a contractor’s employee.

### ***Insurable interest***

Before a person can take out insurance they must have an insurable interest in the subject matter. An insurable interest exists when an insured person has a financial or other kind of benefit from the existence of the insured subject.

A person has an insurable interest in something when loss or damage to that thing would cause the person to suffer a financial loss or some other kind of loss. Generally, insurable interest is established by ownership, possession or a direct relationship. For example, people have insurable interests in their life or their property. An architect would not normally have an insurable interest in the works, which he had designed, that was been constructed under a building contract. However, both the contractor and employer would have an insurable interest in the works.

### *Level of indemnity*

This is the amount the insurance company will pay out against claims. If the level of indemnity is stated as £1 million pounds then this is the amount the insurance company will pay out. So if the claim against a business was £1.4 million, then the business would have to find the £0.4 million balance. The limit can operate either on an 'each and every' claim basis, meaning that the full limit of indemnity under the policy applies separately to each claim which might arise during the period of insurance or on an 'aggregate' basis, meaning that the limit of indemnity applies as a maximum total payment irrespective of the number of claims notified during the period of insurance.

## 10.2 Premises and contents

Loss of or damage to office premises and contents could potentially be disastrous for a business, e.g. due to fire, loss or theft. The partners or directors of a business manage this risk through having appropriate insurance cover in place. Buildings insurance is to protect business premises against damage or destruction. It can provide insurance against fire, lightning, storm, flood, impact from aircraft or vehicles and escape of water from tanks or pipes.

The basis of property insurance will usually be for the 'full reinstatement' or 'rebuild' value of the property. The insurer makes no deduction for dilapidations. If 'full reinstatement' cover is not available then care must be taken that sufficient cover is purchased. If the premises are underinsured, the result will be that in the case of loss, the insurers will only pay out up to the limit of the insured sum. This may fall short of the amount required to carry out the necessary remedial or reconstruction works. It is also necessary to see that the appropriate perils are covered under the policy, e.g. fire, lightning, storm, theft and flood.

The content of an architect's office is particularly vulnerable to damage, consisting as they do largely of paper and electronic material representing many hours of work. It is essential that a business takes a proper inventory of the contents of the office and updates this regularly with the insurers. So far as drawings are concerned, their value for insurance purposes must include the estimated cost of redrawing if they are lost. Some businesses retain documents on behalf of clients (e.g. executed building contracts) and it may not be that easy for these to be replaced. It may be that back-up copies are made, possibly in electronic

format, and stored away from the office in case of fire or at the office but in a special fireproof safe or cabinet. Expensive pieces of equipment such as computers and software must receive special consideration. They may even have to be expressly identified separately in the policy. In addition if equipment is to be used outside the office, e.g. laptops, the insurance must cover such use.

It is important to appreciate who is or are the beneficiaries under the policy. For example, in the case of a partnership, all the partners may jointly own the office premises in which case they would all have an insurable interest and should all be identified as beneficiaries under the policy. Alternatively, if one partner owned the premises and leased it to the other partners then it is likely that only the one partner would have an insurable interest and be the only beneficiary named under the policy. Alternatively, the premises may be leased from a landlord and the business may be only one of a number of tenants in the same building. It is likely to be difficult, if not impossible, for each tenant to get building insurance for 'their' part of the building; and then who would be responsible for any common areas? In which case the partners or directors would not be the named beneficiaries under the insurance policy for the premises owned by the landlord; the policy would likely be taken out by the landlord, who would be the named beneficiary, under a single policy covering the whole building. The landlord would recover the insurance cost through the rent charged. However, the partners or directors would be responsible for taking out content insurance for their offices.

Where possible, a policy should provide protection for all the partners or directors of the business. The likelihood of an insurance company exercising rights of subrogation should not be ignored. Thus, in the case of a tenant responsible for fire damage to the landlord's property, the landlord as the insured beneficiary will be able to claim from the insurers for his loss. However, the insurers may subsequently take action via its subrogation rights to recover their loss from a negligent tenant. That is unless there is a subrogation waiver by the insured, in the policy, in favour of the tenant which is something which should be clarified at the time of entering into the lease.

### **10.3 Public liability**

This category of insurance is taken out and maintained to cover the legal liability of the business to third parties for injury or death or damage to property as a result of the negligence of a partner, director or an employee in the course of the business; for example a visitor who is injured following a trip on the damaged office floor. Public liability insurance does not cover professional negligence (see section 10.5). A large indemnity limit should be specified (e.g. £2,000,000 plus) and this should be upgraded at regular intervals. Liability in excess of the insurance indemnity must be borne by the business. Where a business becomes involved in other activities, such as social or charity events then the insurers should be informed and the insurance cover appropriately extended. This is something that should be discussed with the insurers prior to committing to the event.

## 10.4 Employer's liability

A business is required by law to take out insurance to provide an indemnity against its liabilities to its employees.<sup>2</sup> The indemnity should be for at least £5 million and be undertaken from an authorised insurer. Most insurers offer cover up to £10 million. The policy is to cover death or injury, and it includes sickness of an employee provided that:

- it arises in the course of their employment; and
- the employer has legal liability.

Examples of such liability could be an employer's breach of the Factories Acts or Employer's Liability (Defective Equipment) Act 1969, unsafe systems of work, the negligent acts of other employees or an employee being attacked while going to the bank.

An employer can be fined for not having proper insurance in place and for not publicly displaying their employer's liability insurance certificate or not making it available to inspectors when requested.

## 10.5 Professional indemnity

This is probably the most important area of insurance for all architects. Every business should have an adequate level of insurance to cover the possible negligence of its staff when providing a service. Insurance cover is a requirement of the ARB Code of Professional Conduct and Practice (Standard 8) which reads as follows:

- '8.1 You are expected to have adequate and appropriate insurance cover for you, your practice and your employees. You should ensure that your insurance is adequate to meet a claim, whenever it is made. You are expected to maintain a minimum level of cover, including run-off cover, in accordance with the Board's guidance.
- 8.2 The need for cover extends to professional work undertaken outside your main practice or employment.
- 8.3 If you are an employed architect you should, as far as possible, ensure that insurance cover and/or other appropriate indemnity arrangements are provided by your employer.
- 8.3 You are expected to provide evidence that you have met the standards expected of this Standard in such form as the Board may require.'

The ARB guidance requires a minimum limit of indemnity of £250,000 for each and every claim. This is a minimum and the indemnity should reflect the risks to which an architect or the business could be exposed to should negligence occur. In many instances a client or their advisors will dictate the level of indemnity required. Failure to take out and maintain appropriate

cover will render an architect liable to severe penalties. The ARB states on its website that:

‘The Board, acting through its Professional Conduct Committee, will view very seriously any failure by an architect to maintain adequate and appropriate professional indemnity insurance. Whilst the circumstances of each case will be different, it should be noted that the Professional Conduct Committee has found persons without such cover to be guilty of unacceptable professional conduct as defined by the Architects Act 1997.’<sup>3</sup>

Professional indemnity insurance is provided on a claims-made basis and therefore cover must be held when a claim is made and not when the negligent act or omission occurred. The act or omission may well have occurred many months or even years prior to the cover commencing. Therefore, it is important for an architect or business to have ‘run-off’ cover in place when they cease to practice. This will cover them for work previously undertaken. ARB recommends that an architect or business has cover for a period of six years following the date on which they cease practising.

Although no consultant likes to contemplate the possibility of facing a claim for professional negligence, few architects or businesses escape such claims or the threat of a claim at some time. The insurance is there for the benefit of both the business and the client. It ensures that there is a fund available to compensate a client if an architect is found to have been professionally negligent. It also protects the business against the chance that it is held liable in respect of a large sum which would otherwise have to be found from the business’s own resources; in many cases this would lead to bankruptcy or insolvency. Although one might hope that a client would not press a claim to the extent of making the partners bankrupt or a business insolvent, it does happen. Relying on the benevolence of a client, facing a huge bill to correct the consequences of an architect’s negligent design, could be misplaced. The subject is complex and a specialist text on the subject is worthy of study.<sup>4</sup>

There are certain important points to bear in mind regarding professional indemnity insurance. These are set out below.

- Premiums are high and increasing.
- The scope of professional activity carried out must be declared. The information provided must be accurate. Any activity (i.e. material fact) which is not declared may not be covered by the insurers.
- It can be difficult to decide upon the amount of indemnity (i.e. cover) required. The value of commissions undertaken is no indication of the likely maximum amount of any potential claim.
- Insurers who are prepared to provide the necessary cover are relatively few.
- The cover is only effective on a yearly basis, for example in respect of matters notified during that year. Thus if cover is not maintained, perhaps because a business has fallen on hard times, a claim made during the off-cover period cannot be referred to the insurance company even though cover may have been in place for ten years before and when the negligent act or omission occurred. This is why it is important for an architect to ensure that run-off



cover is available for the years following retirement. Six years seems to be a recommended and popular period for run-off cover although it cannot be guaranteed that there will be no claims after that period.

- The policy normally covers the amount of any damages awarded against the insured together with the amount of legal costs up to the limit of indemnity noted in the policy. It should be noted that many, if not all, policies carry an excess that may be substantial, which will be borne by the architect. The policy will not usually offer cover against allegations of criminal behaviour and against allegations of non-negligent activities.
- Insurers usually claim the right to defend any claim. Alternatively, they may decide to settle. Whichever course they take will be on the basis of sound business principles as viewed by the insurer. This may not suit the insured with the insurers settling a claim on a commercial basis when the insured believes it has done little wrong. In many instances the potentially high legal costs are a determining factor.
- Once cover is in place, the insured must immediately notify the insurers of any and all circumstance which **may** give rise to a claim.<sup>5</sup> Failure to do so may lead to the insurers repudiating liability.

It is possible to extend cover to deal with certain other matters, such as pursuing a claim for fees or infringement of copyright or to provide an indemnity in an action alleging libel or slander.

## 10.6 Latent defects insurance

Latent defects insurance provides cover for new buildings (or new works to existing buildings) in the event that latent defects become apparent. **Latent defects insurance** was the subject of a report in 1988 when the Construction Industry Sector Group of the National Economic Development Council published a report called 'Building Users' Insurance Against Latent Defects' (i.e. BUILD).

Initially the insurance was not available in the UK although it was common in many European countries. More insurers are now interested in offering this type of insurance in the UK. Some of its characteristics are as follows.

- It is available for a period of between 8 and 12 years from practical completion of the works.
- Basic policies cover the structure and weatherproofing but this can be extended to include non-structural elements and mechanical and electrical services (such as heating, ventilating, air-conditioning, water systems, lifts, escalators, electrical distribution systems, building management systems and so on) and some policies will provide cover for loss of rent, loss of profit or revenue, and the costs of working from alternative premises.
- Risk assessment is carried out on behalf of the insurer by independent consultants. This may necessitate amendments to the design or specification in certain instances. This obviously increases the cost paid. However, it can be

argued that this audit process is good for risk management of the design, workmanship, installation, choice of materials and testing etc.

- The policy should be taken out during the early design stages.
- Premiums can be paid annually or through a single one-off payment. Policies are generally freely assignable.
- The employer can simply claim under the BUILD policy rather than have to prove liability against say a designer or the contractor.
- Waiver of subrogation rights against the architect, contractor, etc. can be purchased at an additional premium.

If this kind of insurance becomes general or even mandatory by law, the burden of liability on the architect and other professionals could be eased. However, there is little benefit unless subrogation is waived and that is usually quite costly. It is also unlikely that an employer would be prepared to pay an extra premium for this purpose. Even where subrogation is waived, it should be noted that the cover provided is fairly limited.

## 10.7 Other insurances

Some other common forms of insurance which a business may take out are set out below.

- Partnership insurance to cover the situation which may arise if a partner retires or dies and the partnership loses capital. A partnership will usually insure the lives of all partners in favour of the other partners.
- Director's liability insurance covering directors and officers for claims made against them while serving on a board of directors. In effect, the policies function as 'management errors and omissions liability insurance', covering claims resulting from managerial decisions that have adverse financial consequences.
- Medical insurance for the benefit of partners, directors and employees.
- Motor vehicle insurance to cover company cars.
- Personal accident insurance for all employees.

## References and notes

1. The Pool Re scheme has been set up by the insurance industry in co-operation with the UK government so that insurers can continue to cover losses resulting from damage caused by acts of terrorism to commercial property in Great Britain.
2. Employers' Liability (Compulsory Insurance) Act 1969 and Employers' Liability (Compulsory Insurance) Regulations 1998.
3. [www.arb.org.uk/professional-indemnity-insurance](http://www.arb.org.uk/professional-indemnity-insurance) under PII Guidance.
4. Paterson FA, *Professional Indemnity Insurance Explained* (2005), RIBA Publishing. See also the useful survey in Speaight A (Ed.), *Architect's Legal Handbook* (2010), 9th edition, Architectural Press.
5. *Kajima UK Engineering Limited v. Underwriter Insurance Company Limited* [2008] EWHC 83 (TC). This case illustrates the consequences of not giving a full and timely notification to insurers.

# 11

## Finance and Accounts

### 11.1 Introduction

The subject of finance and accountancy is a practical form of economics and as such is important to the architect in general and therefore useful to have an elementary understanding of the subject. Larger businesses will have finance and accounts departments with accountancy staff. In smaller organisations all financial matters are usually dealt with by senior management.

### 11.2 Accounts

The primary purpose of keeping accounts is to establish a record of all the financial transactions of the business, and to establish whether or not the business is making a profit. The accounts will also be used:

- in determining the distributions to be made to equity shareholders
- in determining the business' tax liabilities
- to support an application for funding, e.g. to a bank
- to determine the value of the business in the event of sale
- as a proof of financial standing to clients and suppliers.

All limited companies are required under the Companies Acts to produce accounts and to file them annually with the Registrar of Companies in order that they are available for inspection by an interested party. Limited liability partnerships have duties similar to those of a company, e.g. to provide financial information equivalent to that of a company, including the filing of annual accounts. Partnerships do not have to make their accounts publicly available.

The principal accounting statements are the profit and loss account and the balance sheet.

### 11.3 Profit and loss account

This is a financial statement that summarises the revenues, costs and expenses incurred during a specific period of time; usually a fiscal quarter or year. These records provide information that shows the ability of a business to generate

<b>Smith &amp; Jones Architects LLP</b>		
<b>Profit and loss account for the period 1 January to 30 April 2015</b>		
	£	£
<i>Income</i>		
Fees received		300,000
<i>Expenditure</i>		
Salaries	150,000	
Rent	50,000	
Others (stationery, electricity, etc.)	30,000	
Depreciation	<u>20,000</u>	
		<u>(250,000)</u>
<b>Profit for period 1 January to 30 April 2015</b>		<b><u>50,000</u></b>

**Fig. 11.1** Example of profit and loss account.

profit by increasing revenue and reducing costs. The profit and loss account may also be referred to as a 'statement of profit and loss', an 'income statement' or an 'income and expense statement'.

For an architectural business, income will be represented in the form of fees received for the supply of architectural services; expenditure is likely to include such items as salaries, rent and insurance premiums. After adjustments have been made for accruals (revenue earned or expenses incurred that have not been paid or received) and pre-payments (advance payments for goods or services not yet provided), an excess of income over expenditure indicates that a profit has been made. The reverse would indicate a loss. An example of a simple profit and loss account is shown above at Figure 11.1.

The preparation of the profit and loss account will enable the business to:

- compare actual performance against budget
- analyse the performance of different sections within the business
- assist in forecasting future performance
- compare performance against other businesses
- calculate the amount of tax due.

## 11.4 Balance sheet

The balance sheet gives a statement of a business's assets and liabilities at a particular point in time. A balance sheet is often described as a 'snapshot of a company's financial condition'. A standard company balance sheet has three parts: assets, liabilities and ownership equity. The main categories of assets are usually listed first and typically in order of liquidity. Assets are followed by the liabilities. The difference between the assets and the liabilities is known as equity or the net assets or the net worth or capital of the company. According to the

<b>Smith &amp; Jones Architects LLP</b>		
<b>Balance sheet as at - 30 April 2015</b>		
	£	£
<b><u>Fixed assets</u></b>		
Fixtures and fittings		200,000
Less: Depreciation		<u>(20,000)</u>
		180,000
<i>Current assets</i>		
Debtors (fees receivable)	60,000	
Cash at bank	<u>60,000</u>	
	120,000	
<b>Less: Current liabilities</b>		
Creditors	<u>(50,000)</u>	
<i>Net current assets (working capital)</i>		<u>70,000</u>
<b>Net assets</b>		<b><u>250,000</u></b>
<b><u>Equity</u></b>		
Capital		200,000
Retained profits		<u>50,000</u>
<b>Total equity</b>		<b><u>250,000</u></b>

**Fig. 11.2** Example balance sheet.

accounting equation, net worth must equal assets minus liabilities. Therefore a balance sheet will include all or most of the following:

- *fixed assets*: those assets held for long-term use by the business, including intangible assets
- *current assets*: those assets held as part of the business's working capital
- *liabilities*: amounts owed by the business to suppliers and banks
- *owner's capital*: shareholders' funds (issued share capital plus reserves) in a limited company or in a partnership the partners' capital accounts.

The various types of asset and liability accounts are considered in more detail below. An example of a simple balance sheet is shown in Figure 11.2 above.

Another way to look at the balance-sheet equation is that total assets equal liabilities plus owner's equity. Looking at the equation in this way shows how assets were financed: either by borrowing money (liability) or by using the owner's money (e.g. partners or shareholders' equity).

Balance sheets are usually presented with assets in one section and liabilities and net worth in the other section with the two sections 'balancing'. A business operating entirely in cash can measure its profits at the end of each accounting period by withdrawing the entire bank balance and adding to that any cash in hand, e.g. petty cash. However, most businesses are not paid immediately. They

build up inventories (i.e. stock-lists) of goods and they acquire buildings and equipment. The business holds assets, which even if they want to, they cannot immediately turn into cash at the end of the accounting period. Often, businesses owe money to suppliers and to tax authorities, and owners and shareholders do not withdraw all their original capital and profits at the end of each accounting period. In other words, businesses have outstanding liabilities. The balance sheet allows the financial position of a business which is not dealing in cash to state its financial position at a particular point in time.

## 11.5 Assets

In financial terms, an asset is an economic resource. Anything which can be owned or controlled and produce a value; it can be tangible or intangible. Simply stated, an asset represents value of ownership that can be converted into cash (although cash itself is considered an asset). The balance sheet records the financial value of the assets owned by the firm. It is money and other valuables belonging to an individual or business. The term 'assets' covers the following:

- *intangible assets*: which include goodwill, trademarks and licensing agreements, usually at original cost less any subsequent write-offs
- *fixed assets*: which include land and buildings, fixtures and fittings, equipment and cars, shown at cost or valuation less depreciation
- *current assets*: which include cash (and equivalents such as cheques, bank deposit and the like) stock, work in progress, debtors and accruals in respect of advance payments.

Depreciation records the loss of value in an asset resulting from usage or age. Depreciation is charged as an expense to the profit and loss account, but is disallowed and, therefore added back, for tax purposes.

## 11.6 Liabilities

In financial terms, a liability is an *obligation* arising from a *past* transaction or event, the settlement of which may result in the transfer or use of an asset or the provision of a service or other economic benefit in the future. Liabilities include amounts owing for goods and services supplied to the practice and amounts due in respect of loans received. It also includes amounts owed to the business owners e.g. the partners or shareholders. It should be noted that contingent liabilities<sup>1</sup> do not form part of the total liabilities, but will appear in the form of a note on the balance sheet as supplementary information.

Liabilities reported on a balance sheet are usually divided into two categories. Current liabilities which are liabilities reasonably expected to be liquidated within a year. They usually include wages, accounts, taxes and accounts payable. Long-term liabilities are those which are not reasonably expected to be liquidated within a year. They usually include long-term loans, long-term leases

and pension obligations. Liabilities of uncertain value or timing are called provisions.

## 11.7 Capital

Sources of capital or finance may include proprietors' or partners' capital, a bank loan or, for a limited company, proceeds from a shares issue. The most common way of borrowing from a bank is by means of an overdraft facility. A lender such as a bank will look to secure both the repayment of the capital loan and the interest by way of a charge for the loan. Most lenders or investors will undertake some form of due diligence prior to offering the loan or making the investment. They are likely to want access to the business's profit and loss account, balance sheet and details of its projected cash flow.

Capital is required to fund the start-up and subsequent operation of the business. This may be for a period until sufficient income is received for work undertaken by the business. Alternatively, capital may be required to expand or develop a business.

Figure 11.2 shows an initial capital investment of £200,000. However, this investment is represented not by the cash invested but by various other assets and liabilities.

To illustrate the movement of cash in terms of receipts and payments a simple cash book summary can be used, e.g. Figure 11.3. Such a cash book summary is normally produced periodically (e.g. monthly or quarterly). Bookkeeping is the recording of financial transactions, and is part of the process of accounting. Transactions include purchases, sales, receipts and payments by a business. An accountant creates reports from the recorded financial transactions. In order to arrive at the Figure 11.3 summary there will be schedules of, for example, the fees received, which will show which client the payment was from, the date received and the job. These should total £240,000. The 'Opening balance' will likely be the aggregation of the bank account(s) and cash. On the

<b>Smith &amp; Jones Architects LLP</b>			
<b>Cash Book Summary January 2015</b>			
<b>Receipts</b>	<b>£</b>	<b>Payments</b>	<b>£</b>
Opening balance (1 January 2015)	200,000	Salaries	150,000
Fees received (January 2015)	240,000	Rent	50,000
		Other expenses	30,000
		Fixtures and fittings	<u>50,000</u>
	<u>440,000</u>		280,000
	<u>(280,000)</u>		
<b>Closing balance 31 January 2015</b>	<b><u>120,000</u></b>		

**Fig. 11.3** Example cash book summary.

'Payments' side there will be a schedule listing out the payments made to staff and the same for 'Other expenses' which could cover expenditure on stationery, staff expenses for travel and entertaining, and office costs such as tea and coffee for the staff. 'Fixtures and fittings' could include office furniture or possibly a new laptop.

## 11.8 Cash-flow forecasting and budgeting

It is necessary for a business to predict how well it is likely to perform in financial terms in the future. Budgets are therefore prepared, usually on an annual basis, based on projected income and expenditure. Once a business is established, future projections can be based to a certain extent on the previous year's results.

As mentioned above, in the event that it is the intention to borrow money from a bank then the bank is likely to request a cash-flow forecast e.g. for the next six or twelve months. The preparation of a cash-flow forecast is a relatively easy process. A computerised spreadsheet or accounting software package could be used to project the likely flow of receipts and payments.

The example cash-flow forecast in Figure 11.4 illustrates the start-up of a business. It identifies the initial introduction of capital, the borrowing facility requested and the projected effect of expenditure and receipts over the period.

<b>Smith &amp; Jones Architects LLP</b>						
<b>Cash-flow forecast 1 January to 30 June 2015</b>						
	<b>January</b>	<b>February</b>	<b>March</b>	<b>April</b>	<b>May</b>	<b>June</b>
Capital introduced	200,000	–	–	–	–	–
Fees received	60,000	180,000	50,000	110,000	100,000	200,000
Asset sales	–	–	–	–	–	–
<b>Receipts</b>	<b>260,000</b>	<b>180,000</b>	<b>50,000</b>	<b>110,000</b>	<b>100,000</b>	<b>200,000</b>
Salaries	75,000	75,000	75,000	75,000	75,000	75,000
Rent	25,000	25,000	25,000	25,000	25,000	25,000
Equipment	100,000	50,000	20,000	30,000	–	–
Others	15,000	15,000	15,000	15,000	15,000	15,000
<b>Payments</b>	<b>215,000</b>	<b>165,000</b>	<b>135,000</b>	<b>145,000</b>	<b>115,000</b>	<b>115,000</b>
Movement in cash	45,000	15,000	(85,000)	(35,000)	(15,000)	85,000
Balance brought forward	–	45,000	60,000	(25,000)	(60,000)	(75,000)
Balance carried forward	45,000	60,000	(25,000)	(60,000)	(75,000)	10,000
Borrowing facility	50,000	50,000	50,000	50,000	50,000	50,000
<b>Additional requirement</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>10,000</b>	<b>25,000</b>	<b>–</b>

**Fig. 11.4** Example cash-flow forecast.



It can be seen from the forecast that an additional £10,000 of funding will be required in April and a further £15,000 (£25,000 – £10,000) in May.

This cash flow is typical of a business start-up, when substantial sums are spent in advance of income being received. Provided the business is run profitably the outflow should be reversed before too long.

## 11.9 Books of account

These are the financial records, ledgers and journals that make up the accounts of the business. A business' books of account, or 'books', are its financial memory. The underlying books of account are likely to comprise the general ledger (which will include all general items such as salaries and rents, and totals from the subsidiary ledgers such as the sales ledger (fees or other income receivable), the bought ledger (accounts payable), the cash book (a record of the bank transactions) and the petty cash account. Other books may also be kept, e.g. for expenses.

In addition to the books of account, businesses must retain vouchers such as receipts, invoices, fee accounts and bank statements to support the accounting records. These are required by business auditors and also for VAT purposes.

## 11.10 Fee invoicing

Fees are the lifeblood of all professional organisations and their early payment aids cash flow and limits the need for borrowing. It is prudent therefore to make provision for the payment of fees by instalments at regular intervals or, as is becoming more common, relative to achieved milestones. It is prudent to make payment of the fee or an instalment dependent upon events which can be controlled. For example, payment upon obtaining planning permission would be risky given that planning permission may never be granted. It would be more sensible to link payment with the submission of the planning application.

Fees can either be in the form of a lump sum(s), a percentage of the value of the construction work, based on time expended at pre-agreed rates or a combination of all of these. It will all depend on the terms of the appointment.

Fee accounts can be raised either as a VAT invoice or as applications for payment which have different implications with regard to VAT as described below.

A schedule of all applications for payment of fees (i.e. fee accounts) should be kept. This should be done in order to monitor payments, to monitor and pursue outstanding debts, and for accounting purposes.

## 11.11 Value added tax (VAT)

VAT is a United Kingdom tax collected on business transactions in the form of an output and input tax. Output tax is the VAT due on taxable supplies, which in relation to professional businesses is charged on the fees for the provision of

services to clients. Input tax is the VAT charged on most business purchases and expenses.

The time of supply of the services is defined as the 'taxpoint'. In respect of the provision of professional services, this is generally the date of issue of a VAT invoice. A VAT invoice must show: (i) an invoice number which is unique and follows on from the number of the previous invoice (a spoilt or cancelled invoice must be retained and made available at a VAT inspection); (ii) the seller's name or trading name, and address; (iii) the seller's VAT registration number; (iv) the invoice date; (v) the time of supply (i.e. the tax point) if this is different from the invoice date; (vi) the customer's name or trading name, and address; (vii) a description sufficient to identify the goods or services supplied to the customer; (viii) the rate of any cash discount and (ix) the total amount of VAT charged in sterling.

The following are not VAT invoices: (i) pro-forma invoices; (ii) invoices which state 'this is not a tax invoice'; (iii) statements; (iv) delivery notes; (v) orders and (vi) letters, emails or other correspondence. VAT cannot be reclaimed if one of these documents is used as proof of payment.

An alternative in the construction industry to a VAT invoice is the use of 'authenticated receipts'. These can be used for the supply of goods and services made under contracts which provide for periodic payments. They must include all the same relevant detail required by a VAT invoice. However, their use has the effect of delaying the tax point until the time when payment is received by the payee and an authenticated receipt is issued.

Up-to-date VAT records must be kept for completion of VAT returns and to enable Customs and Excise to readily check the VAT figures. Tax returns are sent to Customs and Excise together with any tax due (i.e. the excess of output tax over input tax) at the end of the tax period concerned.

## 11.12 Computerisation

Accounting functions over the years have become less time-consuming given the use of computers and software packages. They are ideal for the regular and routine entries and calculations that are necessary. Entries can be allocated to different accounts, and up-to-date information can be retrieved quickly and efficiently in a variety of formats to meet particular needs. This greatly assists in the financial management of a business.

## 11.13 Annual accounts/auditing

At the end of a business' financial year a set of 'end of year' accounts are prepared. These bring together all the previous year's financial information in the form of a profit and loss account and balance sheet. See sections 11.3 and 11.4.

In most circumstances, accounts will be audited by an independent accountant. This is a requirement for all larger limited companies under company legislation. Audited accounts carry more authority with the likes of tax

inspectors and are also useful to prove to third parties, including prospective clients, that the financial status of the business has been independently scrutinised. The figures will more readily be accepted.

## 11.14 Staff time records

It is necessary for detailed records to be kept by a business of the time worked by each member of staff on a project. The purpose is two-fold.

- As a basis on which to build up an account for fees for services that will be charged on a time basis.
- To establish the cost for each particular project. Such costs will be used primarily to establish whether a particular project is making a profit or a loss. They may also be used to help estimate a fee for similar future work.

The *RIBA Standard Conditions of Appointment of an Architect 2010* (2012 Revision) clause 5.13 requires the architect to maintain records of time spent on services performed on a time basis. These records must be produced to the client on request. Even without this stipulation, it is difficult to see how a time charge could be made without timesheets.

Unless the means is available for an office to monitor its progress in a methodical way and assess performance at the end of a project, project planning would remain pure guesswork. Although practice varies, the filling in of timesheets is usually restricted to technical staff, with secretarial and administration costs being treated as part of the overhead. It is difficult to allocate their time to individual projects. For the same reason principals, directors or partners rarely complete timesheets for the whole of their time. Of course principals, directors or partners must keep a record of their time if it is intended to charge a client on an hourly basis. Indeed it is good practice for principals, directors or partners to keep proper timesheets in order to check how time is allocated against each project. Only with this information can the true cost of a project be determined.

Most offices have their own ideas about recording time and costing. However, typically most timesheets are now completed in electronic format and the procedure is as follows. Timesheets are completed on a daily or weekly basis. Software programmes allow the hours worked, and shown against individual projects, to be abstracted from the timesheets and imputed into the accounts system against individual projects where the time can be costed. It is then possible to determine whether the project is financially on target (i.e. compare costs against fee). Graphs can be plotted to show the relationship between forecast and actual expenditure. Time charges to the client become simply a matter of extracting the hours for each member of staff and multiplying by the appropriate hourly rate.

It should never be thought that it does not matter whether the timesheet is filled in accurately or not. It is common for individuals to be less than diligent when completing timesheets, often leaving them until the end of the week when an accurate timesheet will depend on a good memory or note book. It is important to log time accurately against individual projects. Therefore, the timesheet



should be kept up to date and filled in throughout the day. It is equally important not to become overly scrupulous about timesheets, but common sense should be used.

Prompt and accurate feedback to the architects responsible for each project, on a project's profitability, is an indispensable part of the system. If it can be seen, at an early stage, that the time allocated to a project will be insufficient, then steps can be taken to address the problem. It may well be that the reason a project looks like making a loss is due to the estimate of time upon which the fee was calculated was too low or because the client has introduced changes that should be charged at an extra fee. If the timesheets are fabricated or are not accurate then a nonsense is made of the office records on which to manage individual projects, claim additional fees or base fee estimates for future work.

An example timesheet is shown in Figure 11.5.

## References and notes

1. A contingent liability is a potential liability. This means that it may become an actual liability and a loss or it may not. It depends on a future event, for example the outcome of a future lawsuit by the client against the architect for alleged defective design.



# Part 2

## Running a Project





# 12

## The RIBA Plan of Work 2013

### 12.1 Sequential framework and Plan of Work

For every activity there is a need for a sequential framework so that the correct operations can be carried out at the right time and, probably most important, in the right order. The things which an architect has to do throughout the process of design and construction of a building are so numerous, complex and interactive that, without such a framework, chaos would soon result. Architects have long produced such frameworks for themselves. Sometimes they were not much more than lists. In 1964, the RIBA Plan of Work was first published in the RIBA Handbook of Architectural Practice and Management.<sup>1</sup> The intention was to provide a model procedure for the design team. It was never the intention that the Plan of Work would be slavishly followed under all circumstances. Indeed, certain assumptions were made:

- a building cost of about £300,000 and a full team of designers
- the architect is responsible for leading the building team
- the earliest possible appointment
- the objective of each stage being to commence the next
- in each stage the cycle of work is
  - stating objective and assimilation of relevant facts
  - assessment of required resources and setting up of appropriate organisation; planning the work and setting timetables
  - carrying out work
  - making proposals and recommendations
  - obtaining client decisions
  - setting out objectives for the next stage.

The Plan of Work was revised in 1999 as part of the revision of the appointment documents: RIBA Standard form of Agreement for the appointment of an architect 1999 (SFA/99), etc. It was revised again in 2007 as part of the revision of the 2007 appointment documents. Although the revisions were largely cosmetic, they took account of some perceived changes in architectural practice, other professions, the JCT development of multidisciplinary documents and BS7000 Part 4: the Guide to Managing Design in Construction. The 2007 Plan was an ideal tool provided it was remembered that it was only the basic outline. There are many instances when two or more stages may be combined.

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Stages	
A	Appraisal
B	Design brief
C	Concept
D	Design development
E	Technical design
F	Production information
G	Tender documentation
H	Tender action
J	Mobilisation
K	Construction to practical completion
L	Post practical completion

**Fig. 12.1** The 2007 RIBA Plan of Work (title of stages only). Courtesy of the Royal Institute of British Architects (RIBA).

The stages may often interweave and it is rare, certainly up to stage H of the 2007 Plan, that there is any definite point at which it can be said that the project is moving from one stage to another.

The 2007 Plan, in its complete form, indicated the principal tasks for the major participants at the stage when they were usually carried out and showed the architect’s tasks in two sections: design function and management function. The architect was not to slavishly follow this time schedule, but should carefully assess each project in light of the Plan and adjust the Plan to suit. The stages of the RIBA Plan of Work 2007 are set out in Figure 12.1.

An appraisal of the Plan of Work and a complete restructuring was carried out and a new Plan of Work was published by the RIBA in May 2013. The 2013 Plan uses numbers rather than letters for the stages. The stages are set out in Figure 12.2.

The 2013 Plan matches the Construction Industry Council (CIC) Schedule of Services. However, it is not clear why the first stage is not labelled ‘1’ and

0	Strategic definition
1	Preparation and brief
2	Concept design
3	Developed design
4	Technical design
5	Construction
6	Handover and close out
7	In use

**Fig. 12.2** The 2013 RIBA Plan of Work (title of stages only). Courtesy of the Royal Institute of British Architects (RIBA).

the eighth stage labelled '8'. Not only does it seem to make no sense at all but it also makes it awkward to refer to the stages. One has to be careful to remember that the fifth stage is actually stage 4. One can imagine this causing at least a modicum of confusion among those unused to the 2013 Plan.

Guidance on using the 2013 Plan is available on a special website.<sup>2</sup> There is a useful comparison between the 2007 and 2013 Plans. The position is broadly as follows:

- *Stage 0. Strategic definition* is a newish stage in which the project is 'strategically appraised'.<sup>3</sup> We may conclude that this is the stage during which all aspects of the project are to be considered and conclusions drawn regarding their importance to the overall Plan. A brief containing the key requirements of the project and summary of the rationale behind the project are drawn up. Certain activities (unspecified) are drawn from the former Stage A, i.e. Appraisal.
- *Stage 1. Preparation and brief* includes the remaining tasks from stage A and the whole of stage B, namely feasibility studies, project brief, budget, project and quality objectives and what degree of sustainability is desired.
- *Stage 2. Concept design* contains the whole of stage C, namely outline proposals for all aspects of design and construction, initial costs, final brief and consideration of the way in which sustainability, construction, maintenance and other requirements can be achieved.
- *Stage 3. Developed design* is generally the same as former stage D, namely developing the design of the project alongside the constructional aspects and costs concluding with a report to the client for approval of the information produced in this stage.
- *Stage 4. Technical design* draws on former stages E and F, namely completion of the production information from all design team members.
- *Stage 5. Construction* includes the activities from former stages J and K, namely mobilisation and getting ready to construct and the whole of the construction process.
- *Stage 6. Handover and close out* includes generally most of the contents of stage L including post practical completion and the completion of all the building contract procedures.
- *Stage 7. In use* is a new stage which includes evaluation of the way in which the project was carried out and how the project works in use. Further activities may be carried out during this stage.

Whereas the 2007 Plan had the stages listed top to bottom and the tasks in each stage were described alongside the stages, the 2013 Plan lists the stages from left to right and the tasks are separated into categories from top to bottom (termed the 'task bar'). The crucial point about the 2013 Plan is that it is not a plan for all projects; the idea is that the architect, using the facilities provided by the RIBA, will be able to tailor the Plan to suit a particular project. Indeed, it will be possible to vary the plan to suit changing circumstances as the project proceeds.

Some of the tasks in the 2013 Plan can be varied from a choice on the website. However, they include the main things to be carried out as one task called 'core

objectives, the system of procurement to be used, establishment of the project programme, planning applications and discussions, sustainability and reporting back to clients points. A particular feature of the 2013 Plan is that tasks relating to procurement, programming and planning applications are left flexible across stages to allow the Plan to be tailored by the users to suit the specific type of procurement envisaged. Therefore, the Plan prepared for a traditional project will be markedly different from the plans prepared if the project is to be procured by design and build, construction management, etc. (see Chapter 16, section 16.4).

A very full fleshing out of the Plan of Work is represented by the RIBA Architect's Job Book.<sup>4</sup> The use of a Plan of Work will not eliminate mistakes, but it will very much reduce their incidence by ensuring that crucial steps are taken in logical order and paving the way for the architect to co-ordinate the members of the design team. Anecdotal evidence indicates that many architects still refer to the 2007 Plan of Work stages in their fee proposals and in planning their work. That is probably because most projects are still carried out on a traditional basis for which the 2007 Plan provides a useful, albeit incomplete, outline of the activities to be carried out at each stage.

The website also has a multidisciplinary services schedule and a design responsibility matrix (together called the 'toolbox') to be used in conjunction with the Plan. The idea is to indicate the interrelationship of the activities of the various disciplines engaged on a project together with the recognition that most architects take advantage of the expertise of specialist sub-contractors at an early stage in the design process. The design responsibility matrix is intended to show how the responsibilities are to be managed. In simple terms, who is to be responsible for designing what and when. The user is encouraged to complete the interactive forms which are equipped with on-screen instructions and pop-up advice. Some of the resultant documents will be simply stating the obvious, but the system will be useful where a large and complex project is being planned. The RIBA publishes a book to assist the user.<sup>5</sup> Needless to say, the 2013 Plan of Work and its supporting website and publications assume that the user will be prepared to devote a significant amount of time to producing the tailored Plan of Work.

## 12.2 The Plan of Work explained

It is impossible to provide a description of the tasks in various stages of the Plan of Work to suit all procurement routes (see Chapter 16, section 16.4). Therefore, for simplicity, the description which follows relates to a traditional project in which the architect is the lead consultant. In real life, even in the case of a traditional project, there will be overlapping of stages and some activities will be carried out in a stage other than the one indicated.

### *0 Strategic Definition*

During this initial stage, an important function of the architect is to understand the reasons which underlie the client's decision to embark on the project. This

will enable the architect to make more informed judgments in regard to all the key parts of the project. All the possibilities must be broadly considered and discussed with the client before any important and irrevocable decisions are made. If there is any advice the client requires or the architect thinks it proper to give at this point, it will be given. For example, the architect may say at the first meeting that the project is not feasible because of cost, siting or some other reason.

Once the architect and the client are satisfied that the basic idea is sound, the architect must obtain the client's brief. It can be a laborious process if clients are not, and sometimes if they are, sure of what they want. It is the architect's task to separate what the client wants from what he or she really needs. The architect will need to ask many questions regarding available finance, programme and the function required of the building. It is likely that several meetings will be required before the architect is satisfied. At this stage, the brief will be in outline, but it is important that the outlines are realistic. It is at this stage that the architect will be able to provide a rough idea of the cost, time and fees likely to be involved in proceeding with the scheme.

### *1 Preparation and Brief*

If the work the client has in mind is very small, for example an extension to a house, this stage may take no more than a day or so. In the case of larger projects, a correspondingly longer time will be required. Where extremely large and complex projects are concerned, this stage may be very protracted. On anything other than small projects it represents a considerable body of work at the end of which the architect might prepare a report, depending upon the size and complexity of the project, for examination by the client. Instead of a report, the architect's conclusions might be presented orally. The draft programme should be reviewed.

This is the stage during which the architect will check thoroughly that the project is feasible, that it can be built for the money the client wishes to spend, that there are no obstacles in the form of planning objections from the local authority or the site conditions and so on. There will be involvement in discussions with statutory authorities and any consultants appointed and every matter which might affect the client's intention to proceed must be investigated. For example, if the client is proposing a speculative housing development, it might well be prudent to include for the client's information, details of local schools, shops and bus services near the site. If the site is in a designated conservation or urban redevelopment area, the architect will explain how that will affect the scheme.<sup>6</sup>

At this stage, alternative ways of tackling the design will be suggested and will conclude by a request to the client to make certain decisions. The decision may be simply whether to proceed, or it may involve matters thrown up by the investigations. Matters concerning site or building acquisition and the need for a full survey, and of what type, will be considered.

The initial project brief will be developed by the architect from the key points produced in stage 0. This brief takes into account all the preparatory work and the client's decisions on any points thrown up by the appraisal of which

sustainability issues will form a part. The key procedures must be identified together with the way in which the architect intends to organise the design team to deal with the project. The identities of consultants and specialist sub-contractors should be discussed with the client. If it has not already been considered, the architect should advise the client about procurement alternatives, making sure that the client fully understands the implications of alternative methods. Few clients will properly understand the meaning of guaranteed maximum price contracts or the restrictions implicit in opting for design and build (see Chapter 16, sections 16.4.3 and 16.6).

## 2 *Concept Design*

This stage is probably better known as 'sketch design'. Taking into account all previous discussions including the client's decisions at the end of stage 1, the architect will develop the brief into a full briefing document for the project intended to indicate the client's requirements in every particular. The architect will then commence to prepare drawings to illustrate the proposed solution to the client's problem. The drawings will not be detailed, but they will be sufficient to show what the architect has in mind in a general way. It should be possible to see the general massing and external appearance of the building, its disposition on site, the arrangement of the interior, a structural analysis and outline proposals for arrangement of services and any other important constructional issues.

To produce these sketches, the architect will have to have analysed and considered all the information gleaned during the previous stages. The cost information should be reviewed at this time. If it is a small project, in giving such an estimate, an architect is wise to ensure that it makes proper allowance to reflect the outline nature of the design at this stage by building in an estimating tolerance. This is particularly important, because this is the figure that the client will always remember! Where the project is other than small, the cost estimation should be carried out by a quantity surveyor who should have been involved from stage 1, preferably by means of a separate appointment to the client. The quantity surveyor should prepare an initial cost plan.

It is during this stage that consideration should start to be given to the sections if sectional completion is to apply and also how the works are to be insured especially if working to and within an existing rented building.

## 3 *Developed Design*

On small jobs, this stage will probably be combined with the previous stage. The architect must take into account any comments the client makes about the concept, complete the full briefing document and work with any consultants who may be appointed to produce a more detailed design for the client's approval. At this stage, the client should have a very clear idea about the appearance of the building, the materials proposed and the layout of the interior. A fresh estimate of cost will be prepared and the dates for commencement and completion will be determined. The architect will require the client's final approval to the scheme, timescale and cost at this point.

Assuming that the client does approve with little or no amendment, the architect should apply for planning permission. Although an application for outline permission will almost certainly have been made at feasibility stage and thereafter the planning authorities will have been closely consulted, there is unfortunately no guarantee that planning permission will be granted. In the majority of cases, the procedures adopted by the architect avoid a refusal at this stage, but it is not uncommon for the planning authority to require some changes before they will grant permission. Both architect and client will find it frustrating if this happens, in addition it will cause the architect much extra work.

At the end of this stage, the architect should advise the client that any subsequent changes of mind will be costly in terms of time and money. The scheme should now be regarded as fixed.

#### 4 *Technical Design*

As soon as the architect obtains the client's approval to the developed design, every part of the scheme must be developed in great detail and in relation to the cost plan. This is the first part of what is commonly called 'working drawings'. If consultants are appointed, they will be involved in similar detailed design work in accordance with the design responsibility matrix (if used). The client will be asked to approve many of the details, particularly as regards standards of quality and sustainability. The cost of building the project must be kept constantly under review by the quantity surveyor and compared to the cost plan as each detail is finalised. The drawings produced during this stage will be highly technical, dimensioned, noted and coded. On the basis of these drawings, all further negotiations and approvals with statutory bodies will be finalised. The architect should advise the client that if any subsequent changes are required which are other than trivial, the building programme will be disrupted and the client will incur considerable extra cost. The client's idea of 'trivia' may well not accord with the architect's views.

Clients often fail to understand why a change of mind which, on the face of it, appears to reduce the overall cost of the building should result in additional costs. The architect should, therefore, clearly explain that if the client changes something, the architect may have to begin again the process of consultation with statutory bodies (including, on occasions, re-applying for planning and other permissions), consultants and any specialist sub-contractors. Drawings have to be redone, fresh calculations made and new cost estimates prepared. The architect's careful programming of office resources will be upset and there is the very real danger that mistakes will be made. It is the architect's duty to give clear advice in this regard if the client wants any changes. It would be wrong to simply carry out the client's instructions and present a large bill for additional services at the end.

During this, usually fairly lengthy, stage, the architect and any consultants should be busy producing all the information which will be required for tendering and, additionally, the information that a contractor will require to proceed subsequently to erect the building. In addition to the drawings prepared during the last stage, details and schedules will be completed together

with a specification of all the materials and items of work required. Applications in connection with the Building Regulations and any other necessary statutory approvals should be finalised during this stage.

If the system of procurement warrants it (see Chapter 16, section 16.4), bills of quantities should be prepared by the quantity surveyor from information supplied by the architect and other consultants. The architect must be ready to supply any additional information which the quantity surveyor requires. Unless the project is such that the contrary is suggested, the architect should know the building in detail at this stage. The documents must be assembled in a suitable form to allow the prospective contractors to tender. All relevant information should be included so that the contractors can include for every aspect of the work.

It is usual for the architect or quantity surveyor to prepare a final cost estimate to ensure so far as possible that the client will not receive an unpleasant surprise when tenders are returned. The CDM Co-ordinator<sup>7</sup> will be notifying the Health and Safety Executive (HSE) and the architect must pass on copies of the final production information.

Prior to this stage, the architect should have advised the client on the most appropriate way of obtaining a price for the work. It may be by means of negotiation or tendering. During this stage, everything needing to be done before prices are obtained should be organised and, if tendering is decided upon, tendering information should be sent out to all the contractors on a list which the client has previously approved. A prudent architect will have requested references from every contractor on the list and at the same time ascertained by discreet enquiry some idea of their financial stability. This is essential.<sup>8</sup> In some cases, a formal pre-qualification process will be carried out in order to produce a shortlist of the most appropriate contractors. In the case of public sector tendering, the relevant UK legislation relating to EU procurement must be satisfied.<sup>9</sup>

The architect will in due course, together with the quantity surveyor, assess all tenders received and advise the client accordingly. If the lowest tender is too high to suit the client's pocket, the architect may be involved in revising the project. Unless it is the architect's fault that the project is too expensive, an additional fee is appropriate for this work.

## 5 Construction

During this stage, the architect should give advice to the client with regard to contractual matters, verification of insurances and the like and should be ready to answer any questions. Discussions will have taken place concerning the appropriate form of contract, including any necessary amendments, before tender stage and the contract documents prepared for signature. All the information to enable construction to commence on the appointed date must be assembled and it is usual for a number of meetings to be held with consultants, specialist sub-contractors, the contractor and possibly representatives from statutory authorities.

During the course of work on site, the architect will carry out his or her duties under the contract and make regular visits to site to inspect the general progress



and quality of workmanship and materials. It may be necessary to supply further production information from time to time or as set out in an information release schedule. The client should be kept up to date on the progress of the work and supplied with financial reports at regular intervals depending upon the client's requirements and the size and complexity of the project. The client should be given any additional advice required concerning the project.

## 6 *Handover and Close Out*

When work is completed, the architect must ensure that all known defects are made good and that loose ends are tied up and generally make sure that the financial aspects are settled accurately with the help of other consultants as appropriate. The client should be supplied with some general notes on maintenance together with a set of drawings showing the building and the main lines of drainage and the services installations which will be required for the health and safety file.

## 7 *In Use*

This stage assumes that the building has been handed over and all defects made good under the terms of the relevant building contract. All the financial aspects have been dealt with and, if a JCT contract has been used, the final certificate or statement has been issued.

Now is the time to undertake an evaluation of the way the design and construction process has been carried out, what mistakes have been made and what steps need to be put in place to eradicate the mistakes in the future. The next step is to assess the way the building performs in use. Feedback from the client and, if different, the users of the building is essential. To what extent is the building being used in the way assumed from the brief? It is usual to find that the occupants or users of a building find ways to use it which they had not considered before. This is the inevitable result of placing people in an entirely new environment and asking them to carry out essentially the same tasks as they were doing before. The spatial shake up results in a corresponding mental shake up. A good architect will have taken that into account in the design and attempted to stimulate the users.

The Plan suggests that during this stage the documents produced during the course of the design and construction should be updated to respond to client feedback and developments in maintenance or operation of the building.

Clearly, and on a very practical level, there are two things which immediately leap out as important and are as follows.

- The need to get the client's agreement to additional fees (probably on a time charge basis) to deal with the extra work involved in this stage which has no natural end except the end of the life of the building. Many clients may not wish to have this additional service or, at least, not wish to pay for it.
- By following through the use of the building for a lengthy period after completion and checking whether it works in practice and so on, may encourage

the client to believe that the architect and others have not performed the services properly in some respects. It may be an invitation to the client to seek redress for what is demonstrated to have been inadequate advice.

## 12.3 Building Information Modelling (BIM)

The National Building Information Model Standard Project Committee defines BIM as follows:

*'Building Information Modelling (BIM) is a digital representation of physical and functional characteristics of a facility. A BIM is a shared knowledge resource for information about a facility forming a reliable basis for decisions during its life cycle; defined as existing from earliest conception to demolition.'*

That is not very informative of course to anyone unfamiliar with the concept. In simple language what it amounts to is this: most architects now use computer-aided design (CAD) as a means of inputting information and eventually producing what would have been produced in the past – a paper printout. BIM is a system which is capable of receiving all the information about a project and then converting that into three dimensions. If CAD is 2D, then BIM is 3D. In fact it is often referred to as containing 4D (time), 5D (cost) and 6D (facilities management) dimensions. For example, over and above what an architect can put into a CAD system, all the relevant information about specification, manufacturer's details, geography, topography, geology, green issues and virtually everything else one might think of can be included. The result is that one has in one place all the relevant information about a project. This can be interrogated to produce quantities, ordering information and a realistic programme to achieve the work. Indeed, the building can be virtually constructed in stages enabling all concerned to see how everything fits together and any potential problems.

An important point is that other professionals having an input into the project can access the model and input their own information directly. Clashes between pipe runs, structural steel and the building fabric can be quickly identified and eliminated. The degree of access of each party can be controlled and organised. Various parts of a building can be defined in relation to other parts so that if a part is extracted for special consideration, it will retain its relationship and, if amended, the relevant adjacent dependent parts will also change. In theory, the system should almost eliminate errors and remove discrepancies. There is still a need to input data of all kinds accurately; wrong specification will not automatically be detected although the chances of detection should be very much greater.

BIM supports project management, cost control and issues relative to the entire life cycle of the project. In this way, the model can grow and develop over time as repairs are carried out and changes made. The model can be used for maintenance issues. For example, if there is ingress of water, the point of ingress can be located on the model and all the possible reasons for the ingress can be considered without immediately opening up the fabric. A decision to cut into

part of the fabric can be taken with precise knowledge of what lies beneath the surface, provided the information is correct and up to date. As more aspects are explored and developed it is clear that there is a need for a manager devoted to the model and the roles, powers and duties, of the other participants need to be worked out to achieve full integration of effort and outcome.

The Government is committed to BIM. In May 2011, it published the Government Construction Strategy which announced that collaborative 3D BIM (with all project and asset information, documentation and data in electronic format) was to be used on Government projects by 2016.<sup>10</sup> The Government is backing contractor-led BIM. A survey of 1,000 professionals conducted in 2014 found that 95% were aware of BIM and 54% were already using it.<sup>11</sup> The results must be treated with some care, because it is based on responses received. It is conceivable that a number of professionals who were not aware of BIM or were not using it would not respond at all.

There are various 'levels' of BIM, sometimes called 'levels of maturity'. They may be summarised as follows.

- Level 0 is the use of CAD files.
- Level 1 is a combination of 2D and 3D information used by the architect as an aid to visualising the project.
- Level 2 is entirely 3D with all team members inputting information into the model. This will include the contractor and designing sub-contractors.
- Level 3 requires the complete integration of all parties to the model and the use of the model for costings, management, briefing, life cycle and facilities management and its use as a resource for other projects.

The Government's aim for 2016 is for level 3 BIM on all its projects.

## 12.4 BIM overlay to the Plan of Work

The BIM overlay to the Plan of Work 2007 was produced in 2012. The overlay was effectively subsumed into the 2013 Plan of Work and contributed to its development. The notes to the overlay provide a useful overview of BIM and it is possible that a new BIM overlay will be produced in due course.

## 12.5 Green principles

In recent years, environmental concerns have loomed large whenever a new development has been contemplated. This is because we have all become aware of the finite resources of our planet, the effect of climate change and the necessity to conserve energy and resources. Regulations have consistently raised the bar for acceptable standards. What used to be referred to as 'Green Issues' is now called 'Sustainability Issues'. It is under the sustainability heading that checkpoints have been introduced into the Plan of Work.

Sustainability must be an intrinsic part of building design and construction. In order for this to be achieved, it would require the design and construction team

to consider the correct things at each stage of work. The object is not to produce a building in which sustainability aspects have been added on after the design is complete, but where these aspects are taken into account in the same way as accommodation and user studies. Key points at each stage are briefly summarised below.

*0 Strategic Definition*

Carry out overview of client needs and potential solutions to maximise reuse of facilities and materials.

*1 Preparation and Brief*

Include targets for building life, sustainability criteria and handover.

*2 Concept Design*

Check crucial green design issues, that the design can proceed in accordance with criteria, that there is no environmental impact resulting from it and conformity with Building Regulations Part L.

*3 Developed Design*

Sustainability assessment should be carried out, review design to check for missed opportunities.

*4 Technical Design*

The formal sustainability assessment should be virtually finished. User guides should be in first draft. A review of compliance with statutory and briefing criteria should be undertaken.

*5 Construction*

Certification of design stage sustainability and user guides should be complete. Sustainability procedures and testing should be checked and agreed with the contractor.

*6 Handover and Close Out*

As-built information should be provided for sustainability certification.

*7 In Use*

Energy/carbon performance and checking of operation in use should be carried out.

## 12.6 Green overlay to the Plan of Work

The Green overlay to the Plan of Work 2007 was produced in 2011. It was also subsumed into the 2013 Plan of Work and there are no immediate plans to issue a new version.

## 12.7 New words and phrases

It is immensely sad that the profession, and indeed other professions, cannot communicate in simple English. Why should anyone be proud to have received a Plain English award? Surely that is what we should all be speaking. There appears to be a delight in inventing new words or, even better, new ways of using a combination of words. One has only to start to read the vast amount of literature spewed out by the various committees charged with introducing some initiative to immediately lose comprehension. Everybody is very busy and information threatens to overwhelm us all. If information (such as about the Plan of Work) is really necessary, it should be presented in a readily understandable way using words and phrases which are simple and clear. One of the authors vividly recalls attending a seminar about using time more productively, achieving objectives, etc. After an hour of almost incomprehensible business speak, it transpired that the whole talk could be summed up as ‘use a diary’.

Because, unfortunately, a simple approach has not been adopted for disseminating information about the Plan of Work and the Plan itself, it is necessary to provide the following brief explanations for some of the terms used.

### *Construction Strategy*

How the building is going to be built, including all relevant aspects.

### *Design Responsibility Matrix*

A chart designed to set out who is to be responsible for designing what and when.

### *Plug and Play*

Strictly, this is any device that can be simply plugged into a computer and be ready for use immediately without installing drivers and going through other procedures. The phrase has been hijacked by people who like inventing new phrases to mean anything that can be connected to something else and function immediately. For example, the BIM 2012 overlay noted earlier refers on page 4 to replacing the ‘current fragmentation of the design team from designing sub-contractors’ by ‘Integrated Teams working collaboratively under new forms of procurement using ‘plug and play’ working methods’. One deduces that the writer means using a procurement method (unspecified) which allows a designing sub-contractor to work with the design team without either party having to amend their procedures.

### *Project Execution Plan*

A plan of action showing how and to what standards the design will be developed.

### *Project Objectives*

This is defined in the Plan as ‘the client’s key objectives as set out in the Initial Project Brief’. It is not really clear how Project Objectives differ from Initial Project Brief, because the purpose of the brief is to set out the client’s objectives.

### *Project Roles Table*

This is simply a table on which is set out what each party does and when it should be done and it is to be prepared during stage 1, but depends upon the procurement route chosen. This is somewhat like the Design Responsibility Matrix (see section 12.7.2).

### *Project Strategies*

These are anything which is essential to the successful completion of the design. There are several terms in the Plan of Work which end in the word 'Strategy' such as 'Sustainability Strategy' which simply means 'the way in which sustainability will be achieved'.

### *Soft Landings*

This is a term to describe the transition from construction to occupation of a building without problems. This is in contrast to the common experience whether, on completion, the design and construction teams simply walk away and leave the occupants of the building to do the best they can. Smooth transition (which we believe to be a much better term since the meaning can be ascertained from the words used) requires pre-planning at an early stage and the commitment of all parties. It will surprise no one that there is a Government 'microsite' devoted to this topic.<sup>12</sup>

### *Strategic Brief*

The brief prepared at stage 0. It will be an outline brief but it must include all the important elements to be considered at this and the next stage.

### *Sustainability Aspirations*

The standards of sustainability required by the client.

## References and notes

1. The latest edition is Ostone N (Ed.), *Handbook of Practice Management* (2013), 9th edition, RIBA Publishing.
2. [www.ribaplanofwork.com](http://www.ribaplanofwork.com)
3. The developers of the 2013 Plan seem to be very keen on the word 'strategic'. A 'strategy' is defined by the dictionary as 'the management of an army or armies in a campaign': *The Concise Oxford Dictionary*. That meaning has been expanded to refer to any plan or method of accomplishing something. Hence 'strategic' means 'serving the ends' of the strategy or something which is essential to the strategy.
4. 3D Reid, *Architect's Job Book* (2008), 8th edition, RIBA Publishing.
5. Sinclair D, *Assembling a Collaborative Project Team* (2013), RIBA Publishing.
6. Chappell D, *Report Writing for Architects and Project Managers* (1996), 3rd edition, Blackwell Science.
7. Under the Construction (Design and Management) Regulations 2015 this will be either the Principal Designer or the Principal Contractor.

8. See *Partridge v. Morris* (1995) CILL 1095 and *Valerie Pratt v. George Hill* (1987) 38 BLR 25.
9. See especially The Public Contracts Regulations 2006 and amendments.
10. Further information and a selection of excellent graphics are obtainable on the Department of Business Innovation and Skills BIM Task Group website at [www.bimtaskgroup.org/](http://www.bimtaskgroup.org/)
11. NBS National BIM Report 2014.
12. [www.bimtaskgroup.org/gsl/](http://www.bimtaskgroup.org/gsl/)

# 13

## Stage 0: Strategic Definition – Appointment

This stage is described by the RIBA as follows:

‘Stage 0 Strategic Definition is a new stage in which a project is strategically appraised and defined before a detailed brief is created. This is particularly relevant in the context of sustainability, when a refurbishment or extension, or indeed a rationalized space plan, may be more appropriate than a new building. Certain activities in Stage 0 are derived from the former (RIBA Outline Plan of Work 2007) Stage A - Appraisal.’<sup>1</sup>

### 13.1 Introduction

Marketing is dealt with in Chapter 9. The results of marketing should be enquiries from prospective clients. Enquiries can take many forms. Ideally, they come in the form of a letter or email, stating the client’s requirements and requesting details of fees and conditions of engagement. The reality is almost never like that. Established architects will usually have some clients with whom they do business on a continuing basis. In such cases, the enquiry is likely to be quite informal, during a meeting about some other matter, by email or by telephone. Many new clients make their first approach by telephone but few call personally at the architect’s office in the first instance.

The way in which a client makes an enquiry can often tell the architect a great deal about that client. It is always wise to respond to any kind of approach from a new client by arranging a meeting. At the meeting the client can assess the architect and the architect can decide whether it is advisable to work with that client. As in every other field, personalities have a major part to play in the success of the relationship. Clients are dealt with in Chapter 1 at section 1.4. A client may sometimes be a friend or relative, but more generally, a complete stranger. Some may have built before while others will be building for the first time. By its nature, the production of a building may take a very long time from inception to completion and it is important to start the relationship on a firm foundation or it will not survive.



If the client is one who is constructing a new house or work to their existing house, which they intend to live in, then the architect should be cautious in their dealing with that client. In effect that client will be a consumer. Therefore, the s.106 exception under the Construction Act, the Unfair Terms in Consumer Contracts Regulations 1999 and the Cancellation of Contracts made in a Consumer's Home or Place of Work, etc. Regulations 2008 may well apply.

Following the initial enquiry the architect and client will look to formalise their arrangement. The architect will start a process of discovery to try to establish what the client's key objectives are regarding the proposed works. In the terms of the Plan of Work 2013 they will identify whether the client has a business plan and seek to establish a strategic brief for the project (i.e. the core project requirements); give initial consideration to the proposed project team and programme. In addition, the architect needs to start thinking about the services he or she intends to offer to the client (i.e. a scope of services) and also the conditions which are to govern their relationship.<sup>2</sup> The remainder of this chapter will look at the architect's services and conditions of appointment in general terms. Chapter 14 addresses the RIBA standard form of agreement. It would assist to have a copy of the RIBA Standard Agreement 2010 (Revision 2012) for an Architect to hand when reading the remainder of this chapter and Chapter 14.

## 13.2 Scope of services

There is sometimes confusion regarding the scope of services provided by an architect. On one hand, it is often believed that the architect's fee for a commission will include anything and everything the client may require, provided only that it has some relationship to the project. On the other hand, and equally erroneously, it is believed that the architect will prepare a set of plans, but anything else the client may need will cost extra. There is a grain of truth in each, which is why it is often difficult to explain the architect's services satisfactorily to a client.

The question of fees is dealt with below, but it is worth remembering that architects sell their services. If, for example, an architect is asked to prepare a sketch scheme to satisfy the client's requirements, then that is what should be done. It is totally unreasonable to expect the preparation of working drawings, invitation of tenders and inspection of the construction works at no additional cost. Moreover, the client may not like the sketch scheme produced by the architect, but provided that it satisfies the requirements given by the client, the architect will have fulfilled their obligation and is entitled to the fee. It is not the architect's fault if the client has a dramatic change of mind when presented with the scheme and a client should expect to pay for changes. The same client would not expect to be able to go to a solicitor and request the drafting and redrafting of a will without having to pay for each change of mind.

In practice, most architects are prepared to carry out a considerable amount of reworking of their schemes until the client is happy. This may be very worthy and helpful, but it is neither strictly necessary nor sensible, and in an era of

fee competition, it is not always practical. To overcome this problem, the early stages of the architect's work are often carried out on a time charge basis.

It is unfortunately true that many clients are astonished, if they have never built before, that at the end of the initial stages of the architect's work, there is often nothing visible except two or three presentation drawings, for which they are expected to pay what appears to be, an exorbitant fee. To take this attitude, of course, is to ignore the vast amount of background work and thinking that has to be done in order to prepare the drawings. The prudent architect will usually avoid that situation by involving the client as fully as possible in every stage of the work; and possibly as a minimum, explain to the client what will be provided and what will be involved in producing that information. Although this approach is in line with best practice, the architect should assess each client, as some may want nothing more than for the architect to go away and return in a few weeks with some proposals. The architect, therefore, is expected to be something of a psychologist alongside all the other skills required.

The relationship between the architect and the client is often that of an agent and principal. The agent exercises powers, including contractual,<sup>3</sup> on behalf of the principal, and in doing so, the principal is bound by the agent's properly authorised acts. The agency relationship may be created in one of four ways.

- *Expressly*: when the client specifically appoints the architect either in writing or orally. This is most satisfactory, particularly when done in writing, because there is little scope for misunderstandings or mistakes.
- *By implication*: when it is clear to others that the architect must be acting as an agent. Such an instance may occur because the client behaves as if the architect was acting in an agency capacity, or simply because the architect is doing the kind of things normally done by an agent.
- *By necessity*: when the architect acts for the client in an emergency, otherwise there would be no agency. There will be very few instances where an agency comes into being in this way for an architect. One might just visualise a situation where the architect must give an instruction on the client's behalf in order to save the destruction of property. Otherwise the architect may not be empowered to give that particular instruction.
- *By ratification*: when the architect performs an act which the client subsequently ratifies. Two conditions must be satisfied: (i) the architect must carry out the action on behalf of the principal; and (ii) the principal must have been capable of carrying out the act at the time it was performed by the architect.

The agent's authority is important. It may be actual or apparent (ostensible). An architect's actual authority is defined by the terms of the conditions of engagement. Apparent or ostensible authority is the authority the architect appears to possess so far as parties, other than the architect and client, are concerned.<sup>4</sup> An architect is liable to the client for acting beyond his or her authority, but provided the architect is behaving in the way in which others expect

them to act, the client will usually be responsible for such actions to third parties. For example, an architect carrying out administration functions under a building contract may issue instructions to the contractor. Provided the contract expressly empowers the architect to issue such instructions, the contractor is entitled to carry out the work and be paid. It matters not, that the architect may be obliged, under their conditions of engagement, to obtain the client's authorisation for such instructions. Of course, in that situation, the architect may expect to be required to reimburse the client for any loss sustained.

The duties of an agent are as follows.

- *To act*: failure to act if action is called for is actionable at law.
- *To obey instructions*: the principal's instructions must be lawful and reasonable.
- *To exercise skill and care*: the kind of skill and care normally to be expected from a member of that particular profession.
- *Not to take any secret bribe or profit*: the principal may recover damages including the amount of such a bribe.
- *To declare any conflict of interest*.
- *Not to delegate without authority*.
- *To keep proper accounts*.

One of the greatest dangers for an architect is that of exceeding the authority actually given by the client. The possible consequences have already been touched upon. When in doubt, the client's written authority should be obtained. Next best is to confirm instructions back to the client in writing. Another risk may arise if the architect fails to disclose that they are acting for a client. The architect may become personally liable to the third party in such cases.

Agency may be terminated by the death of the agent or principal; by the performance of the agent's contract; by mutual consent; by breach on the part of either the agent or principal; and by bankruptcy of the principal, but not necessarily of the agent.

At one time it used to be thought that the architect was in the position of a quasi-arbitrator or acting in a judicial capacity when carrying out some functions under the building contract. Such matters as giving extensions of time or certifying monies due were thought to fall in this category. Such notions were dispelled following the case of *Sutcliffe v. Thackrah* (1974).<sup>5</sup> The architect has a duty to act fairly in these circumstances, but the duty is owed to the client, not to the contractor.<sup>6</sup> If an architect is negligent in the performance of any duty under the contract, the client may adjudicate or take legal action against the architect, or arbitrate under the conditions of engagement as appropriate, in respect of any loss suffered. However, the contractor must take action against the client, likely to be in adjudication, under the building contract.<sup>7</sup> Developments in the law, however, have suggested that there may be circumstances where an architect could be said to assume responsibility to a contractor who can be shown to have relied upon the architect's decisions. The position is complex and far from clear.<sup>8</sup>

### 13.2.1 Type of services

Architect's services can be broadly allocated into the two following categories.

- (i) Services which an architect would normally undertake as part of the overall design and administration of a scheme from beginning to end.
- (ii) Services which are available from an architect but do not readily fall into the services provided under (i). These services could be in addition to the services provided under (i) or they could be simply provided as part of a limited appointment, e.g. investigation of building defects.

In reality, there is probably no such thing as an architect's 'normal' services. What is 'normal' for one architect is probably not 'normal' for another even under (i) above. There are likely to be variations or differences in what each architect provides, even if they are small. What probably can be said is that there are typical services which an architect will provide. It is important that the architect makes clear to the client precisely what services are to be undertaken and this should be done prior to entering into the appointment, making sure that the agreed services are reflected in the executed agreement.

In order to offer some idea of the type of services undertaken by an architect it is worth looking at the schedule<sup>9</sup> of services published by the RIBA for use with the standard RIBA appointment document.<sup>10</sup> The schedule breaks the services down into three categories, which are:

- roles
- design services
- other services which include what are termed special services.

These are set out in the schedule of services under parts one, two and three respectively. The design services, to which most architects would instinctively gravitate, are included in part two against the various stages of the RIBA Plan of Work (see Chapter 12, section 12.2). Part 1 looks at what are termed 'Roles,' under which are listed a number of so called 'activities' but are in effect services. These are referred to as the management services in the guidance notes. It would seem sensible to look at these roles before looking at the 'design services' under part two and then the 'other services' at part 3. The reason for this is that even if the architect's services are limited to design, it is necessary that one and possibly two of the roles, or management services, would apply and therefore set out additional activities or services to be undertaken, e.g. Designer role.

#### 13.2.1.1 Role specifications

There are six roles identified at part 1 of the schedule under which a number of activities are identified. They are identified as activities but are for all practical purposes services, i.e. management services. The six roles are:

- Project Lead
- Health & Safety Advisor
- Cost Consultant
- Contract Administrator (Employer's Agent)

- Lead Designer
- Designer.

Under Designer there are four further sub-categories (e.g. Architect as Designer) which give a brief overview of the services to be provided.

The number of activities listed under each role varies significantly. There are eighteen activities, not counting sub-activities, listed under 'Project Lead', whereas there are three listed under 'Health & Safety Advisor' and seven listed under 'Lead Designer'. The activities are linked back to the RIBA Plan of Work through the use of common terminology, e.g. the 'Project Programme' and 'Project Execution Plan'. Both of these terms, together with many others, are defined in the Plan of Work 2013 Overview.<sup>11</sup>

The role of the **Project Lead** is to take responsibility to ensure that the client's needs are delivered by taking the '*lead*' to see that procedures are in place and that things are done. There are some eighteen activities identified without taking into account the sub-activities. They are in effect some of the duties that would be undertaken by a project manager (see section 13.6) and in the guidance notes to the standard agreement the role is actually referred to as the project manager. For example, the Project Lead:

- prepares:
  - the client's initial statement setting out the Project Objectives. This needs to take into account the client's core operations and any constraints, e.g. time and budget.
  - and maintains the Cost Information (i.e. the project overall costs) which will include the construction costs and cash flows. These are likely to be prepared by others.
  - or at least takes the lead in the preparation and co-ordination of the Project Execution Plan and Project Programme.
- will identify the requirement for professional expertise (e.g. solicitors, insurance, specialist surveys) and the roles to be undertaken by any client representatives and others who have an interest in the project, e.g. ends users, tenants, funders.
- will manage the appointment of the project team (e.g. Cost Consultant, Designers) and the development of the Brief as well as ensuring that the Brief is implemented. In addition, he or she will have to manage, as well as possibly designing, a change control procedure and either making or obtaining decisions from the client on matters which will impact on time and/or cost.
- will develop and maintain management structures and lines of communication which will allow the consultants, contractor and others to carry out their tasks in an efficient and effective manner. This would include ensuring compliance with any existing client procedures, the frequency of reporting, change control procedures covering both time and cost, and risk management. This should involve monitoring the performance against the cost plan and progress against programme and reporting to the client as necessary. Procedures need to be in place to secure authorisation to implement any necessary corrective measures or secure additional funds or time. The

procedures should clearly establish the appropriate method of communication for the issue of instructions, decisions, approvals or information by the Project Lead to the Lead Designer, Contract Administrator and Cost Consultant. In addition, he or she should facilitate the effective communications between the project team members though key matters of design are to be dealt with by the Lead Designer and Health & Safety Advisor, i.e. communicating to the Designers.

- In addition, the Project Lead is to develop and maintain the project strategy; the term project strategy is not defined though Project Strategies in defined in the Plan of Work (see Chapter 12, section 12.7).
- review the progress of the design work with the Lead Designer and Health & Safety Advisor; reviewing and co-ordinating, in conjunction with the Lead Designer, Contract Administrator and Health & Safety Advisor, the work of the consultants and clerk of works during stages 4 and 5.

In addition, the Project Lead will be responsible for implementing any feasibility studies considered necessary and also to advise on the methods of procuring the construction works.

The **Health & Safety Advisor** is to fulfil the role of CDM Co-ordinator under the Construction (Design and Management) Regulations 2007 (CDMR) and to provide general advice on health and safety.<sup>12</sup> This advice is given to the Project Lead, Lead Designer, Designers and Contract Administrator. In addition, the Health & Safety Advisor is to facilitate communications on matters of health and safety between the client and the project team. The **Cost Consultant** is responsible for providing and updating the Cost Information covering estimates, valuations and other financial information for the construction works (i.e. generally the role of the quantity surveyor). This will involve incorporating estimates and cost information provided by others, e.g. the mechanical and electrical consultant. In addition, they are to provide 'quantity surveying' services which would cover the preparation of interim valuation to assist the Contract Administrator when issuing interim payment certificates. It is likely to cover the valuation of variations under the building contract. Though not clear it would also likely cover the preparation of periodic cost or budget reports relating to the construction costs; these are likely to be submitted to the Project Lead who will probably be responsible for reporting to the client on the project costs.

The role of **Contract Administrator** (or Employer's Agent) is linked to stages 5 and 6 of the RIBA Plan of Work. This is a role which is commonly undertaken by many architects. The activities or services identified cover not only the administration of the building contract but also, in conjunction with the client and the other consultants, consideration of the tenders received, the appointment of a contractor and the preparation of the contract documents as well as arranging for their execution.

The services covering the administration of the building contract include the following.

- Reviewing the contractor's programme and monitoring the progress of the Works.

- Issuing drawings, specifications, details, instructions and other information in a timely manner so that the contractor can carry out the works.
- Reviewing with the relevant members of the project team any information supplied by the contractor, e.g. design documents relating to any contractor designed elements.
- Providing information for the preparation of interim valuations or the checking of a contractor's applications for payment and the issue of interim payment certificates or payment notices. The checking of a contractor's application and the preparation of a valuation will normally be undertaken by the Cost Consultant under the 'quantity surveying' services with guidance of matters of quality from the Contract Administrator.
- The collation of record information in conjunction with the Health & Safety Advisor.

It should be noted that the listed services make the Contract Administrator responsible for ascertaining loss and/or expense, or instructing the ascertainment of loss and/or expense and for dealing with extensions of time. In many instances architects exclude these from their fee because, until the matter arises, the extent of work involved for an architect cannot be known. It is not uncommon for these to be addressed on a time charge basis. Therefore, architects should make clear when agreeing a fee with the client that they can provide these services but that they are excluded from the basic fee and are to be addressed on a time charge basis when the matter arises.

The listed services make the Contractor Administrator responsible for submitting financial reports to the client. However, if appointed this is likely to be to the Project Lead who will likely be responsible for reporting the project costs to the client.

In conjunction with the Lead Designer, Health & Safety Advisor and Cost Consultant, the Contractor Administrator is responsible for co-ordinating and reviewing the work of all the other consultants and the clerk of works during construction. Further, the Contract Administrator is to provide the other consultants and the clerk of works with the information necessary so that they can carry out their activities during the construction period. In addition, the Contract Administrator is to receive reports from the other consultants or clerk of works to enable them to make decisions in respect of their duties for the administration of the building contract. The inference being that the Contract Administrator is to read these report when they are received; it would appear that there is no obligation on the Contract Administrator to ask for the reports. To make this effective there would need to be a requirement in the appointments of the other consultants and the clerk of works to provide the necessary reports to the Contract Administrator. Further still, the Contract Administrator has to liaise or consult with others (e.g. tenants or a purchaser) who may be affected by an instruction issued under the Building Contract. The Contract Administrator is responsible for managing the change control procedures during the construction period and making or obtaining any necessary decision on time and cost. Finally, the Contract Administrator is responsible for reporting to the client; though if appointed, this may be to the Project Lead.

It should be noted that within the listed schedule of services it states that the Contract Administrator is to exercise an impartial and independent judgement when deciding matters between the contractor and employer. This requirement is expressly stated not to be applicable to the role of Employer's Agent though the other services in general would be. The role of contract administrator under JCT Design and Build Contract 2011(DB) is undertaken on behalf of the employer by the 'Employer's Agent'. Their role is different from that of the architect or contract administrator under SBC, IC or MW. The Employer's Agent does not issue certificates and the documents they do issue, when administering the DB contract, are issued on behalf of the employer, e.g. notices and statements.

The listed services make the **Lead Designer** responsible for co-ordinating the programming of the design at each stage of the Plan of Work, and for co-ordinating the design for all elements of the building, including that of the other consultants, the contractor and specialists. Health and safety matters would have to be co-ordinated in conjunction with the Health & Safety Advisor. This includes monitoring the work of the Designers (refer below). Though not expressly stated in the services it is likely that the Lead Designer will prepare and update the Design Responsibility Matrix.

The role of Lead Designer is one that many architects will undertake and therefore they will need to have a picture of how the design for the whole scheme is allocated. If a part of the design is to be undertaken by a specialist supplier or manufacturer, on behalf of the architect or engineer, who will be liable for that design? In other words, if the design goes wrong at some future date, is the architect or engineer to be liable or the specialist? If it is to be the specialist, then what contractual link, possibly by way of a collateral warranty, is to be created between the client and specialist in order to afford the client a contractual remedy? It will not necessarily be for the Lead Designer to arrange for the execution of such a warranty but it will be for them to point out the risk to the Project Lead or client; possibly in the Risk Assessment. Architects should not forget that the terms in many appointment documents prevent the consultant from sub-letting any design without the client's prior consent.

The services make the Lead Designer responsible for establishing the outputs to be produced by each Designer and for the interface between the various elements of the design, including establishing adequate checking or verification procedures. In addition, they are to monitor the work of the other Designers.

The Lead Designer is responsible for taking the lead role in the preparation and co-ordination of the Project Execution Plan. They are also responsible for communicating to the Project Lead or client on matters relating to key elements of design. They will have to advise on the need for and the scope of design services required from other consultants, the contractor and specialists.

The final role is that of **Designer**. Each Designer is to prepare and maintain a programme covering their design services for each stage of the Plan of Work. It should include any outstanding services from a previous stage. It is the responsibility of the Lead Designer to pull together the individual design programmes into one overall design programme and monitor the Designer's work.



Each Designer has to give advice in relation to the design for which they are responsible (i.e. the Relevant Design) and to produce a design and specification having regard to such matters as cost, function, quality, construction safety and maintenance. In addition, they have to identify materials and standards of workmanship, while having regard to the Good Practice in the Selection of Construction Materials 2011 (British Council of Offices Publication). They will produce drawings, sketches, schedules, specifications, calculations and tender information for their design.

If the Designer is engaged during Stage 5 of the Plan of Work (other than as Contract Administrator) the Designer has to make an appropriate number of visits to site in order to inspect the progress and quality of the Relevant Design works undertaken. They also have to approve any works which is stated to be to the satisfaction of the Designer (see Chapter 21, section 21.4) and to provide the Contract Administrator with such information, as is reasonably required, for them to issue any certificate, notice or instruction under the building contract. In addition, the Designer has to advise on any remedial works to be undertaken during the rectification period to make good any defects within the Relevant Design works.

There are five sub-categories of Designer against which a brief description is shown indicating what their services entail. They are:

- Architect as Designer
- Civil and Structural Engineer as Designer
- Building Services Engineer as Designer
- Specialist Designer
- Site Inspectors/Clerk of Works.

It should be noted that against the Architect as Designer it states that the services include those relevant to a landscape architect and interior designer. A specialist designer is identified as a contractor, sub-contractor or consultant with a particular specialism who undertakes an element of the design. The Site Inspectors/Clerk of Works services are stated to cover inspecting and reporting on the progress and quality of work including compliance with the contract specification. Though not a designer they are closely linked to the design process.

In the case of *Kensington & Chelsea & Westminster Area Health Authority v. Wettern Composites* (1984),<sup>13</sup> it was held that the damages awarded against the architect should be reduced by 20% to take account of the negligence of the clerk of works. Being employed by the client, it was held that the client was vicariously liable for the clerk of works' actions. It is clearly in the architect's interest that the clerk of works is employed directly by the client. It is not expected that the architect should make frequent or constant inspections. If such a degree of inspection by the architect is agreed to be necessary, a part- or full-time resident architect may be appointed or otherwise a full-time clerk of works could be employed and the architect should advise the client about this.

If an architect uses part 1 of the schedule as a guide to prepare a schedule of services they need to take care. No matter what role or roles the architect undertakes, it is likely that they will not perform some of the activities or services listed under the roles. It is also likely there will be additional activities or

services to be undertaken which are not listed. Care also needs to be taken to see that the interface between the various role activities are co-ordinated, i.e. it is clear who is doing what and who is reporting to who. Therefore, the architect should carefully go through the list of management activities or services and amend it to reflect precisely what he or she is to undertake.

### 13.2.1.2 Design services

At part 2 of the schedule are the design services to be undertaken by the architect. These should complement the management activities identified under the roles at part 1. The design services are listed under the relevant RIBA Plan of Work 2013 stages (see Chapter 12, section 12.1). The guidance note at the head of part two directs the architect to delete any design services not required or not to be provided and to add any additional services not shown. Clarity and certainty are important. Many of the terms used in the Plan of Work will not be applicable to all projects (e.g. Sustainability Strategy, Design Responsibility Matrix or Information Exchanges) and the architect will have to tailor the services and documents to suit each of their projects.

#### *Stage 0 Strategic Definition*

The listed services cover the initial receipt of the client's instructions and general information about the project. They include helping or assisting the client to identify or set out the client's strategic requirements resulting in the preparation of the Strategic Brief. It is not clear whether the preparation of the strategic brief falls under the design services or whether it is covered under a part 1 role; on balance it is likely the intention is for it to be covered by the design services under this stage. In addition, the services encompass the provision of information to help determine the Project Budget, contributing to the production of a basic Project Programme and, in conjunction with the client, consider a preliminary make-up for an appropriate project team.

Though there is no mention of a visit to the site, or sites if more than one, the architect will likely have to visit the site in order to get some idea of what is involved.

At the end of this stage the listed services require the architect to have contributed to or assisted with the preparation of a:

- Strategic Brief (though the architect may be responsible for preparing this brief)
- Project Budget
- Project Programme.

These terms are defined within the RIBA Plan of Work Overview.<sup>14</sup> Depending on the nature of the scheme these may be detailed and lengthy documents or briefly set out in a letter. If not clear, then the architect should establish prior to agreeing the appointment who will be preparing the documents as it may well affect the fee; this will depend on what roles, under part 1 of the schedule, the architect has taken on, e.g. Project Lead. It may be that the architect will be

simply assisting in the preparation of the documents rather than actually been responsible for their preparation given they are solely a Designer.

### *Stage 1 Preparation and Brief*

The listed services include visiting the Site to carrying out an initial appraisal. They include the architect in assisting with the development of the Initial Project Brief. This would require considering or identifying the Project Objectives, Quality Objectives, Project Outcomes, the client's Sustainability Aspirations, the Project Budget and any other parameters or constraints. Again these terms are defined in the RIBA Plan of Work 2013 Overview.

The services require the architect to carry out any necessary Feasibility Studies and undertake a review of the available Site Information. Though early in the life of a project the architect is required to commence development of the Handover Strategy and the Risk Assessments as well as assisting with the assembly of the project team. The architect would be a key contributor to the Design Responsibility Matrix, the Information Exchanges and the Project Execution Plan.

It is important to note that compiling, revising and editing of the Initial Project Brief is covered under 'Other Service' at item 3a. It is not clear why this is the case; it may well be because it is envisaged that in certain circumstances the Initial Project Brief will not always fall to the architect (e.g. when the architect's appointment is limited to a Designer) but to another consultant, e.g. project manager. Refer below.

The listed services stipulate that the architect is to contribute to or assist with the preparation or development of the following:

- Initial Project Brief
- Project Objectives
- Quality Objectives
- Project Outcomes
- Sustainability Aspirations
- Project Budget
- Feasibility Studies
- Handover Strategy
- Risk Assessments
- Design Responsibility Matrix
- Information Exchanges
- Project Execution Plan

and to obtain and assess the following document:

- Site Information.

This is an extensive list of activities or tasks which if applicable would require a significant commitment of time to complete.

The key document produced during this stage would appear to be the Initial Project Brief. The preparation is not covered by the Design Services but identified under the Other Services. Whether the architect simply contributes to

or is responsible for the preparation of the Initial Project Brief will depend on whether Other Services item 3a applies. This brief is prepared following identification of the Project Objectives, and completion of the Client's Business Case and the site Feasibility Studies.

The quality standards to be achieved for the project (i.e. Quality Objectives) together with the Project Budget should also be set out in the Initial Project Brief. This is not readily evident from a reading of the RIBA Plan of Works 2013.

The services require the architect to make an assessment of the project risks (i.e. the Risk Assessment); this involves looking at not only the design risks (e.g. specifying a particular product as against another) but also the other risks associated with the project (e.g. ground conditions or the possible discovery of asbestos). Though the architect's main focus will be on design and the associated risks, the project team will have to be conscious of the overall project risks. The process will involve identifying the risk and a person responsible for reporting the status of the risk. This is likely to require the creation of a basic risk register to monitor the risks on an ongoing basis until it is no longer relevant.

Though it may seem premature, the listed services call for the architect to start considering and planning for the handover of the building (i.e. the Handover Strategy). For example, is there to be sectional completion of the works? In what sequence is the work to be undertaken? What training systems will need to be in place for the building user? Basically, the strategy needs to consider and plan everything necessary to enable a successful occupation of the building by the client or end user.

Under the listed services the architect is required to contribute to an overall design matrix (i.e. the Design Responsibility Matrix). This should cover the design for the whole project including any design to be undertaken by the contractor or specialists. In connection with any contractor designed work the person responsible for preparing the performance criteria against which the contractor or specialist has to design should be identified, e.g. the contractor's brief.

### *Stage 2 Concept Design*

The principal service listed under this stage is the preparation of a Concept Design together with outline specifications. This would cover the provision of sufficient design information to allow for a preliminary estimate of the Construction Cost to be prepared. The services also cover contributing to the completion of the Final Project Brief and the preparation of a client Stage Report.

The services also cover the preparation of a Sustainability Strategy, a Maintenance and Operational Strategy and for undertaking a review of the Handover Strategy and Risk Assessments commenced under Stage 1. Additionally the architect is expected to assist with any Third Party Consultations (the meaning of this term does not appear to be defined), the updating of the Project Execution Plan, preparing the Construction Strategy and the Health and Safety Strategies.

Though the architect is to prepare a Concept Design and outline specifications, unfortunately, Concept Design is not defined in any detail within the Plan

of Work 2013 Overview. As well as outline specifications it also includes outline proposals for structural and building services systems. Therefore it would seem that the architect is expected to prepare outline proposals for the architectural elements covered by the appointment.

During this stage the Initial Project Brief is developed into the Final Project Brief; the Initial Project Brief is amended so that it is aligned to the Concept Design and in line with decisions made during Stage 2. The services require that the architect assist or contribute to the completion of the Final Project Brief. That is unless item 3b 'Other Services' applies, in which case the architect would be responsible for preparing the brief.

The design information provided at this stage is to be sufficient to allow the preparation of a preliminary estimate of the Construction Cost. The preliminary estimate will be incorporated into the Cost Information for the scheme which covers all the project costs, including any life cycle cost information.

The services stipulate that the architect prepare a Sustainability Strategy, which is a strategy for delivering the client's Sustainability Aspiration, and the Maintenance and Operational Strategy, which is a strategy for the future maintenance and operation of the building. In addition, the architect is expected to review, in conjunction with the project team, the Handover Strategy and the Risk Assessments.

The architect is also expected to prepare a stage report and submit it to the client in accordance with the Information Exchanges. This is an example of a service which would need to be co-ordinated with the activities of the Lead Consultant.

### *Stage 3 Developed Design*

The listed services require the development of the approved Concept Design to show spatial arrangements, type of construction, material and updated outline specifications in sufficient detail to co-ordinate the structural and building services design for the project. This includes investigating the effect of the applicable statutory standards and construction safety on the Concept Design and where necessary to consult with the statutory authorities (this would appear to fall within 'Third Party Consultations'). Design information will be required for the preparation of an updated estimate of the Construction Cost.

The architect is to review the Project Execution Plan and the Risk Assessments; in addition, they will have to review the Sustainability, Maintenance and Operational, Handover, Construction and Health and Safety Strategies.

The outcome of the above services is the preparation by the architect of a stage report in accordance with the agreed Information Exchanges for submission to the client.

In connection with planning the listed services could require, if selected, the architect to arrange and prepare information for planning pre-application discussions; or to prepare and submit an application for detailed planning permission; or assist with the discharge of any conditions attached to the planning consent. Though shown under Stage 3 the Plan of Work indicates that these services could be undertaken at any point during Stages 2 to 4.

#### *Stage 4 Technical Design*

The listed services under this stage require the architect to produce the detailed technical design including specifications and calculations in sufficient detail to allow a contractor to construct the works; the architect will have to prepare and make any necessary building regulation submissions and any other statutory applications. The design is to be prepared in accordance with the Design Responsibility Matrix and the previous Information Exchanges. The design produced will be used to update the estimate of the Construction Costs.

The architect is to undertake a review of the Sustainability Strategy, the Maintenance and Operational Strategy, the Handover Strategy, the Construction Strategy and Health and Safety Strategy. In addition, he or she will also have to review the Risk Assessments and the Project Execution Plan.

The architect is responsible for reviewing any design produced by the contractor or specialists to check that it is co-ordinated and integrated with the other project information; this it would seem can only be relevant to the co-ordination and integration with the architect's design (i.e. the Relevant Design). If the contractor is responsible for design then the architect will probably be checking the contractor's proposals, submitted at tender stage in response to the contractor's design brief.

Unusually the architect is not called upon to produce a stage report.

#### *Stage 5 Construction*

The listed services require the architect to visit the site to inspect the works as a Designer to check and review compliance with the contract and statutory requirements. The role of a Designer is separately stated at Part 1 (see above). Queries raised by the contractor relating to the architect's design necessary for constructing the works will have to be answered in a timely manner. In addition, the architect is required to agree the information necessary for any commissioning and handover training, to allow the client to use the building after completion. Further, the architect is to compile the as-built details (i.e. the 'As Constructed Information') and where applicable information for the Health and Safety File. The architect will also assist with the updating of the Construction and, Health and Safety Strategies.

#### *Stage 6 Handover and Close Out*

The listed services require the architect to give advice on the resolution of defects and to provide information to help in the agreement of the final account. The architect is also required to assist the building users during their initial occupation period.

#### *Stage 7 In Use*

The listed services cover the carrying out of a Post-occupation Evaluation. It is likely as Designer that the architect will have a limited involvement or possibly no role to play during this stage.

*Procurement activities*

These services cover identifying the extent of any design work to be undertaken by the contractor and/or specialist sub-contractors, and the preparation of the documents required for tendering purposes.

These are shown at the end of part 2. Within the Plan of Work it recognises that, like planning, they could be undertaken, even in part, at any time during Stages 2 to 4. The procurement services, if undertaken by the architect, are likely to occur during Stage 4. However, if a two stage tendering approach was to be adopted it could be earlier, e.g. Stage 2 or 3. Alternatively, it may be that elements of the works are tendered early and separately to identify specialist contractors to be appointed by the main contractor as a sub-contractor. This could be undertaken during Stages 2 or 3 with the main contract tendered during Stage 4.

**13.2.1.3 Other services**

At part 3 of the schedule there are what are termed ‘Other Services’. These comprise a list of some 25 services under the heading ‘**Sites, buildings and related services**’ and a separate list of eight services under the heading of ‘**Special Services**’.

The services which fall under the heading of ‘**Sites, buildings and related services**’ are in general terms covered by the following broad headings.

*Management*

An architect can offer management services in connection with the selection of the project team members (which may involve a tendering or selection process), additional site visits or the provision of residential staff on large projects. It could also cover the co-ordination of separate trade contracts, co-ordination and supervision of direct labour contracts and services to either party in connection with design and build contracts.

An important service identified in the list is the compiling, revising or editing of the Initial and Final Project Briefs. See above at *Stage 1 Preparation and Brief*. If the architect is Lead Consultant then they need to ensure that this service is selected. Any editing or revising should probably be subject to a time charge fee. Alternatively, an architect could prepare room data sheets which often form part of the employer’s requirements for design and build projects.

An architect could also undertake negotiations on behalf of a client to obtain statutory approvals or deal with submissions or negotiations with landlords or the freehold owners of the land.

*Sites*

Architects could advise on site suitability and negotiate on the client’s behalf in connection with various sites in order to establish the most appropriate site for the scheme. They could prepare survey drawings and undertake site investigations, in collaboration with the other appropriate consultants.

### *Buildings*

Architects could produce survey drawings of existing buildings and prepare condition schedules. Depending upon the skills within a particular architect's practice, it may be possible to carry out structural surveys, and investigate and report on defects and failures. The preparation of specifications in connections with repairs could be undertaken and the inspection of work in progress carried out. Advice may also be offered on many other building issues such as accessibility, energy conservation, fire protection and change of use. For completed buildings, architects could prepare 'as-built' drawings, maintenance and operational manuals.

### *Development*

An architect should be able to produce plans and other drawings for many purposes in connection with the development of a building. Certain practices are able to produce elaborate models and perspectives. Other specialist services which may be available include montages, detailed plans and specifications for roads and sewers, demolition and environmental studies, and conveyancing plans.

### *Town planning appeals and advice*

Some architects specialise in town planning matters and have considerable experience in this field. Although some will concentrate on planning advice, there are many architects who develop this expertise alongside their general architectural practice. They can offer invaluable assistance where difficult planning questions have to be resolved and where complicated negotiations with planning authorities become necessary.

### *Design*

An architect should be able to offer a wide variety of services under this broad heading. It would include interior design, the design and selection of furnishings and decoration, exhibition design, shop-fitting and advice on the commissioning or selection of works of art. An architect may be able to offer specialist services in landscape design, theatre design, acoustic investigations and access.

### *Financial*

Depending on the disciplines within an architect's practice and the existence of appropriate professional indemnity insurance, it may be possible to offer cost planning services for building projects, advice on cash flow requirements, life cycle cost analysis, value and engineering management, valuation of buildings, preparation of schedules of rates or quantities, estimates and negotiations in connection with fire damage and grant negotiations. Also, an architect could prepare either or both interim or final valuations. If the skills are not evident within a practice then these matters are best left to a quantity surveyor with the appropriate expertise and professional indemnity cover.



### *Tendering*

An architect may be able to advise on the relevant documentation necessary to tender for specialist services, e.g. theatre acoustics. In addition, there is no reason why an architect should not be involved, where appropriate, in negotiating a tender price with a contractor, e.g. during the second stage of a two stage tendering process; it may be that a competitive tendering procedure could not be used due to time constraints.

### *Negotiations*

It is common for architects to offer services in connection with negotiating planning appeals, building regulation relaxations, submissions to bodies such as English Heritage and submissions to landlords, statutory bodies, etc.

### *Legal*

Many architects provide services in connection with easements, party wall negotiations and rights. With appropriate experience and training, it should be possible for an architect to give expert evidence, on architectural practice, in proceedings and advise during conferences with solicitors and counsel. Although, in theory all architects can act as an adjudicator or arbitrator in appropriate cases, in practice only those architects who have had proper training and experience should do so (see Chapter 3, section 3.10). Some architects do offer a service representing clients in adjudication proceedings.

### *Contractor's claims*

Dealing with claims under the building contract has become a specialised area. Determining contractor's applications for loss and/or expense and making a fair and reasonable estimate of any entitlement to an extension of time are things which do not automatically arise under every contract. When claims do arise, they demand particular skill in resolution, particularly where large sums of money are involved and rough calculations and errors are not readily tolerated. Every architect involved in the administration of building contracts should be able to offer a reasonable degree of skill in this area. Refer to 'special services' below.

### *Historic buildings*

Some architects can offer services in connection with historic buildings and conservation areas, embracing research, inspections, detailed reports, specifications and applications for planning approvals.

### *Other consultants*

If architects have appropriately qualified personnel within their practices and have the requisite professional indemnity cover, they will be able to offer services normally provided by the other consultants. For example, services covering structural, mechanical and electrical, landscape and highway design. They will be able to offer these services either on projects for which they are the

project architects or project managers or on projects for which another architect has been engaged (with the agreement of that architect).

### *CDM Co-ordinator*

Many, although not all, architects have undertaken training to enable them to offer services as CDM<sup>15</sup> co-ordinator in connection with buildings under the CDMR. The RIBA has produced special terms of engagement for this purpose. It is not uncommon for an architect to combine both architectural and CDM co-ordinator services on the same project. Refer to Health & Safety Advisor role above.

As with all services, it is important that the architect makes clear what is covered by the services. If any of the above services are to be provided by an architect it would seem sensible for the architect to define precisely what is included and what they mean, and possibly what is not covered. This is less important if the service is to be on a time charge basis but very important if a lump sum is to be given.

The services which fall under the second heading of ‘**Special Services**’ are in general terms as set out below.

- Undertaking revisions to existing approved design documentation or the preparation of additional design documents to comply with the requirements of say the planning or statutory authorities or possibly a landlord. Changes that have to be made to the design following a recent change in the law or statutory regulations. Changes or corrections to the design which have become necessary but have not arisen from any failure on the part of the architect.
- Any investigations, research or surveys necessary following the discovery of work carried out by the contractor and which is not in accordance with the building contract.
- The assessment of alternative designs, materials or products proposed by a contractor, sub-contractor or supplier.
- Assisting the contract administrator in dealing with a contractor’s application for an extension of time and the recovery of loss and/or expense, i.e. contractor’s claims.
- Any additional services to support the client in connection with a dispute the client has with another party, e.g. another member of the project team.
- Services provided following or connected with damage to, or destruction of, the Works or an existing structure, e.g. following a fire or a flood.
- Services necessary following the suspension or termination under the building contract or the agreement of another party to provide services on the project, e.g. insolvency of the contractor and the engagement of another contractor.
- Services in connection with easements or other legal agreements.

These services are identified as additional services and would be instructed as such, when necessary, under the appointment. In other words, an additional

fee would be paid under the appointment. For example, the architect may be Lead Designer and a Designer but not Contract Administrator. The additional service may be to offer support and advice to the Contract Administrator in connection with a contractor's application for an extension of time; this would be instructed as an additional service under the appointment by the client or their representative.

### *Summary*

The services which an architect may offer as part of the normal or additional services cover every facet of construction work and, the care and maintenance of buildings in use. It should be noted that, although all architects will be willing to offer some of the services outlined above, architects like other professionals tend to develop their own specialisms. There could be serious legal implications for architects who hold themselves out as qualified to offer a competent service in something which they are not equipped to do. In addition, of course, it must never be forgotten that architects should not offer services for which they do not have appropriate professional indemnity cover (see Chapter 10, section 10.5).

## **13.3 Determination of the fee**

At one time, architects used to have a mandatory fee scale. The RIBA then published recommended fee scales. These were withdrawn. The RIBA then published indicative percentage fee scales for architects' services in the form of percentage fee graphs for new works and works to existing buildings, and a classification of building types based on the ones which used to form part of the RIBA Architect's Appointment (the 'Blue Book'). Fee scales and graphs were subsequently published in the form of statistical records of fees actually charged by a cross section of architects for various types of work. Percentage fee scales are no longer published, but concise written advice is available about the way in which practices calculate fees and how they structure fee options.<sup>16</sup> Architects are now encouraged to charge on a time charge, resource-based or value-added basis – whether they will persuade clients to pay on this basis is another matter. Negotiations can take place with a prospective client to arrive at a mutually agreeable figure. There is a point, however, below which the architect cannot give a satisfactory standard of service. To negotiate a fee below that point is commercial suicide, to say nothing of being unprofessional. In practice, it seems that architects commonly do some initial work at a lower than 'normal' fee (or a reasonable fee) and sometimes for nothing at all, if it appears likely that a reasonable commission may result.

The number of architects prepared to do so-called 'speculative work' in this way shows no signs of decreasing and some unscrupulous clients use, as an excuse for not paying, that they thought the architect was working speculatively. Although everyone in business must face commercial reality, architects do the profession no favours by working for very low fees or for nothing at all.

The fees negotiated will depend upon many factors of which the following are the more significant:

- the amount of work the architect has in progress
- the size of the office related to turnover and hence the overhead costs
- whether the project is a 'one off' or simply the first of many similar jobs which the architect can expect to receive from the same client
- whether the project is particularly interesting to a particular architect, perhaps because the architect wishes to gain experience in that building type.

Many architects have retained copies and still use the published fee graphs as a basis to calculate their fees. A small, one-man, office may charge less, but offer less resources than a larger firm which may charge more to cover its larger overheads. The smaller firm may argue that it is giving a more personalised service. It is now possible for a client to obtain competitive quotations from a number of architects for the same project. However, to avoid a breach of the RIBA Code of Conduct, it is necessary to ensure that the terms are absolutely clear and on the same basis for each of the architects involved in giving a quotation.

The basis of fees is usually one of the following:

- percentage of the construction cost of building
- time charge
- lump sum.

### 13.3.1 Percentage charges

Architects will normally charge a percentage of the total construction cost if they are providing the full range of architectural service. The no longer published RIBA indicative percentage fee scales divided buildings into classes and provided graphs showing indicative percentages for each class over a range of construction costs. Class 1 buildings were the simplest and class 5 were the most complex. The recommendations were detailed. Among the points worthy of note when calculating the total construction cost for fee purposes were:<sup>17</sup>

- the value of work covered by all the architect's services was included in the total construction cost even if the work was carried out under separate contracts
- specialist sub-contractors' design fees would be excluded
- if the architect carried out services relating to parts of the building which were eventually omitted, then the architect was to estimate the value of omitted work and the total construction cost would include an estimated cost for carrying out the omitted work
- the value of built-in furniture and equipment was included in the total construction cost
- if clients carried out any work direct or supplied materials at their own cost, the architect was to estimate the value and include it in the total construction cost
- where there was a substantial element of repetition the fee may have been reduced.

The RIBA publishes *A Client's Guide to Engaging an Architect*.<sup>18</sup> It makes clear that fees are a matter of negotiation and that there is no standard or recommended basis for calculating a fee. The fee should reflect the complexity of the project and range of services to be provided. The guide includes a chart showing typical building types divided into 'Low', 'Mid-range' and 'High' according to the amount of resources which an architect has to devote. The greater the amount of resources required the higher the expected fee.

It is normal for fees to be paid in instalments based upon the estimated final construction cost. The final fee account will be adjusted to take account of the actual final construction cost of the building. Payment should be agreed as being made at the end of each stage, or better, monthly. The architect needs to consider the fee cash flow for the purposes of running the business. It is essential that the basis of charging is settled before the architect undertakes any services.

During the construction stage, an architect will usually charge based on the amount certified in the monthly payments to the contractor. This is sensible. Occasionally, the architect will base the fee instalments on the estimates of the final cost. Since such estimates are often pessimistic, in the sense of forecasting a high expenditure, the architect may receive a severe shock at 'final account' stage when it becomes clear that the final construction cost is significantly lower than that forecast. This may prove to be a nice surprise for the client but less pleasing for the architect who may be faced with having to repay fees.

### 13.3.2 Time charges

Time charges are based on an hourly rate. Neither the RIBA appointment documents 2010 (2012 revision) or the RIBA's *A Client's Guide to Engaging an Architect* give guidance about the appropriate hourly rate for any given circumstance or professional.

The actual amount charged per hour varies from practice to practice and from one part of the country to another. Charges are usually higher in the London area than in the regions and larger practices usually charge more than small practices. In the latter case, the large practice will probably argue that the increased cost arises from higher overheads needed to maintain a better standard of service.

It is very difficult to arrive at a figure for an hourly rate, because the rates from practice to practice are not generally known. Thus, an architect fixing an hourly rate for their technical staff may wonder where to start. A commonly adopted guide used to be the  $1 \times 1 \times 1$  formula, where the rate was made up of equal parts of salary, overheads and profit. In practice, the architect worked out the amount paid to a staff member per hour, then multiplied by three to find the hourly rate to be charged to the client. It was a very rough guide and current evidence suggests that the profit element is now very much below a third of the total. Architects should go through the exercise, perhaps using 0.3 for the profit (i.e.  $1 \times 1 \times 0.3$ ) to see if they are charging anything like this figure. Another approach is to calculate the rate based on the staff member's cost plus 50% for overheads and a small percentage (up to 5%) for profit. It is our experience that

most architects and surveyors, particularly outside London, charge low hourly rates when compared with other professions.

Work for which an hourly rate would be appropriate could include:

- constant site inspection
- partial services
- additional services
- any instance where the client has agreed with the architect that a time charge should be made
- additional work beyond the architect's control such as:
  - revisions to documents due to changes in the law
  - changes in client's instructions
  - delay or disruption in building operations caused by others
- dealing with contractor's applications for extension of time and loss and/or expense.

Many clients are wary of paying on an hourly basis. They tend to liken it to a blank cheque. It is, however, perfectly possible for an architect to state an hourly rate and to give an estimate of the length of time needed. Another variant is the hourly rate plus a ceiling figure beyond which the architect must not go without further authorisation. Certain clients may require a weekly record to be submitted at the end of each week of the time spent that week. Rendering monthly accounts in such instances assists both the architect and client to keep control of the situation. In certain instances, there is no option but to state an hourly rate. It need not be more expensive than a lump sum (see below) because the architect is certain to make a reasonable profit from an hourly rate, whereas he must add something for contingencies when arriving at a lump sum.

### 13.3.3 Lump sum charges

There is nothing to prevent the architect from quoting a lump sum fee to cover all the work expected to be carried out. Indeed, clients often require that approach. However, this should only be done if:

- the extent of the work required is absolutely clear
- the time-scale of the service is known.

It would be unusual, for example, if an architect was to quote a lump sum fee for carrying out negotiations with a local authority in regard to development work. On the other hand, a small project requiring full services over a comparatively short time-scale is the sort of appointment for which they can give a firm quotation.

There are two kinds of lump sum fee. The first is simply a lump sum. The second is a lump sum which is linked to something, often the construction cost. It is calculated by reference to a percentage and the result is a lump sum which is subject to change if the construction cost changes from the budget by more than a stated amount. Most lump sum quotations appear to fall into the first category (but see section 13.4.3).

There is a danger for clients if they require lump sum quotations and the architect has a duty to explain the implications fully. Clients must know precisely what they want; they must not cause delay nor change their minds. If architects are involved in additional work clearly not included in the original sum, clients can be required to pay additional fees. Where architects are requested to quote on a lump sum basis, they must take care to specify precisely the services which are included, particularly whether or not they are inclusive of VAT, expenses, etc.

An architect may not take part in a 'Dutch auction' so as to effectively undercut another architect's fee quotation. That would infringe Principle 3.4 of the RIBA Code of Professional Conduct which states:

'Where members are engaged in any form of competition to win work or awards, they should act fairly and honestly with potential clients and competitors. Any competition process in which they are participating must be known to be reasonable, transparent and impartial. If members find this not to be the case, they should endeavour to rectify the competition process or withdraw.'

#### 13.3.4 Other fees

It is perfectly possible for an architect and client to decide upon an entirely different system of calculating fees. One such system is payment on results. This is often, less bluntly, referred to as a 'value added' fee. Essentially, the architect is paid according to the money generated for the client. This is often in terms of increasing the value of a plot of land, perhaps on account of a clever planning application or a unique approach to developing a site. Sometimes it is agreed that the architect is paid fees based on a percentage of any such increase. There is no limit on the ways in which fees can be calculated to suit particular circumstances.

#### 13.3.5 Project teams

The practice of a single appointment for a project team is very popular among many clients. These clients commission buildings which, of their nature, require a considerable input from consultants in several disciplines. Traditionally, such clients would be left to negotiate terms and fees with each consultant individually as recommended by the architect, and clients fear that this is an expensive process. Moreover, experience has shown that different consultants do not always fit together harmoniously. Indeed, many disputes arise out of conflicts between the approaches of differing disciplines. The idea of a project team is that an integrated approach is presented to the client consisting of all the consultants under the co-ordination of a lead consultant (who may or may not be an architect), i.e. Project Lead. Fees and the individual responsibilities are expressly set out in the presentation to the client including specific professional indemnity responsibilities. In effect the client seeks a single fee, by negotiation or competition, for the appointment of the project team.

Where, as is usual when this system is adopted, the lead consultant effectively sub-contracts to all the other consultants, there can be considerable risk attached, financial and otherwise. The lead consultant will be liable to the client for all the services carried out by all consultants. The effect of that is that if there are any defects in the services, the client's redress is directly against the lead consultant. It is then a matter for the lead consultant to seek redress from the sub-consultant or sub-consultants concerned. If the method of dispute resolution is adjudication or arbitration, there may be difficulties because, unless all parties agree, it will not be possible to resolve a dispute between client and lead consultant at the same time as a related dispute between lead consultant and sub-consultant. Separate adjudications or arbitrations may result in differing decisions. In order to assist the lead consultant to pass on the liability to sub-consultants, the sub-consultancy agreements must be carefully worded to step down liabilities. Put simply, each sub-consultant must be liable to the lead consultant for services for which the lead consultant may be liable to the client.

Further problems may arise if the lead consultant has difficulty getting paid by the client. The lead consultant's invoice will contain a fee charged by the sub-consultants. Although it is usual for the payment period for sub-consultant invoices to be longer than the lead consultant's invoice, that is little help if the client simply refuses to pay. The sub-consultant's redress is directly against the lead consultant who must, in turn, seek payment from the client. The lead consultant cannot, even if the sub-consultant agreed, rely on a pay when paid clause in the sub-consultancy agreement, because such a clause is unlawful under section 113 of the Construction Act unless the client has become insolvent. In practice, this can lead to serious problems and the lead consultant becomes reliant on the goodwill and patience of the sub-consultants. Moreover, taking action to recover fees from the client is entirely at the lead consultant's cost. These are all cogent reasons why architects, acting as lead consultants, should ensure that the team is structured so that each member is responsible under a separate contract directly to the client and also responsible for rendering and recovering their own fees.

### **13.3.6 Work to existing buildings**

If the work the client requires to be done involves an existing building, a larger fee is usually necessary and should be charged. This is because the architect will be involved in much more work due to the constraints of the original structure, planning, services, etc. If, in addition, the building is of architectural or historic interest, if it is a 'listed building' or in a conservation area, the client may also be paying for the architect's special skills in dealing with buildings of that type. Even if the building is of a new construction to be joined onto an existing building, the client should be charged a higher fee for that portion of the work where new and old connect. It is impossible to give other than rather general indications, because each old building has its own special identity, which requires individual consideration. For example, a very ancient town wall of considerable length might attract a lower percentage fee than a complicated Victorian building. It is very risky, from the architect's point of view, to agree to take on this kind of work for a lump sum fee.



### 13.3.7 Termination

Just whether, and how much, the architect can recover in respect of fees in the event of termination will depend on whether formal conditions of engagement have been entered into and the circumstances of the termination. The RIBA Standard Conditions of Appointment 2010 (2012 revision) provides that either the architect or client can determine on reasonable notice. It also provides that the architect is then entitled to fees and expenses relating to work completed up to the time of the termination. The exact method of calculating the fees will depend upon the basis originally agreed. The architect is also entitled to charge all loss and expense arising from the termination, if due to the client's termination (provided that it was not a result of the architect's material or persistent breach) or breach of contract. For example, an architect in the middle of producing working drawings, specifications and schedules for a contractor cannot be expected to move staff onto other work immediately. There will be non-productive time.

If there is no formal agreement between the architect and the client, there will be no provision for termination and no provision for subsequent recovery of fees. In this situation the parties may well find themselves locked in disagreement and possibly dispute. Anecdotal evidence suggests that many architects do find themselves in awkward situations as a result of a failure to enter into a proper formal agreement with clients. These architects are not only the authors of their own misfortunes in this situation but they are also in breach of both the RIBA (i.e. Principle 2.3) and ARB (i.e. Standard 4.4) codes of professional conduct.

Ignoring what may be in the terms of engagement, it is worth remembering that an architect's engagement is a contract and that it may be brought to an end in the same way as any other contract (see Chapter 20, section 20.12) unless the contract expressly stipulates otherwise. The RIBA Standard Conditions of Appointment 2010 (2012 Revision) includes provisions which expressly change the consequences of such termination (see Chapter 14 section 14.2.5).

### 13.3.8 Expenses

There is no automatic right to expenses. A client is entitled to assume that they are included in any fee quoted unless they are specifically stated to be extra. It is also advisable to state precisely what the architect considers to be a reimbursable expense. Expenses and disbursements are often confused and 'disbursement' is often wrongly used to mean expenses. The terms must be clearly differentiated. Disbursements are sums which are expended on behalf of a client and they are usually recovered as a net amount. Statutory fees and direct payments to consultants fall into this category. Common expense items are:

- postage or other means of delivery
- hotel and travelling expenses (mileage rates should be stated in the agreement)
- printing, reproduction and purchase of all drawings, documents, photographs and models, etc. which the architect must or the client requests him or her to produce in order to carry out the work

- payment for specialist advice which the client has authorised, e.g. legal or insurance advice
- special hire charges for equipment if authorised.

## 13.4 Terms of appointment

### 13.4.1 The basic contract

The relationship between an architect and their client is contractual. Depending upon circumstances, there may also be a tortious liability. Principally, however, the relationship will depend upon the terms of the agreement made between the parties.

There are two types of contract:

- a simple contract (under hand)
- a specialty contract (a deed).

There are important differences. In the case of a simple contract, there must be consideration present (each party must contribute something to the bargain) or the contract will not be valid. In addition, an action for breach of that contract can be defended by reference to the Limitation Act 1980 if brought by one party against the other more than 6 years after the date of the breach. A specialty contract does not require consideration to make it valid and the limitation period is 12 years from the date of the breach. There are other differences, but the two noted above are the most important so far as architects are concerned. Effectively, the result is that an architect who enters into an agreement as a deed, with the client, doubles the length of exposure to actions under the contract or for breach of its terms.

A contract is a binding agreement between two or more persons which creates mutual rights and duties and which is enforceable at law. There must be an intention to create legal relations. In the case of agreements between business people, such an intention is presumed. In the case of friends or relatives, the intention normally has to be demonstrated. For a valid contract there must be:

- an offer by one party
- an unqualified acceptance by the other party
- consideration (except in the case of a specialty contract)
- capacity to contract; certain persons such as drunkards, the insane and minors, have limited capacity to contract
- intention to create a legal relationship
- genuine consent i.e. there must be no duress
- a legal objective
- an objective which is possible.

Although it is traditional to analyse a contract in terms of an offer and an acceptance, in practice the situation may not be so clear-cut. Although it may be easy to establish that the parties are in agreement about all the essential terms of the contract, the agreement may not fall simply into an offer and an acceptance,

but rather a complex series of meetings, discussions and correspondence which taken together show agreement.

A simple contract can be entered into in writing or orally. The problem with an oral contract, of course, is uncertainty about its terms. Even if there are witnesses, they may later disagree about what they heard. Many architects are engaged purely on the basis of an oral agreement and, indeed, some clients may appear offended if asked to put the commission in writing, as though it was some reflection upon their honour. In truth, the purpose of recording the terms in writing is to protect both parties, not only against sharp practice, but more commonly against imperfect memory or plain misunderstanding. At the very least, the architect should confirm in writing the terms of the appointment at the earliest opportunity. It used to be the case that a specialty contract had to be made under seal.<sup>19</sup> This was usually a round piece of red paper on which a seal was embossed or it could be a rubber stamp or, indeed, anything so long as the parties clearly intended the document to be sealed.<sup>20</sup> However, the Law of Property (Miscellaneous Provisions) Act 1989, in the case of individuals, and the Companies Act 1989, in the case of companies, removed the necessity to use a seal. Indeed, the use of a seal alone will not create a deed.

In the case of a company, there are several ways in which a company can execute a deed, but usually all that is required is for the document to state on its face that it is a deed and for it to be signed by two directors or one director and the company secretary or one director in the presence of a witness who must attest the signature. In the case of an individual, the document must state on its face that it is a deed and it should be signed by the person making the deed in the presence of a witness who must attest the signature.

An important principle used to be privity of contract. That was the rule that only parties to a contract could bind or be bound by that contract. However, it was thought that such a rule could result in unfairness in certain circumstances and the Contracts (Rights of Third Parties) Act 1999 was passed to allow persons who are not parties to a contract to enforce rights under the contract. A fuller explanation of these principles is to be found in section 14.3. It is to be noted that most contracts now exclude the effects of the Act as a matter of course, thus restoring privity of contract to all intents and purposes. All the RIBA terms of appointment and most building contracts contain such exclusions which generally state that third party rights are not created unless expressly stated otherwise in appointment or building contract.

### **13.4.2 The effect of the Construction Act**

All terms of engagement entered into by architects after 1 May 1998 are subject to the Construction Act. In Northern Ireland the Northern Ireland Order has the same effect. Part II of the Construction Act deals with construction contracts and every architect should have a copy. Part II is only a few pages long; it includes in the definition of such contracts an agreement 'to do architectural, design, or surveying work, or ... to provide advice on building, engineering, interior or exterior decoration or on the laying out of landscape in relation to construction operations'.

'Construction operations' are defined in some detail. Broadly they are the construction, alteration, repair, etc. of buildings, structures, roadworks, docks and harbours, power lines, sewers and the like. They also include installation of fittings such as heating, electrical or air conditioning, external or internal cleaning carried out as part of construction and site clearance, tunnelling, foundations and other preparatory work and painting or decorating. Excluded are such things as drilling for natural gas, mineral extraction, manufacture of certain components, construction or demolition of plant where the primary activity is nuclear processing, effluent treatment or chemicals, construction of artistic works, sign writing and other peripheral installations.

Importantly, the Construction Act does not apply where one of the parties intends to take residence in the subject of the construction operations, i.e. their dwelling.

Prior to the amendments introduced by the Local Democracy Economic Development and Construction Act 2009 the provisions of the Construction Act only applied to 'agreements in writing' and there were detailed provisions as to what that entailed. However, the Construction Act now applies to all construction contracts whether or not they are in writing.

The Construction Act requires that all construction contracts must include certain provisions. They are as follows.

- *Adjudication.* Either party must have the right to refer a dispute to adjudication with the object of obtaining a decision within 28 days of referral. A party may give notice of intention to refer a dispute at any time; the appointment of the adjudicator and the referral must take place within 7 days of the notice. The 28 day deadline may be extended by up to 14 days if the referring party wishes or indefinitely if both parties agree. The adjudicator may take the initiative in ascertaining the facts and the law. In other words, the adjudicator does not have to wait until one party raises a point, but can ask for evidence. The adjudicator's decision is binding until the dispute is decided by litigation, arbitration or by agreement. The parties may agree to accept the adjudicator's decision as final. The adjudicator is not to be liable for acts or omissions unless there has been bad faith. Errors in either fact or the law would not undermine the adjudicator's decision.
- *Stage payments.* A party is entitled to stage or periodic payments unless the duration of the project is less or agreed to be less than 45 days. The parties are free to agree the intervals between payments and the amounts of such payments.
- *Date for payment.* Every contract must contain an adequate mechanism for working out the amount due and the date on which it is due (i.e. the due date). It must also provide for a final date for payment.
- *Default notice.* Should the contract determine the amount due by the payer giving a payment notice and the payer fails to give that notice within 5 days of the due date then the payee can give a default payment notice specifying the amount due. Unless the payer gives a timely payless notice then the amount to be paid is that shown in the default payment notice.

- *Set-off.* Payment may not be withheld, nor money set-off unless a payless notice has been given particularising the amount to be paid and the basis on which it was calculated. The notice must be given no later than the prescribed period (in the contract) before final payment.
- *Suspension of performance of obligations.* If the amount properly due has not been paid by the final date for payment and no effective payless notice has been given, a party has the right, after giving a 7 day written notice, to suspend performance of their obligations or a part of their obligations under the contract until payment has been made.
- *Pay when paid.* Except in cases of insolvency, a clause making payment dependent upon receipt of money from a third party is void. This is intended to outlaw the so-called ‘pay-when-paid clause’. It does not take effect if the third party is insolvent.

To the extent that a construction contract does not include these provisions, the Scheme for Construction Contracts (England and Wales) 1998 (as amended by the Scheme for Construction Contracts (England and Wales) Regulations 1998 (Amendment) (England) Regulations 2011) comes into effect just as if the clauses contained in the Scheme were written into the contract. There are similar schemes for Scotland and Northern Ireland. Most standard form construction contracts and all the RIBA terms of engagement comply with the Act and, therefore, the Scheme is not relevant where such terms are used. Where architects contract on the basis of an exchange of correspondence or on terms drawn up by the client’s legal advisors, it is likely that some, if not all, of the Scheme will be effective. The industry and professional response to the Construction Act has generally been very positive.

## 13.5 Consultants

A consultant is someone who gives expert advice or assistance. Common types of consultants in connection with construction work are:

- quantity surveyor/cost manager
- structural engineer
- electrical services engineer
- mechanical services engineer
- planner
- interior designer
- landscape architect.

A consultant, of course, can be anyone the client or the architect considers necessary to assist in the development of the project. The architect may be a consultant on the same basis as the other consultants in those instances when another professional is the lead consultant or where a project manager has been engaged by the client. In many cases, however, the architect is the lead

consultant because of the particular breadth and scope of training they have undergone (see section 13.6 which deals with project managers).

If the project is small, the architect may feel capable of carrying out the whole of the design work. Their professional indemnity insurance, however, must always cover all the services, including the scope of the design work, the architect undertakes. On larger projects, the architect should nominate consultants required to deal with those areas of work which are outside the architect's competence. Consultants are employed either directly by the client or by the architect. It is better for the architect if the former is the case, because there is then a direct contractual link established between consultant and client in the case of any problems with liability and fees (see section 13.4). Where the architect appoints the consultant, any action in respect of the consultant's negligence will be taken by the client against the architect. In order to recover the whole or a contribution to any damages, the architect will join the consultant as third party defendant. Therefore, care must be taken that the consultant has appropriate professional indemnity insurance and provides the architect with an indemnity in respect of the work they carry out.

It is good practice, indeed almost essential, that consultants be appointed as soon as their need is identified. In practice, this will be shortly after the architect has clarified the brief with the client. It is sometimes difficult to convince a client that consultants are necessary. The client is conscious of the additional fees. It is part of the architect's duty to advise the client when consultants are required. To delay the appointment of consultants may result in the redesign of large parts of the project at a late stage.

Most architects are aware of the need for early appointment of the quantity surveyor, structural engineer and building services engineers, but the value of early appointment of the landscape architect is sometimes often overlooked. In many instances the landscape architect's appointment in the design team occurs after feasibility studies and sketch design when it suddenly becomes apparent that their services are required to gain planning consent. This is unfortunate, because the landscape architect offers the greatest value to a project at the beginning of the design process. The synergy of the architect and landscape architect from the beginning of the project will ultimately be more cost effective for the client.

However consultants are appointed, they must be made aware of the extent of the services required from them. Ideally, this information should be imparted at the time of appointment, carefully recorded and made the basis of the contract of engagement in each case. It is also crucial that an early design team meeting is arranged at which all consultants, and the client, are present so that any problems in the interface of responsibilities can be ironed out. See below.

The traditional standard forms of contract do not generally make any reference to consultants other than the quantity surveyor. The Engineering and Construction Contract (EEC) identifies the Project Manager, who undertakes the principle contract administration role, and also the Supervisor who deals with matters of quality. The ACA Project Partnering Contract (PPC 2000) makes a feature of being a multi-party contract.

All consultants should report to the architect if the architect is lead consultant and/or lead designer. Obviously, it is essential that all consultants inspect their own work on site, but no building contract gives them power to give instructions. A consultant who wishes to issue an instruction should first submit it to the architect who may incorporate it into an architect's instruction, assuming that the architect is contract administrator. Indeed in some cases they strictly can only enter the site if the architect makes them authorised representatives for the sole purpose of inspecting their own portions of the works, e.g. mechanical or electrical installations. Before issuing the certificate of completion or practical completion for the works, the architect should obtain an appropriate certificate or confirmation from each consultant in respect of the completion or practical completion of each specialist section of work.

## 13.6 Project managers

Although at one time architects were considered to be the obvious choice as the professionals most suited to lead the building team that is no longer necessarily the case, as the concept of project management has become established. A project manager, however, may or may not be the same person as the lead consultant or the contract administrator. All these terms contain a mixture of the woolly and the legally specific. A definition of a project manager which was approved by the RIBA was:

‘The Project Manager is a construction professional who can be given executive authority and responsibility to assist the client to identify the project objectives and subsequently supply the technical expertise to assess, procure, monitor and control the external resources required to achieve those objectives, defined in terms of time, cost, quality and function.’<sup>21</sup>

That definition is worth careful study. Clearly the qualities of a person capable of carrying out that role will be formidable. The reference to ‘control the external resources’ opens up a whole new dimension and one wonders how feasible it is to have one person in this position. It could never be said of architects in traditional scenarios that they controlled external resources. To control is to dominate and to regulate. It could never be said that architects controlled contractors. So far as the courts are concerned ‘*project manager*’ is not a specific profession.

‘There is no chartered or professional institution of project managers nor a recognisable profession of project managers. In so far as it may be appropriate to accept expert evidence, the nature of the evidence that might be acceptable will depend on what the project manager has agreed to do.’<sup>22</sup>

The court said this even though a body called the Association for Project Management has been in existence for over 30 years.

Essentially, the court was saying that the duties of a project manager would depend on the construction professional who carried out that role and what the role was in a particular case. Project management considered in the vacuum,

unfortunately all too common, is the subject of many books and articles. The concept of project management is not particularly linked to construction; there is no good reason why it should be so linked. It is well expressed by the following definition:

‘Project management is a collection of loosely connected techniques, some of which are useful in bringing projects to a successful conclusion. Clearly, the project manager manages. He must think about motivation, team building, career growth, financial control, and all the other things that concern managers. In addition he has to head off into the unknown. His path is not clear, his path has not been trod before, but his objective will be clear.

Something that is special about project management, something that separates project management from plain old management, is the need and the emphasis on planning. Simply because the project management team is following no known path, they must think ahead all the time. They are continually faced with decisions about the route ahead and must plan for events that are long distant in the future. Hence here is a formula that neatly paints a picture:

$$\frac{\text{management} + \text{planning}}{\text{project management}}^{2,23}$$

Project managers may be divided broadly into two categories:

- Project manager (type 1) who act as the technical arm of the employer.
- Project manager (type 2) who carry out the contract administration role in regard to building contracts.

The contractual relationships are quite different. If this difference is not appreciated, very serious consequences may result.

### ***Project manager type 1***

This type of project manager acts as the client’s representative. Generally they act as agent for the client with the power to do, in relation to the project, everything the client could do. They will interview and appoint consultants and carry out the briefing exercise having first been briefed by the client. The advantage is that there is a skilled professional looking after the client’s interests and being paid to watch the other professionals. The project manager has no powers under the building contract. Indeed, many building contracts (e.g. SBC, IC and MW) do not even acknowledge the project manager’s existence as distinct from the architect or contract administrator. Thus, the project manager has no power to verify or sign any certificates nor to recommend payment under these contracts. Indeed, any interference by the project manager in the running of the contract can be interpreted as interference by the employer with significant adverse consequences.

There is provision under clause 3.3 of SBC for an employer’s representative, who might well be the project manager, to be appointed to carry out the employer’s functions. Unless the standard form contracts are amended, project



manager type 1 has no more right than the employer to enter site, nor to attend site meetings and certainly not to give instructions to the contractor. A contractor should not take instructions from a project manager in this position. The project manager has no status on site during the progress of the Works. Attempts by the project manager to organise, run or chair site meetings should be firmly resisted by any architect responsible for administering the building contract.

This is probably the usual position occupied by the person termed project manager. It should be noted that it does not replace the traditional architect's role and there is still a need for a lead consultant and lead designer, whoever that might be.

### ***Project manager type 2***

This type of project manager performs all the functions of a contract administrator in regard to the building contract and, indeed, must be named as contract administrator in the contract. This person alone may issue instructions and certificates. In such circumstances, it is essential that the appointment documents of the other construction professionals reflect the situation. For example, the project manager is responsible for co-ordinating their roles and must have the authority to do so. The project manager in this situation wields a great deal of authority during the construction stage. If the project manager's function is to manage the project, this type of project manager is closest to that role. However, it is comparatively rare to find a project manager in this position. Because this is the role traditionally taken by architects; an architect trained in project management techniques makes a good type 2 project manager.

The person responsible for a significant portion of the administration duties under the ECC construction contract is called the project manager. His or her authority, like any contract administrator, stems from the provisions in the contract.

### ***General***

Whatever the role, and it is possible to find a project manager working solely for a contractor or for a large consortium, the project manager is supposed to have certain skills. Dependent upon the role, the required skills may vary or they may be applied in different ways. Shorn of excessive jargon, they are as follows:

- management
- construction law
- contract law
- value management
- value engineering
- procurement and contract options
- project planning and programming
- briefing
- cost control
- risk management
- contract administration
- dispute resolution.

There are various courses on which a budding project manager may enrol. Before choosing a course, the prospective project manager may care to reflect on the fact that project management is not a universal skill. Project management of a building project with its many disparate elements is quite different from, say, project management of a new product through a factory production line. The two tasks may use some similar skills, but they are not comparable.

## References and notes

1. See 'The RIBA Plan of Work 2013 Overview', Editor Dale Sinclair, published by the RIBA London, p. 7.
2. It is incumbent upon the architect to see that the appointment is in writing in accordance with RIBA (i.e. Principle 2.3) and ARB (i.e. Standard 4.4) codes of professional conduct.
3. See clause 2.5 of the RIBA Standard Conditions of Appointment for Architect. This clause makes clear that the architect does not have authority to bind the client in contract without the client's prior approval.
4. *GPN Ltd (in receivership) v. O2 (UK) Ltd* [2004] EWHC 2494 (TCC). In this case the judge said 'A necessary element of ostensible authority is a representation by the principal that the "agent" had authority to bind the principal.' The judge went on to say 'A distinction must be made between the authority of an agent to negotiate and agree terms and his authority to bind a principal to a concluded contract. The evidence in this case indicates that McCreadies had authority to do the former but did not have ostensible authority to bind the defendant to a contract. On the basis of the pleadings and evidence, the claimant cannot demonstrate conduct which amounts to a representation by the defendant that McCreadies had authority to bind them to a contract with the claimant.'
5. (1974) 1 All ER 319.
6. *London Borough of Merton v. Stanley Hugh Leach Ltd* (1985) 32 BLR 51.
7. *Pacific Associates v. Baxter* (1988) 6 Con LR 90.
8. See *Michael Sallis and Co Ltd v. ECA Calil* (1987) 4 LJ 125, *Pacific Associates v. Baxter* (1988) 6 Con LR 90, *Henderson v. Merritt Syndicates* [1994] 69 BLR 26; *Conway v. Crow Kelsey* (1994) 39 Con LR 1.
9. Schedule of Services 2010 (2012 revision).
10. RIBA Standard Agreement 2010 (revision 2012) Architect.
11. See 'The RIBA Plan of Work 2013 Overview', Editor Dale Sinclair, published by the RIBA, London, p. 33.
12. Under the Construction (Design and Management) Regulations 2015, this will be the role of the Principal Designer. The RIBA has published the following briefing notes which are worth reading 'CDM REGULATIONS 2015 Briefing note no.1: Overview of the new regulations' and 'CDM REGULATIONS 2015 Briefing note no.1: The Principal Designer role and its duties'. At the time of writing the RIBA has not published any amendments to its appointment documents to take account on the new CDM Regulations.
13. (1984) 1 Con LR 114.
14. RIBA Plan of Work 2013 Overview, p. 33.

15. Under the Construction (Design and Management) Regulations 2015, this will be the role of the Principal Designer. Refer above to note 12.
16. Guidance on the various ways in which fees may be calculated is in *A Client's Guide to Engaging an Architect* (2013), RIBA Publishing and *Good Practice Guide: Fee Management* (2009), RIBA Publishing.
17. It should be noted that the RIBA 2010 forms of agreement do not reflect this position.
18. Published by RIBA Publishing May 2013.
19. In Northern Ireland, the need for a seal in relation to companies was removed by the Companies (No.2) Order (Northern Ireland) 1990. In the case of individuals in Northern Ireland the requirement for a seal was removed by the Law Reform (Miscellaneous Provisions) (Northern Ireland) Order 2005.
20. See *Whittall Builder v. Chester-Le-Street District Council* (the 1985 case) (1996) 12 Const LJ 356.
21. *Project Management – A role for the Architect* (June 1995), RIBA Practice Committee, paragraph 3.2.
22. *Pride Valley Foods Ltd v. Hall and Partners (Contract Management) Ltd* (2000) 16 Const LJ 424.
23. Geoff R, *Project Management Demystified* (2007), 3rd edition, Taylor & Francis. This is an excellent book.

# 14

## Stage 0: Strategic Definition – Terms

### 14.1 Standard forms of agreement

Some clients insist that an architect contracts on the basis of the client's own particular terms and conditions. In such cases, the architect should take great care including, where necessary, obtaining expert legal advice. Wherever possible, the architect is well advised to contract on the basis of generally accepted standard terms. The RIBA publish a set of standard forms for the appointment of an architect. These forms are part of a suite of documents that include a standard agreement for the appointment of a consultant (i.e. other than an architect) and also an agreement for the appointment of a sub-consultant.<sup>1</sup> The latter form could be used by an architect when engaging another consultant, who could be an architect or engineer, to assist the architect fulfil its obligations under its appointment with the client.

The standard form known as the '*Architect's Appointment*'<sup>2</sup> was introduced by the RIBA in 1982. It was the successor to the 'Conditions of Engagement' also published by the RIBA and followed the report of the Monopolies and Mergers Commission on architects' and surveyors' services and remuneration. There was also a small works edition. These appointment documents were updated by the RIBA until 1992. In 1992, the RIBA introduced '*SFA/92*' (i.e. RIBA Standard form of Agreement for the appointment of an architect 1992). Significantly, it allowed for changes to the services when something other than the traditional architect's role was required. Therefore, it had supplements for use with historic buildings and for community architecture work. There was also a special edition for use with design and build schemes where the architect was employed either by the client or by the contractor. A version designed for use with projects when the IFC 84 might have been used was issued in 1995 (i.e. RIBA Conditions of Engagement for the Appointment of an Architect 1995 (CE/95)) and then a version for use for small works (i.e. RIBA Conditions of Appointment for Small Works 1996 (SW/96)) was also published. These documents had a mixed reception, many architects continuing to use the '*Architects Appointment*' (i.e. the 1982–1992 appointment). The impetus for a new set of terms of engagement was a general dissatisfaction with the existing forms, the Latham Report<sup>3</sup>

calling for a suite of interlocking contracts and the introduction of the Construction Act which necessitated that certain revisions be made to the existing forms in any event. The forms were revised in 1999 and updated in April 2004 (i.e. RIBA Standard form of Agreement for the appointment of an architect 1999 (SFA/99)). In August 2007, the RIBA revised all the forms of agreement and made them available online. Those forms were not greeted with unanimous approval and the forms were again reissued in 2010 with a 2012 revision. This later revision was to take into account the amendments to the Construction Act<sup>4</sup> which came into force in October 2011. The latest documents are published in the following versions:

- **The Standard Agreement 2010 (2012 revision): Architect**  
For use on a wide range of projects using most procurement methods, for business or commercial purposes or a large scale or value residence, where detailed terms are necessary.
- **The Standard Agreement 2010 (2012 revision): Consultant**  
For use on a wide range of projects using most procurement methods, for business or commercial purposes or a large scale or value residence, where detailed terms are necessary. It is particularly suitable for multi-disciplinary teams so that all consultants are on the same terms.
- **The Concise Agreement 2010 (2012 revision): Architect**  
For use on business or commercial projects, using intermediate or minor building contracts and where concise terms are appropriate.
- **The Domestic Project Agreement 2010 (2012 revision): Architect**  
For use on domestic projects, using intermediate or minor building contracts and concise terms are appropriate.
- **The Sub-Consultant Agreement 2010 (2012 revision)**  
For use where one consultant appoints another to perform a part of the services.

**The Standard Agreement 2010 (2012 revision): Architect** is considered in detail below. The Agreement comprises the following:

- Memorandum of Agreement
- Standard Conditions
- Schedules: Project Data, Services, Fees and expenses

## 14.2 Standard Agreement 2010 (2012 revision): Architect

The memorandum of agreement is for use when a formal approach to the execution of the agreement is required and it is necessary for the agreement to be executed as a deed though there is provision for it to be executed under hand. The alternative approach is to use the 'Model letter,' a copy of which is included at Part 2 of the 'Standard Agreement 2010: Notes.' Concluding the appointment by means of a model letter, which incorporates the standard conditions by reference, requires a degree of care. It could lead to confusion and possible uncertainty, because the application of some of the provisions depends on an

appropriate entry to indicate that they are to apply. The template for the 'Model Letter' seeks to ensure that all the necessary entries are appropriately addressed to see that the agreement is properly executed. To simply write a letter to a client stating that 'the RIBA terms apply' seems to be actively courting trouble. Another difficulty which can arise is that the document is drafted with a traditional procurement arrangement in mind which may not suit all situations.

### ***Memorandum of agreement***

The memorandum of agreement comprises of five pages and can be executed either as a simple contract (six-year limitation period) or as a deed (twelve-year limitation period). Page 3 of the Memorandum requires completion and this is likely to be undertaken by the architect. There is space to enter the names (this should be the full and proper name of the party, and not an abbreviation or a trading name), addresses (this should be their registered address) and the identity of any representative for both the client and architect. In addition, there is space to insert the name and location of the project.

The first provision in the memorandum expressly states that the agreement comprises the attached documents, identified as the standard conditions of appointment and the project data, the services and, the fees and expenses schedules. It is therefore important that these schedules are completed and attached to the memorandum. Should there be any appendices to the schedules then these should be identified at the space provided and also attached to the memorandum. There is provision to enter the roles being undertaken by the architect, e.g. Project Lead, Lead Designer, Designer, Contract Administrator.

There are two sets of attestation provisions. The first is for execution as a simple contract that is signed by each party. If there is a requirement that this is to be done in the presence of a witness, there is space for the witness to sign confirming their presence at the time the party signed the agreement. The second is provision for the agreement to be executed as a deed, making provision for this to be done where the client is:

- a company: executed by two directors or a director and the company secretary, or when the use of a company seal is required by affixing the seal together with the signature of an 'authorised signatory', or a single director in the presence of a witness
- a limited liability partnership: executed by two members
- an individual: executed by the individual in the presence of a witness
- a partnership: executed by each partner in the presence of a witness.

Note the witness is required to insert their address alongside their signature. It would be sensible for each individual to print their name alongside their signature. In England, Wales and Northern Ireland the agreement requires dating (i.e. top of page 3) and this will usually be inserted after the second party executes the document. However, there is nothing preventing the parties from agreeing to insert a different date.

The attestation options will not necessarily cover all the possible client requirements. For example, a local authority, a school or a church may well have

different officers authorised to execute legal documents, e.g. a church may have trustees and a school may have governors.

There is a corresponding set of alternatives for execution by the architect, i.e. to cover the situation where the architect is a company, a limited liability partnership, a sole practitioner or a partnership. The only difference being the substitution of 'sole practitioner' for 'individual'.

The attestation provisions required in Scotland are different from those in England and Wales, and Northern Ireland. For the agreement to be self-proving, it needs to be signed by each party in the presence of a witness (i.e. no further evidence needs to be forwarded that it was signed by the party). The witness not only has to enter a signature but must also state their name and address. If the agreement is subject to reservation then the appropriate provisions are set out in page 6. Note that each party inserts the date when the authorised person signs the document in the presence of a witness. So there may be more than one date if the authorised parties sign the document on different days.

### ***Model letter***

The model letter provides a template to be followed by the architect to produce a less formal looking document. Prior to using the letter, the architect should read the guidance notes which offer sound basic advice and which remind the reader to maintain a degree of formality, given the intention is to create a legal document. For example the letter should be commenced 'Dear Sir' and signed off 'Yours faithfully' or for a consumer client 'Dear Mr Smith' and signed off 'Yours sincerely'. It sensibly suggests avoiding the use of unnecessary or unrelated comments; keep it 'business-like'. It should be signed '*For and on behalf of [the practice]*'. Informalities such as the use of first names are to be avoided.

The second paragraph incorporates by reference the Standard Conditions of Appointment 2010 (2012 revision). If any amendments to the conditions are to apply, then they are to be included in an appendix. It does not make clear where the appendix should be located. In addition, the letter can be used along with the completed 'Schedules' for the project data, role specifications, design and other services, and fees and expenses. These are again to be included in an appendix. These documents together with the letter, and possibly the memorandum of Agreement, are to form the agreement between the parties, together with any other documents referred to in the letter. A copy of both the amendments and schedules, together with any other documents, referred to in the memorandum or letter, should be attached to and sent with the memorandum or letter.

As an alternative to using the 'schedules' for the role specifications, design and other services, and fees and expenses, it is possible to set out the services and fees within the body of the letter. In addition, the standard wording in the letter expressly deals with fees for additional services, applications for payment, interest on late payment and VAT. It would seem from paragraph 4 that the expectation is that the project data schedule is to be used, given there is no obvious space provided to enter the relevant data in the body of the letter. However, space does exist to set out the level of professional indemnity insurance

held by the architect together with the name of their insurer. The template letter invites the architect to deal with the brief either by cross referring to any letter in which the client clearly states their requirements and information about the site, or for the architect to set out the client's requirements and the information about the site in an appendix, presumably to be attached to and sent with the letter.

There is an optional insertion at the head of the second page of the letter for when the client is a consumer and exists to seek compliance by the architect with the Unfair Terms in Consumer Contracts Regulations 1999. The architect should read the text carefully, as the suggested amendments may bear no resemblance to what was discussed with the client. They should make the necessary amendments to reflect what was actually discussed and agreed with the client. The final paragraphs of the letter sensibly restate what has been understood to be the agreed dispute resolution procedures. At the end of the letter are the attestation provisions for signature by the parties and the listing of the relevant appendices. Once the client has signed and returned the agreement then the architect should also sign and insert the date. A certified copy should be returned to the client with a copy of all the relevant appendices. To ensure that the client receives the copy it would be sensible to either hand deliver it in person or send it by special or recorded delivery.

### **14.2.1 Schedules: project data**

This schedule sets out details of the client, project and the brief. It addresses the following.

#### ***Project details***

The name of the project (e.g. the construction of a new sports centre and swimming pool) and the location of the site. A detailed description of the project and the chosen procurement if known (e.g. traditional lump sum, single stage or two stage tendering, design and build). It states that if the brief is attached then there may be no need to fill in the details about the project. This would only be the case if the brief sets out all the required details about the project. The brief is described in the standard conditions as the latest statement by the client of their requirements for the project. If a brief has been provided by, or drafted on behalf of the client, then there is provision for including it as an appendix. It is essential that it is completed, given it sets the benchmark against which futures services will be measured to determine whether the architect has fulfilled its obligations and possibly whether an entitlement to additional fees exists.

#### ***Amendments***

There is also provision for including any amendments to the appointment Conditions as an appendix. Any client who engages a solicitor may wish to have amendments made to the conditions. This should be avoided by the architect if at all possible.



***Programme and budget***

The client's programme and budget are significant matters upon which both parties need to be clear and there is provision for these to be expressly stated in the schedule. This may simply be a cross reference to an agreed programme which should be included as an appendix. The overall project budget cost is to be entered and this would include, but not be limited to, the construction costs. It would include fees and possibly other client costs such as fittings and furniture. The figure is to exclude VAT but should make clear the date at which the price is based (i.e. does it include for market price fluctuations?). If no programme or cost has been agreed then the guidance notes suggest including both a reasonable time and reasonable budget figure.

***Limitation of liability***

There is the opportunity for the parties to agree a time limit for either to commence a legal action against the other in connection with the agreement. From the architect's point of view, the shorter the period the better and although legislation sets out specific periods (6 or 12 years for simple contracts or deeds, respectively), a lesser (or longer) period inserted here will be upheld in the courts.<sup>5</sup>

There is provision to include the nature (e.g. in the aggregate) and the level of professional indemnity insurance, including any sub-limits (e.g. asbestos), to be held by the architect. The conditions assume that the limit of liability is the same as the level of cover stated for professional indemnity insurance.<sup>6</sup> Although it is beneficial from the architect's perspective that their liability should not exceed the level of professional indemnity insurance cover, there is no reason in principle why it should not be greater or less. Indemnity insurance is fixed at a figure to cover any project which the architect might undertake and could be many times greater than a reasonable limit of liability for any particular scheme. A provision similar to this one has been held to satisfy the requirements of reasonableness in the Unfair Contract Terms Act 1977.<sup>7</sup>

Importantly, the schedule allows for the identification of any third party agreements the architect will be expected to execute such as collateral warranties in favour of a funder or tenant. This is something the architect should establish at the earliest possible date. They can then ensure they include for the additional cost which may include seeking legal advice on the terms of the warranty once it has been provided. As an alternative to collateral warranties a third party rights schedule may be used, which again may require the architect to take legal advice. In addition there is provision to identify when the architect is to be novated at some stage during the project, which sometimes happens under design and build schemes. The architect can again price for the risk in their fee of having to take legal advice prior to executing the novation agreement and for having to work for a different client.

***Dispute resolution***

The parties are required to identify the procedures for dealing with any disputes that may arise between them. This is sensible forward management as there may

be no expectation that disputes will arise, but if they do, a mechanism exists for the parties to address them. This may be by mediation and it is possible to identify an organisation which provides mediation services, e.g. the RIBA. If adjudication is to apply, then provision exists to insert the applicable rules which are the Scheme under the Construction Act, the Construction Industry Council (CIC) Model Adjudication Procedures or some other, e.g. TeCSA. If an architect is to select any procedure other than the Scheme then they should make sure they are fully conversant with the procedure and also that their professional indemnity insurers have no objections to its use. Given the option, it is safer for an architect to select the Scheme.

Where the client is a consumer then the Construction Act is likely not to apply and therefore, there is no requirement to include a right to refer any dispute to adjudication. This is a matter the architect would have to fully explain to the client prior to execution of the appointment. If it is agreed that adjudication is to apply then it is possible to opt for the RIBA Adjudication Scheme for Consumers. There is provision to place a cap on the value of dispute to which the Scheme is to apply. Disputes for greater amounts would then be referred to the agreed tribunal, i.e. arbitration or litigation.

Should the parties be unable to agree on an adjudicator then there is provision for the parties to identify a nominator such as the RIBA, RICS or CI Arb. The default body unsurprisingly is the RIBA.

Although the parties have the right to adjudicate, they are also given the option of choosing either arbitration or litigation as the ultimate tribunal. Previously, arbitration was the designated method of dispute resolution. Arbitration offers distinct advantages over litigation. The arbitrator can be an architect agreed upon by the parties, the proceedings are private and they can be considerably faster than legal proceedings. Arbitration also has an element of finality which is absent from litigation. It is rare for an appeal from an arbitrator's award to be entertained by the courts. The ultimate tribunal needs to be selected and if none is chosen, then the default is for disputes to be referred to litigation. This is without prejudice to the right to refer any dispute to adjudication.

### ***Other consultants***

At the final part of the schedule there is provision to identify who are termed 'Other Persons'. These are defined in the conditions as basically anyone other than the architect who will be providing services on the project. For example this could include any other consultants taking on the role of 'contract administrator' or 'lead designer' but would also include the listing of other consultants such as the structural engineer, the mechanical and electrical engineer or quantity surveyor. This is the place to set down the names and addresses of the other consultants or specialist designers either appointed or to be appointed by the client in connection with the project. The entries are to be broken down into 'core roles' and 'additional roles'. If the client is engaging a clerk of works directly then they would be identified. There is space for insertion of the name of the client's representative which is important where the client is a corporate body.

## 14.2.2 The Services schedule

This schedule is important from the architect's perspective, given that this is where the architect clearly identifies the Services that they will be undertaking. The Services are set out under three sub-parts to the schedule and these are:

- Role Specifications
- Design Services
- Other Services.

These schedules have been discussed in detail in Chapter 13, section 13.2.1. There is provision for the inclusion of any additional schedules but the guidance notes state that these are to be applicable only to designers. It is not clear why this should be the case. The additional schedules are to be identified in the schedule. In the guidance notes at page 4 it states that there are other service schedules available, e.g. services for a historic building or conservation project or contractor's design services. The latter would most likely be used where an architect was engaged on a design and build project. Any additional schedules should be attached to the appointment. The Services are to be performed in the specified stages which are linked to the RIBA Plan of Work 2013 stages. The services are to include the performance of any roles specified from the list of which there are 10, i.e.:

Project Lead  
 Health & Safety Advisor  
 Cost Consultant  
 Contract Administrator  
 Employer's Agent  
 Lead Designer  
 Architect Designer  
 Civil and Structural Engineer as Designer  
 Building Services Engineer as Designer  
 Site Inspector(s)/Clerk(s) of Works.

Most of these roles tie in with what are called the core project roles shown under the heading of 'Project Appointments' at the end of the Project Data Schedule. There is space to include for additional roles. It would seem prudent to cross out those roles and services which are not being offered or undertaken by the architect or a sub-consultant of the architect.

There is space against each role to identify which stages that role is to be undertaken by the architect or their sub-consultant. If no stages are identified against that role then the architect is not responsible under the appointment for that role. Alternatively, the architect is only responsible for undertaking that role during the stages identified and not any other stages. Those roles not undertaken by the architect are likely to be identified as being undertaken by 'Other Persons' in the Project Data Schedule under Project Appointments. If any of the roles are not to be undertaken by the architect then it would seem sensible to include 'not applicable' in the space for including the stages or to simply line through the relevant heading.

The activities to be undertaken for each role are set out in the schedule at Part 1 and are called Role Specifications. Some of the specifications are more detailed than others. The person identified is responsible for undertaking the activities in all relevant stages.

Part 2 of the schedule is called design 'work stage services' and these follow the RIBA Plan of Work 2013. If the architect is not to undertake any of the services identified then they should be deleted or lined through. Any additional services undertaken by the architect should be added to the relevant stage. Obviously, there needs to be a co-ordinated approach to the role specifications and the design services. If the extent of services provided by the architect is limited to that of design, then they would also have to identify the role of Designer, and possibly Lead Designer if they were responsible for overall design co-ordination and management.

At Part 3 of the schedule is listed what are called 'Other Services' of which there are 25 listed and provision to add any further that may be necessary. These are wide ranging covering planning submissions, selection of project team members, two stage tendering and negotiating a price with a contractor through to additional site visits and preparation of interim and final valuations. They are selected by the insertion of a tick or stating 'yes'. Alternatively the head note suggests that 'T' (i.e. time charge) or LS (i.e. lump sum) could be used not only to indicate that the services are required but also the basis of the fee. If the service is not required then it should be deleted or lined through.

Finally, there are special services which are identified as being necessary if the need arises. These would be instructed as an additional service and as such would not be covered in the architect's fee. There are 8 such services listed. Presumably, the purpose of listing them is to make clear that they are not included in the fee but that they may be required under the appointment and can be provided.

### 14.2.3 The fees and expenses schedule

Here the fees and expenses payable by the client to the architect for the services are set out. Many architects inadequately complete this schedule and it is extremely important to complete it thoroughly, listing the applicable clauses. Failure to properly complete this schedule could result in fees being paid late or not at all.

The fee is to be broken down into the 'Basic Fee' and the 'other fees'. The other fees are for the other, special or additional services not covered by the Basic Fee. The Basic Fee is to be shown against the individual work stages and there is space to insert the relevant clause under which payment is to be calculated (i.e. *clause 5.4* percentage fees, *clause 5.5* lump sum or *clause 5.6* time charges). In addition there is provision to include any notes which could explain the basis upon which the fee is to be calculated or paid. There is an opportunity to enter the same information for the 'Other fees'.

In respect of works stages 5 and 6, there is the opportunity to state how many site visits are included within or covered by the Basic Fee. This covers not only the construction stage but also the period following practical completion to the

end of the rectification period. If nothing is stated then the maximum number of visits will be taken as one per month; this is unlikely to be sufficient for an architect responsible for design and also undertaking the role of contract administrator. Somewhere in this schedule should be inserted the 'specified licence fee' referred to in clause 6.3.1(b), e.g. under 'Other Fees'.

There is space to include time charge rates for the various grades of personnel, e.g. director, senior architect. Provision exists for dealing with expenses at net cost plus a percentage addition, a percentage addition to the fee or by some other means. Disbursements (e.g. planning submission fee) are to be at cost plus a percentage mark-up and there is space to insert a mileage rate for travel.

Finally, and importantly, there is a space to insert the frequency of when payment accounts (i.e. invoices) are to be submitted. If it is to be other than monthly (e.g. milestones) then the details should be fully and clearly set out. The architect should ensure that if payment is to be by completion of a milestone or a work stage then it is fully within their control. For example, there is a distinct difference between payment being made on the submission for planning permission as against payment on obtaining planning permission. The latter may never be obtained and if this were the case, then a client might never pay the fee.

#### 14.2.4 The standard conditions

These consist of a set of defined terms and clauses which merit looking at in greater detail; architects need to understand these clauses in some depth if they intend to use the standard RIBA documents.

The definitions speak for themselves and they will be referred to as necessary in what follows, but it should be noted that the definition of 'Brief' does not expressly refer to the document identified at page 2 of the Project Data schedule. The relevant 'Brief' at any given time is the latest version issued or approved by the client or their representative. Within the definition it refers to a 'Project Brief' but this does not appear to be defined anywhere in the Appointment documents or the RIBA Plan of Work; it may simply be an amalgamation of the two separately defined terms of 'Project' and 'Brief'. If this is the case then the inclusion of 'Project' would appear to be redundant.

Before looking at the conditions, it is worth looking at the definition of 'Construction Cost' on which the calculation of percentage fees will depend. 'Construction Cost' is defined to mean one of three possibilities. The **first** being 'the Client's initial budget for constructing the Project as specified in the Project Data ...', or where no such amount is specified, a fair and reasonable amount. It would seem sensible to avoid the need for any future debate for the architect to seek the client's agreement to a figure for inclusion in the Project Data. Or subsequently the **second** basis is '... the latest professionally prepared estimate approved by the client ...'. Therefore, unless the architect has, unusually, taken responsibility for preparing cost estimates, the quantity surveyor's last estimate is to be used subject to it having been approved by the client. However, caution should be exercised, because quantity surveyors' estimates of cost during the construction stage are likely to include allowances for all potential costs so that

the client is not asked to pay more than they expect at the final account stage. In addition, the figures included are likely to be on the cautious side, i.e. high. This may result in the architect having to repay fees which have been charged on the basis of an inflated account. The **third** option is the actual final cost of constructing the project on agreement or determination of a final account. A list of what 'Construction Cost' includes is listed in the definition. These are as follows.

- **'the cost as if new of any equipment and/or materials provided or to be provided by 'the Client to a contractor for installation during construction of the project'**

This is included, because the percentage fee assumes that the construction cost is the cost of all work and materials. If the client was minded to enter into a contract under which the contractor carried out the work, but the client provided all goods and materials, the architect's fee would not properly represent the services performed unless the percentage figure was specifically increased to take the lower construction cost into account. The architect will still be involved in having to design to accommodate the equipment and materials, and is likely to have to monitor and inspect their installation or construction. It is easier in theory for the client to notify the architect of the cost as new of everything supplied; 'in theory', because it is sadly not uncommon for a client to decline to provide the information, thus obliging the architect to base their fees on an estimate. These costs will not be covered by the final certificate but, where appropriate, they will have to be added to the sum certified in the final certificate in order to determine the 'final account for the Project ...' referred to in *clause 5.4* and upon which the fees are calculated.

- **'any direct works carried out by or on behalf of the Client'**

This is to be included for exactly the same reason as the previous item. This item refers to work whereas the previous item referred to equipment and materials.

- **'provision for contractor's profit and overheads'**

In building contracts, profit and overheads will be included in the total contract sum in various ways. If they are shown separately a client may seek to view them separately from the cost of the actual 'building work'. However, they are an indisputable part of the construction cost and should be included. The inclusion of this item makes clear that the 'Construction Cost' encompasses the contractor's profit and overheads on both direct works and materials and equipment supplied by the client.

The definition then sets out items which are to be excluded.

- **'value added tax'**

This is a logical exclusion as it is not part of the construction costs and not a matter addressed by the architect.

- **'fees'**

This clearly refers to any fees which are paid out for any purpose whatsoever. Therefore, it covers statutory fees and fees paid to other consultants.

- **‘the costs of resolution of any dispute’**

Costs in relation to dispute resolution, a dispute between the client and contractor, have a straightforward meaning. They refer to the amounts expended by the parties on legal representation, expert witnesses and the like. It may also refer to the fees of an arbitrator or adjudicator. It is not at all clear why anyone should imagine that there is a danger they might form part of the construction cost. In any event, this item removes all doubt.

- **‘the Client’s legal and in-house expenses’**

This must refer to expenses other than those incurred in connection with dispute resolution which are dealt with under the previous item. Again, it is not clear why anyone should imagine that there is a danger they might form part of the construction cost but again any doubt is removed by this item.

- **‘any loss and/or expense payments paid to a contractor’**

This item means that sums which the architect certifies as being payable to the contractor in respect of loss and/or expense must not be included as part of the construction cost. This presents a cogent argument, if one was required, in favour of the architect being able to recover additional fees on an hourly rate basis for dealing with loss and/or expense applications. However, care should be taken to make clear in the Fees and Expenses Schedule that the Basic Fee does not include for the ascertainment of any entitlement the contractor has to loss and/or expense; the fee for such a service would be charged on an hourly basis. The task of ascertaining the amount due may be delegated to the quantity surveyor. Architects should note that this would not address the fee for dealing with a contractor’s entitlement to an extension of time.

- **any adjustment for any liquidated damages deducted by the Client**

This is an awkwardly drafted item. In fact it should be within the first set of included items. However, any sums deducted by the client in respect of liquidated damages from sums due to the contractor must not be excluded from the construction cost. In other words, the construction cost is the cost as if no liquidated damages had been deducted. This makes sense given liquidated damages have no bearing on the construction cost; they are damages recoverable for a contractor’s failure to complete the works by the date for completion in accordance with the provisions in the building contract.

The key provisions in the contract begin at *clause 1.3*. This clause deals with communications between the client and architect. Any notice or other document required under the agreement is to be in writing and given (i.e. in person) or served by any other effective means to the other party. The address is to be that specified in the agreement or such other address notified by the other party; again this should have been in writing. It is acceptable to serve a notice or other document by fax if the other party has notified its fax number. It is not clear what falls under the category of ‘other document’.

Communications other than notices or other documents may be sent to any other address notified by the other party as appropriate for such communications. It would appear from this provision that notices or other documents required under the agreement cannot be sent by e-mail. Any communication

sent by special delivery or recorded delivery is deemed to have been received two working days after posting. It is open to either party to prove that it was received either later or earlier, and this deeming provision takes effect only if there is no alternative proof.

A communication takes effect on receipt but only after the recipient confirms receipt either in writing or by e-mail. This is a strange provision given the recipient could simply refuse to acknowledge receipt thereby making a communication ineffective. There is a second peculiarity in that any notice or document cannot be sent by e-mail but the acknowledgement of receipt can. *Clause 1.4* makes clear that when calculating periods of time, specified by a number of days within which actions must be performed, public holidays are excluded. Ordinary Saturdays and Sundays are included.

*Clause 1.5* states that the agreement binds the parties as long as necessary to give effect to their rights and obligations. This provision simply states the obvious but of course the ability to enforce any rights a party may have will be subject to the applicable limitation period (i.e. 6 or 12 years)

*Clause 1.6* identifies that the agreement is subject to the law of England and Wales, Northern Ireland or Scotland as stated in the Project Data. Therefore it is important that the Project Data is properly completed as the parties will be subjecting themselves to the stated law. Though the clause goes on to state that the parties submit to the exclusive jurisdiction of the specified jurisdiction, there is no jurisdiction specified (i.e. the authority of particular courts). They simply subject themselves to an applicable law which is not necessarily the same. The intention may well be that the parties not only subject themselves to the stated law but also to the exclusive jurisdiction of the courts within the country of the stated law.

*Clause 2* deals with the obligations and authority of the architect. By *clause 2.1* the architect, when performing the services, is to exercise reasonable skill and care in conformity with the normal standards of the architect's profession. This simply states the common law position. In *Bolam v. Friern Hospital Management Committee* (1957)<sup>8</sup> where the judge defined the standard required of a professional person:

‘But where you get a situation which involves the use of some special skill or competence, then the test whether there has been negligence or not is not the test of the man on top of the Clapham omnibus, because he has not got this special skill. A man need not possess the highest expert skill at the risk of being found negligent. It is well established law that it is sufficient if he exercised the ordinary skill of an ordinary competent man exercising that particular art’.

*Clause 2* goes a little further by stating that the architect has also to exercise due diligence when performing the services. Again this is to be in accordance with the normal standards of the architect's profession. This simply means that the architect has to apply the attention and care required of an architect in a given situation.

*Clause 2.2* stipulates that the architect must keep the client informed of the progress of the services and anything which might affect timing, quality or cost.



It is good practice for progress reports to be sent to the client at such intervals as seems appropriate to the nature and size of project. These should be in addition to any reports the architect has undertaken to provide at the end of a RIBA Plan of Work stage. Unless the client is familiar with the construction industry, the reports should be couched in straightforward terms so that the implications can be grasped immediately. *Clause 2.3* places an obligation on the architect to inform the client on becoming aware of the need to appoint Other Persons or when a decision, information or action is required from either the client or the Other Person. It is down to the architect to keep the client informed of when an action, decision or information is required by the client or anyone acting on behalf of the client in relation to the services provided by the architect. This needs to be done in a timely manner so that the client can make the appropriate arrangements so as to avoid delay to the project. Dates by when key decision or actions could be shown on a project programme.

*Clause 2.4* requires the architect to collaborate with any of the persons listed in the Project Data. This collaboration will take the form of supplying drawings and information as necessary and possibly commenting on their work. In addition and significantly, the architect is made responsible for integrating into the architect's design any relevant information provided by the consultants.

*Clause 2.5* is important. It sets out the architect's authority to act on behalf of the client. It gives the architect power of agency in respect of the matters set out or implied in the agreement. Although the express requirement for the architect to seek authority to proceed is now gone, it is implied that such authority must be sought if the architect finds it necessary to report anything. The architect as agent has been discussed in Chapter 13, section 13.2. It is helpful that *clause 2.5* makes clear those matters on which the architect does not hold authority without the client's prior approval, i.e.

- enter into any contractual arrangement on behalf of the client
- terminate the employment of Other Persons engaged by the client
- to make any material alteration to the services or alter the approved design.

Faced with an emergency which is likely to cause material damage to the project or endanger persons, then the architect may issue instructions to the contractor without the client's prior approval. However, this would seem to assume that the architect is also the contract administrator and not simply appointed as a Designer and/or Lead Designer. This is significantly qualified in that the architect is to confirm the action to the client without delay. In effect immediately following the issue of the instruction or as soon after as possible.

It should be noted that the contractor is only concerned with whether the architect, when contract administrator, acts within the powers given by the building contract. If the contract empowers the architect to instruct the contractor to carry out extra work, it matters not that the architect has not obtained the client's permission. The contractor is entitled to do the work and be paid by the client. In such a situation, however, the client might well have a valid claim against the architect for exceeding their actual authority as set out in these conditions.

*Clause 2.6* makes clear that the Architect's Representative, identified in the Project Data, has the full authority to act on behalf of the architect '... *save when advised to contrary*.' Though the clause does not expressly state so, the obligation must be on the architect to advise the client to the contrary and this must be done in accordance with *clause 1.3* (Communications). Therefore the architect must consider whether any restrictions are to apply to the authority of their representative.

*Clauses 2.7* (Photography) and *2.8* (Publicity) may well be important to the architect when it comes to promoting and publicising their business. The architect is given the right to take and publish photographs of the project and the client is to give reasonable access for up to 2 years following completion. However, *clause 2.8* does place a restriction on the architect's right to publish any information about the project unless clearly necessary for the performance of the services. The architect must obtain the prior consent of the client prior to publication but such consent must not be unreasonably withheld by the client.

*Clause 2.9* obliges the architect not to disclose any Confidential Information, a term defined at *clause 1.1* as covering all information relating to the client's or architect's business and affairs. There are limited disclosures permitted (e.g. the matter is already in the public domain, disclosure was necessary to perform the services or to take professional advice in relation to the agreement (e.g. legal advice or advice in connection with insurance matters) or disclosure was required by law). Architects need to be careful what they discuss with others, a contractor for example, when the appointment has been subject to a novation agreement under a design and build contract.

*Clause 3* addresses the obligations and authority of the client. *Clauses 3.1–3.6* are procedural in character. *Clause 3.1* mirrors *clause 2.6* in making it clear that a Client's Representative, as identified in the Project Data, has full authority to act on behalf of the client save where the client advises the architect otherwise. Again this should be done in accordance with *clause 3*. Under *clause 3.2* the client is to supply an initial statement of the client's requirements and advise on the relative priorities of the client's requirements, the Brief, the Construction Costs and the Timetable. The Timetable is defined at *clause 1.1* as the client's initial programme for the performance of the services as specified in the Project Data, or if not specified then a fair and reasonable period. Subsequently, the Timetable is the latest programme approved by the client. If not provided by the client then it would seem sensible for the architect to elicit from the client their requirement priorities and confirm them back to the client in writing and in accordance with *clause 1.3*.

*Clauses 3.3 and 3.4* provide that the client will supply the information, decisions and approvals necessary for the proper and timely performance of the services. Such a provision is required, and would likely be implied if not expressly stated, or the architect would be unable to function properly. An important safeguard states that the architect is entitled to rely on such information, decision, etc. Where the client directly appoints consultants, information provided to the architect by the other consultant will fall into this category, because it is provided by the client's consultant on behalf of the client. Therefore, if any information provided by or on behalf of the client is inaccurate, and the architect has

no reason to believe that it is inaccurate, the client will be responsible for the consequences.

Under *clause 3.5* the client may issue reasonable instructions to the architect, but more importantly, this can be done on behalf of the client by the Lead Consultant or other consultant if designated by the client. This may well be in addition to the Client's Representative. Obviously the client must have authority to issue instructions but the architect needs to be clear on who else is authorised to instruct him and on what matters. It may well be prudent for this to be set out in writing. It could be that the architect is responsible for directing and co-ordinating the works or services of the Other Persons. This is likely to mean that the architect is authorised by the client to issue instructions, the architect may be Lead Consultant, to the Other Persons. *Clause 3.6* makes clear that such instructions must be issued through the architect and that the architect is not responsible if they are issued otherwise for example by the Client's Representative.

*Clause 3.7* surprisingly, requires the client to instruct when applications for statutory and other consents are to be made. The way in which the clause is structured is unfortunate. In practice, the architect would advise when such an application was required and the client would make a decision based on the advice. That might well be an instruction, but the client is reacting rather than taking the lead. The client's responsibility for paying statutory charges, fees and disbursements is usefully set out.

*Clauses 3.8 and 3.9* deal with Other Persons. The case of *Moresk v. Hicks* (1966)<sup>9</sup> decided that architects have no implied authority to delegate design responsibility and unless they obtain the client's agreement they will be held liable to the client if a delegated design proves to be defective. The architect is to advise the client about the appointment of consultants (other than those already named in Project Data) to design, carry out parts of the works or to give specialist advice. It is for the client to appoint and pay each consultant and to confirm to the architect the services which they are to perform together with the duration of their appointment. However, either the architect or client may propose the appointment of consultants at any time for the other's agreement.

*Clause 3.8* is an important provision in that it states that the architect does not warrant the competence, performance, work or services carried out by the Other Persons. That is a good reason, quite apart from the question of professional indemnity cover (see Chapter 10, section 10.5), why the architect should not undertake to carry out, what would normally be undertaken by Other Persons, by directly engaging a consultant as a sub-consultant. The efficacy of this clause, which in effect limits the architect's liability, was accepted by the court in *Investors in Industry Commercial Properties Ltd v. South Bedfordshire District Council* (1986)<sup>10</sup> where a similar clause, in an earlier version of the RIBA appointment document, was considered. The client must require that the Other Persons collaborate with the architect in providing drawings and other information in a timely manner, and by their willingness to consider and comment on the architect's work to enable any necessary changes to be made. If this term was not expressly included, it would have to be implied to enable the carrying out of the architect's duties.

Many problems have been caused by the architect's obligation to inspect the on-site construction works. Nowhere does it state that the architect must 'supervise' the works although the courts, and architects themselves, regularly refer to the architect's duty to design and supervise. Supervision implies constant inspection and direction, and has been held to be a more onerous duty than inspection.<sup>11</sup> In building contracts, the duty to supervise the works falls to the contractor. *Clause 3.9* is especially useful to make clear to a client the true situation in respect of the building contract, although it only states the general law. In practice, a client may seek to blame the architect if anything goes wrong with a project. This clause makes clear that, where the client has entered into a building contract, the contractor, not the architect, must be held responsible for the contractor's methods and for the proper execution of the works.

*Clause 3.10* again sets out a limitation of the architect's liability, in making clear, that they do not warrant that third party permissions will be granted (e.g. planning permission) or that compliance with the Construction Cost or Timetable will be achieved. *Sub-clause 3.10.2* also makes clear that both the Construction Cost and Timetable may need to be reviewed due to things such as variations, market conditions, delay by third parties and unknown conditions. An architect would be misguided to give such a warranty and this clause offers the architect valuable protection when being blamed by the client for the scheme exceeding budget and being completed late.

*Clause 3.11* states that the client must obtain legal advice and provide '... such information and evidence ...' as required for the resolution of any dispute between the client and any Other Persons. It is not entirely clear what this clause means. It is tempting to assume that it merely refers to a situation where the client has a dispute with the contractor, but it probably has wider implications in regard to disputes with other consultants and the clerks of works.

As a consequence of *clause 3.12* the client is under a similar confidentiality obligation to that of the architect under *clause 2.9*.

*Clause 4* deals with assignment and sub-contracting. Here sub-contracting relates to the appointment by the architect of sub-consultants. *Clause 4.1* prohibits either party from assigning the benefit or any rights arising under the agreement without the other's prior written consent. The consent is not to be unreasonably withheld. The position under the general law is that a party may usually assign a right but not a duty. This simply means that the architect must perform their part of the agreement, say to make an application for planning permission, and the client must do its part (i.e. to pay the architect's fees). These are obligations and therefore cannot be transferred without the written agreement of the architect, the client and the third party who would be taking on the obligation, i.e. a novation agreement. A benefit to the architect, under the agreement, is the receipt of fees. This benefit can be assigned, to say the architect's bank in exchange for the bank providing the architect with a loan facility, but for this to be effective the prior written consent of the client is required. A benefit to the client is the receipt of the services from the architect, e.g. the design.

*Clause 4.2* forbids sub-letting by the architect without the client's consent, but such consent is not to be unreasonably withheld. Many architectural practices sub-contract work to other architects on a regular basis. This can be a very

useful mechanism for firms to manage a fluctuating workload. The architects to whom work is sub-let establish over time a very close working relationship with the firm and, if the workload grows on a permanent basis, they are often taken on as a permanent member of staff.

It is important to understand the difference between the transfer of an obligation to another and delegation. If an architect delegates (which may not be done without the client's consent) any duties, they still retain responsible for the proper carrying out of the duties. If, however, some of those duties are allowed to be transferred to a third party, the architect is no longer responsible for them. The responsibility passes to the person to whom they have been transferred. Where a transfer of both rights and duties is intended, it is usual to prepare a three way contract, called a 'novation' agreement, between the parties. What the novation agreement does is to bring the original contract or obligation to an end and replace it with a contract, usually under exactly the same terms but not always, where the identity of one of the parties is changed. Some people find it easier to think of this as replacing one party by another, although that is not strictly correct.

*Clause 4.3* allows the architect to recommend to the client when specialist knowledge or experience would benefit the Project (and therefore the client) and that the client appoints a specialist. For example this may be for the design of specialist glazing. If the recommendation is accepted by the client, then the client and not the architect would appoint the specialist. At this point the architect would no longer be liable for the works undertaken by the specialist and the client should confirm that the architect is no longer liable for that element of the services. This may result in the architect having to accept a reduction in their fee given the change to the scope of the services. As with all Other Persons the architect is obliged to collaborate in the provision of the services.

*Clauses 5.1–5.21* deal with payment of fees and expenses. The fees for the services are to be calculated in accordance with *clause 5* and as specified in the Fees and Expenses Schedule. The fee is broken down into the Basic Fee and the fee for the other services not covered by the Basis Fee. The basis for the calculation of the Basic Fee is set out at *clause 5.2*. At *clause 5.2.1* that part of the Basic Fee for the provision of services covering the design and carrying out of construction works, including the specified number of site visits is calculated by:

- a percentage of the Construction Cost in accordance with *clause 5.4*; and/or
- a lump sum in accordance with *clause 5.5*; and/or
- a time charge in accordance with *clause 5.6*; and/or
- any combination of the above; and/or
- another agreed method.

Other professional services forming part of the Basic Fee are calculated in accordance with *clause 5.2.2* which states that they are calculated by:

- a lump sum in accordance with *clause 5.5.1*; and/or
- a time charge in accordance with *clause 5.6*; and/or
- another agreed method.

The fees for the performance of the Other Services, not part of the Basic Fee, are to be calculated in accordance with clause 5.3. This states that the fee for each service shall be:

- a lump sum in accordance with *clause 5.5.1*; and/or
- time charges in accordance with *clause 5.6*; and/or
- another agreed method.

The principle of percentage fees is well understood, but less so is the way in which such fees are to be shown against at various stages in the project. In practice, it can sometimes lead to disputes. *Clause 5.4* sets out how fees are to be calculated and what constitutes the Construction Cost is set out at *clause 1.1* (refer above). The fee will not be properly ascertained until the end of the contract, when the 'final account' has been agreed or determined. Before that, interim fees are to be calculated using the 'latest' professionally prepared estimate approved by the client. It is not clear what 'professionally prepared' means. Does it mean the estimate prepared by a professional such as quantity surveyor? Or alternatively could it include an estimate prepared in a 'professional manner' by another professional or even the client? Secondly, and probably key is that the estimate has to be accepted by the client. The architect could be faced with a situation, a substantial way into the construction process, where the client has not accepted any of the quantity surveyor's estimates showing an increase in the construction cost. This would seem to mean that the architect is to base their fee assessment on the last approved estimate which may have been the lower pretender estimate. This could have an obvious negative effect on the architect's fee cash flow.

Where a lump sum is to be the basis of the Basic Fee in accordance with *clause 5.5*, there are options, two of which, to varying degrees, alleviate the risk for the architect. It can be either:

- the specified lump sum or sums;
- the lump sum or sums for each work stage calculated by using the percentage stated in the schedule of fees applied to the Construction Cost at the end of Work Stage D; or
- a lump sum for each work stage calculated by using the relevant specified percentage, but applying it to the Construction Cost at the end of the previous stage.

Until the 'final account' for the project is agreed or determined the Construction Cost will be the professionally prepared estimate approved by the client.

Time charges under *clause 5.6* need little explanation. The charge is ascertained by multiplying the time reasonably spent in the performance of the services by the relevant hourly rate or rates. Note it is the time reasonably spent performing the services, which may be less than the time actually recorded, but it is to include travelling time to and from the architect's office. This could be to the site or to attend a meeting at the client's offices.

*Clause 5.7* allows lump sums (after the deduction of any amounts previously claimed) and the time charge rates to be reviewed every 12 months in accordance with the Retail Price Index and the Average Earnings Index, respectively.

The rates for mileage and printing are to be adjusted in accordance with the Consumer Price Index. The 12 months is calculated from the 'Effective Date' which is specified in the Project Data. Where lump sums calculated in accordance with *clauses 5.5.2 and 5.5.3* apply then the 12 months is from the date the lump sum was calculated.

*Clause 5.8* allows for the Basic Fee to be adjusted due to the following.

- Material changes made to the Brief, the Construction Cost or the Timetable save where the changes come about due to a breach of the agreement by the architect. The adjustment under this item is to include for any loss and/or expense suffered by the architect because of the material change.
- The Services are varied by agreement.
- Where there is a reduction in the Construction Cost arising solely from deflationary market conditions not prevailing at the Effective Date. This adjustment is applicable under *clauses 5.4, 5.5.2 and 5.5.3* when they apply.

There is no guidance on how the adjustment is to be made to the lump sums or percentages.

There is extensive provision for the claiming of additional fees under *clause 5.9*. This should not be difficult but, in practice architects vary tremendously in what they are prepared to do for the fee. In most cases, architects are prepared to do rather more than should reasonably be expected of them. The important criterion is that the extra work or expense caused to the architect must be for reasons beyond their reasonable control. Payment is to be on a time basis (i.e. under *clause 5.6*) or, if it is appropriate (more suitable) to do so, by adjusting the Basic Fee. That is a perfectly adequate clause, but it was clearly considered to be necessary to give some examples and although the reasons are stated not to be limited to the examples, the danger is that clients will not be prepared to look beyond them. Some of the examples are that the client varies any item of work, or where performance of the services is delayed, disrupted or prolonged by others. As soon as the architect becomes aware that this clause is going to apply, the client must be informed. In most cases, the architect will be aware before the event or, in the case of external disruptive elements, immediately they occur. Failure to promptly notify the client may result in the architect having difficulty in recovering the fees. The clause somewhat unnecessarily states that it does not apply if the extra work is caused by a breach on the part of the architect. The clause is stated not to apply when an adjustment under *clause 5.8.1* applies to the same event or to any additional work due to a breach of the agreement by the architect.

*Clause 5.10* states that if, after the agreement is executed, the architect agrees to enter into a warranty, the architect will be entitled to extra costs including taking legal advice, for additional professional indemnity insurance and importantly the reasonable cost of assuming the additional liability. Architects should not underestimate the additional liability undertaken with each warranty.

*Clause 5.11* states that if the architect is instructed to invite tenders and either no tenders are returned or none are accepted, then the architect is entitled to the fees due up to and including Work Stage 'H' as applied to the Construction Cost. Alternatively, the architect may recover that part of the fee relating to the

work or services at the date of the invitation to tender. The reference to Work Stage H would appear to be in error given Stage ‘H’ refers to the ‘Tender Action’ stage under the RIBA Plan of Work 2007; this would equate to the procurement task which could fall anywhere between Stages 2–5 of the 2013 Plan of Work.

The architect recovers expenses and disbursements under *clause 5.12* and in the manner specified in the Schedule of Fees and Expenses. Expenses can amount to a substantial sum and architects can easily be caught out so care should be exercised when completing the relevant part of the Schedule. The architect is required under *clause 5.13* to keep records of all expenses and disbursements and also of time spent, if that is to be the basis of charging. The client has the right to see the records. An architect being reimbursed on a time charge basis should, quite rightly, be expected to justify the fee claimed with complete and proper records.

*Clause 5.14* is an important clause dealing with payment of the fee. It makes clear that payment is due on the issue of payment notices which must be submitted at the intervals identified in the Schedule of Fees and Expenses. The payment provisions in the agreement have to conform to the requirements of the Construction Act unless the s.106 residential owner/occupier exception applies. The architect’s payment notice, probably an invoice, should set out the amount the architect considers due at the payment due date, including all accrued instalments of the fee and other amounts due less sums previously paid. The amount stated is what is referred to as the ‘notified sum’. It should also state in the notice the basis upon which the amount (or notified sum) was calculated. The final day for payment by the client of the amount due is 14 days after the date of the relevant architect’s notice (i.e. the final date for payment). The architect needs to be mindful of *clause 1.6* and the inclusion of Saturdays and Sundays when looking at periods expressed in days (i.e. calendar days). There are two specified circumstances when the notified sum does not have to be paid. The first is when the architect is insolvent or the client issues a payless notice under *clause 5.15*. The architect is to submit their ‘final account’ when they reasonably consider that the services have been completed. Under *clause 5.21*, the client has to pay any VAT properly chargeable on the fees and expenses so this should also be shown on the architect’s payment notice.

If the client intends to pay less than the amount stated in the architect’s payment notice (i.e. the notified amount) then not later than 5 days before the final date for payment the client has to issue a pay less notice. This notice has to be issued in accordance with *clause 5.15* which requires the client to state in the notice:

- the amount they consider due at the date the notice is served
- the basis on which the sum is calculated
- identify any sums to be withheld and if there is more than one then each should be shown separately with the amount attributed to it shown separately.

If the client serves a proper notice then the amount payable is the amount stated in the notice; that then becomes the notified amount.



Importantly, part of the clause states that if the payless notice is not given, the amount that the client is due to pay is the amount stated in the architect's notice. That sum remains the notified amount. There is no further opportunity for the client to query the amount due, even if it seems there is a good reason, until after payment has been made. The philosophy is clear, in that the client can query the amount in the architect's notice while holding onto the money if the required notice is given. If the notice is not given, the amount in the architect's notice must be paid and the client may then query it while the architect holds the money. The client can always seek to withhold any monies against any subsequent payment, again this would be subject to proper notice been given.

*Clause 5.16* provides that the client may not set-off against payments to the architect unless the amount is agreed by the architect or the disputed amount has been referred to and determined by a tribunal. Needless to say, this is one of the clauses to which most clients object. It is seen by many architects as a valuable safeguard, because at least in principle, it requires the client to pay even disputed amounts and then to seek to recover the disputed sums by negotiation or via the dispute resolution procedures in the agreement. Against this interpretation, there are three important arguments.

- The clause is in clear conflict with the provisions of the Construction Act s.111 (as amended) which appears to allow set-off subject to the service of an effective pay less notice. Refer to *Clause 5.16* above.
- The clause may conflict with the provisions of the Unfair Contract Terms Act 1977 which generally provides that any clause seeking to restrict or exclude the liability of the party putting it forward (in this case the architect) must be reasonable. It may be questioned whether such an all-embracing clause, seeking to exclude a client's right of set-off would be viewed as reasonable.
- If the architect tried to claim fees, the court would favour trying the claim and any counterclaim together in order to dispose of the claims collectively rather than separately at a greater cost. This argument overlooks the fact that, unless the claim is under the current limit of £10,000, the method of dispute resolution is either adjudication (where the adjudicator has no jurisdiction to hear counterclaims other than as defences) or arbitration and not litigation through the courts. In arbitration, the dispute may well encompass whether or not the client is entitled to set-off despite this provision.

*Clause 5.18* provides that where the architect or client suspends the performance of any or all of the architect's services, or terminates performance of the services or obligations, then the architect is to issue an account or accounts as soon as reasonably practicable. The architect is entitled to:

- any fees and other amounts properly due to the date of the last instalment and a fair and reasonable amount up to the date of the termination or suspension
- payment of any licence fee due under *clause 6*

- reimbursement of any loss or expense or damage suffered by the architect arising from the suspension or termination save where the suspension or termination is by reason of a material or persistent breach by the architect.

If the suspension is ended, then the architect is entitled to recover the reasonable costs of resuming the performance of the services and other obligations in accordance with *clause 8.1.4(a)*. Notwithstanding that the reason for the suspension by the architect is not made good, the architect shall be entitled to recover a reasonable amount, in respect of the costs and expenses it reasonably incurred as a direct result of it exercising its right to suspend.

If the client suspends or determines otherwise than for the architect's breach, or the architect suspends or determines due to the client's breach, the architect in effect is to be paid all loss and damage directly incurred. This could be substantial and for a termination should roughly equate to what the architect could claim for repudiation at common law. The architect ought to be able to claim money to the extent that they are out of pocket due to the termination. Such heads as the profit that would have been made if the project had proceeded and the cost of having to shed staff would also be claimable.

*Clause 5.19* provides that interest is payable on amounts not paid by the client when they are properly due (i.e. not paid by the final date for payment). Payment is of simple interest at 8% above Bank of England base rate current at the date the payment becomes due. The architect is also entitled to recover from the client the reasonable costs, duly mitigated, incurred in recovering from the client the outstanding sums. This covers the costs of principals, employees or advisors such as legal advisors. The interest also applies to money awarded in adjudication, arbitration or legal proceedings.

*Clause 5.20* deals with the recovery of costs and is an unusual clause to have expressly stated in the agreement. It permits the architect or client to recover its costs if it successfully pursues, resists or defends any claim or part of a claim brought by the other party. The costs have to be reasonably incurred and duly mitigated. The right to recover exists even when the matter is resolved by negotiation or mediation. *Sub-clause 5.20.2* states that any tribunal to which the disputed matter is referred may determine the costs. This provision at face value would be acceptable if the tribunal were either arbitration or litigation. However, it is possible that the clause may be unenforceable in adjudication, given it addresses the allocation of the parties' costs. It may conflict with the Construction Act s.108A which makes ineffective any contractual provision '... which concerns the allocation as between those parties of costs relating to the adjudication ...'. It is arguable that it does not fall within clause s.108A, given it does not allocate costs between the parties but simply establishes a mechanism to determine how they will be allocated and that mechanism is in line with that adopted by other tribunals, e.g. the courts. If the clause does not fall foul of s.108A then it would mean that an adjudicator would have authority to deal with the parties' costs. So if an architect was to take a dispute for outstanding fees to adjudication and lost they could be faced with having to pay not only the

adjudicator's fees but also the client's costs, e.g. solicitor's in defending the dispute. This is not the normal position in adjudication where each party is to bear their own costs and run the risk of bearing only the adjudicator's fees. In addition the clause may not be acceptable to many professional indemnity insurers given, so far as adjudication is concerned, it means the procedure will be more onerous than the Scheme.

*Clause 6* deals with copyright and the use of information. Copyright is regulated by the Copyright, Designs and Patents Act 1988 (CDP Act) as amended by various subsidiary Regulations and there is also relevant case law. There is no copyright in ideas or concepts, but only in the way in which they are expressed. For example, the idea for a book would not be subject to copyright but the content of a written book would. Section 1 of the CDP Act states that copyright is a property right in, amongst other things, original literary, dramatic, musical or artistic works. S.4 makes clear that 'artistic work' includes 'a work of architecture being a building or a model for a building' and that 'building' includes any fixed structure and part of a building or fixed structure; 'artistic work' also means 'a graphic work, photograph, sculpture or collage, irrespective of artistic quality'.

In general, copyright remains with the originator or creator of the artistic work for their lifetime and for seventy years after the end of the year in which the creator died. Work produced by an employee is the copyright of the employer. S.2 of the CDP Act, makes clear that no one may reproduce or copy any work without the consent of the originator. Assignment of copyright from the creator of the work to another may only be accomplished in writing. Such assignment can never be inferred (S.90). It is not usual to transfer copyright, but rather to grant a licence to use the copyright material for a particular purpose or for a particular period of time. It is not necessary to register ownership of copyright in any way, but in published works, it is usual to indicate a claim to copyright thus: © Emma Crow (1999).

The CDP Act introduces the concept of 'moral rights' (ss.77(4) to (5)). An architect has the right to be identified as the originator of the building 'in the case of a work of architecture in the form of a building or a model for a building, a sculpture or a work of artistic craftsmanship, copies of a graphic work representing it, or of a photograph of it, are issued to the public.' S.77(5) states that 'The author of a work of architecture in the form of a building also has the right to be identified on the building as constructed or, where more than one building is constructed to the design on the first to be constructed.' The creator must assert the right to be identified before an infringement can take place. Solicitors acting for clients will often attempt to insert a clause removing this right. Such attempts to remove a statutory right should be resisted. The author may object to derogatory treatment of the work, principally by asking for any identification to be removed from the building. There are also rules about the issuing of copies to the public of pictures of the derogatory treatment.

Architects have copyright in their designs and a client usually has a licence, which may be expressed or implied, to reproduce the design as a building. In the absence of any agreement, the client must have paid a sufficient fee before

a licence will be implied *Stovin-Bradford v. Volpoint Properties Ltd* (1971).<sup>12</sup> In any event, even if sufficient fee has not been paid for a licence to reproduce a design in the form of a building to be implied, the client will be entitled to possess the design information (e.g. drawings) *Gibbon v. Pease* (1905).<sup>13</sup>

The architect's usual remedy for infringement of copyright is to take out an injunction to prevent the carrying out of the work. This will not normally be granted if building work has already commenced on site *Hunter v. Fitzroy Robinson and Partners* (1978).<sup>14</sup> The alternative remedy is for the architect to sue for damages. Large amounts of damages will not usually be recovered unless it can be shown that the infringement of copyright was flagrant or that a substantial benefit accrued to the infringer.<sup>15</sup> S. 107 of the CDP Act makes certain instances of infringement a criminal offence with penalties of fines and imprisonment. That particular provision is unlikely to have much application to the architect given it generally covers for example, the making and selling of articles which they know could infringe copyright.

*Clauses 6.1 and 6.2* do not attempt to amend the position under the general law. They simply clarify the architect's position. Copyright in all the architect's drawings and documents, and in any building produced from such documents, is the property of the architect and the architect can assert the right to be identified as the author of the design. The client is prohibited from registering any part of the architect's design under the Registered Design Regulations 2001 without the architect's consent. The client, however, under *clause 6.3* is to have a licence to copy the architect's drawings, documents and all other such work (defined as the 'Material') but only for the purpose of constructing the project to which the design relates and related maintenance, operation, promotion, leasing or sale. It is not to be used for any other project except on the payment of the licence fee specified in the agreement or subsequently agreed.

There are three provisos to the client's use of the materials.

- If the client wishes to use the designs after the architect has completed the last service, the client must seek the architect's confirmation of the degree of completion of the Material and the client must pay the architect any specified or a reasonable licence fee. This is probably somewhat stricter than the position under the general law. See above.
- A valuable right is given to the architect to refuse to allow the client to use the Materials if the client has not paid any amounts properly due. The architect must first have given a 7-day notice. The client may resume the use once the outstanding sums are paid.
- The client is to 'obtain or ensure' that a third party must get any necessary licence and pay fees arising for access to software used to produce any Material. It is not immediately obvious what purpose is served by this proviso. The wording leaves a great deal to be desired.

*Clause 6.4* makes clear that the Basic Fee includes for all royalties, licence fees or similar for making use of any invention or design for the purposes of performing the services.

*Clause 7* deals with liability and professional indemnity insurance. *Clause 7.1* states that the client may not start any action against the architect in contract or tort after the period stated in the Project Data has expired. The period is to be calculated from the date of completion of the last service or from the date of practical completion of the construction of the project, whichever is earlier. This is the opportunity for the architect to reduce the period of time for which they would be liable.

*Clause 7.2.1* seeks to limit the architect's liability to the level of professional indemnity insurance stated in the Project Data. The limitation is subject to the proviso that the architect has notified the claim or claims to their insurers in accordance with terms of the policy. *Clause 7.2.1* clarifies that no employee, director or officer of the architect is to be personally liable to the client for any negligence, default or other liable act or omission arising from carrying out the services.

*Clause 7.3* is a 'net contribution clause'. In the absence of this clause, the client may take legal action against an architect for 100% of damage suffered, even though they may be less than 100% liable. The architect would then be left to seek a contribution from all the others who might be liable. This clause seeks to prevent this by providing that the way in which the architect's liability is to be assessed is that which is 'just and equitable' having regard to the architect's liability for the damage in question when considering the responsibilities for the damage of the others concerned. The others are deemed to have provided contractual undertakings to the client, that are no less onerous than those of the architect's undertakings, with no exclusions of liability or joint insurance provisions and assuming that the other parties are deemed to have paid their share of the damages. This clause, or something similar, is now fairly standard in professionals' terms of engagement. It is a valuable protection to the architect. Under the ACE terms of engagement, it was held that the Unfair Contract Terms Act 1997 did not apply to this type of clause.<sup>16</sup> The problem is many client's legal advisor will seek to delete or exclude net contribution clauses.

*Clause 7.4* obliges the architect to maintain professional indemnity insurance for the amount of indemnity and for the period stated in the Project Data. There is the usual proviso that the insurance is available at commercially reasonable rates and terms to the architect. It is the terms available to the architect which are important. The fact that insurance is available at commercially reasonable terms to architects in general is not relevant if the rates available to the architect under this agreement are higher for some reason. Some bespoke terms drafted by clients' solicitors attempt to restrict the availability by referencing it to architects with a good claims record. That, of course, is of no assistance to an architect who has a bad claims record. The bottom line for the architect is whether they can pay the premium. The insurance is to be subject only to such limitations, exceptions and exclusions as are commonly included in such policies. Under *clause 7.5* the architect must produce insurance documents (e.g. a broker's certificate or letter; insurers frown upon an insured producing a copy of the policy document) on reasonable request and inform the client if such insurance ceases to be available.

*Clause 7.6* requires the architect to notify the client if the insurance becomes unavailable in whole or in part or if it becomes unavailable at commercially reasonable terms or any restrictions are attached to the policy or that the indemnity limit is lower than that specified in the Project Data. In this eventuality, the architect and the client are supposed to discuss how best to protect themselves in the absence of insurance. It may be that the client is able to take out insurance which will deal with the problem, or at least part of it, though the client will likely seek to recover the cost of the premium from the architect.

*Clause 7.7* deals with supplementary agreements (i.e. agreements with third parties). In the Project Data it covers the following situations.

- When the architect is to enter in to a collateral warranty with a third party or parties then provided the terms of the warranty together with the names or categories of the other parties entering into similar warranties, are attached to the agreement, then the architect must enter into the warranty within a reasonable time of being requested to do so by the client. (*clause 7.7.1*).
- If a Third Party Rights Schedule in favour of a third party or parties is attached to the agreement then the rights will come into effect, on the architect receiving from the client, a notice to that effect together with the name of the third party and their interest in the project. (*clause 7.7.2*).
- Where a supplementary agreement under which the architect is to provide services to the contractor appointed by the client to undertake the design and construction of the Project is attached to the agreement, the architect will enter into such agreement with the client and contractor (i.e. a novation agreement) within a reasonable time of being requested to do so. (*clause 7.7.3*).

It is a condition that under any supplementary agreement the architect shall hold no greater liability to the beneficiaries than they owe to the client under the agreement. In addition, it also states it must be a condition that ‘... all fees and other amounts properly due to the Architect have been paid at the date when it comes into effect.’ What it should have read was ‘... that the architect has no liability under supplementary agreements until all outstanding fees and other amounts properly due have been paid by the client.’

*Clause 7.8* is what has become a fairly standard clause in most contracts. It is designed to exclude the effects of the Contracts (Rights of Third Parties) Act 1999 (see section 14.3 below).

*Clause 8* deals with the position if the services are suspended or the agreement is terminated. Without such a provision, neither party would be entitled to terminate or suspend unless they could establish grounds at common law, e.g. repudiation. It is worth noting that usually, there is no right to terminate at common law simply because the client fails to pay; it is simply a breach of contract for which the remedy is damages. That is unless such failure is evidence of an intention not to pay at all.<sup>17</sup>

Under *Clause 8.1.1* the client is entitled to suspend or end any or all of the architect’s services (or any other obligation under the agreement) by giving at least a 7-day notice in writing to the architect. The notice should specify the services effected. The architect may also suspend performance of all or part of the

services on giving not less than a 7 day notice if the client fails to pay the notified sum by the final date for payment (*clause 8.1.2*); this is included to comply with the Construction Act. The notice must state the ground or grounds for the suspension. Insofar as the contractual provision falls short or is more onerous than the Act then the Act would apply. The architect must resume performance when the money is paid in full.

The architect may also suspend on giving not less than a 7 day notice if:

- the client is in material or persistent breach of its obligations under the agreement
- the architect is prevented or impeded from performing the services for matters beyond the architect's reasonable control
- a force majeure event occurs.

*Clause 8.1.2* does not limit the reasons for the architect suspending to the four listed matters. The architect cannot simply cease performance of the services on the expiry of the notice period (i.e. 7 days). *Clause 8.1.3* requires the architect to do it in an orderly and economical manner.

If the suspension arises from a default which is subsequently remedied, then the architect shall recommence the services or other obligations within a reasonable period of the default being rectified (*clause 8.1.4*). If the default is not remedied then the injured party has the right to treat the performance of the services or other obligations as terminated subject to the giving of reasonable written notice (*clause 8.1.4*). Under *clause 8.1.5* if the services or other obligations are suspended by either party for a period greater than 6 months, then the other party has the right to treat the affected services or obligations as terminated. The termination is subject to the giving of a further written notice of not less than 7 days.

Any period of suspension arising from a valid notice given under *clauses 8.1.1* or *8.1.2* is to be ignored when computing any time to be taken by the architect to complete any services directly or indirectly affected by the suspension.

*Clause 8.2.1* provides that either party may determine performance of any or all of the architect's services or obligations by the giving of reasonable written notice to the other. The notice must state the grounds for determination and the services and obligations affected. It would have been better if a definite period of notice had been specified. Reference to 'reasonable notice' leaves the door open for one party to argue that whatever notice has been given by the other is unreasonable. Reasonable notice requires the determining party to take all circumstances into account. For example, if the architect is giving notice, the period should allow time for the client to engage another architect to continue the work without delays. This may be a fairly short period in the early stages of the project, but it is likely to be much longer when the project is on site and the presence of an architect, who is familiar with the construction information, is crucial.

If the client gives notice, regard should be had to the number of staff and other resources engaged on the project and the ease with which the architect can transfer or terminate the use of the staff. Any loss suffered by the architect will be part of the damages referred to under *clause 5.17*. Architects should be wary of

‘reasonable notice’ and always try to err on the side of caution, by giving a longer notice than necessary otherwise the client may be able to allege repudiation by the architect (i.e. wrongly terminated) and claim damages. It is not immediately obvious why the notice should state the grounds for determination, because no particular required grounds are set out in the agreement. Neither, it seems, must the grounds be such as would entitle a party to treat the agreement as repudiated under the general law. Presumably, the requirement will be satisfied by the flimsiest of reasons.

Under *clause 8.2.2* either party may terminate the services or obligations if the other party is bankrupt or in administration; or alternatively they are unable to perform their obligations due to death or incapacity. Termination under any of these grounds is immediate following the giving of a notice.

On termination and if the client requests under *clause 8.2.3*, the architect must give the client copies of the drawings and other documents, etc. not previously provided, which the client has a licence to use. The material provided is subject to the copyright restrictions in *clause 6.3* and its provision is subject to payment of the architect’s outstanding fees and other amounts due, plus reasonable expenses for copying.

Resolution of disputes or differences is dealt with under *clauses 9.1–9.3*. It is a complex set of clauses. They include four possible methods of resolving disputes. It is essential that the parties do not make a mistake in deciding upon the appropriate method or there may be financial consequences. The methods are as follows.

■ *Negotiation or mediation (clause 9.1)*

These are optional and the parties may attempt to settle their differences by negotiation or by means of mediation using the Mediation Services identified in the Project Data. Discussion, which is essentially what this option involves, is always available to the parties whether or not expressly stated. The only purpose of expressly stating this method in the conditions is simply to draw the parties’ attention to an alternative process.

■ *Adjudication (clause 9.2)*

Where the Construction Act applies, either party may opt, to have any dispute or differences arising under the agreement, settled by an adjudicator. The adjudicator is to be appointed and adjudication conducted is to be in accordance with the procedures identified in the Project Data, e.g. the Construction Industry Council Model Adjudication Procedures, the Scheme or another. The current edition of the Construction Industry Council Model Adjudication Procedures is the fifth edition.

The adjudicator is either agreed by the parties or nominated by the nominator specified in the Project Data. If no nominating body is identified then by default it will be the RIBA (*clause 9.2.3*).

*Clause 9.2.4* permits the adjudicator to order one of the parties to pay the legal costs of the other in accordance with *clause 5.20*. This is important, because statutory adjudication under the Act does not allow for the recovery of costs. It only allows the adjudicator to determine how his or her fees and



expenses are to be apportioned between the parties. Refer to the narrative above on clause 5.20.

■ *Arbitration*(clause 9.3)

Where the parties have opted for arbitration as the principal method of dispute resolution, they may agree on an arbitrator or, failing agreement, a person may be appointed at the application of either party by the appointer named in the Project Data. If no appointer is named, the default provision is for the President or Vice President of the RIBA to make the appointment. The agreement to arbitrate falls under the Arbitration Act 1996 in England and Wales or Northern Ireland. If the agreement is subject to the law of Scotland then the Arbitration (Scotland) Act 2010 would govern the arbitration procedures (clause 9.3.3). There is a proviso at clause 9.3.2 (a) that, if the law of the agreement is the law of England and Wales, either party may choose to pursue a remedy through the courts if they are seeking to recover a sum of money not exceeding £5,000 or whatever other sum is set out by legislation in accordance with s. 91 of the Arbitration Act 1996 (the sum has recently been increased to £10,000). The arbitration is to be conducted in accordance with the Construction Industry Model Arbitration Rules (CIMAR) current at the date when the dispute is referred to arbitration (clause 9.3.2 (a)). In addition, under clause (9.3.2 (c)) the arbitrator does not have the power to award security for costs.<sup>18</sup>

■ *Litigation*

If, in the Project Data, the parties have opted for litigation instead of arbitration, any dispute can be dealt with by the courts. The parties must give careful thought to the possibility of litigation as most architects might prefer an architect arbitrator, appointed by the President of the RIBA, rather than a judge to deal with disputes arising out of the appointment. Alternatively, a client may view such an alternative as beneficial to the architect and hence prefer litigation. Clause 9.3.2 allows litigation in any event where the remedy does not exceed £10,000.

### 14.2.5 Other standard forms of appointment

*The Association of Consultant Architects Standard Form of Agreement for the Appointment of an Architect (ACA SFA/2012)* is a set of standard terms of appointment produced by the ACA. It is described as a development of the SFA series of appointments. It is intended for use where the architect is to provide services for a wide range of projects.

*The Appointment of a Consultant Architect for Small Works, Works of Simple Content and Specialist Services ACA 98 (2004 revision)* is also produced by the ACA. It is intended for use for small projects of about £250,000 or if the work is simple in nature.

*The CIC Consultants' Contracts Package 2011* is a set of documents produced by the Construction Industry Council for the use of consultants involved in major projects.

*The NEC 3 Professional Services Contract* is a standard appointment produced by the Institute of Civil Engineers intended for use in the appointment of a consultant providing professional services. It can be used for appointing project managers, supervisors, designers or consultants under NEC contracts and can also be used for appointing consultants on non-NEC construction projects or non-construction projects.

*The NEC 3 Professional Services Short Contract* is a standard appointment produced by the Institute of Civil Engineers intended for use in the appointment of a supplier to provide professional services. This short version of the Professional Services Contract is for use on smaller scale projects comprising straight forward work not requiring sophisticated management.

### 14.3 Duty of care agreements (collateral warranties)

Strictly speaking, a collateral warranty<sup>19</sup> is a contract which runs alongside another contract and is subsidiary to it. Such documents have proliferated over the past three decades and it is common for contractors, the key sub-contractors and suppliers and all the consultants to be required to execute collateral warranties. These are normally executed in favour of the building owner, the funder providing the funds for the project and/or any number of prospective purchasers or tenants. On some of the major projects there is a plethora of warranties produced which become burdensome on all concerned given the time and effort expended in getting them executed. It used to be the view that such an agreement was not very important because it merely stated, in contractual terms, the duties which everyone knew the architect owed to a third party in tort. That view no longer became tenable some time ago and currently there is no indication that collateral warranties are decreasing in number.

Before looking at some of the provisions commonly encountered in such warranties or duty of care agreements (as they are often called when used in relation to consultants), it should be understood why they are so important to the building owner. There is a fundamental contract principle that only the parties to a contract have any rights or duties under that contract. The principle is called 'privity of contract'. For example, in a contract between client A and architect B, each has rights and duties to the other. B has a duty to design a building for A, but B has no contractual duty to a third party C, when designing that building. That was the case even if the contract stated that B had such a duty.

However, this principle has been watered down since the coming into force of the Contracts (Rights of Third Parties) Act 1999. Persons who are not parties to a contract may be able to obtain a benefit from the contract, if it expressly states in the contract that they have, or it appears that the contract is intended to give them, such a benefit.

To express this at its most basic; if A and B now include a term in their contract that they will each pay £100 to C, the term will be effective, in that if they fail to honour it C will be able to enforce it, even though C is not a party to the agreement. Even if the contract simply refers to a class of person as the beneficiary (e.g. the first tenant), once that first tenant is identified they are entitled

to claim the benefit using whatever machinery (e.g. arbitration) is available in the contract. However, parties to a contract may exclude third party rights by inserting a provision to that effect in the contract. Note *clause 7.8* in the above RIBA conditions excludes the rights to third parties other than those identified in clauses 7.2.2 and 7.7.2. Some of the recently drafted contracts, such as the RIBA Standard Agreement 2010 (2012 Revision) and SBC,<sup>20</sup> are using clauses giving an express benefit to specific third parties in order to avoid the use of collateral warranties.

But if, as usual, third party rights are excluded, only the client can take action against the architect for breach of the conditions of engagement. For example, if an architect designs a house for the client, the house is sold on to a third party and a design defect subsequently becomes apparent. The third party cannot take action against the architect under the conditions of engagement between the architect and client. At one time it was thought that the third party would have been able to overcome this kind of problem by suing in the tort of negligence. A party suing in negligence must show that:

- the defendant had a duty of care to the plaintiff
- the defendant was in breach of that duty
- as a result of the breach the plaintiff suffered damage of the kind which is recoverable.

Initially, the courts appeared willing to find that such a duty existed in many instances. However, the House of Lords in *Murphy v. Brentwood District Council* (1990)<sup>21</sup> made it very difficult for a third party to successfully sue in tort for a defective building.

In broad terms, the decision in *Murphy* means that if an architect negligently designs a building, recovery in the tort of negligence will only be possible if the defective design causes injury or death to a person or if it causes damage to property other than the building which is the subject of the defective design. Even then, the recovery will be limited to compensating for the injury or damage to the person or other property. It will not cover rectification of the design defect. The concept is much the same as product liability and the court saw no reason for making any distinction.

The result is that a third party can no longer rely on being able to sue an architect in negligence except in very circumscribed situations, such as when the action can be brought under the reliance principle set out in *Hedley Byrne v. Heller*<sup>22</sup> as interpreted in *Caparo Industries plc v. Dickman*.<sup>23</sup> Essentially, the principle is that where the parties are in a relationship of sufficient proximity and the architect makes a negligent misstatement, the architect will be liable to the other party if the architect knew the other party would rely on the statement and if the other party did so rely and suffered a loss as a consequence. A negligent misstatement given to one party and relied upon by another, a third party, who suffers loss will not give rise to liability to the other party, because the statement was not given to the other party and the architect was unaware that it would rely on it. What constitutes a negligent misstatement has been interpreted fairly broadly by the courts and it is probable that an architect's design would fall into this category.<sup>24</sup>

Contracts are concerned with achieving specific results and contain many terms relating to quality. Tort is concerned with remedying a wrong. The courts now emphasise the difference. To take a simple example: if an architect specifies the wrong external cladding which soon deteriorates, that is a breach of contract for which the law lays down remedies as between the architect and the client. If the cladding is so inadequate that it falls off the building and injures a pedestrian on the pavement below, that may amount to negligence for which the pedestrian has a remedy against the architect in tort. The situation has been muddied by a number of legal cases which have enabled the original party to a contract to bring an action against the other party for breach of contract even though the original party has since sold on the building to a purchaser and received full value for it.<sup>25</sup> However, the situations where that can occur are likely to be limited, because it appears that if the original party (the Employer but no longer the owner of the property) is to be able to take action, among other things the other party (e.g. the Contractor) must be shown to have known at the time of entering into the contract that the building was to be sold on or tenanted.

The purpose of a duty of care agreement is to create a contractual relationship between the architect and a third party who would otherwise be unlikely to have any remedy if design defects became apparent after completion. At the time of writing, there is a form of consultant warranty published by the Construction Industry Council in favour of a funder and in favour of purchasers or tenants. There are also a great many other forms of warranty in circulation, some of which have been specifically drafted by client's solicitors. The following are points which architects should bear in mind when called upon to sign any warranty or duty of care agreement.

### 14.3.1 General

The basic problem is that, by virtue of the collateral agreement, the architect takes on liabilities towards a party who has paid no fee for the privilege. If the architect does not take care, greater duties may be undertaken towards the third party than those which the architect already owes to the client under the conditions of appointment. If it can possibly be avoided an architect should not enter into a duty of care agreement. Some architects take the view that they should not resist requests to execute duty of care agreements because, as professionals, they should be prepared to take responsibility for their actions. This is a most laudable sentiment, but architects should consider whether they wish to accept a greater burden of liability than the general law would impose. In addition, it is questionable whether their professional indemnity insurers would look favourably upon such a view. When a duty of care agreement is executed, it is viewed by the courts as simply another freely negotiated contract. If architects do execute such agreements, there seems to be no good reason why they should not charge an appropriate, rather than a nominal, fee for the warranty. The opportunity afforded to a third party to take legal action should be worth a substantial sum. However, in this, as in most other matters, commercial pressures may force the architect into executing such agreements without charge.

Considerable pressure may be put upon architects to enter into onerous warranties and to agree to the incorporation of clauses which impose unacceptable degrees of liability. When architects are being pressured to accept such clauses, various arguments may be put forward by the client's solicitors.

- *The clause is standard*

There are no standard clauses in warranties. A warranty, like any other contract, is a bargain between two parties. Any clauses may be accepted or rejected. While it is true that certain clauses crop up again and again in warranties, frequency of occurrence does not make a bad clause good. When reference is made to a clause being standard, the solicitor means that it is one which is often used. That does not mean to say that architects must accept it.

- *All the other consultants have signed similar warranties*

Architects who order their businesses on the basis of what others do, or are said to have done, are heading for disaster. Even if this happens to be true, the reason may be because the other consultants have not understood the danger in accepting certain clauses.

- *The client is not prepared to change its position on this clause*

In that case, it looks as though the client will not get a warranty. Clients often lose sight of the fact that it takes two to make any contract. In agreeing the terms of warranties, it is essential for an architect to decide what they will not under any circumstances accept and what they prefer not to accept, but which are not showstoppers. In practice, architects often accept clauses simply because they are frightened of losing a lucrative commission. That is perfectly understandable, but it must be remembered that a lucrative commission may turn into the reverse, after a successful claim from the beneficiary of a warranty.

An architect has always to bear in mind that whatever they sign by way of a collateral warranty needs to be acceptable to their professional indemnity insurers and in line with the policy cover they have in place.

### 14.3.2 Execution

The essential differences between a deed and a simple contract have been explained in Chapter 13, section 13.4.1. Architects will usually be asked to enter into a collateral warranty in the form of a deed, because it extends the potential liability period to 12 years and no consideration is necessary. If the original conditions of engagement are under hand (i.e. a liability period of 6 years), an architect could be in the position of having a longer period of liability to the third party than to the original client. Within duty of care agreements executed as simple contracts there will always be a term stipulating that the architect receives a small sum, usually about £10, in order to make a valid contract. This is because the agreement is always very one-sided and, without the nominal sum, it is very unlikely that any other consideration on the part of the third party would be present. Indeed, apparently from an abundance of caution, many warranties executed as deeds also refer to a nominal payment in consideration.

### 14.3.3 Skill and care

There is usually a term by which the architect warrants reasonable skill and care in the performance of their duties. This is the normal professional standard of care and as such, it is not inherently objectionable. Some warranties, however, take the position further and ask the architect to warrant 'due' or 'all proper' skill care and 'diligence' and continue to refer to architects having the experience of architects commonly performing these services. Because it is not at all certain what greater liability such terms may impose, architects should be wary about entering into agreements on that basis and should stick to tried and tested definitions of their professional obligations. There should also be a proviso that the architect will under no circumstances have a greater liability to the third party than the architect already owes to the client.

An architect should never warrant fitness for purpose. This is a much higher standard of care. It is not unusual for this higher standard to be included in bespoke warranties, but in a disguised form. It is rare that a clause will actually require an architect to warrant in so many words that the building will be fit for its purpose. For example, a warranty in connection with an office building may include a clause which requires the architect to take care that the building, when complete, is suitable in every respect for its function as an office building. It may seem innocuous and, indeed, it may seem only reasonable that an architect designing an office building should give such a warranty, but it should be rejected. It is most unlikely that professional indemnity insurance would be available to cover such a fitness for purpose obligation.

### 14.3.4 Liability

The architect should endeavour to get a net contribution clause in every warranty to safeguard the architect's position in the event of multi-party liability. The effect of such a clause is considered in section 14.2.5 in relation to clause 7.3.

In general, architects should avoid all clauses requiring them to 'ensure' anything. That is equivalent to a guarantee. Often such a requirement can be changed to the use of 'reasonable endeavours'; an obligation somewhat less onerous than 'best endeavours'.<sup>26</sup> However, 'all reasonable endeavours' amounts to the same as 'best endeavours'. Architects should also avoid any clause which attempts to make them liable if they put the beneficiary of the warranty in breach of another contract. These clauses are extremely common. Such an obligation can only be undertaken, if at all, after the architect has had the opportunity to consider the terms of the other contract before executing the appointment.

### 14.3.5 Materials

Architects are often asked to warrant that they will ensure that certain materials will not be used in the construction of the building. An architect cannot warrant

any such thing. The best that can be done is to warrant that the architect will not specify certain precisely defined materials. Vague references, such as ‘any materials generally known to be deleterious’, are to be avoided. At least one manufacturer has mounted a successful legal challenge against the blacklisting of its products and there is scope for further challenges in the future.<sup>27</sup> The golden rule is that architects should not warrant anything without very clearly knowing what it is they are warranting. That seems obvious, but experience shows that many architects are content to execute warranties without understanding the terms.

### 14.3.6 Copyright

Copyright has been considered earlier in section 14.2.5 when looking at *clause 6*. There is no sensible reason why a professional should surrender their copyright. It is enough to grant a licence for certain specific uses such as repair and maintenance. If an architect does agree to assign copyright in the designs, it seems that the architect would not be precluded from reproducing particular details in another design provided a major part of the original design was not reproduced. Architects should beware the granting of an *irrevocable* licence to use their designs, because it means exactly what it says and the licence could not be withdrawn in the future even if the client fails to pay. Any licence granted should be ‘non-exclusive’.

Architects should always make sure that warranties include a clause in which moral rights are asserted under the Copyright, Designs and Patents Act 1988. Frequently, bespoke warranties attempt to remove moral rights. This should always be resisted.

### 14.3.7 Assignment

This is a provision which allows the party to whom the architect gives the warranty to assign the benefits of the warranty to other parties. It is this clause which gives the agreement much of its value. The biggest problem with the right to assign is that the architect has no control over the identity of the future warrantee. The worst clauses allow assignment, without consent, to unlimited numbers of people for an indefinite period of time. If the architect agrees to an assignment clause, it should allow assignment once only within a limited period of time, say two or three years after practical completion, subject to the architect’s consent.

### 14.3.8 Professional indemnity insurance

The party taking the benefit of the warranty will principally be interested in the architect’s professional indemnity insurance. Many architects enter into duty of care agreements with terms so onerous that the insurance would be repudiated by the insurers if ever a claim was made. Every agreement must be put to the

insurers before it is signed, or the indemnity insurance could be at risk. Architects should be aware that their interests and those of their professional indemnity insurers do not always coincide. A term by which the architect agrees to maintain indemnity insurance cover at a particular level for a specific number of years is very common, but virtually useless for practical purposes. The most an architect can do is to agree to use reasonable endeavours to keep such a policy in force provided cover remains available at commercially viable rates and reasonable terms for the architect.

An interesting question concerns the damages which a client could recover from the architect for breach of such a condition. If the breach was not discovered, as seems likely though some client's solicitors do request evidence that insurance is in place on an annual basis for a number of years following execution of the appointment, until the occurrence of an event which warranted calling upon the architect's indemnity insurance, there would be no such insurance to meet the claim and, therefore, presumably no money to pay damages caused by the breach other than the assets of the practice and this would depend on how the practice was structured (see Chapter 5). Those damages would, in any event, be what the client would have lost. The client would have lost the chance to call upon the architect's insurance.

### 14.3.9 Funders

Where the third party is providing financial backing for the development, it will require some kind of control over the situation if things go wrong between architect and client. It is usual for a term (called 'step in rights') to be inserted, which provides that if the architect wishes to terminate the appointment, the architect must give a specified number of days' notice to the funder. If the funder then gives notice to the architect, the architect loses the right to terminate or accept repudiation and must, thereafter, accept the funder's instructions in respect of the development.

This type of clause poses two basic difficulties: one, the original client may object if it is not a party to the warranty; two, the architect loses the right to suspend or terminate, or the rights are severely restricted. If architects agree to the inclusion of this type of term, they should ensure that the original client is a party to the warranty for the purpose of acknowledging that the architect is not in breach of the appointment by accepting instructions from the funder. They should also ensure that the funder can only take over the appointment by novation subject to payment of all outstanding fees and leaving the architect free to pursue termination thereafter if the original reason for the termination has not been removed. This last point is important, because many warranties with step in clauses remove the architect's ability to suspend or terminate after the funder takes over even if the original reason for termination has not been addressed. The problem lies partly in the fact that there seems to be a general assumption that the reason for termination will be due to failure to pay. That may indeed be the case in many instances. However, there can be other reasons for termination and they should not be ignored.



## References and notes

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24. *Henderson v. Merrett Syndicates Ltd* [1994] 3 All ER 506.
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26. *Philips Petroleum Co UK Ltd v. Enron Europe Ltd* (1997) CLC 329.
27. *Kirkforthar Bricks v. West Lothian Council* (1995) unreported. See also 'Blacklists', *RIBA Journal Practice*, issue 150, January 1998, pp. 83–84.

# 15

## Stage 1: Preparation and Brief

This stage is described by the RIBA as follows:

‘Preparation and Brief merges the residual tasks from the former Stage A – Appraisal – with the Stage B– Design Brief – tasks that relate to carrying out preparation activities and briefing in tandem.’<sup>1</sup>

### 15.1 Feasibility studies

Once the architect has found out what the client wishes to build, where and when, the next stage is to decide whether it is feasible to build. If not, the project will abort at that stage. Feasibility, however, may depend upon any one of a number of factors or a combination of several factors. The decision to proceed or to stop lies with the client, but it is the architect’s function to present the appropriate information to the client in a structured way so that it is made as easy as possible for the client to come to a decision. Clearly, the client’s decision may be influenced by matters which are not known to the architect; therefore, it is always wise for the architect to investigate more rather than less widely. Because it is difficult at this stage to decide just what data might be relevant, the architect should always include rather than exclude information.

There are some very small projects for which a formal feasibility study may be inappropriate. It should be remembered, however, that it is not the size of the project which determines whether a feasibility study should be done, but associated factors such as complexity, situation, type of development, and so on. It is a sensible procedure for the architect always to approach a feasibility study as though the client requires a formal report to be prepared. In some cases, particularly in the case of a large company or any organisation whose officers have to satisfy others besides themselves, a feasibility report will be mandatory.

Whether the architect is to produce a report or simply to investigate and report orally to the client, it is vital to have a check list in order to prevent the inadvertent omission of an important item. The following check list and brief notes are not intended to be exhaustive, and some of the items will apply only to certain developments, but it is a suggested starting point which architects can mould to suit individual requirements.

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### *Terms of reference*

It is always sensible to bear in mind the terms of reference, or put another way: what it is that the architect is being asked to do. It is important to include a list of the assumptions being made so that the client is clear about what is known for certain, what is estimated and what is merely assumed for the moment. Typical areas for assumption are that a proper measured survey has not been carried out, in the case of an existing building a structural analysis may not have been done and the structural stability of the building may be assumed. If there is any reason to doubt the structural stability, short of a detailed structural survey and calculation, no assumption should be made and the architect should obtain authority to have the structure properly investigated. Other assumptions which may have to be made concern boundaries and the ground conditions.

### *Consultants*

Consultants who might be involved in the study include:

- quantity surveyor
- structural engineer
- geotechnical engineer
- mechanical and electrical services engineer
- planning consultant
- acoustics engineer
- landscape architect
- drainage engineer.

### *Authorities*

Statutory and other authorities and suppliers who may be involved are:

- planning
- highways
- drainage
- housing
- education
- police
- transport
- fire
- Coal Authority
- electricity
- water
- gas
- telephone services supplier
- broadband supplier
- cable television supplier
- The Commission for Architecture and the Built Environment (Design Council)
- Forestry Commission

- English Heritage
- National Trust.

### ***Site location***

This should be considered in relation to the distance from the nearest centre of population and the general topography. Neighbouring watercourses, flooding risks, trees and use of adjoining land and any possible nuisance should be examined and recorded.

### ***Access***

Means of getting to the site is always important; in some cases it can be crucial to the success or otherwise of the project. Bus, train and air services can be vital to a building which hopes to prosper as a conference centre. Road routes are also important and the proximity of ports.

### ***Shops***

The type of project will determine the importance of nearby shops on its viability. Housing must be reasonably near to shops and accommodation for older persons is more attractive if it has a few small shops nearby such as newsagents, chemists and general stores. Mobile shops are still very important in some areas and the distance of the project from, and ease of access to, the nearest large shopping centre should be recorded.

### ***Health***

The following are important:

- doctors' surgeries
- dental surgeries
- opticians
- chiropodists
- complementary therapies such as acupuncturists, osteopaths, chiropractors, homeopaths, herbalists, etc.
- clinic
- health centre/chemists
- general hospital facilities
- proposed future provision.

### ***Social and recreational***

It is worthwhile making a complete list of this type of provision in the area for certain kinds of proposed development. Although much information can be obtained online or through local libraries, the only accurate way to compile such a list is for the architect to walk over every part of the surrounding area.

### ***Education***

A wide range of educational provision is possible and in the case of residential development it is essential that appropriate provision is available. Any projected educational developments in the area must also be noted. It should not be forgotten that for some people, the proximity of schools will not be thought advantageous.

### ***Employment***

The names and locations and activities of principal employers in an area may be a crucial factor in the viability of housing developments.

### ***Rights***

The following rights should be recorded if existing or if thought to exist:

- light
- way
- support
- party walls
- easements
- covenants (restrictive or otherwise).

### ***Planning points***

Matters to consider:

- whether there is any agreement in principle
- whether there is any earlier permission concerning the same site
- what are the usual standard conditions inserted in planning permissions in that area?
- specific requirements in regard to storey heights and number, densities, access provision, permitted materials, parking provision
- any other planning permissions for nearby sites
- building lines
- improvement lines
- road proposals.

### ***Licensing***

If required.

### ***Drainage***

General provision and problems.

### ***Architectural/historical***

Matters such as whether the building, if an existing building is being examined, is listed and if so what grade, or whether the site is in a conservation area should be considered. Even if there is no statutory protection for the building, the architect will want to record whether there are any interesting and attractive features.

The reaction of local amenity societies should also be considered. Although not decisive, opposition from such a quarter can cause serious delays to the process of obtaining appropriate statutory approvals.

***Geological factors***

Fault lines, unusual ground conditions, old quarries, underground water-courses, mine shafts, tunnels and mining subsidence are all problem areas.

***Statutory undertakings and services***

What services, if any, are readily available to the site or can be connected without undue problems. Any easements or diversions required. Other points regarding street lighting, high voltage cables overhead or underground and sub-stations.

***Policy***

Whether there is any local or central government policy which affects the scheme.

***Grants***

If any are available.

***Structural analysis***

Comments on existing structures, if any, in relation to the proposals.

***Access***

Number of entries to site and width, if metalled surface or special difficulties.

***Design possibilities***

Options available in broad terms with regard to disposition of various elements set against the site factors, structural options, aesthetics, historical and urban factors.

***Estimate of cost***

In broad terms, stating the basis of the estimate (e.g. 'current prices'), whether VAT is included and so on. Some clients insist upon a fairly sophisticated life cycle analysis and a facilities management cost programme which the architect would usually request the quantity surveyor to carry out. In fact, there is little to be gained from such an exercise at this stage, when very little is known about the building.

***Programme***

Possible design team programme and future building programme in the form of key start and finish dates.

***Conclusions***

Advice to the client, with short reasons.

***Approvals/decisions***

A list of the approvals and decisions required from the client and a time schedule for receipt if the programme indicated earlier is to be implemented. This is a valuable method of getting the client to respond.

***Additional material***

Whatever is useful to assist the client in understanding the issues and reaching a decision such as charts, graphs, maps, drawings and photographs.

## 15.2 Site and building acquisition

In most instances clients already have a site when they approach an architect for the first time. Giving advice on a site or building acquisition is one of the additional services which the architect can offer. Clearly, the choice of site should follow the architect's assessment of the client's brief (see section 15.4). If a new building is being considered, the shape of the site, the contours and the location can have a marked influence on the finished building. There are some buildings, such as factories, which require virtually flat sites, others which need sites in sunny locations, by a railway or central road network, in an urban centre and so on. A key factor is the size of the site and whether it is acceptable to erect a high rise building. There are several factors which can influence this kind of decision. Among them is the attitude of the Planning Authority, market value of floor area at different storey heights above ground level and, particularly in the case of dwellings, social considerations.

It is possible that an architect will be asked to advise on the acquisition of a suitable building particularly if the client is seeking a suitable building to convert to a specific purpose. In such a case, the architect has to start from the brief and assess the ease with which any particular building can be converted to its new purpose and the degree to which it is capable of fulfilling the client's brief when so converted. It can be a difficult and complicated task. The key factors to be considered are set out below.

- *Structure.* In most instances a survey will be required.<sup>2</sup> In addition it will be necessary to consider the constructional implications of:
  - columns
  - internal heights
  - changes in floor level
  - access between floor levels
  - unusual roof shapes
  - towers, spires, etc.
  - basements and underground features
  - windows and doors

- special architectural features, e.g. finials, drip moulds
- general condition.
- *Heating and insulation*
  - need to change to comply with current legislation
  - compatibility of electricity, gas, solid fuel, solar heating, organic heating, etc.
  - compatibility of systems such as radiators, warm air, pressured air, underfloor heating, ceiling panel, etc.
  - insulating qualities (heat and sound) of existing fabric
  - ease of upgrading the insulation
  - any obvious restrictions on materials.
- *Materials*
  - durability
  - appearance
  - appropriateness
  - consider floor, walls and ceiling and roof
  - heat-retaining qualities
  - susceptibility to condensation.
- *Ventilation*
  - natural
  - artificial.
- *Lighting*
  - natural
  - artificial.
- *Acoustics*
  - materials
  - room shape and volume and texture.
- *Design considerations*
  - possibility of division vertically and/or horizontally
  - possibility of creating large unobstructed spaces
  - means of escape in the event of fire
  - pedestrian and vehicular access
  - disabled access
  - general shape as existing compared to the required or ideal shape.
- *Environmental requirements*
  - internally: problems in heating, lighting, humidity, ventilation, damp penetration
  - externally: effect of alterations on external appearance and the relationship to other buildings and spaces.
- *Possible adaptation techniques*
  - complete gutting
  - partial gutting
  - virtually complete retention of existing structure.
- *Likely costs*

In practice, the architect will not separate the above into separate categories. Indeed, it can be seen that some factors fall into or have relevance in several



categories. Part of the architect's skill in assessing whether an existing building is appropriate for a particular use is to keep all these factors in mind and weigh one against another in arriving at a considered view. There are certain other legal considerations which are addressed later in this chapter.

## 15.3 Surveys

Whether the architect advises on the acquisition of land or buildings or whether the client presents a *fait accompli*, a survey will be required before the architect can proceed with design work. 'Survey' is an imprecise term referring to an activity which may range from taking a detailed set of measurements, including levels and translating them into careful drawings, to an inspection of varying degrees of thoroughness resulting in a written report. It is, therefore, very important for the architect to establish from the outset the kind of survey which will be required.

For example, if the client is simply considering a purchase and development of an existing property, an inspection and written report is appropriate together with a rough sketch containing a few key dimensions. However, if the architect is presented with a site and instructed to produce a feasibility study, a very general idea of the dimensions, levels and other features is required sufficient to determine whether the project can be fitted onto the site and a wholly different set of information must be considered (see section 15.1). In practice, however, the most common kind of survey in which the architect will be interested is the measured survey.

The next thing the architect must decide is whether to advise the client to engage a surveyor (land surveyor or building surveyor as appropriate) to carry out the work. If the site is relatively small and uncomplicated or the existing building and its proposed alterations are simple in character, the architect can probably do the survey work without difficulty. For anything other than the simplest sites or buildings, a survey produced by an independent surveying firm should be indicated. The main reason is that surveying is becoming very sophisticated and the equipment tends to be highly expensive. It makes no economic sense for the architect to have that kind of equipment and be trained in its use unless it will be operated on a regular basis. Moreover, in the case of complex surveys, the architect cannot hope to compete in speed and accuracy with the surveyor who is doing the job full time. However, in the case of an existing building, the architect may wish to augment the survey with further detailed sketches and photographs, particularly if it is a historic building.

### 15.3.1 Preliminary enquiries

Before tackling the survey or instructing the surveyor to do the work, the architect should make certain enquiries. Some of these enquiries will produce information which is vital to the survey or which assists the architect with any feasibility studies. It is suggested that the following should always be consulted.

- *Local Planning Authority.* They have a wealth of information and they will advise on such things as the structure plans, local plans, unitary development plans, conservation areas, listed buildings and trees with preservation orders. In addition, of course, they will have a view on the acceptability of the proposed development.
- *The Building Control Office.* Old deposited drawings may be very revealing, but often the building control officer may be the best source of information.
- *Local History Department of the Public Library.* The curator will normally have a great deal of information in the form of old maps and plans of the area or of the building. Such things as ancient quarries, river courses and even tunnels may be discovered in this way.
- *Local Inhabitants.* They can give helpful information, but it should always be supported in some other way if possible. Pointers to the possibilities of easements may be obtained (see Chapter 17, section 17.4.7), but watch out for petty rivalries which may fog the memory. It has been known for an old person to positively remember that the site in question used to harbour an old mineshaft only for it to be discovered much further down the road.
- *The Mineral Valuer.* Useful in respect of the nature of the subsoil and the possibility of faults, filled ground, etc.
- *Coal Authority.* For a fee they will provide a short report about the past and projected mine workings which may affect the site. For a larger fee, they will supply more detailed information which may require an expert to interpret.
- *Deeds Registry or County Office.* Tend to be the repository of legal information and deed plans, but it is amazing what can be discovered in the conveyancing history of a piece of land.
- *The Client's Solicitor.* With the client's permission, of course, for advice on any matters affecting the land such as covenants or easements.

### 15.3.2 Site investigation

This term has come to mean the investigation of the ground under the site. Some of the information discovered when conducting the preliminary enquiries will give valuable hints regarding the kind of site investigation which should be carried out. If the building is other than relatively small and light, a specialist consultant engineer should be engaged by the client to advise on and oversee the investigation. Such a consultant should be nominated by the architect. There are firms which specialise in ground investigations, but it is essential that they are given a proper brief so that they can form conclusions regarding the scope of the investigation. Even where the proposed building is very light and the ground has no known problems, the architect should have some trial pits dug in order to confirm that all is well. It is usual to set out the positions of the pits with regard to the actual siting of the building.

If a specialist firm is employed, the type of investigation proposed will depend on the proposed building and the kind of ground conditions expected. The usual method is to sink boreholes and measure the samples, taking various tests for acidity, sulphate content, strengths under varying conditions and so

on. If the height of the building suggests that piles will be required, the boreholes may well be sunk to great depths. The firm will prepare a report which will repay careful study. If in doubt, the architect should never hesitate to request the firm or specialist to produce a further report to explain the first. The interpretation of soil investigation reports is something for an engineer to advise upon.

A major problem is deciding where to take the boreholes so as to reveal the true nature of the ground. Again, this is a task for an expert engineer, but it is common for the boreholes to be set out in a random formation, particularly when checking to find shallow mine workings, such as pillar and stall workings which are sometimes flooded. Setting out boreholes regularly in such situations may lead to each borehole being sunk down the centre of a pillar and giving an entirely false picture.

### 15.3.3 General considerations

Other considerations which should be carefully studied are the aspect; orientation; shelter; overshadowing from adjacent buildings; existence of services such as sewers, water, electricity and gas and means of access to the public highway and communications. In rural districts the suitability of the site for sewage disposal plant or the sinking of a well may also have to be considered. Topographical and other features of the site must be recorded. Such things as levels, dimensions, benchmarks, positions and types of trees, existing buildings on and near the site and their character, overhead cables and poles, rivers, lakes, springs, rocky outcrops, fissures and the type of vegetation.

The architect must never make the mistake of thinking that a first class survey is a substitute for visiting the site. Not even a superb set of photographs taken from every angle or a video of the site will suffice. It should not be discounted how often an architect will spot a potential problem or get a feeling for the kind of building required during the first site visit. It may be because of a particular view or a grouping of existing buildings or something as intangible as the atmosphere. Certain it is then that site then visits are essential.

Even if a surveyor has been engaged to carry out the survey, the architect should make a point of walking all over the site or, in the case of a building, walking throughout the building and actually entering every room, stopping and looking all around including at ceilings and floors. Only by doing this will the architect thoroughly know the site or building and satisfy the duty of care owed to the client.

### 15.3.4 Surveys of existing buildings

Unless it is absolutely out of the question, the architect should always carry out an existing building survey.<sup>3</sup> Not only will the architect know precisely what is required in the form of illustrative drawing so far as difficult details are concerned, he or she will learn about the way the building is constructed by the very process of carrying out the survey and plotting the results.

If a simple extension is to be made to an existing building as opposed to the alteration of the building itself, it will be sufficient to survey only the part of the building immediately adjoining the proposed extension. Some suitable point on the existing building will be chosen as a temporary benchmark which may or may not be related to ordnance levels. The exact positions of all plinths, string courses, openings and other features on the elevations which have to be taken into consideration should be noted. The precise level of every floor should be established, carefully checking that the floors are themselves level and, if not, the taking of several levels along the edge of each floor at the point of extension. The thickness and construction of any walls to be cut through should be determined also. In old buildings, it is not unusual to find dummy columns, pilasters and even the wall thickness itself may consist of battened out voids covered in thick plaster or stucco. The levels of the external ground must be established.

The first thing the architect should do after arriving at the building is to take a general walk around and observe the surroundings, the condition of boundary walls and fences and any outbuildings. After looking at the outer elevations and looking into each room, the architect will be able to form an opinion regarding the overall condition and place it in one of the following categories:

- in good repair
- neglected, but basically sound structurally
- in poor condition structurally, perhaps in a dangerous state.

In some instances, the architect will find a serious problem during the initial walk about. In such circumstances, there is no alternative but to telephone the client immediately for further instructions. Clearly, there is little point in continuing to survey a building which is only fit for demolition. Whatever the client's instructions may be, the architect should always confirm them in writing.

During the survey, it may be necessary to obtain the client's authority to employ a builder to assist the investigations by taking up floor boards or exposing part of the foundations. This kind of destructive investigation cannot be carried out if the client does not own the property, that is unless the actual owner has given express permission. The architect is always wise to get such permission in writing through the client.

Investigations should encompass the various services – whether they exist and if they do, what is their condition? Gas, water, electricity, drainage, hot water, cable TV, etc. may all require substantial overhaul or renewal. The condition of the roof, eaves, flashings, rainwater pipes and gutters, damp-proof course and any other features which prevent moisture from penetrating into the building deserve particular attention, as all the money spent on improving or redecorating the property may be wasted if some fault in these areas is overlooked. It would not be overstating the point to say that damp is at the root of most building defects.

Although it may be that the eventual scheme for the building will only affect certain parts, it is usually best to make an accurate measured survey of the whole, including all internal heights so that sections can be drawn through any

part without much difficulty. The only exception to this general rule is if the architect knows clearly in advance just which parts of the building are to be affected. Some architects advocate the making of a rough survey in the first instance, to be followed by a thorough survey only when the new design has been approved by the client. Down that road lies disaster. The architect may find that he or she is faced with trying to make a scheme work which the later detailed survey shows cannot work, possibly because of an impossible change in levels or a lack of headroom.

The golden rule is never to make assumptions. Inevitably, if the architect has done the survey, he or she will discover, when plotting, that certain dimensions have been forgotten. There is no alternative but to return to the building and check them. This can be difficult if the building is some distance from the office. In those circumstances, the prudent architect will take equipment along to enable the building to be roughly plotted out on site as a check.

Each room or space on the survey drawing must be given a number so that they can be identified easily by giving them the same number on the alteration drawings. Describing the rooms simply as 'N-E Bedroom' or 'Small Rear Office' simply leads to confusion. It is good practice to provide the contractor with a set of drawings of the building as existing so that comparison of existing and proposed can be made readily. The following is a brief check list covering the major areas to be considered when carrying out a survey.

### ***Building Site***

#### *Development*

- Permitted development and restrictions under the structure and local plans.
- Zoning, density, floor space index, etc. as applicable.
- Improvement lines.
- Proposed adjacent development.

#### *History of the site*

- Rights of public and adjoining owners.
- Boundaries or party walls or fences.

#### *Nature of ground and subsoil*

- Trial holes or other evidence of nature of subsoil.
- Precautions against subsidence, seasonal variations in subsoil and water table.
- Safe bearing capacity of subsoil.
- Report from mineral valuer and geologist.
- Liability to flooding.

#### *Condition of site*

- Levels and gradients.
- Benchmarks.

- Shelter or exposure from surrounding ground.
- Direction of prevailing wind.
- Aspect and orientation.
- Dimensions and area of site.
- Existing trees and features.
- Existing buildings on the site and on adjoining land.
- Overhead cables and poles.

#### *Services*

- Position, size and depth of public sewers.
- If no sewer, suitability and possible siting of septic tank and overflow outlet.
- Utility services available, such as gas, water, electricity, etc. with names and addresses of supply undertakings.
- Position and pressure of water main.
- Electricity supply, voltage, capacity of any existing cables.
- Position and size of gas main.
- Telephone service.
- Possibility of sinking a well.

#### *Communications*

- Means of access.
- Nature and proximity of public highway.
- Rights of way across site.

#### ***Existing Buildings (in addition to the foregoing, so far as applicable)***

##### *Drawings*

- Plans, elevations, sections, details as necessary, drawn to scale.

##### *Construction*

- Type and method of construction of foundations, walls, floors and roof.
- Wall and floor thicknesses.
- Hidden construction features.
- Special finishes.

##### *Condition of structure*

- Signs of rot, beetle or other infestation etc., in timber.
- Decay or spalling in concrete.
- Excessive rusting or distress in steel members.
- Looseness of plaster surfaces.
- Deterioration of uPVC.
- Damp penetration through roofs, flashings and gutters.
- Condensation.

- Damp-proof course to walls.
- Settlement cracks.
- Windows, doors, etc.

#### *Condition of services*

- Gas, water, electricity, drains, central heating, hot water, TV cable, aerial or dish, vacuum, computer, specialised gases or other links.
- Possibility of extending the services.

#### *History of the building*

- Age.
- Purposes of previous occupation.
- Quality of previous maintenance work.

## 15.4 The brief

One of the architect's most important functions is the taking of an accurate brief from the client. Yet many architects are very careless in this respect. The brief is the client's instructions to the architect. It may be intensely detailed and complex and, since the architect's task is to satisfy the brief, it is essential that it is as clear as possible. Of course, it may not be possible to produce a very clear brief. Indeed the very essence of some briefs is the vagueness and the freedom of the architect to produce a solution within very broad parameters. This is probably because in those instances, the client does not know what he or she wants.

That raises another important point. The architect's function is really to produce not what the client wants, but what the client needs. That is the function of every professional person. The process of setting down what the client needs may take a long time. Once accomplished, the design process may be swift. In some cases, such as the brief for a new hospital, the pace of development may be so quick that there is never any hope of the architect producing anything more than a loose brief designed, hopefully, to accommodate as many changes as possible so that the design will never be finally fixed until the contractor has left site.

The traditional method of taking a brief would result in a schedule of the accommodation required. That system should long since be defunct in favour of a user requirement study or some development of that principle. The idea is that the architect analyses the client's needs in terms of activities and identifies, in respect of each activity a number of key criteria including direction of movement, areas, volumes, requirements for finishes, orientation and aspect, interaction with other activities and to what extent, numbers of persons involved, special requirements ancillary to the activity and social and psychological needs.

A great deal of work may be necessary to produce a brief of this nature in terms of research or operational study or both. In many cases, it will not be justified

if the proposed building is a common building type. Even if that is the case, the architect should always be wary that the brief which the client has come to know and love over the years may be flawed or may have become flawed with the passing of time and the introduction of new processes, etc.

The result of any briefing exercise will be something in writing or, in some instances, in graphical form. Wherever possible, the architect should try to schedule information in logical form and to confine other written material to note form. There will be much information in the form of hard facts, but there will also be much in less tangible form. It is often useful to separate the two. The brief should always be confirmed to the client before the next stage is commenced.

## 15.5 Reporting

Architects are expected to report to their clients at various stages throughout the design and construction period. Stage 1 is probably the earliest stage at which a client can expect a formal report and, of course, such a report will not always be in writing. Indeed, for a very small project and an unsophisticated client, a written report is probably quite inappropriate.

It is often difficult to decide when to report and when a report is unnecessary, but it is usual to make a report of some kind whenever an architect wants some kind of decision from the client. The purpose of the report in such an instance is to acquaint the client with the appropriate information on which to base a decision. There will be other instances when the architect requires no decision, but it is simply good client relations to report on progress. A client, like anyone else, always likes to know that he or she is not forgotten.

The following list indicates typical reports the architect may produce while running a project, not all of which will be applicable on every project:

- feasibility
- outline proposals
- scheme design
- progress reports
- extension of time
- loss and/or expense
- special reports, i.e. before termination, after insurance risk damage, etc.

The architect will also be responsible for passing on and, if appropriate, commenting upon reports received from other consultants. For instance, cost reports from the quantity surveyor, reports on structural condition from the structural engineer etc. Sometimes such reports are submitted direct by the consultant concerned and the client may particularly require cost reports to be submitted directly. However, from an organisational point of view, it is better that they pass through the hands of the architect so that the employer deals with one person and a possible clash of professional interests is avoided. Some brief comments on report writing are covered in Chapter 8, section 8.5.



## References and notes

1. See 'The RIBA Plan of Work 2013 Overview', Editor Dale Sinclair, published by the RIBA London, p. 7.
2. Glover P, *Building Surveys* (2008), Butterworth-Heinemann; Hoxley M, *Construction Companion to Building Surveys* (2002), RIBA Publishing.
3. Hollis M, *Surveying Buildings* (2005), 5th edition, RICS Books.

# 16

## Stage 2: Concept Design

This stage is compared to the RIBA Plan of Work as follows:

‘Concept Design maps exactly to the former stage C – Concept’<sup>1</sup>

The 2007 Plan of Work Describes stage C as:

‘Implementation of Design Brief and preparation of additional data.

Preparation of Concept Design including outline proposals for structural and building services systems, outline specifications and preliminary cost plan.

Review of procurement route.’

### 16.1 Design data

During these stages the architect will be involved in developing the brief, carrying out user requirement studies, gathering appropriate information, trying out solutions in consultation with other members of the team and preparing an outline proposal. It has already been seen (see Chapter 15, section 15.4) that the architect must prepare a brief on the basis of client needs rather than client wants if the two do not coincide. If the brief is considered a problem, the architect can only start to find the answer when all the necessary data have been assembled.

Much of the data will be collected as part of the feasibility study (see Chapter 15, section 15.1). Other factual material will concern relevant Acts of Parliament, Statutory Instruments and Regulations and the recommendations of appropriate bodies (e.g. Sports Council). In addition to this material, the architect will be concerned with user requirement studies. Some of this work may have been carried out while preparing the brief, but it is usual for more detailed studies to take place after the feasibility stage has been completed.

User requirement studies, put simply, attempt to encapsulate in easy reference form all the criteria which the user requires of the building. All buildings have more than one user, and there lies the problem. Each user may have slightly, or even widely, differing requirements. Sometimes, different classes of person use the same building but they have almost opposing requirements. An example of a building where this is the case is a courthouse, where not only are

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the requirements of judges, prisoners and public quite different, the circulation routes must not cross. When one takes into account the needs of police, court officials, solicitors and others involved in the cases for trial, not to mention the complex administration requirements, a courthouse of any size becomes a very complex building. There are other buildings with equally complex user requirements such as hospitals and airport terminal buildings.

Some part of the user requirement study will be factual, other parts will be more subjective and need to take into consideration such things as suitable environmental, social and psychological factors. During this stage, the architect will try to visit some good examples of the building type under consideration. Much other design data will be standard for most projects (see Chapter 8, section 8.13.4).

The point to appreciate is that all relevant design data must be available before the architect can seriously attempt to formulate even outline proposals. There is a need to emphasise this point because the temptation to launch into the design stage of an interesting project before all information is to hand can be hard to resist. The quantity surveyor will be providing advice about cost planning at this preliminary point.

## 16.2 Concept design and its development

This is not the place to discuss architectural design. It is beyond the scope of this book. Most clients are not at all interested in design theory, they are only interested in results. If the results are bad, the theory is irrelevant.

As a basic principle, the architect should always keep the client informed of the progress of the design work. This is especially the case if the architect wants to attempt something rather different from the norm. In such a case, the client's agreement should be obtained first. In most cases, a client is interested only in such fundamentals as whether the building will successfully keep out the rain, the cold, how well it works and how much it will cost to build and to run. An architect who can keep a client happy on those points will have little to worry about. We are not aware that any architect has been the subject of legal proceedings purely because the client disliked the proportions of the front elevation or the overall massing of the building.

As a general rule, the architect should only present one proposal to the client. There are exceptions to this as to every other rule, but they will be rare. The client looks to the architect and other members of the design team to produce a solution to the problems contained in the brief. Above all, a client expects advice. The team may well come to the conclusion that any one of a dozen different schemes could be developed into an acceptable project, but it is their function to recommend the one they consider to be the best. Unless the client has expressly asked for alternative proposals, one proposal shows that the architect is carrying out the job of eliminating options. Most options should be eliminated by a consideration of the brief and the rest at feasibility stage. To present proposals which show major differences at this stage suggests that the architect has not carried out earlier tasks adequately.

During this stage the architect will perform certain management functions. Co-ordination of the design team is an ongoing process throughout the design and construction stages of any medium to large project; this is when a design matrix may be helpful. As part of this process, the architect will be concerned with putting in place the procedures which will ensure that the team works as a team and not as a group of individuals, although it must be admitted that the ideal is easier to envisage than to achieve. A key factor will be the lines of, and frequency of, communication. As a general rule, all communications should be to the architect whose job is to see that the appropriate information is properly distributed. Although it is vital that the structural engineer has all the information needed to enable a proper contribution to be made to the project, the architect must take care that individual team members are not swamped with information 'just in case' it might prove useful. This is where the managerial qualities of the architect should come to the fore.

It is useful to have a meeting for the team at the beginning of this stage to establish the key following matters.

- The objectives (often overlooked, see Chapter 7, section 7.1).
- Available information regarding the brief, basic design data (see section 16.1), cost limits, timetable set by client or other restraints.
- Sustainability aims, how maintenance is to be approached, how these issues relate to the handover process and risk assessment.
- Matters to be dealt with as priorities.
- Design team procedures, including roles and communications.
- The very important topics of procurement systems and contractual arrangements, tendering, type of bills, specification, schedules, and work methods.
- Any particular drawing techniques or systems (such as Building Information Modelling). It may indeed be a little late in the day to decide this point and it is something which the architect should consider at briefing stage. The reason is that some consultants may not be willing to work within any given system. Most firms use CAD but it is by no means yet common for firms to use BIM. That will probably take some time to evolve. They may in fact have a fully operational computer drawing system which is incompatible with the architect's own system or, rarely, they may have no system at all.
- System of carrying out cost checks during design.
- List of actions to be taken.
- Programming and progress techniques for the design team and for the project in construction.

At some point in Stage 2 the architect will apply for outline planning approval. At the end of Stage 3, full planning permission should be sought (see Chapter 17, section 17.2).

## 16.3 Cost estimates and planning

The quantity surveyor is the expert on costs. There is a world of difference between producing an estimate of the probable cost of a building from a set of drawings and producing a similar estimate from a brief and, as the design

develops, putting together a cost plan which enables the architect to work within known cost limits in respect of each element. The cost plan will be developed and refined as the design crystallises. An experienced architect may make a reasonable attempt at the former, but only a skilled and experienced quantity surveyor will be able to carry out the latter with sufficient accuracy to be useful. Exactly when the cost plan should or can be produced will vary dependent on the circumstances. As a basic rule, it should be produced as soon as possible, because it is an indispensable tool which the architect requires to design properly. Basic cost indications must be given during this stage even if the cost plan proper cannot be produced until Stage 3.

The client will have stated what can be afforded, but the architect may have to use some strategy in getting the true figure. On the basis that all building work costs more than expected or planned, the client will often present the design team with a reduced figure. When this happens, the team set their sights accordingly and when construction is nearing its end the client sometimes indulges in an orgy of expenditure and uses up the hidden balance in pointless extras when it would have been put to better use in perhaps increasing the overall floor area, or heights, or other fundamental provision. Be that as it may, the team can do nothing other than to work to the budget given by the client. To do otherwise would amount to negligence and, at the very least, the professionals would lose their fees.

Although the client may say that the maximum expenditure is, say, £10,000,000, that information is of little help to the architect except in very general terms. It can be translated into rough areas or volumes on the basis of different constructional systems and finishes, e.g. expensive or basic. What the quantity surveyor can do is to produce a cost plan for the designers which allocates a sum of money to each element. For example the cost of walls may be expressed as £x per square metre, similarly for floors, roofs and so on. Allocations for furniture can be made on a room by room basis. More importantly, the quantity surveyor can give the architect an idea of what those sums of money represent in terms of construction and finishes by giving a range of examples in each case. In order to be able to do this, the quantity surveyor has to be able to call upon a file or database of cost information and trends built up over a considerable period.

The cost plan can be presented in different ways, so that for example, if a housing estate is being considered, a price per dwelling may be expressed together with a figure for district heating, another for roads and footpaths, landscaping and so on. Over the years, professional journals have featured buildings whose costs have been presented in this way.

Irrespective of the level of detail within the cost plan, the overall accuracy of the costs is ultimately dependent on the design detail available and the extent of outstanding risks with potential cost implications at the time of estimating.

## 16.4 Procurement paths and implications for the professional

The procurement system should be the most appropriate in the light of the criteria signalled to the architect by the client during and after the briefing stage.

In choosing a procurement path, the key criteria are the client's priorities in respect of:

- time: economy and certainty
- cost: economy and certainty
- control: apportionment of risk
- quality: in design and construction
- size/value: small/medium/large
- complexity: complex/simple.

There are as many different procurement systems as there are pebbles on the beach, but some of them are different only in detail. Most procurement is based on the following principal systems:

- traditional
- project management
- design and build
- design and manage
- management contracting
- construction management.

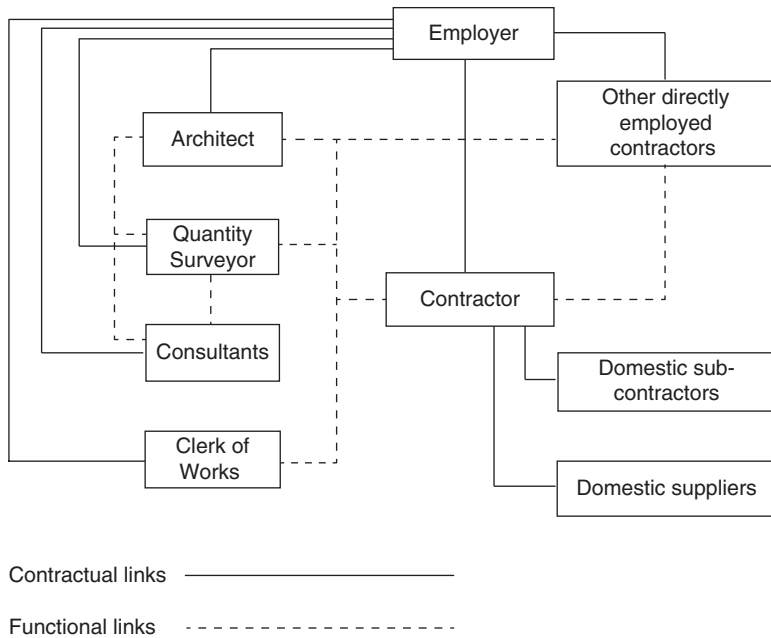
These are the systems which are different from each other in significant ways. Other systems of procurement are touted from time to time, but they tend to be based on one or other of these six processes.

### 16.4.1 Traditional

Very broadly, this is where the client commissions an architect to take a brief, produce designs and construction information, invite tenders, administer the project during the construction period and settle the final account. If the building is other than small and straightforward, the architect will advise the client to appoint other consultants to deal with particular items, such as quantities and cost estimating services generally, structural calculations and building services design. The contractor, who generally has no (or limited) design responsibility, will normally be selected by competitive tender or there may be good grounds for negotiating a tender.

It should be noted that the JCT 2011 suite of traditional contracts provide options for the contractor to carry out and to be responsible for design of specific parts of the building (the Contractor's Designed Portion) and this option is available in SBC, ICD and MWD, but that is a sophistication which simply acknowledges that there may be some elements of the building which it would be useful for the contractor to design.

The essentials of traditional procurement are that the architect is the independent adviser to the client responsible for the design. The contractor is only responsible for executing the work in accordance with the drawings and specifications produced by the architect and other professionals. Figure 16.1 shows the relationships of the parties in diagrammatic terms.



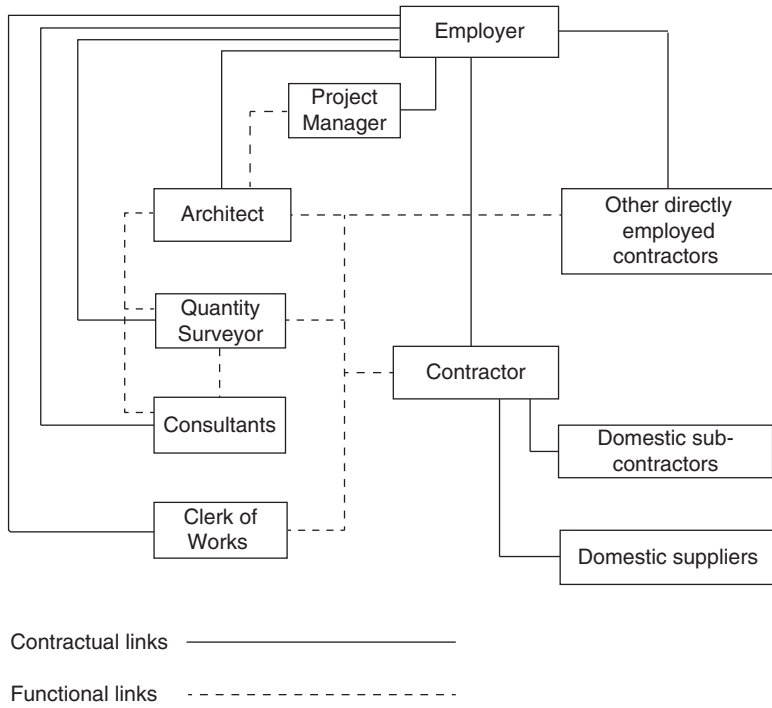
**Fig. 16.1** Traditional contract.

### 16.4.2 Project management

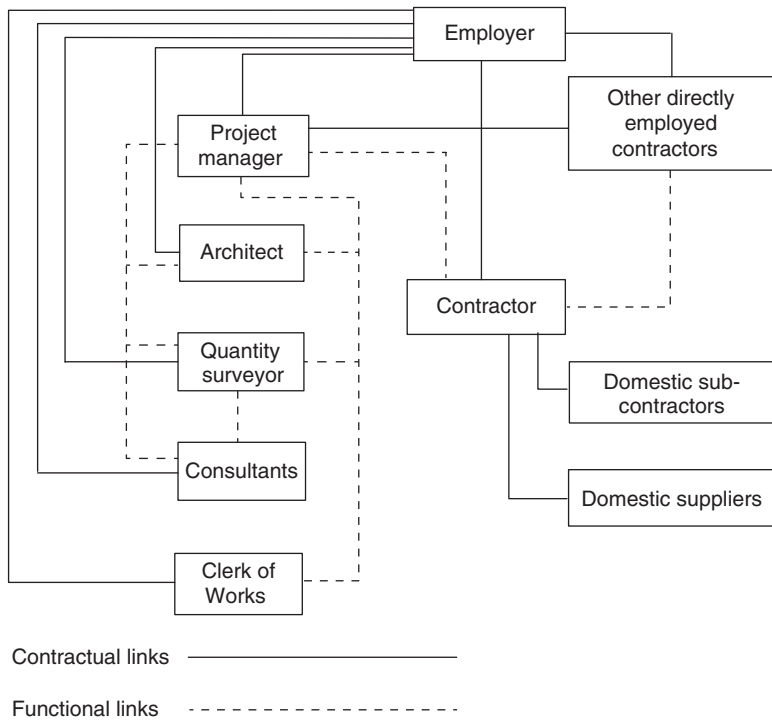
Although this is a somewhat imprecise term, it has much in common with the traditional system (see Chapter 13 section 13.6 for a description of the role). However, the architect is not the leader of the team, the project manager takes the lead. The project manager, of course, can be an architect and most architects would say that an architect is the obvious choice for the post in view of his or her particular training. Essentially, the project management system places most emphasis on planning and management. Therefore, a person, whether architect, engineer or surveyor, with the relevant project management skills is required. The project manager is likely to appear in one of two principal roles; either simply as the technical agent of the employer for the purposes of the project or as the professional with the authority to manage the project, including organising and co-ordinating all consultants. In either case, the project manager acts as a link between the client and the design team. Depending upon the particular kind of project management chosen, the contract administrator may be the project manager or the architect. Figures 16.2 and 16.3 show the relationship of the parties in diagrammatic terms.

### 16.4.3 Design and build

This is a system which has grown in popularity and which appears in various guises. Many so-called new procurement systems have design and build at their heart. It places responsibility for both design and construction in the hands of the contractor; a single point of responsibility for a client. This approach seems



**Fig. 16.2** Project management type 1.



**Fig. 16.3** Project management type 2.



to be attractive for Government projects. There are variations in the name and there are subtle differences in meaning. *Design and build*, for example, refers to the basic system where a contractor carries out the two functions. *Design and construct* includes design and build and other types of construction such as purely engineering works. *Develop and construct* often describes a situation where a contractor takes a partially completed design and develops it into a fully detailed design. *Package deal* can be used to refer to either of these. In theory, the term suggests that the contractor is responsible for providing everything in one package and it is particularly apt when referring to an industrialised building. *Turnkey* contracting is a system in which the contractor really is responsible for everything, including furniture and pictures on the walls if required. The idea is that the employer simply turns the key and begins using the building - hence the name.

Many architects are unduly concerned about design and build as though every such contract is one less for an architect to design. Nothing could be further from the truth. Unless the building is very simple, the contractor will seek an architect to carry out the design including all the preliminary briefing and feasibility work, where necessary, and also the preparation of constructional drawings. From the client's point of view, an independent adviser is required to look after the client's interests before, during and after construction. There is no doubt that the architect's role is different from the traditional one, but that should not be a problem. It does not necessarily mean, because an architect has a contractor for a client that he or she will be unable to produce good architecture. It is very much in the contractor's interest that the employer is happy with the finished building.

The employer may approach a design and build contractor as soon as the intention to build starts to form. The contractor then takes charge of the project until completion. The architectural function will either be carried out in the contractor's own architects' department or, more commonly, by sub-letting the work to a firm of architects in private practice. An architect in such an instance will owe a duty to the contractor, which will depend on the conditions of engagement agreed for the work. Generally, the duty will probably be to carry out the architectural functions in obtaining and satisfying the brief and perhaps to carry out quality control duties on behalf of the contractor during the construction period. An architect in those circumstances will have no duty to the employer other than the common law duty to ensure that the design will not result in injury or death to the employer or those who will use the building and damage to property other than the building itself.<sup>2</sup>

Alternatively, the employer may engage a full design team to complete the design of the building and a great many production drawings in some detail before seeking tenders from contractors to complete the design and to construct the building.

Most commonly, however, the employer will engage an architect to prepare an outline scheme together with a performance specification on which contractors will be invited to tender. The architect will organise tendering and will act as the employer's agent under the contract. The contractor will engage an architect to

do the detail design development work and to produce the production information to satisfy the performance specification.

A system which is increasing in popularity involves what is known as a 'consultant switch'. In this system, an architect or even a full design team is engaged by the employer to prepare all the initial material. This contract comes to an end at about tender stage and tenders are invited on the basis that the successful contractor will take the design team on board as the contractor's consultants to complete the work. When a contractor is appointed, it is placed under an obligation to enter into a contract with the architect to carry out the relevant services for the contractor during the construction period; a term to this effect is included in the building contract. There must be a term in the original appointment with the employer which obliges the architect to enter into a further appointment with the contractor and there must be a copy of the proposed architect/contractor appointment attached to the original appointment with the employer to signify that the parties agree the wording. When tenders are invited, the contractor must agree to the switch and to the terms of the appointment with the architect. The two appointments may be, and often are, entirely different. There is no need for a three-way agreement. The architect and employer still retain liability to each other for the performance of the original appointment and none of this liability is assumed by the contractor. The architect must remember who the client is at any particular moment, because the contractor will require a somewhat different service than that which was given to the employer. After the switch, the employer must either do without independent advice or engage another architect for that purpose.

This system is often wrongly referred to as 'novation'. Novation is similar in general effect, but with some important differences. It is a legal procedure by which a contract between the architect and the employer is replaced by another contract on identical terms between architect and contractor. Because, as noted above, the contract between architect and employer and architect and contractor will require different terms, novation agreements commonly incorporate a schedule of changes. The agreement must be made between all three parties. In novation, a contractor who effectively replaces the employer assumes all the responsibilities of the employer to the architect as though the contractor had been a party to the contract instead of the employer from the beginning. The architect assumes liabilities to the contractor and releases the employer from liability. The architect is released from liability to the employer. To be effective, the original contract between employer and architect must contain a clause agreeing to the novation and the three party novation agreement must be attached to the contract to signify that both parties are agreed on the wording. When tenders are invited, the contractor must agree to the novation and to the terms of the novation; a term to this effect is included in the building contract. It is sometimes seen as a means of assembling all the design responsibility in one place more effectively than can be achieved by other means. Whether that is so is open to question.

Many so-called 'novation agreements' are not strictly so. A proper novation agreement simply replaces the employer with the contractor, releasing the employer from any liability to the architect and vice versa. The contractor is

inserted into the contract as though the contractor had been the employer from the beginning. Novation agreements drafted by the contractor's solicitors will invariably contain what has come to be called a 'Blyth and Blyth clause'. This follows a case in which a contractor unsuccessfully attempted to recover damages from a firm of engineers who, it was alleged, had acted negligently during the time they were engaged by the employer.<sup>3</sup> The contractor failed, because it was unable to show that the employer, in whose place the contractor now stood, had incurred any loss as a result of the alleged negligence although the contractor certainly had done so.

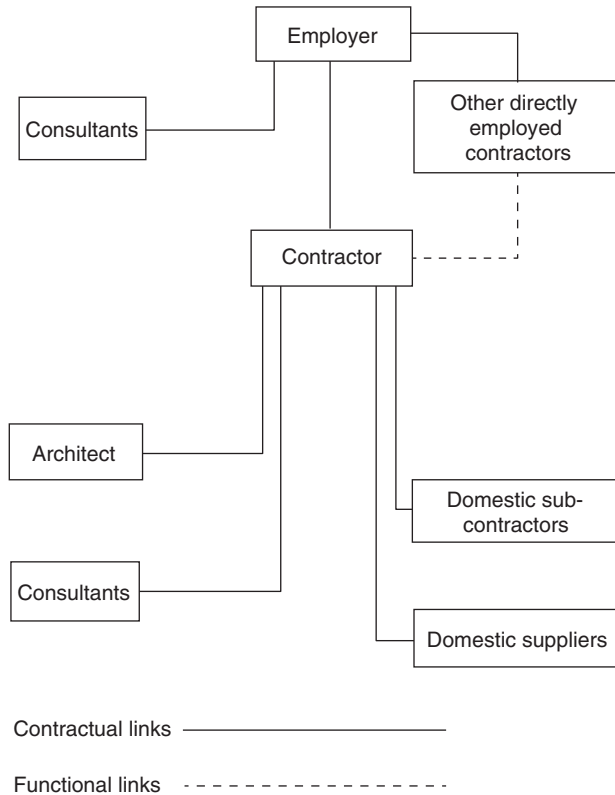
Although both consultant switch and novation are popular, it is difficult to see how the architect or any of the design team in such instances do not find themselves in a conflict situation. Doubtless, the only thing which prevents such situations becoming serious professional issues is the fact that both employer and contractor agree to the arrangement in full knowledge of the implications.

The very worst thing that an architect could do would be to try and act for both employer and contractor. There is a clear conflict of interest. Although it may be thought that no architect would be so ill-advised as to attempt to act for both parties at the same time, the reality is that many clients have their own solicitors to draft architect's terms of engagement which, surprisingly often, provide that the architect must report back to the employer on progress and other things while working for the contractor. Clearly that is completely untenable and one may imagine the reaction of those same solicitors if it was suggested that they should act for one party while reporting back to another.

A particular point which architects should watch if they are asked to carry out work for contractors in a design and build scenario is the extent of the design obligation. An architect's normal obligation, like that of any other professional man, is to use reasonable skill and care. In contrast, the normal design and build liability, unless expressly amended, is to produce an end result which is fit for its purpose if that purpose is made known. The contractor may well attempt to engage an architect on 'fit for purpose' terms. Quite apart from the fact that such liability is very onerous and admits of no 'state of the art' defence, the architect's insurers are almost certain to refuse cover (see Chapter 10.5). The DB contract, like its predecessors, restricts the contractor's design obligation to the normal duty of an architect – to take reasonable skill and care.<sup>4</sup> (Figure 16.4)

#### 16.4.4 Design and manage

This is comparatively rare in this country. Single point responsibility rests with a professional who may be architect, engineer or surveyor. Besides being responsible for the design of the project, the professional also manages the project in the sense of managing the other professionals and also the construction process in the form of, probably, a number of sub-contractors and suppliers. The few architects who become involved in this type of procurement have a background, or employ others with a background, in contracting. In this situation, the architect must be careful to explain to the employer that if the employer requires independent professional advice, another architect must be appointed.



**Fig. 16.4** Design and build.

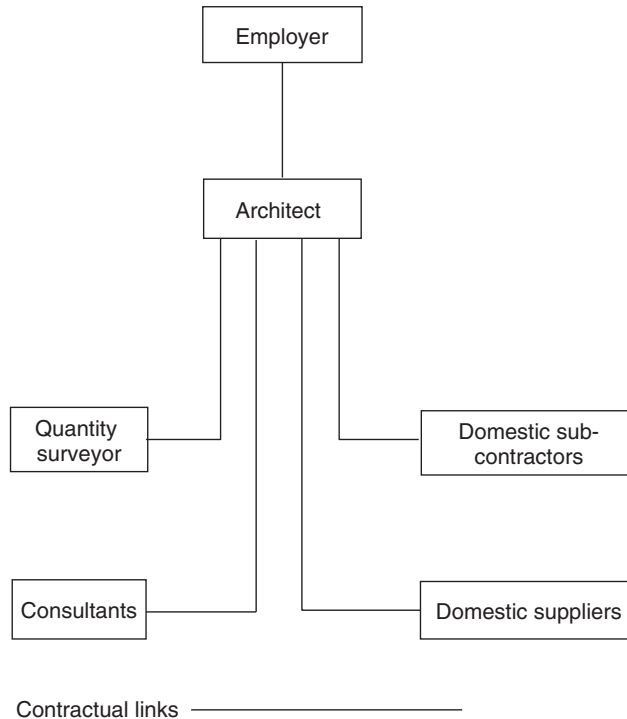
This type of procurement is ideal where relatively small projects require very precise control over every aspect of the design detailing.<sup>5</sup> (Figure 16.5)

### 16.4.5 Management contracting

This system seems to be waning in popularity as design and build increases its stake in the construction market - or perhaps design and build is gaining in popularity as management contracting is decreasing.

The contractor is selected at an early stage. It is not normally responsible for carrying out any of the construction work. The contractor simply has a management function for which a fee is paid. The construction work is divided into a number of packages with the contractor’s advice and tenders for these individual packages are invited as appropriate to suit the programme. The works contractors are in contract with the management contractor and the employer pays only the works contracts costs without the addition of any contractor’s overheads or profit. In this respect the system has something in common with prime-cost contracting.

This type of contract has much in common with earlier forms of traditional contract in which all the work was sub-let to sub-contractors. Management

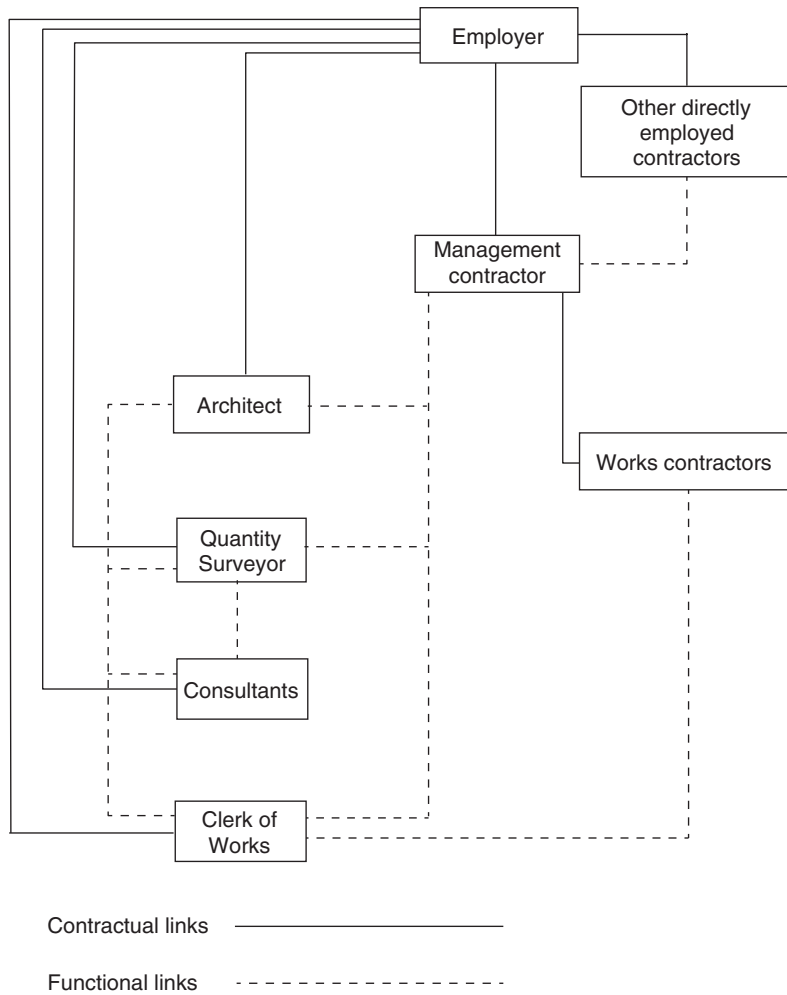


**Fig. 16.5** Design and manage.

contracting is commonly said to allow the employer considerable freedom for changes of mind while preserving price and end date. Such a contention is clearly contradictory and management contracts in practice appear notable for escalating costs and shifting end dates. The employer takes more risk under a management contract than would be the case under a traditional procurement system, but this is the price paid for greater control over the work. Although it is often said that the contractor is one of the design team under this procurement system, the reality is different. The fact that all the works contractors are in contract with the management contractor means that defective work or materials is the responsibility of the management contractor.

This is the system most often referred to as 'fast track'. The idea being that work begins on site as soon as sufficient production information has been produced to enable the first works contractors to start. The architect and other consultants are then involved in a constant race against time to produce the remainder of the drawings in time for the succeeding works packages. The architect must also be sufficiently organised to ensure that subsequent drawings do not necessitate the reconstruction of work already executed.

A few years ago, architects who failed to have all the drawings ready before a project began on site were heavily criticised by quantity surveyors, contractors and employers alike. From that point of view management contracting could be said to have made a virtue out of necessity. Architects should not be



**Fig. 16.6** Management contracting.

misled, however, by the apparent glamour of fast track contracting. The architect's liability is exactly the same. The system imposes a tough discipline on all sides. The employer must be precise in requirements and prepared to hold fast to decisions. The preparation of information must be scheduled and on target, and the management of the contract must be tight. Any disputes which may arise can usually be traced to a failure to adhere to these principles.

It is, of course, quite difficult to perform under conditions of stress such as occur during fast building. It can be compared to driving a car: the faster the car is driven, the better the road and the mechanics have to be, and the further the driver has to see ahead. The driver is called upon to exercise more, not less, skill. The fast driver who has an accident is told that he or she should not have been driving so fast. The architect who makes a mistake purely as a result of fast building techniques must be told to get out of the fast lane<sup>6</sup> (Figure 16.6).

### 16.4.6 Construction management

Once again, this system calls upon the contractor to act simply in a management capacity for which a fee is paid. The design team is often appointed directly by the employer, but in some instances the contractor may appoint. In such cases, the system has some of the flavour of project management. The key difference between this system and management contracting is that the individual works contractors (they are usually termed 'trade contractors' under this system) are in contract directly with the employer.

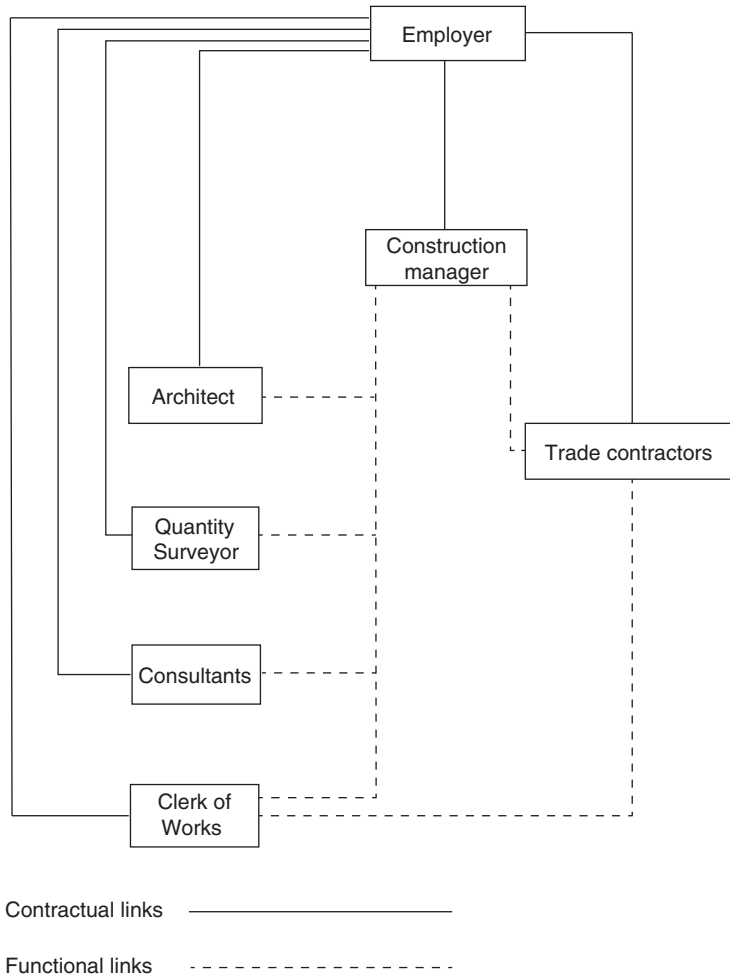
This overcomes a number of problems encountered under the management contracting system; notably, it allows the contractor, as construction manager, to become one of the team alongside architects, engineers, quantity surveyors, etc. and the trade contractors are liable for their breaches directly to the employer without the problems of an intervening contractor in the contractual chain. Although details vary, the construction manager is usually responsible for managing not only the trade contractors, but also the other consultants. Some very large projects have been carried out using this system which calls upon the same kind of skills from the design team as required under the management contract. Figure 16.7 shows the relationship of the parties in diagrammatic form.

There are other ways of separating procurement systems such as by method of price determination (e.g. measurement or cost reimbursement contracts) which must in any event be taken into account, and by reference to the method of contractor selection, e.g. competitive tender or negotiation.

## 16.5 Contract selection and implications

If the architect is carrying out his or her normal duties in contract administration, it is the architect's duty to advise the client about the most suitable form of contract to use for the particular project. This is normally done with the assistance of the quantity surveyor, though an architect should be able to do this without assistance. This is recognised by most standard forms of appointment and noted in the list of services. Even if not expressly stated, it seems likely that such a duty would be implied. No two projects are exactly the same and, therefore, very careful thought must be given to the appropriate form. Architects do not have a good reputation in this field. In the rush of practice, it is all too easy to advise the client to use a contract form with which the architect is familiar. All other matters being equal this should not be a problem.<sup>7</sup> There are a considerable number of standard forms to suit varying situations and procurement routes.

The forms to be used for building works are summarised in Figure 16.8 together with available supplements. Ideally, the architect should have a thorough knowledge of each contract so as to be able to properly advise the client. An architect who advises the use of the wrong form of contract which results in the client suffering loss would be negligent.<sup>8</sup> In any event, it is certain that an inappropriate choice of contract will make it very much more likely that



**Fig. 16.7** Construction management.

problems will occur and that when they do, the contractor will have a justifiable claim for additional money. There are various publications which can assist the architect.<sup>9</sup>

Sometimes, a client will insist that the company solicitor draws up a suitable contract. The task of drawing up a suitable form of contract would be daunting to say the least even if the solicitor is well experienced in construction matters. In most cases, the result will be disastrous. It is always worthwhile the architect explaining to the client the basic advantages of using a standard form. They are as follows.

- It is comprehensive, covering most common construction situations.
- It is drawn up and updated at regular intervals to take account of the most recent legal decisions.
- It is known to the contractor and widely accepted in the industry. The contractor will be aware of the advantages and shortcomings and thus there will



**Joint Contracts Tribunal (JCT 11) Series**

Standard Building Contract (SBC)  
 With Quantities (SBC/Q)  
 With Approximate Quantities (SBC/AQ)  
 Without Quantities (SBC/XQ)  
 Intermediate Building Contract (IC)  
*Incorporating Designed Portion Supplement (ICD)*  
 Minor Works Building Contract (MW)  
*Incorporating Designed Portion Supplement (MWD)*  
 Design and Build Contract (DB)  
 Prime Cost Building Contract (PCC)  
 Management Building Contract (MC)  
 Construction Management Appointment (CM/A)  
 Construction Management Trade Contract (CM/TC)  
 Major Project Construction Contract (MP)  
 Measured Term Contract (MTC)  
 Framework Agreement (FA)  
 Constructing Excellence Contract (CE11 (see note in 'Abbreviations and Acronyms'))  
 Constructing Excellence Project Team Agreement (CE/P)  
 Repair and Maintenance Contract (RM)  
 Pre-Construction Services Agreement (PCSA)  
 Home Owner Contracts (HO)  
*Provision for sections is incorporated into relevant contracts (not MW or MWD) and there are other supplements available.*  
*There are adaptation schedules available for use with SBC, IC, ICD MW, MWD and DB in Northern Ireland*  
*Scottish versions of SBC, MW and DB are available.*

**Association of Consultant Architects**

Form of Building Agreement 1998 (ACA 3) 1999 revision  
 Standard Form of Contract for Project Partnering (PPC 2000)  
 Specialist Contract for Project Partnering (SPC 2000)

**Institute of Civil Engineers**

The NEC3 Engineering and Construction Contract  
 The NEC3 Engineering and Construction Short Contract  
 The NEC3 Term Services Contract  
 The NEC3 Term Services Short Contract  
 The NEC3 Supply Contract  
 The NEC3 Supply Short Contract  
 The NEC3 Framework Contract  
 The NEC3 Adjudicator's Contract  
 Most of these contracts are supported by matching sub-contracts.

**Royal Institute of British Architects**

Concise Building Contract 2014 (CBC)  
 Domestic Building Contract 2014 (DBC)

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**Fig. 16.8** Standard forms of building contract.

be no necessity for the employment of specialist professional to advise on the pitfalls. Thus there will be no inflation of the tender figure from this cause.

- Many of the standard forms have a range of related documents.
- Some of the standard forms and all the ones current in the JCT range are negotiated documents and will not normally be caught by the *contra proferentem* rule. That is the rule of interpretation of a contract which states that where there is an ambiguity in a document which other means of interpretation have failed to resolve, the court may choose the meaning least favourable to the party seeking to rely on it. Such contracts will not be caught by the Unfair Contract Terms Act 1977 either, because they are not the employer's 'written standard terms of business' under the Act.

The choice of contract should be the end of a sequence of activity on the part of the architect and the client. The contract should fit the procurement system (see section 16.4).<sup>10</sup>

Once a decision has been made in regard to the procurement system, the number of possible standard forms will be reduced. There will be some procurement systems which have no standard form. A current example is design and manage which is commonly dealt with by the use of purpose written forms or the use of design and build forms with amendments. Figure 16.9 shows a flowchart method of getting a rough idea of the appropriate form of contract.

It is not unusual to find that after a contract has been chosen as being most suitable, it still leaves a great deal to be desired in detail. It is possible to amend the standard forms, but five points should be noted.

- Any amendments must be kept to a minimum, because amendments often cause problems during the course or at the end of a contract period.
- Amendments invariably lead to concomitant amendments being required elsewhere in the contract and it is easy to overlook them. For instance, changes to the content of clause 4.16 'Gross Valuation' of SBC would have severe repercussions throughout the contract. Failure to pick up all the implications can have dire results.
- Amendments should be drafted by someone with specialist construction contract expertise.
- Since many standard forms contain a clause giving the printed form priority over other documents, amendments should be made on the printed form itself or the priority clause should be struck out. If the amendment is simply made in the specification or the bills of quantities, it will be ineffective.<sup>11</sup>
- The *contra proferentem* rule may apply to amendments.

## 16.6 Guaranteed maximum price

It has become common for contracts to be carried out on the basis of a guaranteed maximum price (GMP) as an add-on to virtually any of the basic

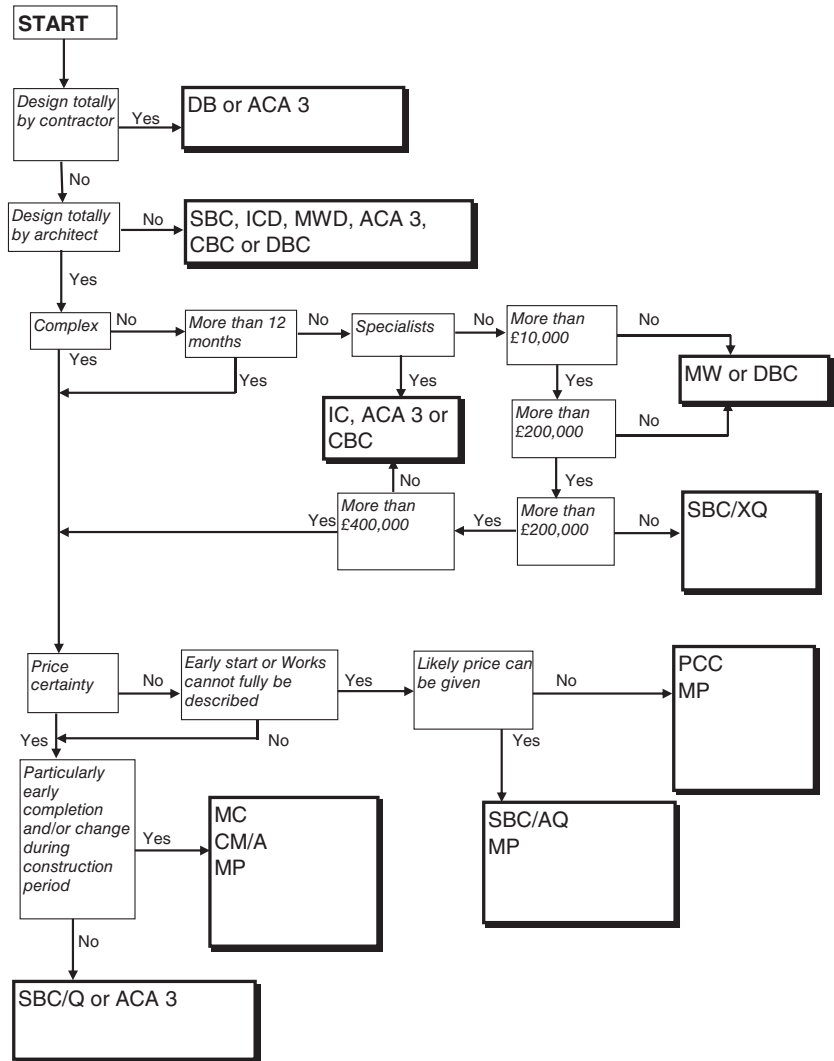


Fig. 16.9 Selection flowchart.

procurement systems. Despite the title, the price under such contracts is neither guaranteed nor maximum. The term is misleading and encourages employers to believe that the price is the maximum amount to be paid no matter what the circumstances arising during construction. Employers may be under the impression that the contractor is giving an unconditional guarantee that under no circumstances will the price be exceeded. The true position is that GMP contracts aim to achieve a degree of certainty about the maximum final cost of the project for the employer; no more and no less. The intention under a GMP contract is to place all the risk with the contractor except for employer changes or variations, or employer's acts of prevention which result in loss and/or expense.

Almost invariably, such contracts are based upon a design and build model. The contractor is expected to carry the risks associated with matters such as ground condition, services, weather and changes in legislation. There is no true GMP standard form of contract and most are specially drafted.

This kind of contract often has a target cost figure and the guaranteed maximum price is fixed above that. Any variations which increase the cost cause the target cost to be raised and the GMP to be raised by the same amount so that there is always a 'buffer zone' between the two. GMP contracts can be an effective method of keeping costs within a specified limit, but the disadvantages have to be accepted. The reality is that the contracts are usually on a design and build basis, which place a great deal of responsibility on the contractor in any event. This type of contract is often used in conjunction with terms dealing with sharing savings and some kinds of losses in certain circumstances.

## 16.7 PFI Contracts

The Private Finance Initiative was introduced in 1992. It is not a procurement system, because any of the systems set out in section 16.4 can be used with PFI. It has become clear, however, that procurement routes based on some form of design and build, certainly contractor led, are the standard. The idea was that the private sector should be involved in providing and operating various assets which might otherwise never have been started, e.g. a new hospital. The system envisaged the eventual return of the project to the public sector. The idea had much to commend it and many PFI projects have been commenced. Private finance invested in the public sector introduces a high level of technical, managerial and financial skills and experience. By this means a construction company might actually be in the position of creating its own workload.

It is usual for a Special Purpose Vehicle (SPV) to be set up for the express purpose of obtaining finance and carrying out the project. More often than not it is a joint venture (JV) company between the finance providers and the building contractor. In order to ensure that the SPV secures a satisfactory return on investment, the agreements with central or local government are normally for periods of as much as 30 years. While apparently ensuring the time to make a substantial profit, the long time period places a high level of risk on the SPV which will have entered into several undertakings about the services to be provided. The system is not yet proven. There has been criticism of the system and there are misgivings among some construction companies who have indicated that they have had to bear most of the losses. A closely related system is Public-Private Partnership (PPP).

Some types of development which the government has said would be suitable for PFI schemes include hospitals, prisons, public sector offices, types of housing, roads and railways. There are many complications and, of course, a whole new set of jargon is being created. Nevertheless, architects must have a thorough grasp of the implications.<sup>12</sup>

## 16.8 Partnering

Partnering has been defined as:

‘A management approach used by two or more organisations to achieve specific business objectives by maximising the effectiveness of each participant’s resources. The approach is based on mutual objectives, an agreed method of problem resolution and an active search for continuous measurable improvements.’<sup>13</sup>

Or, more succinctly as: ‘a structured approach to facilitate team working’.<sup>14</sup>

It is important to know the difference between ‘partnering’ and ‘partnership’. Partnership has been described in Chapter 5, section 5.2. When parties enter into partnership, they intend to, and do, enter into a very specific legal relationship. This is not what is intended by parties who enter into a partnering arrangement. Very often the parties will prepare a ‘charter’ which will set out their joint aspirations. It is rare for the charter to define a legal relationship although it may sometimes overlap into that territory. There is still a necessity for a legally binding contract.

Basically, there are two approaches to partnering. The first requires the parties to enter into a legally binding contract which includes partnering principles such as ‘trust’ as part of the contract. A problem with that is that many partnering concepts depend upon the good sense, co-operation and good will of the participants for their implementation. The courts have shown a reluctance to imply a general obligation of good faith into commercial contracts.<sup>15</sup> Some of those contracts which have included a ‘good faith’ type clause have been ineffective due to a lack of certainty in their meaning and therefore have had no significant influence on the other terms of the contract. There are some contracts specifically intended to include partnering principles. PPC 2000 and CE11<sup>16</sup> contracts are examples. Even the traditional JCT contracts SBC, DB, IC, ICD, MW and MWD were revised to include supplemental provisions to deal with collaborative working, cost savings, value improvements and prompt notification of disputes. How clauses such as IC Schedule 5 Supplemental Provisions paragraph 1 and clause 10.1 in ECC will be interpreted by the courts is simply not known; this therefore makes contract administration difficult and that much more uncertain.

The second approach involves the parties entering into a standard form legally binding contract while at the same time setting out the partnering objectives in a separate non-binding charter. This has the great advantage of separating the agreement which can be enforced at law from the other agreement which is simply an expression of how all parties want to work.

Partnering was one of the recommendations in the Latham Report.<sup>17</sup> Ideally, it should be a means to enable employers and contractors, or contractors and sub-contractors, or professionals and clients, to work together with the object of reducing costs for mutual benefit. It should also have the effect of reducing conflict between the parties. It is not a procurement system, rather it is a commercial system. If all the people interested in getting a finished building on site

were working in the same direction instead of constantly fighting, there should be benefits all around. Some basic principles have been established and are set out below. Not all of them are common to all partnering arrangements.

- Interests of all the participating parties must be identified.
- Potential conflict areas must be identified and eliminated if possible or if not possible, they should be reduced.
- A system of incentives and rewards must be established which enables all parties to share in the rewards.
- Quality and production targets must be set for each project and improved upon in succeeding projects. Systems of measurement against those targets must be devised.
- Systems must be put in place to encourage the parties to work ever more closely together.
- Each party must be open with the other – the so-called ‘open book policy’. The employer must have access to the contractor’s costs.

Any kind of building contract can be used to procure the project, but very often some kind of cost plus or target cost arrangement, with some form of incentive arrangement, is used. Some contracts are framed so that the contractor is always sure of getting the costs of the project, even if there is no profit. Theoretically in such cases, the contractor cannot actually make a loss, although the employer certainly can do so.

One of the problems is that partnering can suffer from the same affliction that bedevilled such concepts as ‘fast track’ and ‘management contracting’. Many people are unsure what constitutes partnering. They have heard that it is ‘a good thing’, but they are not sure why that is the case. Just as every self-respecting large contractor used to bill themselves as ‘managing’, so no project seems to be worth considering unless ‘partnering’ is mentioned in there somewhere. Partnering is more about setting in place a particular ethos than anything else. Concepts of good faith, trust and fair play are important. No two partnering arrangements need be, and probably are not, the same.

The chances of successful partnering are very much increased when there is a prospect of a continuous string of projects, because the carrot of further work and turnover is always there in the future even if the current project is a bit of a disappointment. The chances are lowest if just one project is involved or when tackling the last of a series of projects. Cynics may point out that partnering is merely serial contracting with attractive packaging. There is nothing wrong with that of course.

‘Serial contracting’ works like this. On the basis of the successful tender for the first contract, further contracts are negotiated. To operate properly, the projects should be similar in construction and type so that negotiation for future contracts on the basis of original contracts is feasible. It is usual for the employer to make some sort of limited commitment to the contractor for the whole series. However, it is not something which can be legally enforced since it is always subject to the successful outcome of negotiations. The advantage is that one set of tendering takes place and the contractor can use the experience gained on the first contract to improve efficiency on the second and so on. The maximum

benefit is gained for the employer if the basic terms for the whole series can be established when calling for the initial tender. An intended programme for all the contracts in the series should be set down at the outset if the contractor is to be able to calculate the potential benefits to the full. The system should produce savings for both parties.

Anecdotal evidence suggests problems arise in partnering if either employers or contractors use the cover of partnering to disguise business as usual. There are also success stories. At the root of most contractual disputes lies money. If the contractor is making an acceptable profit and the employer is not paying out much more than expected, things will go smoothly whether or not partnering principles are used.

## References and notes

1. See 'The RIBA Plan of Work 2013 Overview', Editor Dale Sinclair, published by the RIBA London, p. 7.
2. *Murphy v. Brentwood District Council* (1900) 50 BLR 1.
3. *Blyth and Blyth Ltd v. Carillion Construction Ltd* (2002) 79 Con LR 142.
4. DB clause 2.17.1.
5. DB clause 2.17.1.
6. DB clause 2.17.1.
7. *Cunningham v. Collett and Farmer* (2006) 113 Con LR 142 at paragraph 56 the judge said 'The recommendation of which standard form of building contract should be used for a particular project will usually come down to the consultant's personal preference and his previous experience. Such a subjective basis for choice seems to me to be entirely reasonable: if, as a contract administrator, a professional person likes and understands the way a particular standard form works, then, unless there is a very good reason why he should not use it in a particular instance, it seems to me to be to everybody's advantage if he recommends that form for use on his projects.'
8. Powell J, Stewart R, Jackson R, *Jackson & Powell on Professional Liability* (2008), 6th edition and second supplement, Sweet & Maxwell. In *Plymouth and South West Co-operative Society Ltd v. Architecture Structure and Management Ltd* [2006] 108 Con LR 77 the client succeeded in an action against the architects for professional negligence in failing to advise of a suitable contract strategy.
9. JCT Practice Note 2011, *Deciding on the appropriate form of JCT Main Contract 2011*, is a useful read. The *Guide to selecting the appropriate JCT main contract (2011)* is published as a flowchart. Both documents are available from the JCT website as a free download.
10. These factors, together with systems of contract choice are explained in Chappell D, *Which Form of Building Contract* (1991), Longmans, 1991. This book is out of date in that it refers to contracts which have been superseded, but the principles are still relevant.
11. *M J Gleeson (Contractors) Ltd v. London Borough of Hillingdon* (1970) 215 EGD 495.
12. Yescombe, ER, *Public-Private Partnerships* (2011), Butterworth-Heinemann; Geddes, M, *Making Public Private Partnerships Work* (2005), Gower; Akinoye, A and

Beck, M, *Policy, Finance and Management for Public Private Partnerships* (2008), Wiley-Blackwell.

13. *Trusting the Team* (1995), Centre for Strategic Studies in Construction, University of Reading and the Reading Construction Forum.
14. CIB (1997), *Partnering in the Team: a report by working group 12 of the CIB*.
15. *TSG Building Services plc v. South Anglia Housing Ltd* (2013) 148 Con LR 228.
16. See note in 'Abbreviations and Acronyms'.
17. Latham, Sir Michael, *Constructing the Team* (1994), HMSO.



# 17

## Stage 3: Developed Design

This stage is compared to the 2007 RIBA Plan of Work as follows:

‘Developed Design maps broadly to the former Stage D - Design Development - and part of Stage E - Technical Design. The strategic difference is that in the RIBA Plan of Work 2013 the Developed Design will be coordinated and aligned with the Cost Information by the end of Stage 3. This may not increase the amount of design work required, but extra time will be needed to review information and implement any changes that arise from comments made before all the outputs are coordinated prior to the Information Exchange at the end of Stage 3.’<sup>1</sup>

### 17.1 General

The team should have a very clear idea of the brief during this part of the work. Indeed, the brief should be finalised and there should be no question of changing it once this stage is complete and the client should be so informed, otherwise much wasted time and money will be involved. What was thought of in terms of concepts during the last stage now have to be developed, with the advice of appropriate consultants, into a design which is quite detailed, that is, the staircase must be capable of being made to work without altering its dimensions and space allocations for columns, beams and services ducts must be adequate. Structural and services systems must be agreed. It is during this stage of work that every member of the team has to make a determined effort to work together. It really is no use the architect saying that all the other members must fit their designs into his or her master design, neither should any other consultants stick out for their own particular preferences. Unless the final design is a true combination of all the team working single-mindedly to solve the client’s problems, the end result will be lacking in validity. A modern building is so complex that single-handed design is not feasible.

At the end of this stage, the architect should be able to present the client with design drawings which show how the building will work and look and, if up-to-date computer techniques are employed, how the users will experience living and working in and around the building as part of the overall environment. The effect of the building on that environment is an important part of current

design. The architect will be reporting on the environmental impact of alternative materials and techniques and a sustainability assessment should have been carried out.

The management function is much the same as in Stage 2, except that the procedures set up then should be fully operational and the architect is simply in the position of setting fresh objectives, timescales and ensuring that every member co-operates properly and at the right time. In addition, the architect will be ironing out any problems with relevant authorities, the most important of which will be:

- water
- electricity
- gas
- highways
- drainage
- fire
- telephone/communications
- environmental health
- cleansing.

Many of these authorities require layout plans before they can comment sensibly and it is essential that the architect has agreements before this stage is completed or the whole scheme can be put at risk. Even something like refuse collection may pose severe problems if not tackled early with the support, rather than the opposition, of the local cleansing department. The need to divert the course of a substantial length of main drainage can jeopardise the entire project.

It is useful for the architect to submit a written report with the presentation drawings in which the major strengths can be emphasised and any weaknesses made clear. The architect should ask the client for agreement to proceed to tender stage through the technical design, production information and bills of quantities stages.

## 17.2 Planning applications and approvals

### 17.2.1 The administration of planning control

#### *Summary*

Town and country planning administration functions in the UK at two main levels: a central government tier under the mantle of a Secretary of State (SoS) or Minister, responsible to Parliament or the National Assemblies in the case of Scotland, Wales and Northern Ireland; and a local government tier under elected Councillors in the shape of Local Planning Authorities (LPAs). Changes in the political scene in England have substantially reduced the emphasis on regional planning, with the abolition of regional planning bodies.

This section gives an overview of the key elements of the planning function in the UK as well as a summary of the various processes for seeking planning consent.

Apart from an initial summary of the positions in Scotland, Wales and Northern Ireland, to try to cover all parts of the UK in detail would be overcomplicated, although the planning system is broadly similar throughout.<sup>2</sup>

An excellent source of advice on planning, as well as the door to the online submission of applications or appeals is the Planning Portal,<sup>3</sup> which is the UK Government's online planning and building regulations resource in England and Wales.

Where there are complex planning issues involved, the use of a planning consultant is advised.

### ***National planning***

In England, town and country planning comes within the remit of the SoS for Communities and Local Government (DCLG), whose responsibilities include planning, housing, local government, building regulations and sustainable communities, and he is supported by a number of ministers.

National planning in general and for major infrastructure projects is prepared by the SoS. The Departments of Transport, the Environment, Farming and Rural Affairs (DEFRA), and of Culture, Media and Sport (DCMS) under their respective SoS hold responsibilities for some other planning functions. Legislation on planning passed by the UK Parliament applies only to England and Wales.

The **Scottish** Parliament is responsible for making laws affecting that country and Scottish Ministers prepare a National Planning Framework (NPF) which sets the national planning policy for that country. In the Scottish Executive, the Directorate of the Built Environment has several key roles to play within the Scottish Government. It maintains and develops the law on planning, provides policy and advice on key policy subjects, approves structure plans, and makes decisions on some major planning applications and appeals. The NPF sits at the top of the policy hierarchy and is the long-term strategy for the development of Scotland.

Devolved government in **Wales** gives specific planning policy powers to the Welsh Assembly. A Minister for the Environment, Sustainability and Housing has overall day-to-day powers on planning matters. The context for planning policy in Wales is contained within two main documents (i) Planning Policy Wales – guidance on the preparation and content of development plans and advice on development control decisions and appeals; and (ii) Minerals Planning Policy Wales – guidance for the extraction of all minerals and other substances in, on or under land. Changes or updates to planning policy are issued in Ministerial Interim Planning Policy Statements (MIPPs). Planning Policy Wales and Minerals Planning Policy are supplemented by a series of topic-based Technical Advice Notes (TANs) and Minerals Technical Advice Notes (MTANs).

In **Northern Ireland**, the Planning Service is an Executive Agency within the NI Department of the Environment. The Agency's work includes providing operational Planning Policy, Development Plans and planning decisions across the province for the time being through local area offices although some planning powers have been transferred to local councils.

### ***Local planning***

The administration of the planning system on a day-to-day basis still rests largely with LPAs which take a number of different forms.<sup>4</sup>

In the English shire counties, there is generally a two-tier system with the planning function split between the county councils for minerals, waste and transportation issues and the district councils for the rest. Some larger district councils and a few counties may however be unitary authorities in their own right, responsible for all their functions. These are slowly increasing in number. In metropolitan areas too, a single tier of cities, metropolitan districts or boroughs, known as unitary authorities administer the planning system. A Planning Board generally carries out the planning function in National Parks.

Local planning authorities are responsible for preparing development plans and processing planning applications for development as well as other planning related work. Usually decisions on major proposals are made by planning committees made up of elected members while the majority of decisions are made by planning officers under delegated powers. In recent years some other agencies, such as development corporations and joint planning boards, had the same powers as local planning authorities, but these have largely been disbanded.

In Scotland, planning powers at local level rest with 32 unitary Councils, some of which are cities or shires. These prepare local development plans for their area, apart from the four main city regions – Aberdeen, Dundee, Edinburgh and Glasgow – where the two-tier system will remain and there are Strategic Development Plans covering the wider city regions. Decisions on most planning applications are generally made by the unitary councils.

In Wales, local government is single tier, although some are called counties and some cities. There are 22 local unitary authorities in Wales and they work together with the Assembly Government in a statutory Partnership Council that also includes members from Community Councils, National Park Authorities, Fire Authorities and Police Authorities. Together they develop and implement policy that promotes a joined-up approach to local government. Together with National Park Authorities they each prepare local development plans under the Community Strategy, and determine planning applications.

In Northern Ireland, there are 11 local government Local Councils, but they do not currently carry out the same range of functions as those in the rest of the United Kingdom apart from building control and local economic development. The role of LPA is presently largely undertaken by the DOE.

## **17.2.2 Legislation in England**

Town planning legislation in England derives principally from the Town and Country Planning Act 1990 (the 1990 Act). Under this are a number of subsidiary Acts, and the 1990 Act itself has been amended twice.

Revisions to the 1990 Act were made firstly by the Planning and Compensation Act 1991 (the 1991 Act). This introduced new provisions in those four Acts about what was controlled and made some important new changes to planning

law, including changes in relation to development plans, the definition of development, appeals, enforcement and other matters. Further major revisions to planning legislation were proposed by Government in the late 1990s and after a lengthy period of consultation they were incorporated in the Planning and Compulsory Purchase Act 2004 (the 2004 Act). The 2004 Act focuses on major changes to the development plan system described below, with some significant changes in relation to development control. The subsidiary legislation is contained in:

- The Planning (Listed Buildings and Conservation Areas) Act 1990
- The Planning (Hazardous Substances) Act 1990
- The Planning (Consequential Provisions) Act 1990.

Mainly in response to delays in dealing with Nationally Significant Infrastructure Projects (NSIPs), such as energy generation, airports and docks, Governments are introducing National Planning Statements. The Planning Act 2008 (the 2008 Act) also includes extensive provision for dealing with those major applications.

The Localism Act 2011 abolished the *Infrastructure Planning Commission*, but has retained most of the procedures on the consultation process prior to reaching a decision and how the decisions will be made. The main difference is that now the Major Infrastructure Planning Unit, which sits within the Planning Inspectorate, will administer applications before advising the relevant Minister. The Minister will then make the final decision on whether the project should go ahead or not.

These Acts together, along with a number of rules, regulations and orders, comprise the Town and Country Planning 'Code' which controls development and use of all land and buildings in England and Wales. Some of the more significant statutory instruments made in recent years remain and are as follows.

- The Town and Country Planning (Use Classes) Order (1987, with later amendment) (UCO) which provides that certain changes of use are not material (i.e., important) and, therefore, are not development.
- The Town and Country Planning (General Permitted Development) Order (1995), with many later amendments) (GPDO) provides that an increasing number of modest developments or changes of use will be deemed to be permitted, often subject to extensive qualifications and restrictions. Development specified in the Order is commonly referred to as 'permitted development'.
- The Town and Country Planning (General Development Procedure) Order 1995, with later amendments) (GDPO) specifies the procedures to be adopted in the making and processing of all types of applications.

Government also lays down policies for the guidance of the local planning authorities in the exercise of their day-to-day control duties, and also directs how certain matters are to be dealt with. Policies are normally developed through a consultation process to clarify, update and simplify control of uses and development and in response to changes in procedure, as well as Draft Guidance documents on various topics.

### *Policy guidance*

National planning policy for England was radically consolidated in 2012 into the National Planning Policy Framework (NPPF).<sup>5</sup> This covers a wide range of topics including housing, good design, economic development, green belts, the historic and natural environments and climate change. Planning Advisory Notes (PAN) in Scotland (being replaced by Scottish Planning Policy (SPP)), and TAN) in Wales perform a similar function.

National Planning Practice Guidance (NPPG)<sup>6</sup> gives additional guidance on a wide range of subjects in England and supplements the NPPF. It is regularly updated online and is not published in hard copy.

In respect of major nationally significant infrastructure projects such as energy generation, airports, docks, strategic rail and road development National Planning Statements in England and Wales set broad planning policy

The national policies contained in the NPPF and additional guidance in the NPPG constitute a material consideration for the decision maker on planning applications and must be taken into account by LPAs both in preparing their development plan policies, and in the determination of planning and other applications both by the LPA and the Planning Inspectorate. Consultation drafts on proposed policies, as well as a variety of Ministerial statements and White Papers will carry limited weight too, as an indication of future policy.

Legislative and procedural matters are contained within government circulars, Statutory Instruments and directions. Included in the latter are rules governing circumstances where applications have been made for major proposals or significant departures from the development plan. These proposals have to be notified to the SoS who has powers to 'call-in' the application to be determined by him, usually after a public inquiry.

## **17.2.3 Development plans in England**

The UK planning system is increasingly plan-led, and therefore Local Development Plans play a vital part in the system for the control of development.<sup>7</sup> They constitute the main framework for allocating new major land uses, and against which applications for planning permission and planning appeals are determined and decisions are made about whether or not to issue enforcement notices against unauthorised development.

The development plan system helps ensure that there is both a rational and consistent basis for making these decisions. They also influence the scale, location and timing of development or redevelopment of land, having regard to the extent and availability of the necessary infrastructure. The 2004 Act in England has reaffirmed the general principle that the determination on the grant of a planning permission must be made in accordance with the development plan unless material considerations indicate otherwise or the plan policy has been overtaken by national planning policy.

The starting point for the decision taker in considering any planning application is therefore the development plan for the LPA concerned, and any provision in it relating to the specific site or area, or type of proposed development.

The 2004 Act has radically altered the form of development plans for the future. A new Local Development Framework (LDF) is being introduced over the next few years (see below). Work on preparing Core Strategies for those has already begun. Minerals and Waste Plans will continue to be prepared by County Councils to contain policies on those matters.

### ***Supplementary planning documents***

In order to give further guidance in interpreting and implementing policy, the LPA will normally produce a series of Supplementary Planning Documents (SPD) (previously known as Supplementary Planning Guidance (SPG)) on a range of issues that are of local importance. These guidance documents should have been subject to consultation and formal adoption, and as they carry weight, are material considerations in determining planning applications.

SPDs will form part of the LDFs and must be founded on the broader policies set out in the LPAs development plan. They will usually include Design Codes and guidance, Conservation Area Guidance, Town, Village and Parish Plans, Development Briefs for particular sites, vehicle parking standards and guidance on affordable housing provision. Early preparation of any application should involve searching the LPA's website both for relevant policies in the Development Plan and for any relevant SPDs.

## **17.2.4 New style of development plans in England**

The new style of development plans, introduced in England in the 2004 Act is grounded in an approach for more community involvement as well as contributing towards the achievement of sustainable development. Plans will have to be kept under constant review, and their implementation monitored. Most LPAs have produced a Statement of Community Involvement setting out how they will consult with the community about all planning matters including emerging policies and applications.

At the LPA level, councils must prepare a Local Development Scheme (LDS), which will set out what Local Development Documents (LDDs) they will be preparing. Gradually these make up an LDF which will replace all Unitary Development Plans and District Local Plans.

An LDF is a portfolio of LDDs, all of which will have to be subject to a sustainability appraisal and must generally comply with the NPPF.

Government has been putting increasing pressure on LPAs to produce new style Local Plans to cover the future development of their area for the next 15 or more years. These may comprise either a full Local Plan including allocation of sites for housing or employment, or a dual plan with a Core Strategy setting out a board spatial strategy and a Site Allocation Document which designates particular sites for development.

In all cases there will have to be extensive public consultation as well as close scrutiny by way of an Examination in Public before a Planning Inspector to test the soundness of the Plan and the extent of cooperation between Councils in preparing the Plan, especially in relation to the supply of land for new housing.

### ***Neighbourhood development plans***

A neighbourhood development plan may be prepared usually by a local community such as a Parish or Town Council or it may be by a community forum like a residents' or business development association. It has to go through a specific preparation process including local consultation and publicity, scrutiny and a local referendum establishes general planning policies for the development and use of land in a neighbourhood, like where new homes and offices should be built and what they should look like. The plan can be detailed or general, depending what local people want.

Neighbourhood plans allow local people to get the right type of development for their community, but the plans must still meet the needs of the wider area. Such plans will have to take into account the LPA's assessment of housing and other development needs in the area and generally conform to the adopted Local Plan.

Neighbourhood planning is a growing movement. Well over 1,000 communities have taken the first formal steps towards producing a neighbourhood development plan; many full draft plans have been produced for consultation and increasingly the plans have been passed at community referendums. They carry weight and are a material consideration on planning decisions, and part of preparing proposals for development should include whether there is a Neighbourhood Development Plan adopted for the area.

Local communities are empowered to seek a neighbourhood development order which allows the community to grant planning permission for a development that complies with the order. This removes the need for a planning application to be submitted to the local authority.

A Community Right to Build order gives permission for small-scale, site-specific developments by a community group.

## **17.2.5 Development management**

With a few minor exceptions the development of land in the UK may only be undertaken with written permission of two bodies. They are either the LPA, or the SoS (or on appeal by an appointed Planning Inspector acting on behalf of the SoS).

### ***Defining development***

At the core of the planning system of controlling development is the definition of 'development' itself, which is normally defined as the carrying out of building, engineering, mining and other operations in, on, over or under land or the making of any material change in the use of any buildings or other land.

If any works or changes of use come within that definition then it will amount to 'development' requiring planning permission unless that permission is granted under the general permitted development legislation – see below.

Where a person intends to carry out an act of development they must obtain planning permission by applying to the local planning authority or verify that what they intend to do amounts to permitted development. If they carry out



development without planning permission, where that is needed, they are liable to the process of enforcement.

### ***Permitted development***

Certain minor works, operations, or changes of use, which fall under the definition of ‘development’, are in turn granted deemed planning permission by legislation. The Town and Country Planning (General Permitted Development) Order (GPDO) as amended sets out, in separate subject areas, a list of types of development that (subject to complying with criteria set out for each) are granted automatic planning permission by the Government.

These sorts of development are known as ‘permitted development’ or ‘PD rights.’ In recent years the Government has significantly widened the scope of permitted development and this has resulted in a plethora of GPDOs. There is a prospect that these will be consolidated in due course, but a web search is likely to help identifying specific categories of permitted development, or this can be checked with the LPA.

Examples include:

- enlargements or alterations to dwellings, e.g. garages and extensions
- the erection of walls and fences in any location
- building and other operations on agricultural land
- some changes of use to retail or commercial premises
- temporary buildings and uses
- certain industrial development
- some developments carried out by local authorities or statutory undertakers
- certain types of demolition.

In some cases of agricultural development, telecommunications or demolition, prior notification has to be given in writing to the LPA, who in turn may require a formal submission or indicate that they do not wish to intervene.

Almost all permitted developments are subject to sometimes complex qualifications and restrictions, for example the amount a dwelling can be extended before planning permission will be required, whether the site is in a conservation area or whether the property is a listed building, etc. Permitted development rights can be removed by conditions put on a planning permission by the authority or by a formal Direction under Article 4 of the GPDO. Article 4 directions are mostly, although not exclusively, used in conservation areas and normally they must have the approval of the SoS.

Confirming whether the proposed development is in any area of special control, such as a conservation area, or is a listed building is an important initial exercise to determine what additional consents may be required, and whether there are any special design requirements. The LPA website may help to identify these.

### ***Local development orders***

Local Development Orders may be made by LPAs and give a grant of planning permission to specific types of development within a defined area. They are not

common but may cover enterprise areas where they are intended to streamline the planning process by removing the need for developers to make a planning application to the LPA. They create certainty and save time and money for those involved in the planning process.

### ***Use classes***

The Town and Country (Use Classes) Order (UCO) sets out a range of retail, commercial, residential and institutional uses in four basic classes. It provides that a change of use from a use in one class to another use in the same class may not be material and involve the need for planning permission.

The UCO does not cover every possible use of land. Each case has to be assessed for the primary and any secondary or subsidiary use on a site, to determine whether it clearly falls within one of the Classes in the UCO. There may be a mix of uses on a site or a site may be divided into sections and each section or planning unit may have a different class of use.

If a particular use does not fall clearly within a category in the UCO it may be considered to be *sui generis*; outside the scope of the Order. In that case planning permission is needed to change to any other use. It does not always mean that any change of use to or from a use so classified is a material one. The land use may also be mixed, perhaps with complicated primary and ancillary uses, such that an alteration in the respective relationship of uses may also require formal planning permission.

The UCO has been amended in detail in recent years and now separates such uses as retail and residential into different sub-categories, where a change from one sub-category to another may require permission.

Although changing from a use in one Use Class to a use in a different Use Class generally will require permission, the question must still be asked if there is a 'material' (i.e. significant) change. Furthermore, the GPDO specifically grants planning permission for certain changes of use, for example, from a use in class A3 (restaurant or café) to a use in class A1 (general shop use), but not vice versa.

## **17.2.6 Making a planning application**

The architect should always consult the planning authority or, with the consent of the client, engage a planning consultant at an early stage (see Chapter 15, section 15.1).

Pre-application consultation with the LPA is positively encouraged by Government and can help to identify the major issues or any problems related to the site or area, or provide advice about the type of supporting information that may be required with a particular type of proposal. Such pre-application approaches will normally require completion of a form and submission of details of the proposal to the LPA and often involve payment of a fee varying dependent on the type and size of the proposal.

Sometimes the LPA will be prepared to discuss the proposals with applicants or they may just respond in writing in due course. Such consultation should

identify issues that are likely to arise in considering the application such as to carry out consultation with the local community, and help to minimise the likelihood of the application being rejected. In some areas, LPAs may have a Development Panel of experts that can be set up to meet developers and their advisers and discuss early proposals. However, it may not be possible to gain any clear certainty as to whether a particular proposal is likely to be approved but reference to any pre-application consultation will need to be made at the time of any application.

Because of the complexity of dealing some of the planning conditions that are likely to be imposed on any planning permission, it is often sensible to include a significant amount of detail in any full application. This could include a full detailed landscaping scheme, highway design detail etc. It may also be prudent to submit a draft planning obligation, if one is likely to be required at some stage.

### ***Types of applications***

A standard national planning application form is now in use and is available online via the Planning Portal. Increasingly applications, supporting statements and drawings should be submitted on-line to an LPA.<sup>8</sup>

There are three main types of applications: (a) a full (or detailed) application (b) an outline application, and for extensions to dwellings, (c) householder applications with a shorter form.

Most proposals will be sufficiently advanced to be able to apply for full permission or householder approval. These applications should provide all the details of a proposed development including design, external appearance, access, parking, landscaping as appropriate and so on.

In certain cases, a developer may wish to establish at an early stage the likelihood of a proposal being approved by the LPA in principle, without submitting a full application with all the detailed drawings required. Seeking outline planning permission can establish that certain aspects of the development, whether for example the scale, access or layout are acceptable. While any details not provided at this stage can be reserved for subsequent approval (a 'reserved matters' application), it is increasingly likely that applications will have to include a reasonable amount of illustrative detail to show the siting, scale and basic design of the proposed development, as well as the access. A simple site plan is no longer enough.

### ***Planning application fee***

A fee to the local planning authority will need to be submitted with nearly all types of application (apart from applications for Listed Building Consent, which are free). The fee scale is set nationally under Regulations and relates to the scale and nature of the application. Normally the Client is responsible for paying the planning fee, as it is their application. If an application is refused, it may be possible to submit a revised application of the same type /site and nature within 12 months as a 'free-go'. If the application is withdrawn the 12 months' time limit is determined by the date the original application was submitted.

***Ownership and the application site***

It is important to clarify with the Client, who is to be the applicant for Planning Permission as this may have legal implications. Certainty is also required as to the extent (if any) to which the Client owns the site or part of it, as well as the access to it from the public highway, and the extent of any other ownership interest in the site.

Most applications must include a completed Certificate of Ownership and declaration in respect of whether it is an agricultural holding and if there is any tenant thereof. Planning applications can be submitted where none or only part of the land is in the ownership of the applicant, provided that the proper formal statutory notice has been served on any person (other than the developer) who has an ownership interest in the land.

The application site, including any land involved in servicing the proposed development, should be edged red on an OS site/location plan. It must make clear to the local planning authority what is the precise area of land in which all aspects of the development are proposed to take place, including all areas affected by construction, and service. It is normally necessary to include within the application site an access to a public highway. Where the applicant owns any adjacent land to the site, this needs to be shown with a blue border on the OS site/location plan.

***Supporting documents – validation criteria***

Because of variance between LPAs on the documentation and supporting statements needed to accompany an application, national validation criteria have been established setting basic requirements, such as number and type of forms, plans, as well as the planning fee, etc. Additionally, there will be local validation criteria adopted by each LPA setting out what specific additional supporting documents they require for applications in their area. Details of both national and local criteria should be available on the LPA website.

A Design and Access Statement is required for all major applications – usually over 10 dwellings or 1000 sq m of commercial development. Detailed advice on preparing this is available from the LPA and should include illustrations to show how the design of the project has evolved and how it relates to the context of the site.

In any application with some significance, use of coloured drawings, perspectives and models can help to inform the decision-maker about the proposed development, and will often minimise the extent of written explanation.

Householder and the simpler full applications should be accompanied at least by a full letter to explain the background to the proposal, as well as listing all the documents and plans, etc. being submitted.

For more important applications a full supporting Planning Statement should be prepared, often using a Planning Consultant,<sup>9</sup> to set out the context of the proposals, including an analysis of the planning policies relevant to the proposal, summarising the conclusions of any other specialist supporting reports, emphasising the supporting grounds and reasons why planning permission should be granted.

For more complex cases the application may also need to include at least some of the following full reports as set out in the Local Validation Criteria:

- transport assessment
- travel plan
- archaeological assessment
- heritage impact assessment
- tree survey and arboriculture impact assessment
- affordable housing statement
- retail impact assessment
- biodiversity statement
- flood risk assessment
- economic impact assessment.

### ***Plans and drawings***

The basic plans are an accurate location plan usually at 1:1250, and a site block plan at 1:500. Floor plan drawings – existing and proposed, with detailed site plans will also be needed with full elevations of all sides of the building including sometimes a roof plan. Additional drawings will be set out in the National Validation Criteria, and it may be useful to include street elevations showing adjoining buildings with further illustrative material including coloured perspectives.

### ***Environmental assessment***

Environmental assessment is a formal procedure that ensures that the environmental implications of decisions are taken into account before the decisions are made. It is likely to be required to accompany most major applications. Detailed guidance is given in the still useful ‘Environmental Impact Assessment: A guide to procedures’ although the DCLG website will provide up to date advice.<sup>10</sup>

The process involves an analysis of the likely effects on the environment, recording those effects in a report, undertaking a public consultation exercise on the report, taking into account the comments and the report when making the final decision and informing the public about that decision afterwards.

If a development proposal requires such an Assessment, the summary in the form of an Environmental Statement, with supporting technical appendices, must accompany the planning application. An Environmental Assessment may need to be undertaken for individual projects such as a dam, motorway, and airport, large extension to an existing town or factory (‘Environmental Impact Assessment’) or for plans, programmes and policies (‘Strategic Environmental Assessment’).

### ***Pre and post submission – local publicity***

Engaging the community living around a proposal in the early stages is commended by both Government and LPAs, and the national planning form requires reference to that. It may be appropriate for some schemes to arrange a

session for community involvement by way of a drop-in exhibition and feedback forms so that local issues of concern can be recorded which may also influence the final design before it is submitted as an application. A Statement on that exercise should be included with any major application.

Publicity for planning applications is required by the legislation, but is largely the responsibility of the LPA, not the architect/applicant. The type of publicity required usually involves a combination of newspaper, neighbour notification and site notice.

Sometimes the LPA or elected Councillors for the area affected by the proposal may also undertake direct consultation (e.g. a public meeting) with local residents.

The type of publicity will depend on which type and size of development, e.g. major or minor, those that involve a departure from the development plan and those that require an environmental statement or affect a public right of way. Applications in conservation areas, or which will affect the setting of a listed building, require a notice in a local paper and a site notice.

### ***Pre and post submission – consultation***

Where there are likely to be significant issues in relation to development of a site, it is usually sensible to discuss preliminary plans with particular interest bodies prior to submission of an application. Apart from neighbours, the planning authority is under a duty to consult certain other interested parties before they make a decision on certain types of application, and early consultation may help to identify issues and to address them before plans become too advanced.

These bodies fall into two broad categories. Firstly, statutory consultees who must be consulted subject to the criteria in the Town and Country Planning (General Development Procedure) Order. For example, the highway authority must be consulted for developments that will affect access or highway conditions. Other statutory consultees include, in England, the Environment Agency, Natural England, Sport England, and Heritage England, and the equivalent body in other UK countries.

A duty is imposed on statutory consultees to respond on consultations within a set time period. The LPA must take into account the views of a statutory consultee in determining an application, and may take into account views from others. A statutory consultee can require the SoS to call-in an application if they believe that the LPA is ignoring their views.

Secondly, there is wide range of non-statutory consultees whose views may be sought by the local planning authority. These include local interest groups, nature conservation bodies, the Police and Fire Service, and environmental health, etc.

### ***Processing the application***

Once submitted, each application will be checked administratively for compliance with the national and local validation criteria, and if it complies it will be formally entered in the Register of Applications. An acknowledgment will be formally sent to the Applicant/Agent setting out when a decision can be

expected under normal circumstances, a receipt for the planning fee, details as to who is dealing with the application, and various rights of appeal.

Publicity and consultation will then commence with copies of the application documents being circulated and letters, etc. sent out. It will usually take 3–4 weeks before any responses are received and an initial consideration given by the case officer to the proposal, who may by then have visited the site and area around to look at the proposals and identify any issues of concerns.

There will then be a period of internal consultation to consider issues in relation to the application, how the application should be dealt with, any other issues that have arisen or that need to be investigated, and to analyse the responses to any publicity and consultation.

The Case Officer will then prepare a report on the application, identifying any planning history, relevant policies, the responses to consultation and publicity, and the main issues that have been identified in relation to the proposal. The report should then go on to assess those main issues in turn and to draw a conclusion on each. Those should then be summarised and weighed in the balance particularly as to any conflict with adopted policies or guidance. The Case Officer's report should then conclude with a recommendation as to the decision he/she considers should be taken on the application, or if the matter should be deferred for other information, etc.

A Case Officer's Report is normally directed at the Head of Planning, or another senior Officer, who may agree or not agree with the case officer's report. At the end of the process it is normally the Head of Planning whose final recommendation takes precedence.

### ***Negotiation and amendment***

Applicants or Agents should seek to find out periodically how their application is progressing so that any clarification or additional information can be supplied before the application is determined. It may also be possible to see whether the application is likely to be approved or refused, and to keep the client informed as to progress.

Negotiation may be appropriate or possible with the Case Officer to try to rectify any matter of concern, but any significant amendment of the application may mean that the application cannot be progressed as it may be too far removed from the proposals as submitted. In the latter case it may be appropriate to withdraw the application and resubmit the revised scheme.

If the application is likely to be refused the Applicant/Agent may have the option of withdrawing it before a decision is made, but unless there are any legal reasons for the Client to do that, it may be wiser to let the application go through to a decision so that clear reasons for refusal can be addressed in a re-application or an appeal.

### ***Material considerations***

In determining any planning application, apart from the development plan, the decision maker must take into account all other material considerations relevant to the site and proposal.

A material consideration can be pretty much anything relating to planning matters, depending on the particular circumstances of the case. For example it could be: something in the NPPF, Local Plan or Core Strategy, SPD, the conservation status of a site/area, or local road capacity.

The potential effects on property values, land ownership, or legal covenants are not relevant to planning and are not normally material considerations.

### ***The decision-making process***

The LPA must come to a decision within 8 weeks (13 weeks for major proposals i.e. 10 dwellings or 1000 sq m of commercial development or more) of the application date, unless (theoretically) agreement is reached to extend this period. Most LPAs do not seek an extension of time, and it is for the Applicant or Agent to monitor progress.

If there is no such agreement and the authority fails to determine the application within that time period, the applicant has a theoretical legal right to appeal against 'non-determination'. But that appeal to the SoS must be made within 6 months of the expiry of the statutory primary decision period.

If discussions are continuing and a decision is within 'sight', it may be quicker to allow the decision to be made rather than subject the application to the appeal process, for once an appeal is lodged the decision is taken out of the hands of the LPA.

Final decisions on applications by the LPA are delegated in most cases to the Head of Planning, or a nominated officer in their department, perhaps in consultation with the Chairman of the relevant Committee, or for a few cases by a Planning Committee of elected Councillors, who concentrate on more significant/contentious proposals.

The criteria for delegated decisions are usually set out in a Delegation Agreement between the Council of elected members and Officers. Delegated decisions are usually made where proposals are not contentious, have not attracted significant objection and accord with policy and guidance. Applications may be refused if they clearly conflict with policy and there are no very special circumstances advanced to depart from that policy. Sometimes elected Councillors may request that a particular application should be referred to Committee for open scrutiny.

### ***The decision***

The LPA may eventually either grant permission subject to conditions, or refuse it, giving reasons for the conditions or refusal. Any planning permission is granted subject to the development or change of use being carried out in accordance with the approved plans, either as originally submitted, or as amended before the grant of planning permission. Both outline and full and householder permissions are normally valid for three years, and must be implemented before then. The need to discharge any conditions, and for any variation of plans or conditions is considered below.

A local planning authority can decline to determine an application in certain circumstances. These powers were increased under the 2004 Act and now cover



such instances as where a similar application is submitted within two years of a previously refused application that has also been dismissed on appeal.

A planning authority may not approve an application outright for certain types of development which are not substantially in accordance with the development plan without going through a special procedure involving notifying the SoS, who will then decide whether or not to call in the application for decision.

### ***Planning conditions***

In approving an application, the LPA may impose such conditions in the Decision Notice as it considers necessary to control the development. Although somewhat dated, DOE Circular 11/95<sup>11</sup> sets out most model conditions, although LPAs should tailor all conditions to the particular proposal concerned.

Planning conditions must comply with five tests – they must be relevant to planning, and to the development concerned, necessary, reasonable and enforceable. Permission is usually given for the land; it is rarely personal to the applicant. Therefore, when the land is sold, the permission is transferred also.

Certain standard conditions will appear on every permission, such as a time limit on commencement (usually 3 years), or the procedure and timing for submitting the reserved matters under outline permission. Those will appear together usually with a series of special conditions to suit particular sites. Some of these conditions will apply for the lifetime of the development, for example, hours of opening or delivery, whilst others (called either ‘pre-commencement’ or ‘conditions precedent’) require the submission of further details to the LPA or works to be carried out before development can commence on site.

Examples of the latter might include the submission of drainage details, or details of external facing materials, or that works to improve the highway access directly to the site are carried out in advance of the development itself. Failure to secure approval to pre-commencement conditions before starting work may invalidate the planning permission and care needs to be taken to ensure that any requirement of conditions are fully met when specified.

It is the responsibility of the developer, applicant or agent to ensure that a development proceeds in accordance with the approved details and in compliance with any conditions on the planning permission. However, where a developer commences operations in breach of such a pre-commencement condition, then, provided the details are submitted for approval ***before the consent expires*** and those details are approved, this can save the consent from lapsing. The permission is likely to be wholly invalidated if the time limit for commencement has expired.

A national form is available to use for the discharge of conditions, and there is a fee payable for each application. It is normal practice to seek to discharge as many conditions as possible in one application to reduce the fee cost.

### ***After the decision***

If the decision of the LPA is to refuse permission, it is a matter for the client to decide whether to appeal. Appeals are dealt with below. The reasons for refusal

may relate to 'technical' matters that are possibly resolvable in a fresh application, or policy issues that may not be easily overcome, unless further special circumstances can be argued.

In the case of an approval, it is a matter for the Client to decide to proceed and implement an approval. If that decision is made straight away, it is necessary to secure approval to all pre-commencement conditions before any work begins. If the decision to start is to be delayed, pre-commencement conditions should still also be discharged well before the time limit of the permission. If necessary, the applicant can then make a meaningful start before the expiry date.

If work is not likely to start in time before the expiry of the permission (usually 3 years) it will be necessary to seek an extension of the time limit permission. This should not be left until the last minute. Securing an extension before the expiry date, allowing a few months for submission to and consideration of the application by the LPA, should still leave an opportunity to submit details as required by a condition, make a meaningful start and save the permission.

### ***Commencement***

Preserving a planning permission, particularly if there is a possibility that it may not be granted again once the time limit expires, can be very important. A planning permission must be implemented within three years from the date it was granted, unless expressly stated otherwise. It is implemented by the carrying out of a 'material operation' which can include:

- any significant work of construction in the course of the erection or demolition of a building
- the digging of a significant length of trench to contain foundations, or part of the foundations of a building
- the laying of underground mains or pipes to the foundations, or part of the foundations, of a building or to any such trench as mentioned above
- any operation relating to the laying out or constructing a road or part of a road.

Such a material operation should be undertaken once all the pre-commencement conditions (see above) have been discharged, and should be significant and noticeable in terms of physical works. They should be notified to the LPA, and arrangements should be made for it to be independently verified – if possible by the LPA or Building Control Officer.

Previously, there was some doubt as to whether such work could be carried out simply to keep an approval alive, with no intention to actually carry out the development, but recent case law has held that the intention of the person carrying out the work is irrelevant provided the work has been done in accordance with the planning permission.

Some preparatory works may be needed to the site before development proper commences, such as demolition or service diversions. These should be agreed with the LPA, who may also wish to approve a construction method statement, by way of a condition.

### ***Variation of plans and conditions***

All development should be built fully in accordance with the approved plans and any conditions attached to the permission. There may be serious consequences for the developer if not. Applications may be made to retain unauthorised development, or to vary or delete a planning condition, other than (at present) the time-limit condition to start the development. Failure to start on time risks the life of the planning permission.

If any variation in plan is required by the developer, or found necessary because of say ground conditions, early discussion should be held with the LPA to see whether that would be acceptable and if so how such a variation should be addressed.

Where the amendment is non-material an application can be made to the LPA to seek approval. Whether amendments are material or non-material will depend on the circumstances of each case. If an application is successful, no new planning permission is created.

Applications can also be made to vary or delete planning conditions if they are unacceptably restrictive or no longer appropriate. In some circumstance this procedure may result in the grant of a new planning permission.

### ***Trees***

Dependent on the scale and nature of the proposal a fully detailed site survey should be prepared, which should include detailed information on the location of the trees on a site.

In some cases it may be necessary to undertake a full survey and assessment of every tree, and to prepare a tree impact assessment so that, so far as is possible, any development is restricted to those parts of the site where the least important trees are located.

Most significant applications should include information on the site layout plans of those trees and other landscape features that are to be retained, and where new landscaping and tree planting is proposed. Details of this are usually prepared by a landscape architect or arboricultural surveyor engaged by the client.

Every LPA has the duty to ensure that adequate provision is made for the preservation and planting of trees when planning permission is granted.<sup>12</sup> It may also make tree preservation orders for trees, groups of trees and woodlands which contribute to the amenity of the area. Notice must be given to the owners and occupiers of the land and neighbouring land owners who may be affected by it, who are entitled to object.

It is an offence to cut down, lop, top or wilfully damage such protected trees without the consent of the LPA, unless it can be demonstrated that they are dangerous, dying, dead or the work is executed in compliance with another Act of Parliament. Even in such cases, the prior consent of the authority should be sought.

Trees in Conservation Areas are automatically protected and prior notification must be given to the LPA if such trees are to be felled or pruned, after 6 weeks of which works can be carried out if the LPA have not imposed a

formal tree preservation order on the tree(s). The authority is entitled to insist on the replacement of a felled tree by another of appropriate size and species.

A provisional tree preservation order is made in the first instance which, except in cases of urgency, is valid for six months, to allow for the resolution of objections and any changes to be made to the order. The order becomes permanent upon confirmation by the LPA.

### ***Certificates of lawfulness***

In some cases existing development or operations or a use may have been carried out some time ago, or is proposed in the future, and it may be necessary to establish that those are lawful and exempt from any action by the LPA. S. 191 and 192 of the 1990 Act allows anyone who wishes to do so, to apply to the LPA to determine whether any of the following matters are lawful and, if so, to be granted a certificate of lawfulness to that effect.<sup>13</sup> The matters are:

- an existing or proposed operational development on land
- an existing or proposed use of land
- any other matter constituting a failure to comply with any condition or limitation subject to which planning permission was granted
- carrying out development that would be in accordance with an existing planning permission.

The burden of proof is on the applicant, who must accurately describe the existing development or use, or the proposal in sufficient detail to enable the authority to make their decision. The local authority must grant a certificate if the case is proven on the balance of probability. These two forms of certificate replace the former 'certificate of established use'.

### ***Advertisements***

LPAs are responsible for the day to day operation of the advertisement control system and for deciding whether a particular advertisement should be permitted or not. The control relates to a wide range of advertisements and signs including posters, notices, placards, fascia and projecting signs, directional signs, flag adverts, captive balloon adverts, etc. The rules which govern advertisements,<sup>14</sup> effectively divide them into three main groups, each subject to very detailed criteria:

- advertisements which are deliberately excluded from any control
- advertisements for which the rules give a deemed consent so that the LPA's consent is not needed, provided the advertisement meets certain criteria
- advertisements for which the LPA's 'express consent' is always needed.

Applications must be made using the appropriate forms accompanied by a fee, and suitable drawings and site plan.

In deciding an application, the local authority may consider only two issues: amenity and public safety. Consent when granted is normally for 5 years (although a shorter period can be stipulated). However, unless a condition is imposed that requires removal of the advertisement after the consent expires,

the sign can continue to be displayed without making further application. In the case of refusal or imposition of a condition with which the applicant is dissatisfied, there are rights of appeal to the SoS.

### 17.2.7 The prior approval regime

In recent years Government has increasingly introduced a regime of prior approval in relation to certain proposed developments. This operates where Government wants to free up the planning process for certain types of development which have been included in the scope of permitted development and where it is considered that it would have only limited impact on the environment.

The process involves submitting a limited amount of details to the LPA with the appropriate form (online or hard copy) and seeking confirmation from them that no approval by way of a formal planning application would be required. Such Prior Approval procedures in some cases may be eligible only for a limited period and may not apply in special areas such as conservation areas or national parks and may be extended indefinitely.

These prior approval submissions are generally subject to specific limitations which need to be checked and include:

- essential agricultural development on holdings above 5 hectares
- larger household extensions beyond normal permitted development limits
- changes of use from offices to residential except in certain areas
- changes of use from retail to residential
- changes of use of agricultural buildings to commercial use, or up to three dwellings or state funded schools or registered nurseries.

#### *Demolition*

In most cases you will not need to apply for planning permission to knock down a building, unless the LPA has made an article 4 direction restricting the permitted development rights that apply to demolition. If you decide to demolish a building, even one which has suffered fire or storm damage, it does not automatically follow that you will get planning permission to build any replacement structure or to change the use of the site.

Where demolition of any kind of building is proposed, the LPA may wish to agree the details of how you intend to carry out the demolition and how you propose to restore the site afterwards. You will need to apply for a formal decision on whether the LPA wishes to approve these details before you start demolition. This is what is called a 'prior approval application' and the LPA will be able to explain what it involves.

You do not normally need to make a planning application to demolish a listed building but you are most likely to require listed building consent. If the building is in a conservation area you may need planning permission for relevant demolition in a conservation area. You should discuss this with the LPA before you take any decision to demolish such buildings, to avoid the risk of legal action being taken against you or your client.

## 17.2.8 The historic environment

Protecting and enhancing the historic environment is an important component of the NPPF's overarching thrust to achieve sustainable development. Whether it is protected buildings or structures, or designated areas, open spaces or gardens, the conservation of what are known generally as 'heritage assets' forms one of the core planning principles set out in the NPPF and it is expanded upon with policies elsewhere in the Framework.

Heritage assets are designated by English Heritage or the appropriate body in the other UK countries. Identification of such buildings are generally searchable on the English Heritage website.

LPA may identify non-designated heritage assets. These are buildings, monuments, sites, places, areas or landscapes identified as having a degree of significance meriting consideration in planning decisions but which are not formally designated heritage assets. In some areas, local authorities identify some non-designated heritage assets as 'locally listed'.

A substantial majority of buildings have little or no heritage significance and thus do not constitute heritage assets. Only a minority have enough heritage interest for their significance to be a material consideration in the planning process.

### *Listed building and scheduled monument consent*

A building of special architectural or historic interest may be listed for its exterior, interior or any feature, and will be graded a 1, 2 or 2\*, dependent on its quality and importance.<sup>15</sup> Additionally scheduled monuments, registered battlefields, protected wreck sites and registered parks and gardens are afforded protection. A full site analysis with information from the LPA/ Historic England should identify any historic constraints

Historic England (HE) is the statutory adviser on the historic environment in England. It is an Executive Non-departmental Public Body sponsored by DCMS. Amongst a wide range of work HE maintain and compile the schedules of listed buildings and ancient monuments, and can recommend the DCMS to list individual buildings.

Religious bodies, which have approved systems of control, including the Church of England, the Church in Wales and the Roman Catholic Church, benefit from exemption from listed building control ('ecclesiastical exemption'). All other religious bodies not benefiting from exemption are subject to normal listed building and conservation controls.<sup>16</sup>

It is an offence to demolish, alter or extend a listed building unless the LPA or SoS has granted a written listed building consent. If work is carried out without such consent, it may be possible (but not without some convincing) to make out a defence on the grounds that the works were urgently necessary for safety, health or to preserve the building. However, the LPA must be notified in writing as soon as possible.

The LPA or DCMS/HE can give temporary protection to an unlisted building which is in danger of demolition or alteration, by the service of a building

preservation notice. Its effect is immediate and it lasts for six months during which time the DCMS / HE can decide whether or not to list it.

### ***Conservation areas***

A LPA has power to designate parts of its area that are considered to be of special architectural or historic interest as Conservation Areas. Any proposal to develop in a Conservation Area must be assessed by the LPA as to whether it would preserve and enhance the area's character or appearance.<sup>17</sup> The controls in a conservation area include generally the need for consent for demolition of all but the most minor buildings and for the felling of trees.

Additionally, the LPA may have removed PD rights for many more alterations and extensions to properties by way of an Article 4 Direction. Checking fully with the LPA should identify those constraints. The controls on development are not as extensive as for listed buildings, but more restrictive tolerances may be applied in certain instances.<sup>18</sup>

## **17.2.9 Developer contributions**

Developers may be asked to provide contributions for infrastructure in several ways. This may be by way of the Community Infrastructure Levy and/or Planning Obligations in the form of section 106 agreements and section 278 highway agreements. Developers will also have to comply with any conditions attached to their planning permission. The combined total impact of such requests needs to be ascertained at an early stage in any development so that they do not threaten the viability of the sites and scale of development proposed.

Planning Obligations are also known as Planning Agreements, S106 Agreements (from S106 of the 1990 Act (as amended by the Planning and Compensation Act 1991)) or Planning Gain. An obligation is effectively a covenant that is either secured by a legally prepared agreement with the LPA or by the developer giving a unilateral undertaking. The LPA should indicate on their website what they are likely to require in any planning obligation.

Legislation provides that developers may enter into a 'planning obligation' which may restrict the use of land, require specified operations to be carried out or require sums of money to be paid to the local authority. By doing so, the local authority may be prepared to grant planning permission, but a planning obligation should not be a reason to grant permission for a proposal that should otherwise be refused. Nor should an agreement be used when a planning condition would be more appropriate.

The policy for seeking obligations should be grounded in an understanding of development viability through the plan making process. On individual schemes, applicants should submit evidence on scheme viability where obligations are under consideration. Wherever possible, this should be open book.

Planning Obligations are used to mitigate the impact of development and must relate directly to matters needed to make a particular development function – such as a close-by road junction improvement or drainage works off-site, or provision of open space and its future maintenance.

Obligations must meet the tests that the matters covered are necessary to make the development acceptable in planning terms, directly related to the development, and fairly and reasonably related in scale and kind to that development. These tests are set out as statutory tests in the Community Infrastructure Levy (CIL) Regulations and as policy tests in the NPPF.

Obligations are normally used to ensure that affordable housing schemes are properly managed by a registered social landlord in perpetuity.

### ***Community infrastructure levy***

A CIL is required to be paid by a developer dependent on the size and nature of the proposed development and to support local infrastructure provision. The CIL charging authority, usually the LPA, will have to go through a process of consulting on a charging schedule to determine which form of development at what scale and in what parts of their area they propose to make a charge on development. That will normally be for dwellings (apart from affordable housing) and commercial development at a scale dependent on floor space, and may cover certain areas and not others. CIL will not normally be charged on householder applications. The charging schedules will be subject to rigorous consultation, including a public inquiry, and once adopted will be available to check on the LPA website. More information on CIL is available from the Planning Portal or from the LPA website.

The definition as to what constitutes infrastructure will be wide enough to enable local authorities to decide what infrastructure is appropriate for their local areas. Affordable housing will continue to be provided through the existing system of negotiated planning obligations (i.e. the section 106 route).

LPAs who prepare development plans will be the charging authorities and they will have the freedom to work together to pool contributions for CIL. Before CIL can be charged there must be an up-to-date development plan for the area that has set out the likely cost of the required infrastructure. Where the levy is in place for an area, charging authorities should work proactively with developers to ensure they are clear about the authorities' infrastructure needs and what developers will be expected to pay for through which route. There should be no actual or perceived 'double dipping' with developers paying twice for the same item of infrastructure.

The amount of CIL to be paid will be calculated when planning permission is granted, and may be payable within 28 days of commencement of the scheme although they may also be provision for payment by installment. Where development is phased (i.e. an outline planning permission followed by reserved matters) each phase could pay CIL separately.

Use of the CIL regime will be discretionary and will sit alongside the current s106 arrangements, although the latter are now far more restricted in use once CIL has been introduced by the LPA.

## **17.2.10 Appeals**

An applicant may appeal against refusal of planning permission, conditions attached to the permission and various other matters, including lack of decision



in the statutory time period. Technically the appeal is being made to the SoS, but in reality appeals are dealt with by the Planning Inspectorate (PINS) which is an executive agency based in Bristol.<sup>19</sup> PINS will administer the process, and it has a large panel of qualified Inspectors available to determine cases. An Inspector will be appointed to consider the case and make a decision.

The SoS retains powers to 'call-in' or 'recover' appeal cases to decide himself, as he also has for very important planning applications, although his decision will be made usually after an inquiry has been held in front of an Inspector, who prepares a report on the evidence and arguments made with his/her recommendation.

The Appeal must be made usually now online using the appropriate form within a stipulated period from the date on which the refusal was received or, in the case of non-determination, within the period from the date on which the determination should have been made. Apart from Householder Applications and some other types of application, an appeal must normally be submitted with all the related documentation within 6 months of the LPA decision, or in the case of non-determination, the expiry of the 8 (13) week primary period for the LPA to have made their decision.

Apart from householder applications, a full Statement of Case on behalf of the Appellant will usually have to be submitted with the appeal, to which the LPA can then respond and the Appellant can comment on that response within specific time limits before the appeal papers are sent to an Inspector or a Hearing is arranged.

An appeal may be dealt with in one of three ways.

- *Written representation*: This is the most common type of appeal and it is used in about 95% of planning appeals. It has the benefit of speed and relative cheapness.
- *Local (public) inquiry*: These will deal with the most complex or major applications and they usually involve legal representation and the cross-examination of witnesses. They take much longer to arrange and are the most expensive procedures.
- *Informal hearing*: A simpler procedure with some characteristics of written representations and public local inquiry. Here the inspector will lead a round table discussion about the matters at issue, usually without lawyers present.

Normally each side must bear their own costs in appeals, but where one side or the other have shown unreasonable behaviour, or acted improperly, after hearing the arguments, application with reasons can be made to the Inspector for an award of costs against the offending party.

Most appeals are now dealt with by Written Representations. Although the LPA or Appellant may request an Informal Hearing or Local Inquiry, PINS will impose the method in which an appeal is to be dealt with and there is guidance on the PINS website about the criteria used to determine that.

The appeal process for Householder applications (extensions or alterations to dwellings) is shortened. In those cases the appeal must be made within 12 weeks of the decision, and it will normally be undertaken by Written Representations

only and will rely on the information submitted to the LPA as the application – no provision remains for making any further representations other than in the Grounds of Appeal submitted with the appeal. If the proposals are likely to be contentious it is worth front loading the initial planning application with as much supporting information as possible to bolster the chances on appeal.

The award of costs may also be made in Written Representation cases as well as previously in the case of Local Inquiries and Hearings.

The LPA can provide details of the appeals procedure and helpful guidance is provided by the Planning Inspectorate on the Planning Portal website.<sup>20</sup>

## 17.2.11 Remedies

### *Completion notice*

Under section 94 of the 1990 Act, a local authority may serve a completion notice on a developer where they are of the opinion that, although construction has commenced, it will not be completed within a reasonable period. The notice must then specify a reasonable time, which must not be less than 12 months, to complete the development. Failure to comply will result in the planning permission being invalidated.

### *Enforcement*

The local authority is empowered under the provisions of the 1990 Act, as amended by Part I of the Planning and Compensation Act 1991, to take action to enforce against unauthorised development. The weapons at their disposal are as follows:

1. *Enforcement Notice*

The authority has discretionary power to serve this notice where there has been a breach of planning control, such as development or change of use without permission or in contravention of the condition imposed by the authority. The notice must require the building owner or occupier to do whatever is necessary to remedy the breach. A reasonable time limit must be imposed.

An appeal on specified grounds must be lodged with the SoS within 28 days. While the SoS is deciding the appeal, the notice is of no effect. It is not unknown for a building owner to appeal for that very reason. The LPA has other enforcing powers, however.

2. *Stop Notice and/or Injunction*

Where there has been a serious breach of planning control the LPA may seek to ensure that construction ceases or to prevent a material change of use as a matter of urgency by serving a stop notice or injunction. A stop notice may only be served after an enforcement notice, and only if it seems that the building owner is intent to press ahead with work during any appeal against the notice, and the continuation of the development or use is causing particularly significant harm to an area.

There is no appeal against a stop notice. If the appeal against the enforcement notice is successful, the stop notice is automatically void. Failure to observe a stop notice results in very heavy penalties and further daily penalties for continuing failure.

In some instances, a building owner may be able to obtain compensation after a successful appeal against an enforcement notice which was followed by a stop notice. For this reason alone, planning authorities are reluctant to serve stop notices.

### 3. *Planning contravention notice*

This is a procedure introduced under the Planning and Compensation Act 1991 whereby a local planning authority can obtain information about activities being carried out on a site where a breach of planning control is suspected. The owner, occupier or any other recipient is required to reply within 21 days. This is usually a precursor to possible enforcement action.

### 4. *Breach of conditions notice*

The LPA has power to serve a notice requiring compliance with a condition in a planning permission. There is no appeal against such a notice and failure to comply within 28 days is a summary offence.

## 17.3 Other approvals

A development may be subject to a great many approvals other than planning and building control (see 17.1 above). The following are building types which require special approvals of various kinds:

- licensed premises, cafés and restaurants
- music and dance halls and night clubs
- cinemas
- petrol stations
- nursing homes
- abattoirs.

In addition, approval may be required from landlords or funders of development.

## 17.4 Property

### 17.4.1 Boundaries

Boundaries are the demarcation lines between separate properties. They can be the source of many problems when the properties either side of the line are in different ownerships as is usually the case.

When investigating the feasibility of building, the architect should make it an early task to establish or verify the apparent boundaries of a site. The only

safe way to do this is for the architect to request verification from the client's solicitor. Since deed plans and the deeds themselves are often unclear on the matter, the solicitor will often be loath to put forward a definitive view, but it is certainly not the architect's duty to decide on boundaries and the architect who does so risks an action for negligence at some stage. On occasion, boundaries are so vague that all the adjoining owners have to agree the boundaries afresh. Certain presumptions may be made from inspection of such things as fences, ditches and hedges.

Very great care must be taken when dealing with old properties which adjoin. Ownership of a cellar may extend under the ground floor of the other property and the buildings themselves may actually interlock, i.e. first floor may project over the neighbouring ground floor and under the neighbouring second floor. Such cases, however, would more usually fall under a consideration of party walls (see section 17.4.2 below).

If a building is constructed so as to infringe a neighbouring boundary, the building owner will have committed trespass against the neighbour. The matter can only be rectified by the removal of the building or the purchase of the portion of neighbouring land on which it stands, probably at an inflated price. Common infringements occur in the projection of footings or eaves across the boundary. Where a neighbour permits an eaves to project onto his or her land, the building owner is said to have a 'right of eavesdrop'.

## 17.4.2 Party walls

There are three types of party wall. The most common type is where the wall is divided vertically and reciprocal easements are in force over the whole wall. The second type is where the wall is divided vertically into two strips, one strip belonging to each owner. In the final type, the wall belongs completely to one owner and the adjoining owner has the right to have it maintained as a dividing wall.

There are special procedures for party walls under the Party Wall Act 1996 which came into force on 1 July 1997. It applies only to England and Wales at present. What follows in this section is an overview and it is not a substitute for reading the Act itself which affects all architects. If anything is to be done to a party wall, as defined by the Act, notice is to be given in certain forms. A party wall is defined as a wall, standing on land of different owners not taking account of projecting foundations, which is part of a building; or that part of a wall which separates buildings belonging to different owners. A 'party structure' is a party wall, floor or other structure separating parts approached by separate entrances, while a 'party fence wall' is a wall, standing on land of different owners not taking account of projecting foundations, which is not part of a building, but separates adjoining lands.

If the two adjoining owners do not agree (and it is often unwise to agree in advance), each party must appoint a surveyor to whom certain powers are given by the Act to determine the difference and to decide, subject to the provisions of the Act, what contribution each party is to make to the cost of the work. Both building and adjoining owners have statutory rights which they can exercise

under the Act and those rights can never be ignored or set aside. Care must be taken to adhere to the periods of notice laid down. When acting for the building owner and in view of the time required for notice, counter-notice and negotiation, the architect must take early steps to set the machinery in motion.

There are three basic situations covered by the Act:

- building a new party wall
- work to existing party walls
- adjacent excavations and constructions.

### ***Building a new party wall***

Where adjoining land is not built on at the line of junction between two owners or only built on as a boundary wall (i.e. not a party fence wall straddling the boundary or the external wall of a building adjoining the boundary), there are two situations. If the wall is intended to straddle the boundary, a one month notice of a wish to start work must be given. The notice must indicate desire to build and describe the intended wall. If notice of consent is received, the wall must be built half and half, or as agreed, the cost borne by each in proportion to use. Alternatively, if the wall is wholly on the applicant's own land, one month notice of a wish to start work must be given. The notice must indicate a desire to build and describe the intended wall as before, but the building owner has the right to project foundations, if necessary, under adjacent land any time within 12 months from expiry of the notice. However, the work must be at the building owner's own expense and the adjoining owner or occupier must be compensated for damage caused by building the wall or the foundations. This also applies where the adjoining owner refuses consent to a party or party fence wall.

### ***Work to existing walls***

A building owner has certain rights in respect of existing walls. The scope is very broad and the following is a brief summary. The building owner has the following rights.

- To underpin, thicken or raise, but if not due to defect or lack of repair, must make good all damage to adjoining premises, internal furnishings and decorations. Furthermore, if a party structure or external wall is concerned, any adjoining owner's flues and chimneys which rest on or form part of the party structure or external wall must be carried up as may be agreed or settled by the disputes process.
- To repair or demolish and rebuild a party structure or party fence wall if the work is necessary as a result of defects or lack of repair.
- To demolish a partition which does not conform to statutory requirements and build a party wall that does conform.
- To demolish structures over public ways or passages belonging to other persons and rebuild so as to make them conform to statutory requirements.
- To demolish a party structure and rebuild so as to make it of sufficient strength or height for any intended building of the building owner or to rebuild to lesser thickness or height, provided it is still sufficient for any

adjoining owner. All damage to adjoining premises, internal furnishings and decorations must be made good and if a party structure or external wall, any adjoining owner's flues and chimneys which rest on or form part of the party structure must be carried up as may be agreed or settled by the disputes process.

- To cut into a party structure or away from a party wall, party fence, external or boundary wall any foundation, chimney breast or other projection over the building owner's land or take away or demolish overhanging parts of wall or building of adjoining owner to the extent necessary to enable a vertical wall to be erected or raised against the wall or building of an adjoining owner. All damage to adjoining premises, internal furnishings and decorations must be made good.
- To cut into an adjoining owner's wall to carry out weatherproofing of new wall erected against it, but must make good all damage to the wall.
- To carry out other necessary works incidental to the connection of a party structure with the premises adjoining.
- To raise a party fence wall or to raise it for use as a party wall or to demolish it and rebuild it as a party fence or party wall.
- To reduce or to demolish and rebuild a party wall or party fence wall either to not less than 2 metres if not used by adjoining owner other than as a boundary wall or to a height currently enclosed by the building of an adjoining owner, but must reconstruct or replace any existing parapet or construct one if needed.
- To expose a party wall or structure, but adequate weathering must be provided.

A building owner may exercise these rights with the written consent of the adjoining owner. If adjoining land is built on at the line of a junction as a party wall or party fence wall or the external wall of a building, before exercising any right under the Act the building owner must give a two months 'party structure notice' of the date when work will start. The notice must state the name and address of the building owner, particulars of the proposed work, whether special foundations are intended and include plans, sections and details including the loads to be carried. The notice ceases to have effect if the work is not begun within 12 months of the date the notice is served or if the work is not continued with due diligence. There is provision for the adjoining owner to serve a counter notice. If no consent is received within 14 days of the date of service of party structure or counter notices, dissent is deemed and a dispute is deemed to have arisen.

### ***Adjacent excavations and constructions***

There are two situations where owners of structures are deemed to be adjoining owners for the purposes of this section even though the property is not touching the boundary. These are:

- where a building owner proposes to excavate and erect a structure, any part of which is within 3 metres horizontally from any part of a structure of an

adjoining owner and which extends to a lower level than the level of the bottom of the foundations of the adjoining structure; and

- where a building owner proposes to excavate and erect a structure any part of which is within 6 metres horizontally from any part of the structure belonging to an adjoining owner and which extends to a lower level than a point measured at 45 degrees from the point of intersection of the external face of the adjoining structure and the bottom of the foundation.

The building owner must give one month's notice of the date when work will start. The notice must set out the proposals and whether underpinning or other strengthening or protection is proposed. Plans and section must show the site and the depth of any excavation proposed and, if the erection of a building is proposed, its site. The notice ceases to have effect if work is not begun within 12 months of the date the notice is served or if the work is not continued with due diligence. The building owner may at his or her own expense strengthen the foundations of the adjoining structure or may be required to do so by the adjoining owner. If there is no consent within 14 days of the date of service of notice, dissent is deemed and a dispute is deemed to have arisen.

There are various other provisions in relation to matters such as disputes and access which requires careful study.

### 17.4.3 Neighbouring land

A difficult problem can arise when it is necessary to enter upon a neighbour's land in order to carry out work. A landowner could be held to ransom by their neighbours where the work was essential to deal with weather ingress or structural problems. The Access to Neighbouring Land Act 1992 was intended to deal with such matters. It came into force on 31 January 1993. Like the Party Wall Act, it only extends to England and Wales. The Act deals with 'basic preservation works'. The term is broad and it includes, but is not necessarily restricted to, such things as maintenance or repair of a building, clearance or repair of a drain or cable, treatment or cutting back of any growing thing and the filling in or clearance of a ditch.

An application must be made to the court, which must be satisfied that the work is reasonably necessary for preservation and that it cannot be carried out without substantial difficulty without entry on the adjoining land. The court cannot make an order if the adjoining owner would suffer interference with use or enjoyment of the land or would suffer hardship. Of course, the court may include whatever terms and conditions it deems appropriate to protect the adjoining owner's property or privacy. These terms may include the payment of money to the adjoining owner by the person desiring to carry out the work.

### 17.4.4 Trespass

This is a category of the law of tort. Trespass to land is of most concern to the architect. The general rule is that if a person enters upon, remains upon

or allows anything to come into contact with another's land, that person is committing trespass. Trespass can occur under land, on the surface or to a reasonable height over the land. Contrary to popular misconception, there is no necessity to prove damage in order to sue for trespass. There is a requirement for damage before action in the case of nuisance, however, with which trespass is often confused. If a person demolishes a wall by pushing it onto adjoining property, that is trespass; if the wall simply collapses with old age and falls onto adjoining property, that is nuisance. Building a foundation across a boundary is trespass, allowing tree roots to grow across is nuisance.<sup>21</sup> Trespass is a direct invasion of another's land.

The usual legal remedies for trespass are to take action for damages, if any and/or an injunction to prevent further or continuing trespass. A form of self-help is for the person in possession of the land to forcibly evict the trespasser who refuses to leave, but this option should be a last resort and exercised with great care.

A contractor carrying out work on a site is said to have a licence to be on the site for the purpose of carrying out the building. There may be an express licence, but it is more usual that the licence will be implied. A contractor who stays on the land after the work is complete or after termination of employment will be a trespasser. Trespassers, particularly children, can be a real problem on construction sites and those in possession of the site have an especially strict duty to ensure that children do not suffer injury.<sup>22</sup>

An occupier owes a duty to trespassers by virtue of statute<sup>23</sup> if:

'he is aware of the danger or has reasonable grounds to believe that it exists; ... he knows or has reasonable grounds to believe that the other is in (or may come into) the vicinity of danger; ... the risk is one against which in all the circumstances of the case, he may reasonably be expected to offer the other protection.'

The duty is to take such care as is reasonable in all the circumstances of the case to see that the entrant to the property does not suffer injury on the premises by reason of the danger concerned. This duty may be discharged by giving warning of the danger on an appropriately worded notice.

### 17.4.5 Nuisance

Nuisance has been mentioned briefly under trespass. It is another category of the law of tort. There are three types of nuisance:

- public nuisance
- private nuisance
- statutory nuisance.

#### *Public nuisance*

This is an act or omission without lawful justification which causes damage, injury or inconvenience to the public at large. It is a crime as well as a tort. It must



affect a reasonable sized class of people or the nuisance cannot be categorised as public. An example is the obstruction of a highway. A private person has no remedy for public nuisance unless that person suffers from that nuisance over and above the damage suffered by the public at large.

### *Private nuisance*

This is an unlawful interference with the use or enjoyment of land. The usual examples are smell, smoke, dirt, noise, vibrations and tree roots. If a person wishes to sue for nuisance, damage must be proved. Remedies available are damages or an injunction. It is only in wholly exceptional circumstances that the suffering party may take direct action to abate the nuisance. In some instances, building work can be held to be nuisance.<sup>24</sup> It is now rare for actions to be brought in this respect, however, because building operations are generally quite short duration, it is usually reasonable use of property to permit or cause building work to be carried out from time to time and there are statutory powers for the local authority to regulate building work to prevent excessive noise, dust, etc.<sup>25</sup> It is not sufficient to show reasonable fear of danger or damage; the fear must be well founded.<sup>26</sup> Nuisance is a complex subject and should any problem arise, the architect should advise the client to seek legal advice.

### *Statutory nuisance*

This is anything which is declared by statute to be a nuisance.<sup>27</sup> The local authority may serve an abatement notice to require the perpetrator to bring the nuisance to an end.

## **17.4.6 Rights of light**

Sometimes called 'ancient lights'. It is a negative easement (see section 17.4.7) which entitles an owner to prevent his or her neighbour carrying out building work so as to obstruct the flow of light through particular windows. The right is not acquired in respect of the whole building, unless it is entirely glazed, but only in respect of the window openings. For this reason, when considering the redevelopment of a property which has rights of light to certain windows, it is essential that a careful measured survey is carried out so that any new windows will be replaced exactly in the same positions as the original windows. The right is usually acquired under the Prescription Act 1832 which requires the right to be enjoyed for twenty years without interruption and without written consent.

The existence of a building with rights of light on adjoining land can put severe constraints on the development potential of a site. In order for an act to be considered as an interruption, it must continue for at least a year. At one time, it was necessary to erect a screen to block the light to prevent the right being acquired. Since the Rights of Light Act 1959, the owner of land over which a right of light might be acquired may register as a land charge a notice identifying the properties and specifying the size and position of a notional screen.

Parties likely to be affected must be given prior notice and the notice itself is in force for a year during which time an affected party may seek to have it varied or cancelled. In order to prevent the right being acquired, it is necessary to re-register at least every nineteen years.

If a party considers that another is infringing his or her right of light, the injured party must show that the light which remains is not sufficient for the comfortable use and enjoyment according to the ordinary notions of mankind.<sup>28</sup> Any action would be brought in nuisance (see section 17.4.5) and a practical test, which is often adopted, is whether the light can flow into the window without interruption at an angle of 45 degrees from the horizontal measured at the window cill. The nature and use of the building will determine the amount of light entitlement. Thus a greenhouse will need more light than a private house.<sup>29</sup>

### 17.4.7 Easements

A right held by one party to use the land belonging to another or to restrict the use of such land by another. Common examples are: rights of way and rights of drainage or for services. They are known as positive easements as compared to easements such as rights of light or right of support, which are negative easements. An easement relates to land, not people. The land which enjoys the right is called the dominant tenement; the land on or against which the easement is exercised is called the servient tenement. It is essential that the two pieces of land have different owners.

There is often confusion with regard to right of support although the position is very clear. All land enjoys right of support from adjoining land. In the present state of the law, no successful action would be possible against a person excavating near a neighbour's boundary unless the excavation caused actual physical damage to the adjacent land. A neighbour could not successfully bring an action for the cost of building a retaining wall to prevent possible future slippage. That is simply economic loss and it is not recoverable in tort. There is no natural right of support for buildings (However, see section 17.4.2 relating to the Party Wall Act).

If, however, the removal of support from land causes the collapse of that land and the building standing on it, the building owner would have the right to bring an action. The right of support when applied to a building is usually acquired by prescription, but it can also be acquired expressly. A fairly common situation is where a property has been in existence for some years when the adjoining owner builds next to, and taking support from, the original property. There may be an express agreement entered into before building or to regularise the position, or the owner of the original property may take no action for twenty years.

A *profit à prendre* is a right to remove something from another's land, for example turf. Easements and profits may be created by Act of Parliament; Express grant, usually by deed; Express reservation, when land is sold; Prescription (see section 17.4.6).

## References and notes

1. See The RIBA Plan of Work 2013 Overview, Editor Dale Sinclair, published by the RIBA London, p 7.
2. More information about the planning system in each country of the UK can be obtained from the various Government websites: England ([www.communities.gov.uk](http://www.communities.gov.uk)), Scotland ([www.scotland.gov.uk](http://www.scotland.gov.uk)), Wales ([www.wales.gov.uk](http://www.wales.gov.uk)) and Northern Ireland ([www.northernireland.gov.uk](http://www.northernireland.gov.uk))
3. The Planning Portal can be found at [www.planningportal.gov.uk](http://www.planningportal.gov.uk)
4. Information about local government and local councils is available from [www.direct.gov.uk](http://www.direct.gov.uk) where there is also a link to individual LPAs from which detailed local planning guidance on plans, policies and making applications can be obtained.
5. The National Planning Policy Framework (NPPF) can be found at <http://planningguidance.planningportal.gov.uk/>
6. The National Planning Practice Guidance (NPPG) can be found only at <http://planningguidance.planningportal.gov.uk/>
7. More on Local Plan can be found at [www.planningportal.gov.uk/planning/planningsystem/localplans](http://www.planningportal.gov.uk/planning/planningsystem/localplans)
8. For submission of applications online go to the Planning Portal at [www.planningportal.gov.uk/](http://www.planningportal.gov.uk/)
9. A list of planning consultants is available from the Royal Town Planning Institute at [www.rtpiconsultants.com](http://www.rtpiconsultants.com)
10. See the CLG website [www.communities.gov.uk](http://www.communities.gov.uk)
11. <https://www.gov.uk/government/publications/the-use-of-conditions-in-planning-permissions-circular-11-1995>
12. The Town and Country Planning Act 1990, cover the requirement for local authorities to consider the protection and planting of trees and the making of tree preservation orders.
13. For guidance on Certificates of Lawfulness see [http://www.planningportal.gov.uk/uploads/1app/guidance\\_note-lawful\\_development\\_certificates.pdf](http://www.planningportal.gov.uk/uploads/1app/guidance_note-lawful_development_certificates.pdf)
14. The Town and Country Planning (Control of Advertisement) Regulations 2007.
15. Planning (Listed Buildings and Conservation Areas) Act 1990. This Act consolidates all listed building and conservation area legislation and covers such things as listing, getting listed building consent, appeals and enforcement.
16. Ecclesiastical Exemption (Listed Buildings and Conservation Areas) Order 1994.
17. Planning (Listed Buildings and Conservation Areas) Act 1990. This Act consolidates all listed building and conservation area legislation and covers such things as listing, getting listed building consent, appeals and enforcement.
18. The Town and Country Planning (General Permitted Development) Order 1995, Schedule 1 (termed article 1(5) land).
19. See the Planning Inspectorate website for appeal information [www.planninginspectorate.gov.uk](http://www.planninginspectorate.gov.uk)
20. See the Planning Inspectorate website for appeal information [www.planninginspectorate.gov.uk](http://www.planninginspectorate.gov.uk)
21. *Lemmon v. Webb* (1894) 3 Ch 1.
22. *Pannett v. McGuiness & Co* (1972) 2 QB 599.
23. Occupiers' Liability Act 1984, section 1(3).

24. *Andrae v. Selfridge & Co Ltd* (1938) Ch 1.
25. Control of Pollution Act 1974.
26. *Birmingham Development Co Ltd v. Tyler* (2008) 122 Con LR 207.
27. Environmental Protection Act 1990.
28. *Colls v. Home & Colonial Stores* (1904) AC 185.
29. *Allen v. Greenwood* [1979] 1 All ER 819.

# 18

## Stage 4: Technical Design

This stage is compared to the 2007 RIBA Plan of Work as follows:

‘Technical Design comprises the residual technical work of the core design team members. At the end of Stage 4, the design work of these designers will be completed, although they may have to respond to Design Queries that arise from work undertaken on site during Stage 5. This stage also includes and recognises the importance of design work undertaken by specialist sub-contractors and/or suppliers employed by the contractor (Performance Specified Work<sup>1</sup> in JCT contracts) and the need to define this work early in the process in the Design Responsibility Matrix.’<sup>2</sup>

### 18.1 Technical design

This stage of the architect’s work is essentially a completion of the design stage. The architect must collaborate with, and co-ordinate the work of, the design team. This is easy to say and less easy to do.

During this period, the architect must ensure, so far as possible, that all conflicts between consultants’ work are ironed out. If any specialist sub-contractor design work is involved in the project, this must also be co-ordinated, together with final details from statutory and other authorities. Construction safety must be taken into account during this stage.

As a general rule, the use of sub-contractors in a design capacity is not to be advised, because it can cause complications. However, it should be noted that the Plan of Work now acknowledges the reality of practice in this respect. The principal problem is that, unless the sub-contract work is part of the contractor’s designed portion work under SBC, ICD or MWD, the contractor will have no design responsibility to the client for the work, even though the sub-contractor may have a design responsibility to the contractor. For example, if after practical completion a defect becomes apparent and it can be shown that the defect is due to a design error, the employer will have no obvious cause of action against the contractor. In practice, no doubt the contractor would pass the client’s concerns to the sub-contractor and press for rectification. But if the sub-contractor became insolvent or simply refused to act, the employer could be without an adequate remedy except perhaps against the architect.

In any event, the client must authorise such design delegation (Chapter 14, section 14.2.5). It has to be acknowledged that there are some instances where the use of specialist sub-contractors in a design capacity cannot be avoided due to the nature of the specialism. In such instances, the use of a form of collateral warranty between sub-contractor and employer is required to protect the client.

Ideally, at the end of Stage 4 all the major decisions about structure, services, materials and construction techniques must have been made. Careful cost checks will be made by the quantity surveyor if the project is large enough to support one, otherwise the architect must carry out this exercise.

If the project is sufficiently large to support a design team, they will be carrying out specific functions during this period, culminating in a meeting of the full team under the chairmanship of the team leader. This may be a project manager directly appointed by the client, but this will usually be as the employer's technical representative (Chapter 13, section 13.6). The separate functions of members of the design team will depend on the type of project, but as a general guide, they may be expected to be carrying out the following tasks.

#### ***Quantity surveyor/cost manager***

- Reviewing the cost plan in the light of the client's comments and decisions on the scheme design. The review highlights potential additional cost, risk areas and indicates scope for maximising value.
- Carrying out cost studies and cost checks as the design team finally shapes their details. There must be a constant flow of information between the architect and the consultants, the architect and the quantity surveyor, and the quantity surveyor and the architect (Figure 18.1 shows the principle).

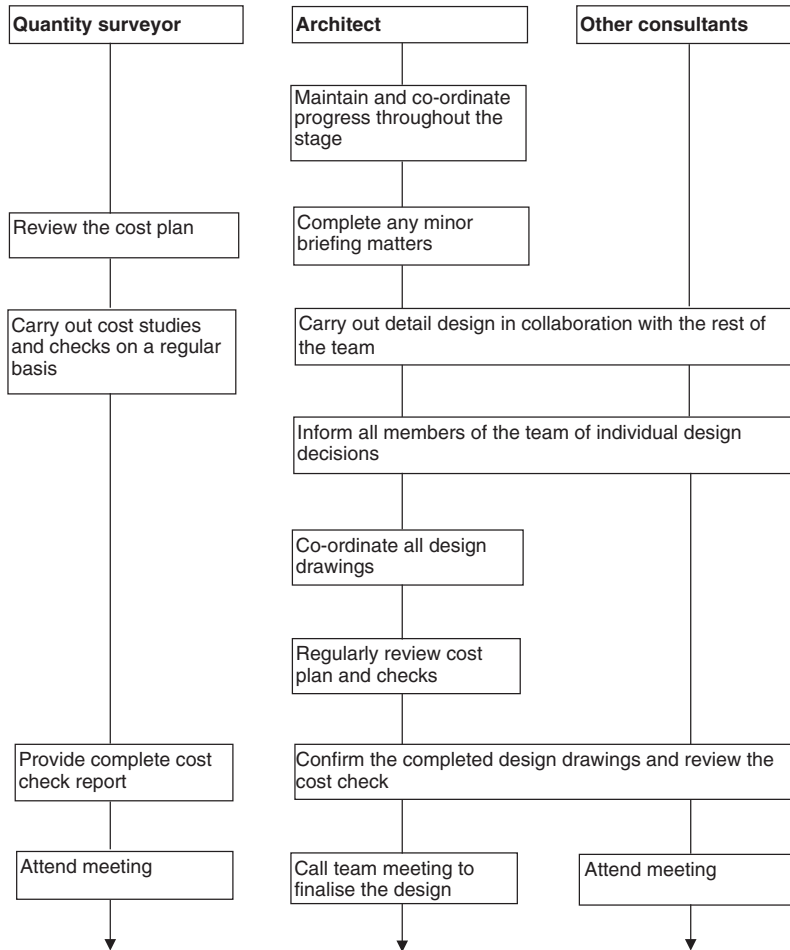
#### ***Civil and structural engineers***

- Collaborating in the cost plan review and cost checking procedures.
- Finalising all details in respect of dimensions, levels, loadings, concrete mixes, etc.
- Developing the specifications in detail.

#### ***Mechanical and electrical engineers***

- Collaborating in the cost plan review and cost checking procedures.
- Refining the design of all services to be incorporated in the building.
- Developing the specifications in detail.

Strenuous efforts must be made to obtain the client's decision on any outstanding items. If the client makes any change in the size, location, shape or cost of the scheme after this stage, there will be a cost penalty to pay for the re-doing of work already carried out. Ideally, there should be no changes at all in the design after this point, but in practice, it is impossible to eliminate all changes. Particularly in the case of some projects such as hospitals; the brief will be constantly evolving and the client just has to accept that there is a price to pay for changes. The difficulties may sometimes be eased by the choice of a particular procurement path and/or contract form, but it can never be removed entirely.



**Fig. 18.1** Stage 4: Flow of information.

When faced with a constantly changing brief, some clients have been known to opt for design and build as a way of washing their hands of the problem. Such an approach is misguided. Design and build procurement is not appropriate unless the brief is fixed. To use design and build where the work is being constantly varied is a very expensive and ineffective way to proceed.

The architect will continue the important two-fold function of designer and manager throughout this stage. There are several systems of setting out production information (section 18.2), but in every case, the architect cannot simply start by drawing a foundation and working up or starting with the roof and working down.

It is essential that the architect thoroughly understands the nature of each part of the building and it is during this stage, more than any other that the building takes shape as a whole. It cannot be overstressed that all parts must progress together so that for example the architect is aware, when considering the ducting details, what effect it has on the foundation designs, lift wells, room

plans and so on. This is in fact the most important stage in the architect's work on a project.

## 18.2 Production information

### 18.2.1 General

This used to be Stage F of the RIBA Plan of Work 2007. It is now part of Stage 4. All detailed construction decisions and the completion of all information in readiness for the quantity surveyor to produce bills of quantities if that is part of the chosen procurement route should be firmed up at this stage.

During this period, the architect prepares drawings, specifications and schedules. These are the instructions to the contractor to tell him what is to be built and the quality required. Although some architects leave the detailed specification to the quantity surveyors, this is thoroughly bad practice because the architect is ultimately responsible for the specification and from every point of view it is best if the architect prepares it.

It is also the time for agreeing details of the contract with the client and for obtaining quotations from those who are to be named or listed sub-contractors. The architect must be in a position to inform the quantity surveyor of the nature and amounts of all provisional sums which are to go into the bills of quantities.

### 18.2.2 Drawings

There are several different ways of producing the kind of drawings which make up the bulk of the production information. The design presentation drawings usually form the starting point for the preparation of working drawings. It has already been observed that by this stage the design drawings will be very detailed. Computers are now standard practice for the production of drawings (Chapter 8, section 8.9). Few architectural practices still use traditional methods and the need to be able to send drawings quickly by e-mail has made the production of drawings by computer essential. More practices are moving to the use of BIM which enables all the parties to have access to the total building 'in the round' (see Chapter 12 section 12.3).

Under most standard forms of building contract, the responsibility for supplying the contractor with correct information lies with the architect. It is not the contractor's responsibility to look for errors and inconsistencies.<sup>3</sup> Mistakes will always occur, but in view of the cost of rectifying a mistake on a drawing which no one has spotted until too late, it is of the utmost importance that the drawing system should be simple and capable of highlighting errors. Of course, there is no such foolproof system, but some methods are probably better than others.

Traditionally, architects worked on all aspects of the building at once, having half-finished drawings showing plans at each level, elevations, sections and



rough sketch drawings of all the major details to a large scale. These 'typical details' were often drawn on the same sheet as a plan or section which included the detail to a much smaller scale. The drawings were all brought to completion together and generally formed a well integrated set. Such sets of drawings were characterised by very many more lines than strictly necessary to tell the story and an apparent desire on the part of the architect to leave no square millimetre of paper unused. Notes littered the drawing and they were often repetitive in nature.

This kind of drawing system is quite satisfactory, although expensive, if the building is relatively small and uncomplicated by special services. It is likely to be accurate because it is produced as a set and it has the advantage of having all the large scale details on the same sheet as the small scale information to which it relates. Moreover, the bricklayer can see what the carpenter has to do and the steel erector can readily appreciate the reason for any fine tolerances which have been specified. In fact, each part of the building can be understood in relation to every other part.

The problems with this kind of drawing system stem from the advantages. Although the system is fine for small buildings, it is very difficult to build a medium to large building from such drawings. One problem is the change in number of drawings from perhaps an optimum of two or three to perhaps fifty or more for a building only marginally larger and more complex than a large detached family house. The other problem is the unstructured way in which the information is presented. If details are drawn on the same sheet as small-scale drawings, finding such a detail will be difficult if there is more than one drawing showing the small-scale item, but the large-scale detail is only on one drawing. There is a rule, whose name escapes the authors at present, which states that whichever drawing the site agent picks up, the detail will be on another. The sheer complexity of such drawings, when multiplied for a large building makes errors almost certain (see Chapter 19, section 19.2, Co-ordinated project information).

A drawing system which attempted to overcome the defects in what can be termed the traditional method was the elemental drawing. The idea of this was that each element of the building was given a special drawing or set of drawings. Each item of information was given just once, in the appropriate place and to an appropriate scale. Among other things, the alteration of a drawing was made easier than where a traditional drawing was involved. Thus there was a complete set of reinforced concrete drawings showing every detail of the concrete including dimensions, but nothing else. Similar sets were provided for brickwork and blockwork, plastering, joinery, plumbing, etc. Further drawings in outline were provided to show the way in which the elements fitted together. This was an excellent system provided that it could be guaranteed that there were no errors on the drawings and that the drawings were comprehensive. Therefore, an enormous drawback to this system was that the inevitable errors which are present in any set of drawings had much less chance of being discovered, because the site operative could not easily see how the various segments interfaced.

Although flawed, this system was developed into a four-stage and more practical drawing method:

- location drawings
- assembly drawings
- component drawings
- details/schedules.

### ***Location drawings***

These drawings were produced to a small scale, typically 1:100, but sometimes, for very large buildings, 1:200 was used. The purpose of the drawings was reflected in the content. They were intended to show the location of the building and other elements on the site; so as to enable the site agent to set them out properly, and to show the position of all the other major elements in the building itself. Thus there is a site plan, plans at each level, elevations and sections through every difficult portion of the building. Such plans and sections are not intended to show how the building should fit together; they were principally to serve as an index or menu from which the site agent could get a reference number for the required drawing. Some additional information could be included, such as finished floor and foundation levels and setting out and other dimensions, but the golden rule was that every line must be on the paper for a definite purpose. Very often, these drawings were produced on a standard grid basis to simplify location of walls, doors and windows.

### ***Assembly drawings***

These were the drawings which show how the components of the building fit together. They were the successors to the traditional 'half-inch sections' although they may not be sections and the scales could be any standard scale from 1:50 to 1:10. These drawings tend to contain the information which is not to be found elsewhere.

### ***Component drawings***

Component drawings showed how the parts of the building were to be manufactured. Such items as fitted joinery, windows, doors, stairs, screens, concrete products and standard panels would be shown on these drawings. Generally, there was a separate drawing for each component. Components were often drawn full size or to some other appropriate large scale.

### ***Details/schedules***

The final category of drawings includes large scale details of specific items of construction not shown sufficiently clearly elsewhere. Special details of damp-proof courses, weatherings, eaves, junctions and external hard landscaping may be included. This category also included schedules. Schedules are a very good way of presenting information for categories of building element. They also impose a good discipline on architects who learn a lot about their buildings in particular and construction in general by producing schedules. The architect

who schedules everything possible accurately will make a friend of the quantity surveyor. Common schedules include the following:

- ironmongery
- sanitary fittings
- precast concrete
- doors
- windows
- floor, wall and ceiling finishes
- lighting
- glazing
- tiling
- colour
- inspection chambers and manholes
- lintels.

Some less obvious subjects for schedules, but which were well worth doing include:

- architraves
- skirtings
- casings
- plumbing pipe runs
- rainwater pipes and gulleys
- external paving.

These drawing systems are still in common use in the case of practices which are not ready to espouse BIM or for projects of a relatively small nature for which BIM may appear like overkill.

## 18.3 Building regulations 2010 (as amended)

### 18.3.1 General

The Building Regulations in England and Wales are made by the Secretary of State under the Building Act 1984; the Building Act does not extend to Scotland or to Northern Ireland. Although they have shared the same format since 2012, Wales has had devolved responsibility for Building Regulations and subsequent revisions have differed in content, scope and requirements in England and Wales. The purpose of Building Regulations is to secure the health, safety, welfare and convenience of people in or about buildings and of others who may be affected by buildings or matters connected with buildings and to further the conservation of fuel and power and preventing waste, undue consumption, misuse or contamination of water. The purpose for which Building Regulations may be made has been extended to include furthering the protection or enhancement of the environment, facilitating sustainable development, and furthering the prevention or detection of crime. These changes were introduced by the Sustainable and Secure Buildings Act 2004.

Administration of the Building Regulations and assessment of schemes at design and construction stages are carried out by Building Control bodies. These bodies may be either Local Authorities or private sector Approved Inspectors. The latter system operates under The Building (Approved Inspectors, etc.) Regulations 2010.

Most building works or alterations to buildings require a Building Regulations application to be submitted. However, in the case of some minor works a competent person may be engaged to carry out the design, installation and testing of the work and that competent person will notify the Building Control body once the work is complete.

The following building types, at present subject to certain conditions, are exempted, by virtue of Schedule 2, from the Regulations.

- Buildings subject to the Explosives Acts 1875 and 1923.
- Buildings (other than dwellings, offices and canteens) on a site with a licence under the Nuclear Installations Act 1965.
- Buildings subject to the Ancient Monuments and Archaeological Areas Acts 1979.
- Buildings into which people cannot or do not normally go, subject to siting.
- Detached buildings containing fixed plant or machinery to which people only go intermittently to inspect or maintain the plant or machinery subject to siting.
- Greenhouses (unless used for retailing, packing or exhibiting).
- Any building used for agriculture, including fish farming, sited one and a half times its height from any point of a building containing sleeping accommodation and having no point more than 30 metres from an exit which may be used in the case of fire (unless the main purpose of the building is retailing, packing or exhibiting).
- Buildings intended to remain where erected for not more than 28 days.
- Any building on a site used in connection with the sale of buildings or building plots, provided there is no sleeping accommodation.
- Any building used by people in connection with the erection, extension, alteration or repair of buildings and containing no sleeping accommodation.
- Small detached single storey buildings not exceeding 30 square metres floor area containing no sleeping accommodation and either sited more than one metre from the boundary of its curtilage or constructed substantially of non-combustible material.
- Nuclear, chemical or conventional weapon shelters not exceeding 30 square metres and which do not affect the foundations of adjoining or adjacent buildings, that is, sited at a distance of the depth of excavation plus 1 m.
- Any conservatory, porch, covered way or carport at least open on two sides. The extension which has a floor area not exceeding 30 square metres subject to glazing requirements of Approved Document K.

The Regulations are expressed fairly simply in functional terms, but there is a set of Approved Documents which indicate ways in which compliance with the

Building Regulations may be achieved. However, it is possible to show compliance with the Regulations by reference to other Standards or by calculation.

There are Approved Documents relating to the following requirements of the Building Regulations:

- AD A Structure
- AD B Fire safety – Volume 1 Dwellinghouses
- AD B Fire safety – Volume 2 Buildings other than dwellinghouses
- AD C Site preparation and resistance to contaminants and moisture
- AD D Toxic substances
- AD E Resistance to passage of sound
- AD F Ventilation
- AD G Sanitation, hot water safety and water efficiency
- AD H Drainage and waste disposal
- AD J Combustion appliances and fuel storage systems
- AD K Protection from falling, collision and impact
- AD L1A Conservation of fuel and power – New dwellings
- AD L1B Conservation of fuel and power – Existing dwellings
- AD L2A Conservation of fuel and power – New buildings other than dwellings
- AD L2B Conservation of fuel and power – Existing buildings other than dwellings
- AD M Access to and use of buildings
- AD P Electrical safety – Dwellings
- AD to support Regulation 7 – Materials and workmanship.

In addition, compliance guides are also published in relation to more detailed design aspects. These guides relate to ventilation systems and services installation.<sup>4</sup>

### 18.3.2 Notification

It is an offence to commence building operations without first depositing plans or a building notice giving at least two clear days' notice to the local authority. If the Building Control function is being carried out by an Approved Inspector, then an Initial Notice advising of the intention to carry out the work must be submitted five days before work commences. However, it is not necessary to await approval before commencing work.

It is not necessary to give notification for classes of work given in Schedule 2A where the work is undertaken by a competent person who is a member of an approved Self-certification Scheme. There are schemes covering:

- installation of gas appliances
- installation of oil appliances
- installation of solid fuel appliances
- installation of heating and hot water installations in dwellings
- installation of heating, hot water, mechanical ventilation and air conditioning systems in buildings other than dwellings

- electrical installations
- installation of certain insulation systems
- certain drainage and plumbing installations.

The principles of self-certification are based on giving people who are competent in their field the ability to self-certify that their work complies with the Building Regulations without the need to submit a building notice and thus requiring local authority inspections or incurring fees. The notice procedures are the following.

### ***Deposit of full plans***

This is the traditional system. A full set of plans must be deposited with the local authority in duplicate together with completed forms which may vary in layout from authority to authority, but which all contain requests for the same basic information. Where Part B Fire Safety imposes a requirement, two further copies must be deposited demonstrating compliance except in regard to dwelling houses. It is now possible to request, at the time the plans are deposited, that the local authority issue a completion certificate in accordance with the regulations. The Building (Local Authority Charges) Regulations 2010 gives the local authority power to determine the scale of plan or inspection charges as may be necessary to discharge its duties under the appropriate regulations. Charges can relate to the passing and rejection of plans, site inspections, building notices, reversion, regularisation and determinations. Charges are now payable when appeals are made to the Secretary of State. Current charges are available from the building control department of the local authority.

The drawings, each of which must be signed by the applicant or appointed agent, are generally expected to consist of the following.

- A block plan, not less than 1/1250 scale, showing the size and position of the building in relation to adjoining buildings, boundaries, position of all buildings within the curtilage, width of adjoining streets, lines of drainage, size, depth and gradient of drains and means of access, position and level of drain outfall and sewer connection.
- Sufficient plans and sections to suitable scales (usually not less than 1/100) showing full details of the intended construction of the project including site and floor levels, number of storeys, foundations, construction of floors, walls and roof, windows, doors, barriers to moisture, fire safety, means of escape, insulation, ventilation and access for all users of the building.

The local authority must give written notice of approval or rejection of the application within 5 weeks of the date of deposit of plans, provided the requisite fee has been paid and a reasonable estimate of the cost of the work has been submitted. The period may be extended in writing to a total of not more than 2 months by agreement of both parties. Approval may, with the agreement of both parties, be given subject to conditions. The conditions can only relate to the deposit of further information or the modification of the details submitted.

If the authority fails to give written notice, it is in breach of its duty and the plan charge must be refunded. There is no deemed approval and indeed, even if

there were such deemed approval it would be of little value if there was any dis-conformity, in the face of the applicant's obligation to construct in accordance with the Building Regulations. Once plans have been deposited for approval and a question arises as to whether the plans of the proposed work conform with the Building Regulations then the question can be referred to the Secretary of State for determination (in Wales, the question is referred to the National Assembly of Wales).

### ***Building notice***

There is no approval of plans by the authority where this procedure is adopted and work can be commenced subject to the submission of notices (see above). A building notice is now valid for three years if work is not started and it cannot be given for a building which is, or will be subject to the Regulatory Reform (Fire Safety) Order 2005.

This applies to both new and existing buildings, including alterations or extensions. Effectively a building notice cannot be used in relation to buildings other than dwellings. Additionally, a building notice cannot be used in the case of a building fronting onto a private street or in the case of work over or within 3 m of an existing drain or sewer shown on the Sewerage Undertaker's sewer records. The local authority will be able to provide details of these records. There is no prescribed form for the notice, but it must contain certain basic information: The name and address of the person intending to carry out the work, notice that it is given under Regulation 11(1)(a) of the Building Regulations and a description including the use of the building to which the application relates. In addition, appropriate drawings and the prescribed charge must be deposited.

The drawing, to a scale of not less than 1/1250, will usually show the size and position of the building, its relationship to adjoining buildings, boundaries, position of all buildings within the curtilage, width of adjoining streets, numbers of storeys, building use, means of drainage and building over sewers. Details of insulation and hot water storage systems must be given in a detailed statement.

The authority may request the submission of whatever additional drawings or information they require to enable them to carry out their duties. Where unauthorised work has been undertaken on or after 11 November 1985, the owner has to apply to the local authority for a Regularisation Certificate which is subject to a non-refundable charge at the time of submission.

### ***Initial notice***

This procedure is used if private certification is to be employed, using an approved inspector (see section 18.3.1). The notice must be in the prescribed form and must contain a description of the work. This is the case whether it is:

- 'minor work' under the Building (Approved Inspectors, etc.) Regulations 2010
- an undertaking to consult the fire authority
- a statement of awareness of statutory obligations, or a declaration that an approved insurance scheme is in operation.

Figure 18.2 is an example of such a notice. The notice must be signed by the inspector and by the applicant. It must be accompanied by an appropriate drawing. The drawing must be a site plan to not less than 1/1250 scale showing the location of the site, boundaries, connections to sewers and any proposed work over a sewer.

The local authority has five working days from the date of receipt of the notice to accept or reject it. If the notice is not rejected within this period, the authority is presumed to have accepted without conditions. The authority may impose various conditions when accepting the notice.

A local authority may reject an initial notice on the following grounds only if:

- the notice is not in the prescribed form
- the work is not within the area of the authority on which the notice has been served
- the person signing as the approved inspector is not in fact an approved inspector
- insufficient information about description, use of building, location or drainage
- there is no undertaking to consult the fire authority (if applicable)
- the inspector has a professional or financial interest in the work (unless 'minor work' involved)
- the drainage proposals are unsatisfactory
- the authority is not satisfied that it may consent to building over a public sewer (if applicable)
- local legislation will not be complied with
- there is an overlap with a still effective initial notice.

Upon acceptance, supervision of the work becomes the responsibility of the inspector and the authority's powers to enforce the Building Regulations are suspended until either the initial notice is cancelled by the inspector or it ceases to have effect on the lapse of a period of four to eight weeks depending on the project.

### 18.3.3 Commencement, completion, etc.

Where full plans have been deposited in the traditional way, building works must be commenced within 3 years of the date of deposit of plans with the local authority. Once work has started, neither the Regulations nor the Act itself stipulate the speed at which the work must progress, probably because it would not be feasible to do so. It is possible for the work to be carried out over a very protracted period without the applicant incurring any penalty.

If the local authority is to supervise the work by means of its own inspectors, the Regulations require the applicant or the contractor to give the notices of commencement and completion in writing. The authority may, and often does, inspect on the basis of a telephone call, and will agree with the person carrying out the works a schedule of inspections during the project to address compliance with the requirements of the regulations.



The Building Act 1984, section 47, and the Building (Approved Inspectors, etc.) Regulations 2000

INITIAL NOTICE

To: The Kirdale Metropolitan District Council, Department of Planning  
(Building Control Section), Old Town Hall, Kirdale, KD1 2FT

1. This notice relates to the erection of a home for older persons, corner of Low Road and High Street, Kirdale, KD2 4EV
2. The approved inspector for the work is:  
Seymore Thanniew RIBA  
Canny Buildings  
Kirdale, KD5 6PC  
Tel: 0111 234567
3. The person intending to carry out the work is:  
Hope Furthurbest  
Penury House  
Neely Spent  
Kirdale, KD2 7EV  
Tel: 0111 345678
4. The following documents relating to the work are enclosed with this notice:  
A copy of the approved inspector's notice of approval.  
A scheme of insurance approved by the Secretary of State, issued on behalf of Yorisk Insurers plc. relative to the work described.  
A plan to 1:1250 scale indicating site location, boundaries, drainage, connection and location of existing sewers.
5. The work is not minor work.
6. I, Seymore Thanniew, declare:
  - (a) that I have no professional or financial interest in the work; and
  - (b) that I will consult the fire authority before giving a plans certificate in accordance with section 50 of the Act or a final certificate in accordance with section 51 of the Act in respect of any of the work; and
  - (c) that I am aware of the obligations laid upon me by Part II of the Act and by the 2000 Regulations.

Signed

Approved Inspector  
16 July 2015

Signed

Person intending to carry out the work  
16 July 2015

**Fig. 18.2** Example of an initial notice.

The person carrying out the work must also provide the local authority with:

- in the case of a new dwelling, a carbon emission calculation and a fabric energy efficiency calculation at design and completion stages
- in the case of a new building, an air leakage test result
- in the case of new dwellings, a water efficiency calculation
- in the case where Part E (resistance to passage of sound) applies, the results of appropriate sound testing unless approved constructional details have been used
- copies of testing and commissioning certificates to demonstrate that services and equipment operate safely and efficiently at the time of completion.

Local authorities must issue completion certificates for all projects and approved inspectors will issue a final certificate. Certificates will not be issued until all necessary testing has been carried out and certified and all systems have been commissioned and tested. In addition any elements of the project carried out under self-certification schemes by competent persons must have been the subject of a notification of compliance.

Where an approved inspector is involved, the inspector must issue a final certificate when work is complete (it should be noted that this is not the same as the final certificate under the provisions of JCT or other building contracts). The local authority is deemed to have accepted the certificate if it does not reject it within ten days of receipt.

#### **18.3.4 Contraventions**

The local authority may require the removal or amendment of work which is carried out in contravention of the Regulations. This is normally done by service of a notice on the building owner. Failure to comply with such notice within 28 days entitles the authority to take action itself to correct the contravention and charge such costs to the owners. Such notice may not be served after the expiry of two years from the date of completion of the work. Appeal from such notice is to a magistrate's court. An alternative is for the building owner to obtain a written report from a suitably qualified person in regard to the subject of the notice. The time for compliance with the notice is then extended to 70 days. On receipt of the report, the authority may withdraw the notice and may pay the building owner appropriate expenses.

#### **18.3.5 Fire precautions**

Fire has proved to be a major hazard in buildings for centuries. The Building Regulations 2010, Schedule 1, Part B, Fire Safety, contains five requirements:

- B1 Means of escape from all buildings, including dwelling houses
- B2 Internal fire spread (linings)
- B3 Internal fire spread (structure)
- B4 External fire spread
- B5 Access and facilities for the fire service.

In large and complex schemes, the only viable and acceptable standard would be achieved by the fire engineering approach coupled with consultations with the Building Control Authority and the fire authority at every stage in any project.

The Fire Safety Order reforms the law relating to fire safety in non-domestic premises. Specifically it replaces the Fire Precautions (Workplace) Regulations 1997 and the Fire Precautions Act 1971. It imposes a general duty to take such fire precautions as may be reasonably required to ensure that premises are safe for the occupants and those in the immediate vicinity. By virtue of the Order, the responsible person is required to carry out a fire risk assessment of their premises. This must be a suitable and sufficient assessment of the risks to which relevant persons are exposed for the purpose of identifying the general fire precautions they need to take to comply with the requirements under the Order.

Although these requirements are applicable to premises whilst in operation, it would be useful for the designers of a building to carry out a preliminary fire risk assessment as part of the design process. If a preliminary risk assessment is produced, it can be used as part of the Building Regulations submission and can assist the fire safety enforcing authority in providing advice at an early stage as to what, if any, additional provisions may be necessary when the building is first occupied.

The Order applies to all non-domestic premises, which includes the common parts of a block of flats and houses in multiple occupation.

This is an important piece of legislation which is closely linked to the Building Act 1984. Architects should be familiar with its provisions so as to be able to advise clients broadly concerning its application in particular instances.

### **18.3.6 Energy performance certificate**

The way a building is constructed, insulated, heated and ventilated and the type of fuel used, all contribute to its energy consumption and carbon emissions.

When a building is built, an Energy Performance Certificate (EPC) is required under the Building Regulations. The certificate provides energy efficiency A-G ratings and recommendations for improvement.

The Energy Performance Certificate is one measure introduced to help improve the energy efficiency of our buildings. Other changes include requiring larger public buildings to display certificates showing the energy efficiency of the building and requiring inspections for air conditioning systems.

EPCS must be produced by accredited energy assessors. They are produced using standard methods and assumptions about energy usage so that the energy efficiency of one building can easily be compared with another building of the same type. This allows prospective buyers, tenants, owners, occupiers and purchasers to see information on the energy efficiency and carbon emissions from their building so they can consider energy efficiency and fuel costs as part of their investment.

An EPC is always accompanied by a recommendation report that lists cost effective and other measures (such as low and zero carbon generating systems) to improve the energy rating. Each recommendation is assessed against

the potential impact over three payback periods in addition to other measures based on an understanding of the building and indicates whether the impact is High, Medium or Low.

### 18.3.7 Further legislation

The construction of buildings, their subsequent alteration or adaptation for other use is becoming more complex and may be subject to other Acts and regulations which may be outside the remit of the Building Regulations.

Many large towns and cities had introduced Local Acts which required additional measures to be introduced beyond the requirements of the Building Regulations, particularly in relation to fire precautions in large premises. The majority of these requirements were repealed in 2013 and whilst they no longer apply, features provided to existing buildings under these requirements should not be removed without a comprehensive risk assessment.

The following list is an aide memoire for other legislation connected with buildings and structures, but it is not intended to be fully comprehensive. Scotland and Northern Ireland are not always included. Most local authority staff are happy to confirm whether a particular Act or regulation is applicable to a scheme:

- *Building Act 1984*  
The most commonly encountered sections deal with dangerous and defective premises, demolition of buildings, means of escape from certain high buildings and the raising of chimneys, if overreached by building work.
- *Building (Scotland) Regulations 2004*
- *Building Regulations (Northern Ireland) 2012*
- *Health & Safety at Work Act 1974*
- *Construction (Design and Management) Regulations 2007 (CDMR)<sup>5</sup>*
- *Highways Act 1980*  
Means of access to premises from highways, bridges in England and Wales, certain footpaths in buildings by agreement, footbridges over highways linking buildings, doors not to open onto highway, power to prescribe building lines, control of builders' skips, dangerous land adjoining highway.
- *Safety of Sports Grounds Act 1975*  
Not applicable to Northern Ireland. An Act to make provision for safety at designated sports stadia and other sports grounds where accommodation is in excess of 10,000 spectators.
- *Constructional Products Regulations 2013*  
The Regulations require products to have such characteristics that work in which they are incorporated, if properly built satisfy any essential requirements which apply to the works. Products which bear the CE mark will be presumed to satisfy this requirement.
- *Equality Act 2010*  
Buildings should be designed for access and use by everyone and designed to create a barrier-free environment. From 2004, service providers have had to take reasonable steps to remove, alter, or provide reasonable means of

avoiding physical features that make it impossible or unreasonably difficult for disabled people to use a service.

■ *The Party Wall Act 1996*

See the fuller description in Chapter 17, section 17.4.2.

## References and notes

1. Performance Specified Work is no longer included in JCT contracts, but there is provision for Contractor's Designed Portion which also has the effect of giving the contractor design responsibility for selected elements.
2. See 'The RIBA Plan of Work 2013 Overview', Editor Dale Sinclair, published by the RIBA London, p. 7.
3. *London Borough of Merton v. Stanley Hugh Leach Ltd* (1985) 32 BLR 51.
4. Copies of the Approved Documents and compliance guides can be freely downloaded from <http://www.planningportal.gov.uk/buildingregulations/approveddocuments>
5. Now the Construction (Design and Management) Regulations 2015.

# 19

## Stage 4: Technical Design: Tender Documentation and Tender Action

This stage is described by the RIBA as follows:

‘Technical design comprises the residual technical work of the core design team members. At the end of Stage 4, the design work of these designers will be completed, although they may have to respond to Design Queries that arise from work undertaken on site during Stage 5. This stage also includes and recognises the importance of design work undertaken by specialist sub-contractors and/or suppliers employed by the contractor and the need to define this work early in the process in the Design Responsibility Matrix.’<sup>1</sup>

### 19.1 Introduction

The alternative procurement paths have been described in Chapter 16. All of them require documentation to be prepared in some form to enable the tendering contractors to submit a tender for the Works. Whilst the composition of such documentation will vary, it is essential that it is properly co-ordinated and, in a form adequate for the tenderer to fully understand the scope of the Works and the requirements as to the tender submission.

On major projects, where the traditional procurement approach is adopted, it is commonplace for bills of quantities to be prepared. In the absence of bills of quantities the tender documentation will comprise a specification or works schedule and drawings; under the ECC the contractor has to undertake the works in accordance with the Works Information. Though not usual a specification or works schedule may include some quantities. When no quantities are shown the tenderers will have to prepare their own quantities in order to price the Works.

The continuing development of sophisticated design and modelling computer software (e.g. BIM, see Chapter 12, section 12.3) and the increasing flexibility of the hardware on which information can be viewed (e.g. portable electronic devices) through the WEB, is changing the way in which designs are created, developed, stored and viewed. This ongoing development has changed, and

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continues to change, the way in which drawings, bills of quantities and specifications are linked and the way in which tenders are produced and information is conveyed. However, it is likely to be a long time before paper copies of drawings, bills of quantities and specifications are dispensed with entirely, especially on the smaller projects.

## 19.2 Co-ordinated project information

One of the prime causes of disruption to building operations on site has been highlighted as the inadequacy of the drawn information and a lack of compatibility in project information generally i.e. the drawings and specifications or bills of quantities are not consistent.

In order to improve the situation the Co-ordinating Committee for Project Information (CCPI) was set up in 1987 by the major bodies in the construction industry. After consultation with all interested parties it produced a *Common Arrangement of Work Sections for Building Works* (CAWS). They also produced codes for the writing of a project specification and the production of drawings. They also worked with the RICS when it produced the Standard Method of Measurement for Building Works (SMM7). CAWS was revised and updated in 1998 to align it with Uniclass (see Chapter 8, section 8.13.2 and below).

The purpose behind CAWS was to define an efficient and generally acceptable arrangement for classifying work within construction documents such as specifications and bills of quantities. CAWS is a system based on the concept of work sections. To avoid boundary problems between similar or related work sections, CAWS has a list of what is covered within, and what was not covered within, each work section. It also identifies the appropriate sections for locating rogue item of work. It has some 300 work sections which reflect the extensive range of products and materials that exist for use by contractors, sub-contractors and specialists. Although very much dependent on size and complexity, no single project specification would need more than a fraction of the 300 sections. If necessary, further work sections could easily be introduced without the need for extensive re-numbering.

The main advantages were seen as follows.

- Easier distribution of information; particularly in the dissemination of information to sub-contractors. One of the prime objectives in structuring the sections to CAWS was to ensure that the requirements of sub-contractors should not only be recognised but that the information is kept together in relatively small compact packages.
- More effective reading of documents collectively. Use of the CAWS coding allowed the specification to be directly linked to the bills of quantities descriptions. This cut down the descriptions in the latter whilst still including all the information contained within the former.
- Greater consistency achieved across the documents. The site agent and clerk of works should be confident that when they compare the drawings with

the bills of quantities, there should be less chance of being faced with the question '*which one is correct?*'

In the late 1980s the Building Project Information Committee (BPIC) was set up and superseded the CCPI. The BPIC was subsequently reconstituted as the Construction Project Information Committee (CPIC). This Committee's major sponsors are the Construction Confederation, the Royal Institute of British Architects, The Royal Institution of Chartered Surveyors and the Chartered Institution of Building Services Engineers. The committee states its objectives as being '*responsible for providing best practice guidance on the content, form and preparation of construction production information and making sure this best practice is disseminated throughout the UK construction industry*'.

The increased use of computers and collaborative working resulted in the publication of '*Production Information – A Code of Procedure for the Construction Industry*' in 2003. The aim of this Code is to provide practical guidance on the preparation of production information by making optimum use of widely adopted computer systems; production information is conveyed by drawings, specifications and bills of quantities or schedules of work. Unless this information is complete, accurate and co-ordinated, it will not be effective and, no matter how good the design is, it will not be satisfactorily realised on site. Poor production information causes delays, extra costs and poor quality, which in turn gives rise to disputes over who is responsible for the problems. Good production information is thus of vital importance to the success of a project

In 2007 the BSI Committee published BS 1192:2007 called '*Collaborative Production of Architectural, Engineering and Construction Information*'. The emphasis is on collaborative production of information and offers guidance on how to implement collaborative work as well as on how to use well-structured names for directories, files and layers. The standard establishes the methodology for managing the production, distribution and quality of the construction information using a disciplined process for collaboration and a specified naming policy.

CPIC started to move away from CAWS in 1997 and published Uniclass (Unified Classification for the Construction Industry). Uniclass was a new classification scheme for the construction industry and is based on 15 tables, each of which represents a different broad facet of construction information. Each table can be used as a 'stand alone' table for the classification of a particular type of information but in addition terms from different tables can be combined to classify complex subjects. Uniclass is seen as providing a structured approach to classifying building information by organising it based upon common characteristics. It incorporates elements from CAWS, EPIC and the CI/SfB forms of classification (see Chapter 8, section 8.13.2). It was intended for wider use than simply organising project information. It can be used to classify library material and to structure product literature.

Uniclass2 was introduced in 2013 and extends beyond buildings to all aspects of the built environment. It is considered to be better able to accommodate civil engineering and process engineering works alongside architecture and landscape. It more easily enables the description of systems in performance terms, and is more suited to accommodating facilities management.



It groups like information in tables and these tables can be viewed in a hierarchy of increasing detail (e.g. complexes comprise entities, entities comprise elements, elements comprise systems, and systems comprise products). It also provides tables that can be used to classify activities and spaces. Buildings comprise spaces, and activities take place in those spaces. For example at its broadest level, a complex such as a sports centre will comprise many entities e.g. buildings, roads and landscape. These entities can individually comprise of elements which themselves comprise systems and so on. Uniclass is used in the National Building Specification (see section 19.4.7).

Uniclass2 is seen as the implementation of the international framework for construction information defined by ISO 12006-2 and the tables in Uniclass2 are premised on this standard. The Common Arrangement of Work Sections (CAWS) was covered in Table J of Uniclass. Uniclass2 includes an equivalent table but this table has been unified with the other Uniclass2 tables; therefore Uniclass2 sees a move away from CAWS.

## **19.3 Bills of quantities**

### **19.3.1 General**

The work of the quantity surveyor/cost manager is described in Chapter 1. Whilst the role was traditionally to measure and value, today it covers a much wider range of activities. The comments in this chapter are restricted to the preparation of bills of quantities, a key part of the measuring and valuation function, though the number of clients requiring the use of bills of quantities on their projects may well be on the decline. Whilst bills of quantities are not always required, measurement of quantities in some form, either on behalf of the client or by the contractor, will be necessary. Therefore, it is important for architects to understand the process involved and for the need to provide adequate and timely design information.

### **19.3.2 Preparation of quantities**

The quantity surveyor's work in preparing quantities is the final stage, when using the single stage traditional procurement route, prior to the issue of the tender documentation. Consequently, there is a tendency for the cumulative result of delays during the earlier stages of a project to have an effect on the time allocated for this process. With drawings and specification completed, it is sometimes difficult for clients to understand why there is a further delay.

The quantity surveyor can and will increase resources and hours worked when necessary, but they cannot do so for everybody and all the time. They are, after all, preparing a contract document (e.g. the priced bills of quantities will become the Contract Bills under SBC) which should define the contract works precisely. Accuracy in the bills of quantities depends on systematic checking at each stage and a very careful reading and checking of the final document. Excessive pressure to complete the document can only result in work being undertaken hurriedly with the inherent risk of errors or omissions. This gives rise to the possibility of subsequent disruption and delay to the works

resulting in additional cost to the client. Therefore, no attempt should be made to reduce the period allowed for the preparation of the bills (i.e. the taking off of the quantities) to make-up for earlier delays in the project.

Time should be saved in the preparation of the bills of quantities if the quantity surveyor is fully involved throughout the various design stages. If this is the case, they would be fully informed and therefore better placed to plan so that the necessary resources are available as and when required. The design team should keep the quantity surveyor fully informed about the programme and advised of any slippages when they arise. When completion of the drawings and specification is fast approaching, the quantity surveyor should be given a definite date for completion, which once given, should, if at all possible, be adhered to by the designers. The quantity surveyor can then plan their work and resources to complete the bills in the shortest possible period. If the quantity surveyor is expecting the design information, they can allocate the resources to do the work in an efficient manner. That is not likely to be possible if the design information is supplied late or drip-fed in batches. Quantity surveying resources cannot simply sit around doing little or nothing and will more than likely have to be allocated to other unrelated tasks if the design information is not supplied in a timely and efficient manner. Once allocated to other tasks it may not be easy to simply reallocate the resources back to the bill preparation at short notice.

So that the architect may appreciate the requirements of the quantity surveyor in terms of the drawings and other design information to be provided, it is necessary to give some thought to how the quantity surveyor sets about preparing bills of quantities. The building work is generally divided into sections, and each section is individually measured. A list of sections in a typical building might be:

- |     |                |      |  |
|-----|----------------|------|--|
| (a) | Substructure   | (1)  | Substructures                              |
| (b) | Superstructure | (2)  | Frame                                      |
|     |                | (3)  | Upper floors                               |
|     |                | (4)  | Roof                                       |
|     |                | (5)  | Stairs                                     |
|     |                | (6)  | External walls                             |
|     |                | (7)  | Windows and external doors                 |
|     |                | (8)  | Internal walls and partitions              |
|     |                | (9)  | Internal doors                             |
| (c) | Finishes       | (10) | Wall finishes                              |
|     |                | (11) | Floor finishes                             |
|     |                | (12) | Ceiling finishes                           |
| (d) | Services       | (13) | Sanitary appliances                        |
|     |                | (14) | Disposal installations                     |
|     |                | (15) | Water installations                        |
|     |                | (16) | Heating installations                      |
|     |                | (17) | Electrical installations                   |
|     |                | (18) | Gas installations                          |
|     |                | (19) | Lift installations                         |
|     |                | (20) | Communications installations               |
|     |                | (21) | Builder's work in connection with services |
| (e) | External works | (22) | Site works                                 |
|     |                | (23) | Drainage                                   |

This list is obviously not fixed. A particular building might introduce additional sections, e.g. kitchen equipment, laboratory installations. The list is in a logical order, more or less following the construction of the building. The

quantity surveyor going through these sections will usually visualise the erection of the building together with the necessary detail; even the fullest of drawings cannot show all the necessary details and information. The quantity surveyor may decide the detail for themselves given they must have something in mind to measure the quantities. Where the quantity surveyor is unable to identify an appropriate detail they will request further information or clarification from the architect or other design team members. When the quantity surveyor allows for a detail, which is not fully or properly shown in the design information supplied, they should confirm what has been measured to the architect. This would then give the architect, or other design team member, an opportunity to confirm that the detail allowed is correct or provide an alternative detail.

Obviously, it would greatly assist the quantity surveyor if all the drawings are made available at the same time. If certain drawings are delayed then the quantity surveyor will likely progress with those sections for which they have sufficient information. However, careful consideration should be given to the sequence for the issue of design information. The quantity surveyor may be able to progress bill preparation without say the joinery fittings or drainage drawings and not disrupt their measurement programme. However, if they are sent the foundation drawings and are told by the architect '*You will have to wait for the depths*', then the drawings are likely to be of little use. The quantity surveyor is unlikely to be able to measure the substructure without the depths. When drawings or other design information are not going to be available, the quantity surveyor should be consulted to determine a priority for issue in order to achieve an efficient production of the bills.

### 19.3.3 Standard methods of measurement

Standard methods of measurement have been introduced over the years to ensure that bills of quantities are prepared on the basis of a set of accepted rules. These are necessary so that those pricing the bills fully understand what descriptions of work are intended to cover and they can then price accordingly. These standard methods are measurement rules and not necessarily a method for classifying the works.

The most common set of rules in use was, and probably remains, the Standard Method of Measurement of Building Works agreed between the RICS and the Construction Confederation. This is in its 7th edition (i.e. SMM7), was revised in 1998, and is structured around CAWS (see section 19.2). It provides a uniform basis for measuring and presenting quantities in bills of quantities. There is a Measurement Code for use with SMM7; this is a non-mandatory explanatory document.

The RICS has recently published the New Rules of Measurement with the aim of providing a more consistent approach to the measurement of buildings throughout all stages of a building's life, that is estimating through to whole life costing. There are three volumes to the New Measurement Rules. These are:

- NRM 1 rules for order of cost estimating and elemental cost planning
- NRM 2 rules for works procurement

- NRM 3 rules for maintenance and operation cost planning and procurement.

NRM 2 is a detailed set of rules for the measurement and description of building works for the purpose of obtaining tender prices. The rules address all aspects of bills of quantities production, including setting out the information required from the client and other construction consultants to enable a bills of quantities to be prepared, as well as dealing with the quantification of non-measurable work items, contractor designed works and risks generally. The rules can be used for bills of quantities for both main contract works and for discrete work packages (e.g. sub-contract packages). Although written primarily for the preparation of bills of quantities and quantified schedules of works, the rules will assist when designing and developing standard or bespoke schedules of rates, or other quantity-based pricing documents.

NRM has its own indexing, which departs from both CAWS and Uniclass (see section 19.2). The purpose for this is to make it easier to apply the rules to other classification systems, thereby giving the rules a broader and possibly a more international appeal.

NRM2 was published by the RICS with a view to replacing SMM7 from 1 January 2013. The RICS intended that NRM2 should be used instead of SMM7 for all relevant JCT contracts and sub-contracts entered into on or after that date. The JCT has published an amendment to the SBC and IC contracts which replaces SMM7 with NRM 2. It was published in August 2012 with a view that the NRM 2 would be used on all contracts after 1 January 2013. Anecdotal evidence would appear to indicate that many quantity surveyors are still using SMM7 and therefore the amendment to the JCT contracts is not being used.

For engineering works the ICE publishes a Civil Engineering Standard Method of Measurement (i.e. CESMM) which like its counterpart in the building field provides a uniform basis for measuring and the preparation of bills of quantities. This method of measurement does not have the same contractual significance as NRM 2 (or SMM 7) in that it is not mandatory under the standard forms of contract used for civil engineering works. For example ECC Option B does not expressly mention CESMM but refers to the method of measurement identified in the 'Contract Data Part one provided by the Employer'.

Deviation from a standard method of measurement is to be avoided unless there is good reason for doing so. If deviations are to be used then it is essential that this is made clear to the tendering contractors in the tender documentation,<sup>2</sup> and addressed in the contract itself, otherwise disputes are likely to arise.

#### 19.3.4 Provisional sums

Provisional sums are included to cover work for which there is insufficient information available for proper measurement and/or pricing. For various reasons it is not always possible to define, at design stage, everything necessary for the completion of the building. It may be necessary for the architect to select certain articles such as sanitary appliances, ironmongery and the like in consultation with the client, and the details of these may very well not have been

considered when tenders are being sought. Provisional sums may also be included to cover possible expenditure on items which may be required but for which there is no information available at tender stage. Not all contracts make provision for dealing with provisional sums; the JCT contracts do but the ECC does not.

Under NRM 2 or SMM 7, provisional sums may be classified as for either 'undefined' or 'defined' work. Defined work being work which can be described fairly fully but not measured, perhaps because the extent is not known or some other precise detail inhibits a full description. In respect of 'defined' work the contractor is required to have taken into account all their costs for preliminaries and to have programmed for the works within the contract period. When the provisional sum is expended and the work content is valued, no adjustment would be made to the contract sum for preliminaries and no adjustment would be made to the completion date for undertaking the work. On the other hand, if the provisional sum is described as 'undefined' then the contractor is not deemed to have allowed for the cost of preliminaries or programmed for the works within the contract period. Therefore, items such as plant or supervision may be included when the work is valued against the instruction. In addition the contractor may be entitled to additional time and prolongation costs associated with undertaking the work.

In most if not all construction projects there are bound to be unknown matters arising such as unforeseen ground conditions, new by-law requirements or problems emerging when work within an old building is opened up, e.g. discovery of asbestos. In order to ensure that funds are available to pay for the unexpected additional works it is usual to include specific risk allowances or alternatively a sum of money known as a *contingency sum*. These are to be expended if required or if not then omitted in whole or part as the case may be. It should be emphasised that these sums, which are undefined provisional sums, are there for the very purpose described and not there to be spent because the architect has had a change of mind or has forgotten to include a part of the client's brief.

### ***Sub-contracted works***

Generally it is for the Contractor to sub-contract parts of the Works usually subject to the architect's (or contract administrator's) consent. However, it may be desirable to select specific specialist firms to carry out certain works and not leave the choice to the main contractor. For instance to undertake curtain walling, mechanical and electrical services and lift installation works. There is the '*Named Specialist Update*' for use with SBC that allows the client, by an appropriate entry in the Contract Particulars, to name individual sub-contractors to carry out identified parts of the works (see Chapter 1, section 1.5). Depending on the entry selected, the right may be restricted to those specialists (or their replacements) 'pre-named' in the Contract Documents (e.g. bills of quantities). Alternatively, provision can be made for the inclusion of a provisional sum which would be expended post contract once the specialist sub-contractor had been identified (i.e. 'post named'). Whether the provisional sum is 'defined' or 'undefined' will very much depend on the extent and nature of the information available to describe, at tender stage, the works to be undertaken by

the named sub-contractor. On a particular project it is feasible that there could be a combination of both 'pre named' and 'post named' sub-contractors.

### 19.3.5 Figured dimensions

Figured dimensions on drawings can be divided into three categories:

- i. overall dimensions of the structure or building
- ii. subdivision of the last for setting out, showing spacing of structural openings for frames, windows and doors
- iii. internal dimensions of rooms or spaces.

The quantity surveyor will require (i) and (iii). They use (i) to calculate the girths of walls and a whole series of items that are dependent on these girths, e.g. trench excavation, concrete foundations, brickwork, damp-proof courses, facings, copings. They must have (iii) to record the measurements of ceiling and floor finishes and to establish the girths of the rooms for internal walls, plaster, skirting, etc.

Architects should ensure, therefore, that they give overall dimensions of all sides of the building and that the exact dimensions, in either direction, of every room can be seen at a glance. Where there is a range of rooms of similar dimensions, obviously the figures need not be repeated for each, but otherwise the two dimensions should be clearly given on the plan. The dimensions of piers, recesses, cupboards, etc. should be clearly marked. The figures for heights on sections are important and it must be made clear whether they are floor-to-floor or floor-to-ceiling heights.

Category (ii) figures are generally not of interest to the quantity surveyor but are absolutely necessary on drawings from which the work is to be constructed.

Contractors also require the overall dimensions (except where setting-out is for a steel frame) to set out the corners of the building before they can consider the position of the window or door openings, etc. In the same way, the internal dimensions of rooms will assist the contractor in setting out the internal walls and partitions.

All figured dimensions on plans will normally be of the shell of the building (i.e. between wall faces before plastering). It should be made quite clear whether heights are to the finished level or surface of the structure. The allowance for the thickness of finishes should be given so that the contractor has precise dimensions to follow.

It may be found convenient to mark floor levels on each floor in relation to a specific datum, particularly when they vary on a floor. It should be made clear by a note on the drawing whether these are finished or slab levels. They are usually given as the former.

### 19.3.6 Specification notes

Drawings need to be supplemented by descriptive information. This may be either a full specification such as would be used if there were no quantities, or in the form of notes on a drawing expressing the architect's requirements (see

section 19.4). In the SBC/Q and SBC/AQ forms the specification is not expressly identified as a contract document; it forms part of the bills of quantities.

The specification plays a key role in tender documentation and whilst not itself a contract document, the relevant parts need to be incorporated in some way. The fuller the information given to the quantity surveyor, the more the bills of quantities will represent the architect's requirements and the less chance of the need to answer questions from the quantity surveyor seeking outstanding design information or clarification on precisely what is required.

Specification notes are sometimes found written all over the drawings. If they are at all extensive, they hinder easy reading of the drawing, particularly if the same note is repeated in several places. For instance, a note '*255 mm cavity wall*' is sufficient, if the bricks are known to be 102.5 mm thick. Detail of the bond, ties, etc., is not necessarily something that should be shown on a drawing but it is, of course, essential that it is included in the specification.

### 19.3.7 Corrections to drawings

The detailed analysis of the design documents made by the quantity surveyor when preparing the bills of quantities can be of great assistance to architects. It will bring to their attention any errors or inconsistencies in the drawings and/or specification. However, this should not be relied upon by the architect as the formal check of their design information. Even if not highlighting errors or omissions, the points raised by the quantity surveyor may sometimes involve or require alterations to the drawings or specification.

The contract drawings must correspond to, and be consistent with, the bills of quantities. They must also be identical to the tender drawings. If, as sometimes happens, alterations are necessary after the bills of quantities have been prepared, and the decision is made to leave the alteration to be adjusted as a variation, it is important that the drawings identified as and signed as part of the contract documents do not show the alterations. When it comes to the signing of the contract, if copies of the tender drawings cannot be made, or if the architect, not realising the discrepancy, supplies the revised drawings, then an inconsistency between the drawings and the contract bills would exist. As a consequence the client may incur unnecessary additional cost if the inconsistency has to be removed or clarified by means of a variation under the contract.

If, during the preparation of the bills of quantities, the architect proposes to alter the drawings, they should immediately advise the quantity surveyor. Even the alteration of a line, including its deletion, may involve substantial alterations to the measured quantities. Such changes as reducing the length of a building by 250 mm, or the pitch of a roof by 5 degrees, are likely to involve complications in measurement not obviously apparent.

Alterations made during the measurement process are not only a waste of valuable time, but are likely to mean that, when it comes to adjusting for variations during the contract, it is necessary for the quantity surveyor to search in two or three documents to discover what measurements the contract bills were based. If revised drawings are issued to the quantity surveyor to correct or change previously issued drawings, then it is helpful if the architect circles the revision using a coloured pen. This ensures time is not wasted by the quantity

surveyor searching for the alteration and it avoids the risk that minor alterations are not noticed.

## **19.4 Specifications**

### **19.4.1 General**

In the context of the tender and contract documentation, the specification has always played a key role. It is the document from which other information, either drawings or bills of quantities, is generated.

The writing and use of specifications are a subject in their own right and as such warrant separate study.<sup>3</sup> Comments in this book are restricted to explaining the purpose of a specification and the changes that have come about in recent years in the way that they are drafted.

### **19.4.2 The purpose of a specification?**

In conjunction with the drawings the specification has three important purposes. They are:

- to be read by the contractor's estimator as the information available on which to prepare a tender
- to be read by the quantity surveyor to enable a bills of quantities to be prepared as a basis for inviting a tender or tenders
- to be read by the contractor, the clerk of works and the architect as the requirements for carrying out the works.

### **19.4.3 The specification as a basis for tenders**

This can be adopted for a small project with a value of around £100,000 and for projects of a higher value but which are for works of a relatively straightforward nature; for works that are being procured on a package-by-package basis, the tendering contractors may have to prepare a tender from drawings and a specification. The contractor's estimators would take their own measurements for the work from the drawings and build up their tender, relying on the specification for a full description of the quality, materials and workmanship. The drawings and specifications, when read together, must identify everything required to complete the works and to be covered by the tendered figure. If something is omitted, not mentioned in the specification or not shown on a drawing, then such omitted work may not form part of the contract. If it transpires that it is required then the contractor may be entitled to seek additional payment by way of a change or variation to the works; though this would depend on the wording in the contract.

The person responsible for drafting the specification must realise the importance of the task they are undertaking. The clauses and provisions must be clear and complete in detail. The specification will be one of the contract documents and should not be rushed and simply thrown together. It must have all the



preciseness of a contractual agreement, in fact it will form part of an agreement. It should convey to the contractor exactly what is required, covering all aspects of the works. A poorly drafted document is likely to give rise to claims, by way of a change or variation, from the contractor for extra payment due to vagueness, uncertainty and incompleteness.

A specification, like bills of quantities, incorporates contract particulars, client's requirements and contractor's liabilities as well as a full specification for the materials and workmanship. A specification, however, should not contain quantities. To quote quantities in a specification is to invite trouble. The contractor may well say '*We've priced the quantities we were given*', whereas they should have priced everything that was considered necessary from their own measurements to arrive at a lump sum price. Under some forms of standard contract, where the specification option is chosen, the inclusion of quantities can lead to those quantities taking priority over what is shown on the drawings, e.g. SBC without quantities clause 4.1.

#### 19.4.4 The specification for the quantity surveyor

Where it has been decided that bills of quantities are to be prepared on behalf of the client, and given to the contractor for tendering purposes, the descriptions and quantities are drafted by the quantity surveyor. Each tenderer is then left to price the items in the bills of quantities provided. When a bills of quantities is not produced on behalf of the client it is left to each individual tenderer to produce their own quantities to price. When each tenderer has to produce their own bills of quantities it results in the duplication of resources and therefore cost. This increases the cost of tendering which benefits neither the client nor contractors. It also increases the variables when comparing tenders, that is not only the level of pricing by each tenderer but also the accuracy of the measured quantities and understanding of the works to be completed.

In order that the quantity surveyor may prepare the bills of quantities, instructions must be given by the architect. While such instructions may not necessarily need to be as complete as those required by the contractors when taking their own quantities, they must be sufficient to ensure that all cost significant matters are fully described in the bills. When using a bills of quantities the architect's specification is not a separate contract document, it will form part of the bills of quantities usually referred to in the preambles and the descriptions of the works; and included as an appendix to the bills of quantities. The descriptions for the measured items in each bill, which may cross refer to the relevant clause of an appended specification or drawing, must 'fully describe and accurately represent the quantity and quality of the work' as required by the SMM7 or the NMR2. Care needs to be exercised when using different forms of contract and the architect needs to be clear on the function of the bills. It is not always the same. For example when using SBC with quantities (or approximate quantities) the purpose of the bill is to define the quality and quantity of work set out in the contract sum. The situation is different with the ECC Option B contract under which the quality and quantity of work is that set out in the Works Information; the bills of quantities are used for commercial purposes only.

### 19.4.5 The specification for the site agent and clerk of works

When the building work starts it will be supervised on behalf of the contractor or by its site agent. On large projects a clerk of works may be employed to inspect the works on behalf of the client. The larger projects are likely to require frequent or even constant inspection of the works, and as the architect is not expected to have a continuous site presence, it would be necessary to engage a clerk of works. Both the site agent and the clerk of works require direction and they take this, subject to any variations ordered by the architect, from the contract documents (i.e. the drawings and bills of quantities or specifications and drawings). Where quantities have been prepared, the quantity surveyor will have incorporated the specification in the bill descriptions or in the bill preambles, possibly cross referring to the relevant specification clause included as an appendix to the bills of quantities.

There is, however, certain information required by the site agent and clerk of works, which will not be shown in the bill. For example colour schedules will not usually be mentioned in the bill because they do not normally affect price. However, the site agent must have this information when it comes to carrying out the works.

### 19.4.6 Drafting specifications

For many years it was common practice for specifications to be hand-written, albeit often using previous documents from other projects suitably amended. Over the years the practice of writing specifications has fallen into decline. Regrettably, on many occasions specifications became a matter of a few sheets of hastily drafted notes and more often it was simply a case of 'It's all on the drawings'.

Today, owing to the advances in computer technology, slowly at first but with gathering momentum, standard specifications have become commonplace. Now architects and quantity surveyors can enjoy the benefits of having the facility to call up copies of a standard specification to be adapted for each specific project. This in itself can cause problems as it does happen that clauses which are not relevant are not deleted and clauses requiring an entry are left blank. This can lead to uncertainty and discrepancies resulting, by way of variation or changes, to additional costs being incurred by the client. The use of a standard template still requires a careful and rigorous approach to drafting together with a thorough checking procedure.

### 19.4.7 National building specification

The National Building Specification (NBS) is not a standard specification, rather it is a large library of specification clauses all of which are optional. Many of the clauses are direct alternatives, and often require the insertion of additional information. NBS thus facilitates the production of specification text specific to a project that should only include all relevant matters and exclude any text that does not apply.

NBS is available only as a subscription service. Subscribers are kept up to date by issue of new material several times a year on CD-ROM and interim updates are available online. There are three versions of NBS, the Standard Version, an abridged Intermediate Version and a Minor Works Version.

## 19.5 Schedules of work

A schedule of work is simply a list of work items required to be done and should not be confused with a specification. It is mainly used on small projects, and alteration works, to spell out in general terms the items of work that are covered by the specification. Any information about quality should be provided within the specification. Information about location and size should be provided on the drawings. Schedules of work as an adjunct to the specification have to be used with care.

There is a tendency for clients to require the lump sum to be broken down into component parts, with schedules of work indicating specific packages (e.g. alterations, sub-structure, brickwork, roofing) and a price shown against each package. Whilst this can be of some assistance in checking payment applications, in giving the client a breakdown of the price and in some ways the costing of variations, the problem can arise if the contractor states that '*We only priced what was written down*'. Whereas the intention was that everything necessary should have been priced. It is therefore important that the same care is taken when drafting schedules of work as that taken when drafting a specification. It must be very clear to the estimator exactly what is required. There is merit in inviting the tenderer to include for any additional items not shown on the schedule and which they wish or believe should be included.

## 19.6 Activity schedules

An alternative basis on which to obtain tender prices is by way of a priced activity schedules (e.g. as provided for in the ECC Option A or SBC). An activity schedule is a list of activities, normally relating to programmed activities, that the contractor needs to carry out in order to complete the works. Activity schedules are considered by some to be more suited to method driven projects (e.g. those of a civil engineering nature) however, they have become more widely used on building projects.

Such a schedule may be prepared by each tenderer and submitted as part of the tender documentation, allowing an easy comparison of the tenders received. Alternatively, it could be submitted by the successful tenderer for use during the contract period, e.g. preparation of interim payments as in SBC.<sup>4</sup>

## 19.7 Tendering

### 19.7.1 Procedure in preparing a tender

The preparation of a contractor's tender may be divided into two parts: (i) the ascertaining of facts and (ii) the application of judgement to those facts. The

facts are the nature, quantity and quality of the materials and the workmanship required, which must be set out in a form suitable for pricing. A bills of quantities provides this. Where no bills of quantities is supplied, the tenderers must, with the guidance of the specification, prepare their own quantities from the drawings.

The key factor in the preparation of a tender when quantities are supplied is the tenderers' judgement on how the work is to be carried out and the prices. They should not follow rule-of-thumb or price books (although some inexperienced firms have been known to do so) because every contractor's office has to take different circumstances into account when pricing a project. Tenderers are likely to have records of the actual cost of the main components of building works from other projects undertaken, and these costs may help provide a basis for pricing new work. They may have particularly good workmen in certain trades, or may be in a position to procure certain materials at advantageous prices. They must consider the particular location of the project in question, its distance from their office or depot, its accessibility etc., and adjust their costs accordingly. An isolated site involving transport and travelling time for workmen can make a big difference to the real cost of an hour's work. There will be many items for which tenderers must obtain quotations in order to build up suitable rates. Many contractors sub-let a high proportion of the work to sub-contractors and will therefore have to arrange the tender documentation in appropriate packages in order to seek competitive tenders from potential sub-contractors.

They may well adjust their tender according to their need for new work. If they are short of work they may be satisfied with a low level of profit and sometimes no profit at all, although this can cause problems as the work progresses and the contractor is faced with unexpected costs. If they are busy they may not want the work unless they can secure it at an enhanced profit. In addition, a contractor may well adjust its tender price if it believes the quality of design information provided is poor or incomplete.

It is important to remember that in submitting competitive tenders a mistake may involve serious financial loss. Contractors do not enjoy the luxury of being able to subsequently correct their mistakes as do architects, engineers and quantity surveyors. It is therefore most important that contractors have all possible information available, and every facility to acquire so far as possible a full knowledge of the proposed work, at the time of tender.

## **19.7.2 Documents for tendering**

Where a bills of quantities is provided, it will be accompanied by a copy of the general 1:100 or 1:50 scale drawings, together with any component details necessary to price the bills of quantities. The supply of this type of drawn information gives tenderers an idea of the nature of the project and their likely commitments. When no quantities are supplied, each tenderer must, of course, be given a complete set of all the drawings from which to prepare their tender.

In the case of alteration works, a set of drawings should be issued to each tenderer. If, however, for some particular reason this cannot be done, then a set

should be made available for inspection at the location of the works, assuming this is practical and possible. It will be difficult for an estimator to go round a building and price spot items without drawings. Where there are substantial alterations to be undertaken a set of drawings available for inspection at the architect's office will be of little use to the contractor when trying to price the works.

For alteration works, where rooms are divided or two or more are to be made into one, rooms should be given serial numbers on the drawings according to the existing plan. The specification and the bills of quantities should be similarly referenced. The numbers then have a clear meaning to the estimator walking around the building before any alterations are made. If the identification of new rooms is required in a similar way, a series of letters can be used to distinguish them from the existing rooms (or vice versa).

Where there are no quantities a complete specification should be supplied to each tenderer. This will not necessarily be the case when a bills of quantities is supplied.

### **19.7.3 Selection of contractors**

The selection of the contractors invited to tender for each project should be made having full regard to the scope and nature of the works. The aim should be to select contractors of similar standing to obtain tenders that can be properly compared. Construction of a small house will warrant a different list of tenderers from that for a civic centre and contractors who may be suitable for a civic centre contract may not necessarily be suitable for a steel-framed factory unit. Whereas, many contractors could tackle a dozen houses in a housing scheme, the number in the locality who could properly undertake a contract for 200 houses is likely to be limited.

Consideration needs to be given to the nature of the work, together with the prospective contractor's financial capacity, experience of work of a similar nature, and reputation. JCT Practice Note - Tendering 2012<sup>5</sup> provides guidance on good practice in the selection of contractors and the awarding of contracts.

Public sector construction contracts within the European Union over approximately €5.17 million (approx. £4.3 million) must be invited and awarded in accordance with the procedures laid down in EU Directives. These provide for 'restricted tendering procedure', which permits the selection of technically and financially competent contractors following advertisement in the official journal of the European Union circulated throughout member states.

Certain public authorities, by their standing orders, are required to advertise their contracts publicly even when below the EU threshold. This can result in a mixed list, and many of the better firms, as long as they have plenty to do, may refrain from tendering in such circumstances. They have to compete with inexperienced firms, who may cut the price merely to get a foothold in the market; as they are often unknown, tendering in this manner is the only way they can make a start. The lowest price in those circumstances is not necessarily the best value, or even the most economically advantageous.

Where open invitations are issued, it is not uncommon for the client to require the successful contractor to provide a guarantee bond, and this may be obligatory to comply with the standing orders of some public authorities. The guarantor under the bond warrants to meet any deficiency due to the failure of the contractor to carry out the contract, up to an agreed specified limit, commonly 10% of the contract sum. The details of the bond are a matter for the client's solicitor and are usually outside the province of the architect.

#### **19.7.4 Time for tendering**

With the object of ensuring that contractors have every opportunity of preparing a proper tender, which they can safely stand by, the time allowed for tendering should be as long as possible. An excessively short period results in rushed work and the inability to get sub-contract quotations in proper time, and in consequence increases the risk of errors.

Pre-qualification and the process of establishing a list of appropriate contractors interested in tendering should be carried out in good time. Any firm that cannot submit a tender in the stated time will then be able to say so and last minute requests for additional time will be avoided. Adequate warning should also be given as to when documents will be sent out and the date for delivery of the tenders. Four weeks should be regarded as the minimum time for submission of a tender.

When a bill of quantities arrives in a contractor's office for pricing, the usual procedure is for the estimator to go through it and mark up those parts for which quotations are required, either for the supply of materials, or the sub-letting of work. The marked portions will then be copied with any adaptations necessary (e.g. inclusion of contractor's sub-contract terms) and these portions will be used to obtain competitive sub-contract quotations. The bills of quantities will then be put to one side by the contractor because it cannot be priced until all replies have been received. When the replies are received they are sorted and examined and the most suitable used, with the necessary additions for profit and contractor input as appropriate.

It is obvious that when contractors are tendering on a specification and drawings they may well need longer to tender than would be the case if a bill of quantities is supplied. The tenderers will need time to prepare their own quantities.

#### **19.7.5 Sending out documents**

The architect or the quantity surveyor will send to each tenderer a copy of the tender form including any instructions to tenderers, a copy of the bills of quantities and a selection of drawings (refer above). Alternatively, if a specification is used then a copy of that specification and a complete set of drawings are provided, together with the tender form and instructions to tenderers. Whichever set of tender documents is used they should be issued under a covering letter that needs to state:

- an invitation to submit a tender (if not previously sent)
- a list of enclosures

- a date and place for delivery of tenders
- whether the site of the works is open for inspection and if so the arrangements for making a visit
- a request for an acknowledgement of receipt.

Dear Sir

[insert heading]

We refer to your letter of the [insert date] in which you expressed a willingness to submit a tender for the above project. We now have pleasure in enclosing the following:

1. Two copies of the bills of quantities.
2. Two copies of each of the drawings numbered [insert numbers] giving a general indication of the scope and character of the works. These will become the contract drawings.
3. Two copies of the form of tender and instructions to tenderers.
4. An addressed envelope for the return of the tender and instructions relating thereto.

Please note the following:

5. Drawings may be inspected at [insert place].
6. The site may be inspected by arrangement with [insert person and telephone number].
7. Examination and correction of priced bills of quantities will be in accordance alternative 1/2 [delete as appropriate] in the JCT Practice Note – Tendering 2012.

The completed form of tender is to be sealed in the endorsed envelope provided and must arrive at [insert place] not later than [insert time] on [insert date].

Please acknowledge receipt of this letter together with the enclosures noted and confirm that you will submit a tender in accordance with these instructions.

Yours faithfully

**Fig. 19.1** Letter to contractor: invitation to tender (assumes bills of quantities used).

Figure 19.1 illustrates a typical letter.

Tenders will usually be returned to the offices of the architect or the quantity surveyor though sometimes they are delivered directly to the client. In the case of public authorities both the sending out of the documents and receipt of tenders, will usually be handled by a representative of the authority. A suggested form of tender is illustrated below at Figure 19.2. A suitable envelope should accompany the tender documents for the return of the tender by the tenderer. It should be pre-addressed and marked ‘TENDER FOR ...’ on the face.

Tender for [describe Works]  
at [insert location]

To [insert name and address of client]

We, having read the conditions of contract, articles of agreement, appendix and specification/ schedules of work/ bills of quantities [delete as appropriate] delivered to us and having examined the drawings referred to therein, do hereby offer to execute and complete the Works described in accordance with the terms therein for the sum of  
 .....(words) £  
 .....

We agree that

- (a) The employer is not bound to accept the lowest or any tender.
- (b) Persons tendering do so at their own cost.
- (c) If errors in pricing or errors in arithmetic are discovered in the priced specification/ schedules of work/ bills of quantities [delete as appropriate] before acceptance of this offer, such errors will be dealt with in accordance with alternative 1/2 [delete as appropriate] in the JCT Practice Note – Tendering 2012.

We confirm that this is a bona-fide competitive tender and we have not fixed or adjusted the amount by reference to any other person, body or organisation or divulged the amount of this tender.

In consideration of the sum of £10 (receipt of which is hereby acknowledged) this tender remains open for acceptance for [insert days] from the date of this tender.

Dated this ..... Day of ..... 20 .....

Signed .....

in the capacity of .....

duly authorised to sign tenders for and on behalf of:

Name .....

Address .....

**Fig. 19.2** Form of tender.

These envelopes will, on receipt, be recognised as containing tenders and will be left unopened until the time stated for delivery has passed.

Where a bills of quantities is used there will be a selection of small-scale drawings showing typical details, together with any particular drawings required by the rules in SMM or NRM 2, issued to tenderers. These will indicate in broad terms the scope and quality of the work. The covering letter should state that the remaining drawings can be inspected if required, usually at the offices of the architect or quantity surveyor.



If the bills of quantities is to be returned with the form of tender, as is sometimes the case, there must be included a separate envelope of suitable size and strength to hold the priced bills of quantities. The envelope should be addressed in the same manner as the envelope for the form of tender. The tenderers should be notified in the covering letter to put their name on the outside of the envelope containing the bills of quantities so that only the bills of quantities accompanying the lowest tender is opened. The remaining bills of quantities should be returned unopened. The pricing of the bills of quantities is a costly and time consuming exercise. Therefore, it is sometimes sensible to ask for a priced bills of quantities from the lowest, and possibly the second lowest, tenderers following the opening of the received tenderers. The instructions to tenderers should make clear exactly what is or will be required.

Should a tenderer consider that any of the tender documents issued be deficient or require clarification then they should inform the client or the designated person who is likely to be either the architect or the quantity surveyor. The person designated to receive queries, together with their contact details, should be identified in the instructions to tenderers. The client or the designated person when answering the query raised by a tenderer should also inform the other tenderers of both the query and clarification.

### 19.7.6 Opening of tenders

Before opening the tenders it is important to see whether they have all been delivered and care taken to identify any tenders delivered late. Most contractors will, should they wish, be able to discover relatively easily the identities of the other tenderers. After the date and time fixed for the return of the tenders it may be possible for one contractor to discover the tender figures submitted by the other tenderers. Therefore no advantage should be given to any late tender submissions. If this procedure is not scrupulously observed the client may be liable for a tenderer's abortive expenditure.<sup>6</sup>

If tenders are delivered to the architect's office they will be opened and a list prepared, arranged in order of price, for submission to the client. It is sensible for tenders to be opened in the presence of more than one person and it is not unusual for the quantity surveyor to be present at the architect's offices or vice versa. Any conditions attached to a tender should be noted and entered against the tenderer's name in the list. If tenderers are required to state a contract period as well as a price, as is sometimes the case, this too should be entered against each name. If the tenders are being opened by a representative of a public authority, often in the presence of an elected member, the same procedure will be followed for submission to the council or committee concerned. It is not unusual for the schedule of submitted tenders to be signed by those persons present at the opening.

### 19.7.7 Reporting of tenders

When considering tenders, factors other than price may be relevant. For example the time required to carry out the work may be important to the client. If

tenderers were required to state, on the form of tender, a time within which to complete the works then this together with price would have to be compared. If there are several variables, tenderers should be provided with an indication of the weighting which will be given to various factors. Matters become complicated when the tenderer offering the lowest price does not also offer the shortest period in which to complete. It then becomes a matter of priority for the client. A comparison of the times offered by the tenderers may well give an indication of a reasonable period within which the works can be completed. If there is no consistency between the periods stated by the tenderers then the time offered by a reputable tenderer may be indicative of a reasonable estimate, having regard to the circumstances known.

The architect having considered these matters, in consultation with the quantity surveyor, will report the tenders to the client or committee concerned. If there is any doubt, the case in favour of acceptance of one tender or another needs to be clearly set out for consideration. Other matters that may be considered are the tenderers proposed construction team, its financial standing and, quality and safety records.

When tenders are invited from a selected list of contractors, the lowest, or potentially lowest, should generally be accepted. If a particular tender is not suitable or there is doubt about his suitability then he should not have been invited to submit. All tenderers go to a great deal of trouble and expense to prepare a tender, and the object of such a tendering approach is to decide which amongst a number of acceptable contractors is to do the work at the lowest price. If the lowest tender is significantly below the others then there may be doubts about whether the contractor has made an error or misjudged the nature of the works. If such doubts exist then an appropriately structured interview of the lowest tenderer could help clarify the situation.

However, when tenders are advertised and any contractor who can raise the required deposit and surety may submit a tender, the circumstances are different. One can justly say 'I didn't ask you and I don't want you', though even then, when the expenditure of public money is involved, there may be repercussions of not accepting the lowest tender.

Whether expressly disclaimed in the invitation or not, there is no legal obligation on a client to accept the lowest or any tender. Generally, a contractor's tender is viewed in legal terms as an offer.

As soon as the lowest or any tender is accepted, or there is an intention to accept it, then the remaining tenderers should be notified (see section 19.7.10).

### **19.7.8 Examination of a priced bills of quantities**

If the client decides to proceed with the work, the tenderer whose offer is under consideration will be asked to supply a copy of the priced bills of quantities if it had not already been submitted with the tender. This will be examined by the quantity surveyor, who will undertake an arithmetical check and will also look generally through the rates and prices for any possible serious errors or omissions in the pricing, or excessively high rates or prices that would be unreasonable for the purposes of pricing variations or making interim payments. If there

are no serious errors, and provided there are no other inhibiting circumstances, the tender would be recommended for acceptance.

However, if mistakes are found the tenderer must be notified. If the JCT Practice Note – Tendering 2012 has been adopted, one of two alternatives will apply to address the mistake: under alternative 1, the tenderer should be invited either to stand by their tender price or withdraw, in which case a commercial decision would have to be taken by the tenderer; under alternative 2, the tenderer should be given the opportunity to stand by the tender price or correct genuine errors. If this results in the revised tender not being the lowest or best value then the tender that becomes the lowest or best value should then be examined. Which of the two alternatives is to apply should be notified to tenderers at the time the tender documentation was issued, for example in the instructions to tenderers.

### 19.7.9 Reductions

Unfortunately, it is not uncommon for tenders to be higher than expected. This is sometimes due to an optimistic attitude by the architect and quantity surveyor at the tender estimate stage or, more probably, because a full cost-planning exercise had not been carried out. If clients are not prepared to meet the higher cost, ways and means have to be found to reduce the tender to an acceptable figure, and at the same time meet the client's requirements as to accommodation, etc.

The architect will have to re-examine the drawings and specification with this in mind. Here the help of the quantity surveyor could be useful. He may be able to suggest, from an analysis of the priced bills of quantities, where the architect's requirements are costly and less costly alternatives could be considered. A list of possible reductions could be prepared and valued in consultation with the quantity surveyor; who may well involve the lowest tenderer. What appears like a simple adjustment to the design may well result in a time consuming adjustment to the bills of quantities. For example, to take 150 mm off the length of a building, which may only mean a few broken lines and figured dimensions on the architect's drawings, affects a large number of items throughout many sections in the bills of quantities, from stripping surface soil to the paint on the walls and ceilings. The quantity surveyor can prepare an addendum to the bills of quantities identifying the measured omissions and any counterbalancing additions, showing the overall adjustment to the tender sum.

There is one cause of excessive tender figures, and the resulting need to look for savings, that should be avoided. This is the inclusion within the design of something that the architect wants and is done in the hope that the client can be persuaded to retain it if an acceptable tender figure is received. The architect may feel that it is easier to omit the excessive design item when tenders are returned, rather than to try and include it within the works later by way of a variation. Such conduct on the part of an architect may amount to professional negligence. Unless there is a reasonable likelihood of keeping within the client's budget, then such items should be excluded at an early stage in the design process. Reductions to a tender only create additional work for the architect, the quantity surveyor and probably the lowest tenderer. Alterations have

to be made to the drawings and specifications; an addendum reduction bills of quantities has to be prepared and priced. Moreover, it is likely to involve the client in additional fees and expenses.

### 19.7.10 Informing tenderers

Preparation of competitive tenders is an expensive activity. Much time and effort and consequently money is expended. It is only reasonable that tendering contractors should be made aware of the result. The successful tenderer will want to know *'how much they left on the table'* (i.e. what margin there was between their bid and the next tenderer). The losers in turn will need to know, for future pricing and policy purposes, where they stood; by how much will they have to *'sharpen their pencils'*.

Much is made of the need for confidentiality in competitive tendering and it is sometimes argued that publication of tender results breaches that confidentiality. Actual confidentiality is perhaps questionable; there are too many common contact points by way of suppliers and sub-contractors whereby it is not unknown for a tender list to become known. Once tenders are submitted it is not unusual for tender amounts to be exchanged by the competing contractors.

However, none of this alters the duty to publish a list of tenders to the tenderers. With the aim of trying to maintaining a degree of confidentiality, this can be done by publishing a list of amounts without the tenderers' names being given. Each tendering firm will recognise their price and thereby determine their position. An alternative could be to publish the list of tenderers in alphabetical order and the tender figures in order of ascending value.

### 19.7.11 Negotiated tenders

All that has gone before in this chapter assumes that competitive tendering procedures are being adopted. However, in certain circumstances a decision may be taken to negotiate a tender. For example:

- where the contractor is known to either the client or architect and for whom they have performed well in the past
- the project is a further stage of a contract upon which the contractor has already worked or is still working
- due to time constraints.

The procedures that are to be gone through are similar to those required for competitive tendering except that before the final tender is submitted it will have been examined by the quantity surveyor, who may have been involved in the procedure for obtaining prices from sub-contractors and suppliers, and, where necessary, the tender prices may have been negotiated. Although the price can be shown to be the right price it can never be proved to be the 'best value'. If the lowest price is the criterion for letting the contract then the negotiated approach is not the better alternative.

## 19.8 Preparing the contract documents

The duty of preparing the form of contract by completing the various blanks in the recitals, articles of agreement and contract particulars should fall to the architect although the quantity surveyor, when one is engaged, commonly undertakes the task. It may be necessary to add special clauses to the conditions of contract and to amend other clauses (normally prepared by the client's legal advisors); if so, these amendments must be written into the contract and both parties must initial the insertion or alteration at the time of signature. Any portions to be deleted must be ruled through and similarly initialled. The drafting of such amendments should not be undertaken by the architect but the client's legal advisors. The publishers of certain standard forms of contract (e.g. the JCT and NEC) make their contracts available in electronic form. They can be prepared electronically and printed for signature by the parties; amendments to the JCT standard provisions are shown with deleted text lined through and inserted text underlined.

All other documents making up the contract documents (each drawing and the bills of quantities) should be marked for identification purposes and signed by the parties, for example

*This is one of the drawings referred to in the contract signed by the Employer and Contractor this            day of            2014*

or

*This is the bills of quantities referred to in the contract signed by the Employer and Contractor this            day of            2014*

In the case of the bills of quantities this identification should be on the front cover or on the last page and the number of pages should be stated. If the standard SBC form is used (with quantities or approximate quantities) then a separate specification as such is not part of the contract, and will not be signed by the parties, because it will be incorporated into the bills of quantities. Where there is no bills of quantities then a full specification would be required as a contract document and must be signed accordingly by the parties.

Contracts are either signed under hand, giving a limitation period of six years or, when 12 years is required, are completed as a deed. In the latter case it is important to ensure that this is duly recognised. A failure to do so could have serious implications for both the client and the architect (or quantity surveyor) if they incorrectly prepared the contract documents, that is not in accordance with the client's requirements. The contract documents should be executed in a timely manner.<sup>7</sup>

All the documents are generally to be construed together. However, a body of case law illustrates the importance of ensuring that all the individual contract documents are consistent and in agreement with each other. In one case<sup>8</sup> there was a discrepancy between the completion dates set out in the contract bills

and those in the contract particulars to the relevant JCT form. Delays occurred, and the question was which date was the correct date to be used in calculating the contractor's liability for liquidated damages. The court held that under the standard form<sup>9</sup> the date in the contract particulars prevailed over that in the contract bills. This decision has been upheld in a number of other cases.<sup>10</sup> The dispute would not have arisen if all the contract documents had been checked for inconsistencies prior to execution.

## References and notes

1. See 'The RIBA Plan of Work 2013 Overview', Editor Dale Sinclair, published by the RIBA London, p. 7.
2. For example see ICD clause 2.12.
3. Willis CJ and Willis JA, *Specification Writing for Architects and Surveyors* (1997), Blackwell Science, Oxford.
4. See SBC clause 4.16.1.1.
5. JCT, *Series 2: Practice Note 6: Main Contract Tendering* (2002), Sweet & Maxwell. This Practice Note is the successor to JCT Practice Note 6, which was itself published as a successor to the Code of Tendering Procedure published by the National Joint Consultative Committee (NJCC).
6. *Blackpool & Fylde Aero Club v. Blackpool Borough Council* (1990) CILL 587.
7. *Trustees of Ampleforth Abbey Trust v. Turner & Townsend Project Management Ltd* (2012) 144 Con LR 115: see paragraph 106.
8. *M.J Gleeson (Contractors) v. London Borough of Hillingdon* (1970) EGD 495.
9. JCT 63 clause 12(1). The equivalent provision in SBC is clause 1.3.
10. *Bickerton v. North West Regional Hospital Board* (1970) 1WLR 607; *English Industrial Estates Corporation v. George Wimpey & Co* (1973) 1 Lloyd's Rep 118; *John Mowlem & Co Ltd v. British Insulated Callenders Pension Trust Ltd* (1977) 3 ConLR 64.

# 20

## Stage 5: Construction

This stage is described by the RIBA as follows:

‘Stage 5 Construction maps to the former Stage K – Construction to Practical Completion – but also includes Stage J – Mobilisation.’<sup>1</sup>

### 20.1 Contractor’s programme

The programme is a valuable management tool. Any competent contractor should have a programme for each project in which it is involved. That programme may well not be presented in a written form but the contractor’s key personnel will have in their mind key milestones that need to be achieved in order to meet the agreed completion date. However, it is better if the contractor is required to produce, in an acceptable written format, its programme for the works. It forces the contractor to plan ahead and to share those plans with the wider project team. Progress can be monitored not only by the contractor but also by the clerk of works, the architect and the client. Decisions can be made as to whether or not the work is proceeding at a satisfactory rate. If not appropriate, action can be discussed and measures implemented as necessary. It should show when sub-contract packages are to be let, it will help avoid the risk of overlooking the ordering of materials or fittings, and enable adequate steps to be taken to reinforce or reduce the labour force as the situation demands.

On large contracts it is customary for the contractor to include in the programme the dates by when full design details of the various parts of the works are required, from the architect or the other consultants, in order to maintain progress. They should also show the latest date by when instructions are required regarding the expenditure of provisional sums. A number of the JCT contracts (e.g. SBC) make provision for the architect to provide the contractor with an information release schedule which, if used, should render the need to show the dates by when design information is required on a programme obsolete. That said it may prove a beneficial reminder to repeat the date in the information release schedule on the programme. The information release schedule is distinct from an information required schedule which fulfils the same objective but which is normally produced by the contractor; it is also not a contract document. However, the contractor will request the design information in a

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manner and at a time to suit its tendered method of construction, as amended to suit the conditions encountered on site during construction. The information request schedule may be used as an alternative, or in addition, to showing the information on a programme. As the contract proceeds it may be necessary to expand the programme to show in greater detail the co-ordinated installation and commissioning of complex engineering services.

Although the provision of an information release schedule in certain of the JCT contracts sounds like a good idea, it appears to have been devised by someone with little practical experience of either architectural practice or contracting. The schedule is intended to show when various drawings and schedules, required by the contractor to construct the works, will be provided to the contractor by the architect; not all the design information will be prepared by the architect but it will likely be issued by the architect as the contract administrator. Essentially, it is a list of dates and descriptions of drawings and other design information to be provided by those dates. A major problem is that, when the contractor is tendering, it needs to know when the drawings and design information will be released, because a major factor in tendering is how the contractor will carry out the works. An experienced contractor can secure a contract simply by clever planning of the works. The contracts which include provision for an information release schedule are SBC, IC and ICD. They provide that the schedule must have been supplied by the time the contract is executed, but by that time of course the contractor has submitted its tender. At first sight, a solution might be to provide the schedule at the time of tender. However, doing that would effectively dictate when the contractor could carry out aspects of the works; this may not be the most efficient from the contractor's point of view and may well increase the tender price. There is a general principle applicable to construction contracts that, in the absence of any indication to the contrary, a contractor is entitled to plan and carry out the Works as it pleases, subject to any constraints in the contract documents, provided that it finishes by the date for completion in the contract.<sup>2</sup> It is possible that the architect and contractor could sit down together and try to agree the schedule after submission of tenders but before the contract is executed; again the question would be what impact the agreed schedule would have on the tendered price.

The question whether, in the absence of an information release schedule, an architect is obliged to provide information to suit the contractor's programme is often mooted. The programme may well show a completion date earlier than that fixed in the contract. There is legal authority for the JCT contracts that, although the contractor is entitled to finish early, the architect is not obliged to provide information to suit the earlier date. The architect's duty is simply to provide information at such times as will enable the contractor to carry out and complete the works by the contract date for completion.<sup>3</sup> SBC, IC and ICD now enshrine that principle in clauses 2.12.2 and 2.11.2, respectively. These clauses suggest that if the contractor is late, the architect may slow down the provision of information to suit. Architects are well-advised not to delay the provision of information for this reason. At a later date it may be difficult for the architect to prove that the contractor's delay was responsible for the slow information and not the other way around.



Clause 2.9.1.2 of SBC contains a requirement for the contractor to provide the architect with a copy of its master programme; this assumes of course that the contractor has produced a master programme. The clause gives the architect the right to have a copy of the contractor's master programme if one is produced. The clause also requires the contractor to update the programme whenever the contract period is extended by the architect (i.e. the architect has granted an extension of time). However, this is an unsatisfactory situation given the contractor may be in culpable delay and the architect may wish to see a revised programme. Unless an extension of time is given, the architect has no right to require the contractor to provide an updated master programme. SBC has no provision to require the contractor to produce an update programme upon the architect's reasonable demand. This is not helpful for the management of the project to completion by the architect and given that most competent contractors are likely to be regularly producing updated programmes for their own benefit, it does not seem unreasonable to require the contractor to provide copies to the architect. With care a suitable amendment could be made to the SBC contract to require the contractor to provide the architect with an updated programme on reasonable request. Within the Contract Particulars to SBC there is, subject to an appropriate deletion, provision that requires the contractor to show the critical path on the programme. The contractor should always be required to show the critical path, or possibly paths if there is more than one, on the programme. It is important to help both the architect and contractor understand the impact of events on the progress and completion of the works.

Under SBC the programme is not a contract document, but a document produced under the terms of the contract. This is an important distinction. If the programme is made a contract document under SBC then a failure by the contractor or the Employer to follow that programme would amount to a breach of contract.

The programme should be drawn up by the contractor before starting work and monitored on a regular basis by both architect and contractor. It should be prepared so that all the information can be clearly tabulated and placed in a prominent position in the site office. It must not be too complicated, but it should at the same time give a precise indication of the progress planned by each trade or operation each week, together with the actual progress achieved. Therefore, it would require regularly updating by the contractor, probably on a weekly basis.

Unlike the JCT contracts the ECC contract includes detailed provisions addressing the contractor's programme which has to be submitted for acceptance by the project manager. Clause 31.2 sets out in some detail what the contractor must show on its submitted programme. In addition clause 32.1 identifies the frequency for resubmitting updated programmes during the works. ECC places a significant onus of the programme as a necessary management tool for the successful completion of a project. An important distinction with SBC is that the contract makes clear within the contract the purposes for which the programme is to be used.

The most common programme is the *Gantt* or *bar chart* on which proposed and actual progress can be shown. A line is plotted in black (or any other chosen

colour) against each trade or operation, commencing at the week the particular work or operation is due to start and continuing through the number of days or weeks that it is expected to last. This may not, of course, be a continuous line. It may be necessary to show a break in, or suspension to, a particular operation while some other activity is undertaken which on completion would then allow the completion of the suspended operation. The actual progress of each operation or the works should be recorded by a line or lines in a different colour to that for the planned progress; making it easy to identify the progress of an operation or trade at a glance.

Other forms of programmes include network analysis, precedence diagrams and PERT (Performance Evaluation and Review Technique) charts. These show the planning of the work as a set of activities related to each other. The facility then becomes available to plan alternatives and variants to the critical, or chosen, path when for some reason there has to be a change to the planned path.<sup>4</sup> The architect is able to monitor the effects of delays to the work especially where one of the many computer software programmes is used. Such matters as estimating extensions of time are much simpler and indeed the courts appear to support extensions of time calculated by this means.<sup>5</sup> A programme in this form (showing resources) should, where appropriate, be requested in addition to the more common bar chart. Under the ECC the contractor is to show '*for each operation, a statement of how the Contractor plans to do the work identifying the principal Equipment and other resources which he plans to use.*'<sup>6</sup> with the submitted programme.

Given the architect is not empowered, under the terms of any JCT contract to give instructions to the contractor about the programme, the requirement to provide a programme in the form noted above, should be made in the preliminaries section to the bill of quantities or the specification if there is no bill of quantities. This should not create a conflict between the bills of quantities (or specification) and the contract conditions, because there is no attempt to override or modify what is in the contract conditions, but merely to require something which is not already in the contract conditions. If there is a provision for a master programme, then the item in the bills of quantities or specification should merely seek to amplify that provision. This is not an issue under the ECC given the detailed nature of clause 3.

If the architect is used to using a specific programme software package, then the contractor should be required to use that software package, assuming it is appropriate, for the project. The alternative is for the architect to adapt, possibly even having to purchase expensive software, to that used by the contractor. This point applies equally to both the JCT and ECC contracts. In the former contracts the requirement should again be set out using an appropriately worded preliminaries clause in the bills of quantities or specification, and for the ECC contract within the preliminaries section of the Works Information.

## 20.2 Meetings

Every architect will be involved in meetings. There is no escape from having to attend meetings although many people consider them a waste of time. This will

prove correct unless there is a clear purpose to the meeting and the participants are carefully selected and relevant to that purpose. A sensible way of identifying that purpose is to frame it as a question or a series of questions which the people attending the meeting must answer. The purpose of the meeting should then be reflected in the agenda. It is useful to work on the basis that if the most effective meeting consists of two people with every extra person attending reducing the effectiveness of the meeting. The type of meetings attended by architects can be generally classified as follows:

- staff meetings
- client meetings
- design team meetings
- site meetings
- meetings for special purposes.

### 20.2.1 Staff meetings

This is the kind of meeting at which all members of staff attend to talk about office reorganisations, expansion, contraction, etc. Many offices make a practice of having a regular staff meeting each month or every two months to discuss points of interest to the whole business. It is a good way to air problems and update staff on the progress of the business and individual projects. How successful such meetings are depends on the maturity of the participants. In some offices, staff meetings may be called rarely and then only to deal with major concerns. Some staff meetings are little more than a gathering of staff to enable management to tell them about changes and contributions 'from the floor' may well be discouraged or certainly not invited. How staff meetings are used, indeed whether they are used effectively at all depends on the management styles of the partners or directors responsible. If they are used as an opportunity for management to engage with staff and engender a team spirit, and where staff can freely and openly offer their views for proper consideration by management, then such meetings should be good for the development of the business and office moral.

### 20.2.2 Client meetings

It has already been said that the best meetings are one to one. A client meeting may involve only one person other than the architect but then the client may be a board of directors or local government committee. Meetings between the architect and the board of directors or the members of a committee should be avoided if at all possible. They should only be necessary when the commission is being established and possibly when the architect is demonstrating their initial design proposals. At other times, the board or committee should nominate someone with authority, to deal with the architect on the board's or committee's behalf, otherwise, progress is likely to be slow. Generally, the architect will initiate client meetings to make decisions, receive reports, view proposals and so on. Occasionally, there may be other professionals present. These may be the client's legal and financial advisers or the other members of the design team.

### 20.2.3 Design team meetings

In planning this kind of meeting, the architect should be guided by, but should not slavishly follow, the RIBA Plan of Work. Depending upon the size of the project, the personalities of the participants and the project stage, the client may attend such meetings. In any event, all the consultants should be present. These meetings are necessary in order to co-ordinate the effort of the team and to create the right sort of enthusiasm which is essential for the success of any major project. Normally, these meetings are called at key stages in the scheme rather than, say, *'every month just to make sure that everything is proceeding smoothly'*. Such regular meetings for no good purpose are usually counter-productive, as participants introduce various matters simply to justify their presence or make excuses for non-attendance.

The general rule about numbers is equally valid with reference to design team meetings and the architect will often find it easier to work on a *'one to one'* basis with the other consultants, in addition to the key stage meetings mentioned above. In practice, it is common to find that the necessity for full design team meetings ends at tender stage. After that *'one-to-one'* meetings can be adopted.

### 20.2.4 Site meetings

Architects commonly have regular fortnightly or monthly site meetings, although one school of thought considers that there is little to commend them. The purpose of site meetings is presumably:

- to measure actual versus planned or predicted progress
- to answer queries
- to provide information.

Progress is in the hands of the contractor, whose best interests will be served by a quick and workmanlike conclusion to the contract. The architect's principal role in assisting progress is to ensure that all necessary design information is provided at the proper time. The clerk of works, if appointed, can be asked to submit a weekly progress report in a format, and incorporating whatever information, the architect may desire. The contractor should be required to submit a separate weekly or monthly progress report. If the architect believes that the contractor's progress report is inaccurate or fails to address certain key issues, then the architect should make this known to the contractor, preferably in writing; recorded in the minutes of any meeting at which the report is handed over or discussed. Any problems with the progress of the project can be taken up directly between the architect and the contractor, in person, by telephone or, when necessary in writing.

The site meeting is not really the correct forum for answering queries. Most queries arise between meetings and they should be answered immediately. In any event, it is best to answer queries and provide information in writing so that there is a proper record. Site meeting minutes are notorious as a vehicle for what the architect wished had been said! Site meetings tend invariably to be

preceded by a site inspection but an inspection can be carried out without a site meeting.

A final point against regular site meetings is the number of expensive man-hours taken-up by those attending. At every meeting there are many people in attendance who have an interest in only a small part of the proceedings. Indeed, in some cases, a professional may be there just in case, rather than for a specific purpose. This is a huge waste of resources.

Obviously, there must be a meeting for all interested parties before the project commences on site. Assuming that the contract has already been executed, this is usually erroneously called the 'pre-contract' meeting rather than the more accurate 'pre-start' meeting. After the first meeting to sort out procedures and deal with the many preliminary matters which must be resolved before work can actually start, site meetings should be reserved for specific purposes. Then, the meeting becomes an important occasion, not to be taken lightly. Before arranging a site meeting (or any meeting for that matter) it is useful to ask what the meeting can achieve which cannot be achieved in some other way, more effectively and at less cost.

### 20.2.5 Meetings for specific purposes

There will always be some meetings which cannot be properly categorised except under this heading. Meetings with local government officers, members of an amenity society or ministry officials fall into this group.

### 20.2.6 Conduct of a meeting

It should go without saying that every meeting must have a purpose and a clear idea of what is to be achieved. A good meeting will be the result, among other things, of careful preparation. It is usual to prepare an agenda and to circulate it to participants together with any papers which should be read prior to the meeting. Provided that the date of the meeting has been agreed in advance, it is best to circulate the agenda and supporting papers no more than a week before. This gives people the time to read the information, but does not really allow time for it to be put on one side. The generally accepted format for any kind of meeting is to:

- register those present including their role
- record any apologies for non-attendance
- note agreement to the minutes of the last meeting or record any matters not agreed
- deal with matters arising from the minutes of the last meeting
- address any items for discussion
- address any other business
- record a date and time of next meeting.

An example of an agenda for a pre-start meeting is shown in Figure 20.1. It is simply an outline. Architects should not assume that the pre-start meeting

<p><i>Golf Club, Willow Developments Ltd</i></p> <p><i>Agenda for Pre-Start Meeting</i></p> <p>To be held on 3 September 2014 at 11.00 AM in the site office.</p> <ol style="list-style-type: none"><li>1. Personnel</li><li>2. Production information<ol style="list-style-type: none"><li>a) prepared</li><li>b) to be prepared</li></ol></li><li>3. Contractor's copy of contract documents</li><li>4. Insurances<ol style="list-style-type: none"><li>a) by Employer</li><li>b) by Contractor</li></ol></li><li>5. Bond</li><li>6. Collateral warranties and/or third party rights</li><li>7. Sub-contractors</li><li>8. Employer's licensees</li><li>9. Architect's instructions</li><li>10. Clerk of works directions</li><li>11. Oral instructions</li><li>12. Queries and information requests</li><li>13. Contractor design work</li><li>14. Further meetings and participants</li><li>15. Contractor's programme, form and updating</li><li>16. Progress reporting</li><li>17. Role of the clerk of works</li><li>18. Samples</li><li>19. Covering up work</li><li>20. Setting out</li><li>21. Services</li><li>22. Signboard</li><li>23. Consultants and their roles</li><li>24. Procedural matters not otherwise covered</li><li>25. Any other business</li><li>26. Date, time and place of next meeting if appropriate.</li></ol>
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**Fig. 20.1** Example of a pre-start meeting agenda.

is an opportunity to put restrictions on the contractor. By this time, the contractor should be in contract with the employer on clear terms. The architect has no power to vary those terms and if variations to the works or materials are instructed during the meeting, there will likely be a price to be paid by the employer. It is no place to inform the contractor that certain parts of the site must be fenced off or that access is only possible at one, rather than the intended two points. The architect may give such instructions, but they will likely involve additional costs and possible delay and it does not set the project off on the right footing. The pre-start meeting is to give everyone the opportunity to meet and hopefully form the beginnings of a team and to remind everyone of the important points about the project. There will also be a certain amount of business to be carried out regarding insurance policies, bonds and the like unless these have been dealt with prior to the meeting taking place.

It is usual, and desirable, for architects to chair their own meetings. This is a difficult task to undertake properly. The chairperson must lead the discussion and be prepared to silence the talkative. Minutes should be brief, recording decisions, not the rambling discussion leading to the decision. Minutes should be circulated within twenty-four hours to everyone attending the meeting and those who have an interest in the outcome of the meeting. Anyone receiving the minutes of a meeting should read them immediately and carefully in order to check for mistakes and omissions. These should be reported in writing to the author of the minutes without delay and the letter or e-mail should be copied to those people noted on the circulation list. It is fatal to wait until the next meeting to rectify a mistake; memories are likely to have faded by then.

## 20.3 Site inspections

‘Inspection’ and ‘supervision’ are often confused. Architects are commonly referred to as being responsible for ‘design and supervision’ of the works. That, of course, is quite wrong. Inspection involves looking and noting, possibly even carrying out tests. Supervision, however, not only covers inspection, but also the issuing of detailed directions regarding the execution of the works. Supervision is more onerous than inspection.<sup>7</sup> It can only be carried out by someone with the requisite authority to ensure that the work is performed in a particular way. That is the prerogative of the contractor.

Inspection is not something to be carried out lightly. Many contract administrators simply wander onto the site with no clear idea of what they expect to find nor indeed what they should be looking for. Before commencing an inspection of the works, the architect must have a plan or strategy along the following lines.

- Inspections should have a definite purpose. They should coincide with particular stages in the works. It is sensible for the architect to sit down beforehand and draw up a list of primary elements of the works which must be inspected on that particular visit together with items of secondary importance that should be inspected if possible.<sup>8</sup> It may be that the architect’s plan involves a degree of sampling. It may not be possible to view all the individual items during a visit (e.g. fire stopping or proofing within the suspended ceiling void). The composition of the list and the frequency of inspections will depend on factors such as the employment of a clerk of works, the size and the complexity of the project. Comments can be made against a checklist as the inspection progresses. The list and the comments should be for the architect’s own files and not for general distribution. Although an architect’s inspection duties are quite onerous, they will be better able to defend themselves in court against an allegation of negligent inspection if they can show, by reference to contemporary notes and records that inspections were not only carried out but were carried out in an organised manner.<sup>9</sup> It is worth noting that the architect is not necessarily required to identify all defects or non-compliant works following an inspection, simply those that a

competent architect exercising the necessary reasonable skill and care would have identified.

- Times for inspections should be varied so that a contractor cannot rely upon getting poor work covered up between inspections. In *McGlinn v. Waltham* the judge said:<sup>10</sup>

‘The frequency and duration of inspections should be tailored to the nature of the works going on at site from time to time ... Thus it seems to me that it is not enough for the inspecting professional religiously to carry out an inspection of the work either before or after the fortnightly or monthly site meetings, and not otherwise. The dates of such site meetings may well have been arranged some time in advance, without any reference to the particular elements of work being progressed on site at the time. Moreover, if inspections are confined to the fortnightly or monthly site meetings, the contractor will know that, at all other times, his work will effectively remain safe from inspection.’

- The architect should always finish an inspection visit by spending some time inspecting on a random basis.
- Action should be taken immediately the architect returns to the office, whether or not any defects have already been pointed out to the site manager. It is wise to put in writing all comments regarding defective or non-complaint work, and issue any instruction or notice as appropriate.
- During site inspections, the architect is bound to be asked to answer queries. It is prudent to give answers following a return to the office, when it is possible to calmly sit down and assess the situation. Many decisions made on site are either amended or regretted later.

## 20.4 Safety

The health and safety of those employed on a construction site is governed by Acts of Parliament and subsidiary regulations. The principal Acts are the:

- Health and Safety at Work Act 1974
- Factories Act 1961
- Offices, Shops and Railway Premises Act 1963.

The Construction (Design and Management) Regulations 2007 (CDMR) came into force on 6 April 2007. They apply to all construction operations except some minor works. The emphasis is on safety right through the construction process including design. The principal object of the CDMR is to integrate health and safety into the management of the project and to encourage everyone involved in the construction process to work together. An entirely new discipline; that of CDM co-ordinator, was created by the CDMR. The preparation of a construction phase plan at the beginning, and a health and safety file at the end of the process are important stages. All participants, including clients, have a responsibility under the CDMR. Many of the standard forms of contract have been amended to make a failure to comply with the CDMR a breach of



contract. Many architects also practise as CDM co-ordinators, but in any event, all construction professionals should be well briefed on the CDMR.<sup>11</sup> The Construction (Design and Management) Regulations came into force on 6 April 2015. The role of the CDM co-ordinator was replaced by the Principal Designer.<sup>12</sup>

Some relevant regulations are the:

- Notification of Accidents and Dangerous Occurrences Regulations 1980
- Health and Safety (Consultation with Employees) Regulations 1996
- Health and Safety (Enforcing Authority) Regulations 1998
- Management of Health and Safety at Work Regulations 1999
- Control of Substances Hazardous to Health Regulations 2002.

The architect should have a reasonable knowledge of the safety regulations and be on the lookout for any infringement on site. They should take basic precautions such as reporting to the site manager immediately on arrival, wearing a hard hat and other protective clothing as appropriate and conforming to all reasonable safety rules set up by the site management. Every office should have its own safety policy, which should be clearly set out to all members of staff besides, of course, conforming to statutory safety regulations.

SBC<sup>13</sup> includes what are referred to as Supplemental Provisions. These are set out at Schedule 8 and there are six optional provisions. Provision two is headed 'Health and safety'. If it applies the client and contractor will endeavour to establish and maintain a culture and working environment in which health and safety is paramount.

## 20.5 Architect's instructions and variations

Construction contracts generally give the contract administrator reasonably wide powers to issue instructions. Under the JCT contracts this will likely be the architect and they must adopt a systematic method for documenting all instructions given under the contract. The majority of these will be variations. In the past many architects have used standard forms for this purpose, which were called '*variation orders*' (commonly abbreviated to VOs). The term '*variation order*' does not appear in SBC or any other JCT contract and its use is to be discouraged as not all instructions amount to a variation. The RIBA publish a standard form for use with SBC entitled 'Architect's Instruction' (Figure 20.2).

SBC generally requires that variations are the subject of an architect's written instruction, but there are certain exceptions (e.g. clause 2.14.3) which are simply treated as variations. A letter or memorandum signed by the architect is actually sufficient authority for an instruction (i.e. it does not have to be given on the RIBA pro forma). However, the pro forma has the advantage of keeping the information complete and orderly for every instruction issued throughout the project. It will appear distinct from other correspondence and forms, especially if a coloured paper is used. They should be filed separately from other communications. The following information should be shown on every architect's instruction:



the contractor's copy, as such a value for any change will tend to be treated by the contractor as a minimum. However, if the quantity surveyor has been prudent, it will reflect a maximum liability in terms of cost and complications could arise when it comes to agreeing the final account.

Where an instruction involves something quite different from the original requirements, a definite estimate may, of course, be obtained from the contractor and accepted by the architect on behalf of the employer as a firm price. Obviously prior to acceptance the architect should consult with the client and obtain their approval to accept. Indeed, under SBC Schedule 2, the contractor can be requested to give a quotation on receipt of an instruction (see reference to the priced statement in section 20.6.3). In such cases, however, it is the quantity surveyor who, before conformation of acceptance by the architect on behalf of the employer, will examine the detailed build-up of the estimate and ensure that proper credit has been given for balancing any relevant omissions. A Schedule 2 quotation should include the cost of the additional works plus an estimate of any extension of time and loss and/or expense the contractor believes he will suffer as a consequence of the proposed variation. Any extension of time sought by the contractor should be reviewed by the architect.

When instructing variations it is sensible to mark each variation clearly, whether they are omissions or additions to the contract, and to give each item a subsidiary number within the overall instruction. A variation can be described in one of two ways. For example, either:

1. *For softwood door to Entrance Hall substitute oak to detail.*

**Or**

2. *OMIT Softwood door to Entrance Hall*  
*ADD Oak door to detail*

It is not advisable to quote item reference numbers from the bill of quantities to define a variation or to mention prices except when a definite quotation sum from the contractor is being accepted. The architect will not be fully aware of what bills of quantities items might be affected. It is better to specify the variation in normal terms and leave it to the quantity surveyor to look up the dimensions and see which bills of quantities items need to be adjusted.

All drawings and specifications should be issued under cover of an architect's instruction. A copy of each architect's instruction and revised or supplementary drawings should be sent to the quantity surveyor at the same time as issued to the contractor.

It sometimes happens that an instruction is issued to cover changes instigated at the behest of the contractor. If this is the case then the architect should be careful about how the instruction is worded. If a contractor-driven variation is accepted and instructed on the basis that there would be no adjustment to either or both the contract price and the completion date, then the wording of the instruction should make clear that it was issued on that basis.<sup>14</sup> If this precaution is not taken, it may prove difficult to rebut a future claim from the contractor seeking additional costs and time on the basis that the instruction simply records a change to the works. If the contractor has any issues with the qualification then they should be raised at the time the instruction is received.

Architects cannot generally delegate their powers or duties under the contract other than the customary delegation within a practice, and even then not without the client's permission, if the architect has been appointed on a personal basis. Accordingly, an instruction signed by a clerk of works will not constitute a proper variation within the meaning under SBC.<sup>15</sup> As has been stated earlier, duties of a clerk of works are solely that of an inspector. While certain inspection duties may be delegated, instructions issued under SBC must be given by the architect.

Some contractors keep a 'variation order' book on site in which the agent enters all instructions purported to have been given and the architect is asked to sign them on visiting the site. It would be normal for the architect to receive a copy following signature. It should be remembered that if a contractor confirms an oral instruction to the architect in writing, perhaps on a form titled '*Confirmation of Architect's Instruction*', then this would constitute a formal notification under clause 3.12.1 in SBC. Unless the architect dissents in writing within seven days of receipt, the confirmed oral instruction will take effect as an architect's instruction.

The ECC takes a slightly different approach in that it includes an express provision permitting both the Project Manager and Supervisor to delegate any of their actions to another person.<sup>16</sup> This has to be in writing to the contractor in accordance with clause 13. However, the ECC does not include a provision to confirm oral instructions. Certainty prevails in that all instruction must be given in writing.

With the named sub-contract procedures set out in schedule 2 of IC, it is open to the architect to give instructions regarding the expenditure of a provisional sum that work is to be carried out by a named person. In such an instance, the ancillary document ICSUB/NAM must be used. It is in three parts: Invitation to Tender, Tender and Agreement. Attempts to name in an instruction without using this form may well be unsuccessful. A similar approach is adopted in the 'Named Specialist Update' for use with SBC when a provisional sum is used to 'post name' a sub-contractor. It is not unknown for some architects to obtain quotations for additional work directly from a supplier or a potential 'sub-contractor', and then instruct the contractor to accept the quotation. This is a dangerous approach to adopt given that the contractor in complying with the instruction may well have to accept the 'sub-contractor's' standard terms and conditions if they formed part of the quotation. The effect would be to remove some of the contractor's ability to negotiate suitable terms for the sub-contract including the price. As a consequence the architect may unwittingly pass on to the employer some of the responsibility and liability for that sub-contractor.<sup>17</sup>

## 20.6 Variations and their valuation

### 20.6.1 General

Most construction contracts include provision for changes in both design and construction. These can arise as a result of a change to the client's

requirements, revisions to the design by the architect, the other design consultants or implemented to address issues arising from on-site conditions. These changes are better known as 'variations'. Variations by their very nature can be both disruptive and expensive. Architects as well as the other designers need to think very carefully before introducing change. They must in particular adhere strictly to the terms of the contract and ensure that they do not act outside their powers; care needs to be taken to ensure that the instruction is carefully worded to address precisely what was intended; worded in a clear and concise manner.

The variation procedures under the SBC and IC forms are covered in the main by clause 5. These two JCT contracts draw a clear distinction between valuing variations (usually tied to rates in the contract bills or to a schedule of rates) and ascertaining loss and expense which may arise over and above the value of the direct work content of the variation. Loss and/or expense is ascertained on the basis of the actual cost or loss incurred by the contractor rather than the competitively derived contract rates or prices set out in the contract bills or the schedule of rates. However, SBC provides at Schedule 2, for the architect to issue instructions requesting a quotation. The intention of this is to establish an all-encompassing price for a proposed variation including any direct loss and expense resulting from the variation, as well as any delay to the completion date (see section 20.6.3). Therefore the loss and expense under this provision is an estimate and not actual amounts actually suffered by the contractor. Given the work involved this procedure would appear to be best suited to variations which have a significant impact on the works in terms of cost. Under Schedule 2 the contractor knows he is not to progress with the works covered by the proposed variation. This is in direct contrast to other instructions, including variations, which he should forthwith comply. He cannot hold the architect and client to ransom by threatening not to progress with the varied works until a price has been agreed.

An alternative approach is adopted in the ECC which provides a structured procedure for the submission and agreement, as the contract proceeds, of quotations for what are called compensation events. In most cases these quotations will be submitted and accepted prior to the full impact of the compensation event being known. They are in effect binding estimates when accepted. This includes what are termed changes to the Works Information, which are in effect variations under this contract. This quotation procedure is all-encompassing in that the quotation is to cover the work content, any disruption or prolongation costs caused by the compensation event, and also any delay to the completion date (i.e. any extension of time). Under the JCT contracts these three heads are addressed separately unless the schedule 2 procedure is adopted. Generally under ECC, unlike SBC, rates and prices in the priced activity schedule or bills of quantities are not used to price compensation events under this contract unless otherwise agreed. What is termed the contractor's defined costs is used. These are the contractor's estimated costs for labour, plant and materials plus the percentage additions identified in the Contract Data to cover overheads, profit and other costs.

### 20.6.2 Definition of a variation

In order to determine what amounts to a ‘variation’ you have to look at the provisions or definition within each individual contract. The definition within the ECC is different from that within the JCT forms. Within SBC and IC a variation is defined as the alteration or modification of the design, quantity or quality of the works as shown upon the contract drawings and described by or referred to in the contract bills (or specification if there are no bills of quantities). The addition, alteration or omission of certain obligations or restrictions imposed on the contractor by the employer also fall within the definition of a variation. In the case of SBC and IC this includes:

- the addition, omission or substitution of any work
- alteration of the kind or standard of any of the materials or goods to be used in the works
- removal from the site of work or materials
- changes in access to the site or part thereof
- limitations in working space or hours
- changes to the order in which the works is to be undertaken.

Under the DB ‘variations’ are called ‘Changes’. Though the definition is similar to that in SBC and IC there is a key difference. A variation or alteration in the design or scope of works undertaken by the contractor does not necessarily equate to a ‘Change’. For it to amount to a ‘Change’ there has to be an alteration to the requirements set out in the Employer’s Requirements document not simply the work, including any design, undertaken by the contractor.

The ECC does not use the word variation. Subject to certain qualifications a ‘variation’ is an instruction issued by the Project Manager which changes the content of the Works Information.<sup>18</sup>

### 20.6.3 Valuing variations

Many standard forms of contract like SBC and IC seek to link the valuation of the variation to the competitively obtained rates and prices in the contract bills or the schedules of rates. This is set out within the contracts at clause 5. Matters valued under clause 5 are:

- variations
- provisional sums both defined and undefined
- the effect of variations on the remainder of the work.

Matters excluded from valuation under clause 5 are:

- variations the price of which is agreed between the employer and the contractor.
- disruption to the regular progress of the works and any items to which SBC clause 4.23 and IC clause 4.17 apply (i.e. loss and expense). An exception is where a quotation has been accepted under SBC Schedule 2 - see below.

Where contract bills form one of the contract documents the included rates and/or prices are to be used in the valuation of variation. How appropriate this is will depend on how similar the 'variation' work is to that included within the contract bills. How similar is the character, the quantity and the conditions under which the varied work is to be undertaken? The answer to these questions will dictate whether or not the rates and prices in the bills of quantities (or schedule of rates) can be used without amendment; whether they are to be used as the basis to derive a new rate or price given a change in quantity, character or conditions under which the varied work is to be undertaken. In very general terms the position can be summarised as follows:

	Character	Conditions	Quantity	Basis of Valuation
(1)	Similar	Similar	No significant change	Use the rates and prices in the contract bills
(2)	Similar	Similar	Significant change	Use the rates and prices in the contract bills as a basis to derive an appropriate rate or price making due allowance for the change in quantity
(3)	Similar	Not similar	No significant change	Use the rates and prices in the contract bills as a basis to derive an appropriate rate or price making due allowance for the change in the conditions under which the work is executed.
(4)	Not similar	–	–	Given the lack of similarity it would be inappropriate to use the rates and prices in the contract bills. Therefore derive fair and reasonable rates and prices

Other matters that need to be considered in the valuing of variations include the following.

- Work that cannot properly be valued by measurement is valued by reference to dayworks. Daywork sheets must be delivered for verification within the detailed timetables (SBC clause 5.7).
- Omitted work is valued at rates or prices in the contract bills.
- Work that is not varied *per se* but is affected by a variation (including an omission) is valued as if it were the subject of a variation.
- Where work is valued by reference to bill rates allowance must be made for:
  - measuring using the same rules as applied to the contract bills (e.g. SMM7)
  - any percentage or lump sum adjustments in the contract bills
  - adjustment of the preliminaries items.

As contract bill rates and prices are key to the valuation of variations, it is important that any errors and/or inconsistencies are removed before the contract is signed. The JCT Practice Note Tendering 2012 sets down appropriate procedures.

Within SBC at Schedule 2 is a relatively detailed procedure that allows the architect to issue an instruction requesting the contractor to submit a quotation for a proposed variation instruction. The contractor has 21 days in which to prepare and submit a quotation. The quotation is to include the following:

- the cost of undertaking the works. It should be calculated using the contract bill rates when applicable and include necessary supporting calculations
- any extension of time
- loss and/or expense
- a fair and reasonable amount for preparing the quotation
- if requested a method statement and statement of resources to be used.

Until such time as the contractor's quotation is accepted the contractor is not to proceed with the works described in the instruction. The quotation is to remain open for acceptance by the employer for 7 days. If it is accepted then the architect is to issue an instruction accepting on behalf of the employer (i.e. a 'Confirmed Acceptance'). The instruction should make clear what adjustments are to be made to the contract sum and the completion date. If the quotation is not accepted then the architect shall instruct either that the work is not to be carried out or that it is to be carried out but valued under clause 5. A fair and reasonable amount is to be added to the contract sum for preparing the quotation. If not accepted neither the employer nor contractor can use the quotation for any purpose.

The question often arises as to how work should be priced where there is an obvious inconsistency or clear mistake in the original pricing document (e.g. contract bills or schedule of rates). A fair solution might appear to be that of holding the contractor to the erroneous rate or price for the original quantity of work but to apply a corrected rate for any additional quantity. However, case law<sup>19</sup> does not support this view and a contractor can be held to the original rate irrespective of quantity subject to any alteration to the rate or price as permitted in accordance with the provisions in the contract. This on the face of it would appear correct in that errors in rates and prices could result in a high or low rate. If through an error a contractor's rate or price was too high, should the contractor be held to that price for the original quantity with the reduced corrected rate applying to the additional quantity? The answer is no.<sup>20</sup> Therefore, it should not be forgotten that errors can work both ways.

## 20.7 Controlling costs

### 20.7.1 General

Possibly the most common criticism that is made by clients of their architects (and quite often quantity surveyors as well) is that they never keep them



informed of how their money is being spent. They have in most cases signed what has been described to them as a 'lump sum firm price' contract and they have difficulty understanding why they are now being asked to pay additional money.

For this reason architects have a particular duty to watch the expenditure of their client's money. When clients want changes made, not only must they be advised whether or not such changes are feasible but also what the cost is likely to be both in terms of time and money. Equally, they must be kept informed when unavoidable changes have to be made for matters such as unforeseen ground conditions or unexpected problems arising when an existing building is opened up. Finally, of course architects must resist the temptation to change their designs to suit their revised thoughts. If such architect's changes are envisaged then the client must be consulted and again advised of any financial effect on the budget. If the financial effects are of any magnitude, the chances are slim of the client agreeing to the change.

A running record of cost can be kept by having a valuation of each instructed variation recorded and totals of omissions and additions to the contract sum made from time to time. Provisional sums must also be adjusted as and when instructions are issued for their expenditure. Such a record depends very much for its accuracy on the prompt issue of written instructions. Obviously, if the prompt issue of instructions is neglected, then any available figures will not represent a true picture of expenditure and be of little value. Price adjustment increases (i.e. fluctuations) and payments made for loss and expense must also be taken into account.

## 20.7.2 Financial report

Ideally a statement of the financial position should accompany each interim certificate so that clients, when paying the contractor, have in front of them a financial picture of the project. The statement needs to be tailored to meet the specific client requirements. Certain clients will only require a summary statement showing the current financial position (see example in Figure 20.3); others will require a detailed report identifying the cost implication of each instruction, whether issued or anticipated. It is very important that the figures contained in such statements are, if not accurate, then on the cautious side. There is nothing worse for a client than to be lulled into a sense of false financial security only to receive a bombshell at the end of the contract. It may not be that easy for a client to raise additional funds at such a late juncture.

It is also important to make sure any qualifications or exclusions are clearly stated in the report.

## 20.8 Workmanship and materials

Workmanship and materials are the very essence of a building. They should be specified by the architect in accordance with the design. Materials are inextricably bound-up with the appearance and use of the building. Specification of

<b>WILLOW DEVELOPMENT LTD</b>		
<b>GOLF CLUB</b>		
<b>COST REPORT NO. 8</b>		
		Date 10 April 2015
SUMMARY	£	£
Contract Sum		2,168,328
Less Contingencies		125,000
		2,043,328
Adjustments for:		
Instructions Issued - Section 1	47,320	
Provisional Sum Expenditure - Section 2	(13,222)	
Anticipated Variations - Section 3	20,500	
Ascertained loss and/or expense	-	
	54,598	54,598
Anticipated Final Account	£	2,097,926
Current Approved Sum	£	2,168,328
Balance of Contingencies	£	70,402
<i>Notes: Costs exclude VAT, Professional fees and direct client costs</i>		

**Fig. 20.3** Financial statement.

the wrong materials can ruin the concept and possibly leave the architect open to an action from the client for failing to take proper care. Examples would be if the architect specified an unsuitable roof covering which subsequently let in water, or a floor finish which was inappropriate for the anticipated level of traffic and became badly marked or worn.

The specification of workmanship is less obvious and less clearly defined. Yet a poor specification in this area can be just as detrimental to the building as a whole. If poor workmanship is applied to the task of erecting the finest materials, the result could be worse than if less expensive materials had been used but with first class workmanship. Good workmanship is difficult to define, but easy to recognise. The specification for workmanship is more difficult than the

specification of materials and reference is often made to the detailed guidance in published codes of practice. Certain aspects of good workmanship can be described, such as the way in which bricks are to be laid, but generally good workmanship is described by the required result. Hence the practice of having samples constructed of various elements of work. A brick sample panel is constructed in order to have a point of reference for workmanship rather than for materials although, of course, it can serve for both. Thus, materials are the basic building elements but workmanship is the process which puts those elements together.

It is one of the architect's functions, and that of a clerk of works if appointed, to check that the correct materials have been used and that the workmanship is in accordance with the specification. Depending upon the size of the project, a clerk of works may spend a great deal of time checking materials and, for example, taking samples for testing, e.g. concrete for testing in the laboratory. Under most standard forms of contract, the architect has wide powers to reject materials or work not in accordance with the contract. Under SBC, clause 2.3.1, for example, the contractor must provide materials in accordance with the contract so far as they are procurable. This offers valuable protection for the contractor whose obligation seems to come to an end if the materials are truly not procurable. Of course, not procurable at a price or at a date the contractor considers reasonable does not fall within the meaning of this provision. Workmanship is to be to the standards described in the contract bills or specification if there are no bills. If no standards are described, the workmanship is to be to a standard 'appropriate to the Works'. That is fairly broad, but probably as good a standard as any in the absence of precise specification.

It is always open, and provided for in SBC, for the architect to specify materials or workmanship to be to his or her satisfaction. In which case, the contracts usually stipulate that they are to be to the architect's reasonable satisfaction. This is obviously intended to prevent an architect from insisting upon an inappropriately high standard. Whether the standard sought by an architect is inappropriate or not is something which, in the last resort, must be settled by adjudication, arbitration or litigation if disputed by the contractor. Architects must be sure that they inspect such work carefully, because the issue of the final certificate under SBC and IC will be conclusive evidence of satisfaction in such instances (see Chapter 21, section 21.4). SBC clause 3.20 requires the architect to express their dissatisfaction within a reasonable time following the execution of work specified to be to the architect's satisfaction. No doubt, some architects may be tempted to advise their clients to delete this particular clause as being a potential cause of trouble.

SBC has elaborate provisions, in clause 3.18, to allow the architect to order the removal from the site of work or materials which are not in accordance with the contract. Surprisingly the clause does not empower the architect to instruct the contractor to make good the non-compliant work that is not in accordance with the contract. The architect under SBC may also take the following actions.

- Allow the work to remain subject to the client's consent and make an appropriate deduction from the contract sum.

- Issue reasonably necessary instructions requiring a variation but at no additional cost and attracting no entitlement to an extension of time or loss and/or expense. This instruction is issued as a consequence of the instruction issue either to remove the defective works or for it to remain.
- Require the contractor to open up or test the work to establish whether there is likelihood of a similar failure but again at no additional cost. However, an entitlement to an extension of time exists if the work examined is found to be in accordance with the contract. The architect is to have due regard to the code of practice set out at schedule 4 before issuing an instruction.

The IC and ICD have provisions which are less far-reaching, but of similar overall effect. SBC at clause 3.17 and, IC and ICD at clause 3.14, give the architect power to order opening up and/or testing of work or materials. If the work or material is found to be in accordance with the contract, the contractor is entitled to an extension of time, if appropriate, and any direct loss and/or expense that can be shown to have been suffered.

Under the ECC the standard of workmanship and materials is set out in the Works Information. It is the role of the Supervisor, and not the Project Manager, to inspect the works, raise instructions or notices in connection with non-compliant work and to undertake or witness tests.

## 20.9 Certificates and payments

### 20.9.1 Responsibility for certificates

Under most construction contracts the architect is likely to have to issue a number of different certificates. It should not be forgotten what the architect is doing when they issue a certificate and this was expressed in the following manner by the judge in *Cantrell v. Wright*:

‘When the Architect certifies, he is recording for the parties his professional, personal and objectively arrived at opinion that the fact [sic] situation recorded by the certificate is accurate at the time when the certificate was issued.’<sup>21</sup>

It therefore should not be forgotten that the certificate is an expression of the architect’s personnel and objectively arrived at professional opinion about certain facts.

The certificate most commonly issued by an architect is likely to be the certification, from time to time, of the amount due for any on account instalments to be paid to the contractor. The architect will probably also have to certify the overall final account figure. It is generally required that interim payment certificates shall include for the value of work properly executed together with any unfixed materials, both on and off site, less a specified percentage to be retained which is known as the retention sum or reserve.

Whilst the quantity surveyor (where appointed) will usually carry out valuations for the benefit of the architect, the architect is nevertheless responsible for the issue of the certificate,<sup>22</sup> the surveyor’s valuation being adjusted as necessary in respect of any unsatisfactory work, incomplete work, etc. A standard

valuation form, for use with SBC, is published by the RICS (Figure 20.4) for completion by the quantity surveyor. Public authorities often have their own form for this purpose. If the architect is at all unsure about the quantity surveyor's valuation, it is a matter for the architect to request clarification or more information from the quantity surveyor. Architects should only certify the amounts which they are happy are due. There is a requirement under the Construction Act for any payment notice or certificate to state not only the amount due but also the basis on which that amount has been calculated. Therefore, it would seem sensible for the architect to have access at least to the quantity surveyor's summary showing a build-up to their valuation, or possibly their detailed build-up.<sup>23</sup> In fact, reference may have to be made to the quantity surveyor's build-up on the face of the certificate, with a copy attached.

It is worth noting that under certain standard construction contracts, such as SBC and IC, payment to the contractor is driven, not by the contractor's applications, but by the date stated to be the 'due date' in the contract. In other words if the contractor fails to make an application this would not excuse the architect from having to issue the certificate. This is the same for the project manager under the ECC. Given the changes to the Construction Act it is now imperative that architects issue their certificates no later than 5 days following the due date under the contract even if the amount due is zero. In fact they should ensure that the certificate is received by the contractor within the 5 day period.<sup>24</sup> Otherwise, they may find that a contractor may be due payment of the sum stated in the contractor's application or his payment notice; this would be subject to a timely pay less notice having been issued.

Finally, architects need to be aware that SBC, IC and ECC standard contracts make no provision requiring the contractor to submit an invoice. Payment is due and made against the certificates. Payment of the principal sum is not conditional on the employer receiving an invoice, which may not be what most clients envisage or require. Obviously, there is no obligation on the client to pay any VAT without a proper invoice.<sup>25</sup>

### 20.9.2 Method of valuation

How valuations are carried out will depend on the size and complexity of the project. The contract provisions can often require or permit the contractor to submit a detailed statement with each application. This can then be checked against the on-site progress. SBC and IC are examples of contracts which include such a provision. However, it is not mandatory for the contractor to submit an application.

On smaller projects architects should quite easily be able to make their own assessment. Where there are no bills of quantities the contract schedule of works (if priced) can be used. Alternatively, a reasonable breakdown of the contract sum (i.e. a contract sum analysis) may have to be agreed for the purposes of interim valuations.

On contracts for larger buildings it is commonplace for a quantity surveyor to be appointed, who will either go through the contractor's application (if presented) together with the bill of quantities, or pricing schedule if applicable and, taking each work section in turn, identify the work which has been done and

### Valuation for JCT Standard Building Contract (2011 Edition)

**Surveyor** Brown & Partners High Street, Notown XX1 2CD  
**Works** Golf Club Park Acres, Notown XX3 1RR  
**Valuation no:** 3  
**Date of issue:** 10 April 2015  
**Reference:** 123



<p><b>To Architect/Contract Administrator</b> Smith &amp; Jones Architects LLP Design Studios, High Street Notown XX1 3BB</p>	<p><b>As at</b> 9 April 2015 Contract, an Interim Valuation, the basis on which the amount shown as due has been calculated is clause 4.9.2 of the Conditions of Contract, and report as follows:</p> <p><b>Gross valuation</b> (excluding any work or material notified to 'me/us by the Architect/Contract Administrator in writing as not being in accordance with the Contract)</p> <p>Less total amount of retention, as attached Statement</p> <p>Less total amount of Interim Certificates previously issued by the Architect/Contract Administrator up to and including Interim Certificate No. 2 and any advance payment (if any) due for reimbursement by the date of the next Certificate.</p> <p><b>Balance</b></p>	<p>£ 845,390</p> <p>£ 25,362</p> <p>£ 820,028 £ 0.00</p> <p>£ 310,018</p>
<p><b>Employer</b> Willow Developments Ltd Will High Street, Notown XX1 4RB</p>	<p><b>Contractor</b> ABC Builders 10-12 Builders Way Notown XX2 2ER</p>	<p>Surveyor: <i>W Brown</i> XXXXXXXXXXXXFRICS</p>

Contract sum £ 2,168,328

- Notes:**
- All the above amounts are exclusive of VAT.
  - The balance stated is subject to any statutory deductions which the Employer may be obliged to make under the provisions of the Construction Industry Scheme where the Employer is classed as a 'Contractor' for the purposes of the relevant Act.
  - It is assumed that the Architect / Contract Administrator will satisfy him or herself that there is no further work or material which is not in accordance with the Contract
- \* Delete as appropriate

Fig. 20.4 Standard valuation form. Courtesy of The Royal Institution of Chartered Surveyors.

its value. A total can be built-up of the work completed in accordance with the contract. A suitable proportion of the preliminaries items would be included together with any addition made on a pro rata basis to cover sums for insurances, etc. shown in the summary to the bills of quantities or pricing schedule.

In the case of repetitive work such as housing, it may be possible to fix a value per house at a given number of stages. For example, say at:

- damp-proof course level
- first floor joists fixed
- roof plate level
- roof completed
- plastering completed
- second fixing and decoration completed.

To this would have to be added the proportion for drainage and the external works completed plus an allowance for the preliminaries costs. As a valuation this would only be approximate but could be sufficient for the purpose of payments on account. Obviously the architect needs to exercise care to see that a contractor is not going to be overpaid at any given stage. An architect does not want to be faced with the situation of an insolvent contractor and the value of the works being over certified.

Another variant is to make payment in accordance with a predetermined stage payment chart or table. This can be provided either by the employer as a tender document or submitted by the contractor with its tender. For example payments could be made at regular intervals based on a stated percentage for completion at a given stage. Allowances can be made to amend the percentages either up or down according to whether the contractor is ahead or behind programme. Alternatively, payment could be made on the basis of a pre-agreed lump sum when the works have reached a specified stage, e.g. completion of the sub-structure, completion of the frame, etc. Obviously, each lump sum should relate to the value of work completed at each stage.

Where the contract is based on a priced activity schedule, the assessment of the amount due in each interim certificate is the value of each completed activity adjusted to reflect the impact of any relevant variations. The valuation process tends to be easier than with contracts based on bills of quantities given that there are usually substantially less items to consider and they tend to be programme related. ECC Option A includes for payment based on a priced activity schedule.

Architects should beware that if they carry out the services normally undertaken by the quantity surveyor they could find themselves without appropriate professional indemnity insurance cover (see Chapter 10, section 10.5).

### 20.9.3 Unfixed materials

Most forms of contract provide for interim payments to include the value of unfixed materials properly brought onto the site. The contractor should be asked to prepare a priced list of these at the date of the valuation, which can be checked by the clerk of works (if any), the architect or quantity surveyor. If verification for the cost of any of the items is required, this can be requested

from the contractor (e.g. invoice). At the same time written assurances can be sought regarding retention of title to ensure that the materials are the property of the contractor and that ownership can safely be passed to the employer.

When payment is made for these materials the intention is that they become the property of the employer. However, this can only happen if at the time of payment they are the property of the contractor. The contractor may not have legal ownership of the materials; ownership may be retained by the sub-contractor or supplier under the sub or supply contract. It may be a condition of the sub or supply contract that ownership only passes to the contractor when the sub-contractor or supplier is paid in full. The use of the appropriate JCT sub-contract by the contractor can greatly assist in avoiding this problem. Once the property of the employer, they must not, of course, be removed from site without permission. In the event of the contractor's insolvency, the materials would not be an asset available to the liquidator or administrator. They could be removed or, as is more likely, used by the employer to complete the works. Once materials become fixed to the land or the property, then they normally belong to the land or property owner, whether they have paid for them or not; if not then the land or property owner would be under an obligation to pay the outstanding amount in accordance with the contract. To some extent, a sensible approach has to be adopted with low value materials, when putting the contractor to proof of ownership prior to certifying payment. For example, by the time payment becomes due the materials may well be incorporated into the works, therefore the risk to a client would be reduced.

The inclusion in an interim certificate for the cost for off-site materials requires careful consideration. These are not on the site and so outside the physical control of the employer and his agents (e.g. SBC clause 4.17). Under SBC if the employer is prepared to agree to payment for materials off-site, a list must be prepared at tender stage and, in due course, appended to the contract documents. If materials or goods are not included in the list, they must not be included in an interim payment certificate. Often a surety bond is required.

If payment is to be made for materials off-site the provision in SBC requires that:

- the items are in accordance with the contract
- reasonable proof of ownership and adequate insurance is provided
- the materials are set apart and clearly marked as to ownership and ultimate destination
- the surety bond has been provided if required by the contract particulars in the case of uniquely identified listed items.

#### **20.9.4 Sub-contractors**

Under an earlier version of the SBC (i.e. JCT 98) architects when issuing certificates were obliged to notify the contractor of the amounts included for what were called nominated sub-contractors. It should be noted that SBC makes no provision for the architect to inform on the amounts included for individual sub-contractors. This is the case even if the *'Named Specialist Supplement'*



is used. Generally, the architect has no authority to authorise or to control payments to any sub-contractors. Payments are made from the client to the contractor.

### 20.9.5 Price adjustment

Where provision is made for price adjustment on account of fluctuations in the cost of labour and materials, this must be taken into account in the valuation under the relevant contract clause.

Generally, before any increased cost is included under the price adjustment clauses, the contractor should submit a statement showing the price adjustment computations for checking. If the adjustment is to be by way of wages and materials increases, the necessary information (backed up by time sheets, invoices, vouchers, etc.) must be produced. Increased costs (or in rare cases decreased costs) cannot be taken into account in interim certificates until they have been incurred.

### 20.9.6 Retention sum

In preparing certificates, architects have to take into account any sum to be retained under the contract. If the quantity surveyor has submitted a statement, the amount retained should be shown in accordance with the requirements in the contract. The retention sums outstanding on various contracts constitute a substantial part of a contractor's capital. Whilst they are part of the financing which is expected of contractors they should not be expected to do more than the contract requires. Architects should therefore see that, so far as they are concerned, there is no delay in releasing balances at 'practical completion' and at the end of the rectification period after any notified defects have been made good. To this end they should be prompt in making their inspections and in giving notice to the contractor of defects to be remedied.

The retention provisions of SBC are set out in clauses 4.18, 4.19 and 4.20 and the contract particulars make provision for stating the percentage of the value of the work done and materials supplied that is to be retained. The default figure is 3%. When calculating the amount of retention to be held at any one time the total value of the contractor's work and the value of materials on site (and sometimes off site: see section 20.9.3) must be taken into account when applying the percentage.

Clause 4.16.1 of SBC indicates which work is subject to retention and which is not. The first category to which retention applies includes the value of work done, the materials on and off site and fluctuations computed under the price adjustment formula; the second category to which retention does not apply includes loss and expense applications and fluctuations adjusted on the rise and fall of actual labour rates and material prices.

The employer's interest in the retention sum is fiduciary as trustee on behalf of the contractor. The employer, unless it is a local authority, is required, if asked, to set the money aside in a separate account in the joint names of the employer and the contractor. This means that in the event of default or insolvency of

the employer the money is available to the contractor and it is not lost in the employer's general funds available to the administrators or liquidators. When the employer is a local authority the same circumstances apply but there is no requirement for a separate bank account although it seems that a contractor could insist.<sup>26</sup> A trustee always has the obligation to keep trust funds separate.<sup>27</sup>

There is the option of a surety bond (clause 4.19) instead of applying retention. The bond does offer certain benefits. The contractor should have an improved cashflow, the full bond reserve will be available once the bond is executed and there is no gradual build-up of the reserve over the duration of the construction period. The downside is the premium which will have to be paid to the surety. Though paid by the contractor the amount will be reflected in the tendered sum.

A Statement of Retention Values form for use with SBC is published by the RICS (Figure 20.5) and provision is made in the RIBA certificate form for the retention details to be included (Figure 20.6).

### **20.9.7 Final check**

When the certificate has been completed a careful check should be made to ensure that the figure shown as already certified or paid is correct. A slip at this juncture may well cause a serious error in the certification.

### **20.9.8 Release of part of retention**

It is usually provided that half, or some other part, of the retention shall be released when the work is complete, the balance being retained until the end of the rectification period. Clause 4.20.2 of SBC provides for this release on 'practical completion' of the Works, i.e. when the architect issues a certificate of practical completion under clause 2.30. It is not, therefore, necessary for the contractor to have completed the contract (see Chapter 21, section 21.2).

In the ECC retention is addressed under secondary option X16: Retention. This has to be chosen for retention to apply. The approach is similar to SBC except that option X:16 includes what is called a retention free amount. The retention percentage only applies once the retention free amount has been exceeded.

### **20.9.9 Release of final balance**

Under clause 4.20.2.3 of SBC the whole of the balance of the retention sum is to be released forthwith on the issue of the certificate of making good; see clause 4.9.1 which establishes a due date on the latter of the expiry of the rectification period or the date of issue of the certificate of making good.

If the 'final account' has been resolved then the interim certificate issued following the issue of the certificate of making good, may be the final payment by the client to the contractor; there will be a further certificate, the final certificate, but this would likely show a balance due of zero. If the 'final account' is not complete then provision is made for payment of any balance, either way, when the total of the 'final account' is known. If the valuation of variations is

## Statement of Retention Values



© RICS 2011

Surveyor	Works	Gross Valuation	Basis of Gross Valuations (see note 1)	Amount Subject to (see note 2):		Amount of Retention	Net Valuation	Amount Previously notified	Balance
				Full Retention of 3 %	Half Retention of %				
Brown & Partners High Street, Notown XX1 2CD	Golf Club Park Acres, Notown XX3 1RR	845,390	Clause No.	845,390	-	25,362	820,028	510,010	310,018
		845,390		845,390	-	25,362	820,028	510,010	310,018

This statement relates to:  
Valuation No: 3  
Date of Issue: 10 April 2015  
Reference: 123

Notes:  
1. The sums stated are exclusive of VAT.  
2. See clause 4.13/4.14 for rules for ascertainment of retention.

Fig. 20.5 Statement of retention values. Courtesy of The Royal Institution of Chartered Surveyors.



**Interim Certificate**

SBC

Issued by: Smith & Jones Architects LLP  
address: Design Studios, High Street, Notown XX1 3BB

Employer: Willow Developments Limited  
address: High Street, Notown XX1 4RB

Job reference: 0055

Certificate no: 3

Contractor: ABC Builders Limited  
address: 10-12 Builders Way, Notown XX3 2ER

Date of valuation: 9 April 2015

Due date: 13 April 2015

Works: Golf Club  
situated at: Park Acres, Notown XX3 1RR

Date of issue: 14 April 2015

Final date for payment: 27 April 2015

Contract dated: 12 January 2015

This Interim Certificate is issued under the terms of the above-mentioned Contract.

Gross Valuation (calculation attached) .....	£	845,390
Less Retention as detailed on the attached Statement of Retention .....	£	25,362
	Sub-total	£ 820,028
Less reimbursement of advance payment (statement attached) .....	£	nil
	Sub-total	£ 820,028
Less total amount previously certified .....	£	510,010
	Sub-total	£ 310,018
Less payments referred to in clause 4.9.2.4 .....	£	nil
Net amount for payment .....	£	<b>310,018</b>

*All amounts are exclusive of VAT. The Employer shall in addition pay the amount of VAT properly chargeable.*

I/We hereby certify that the **amount due** to the Contractor from the Employer is (in words)

**Three Hundred and Ten Thousand and Eighteen Pounds Only**

To be signed by or for the issuer named above

Signed J. Swire

**This is not a Tax Invoice.**

Distribution  Employer  Contractor  Quantity Surveyor  File Copy

for SBC CONTRACT ADMINISTRATION FORMS ©RIBA Publishing 2011

**Fig. 20.6** Interim certificate. Reproduced by kind permission of RIBA and RIBA Publishing.

progressively determined as the contract clearly envisages, the final figure should be available by the end of the rectification period and no further adjustment should be required in the final certificate.

**20.9.10 Form of certificate**

Certificates are published and sold by the RIBA (Figure 20.6) in a standard form for use with the JCT contracts. However, certificates need not be in any prescribed form, but they should use the words ‘I (or we) certify’, stating the name of the contract, the names of the contractor and employer, the amount

certified as due and the date, and they must bear the signature of the architect. It is an obvious advantage if they are given a serial number. In the RIBA standard forms provision is made for the amount of any reimbursement against an advance payment and for any payment against a previous interim payment notice where there was no relevant certificate issued.<sup>28</sup> It is sensible that the certificate makes clear on its face what form of certificate it is, e.g. interim or final. Though this may seem obvious, in the rush of a busy business day it is easy to make a mistake.<sup>29</sup>

Under the JCT contracts the certificate is issued to both the employer and contractor at the same time. It is not necessary for the contractor to present the certificate to the employer in order to receive payment. Given the provisions within the Construction Act it would seem sensible for the architect to ensure that their certificate is **received** by the contractor within the 5 day period following the due date.

### 20.9.11 Need for promptness

Finance is an important factor in the running of any business and contractors are no exception; like all businesses they naturally want to reduce to the minimum the amount of capital they have tied up in a project. The intervals at which interim certificates are to be issued is usually dictated by the contract, and architects should see that certificates are issued strictly in accordance with the contract intervals.

From a practical perspective, if there is a delay in carrying out valuations and processing certificates, particulars given by the contractor quickly become obsolete and the time-lag between valuation and payment increases.

While it may seem that a delay of a week or two in payments of what may be relatively small sums of money may not be very important, the aggregate of such outstanding amounts can be substantial. Where the contractor has no significant margin, delays in payment may cause financial difficulties from which the employer may ultimately suffer. Quite apart from anything else, the architect would be in breach of contract for which the employer may be liable.<sup>30</sup> However, following the changes to the Construction Act the failure by the architect to issue their interim payment certificates in a timely manner could have serious consequences. For example, under SBC and IC contracts the architect has to issue their certificate within 5 days, that is calendar days, of the due date. A failure to do so could mean that the certificate would have no effect and a contractor could 'trump' an architect's certificate issued late by giving an interim payment notice stating the amount it believes is due.<sup>31</sup> Unless a timely pay less notice is issued then the contractor may be due payment of the amount set out in its notice. The figure is likely to be higher than that thought due by the architect.<sup>32</sup>

## 20.10 Delays and extensions of time

Construction contracts usually take the form of an agreement under which the works are to be constructed for a certain sum of money or for a sum to be

computed in a particular manner. In addition, contracts include an agreement as to the length of time that the works will take to complete. Accordingly, either start and completion dates are stated or a set period is given. In either case an end or *contract completion date* is established.

In many cases, for various reasons, a project will overrun and finish on a date later than that originally set. This later date is the *actual contract completion date*. The fact that the contractor has to spend longer on site than they contracted does not necessarily mean that the original contract completion date will be extended. In addition, it does not necessarily give rise to an entitlement to reimbursement in respect of loss and/or expense incurred through being on site longer.

To compensate the employer for late completion by the contractor, where the contract completion date is not formally extended, provision is normally included in the contract (e.g. SBC clause 2.32) for the employer to deduct liquidated damages at the rate stated in the contract particulars; normally the rate is stated as an amount per week but there is merit in many instances of expressing it as an amount per calendar day thereby reducing the risk of it being challenged as a penalty. It is important that the rate included is a genuine pre-estimate of loss to the employer in the event of delayed completion, thus providing the contractor with a known amount prior to commencement of the contract. The assessment is undertaken at the time the contract is made.

If the contract did not include provision for liquidated damages a client would have to claim their actual damages (i.e. unliquidated damages). These have to be calculated and would be subject to proof, which could well be a costly and protracted process.

The architect has a responsibility (e.g. SBC and IC but not MW) to certify the contractor's failure to complete the works by the completion date. In addition, the architect should calculate the level of damages that may be deducted and advise the client accordingly. However, any decision to deduct liquidated damages must rest with the employer.

In the event that the employer elects to deduct damages, they are generally deducted by the employer by way of a pay less notice from the amount certified for payment by the architect. In certain circumstances there may well be an overriding commercial reason for the employer not to make such deductions. Under some contracts such as the ECC the project manager makes the deduction of liquidated damages, known as delay damages, in the interim payment certificates. This is a different approach from that of the JCT contracts but even though shown on the ECC interim certificate, it still remains the employer's decision whether or not damages are to be deducted.

Most contracts provide for architects, when acting as contract administrator, to have the power to extend the original contract completion date if they are satisfied that the reason for the delay is one of those set out in the contract. Certain contracts, the JCT standard forms in particular, set out very clearly the duties of the contractor and architect in this respect. The contractor has to give notice as soon as it becomes apparent that delay has arisen or is likely to arise, to state the reasons and give an estimate of the length of delay. The architect in turn has to decide first whether or not in his or her opinion delay has actually,

or is going to, occur and second, what the true reasons are for that delay. If it is decided that the delay was due to one of the *relevant events* set out in the contract then the contractor is entitled to additional time. The architect has then to decide how long that period should be. In the case of SBC the *relevant events* contained within clause 2.29 are as follows:

- **variations**
- **architect's instructions**
- **antiquities**
- **deferment of possession**
- **approximate quantities not an accurate forecast**
- **suspension of contractor's obligations**
- **impediment, prevention or default of the employer**
- *delay by statutory undertaker*
- *exceptionally adverse weather conditions*
- *loss or damage occasioned by a specified peril or perils*
- *civil commotion, use or threat of terrorism*
- *strike or lock out*
- *act or statutory power by Government*
- *force majeure.*

It will be seen that these *relevant events* fall into two distinct categories: those which are neutral (i.e. neither the fault of the employer nor of the contractor) shown above in *italics*; and those for which the employer or their agent is responsible or liable shown above in **bold**. They have been arranged in SBC and IC to reflect this.

Once the architect is satisfied that the delay due to one or more of these *relevant events* affects the completion date, then they are empowered to fix a new contract completion date. This would remove the contractor's liability for liquidated damages. Under SBC the architect has to state the *relevant events* taken into account and the period allocated against each *relevant event*. If the full period of delay is not covered by the award of an extension of time then there would be a *period of culpable delay* for which the contractor would remain liable for liquidated damages.

Other JCT contracts have similar clauses. The provisions of IC clause 2.20 are very similar to SBC though there are some subtle differences which the architect should be aware. MW does not list events, other than the architect's instructions, and relies upon a single broad ground of 'reasons beyond the control of the Contractor'. Such wording means that the contractor would be entitled to an extension of time for any matter beyond his control which delays completion. The relevant provision makes clear that sub-contractors are taken to be within the control of the contractor. However, any weather which delayed completion of the works would give rise to an entitlement to an extension of time, rather than simply exceptionally adverse weather as would be the situation under SBC. Basically under the MW the employer takes the risk of weather.

When questions of extensions of time arise architects must study carefully the particular contract clause and act accordingly. Certain basic facts have to be borne in mind.

- Unless the contract includes an acceleration clause the original contract completion date cannot be improved upon (i.e. there is no facility to shorten a contract period).
- A contractor has a duty to make every endeavour to prevent delay arising short of the expenditure of significant sums of money. The obligation is to continue to work regularly and diligently. However, once delay has arisen there is no requirement that time lost must be recovered.
- Extensions of time provisions are to preserve a completion date and provide relief from the liquidated damages. They are, as pointed out below, primarily for the benefit to the employer. However, under SBC, for example, the contractor is given relief for certain neutral events for which he would otherwise carry the risk e.g. weather.
- Under the JCT contract extension of time clauses the question of additional costs being paid does not arise.<sup>33</sup> These are matters dealt with elsewhere in the contract (see section 20.11). However, this is not the case in every contract e.g. ECC clause 6 compensation events addresses both time and money.

Extension of time provisions are inserted in construction contracts for the benefit of the client as much for that of the contractor. As far as clients are concerned the clause protects their right to receive liquidated damages. If such provisions were not included and contractors were delayed by the employer or any of their agents (i.e. an act of prevention) then the right to recover liquidated damages would be forfeited. The contract would become (as the lawyers say) *at large* (i.e. the only obligation on the part of the contractor would be to complete the works within a reasonable time).

## 20.11 Financial claims

The word 'claim' is not used in the JCT forms of contract; the contractor makes an 'application' for loss and/or expense. What have come to be known under the generic head of claims, is in fact an entitlement to reimbursement of direct loss and/or expense, to use the precise terminology of the contracts. Before considering claims at all it is necessary to define the differences between two types of claim that the law recognises: common law claims and contractual claims.

*Common law claims* are claims for breach of contract when the claimant must prove a breach of contract and is then entitled to recover damages (i.e. unliquidated damages) calculated on common law principles. These claims unless agreed between the parties have to be pursued by way of adjudication, litigation or arbitration. The architect has no authority to deal with them unless expressly authorised to do so by the employer and contractor. Any resulting payment must be made outside the terms of the contract.

*Contractual claims* arise because some provision in the contract entitles the contractor to payment for 'loss' or 'expense', made and settled under machinery provided within the contract. In some cases events which give rise to such a



claim will also be breaches of contract and as such will give rise to a common law claim. In other cases they will not. For example, the issue of a variation instruction may give rise to loss and expense even though the architect is authorised under the contract to issue such instructions. In both cases the burden of proof lies with the party asserting the right, i.e. the claimant.

Before considering claims at all it is also necessary to define what the phrase '*direct loss and/or expense*' means. Perhaps it is easier to say what it does not mean. It is not the difference between what the contractor thought the costs would be and what the costs actually were. This is a commonly held view of some contractors; it overlooks the possibility that the initial tender figure might have been optimistic or simply wrong. The word 'direct' in this context means that which can fairly and reasonably be considered as arising naturally from the event. 'Expense' means 'actual disbursements'. 'Ascertainment' means 'find out': not, as some appear to think, 'work out'. In several cases, when considering JCT contracts, the courts have held that loss and/or expense is subject to the same principles as are applied to common-law damages.

Claims, to use the generic term, in the construction industry fall into two categories: extensions of time, and loss and/or expense for disruption to the regular progress of the works. Claims for extensions of time are covered in section 20.10. Claims for loss and expense can be sub-divided into two broad categories: (i) prolongation and (ii) disruption elements. While the JCT forms of contract do not recognise any distinction (each being treated as part of the whole), it is necessary to consider the difference when it comes to the computation of a contractor's application.

A *prolongation claim* arises from delay in completion of the contract works beyond the date when they would otherwise have been completed. Such a claim is sometimes erroneously called an extension of time claim.

A *disruption claim* is one that arises from the effect of an event upon the contract Works which may not in itself necessarily involve a delay in the completion of the overall Works. A popular misconception is that there cannot be disruption without prolongation. This supposition is quite false and it is no defence for an architect to say that no extension of time has been granted and therefore there can be no application for loss and/or expense; there certainly can be.

The subject of financial applications and their ascertainment warrant textbooks on its own, and indeed various books deal with the topic.<sup>34</sup> Suffice it to say that architects will from time to time have to make judgments by way of ascertainment and occasionally have to be 'judge and jury' on their own misdemeanours, e.g. late information resulting in disruption to the regular progress of the works and delay to completion.

In making these decisions architects must bear in mind two main principles:

- consideration must be given to any relevant clause in the contract which may apply to the matter. For example, has the contractor already recovered under a provision elsewhere in the contract or has the contractor complied with any provision which required that he give a timely notice of outstanding information

- the value of the application should not affect a decision on the principle. If the claim is very small; however, whichever party is concerned might be persuaded to waive it, or it may be eliminated by a bit of 'give and take'.

## 20.12 Termination

Most forms of building contract provide that either party can bring the contractor's employment to an end on the occurrence of certain events. The contract itself is not ended, because it is important that the contract continues in existence to govern the situation after termination. The act of bringing the contractor's employment to an end must never be taken lightly by either employer or contractor. The provisions are intended to be used as a last resort, which indeed they are so far as those contracting parties are concerned.

If there were no termination provisions in building contracts, termination could only be achieved under the common law principles. In that case, performance under the contract itself would come to an end. There are four ways this could happen:

- by performance
- by agreement
- by frustration
- by breach.

### 20.12.1 Performance

Most contracts come to a conclusion in this way. This is when both parties have carried out their obligations in accordance with the contract, e.g. the contractor has built the building free from defects and the employer has paid in full.

### 20.12.2 Agreement

It is open to the parties to a contract to agree at any time that the contract should be ended prior to full performance of their obligations. In theory, all that is necessary is for both parties to agree to walk away. In practice, because human nature is sometimes frail (and human memory suspect), it is wise to record the agreement in writing. For the agreement to have binding effect, it must either contain consideration from both parties (i.e. both must gain and/or lose something) or it must be executed as a deed (see Chapter 13, section 13.4.1). In practice, completion as a deed is the surest way.

### 20.12.3 Frustration

This is a term with a specific legal meaning in relation to contracts. When an event, completely outside the control of the parties, results in the contract becoming fundamentally different from that contemplated by the parties at the time the contract was made, then the contract is said to have been frustrated.

It is not sufficient that the contract has become more expensive, than originally envisaged by the contractor, to perform.<sup>35</sup> A good example of frustration would be if a contractor was unable to carry out a refurbishment contract because the building burned down before the date for possession. There are less extreme examples such as a government order which restricts the work.

#### 20.12.4 Breach

Breach is an unjustified failure to carry out contractual obligations by one of the parties. If it is a serious breach, it may entitle the other party to treat their own obligations under the contract as ended. The breach itself does not discharge the contract; it has to be accepted by the other party. The innocent party may treat their obligations under the contract as having ended and sue the other party for damages; such a breach is known as 'repudiatory' because it is a repudiation of the contract. Alternatively, the innocent party may treat the contract as continuing (referred to as 'affirming' the contract) and simply sue for damages.

The difficulty is knowing whether a breach is sufficiently serious to allow acceptance as repudiation. It is often said that such a breach must go to the root of the contract. If a party wrongly accepted a breach as repudiatory and refused to continue with the contract, that party would then be the one in breach. As a general guide, a breach will be repudiatory if it is clear that, by the breach, a party demonstrates an intention not to be bound by the terms of the contract. Great care must be taken, however, because it has been held that the actions of a contractor who suspended work in breach of contract did not amount to a repudiatory breach. Far from indicating an intention not to continue with the contract, the word 'suspension' indicated only a temporary cessation of activities.<sup>36</sup> A clear case of repudiatory breach would be if a contractor simply walked off the site before practical completion, vowing never to return or if the architect's client said that fees would no longer be paid in accordance with the agreed instalments, but only at the end of the project when the client was entirely satisfied. These are clear examples. Less obvious is the situation when an employer fails to pay a contractor sums due under a building contract. Although it is fairly clear that continued non-payment can amount to a repudiatory breach, it has been held that a refusal to pay a substantial sum can itself in some circumstances be held to be repudiatory.<sup>37</sup>

#### 20.12.5 Termination under the contract

The conditions which have to be satisfied before the contractor's employment can be brought to an end under the contractual machinery can be far less onerous than those required under the general law, e.g. SBC clause 8. Typical grounds for termination by the employer are as follows. If the contractor:

- completely or substantially suspends the works
- fails to proceed regularly and diligently<sup>38</sup>
- refuses or neglects to rectify defective work and the works are seriously affected as a result; there are usually other more suitable contractual remedies

- does not observe the provisions of the assignment and sub-letting clauses
- does not comply with the Construction (Design and Management) Regulations 2007 (CDMR)<sup>39</sup>
- is insolvent.

Since termination is such a draconian step, the courts are likely to look very closely at the procedure. The party wishing to terminate must comply strictly with the contractual terms governing termination. If the contract stipulates that notice must be given by special or recorded delivery or delivery by hand, other forms of communication such as e-mail or facsimile may not suffice although facsimile has been held to be the same as actual delivery.<sup>40</sup> In SBC, for example, although the architect is to give the prior notice of default, the notice of termination (if given) must be issued by the employer. There is no substitute for carefully reading the particular contract being used.

Where the contract requires that a certain number of days' notice must be given before termination, the termination will not be valid if attempted even one day early. In such a case, the contractor may be able to sue for damages for repudiation, although much depends on the extent to which the employer has relied on the contract provision, even if mistakenly.<sup>41</sup> As the person charged with administering the contract, the architect has important duties to administer the provisions carefully after termination. The best drafted contracts expressly provide that the contractor must give up possession of the site after termination. Although it may seem obvious that the contractor must leave the site, there could conceivably be problems if the contractor disputes the termination and tries to keep possession of the site. Substantial time and legal costs may be wasted on gaining possession.

Most standard form contracts provide that the employer has the right to make use of the contractor's plant (this can only cover a plant owned by the contractor and not a hired plant) and engage others to finish the Works, taking over contracts for the supply of work and/or materials. Generally, the employer will not be obliged to make any further payment to the contractor until the Works are complete, even if a certificate has been issued (e.g. SBC clause 8.7.3). It will then fall to the architect and the quantity surveyor to take all the expenditure into account including additional professional fees (some contracts include provision for including the employer's loss and damage in the calculation) and calculating a final payment of the balance either to employer or to contractor. This final payment may be set out in a statement or certificate depending on the provisions within the contract. The architect should be careful in issuing a certificate especially when they have no way of verifying the costs directly incurred by the client and these are included within the calculation of the final payment.

If the contractor terminates, the situation will be very serious, not to say catastrophic, for the client. The architect should make every effort to prevent such an occurrence. Many contracts provide that a contractor who terminates may claim the loss of the profit which would have been made had the contract continued.<sup>42</sup> This would obviously be subject to proof. Quite apart from that, the employer will have to shoulder the burden of completing the project using another contractor probably at an increased cost for the works, additional

consultant's fees and to an extended time scale. Examples of matters included within standard form contracts which could give rise to the contractor having a right to terminate are as follows. The employer:

- fails to pay certified sums within the period stated in the contract
- interferes with the issue of any certificate
- fails to comply with the assignment clause
- fails to comply with the CDMR<sup>43</sup>
- or their agent cause a suspension of the works for a protracted period
- becomes insolvent.

Many contracts provide for termination by either party for such things as prolonged suspension of the works due to causes outside the control of either party. Normally, the consequences are simply that the contractor is paid up to date of the suspension and the parties have no further liabilities to each other. Of course, the employer still has the problem of paying extra and waiting longer for the completion of the works.

A contractor has nothing to gain and everything to lose by terminating its employment as a result of a suspension. Having said that, the contractor cannot wait forever and the architect should attempt to obtain some agreement if it seems that suspension of the works will last long enough to give rise to the contractor having a right to terminate. A most important provision is that a termination notice from either party must not be given unreasonably or vexatiously. That provision must be interpreted in the ordinary common sense way.

## References and notes

1. See 'The RIBA Plan of Work 2013 Overview', Editor Dale Sinclair, published by the RIBA London, p. 7.
2. *Greater London Council v. Cleveland Bridge & Engineering Co Ltd* (1984) 8 Con LR 30.
3. *Glenlion Construction v. The Guinness Trust* (1987) 39 BLR 89.
4. Keane PJ, Caletka AF, *Delay Analysis in Construction Contracts* (2008), Wiley-Blackwell.
5. *John Barker Construction Ltd v. London Portman Hotels Ltd* (1996) 12 Const LJ 277; *Balfour Beatty Construction Ltd v. London Borough of Lambeth* [2002] BLR 288.
6. Clause 31.2.
7. *Consarc Design Ltd v. Hutch Investments Ltd* (2002) 84 Con LR 36.
8. Jamieson N, *Good Practice Guide: Inspecting Works* (2009), RIBA Publishing.
9. *East Ham Corporation v. Bernard Sunley & Sons Ltd* [1965] 3 All ER 619; *Sutcliffe v. Chippendale and Edmondson* (1971) 18 BLR 149; *Brown & Brown v. Gilbert Scott & Payne* (1993) 3 Con LR 120; *Alexander Corfield v. David Grant* (1992) 59 BLR 102; *Bowmer & Kirkland v. Wilson Bowden* (1996) 80 BLR 131. The most recent and comprehensive advice on the topic of inspections was given in *McGlenn v. Waltham Contractors Ltd and Others* (No. 3) (2007) 111 Con LR 1.
10. *McGlenn v. Waltham Contractors Ltd and Others* (No. 3) (2007) 111 Con LR 1 at paragraph 218.

11. Summerhayes S, *CDM Regulations 2007 Procedures Manual* (2008), 3rd edition, Blackwell Publishing; *Managing Health and Safety in Construction: Construction (Design and Management) Regulations 2007: Approved Code of Practice* (2007), The Stationery Office.
12. See the RIBA briefing notes 'CDM REGULATIONS 2015 Briefing note no. 1: Overview of the new regulations' and 'CDM REGULATIONS 2015 Briefing note no. 1: The Principal Designer role and its duties' for an overview of the role of the Principal Designer.
13. There is similar provision in the IC, ICD, MW and MWD.
14. *Howard de Walden v. Costain* (1991) 55 BLR 124.
15. The clerk of works can issue direction under SBC clause 3.4. These directions must be confirmed within 2 days by the architect.
16. Clause 14.
17. *Gloucestershire County Council v. Richardson* [1969] 1 AC 480.
18. Clause 60.1(1).
19. *Dudley Corporation v. Parsons & Morrin* (1967) Unreported.
20. *Henry Boot v. Alstom Combined Cycles* (1999) 90 BLR 123.
21. *Cantrell v. Wright & Fuller Ltd* [2003] EWHC 1545 (TCC) at paragraph 83.
22. *R M Burden Ltd v. Swansea Corporation* (1957) 3 All ER 243; *Sutcliffe v. Thackrah* (1974) 1 All ER 889.
23. Chappell D, *SBC11 Contract Administration Guide How to complete the SBC contract and its administration forms* (2011), RIBA Publishing, p 44.
24. Though not stated within the JCT contracts it would appear that the architect's certificate is doubling up as the employer's payment notice in compliance with the Construction Act. As a notice has to be received to take effect it is important that the certificate is received within the 5 days.
25. Refer to Chapter 11 section 11.11.
26. *Rayack Construction Ltd v. Lampeter Meat Co Ltd* (1979) 12 BLR 30.
27. *Wates Construction v. Franthom Property Ltd* (1991) 53 BLR 23.
28. Four helpful guides to completion of all kinds of contract administration forms and other useful hints are published by RIBA Publishing in respect of SBC 2011, IC and ICD 2011, MW and MWD 2011, DB 2011. Each is entitled 'Contract Administration Guide' prefaced by the relevant contract abbreviation, e.g. 'DB11 Contract Administration Guide'. They contain some useful information of general application.
29. *Cantrell v. Wright & Fuller Ltd* [2003] EWHC 1545 (TCC) at paragraph 194.
30. *Croudace Construction Ltd v. London Borough of Lambeth* (1984) 1 Con LR 12; *Penwith District Council v. V P Developments Ltd* 21 May 1999 Unreported.
31. If the contract permits the contractor to make an application for payment then provided the contractor submits in accordance with the contract that application can become the contractor's default notice. For example, see SBC clause 4.11.
32. See *ISG Construction Ltd v. Seevic College* [2014] EWHC 4007 (TCC). This case related to a DB contract and though the payment regime is different under SBC it clearly illustrates the consequences of not issuing a timely payment notice or certificate under SBC.
33. *H Fairweather Ltd v. London Borough of Wandsworth* (1987) 39 BLR 106.
34. Chappell, D. *Building Contract Claims* (2011) 5th edition, Blackwell Publishing deals with the legal principles and their application across different forms of contract.

35. *Davis Contractors Ltd v. Fareham UDC* [1956] 2 All ER 145.
36. *F Treliving & Co Ltd v. Simplex Time Recorder Co (UK) Ltd* (1981) Unreported.
37. *C J Elvin Building Services Ltd v. Noble* (2003) CILL 1997.
38. This concept has caused some trouble in the past. It really has to be clear and unambiguous. See the courts' views in *Greater London Council v. Cleveland Bridge & Engineering Co Ltd* (1986) 8 Con LR 30 and particularly *West Faulkner Associates v. London Borough of Newham* (1994) 11 Const LJ 157.
39. Now the Construction (Design and Management) Regulations 2015. See JCT Amendment 1: CDM Regulations issued March 2015.
40. *Construction Partnership UK Ltd v. Leek Developments Ltd* [2006] EWHC B8 (TCC).
41. *Woodar Investment Development Ltd v. Wimpey Construction UK Ltd* [1980] 1 All ER 571.
42. *Wraight Ltd v. P H & T (Holdings) Ltd* (1968) 8 BLR 22.
43. Now the Construction (Design and Management) Regulations 2015. See JCT Amendment 1: CDM Regulations issued March 2015.

# 21

## Stage 6: Handover and Close Out

This stage is described by the RIBA as follows:

‘Stage 6 Handover and Close out maps broadly to the former Stage L – Post Practical Completion – services.’<sup>1</sup>

### 21.1 Practical completion

Practical completion is a term used in the JCT suite of contracts. The ECC refers to the project manager certifying ‘Completion’. Unlike the other contracts the ECC includes a definition of ‘Completion’ which is when the contractor has done all work which the Works Information states he is to do by the completion date and corrected the notified defects which would prevent the employer from using the Works and others from doing their work. If the Works which the contractor is to do by the completion date is not stated in the Works Information, then completion is when the contractor has done all the work necessary for the employer to use the Works and for others to do their work. This does not appear to have the same meaning as ‘practical completion’<sup>2</sup>; probably a lower threshold for the contractor to achieve subject to what is included in the Works Information.

There are conflicting views regarding the meaning of practical completion, but it is certainly not when the building is totally complete; if it meant completion down to the last detail, however trivial and unimportant, then it is likely that the liquidated damages clause would amount to a penalty clause and as such be unenforceable.<sup>3</sup> It has been said that the architect may certify practical completion when the architect is satisfied that the Works are reasonably in accordance with the contract with no obvious defects, even though there are some minor things left to be done.<sup>4</sup> This is probably the best view and receives support from an earlier House of Lords decision.<sup>5</sup> In a relatively recent decision from Hong Kong, the courts said that ‘practical completion’ was a state of affairs in which the Works had been completed free from any patent defects other than those that can be ignored as trifling.<sup>6</sup> In the commentary on a later case it was said that it was clear that ‘practical completion’ is to be viewed as a

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*The Architect in Practice*, Eleventh Edition. David Chappell and Michael Dunn.

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rigorous standard.<sup>7</sup> The minor things left to be done are at the discretion of the architect, but in exercising that discretion, it is suggested that the architect must consider as 'minor' only those items which can be subsequently carried out by the contractor without seriously interfering with the client's use of the building. The golden rule must be that architects must not certify practical completion before they are of the opinion that practical completion has taken place. The certificate is a formal demonstration of the architect's opinion and, therefore, not something to be taken lightly. The architect is not entitled to certify practical completion merely because the client or the client's solicitor has instructed the architect to do so. The Works have not reached practical completion simply because the employer occupies them.

A vexed question concerns the extent to which an architect is justified in certifying practical completion, because the client has re-taken possession of the Works. Certainly, practical completion is not to be certified simply because the client has occupied the Works.<sup>8</sup> Often a client will re-take possession long before the building is complete simply because the delay in completion is proving to be far longer than expected. However, it has been held that if the client takes partial possession of the whole of the Works, it is deemed to be practical completion.<sup>9</sup> In those circumstances, it seems that the architect has no obligation to issue a formal certificate of practical completion, but merely a written notice of possession as detailed below.

Although practical completion is something which the contract generally leaves to the opinion of the architect, it can be seen that in reality the architect has very little discretion. Practical completion is very largely a question of fact in each case. In *McGlinn v. Waltham*<sup>10</sup> the judge made clear that a qualified practical completion certificate was not something envisaged under SBC when he said:

'They seemed to envisage some sort of qualified practical Completion Certificate which is not provided for in the JCT form and is, on analysis, a contradiction in terms.'

Therefore the works are either practically complete or not. This raises the interesting question about a practical completion certificate which is issued with an extensive list of outstanding work or defects attached. The cumulative effect of a large number of items to complete or made good could mean that the works were not practically complete. Alternatively, such an extensive schedule could be viewed as qualifying the certificate which according to the judge in the *McGlinn case* would not be acceptable. The general assumption is that defects and outstanding works identified at practical completion (i.e. listed in a schedule attached to the certificate) will be made good during the rectification period. However, there is no provision in the JCT contracts which expressly addresses this point, i.e. requiring the contractor to make good defects that exist at practical completion. There is authority that it was implicit that minor defects existing at practical completion could be addressed with those arising during the rectification period.<sup>11</sup> Architects should not rely on this possible implication and seek a written undertaking from the contractor that the defects identified

at practical completion would be made good during the rectification period, i.e. treated as if they had arisen during the rectification period. In contrast the ECC expressly addresses the matter of defects existing when the project manager certifies completion.

Following the introduction of the Construction (Design and Management) Regulations 2007 (CDMR),<sup>12</sup> the JCT contracts set out two criteria before practical completion may be certified. These are:

- practical completion of the Works must have taken place in a physical sense; and
- the contractor must have sufficiently complied with its obligation to provide information reasonably required by the CDM Co-ordinator<sup>13</sup> to prepare the health and safety file.

The, perhaps unexpected, result is that the certificate may be withheld for weeks, because the information for the health and safety file is not provided. The contract provisions allow the employer to deduct liquidated damages until the date of practical completion in such circumstances. The only glimmer of light is that the contractor must have 'sufficiently' complied with his obligations to provide that information reasonably necessary for preparing the health and safety file. This no doubt allows the certificate to be issued when there is outstanding information which is not significant. At the first site meeting, architects should stress to the contractor the importance of it supplying the information so that practical completion can be certified. It may well be that a client would or could operate the partial possession provisions in such circumstances, thereby reducing the level of damages that would apply.

When there is a contractor designed portion the contractor has also to provide the as-built drawings relating to that part of the work he designed before practical completion can be certified.

The contractor will be anxious to see the 'completion certificate' because it usually has the effect of reducing the contractor's liabilities and has a positive impact on cash flow. In most contracts it identifies when:

- the contractor's liability to insure the works ends
- the contractor's liability for liquidated damages ceases
- half the retention held is released.

It is generally the case that performance bonds cease or expire at completion of the works. As many sureties seek some form of security from a contractor in exchange for providing the bond, its expiry will usually place the contractor in a financially better position. For example, if the surety was a bank, it may well have placed a restriction on the contractor's overdraft or lending facility until the bond expired.

Most contractors will notify the architect when practical completion is about to be achieved, although it is rare for a contract to include a provision to that effect. A contractor may well inform the architect prematurely, stating that completion has been achieved when in fact significant works remain outstanding. Architects must be on guard against this tactic which can possibly be used to

suggest that the architect is being unreasonable when certification is subsequently withheld. The contractor may well seek to apply pressure by writing to the effect that it is two months since the architect was informed that practical completion had been achieved and still the architect refuses to issue a certificate. The contractor overlooking the significant works that remained outstanding at the time it informed that completion had been achieved. Such manoeuvres are highly reprehensible of course, but also it must be said that some architects can be slow to certify.

The architect should inspect the building and, if it is not complete, write a very firm letter to the contractor pointing out that, at the present rate of progress, it seems to be x weeks from practical completion and that practical completion had not been achieved on the date suggested by the contractor.

Figure 21.1 shows an example of a form of certificate of practical completion for use with SBC.

There is nothing wrong and much to be said for architects who point out defects to the contractor. But architects should not be persuaded to carry out detailed inspections of every part of the building and prepare long lists for the contractor, i.e. so-called 'snagging lists'. In a relatively recent case<sup>14</sup> the courts expressed a view that the following was usual practice in the UK construction industry when a building was nearing completion.

- The contractor goes through the building to ensure that it complies in all respects with the contract.
- The architect then undertakes his or her own careful inspection of the building and records, in a detailed snagging list, all those items which he or she considers to be patently incomplete or defective.
- The contractor is then required to correct all the items on the snagging list.
- Once the architect is satisfied that all the items on the snagging list have been corrected, then, unless some other event has intervened, the architect will normally issue a certificate of practical completion.

It is not believed that such a practice is usual in the industry. A danger with such lists is that the contractor will rely on the architect and clerk of works to do what the contractor's site supervisory staff should be doing. Another danger is that the contractor will frequently consider that when the listed defects are rectified, practical completion will be certified. In fact, the architect may well carry out another inspection two days later and add further items to the list. The architect is perfectly entitled to do so, but it does not make for good relations with the contractor. Far better to get the facts straight at the beginning, it is the contractor's obligation under the terms of the contract to construct the building strictly in accordance with the contract and the architect has no duty to point out defects. If the contractor wants a list of defective work before practical completion, then it should prepare such a list itself.

It has already been noted that the client may try to persuade the architect to certify practical completion, before it has really been achieved, so that the client can move into the building. Of course, as one of the parties to the building contract, it is open to the client to agree with the contractor to take over the building at any time. However, it has been seen that the architect has no such power



**Practical Completion Certificate**

SBC / IC / ICD / MW / MWD

Issued by: Smith & Jones Architects LLP  
address: Design Studios, High Street, Notown XX1 3BB

Employer: Willow Developments Limited  
address: High Street, Notown XX1 4RB

Contractor: ABC Builders Limited  
Address: 10-12 Builders Way, Notown XX2 2ER

Works: Golf Club  
situated at: Park Arcres, Notown XX3 1RR

Contract dated: 12 January 2015

Job reference: 0055

Certificate no: 1

Issue date: 30 November 2015

Under the terms of the above-mentioned Contract,

I/we hereby certify that in my/our opinion

Practical completion of the Works has been achieved

\*Delete if not applicable

\* and the Contractor has supplied the specified documents and drawings relating to the Contractor's Designed Portion

\* and the Contractor has complied with the contractual requirements in respect of information for the health and safety file

on 30 November 2015

To be signed by or for the issuer named above

Signed J. Smith

Distribution	<input checked="" type="checkbox"/>	Employer	<input checked="" type="checkbox"/>	Structural Engineer	<input checked="" type="checkbox"/>	CDM Co-ordinator	<input type="checkbox"/>
	<input checked="" type="checkbox"/>	Contractor	<input checked="" type="checkbox"/>	M&E Consultant	<input type="checkbox"/>		<input type="checkbox"/>
	<input checked="" type="checkbox"/>	Quantity Surveyor	<input type="checkbox"/>	Clerk of Works	<input type="checkbox"/>		<input checked="" type="checkbox"/> File

for SBC / IC / ICD / MW / MWD

CONTRACT ADMINISTRATION FORMS

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**Fig. 21.1** RIBA certificate of practical completion. Reproduced by kind permission of RIBA and RIBA Publishing.

and, therefore, it would be very unwise to issue the certificate before practical completion has in his or her opinion been achieved. If the client takes over the building before practical completion, the architect's duty depends on the form of contract. If an employer simply occupies a building without the contractor's consent, and the contract does not otherwise permit, then the employer would be in breach of contract.<sup>15</sup> Under the provisions of SBC<sup>16</sup> or IC, if the client takes possession of any part or parts of the Works with the contractor's consent, the architect must issue a written notice on behalf of the client identifying the part taken into possession and the date. The ECC has provisions which achieve

a similar end and which refer to the employer taking over the works prior to completion. It is worth noting that under the ECC the contractor is given access to the site and not possession; the employer retains possession.

Many contracts have provision for such partial possession. The idea is that where there is just one date for completion in the contract, but during the progress of the Works, the client wishes to take possession of some part of it before practical completion of the whole, this can be achieved provided that the contractor agrees. It is important to remember that the provision does not enable sectional completion to be achieved. Where it is known at the time of tender that sectional completion is desired, care should be taken to see that the appropriate form of contract is used. SBC and IC contracts now incorporate provision for sectional completion though MW does not, and the ECC includes for the possible inclusion by selecting the secondary option clause X5.

It is not usually sufficient to put a list of handover dates in the specification or bills of quantities if there is only one completion date in the contract conditions. In such circumstances, the architect may be unable to insist on sectional completion under JCT contracts due to the priority clause in the contract.<sup>17</sup> He will be unable to give extensions of time to individual sections of the work and the liquidated damages clause might well become a penalty and thereby unenforceable. Where there is provision for sections, a section completion certificate must be issued at practical completion of each section. On practical completion of the last section, the architect should issue a section completion certificate for that section and also a practical completion certificate for the whole of the Works. This removes any doubt that there may be some small part of the Works which has not (technically) reached practical completion.

As the works approach practical completion the architect should start to prepare the client so that they are ready to take control of the works at practical completion. The client may not take actual possession but they will be responsible for insuring and securing the building. The architect should have prepared the employer for this time so that it does not come as a shock and a rush to put everything in place to take possession, e.g. adopting the handover strategy identified in the RIBA Plan of Work 2013.

## 21.2 Rectification period

Most forms of building contract provide for a period of time following completion of the works during which the contractor has the opportunity to return to site and make good any defects for which he is liable. The usual period is six months, but twelve months is commonly specified so that the mechanical services system can be exposed to the full 12 month cycle. Other than where there are sections, most contracts do not allow for different rectification periods to be specified, e.g. one for the building work and another for the mechanical and electrical. The solution is to specify the longer period required as the rectification period for the Works as a whole.

The reason for the period is often misunderstood. It must be remembered that, during the contract period, the contractor is said to have a licence to be

on the site (the client's property) for the purpose of carrying out the Works. It is generally understood that the licence allows the contractor to remain on the site until the Works are completed. If the contractor were to stay on site or allow equipment to remain on site beyond that point, it would amount to trespass for which the client could mount an action for whatever damages could be proven. Moreover, if there was no rectification period, the client could simply notify the contractor of any defects, but arrange to have them corrected by another contractor and charge the original contractor with the cost. That said, a client may not be able to recover the full cost if the contractor can demonstrate that, if given the opportunity he could and would have rectified the defects at a lower cost. If this were the case it could be argued that the client had failed to mitigate the costs he incurred and recover from the contractor only the cost the contractor would have incurred in correcting the defects. The position would be different if the contractor was given an opportunity and refused to return to remedy the notified defects; the client would be entitled to recover from the contractor the cost of engaging another contractor to remedy the defects.

The rectification period allows defects to appear and provides for the architect to give an instruction or schedule to the contractor with a requirement (i.e. an instruction) to rectify them. The contract gives the contractor an opportunity to re-enter the site to make good the notified defects. A method statement and programme for undertaking the remedial works would have to be agreed with the client, something commonly arranged by the architect. The provision is for the contractor's benefit giving it a right under the contract to rectify those defects.<sup>18</sup> This is a valuable right for the contractor because the cost to the contractor for doing the remedial work will be much less than the cost to the client of getting another contractor to do the same work. It is probable that the contractor will have the remedial works undertaken by its sub-contractors who are likely to have a liability under the relevant sub-contract. Therefore, the cost to the contractor could be minimal.

Some contracts make provision for the client to decide not to allow the contractor to make good the defects and to make 'an appropriate deduction' from the contract sum. How the appropriate sum is calculated will very much depend on the circumstances.<sup>19</sup> If an employer refuses to allow the contractor to return to site to make good the defects then the sum is not the cost of engaging another contractor, but what it would have cost the original contractor to do the work.<sup>20</sup>

Another misconception is that at the end of the rectification period, the contractor has no further liability for defects. This may have been a reason behind the change of name in the JCT contracts from 'defects liability period' to 'rectification period', simply to avoid the misconception which may have been partly engendered by the former name. The contractor is liable for all defects (i.e. work not in accordance with the contract); however, after the expiry of the limitation period he would have a defence against any claims brought (see Chapter 13, section 13.4.1). Thus, if it was discovered three years after the end of the rectification period that a contractor had omitted a number of wall ties, specified to be used in the cavity walls, an action could be brought against the contractor for the cost of making the defect good. Not just what

it would have cost the contractor, but all the costs involved in getting another contractor to do the work<sup>21</sup> and all other costs suffered directly arising from the breach, e.g. alternative accommodation costs or loss of trade while the work was undertaken. A contractor is liable beyond that period, but the Limitation Act operates to allow a contractor faced with an action in respect of a breach of contract to escape the consequences after a period of 6 years from the date of the breach or 12 years in the case of a deed. The starting date for this period under a contract is the date the breach occurred and for building Works this is typically taken as from the date of practical completion. If the client wants to recover the cost of making good defects from the contractor, it is essential for the contractor to be given notice of the defects, to be afforded an opportunity to inspect and given a reasonable opportunity to carry out remedial work.

A factor that should be borne in mind is the possible consequences of the client engaging another contractor to carry out the remedial work. For example, engaging a different contractor may well invalidate any product or equipment warranties provided under the contract. Additionally, liabilities may be confused should further defects occur in the future in the location of the remedial work. Are these defects due to a breach by the contractor or were they caused by the other contractor who completed the remedial work?

Most forms of contract provide for the architect to issue a certificate or notice when all the listed defects have been made good and, in some standard forms, there is then provision for the second half of the retention to be released. The retention acts as a safeguard to the client if the contractor fails to make good the defects. The contractor should make good the defects within a reasonable time following notification by the architect. What is a reasonable time will depend on many factors. It is not possible to fix a period which applies to all circumstances. The criteria to be taken into account include the complexity of the work, the size of the project, the number and type of defects and the difficulty of making good. That said the ECC does have what is called the 'defects correction period' which is identified in the contract data part one and this is the period within which the contractor is expected to remedy notified defects (clause 43.2). If the contractor does not rectify the defect within this period then the project manager can make an assessment of the cost of the remedial works and this amount is withheld from the contractor (clause 45.1). The clause expressly states that if the contractor is given access but fails to rectify the defect then the assessment is based on the cost to the client of having the defect remedied; alternatively, it states that if the client fails to give access then the assessment is based on the cost to the contractor.

If the architect is of the opinion that the contractor is not attending to its contractual obligations with reasonable expedition and does not respond to pressure, then the architect should seriously consider giving notice, on behalf of the client, that if the making good is not commenced/completed within a reasonable time then the client will engage others to do the work. The costs incurred by the client will be charged to the contractor. That would normally amount to making a deduction from monies due to the contractor including the retention

fund. Some contracts include provision for such a notice and specify a period within which the contractor must comply, e.g. SBC clause 3.11 which gives the contractor 7 days.

Some contractors and even some forms of contract refer to the 'maintenance period'. The term is quite misleading and it should not be used because it suggests an obligation to keep the works in pristine condition rather than an obligation simply to correct defects. The only kind of defects which most forms of contract require the contractor to make good are those which are due to the work not being in accordance with the contract. Clearly, ordinary wear and tear is excluded as are the consequences of inadequate specification.

### 21.3 Adjustment of contract sum

It seems to be the fashion for architects to leave the calculation of the final account entirely in the hands of a quantity surveyor. Architects should remember, however, that they are the contract administrators and that when the final certificate is issued that it may be conclusive (e.g. SBC and IC) that all the clauses which provide for adjustment of the contract sum have been correctly operated. The consequences of a failure in this regard could be quite serious. The only safe process is to check through the contract and make sure. Using SBC as an example, it contains no less than 28 different instances which permit or require adjustment of the contract sum. They are summarised in Figure 21.2. Each clause should be carefully considered and a positive decision should be made that the matters referred to in the clause have been dealt with.

Architects should not leave everything to the quantity surveyor, they should check through the material provided by the contractor. Although it is probably inappropriate for architects to attempt the kind of financial reconciliations which are in the province of the quantity surveyor, architects can usefully see what sort of information has been sent by the contractor and the work categories concerned. Architects who do this may spot errors which the quantity surveyor has missed because the quantity surveyor was not so closely involved with the carrying out of the work. Needless to say, the quantity surveyor must have a full set of all the instructions issued by the architect during the course of the project. This should include not only the standard architect's instruction forms, but also any instruction given by the architect in any other way.

If the contract is small and no quantity surveyor is involved, the architect will be responsible for checking the final account in detail.<sup>22</sup> Where appropriate all invoices of sub-contractors and suppliers should be requested and they should be checked against entries in the account and the amounts allowed in the contract. All extra items should be authorised by architect's instructions and where there is no contractually precise method of valuation set down, care should be taken that prices are in accordance with any agreed pricing document or that they are fair and reasonable. Finally, the arithmetic of the account must be checked.



<b>Clause</b>	<b>Adjustments</b>
2.6.2	Additional premium for early use
2.10	Levels and setting out
2.14.4	Errors in the contract bills
2.16.2	Discrepancy in CDP documents not dealt with in the Contractor's Proposals
2.17.2.2	Divergence between contract documents and statutory requirements
2.18.3	Emergency compliance with statutory requirements
2.21	Fees legally demandable under Act of Parliament
2.23	Patent rights - instructions
2.38	Defects
3.11	Non-compliance with instructions
3.14	Instructions requiring variations
3.16	Instructions on provisional sums
3.17	Inspecting – tests
3.18.2	Work not in accordance with the contract
4.2	General provisions
4.3	Adjustments to the contract sum
4.5	Final adjustment
4.14.2	After suspension due to employer's failure to pay
4.21	Fluctuations
4.23	Loss and/or expense
5.5	Adjustment of the contract sum
6.5.3	Insurance payments by the contractor under clause 6
6.10.2	Pool Re cover
6.10.3	Terrorism cover other than Pool Re cover
6.16.1.2	Joint Fire code amendments/emergency measures
6.17	Revisions to Joint Fire Code
Schedule 3	Option B.2.1.2 Contractor insuring if employer defaults
Schedule 3	Option C.3.1.3 Contractor insuring if employer defaults.

**Fig. 21.2** Adjustment of the contract sum under SBC.

When the final account has been sent to the contractor and, hopefully agreed, it should be sent to the client. It is usually best to do this in a simplified version. Under most standard forms, the contractor's agreement is not required. The client, of course, has the right to see the full final account and any other papers, but unless the client has some professional expertise, a simple version is likely to suffice. It is appropriate for the architect to prepare the simple version. It should not miss out anything important nor attempt to whitewash over difficulties. An example is shown in Figure 21.3. Where architects are dealing with local authorities or companies who have their own technical staff, they may well require the full account to be submitted and they are equally likely to have a great many queries which must be answered.

The architect should have kept the client up to date throughout the contract, with the assistance of the quantity surveyor, on the financial position, e.g. monthly cost reports. It should have been made clear that changes from

<b>Willow Developments</b>		
<b>Golf Club, Park Acres, Notown</b>		
<b>Summary and statement of final account</b>		
<b>Item</b>	<b>Omissions</b>	<b>Additions</b>
	£	£
1. Contract sum	-	2,168,328.00
2. Adjustment of provisional sums account	125,000.00	-
3. Adjustment of architect's instructions account	-	97,780.02
4. Loss and/or expense account	-	14,327.00
	<u>125,000.00</u>	<u>2,280,435.02</u>
		(125,000.00)
		<u><b>£2,155,435.02</b></u>

**Fig. 21.3** Example statement of final account to client.

the agreed scheme will inevitably result in extra cost. Any instructions from the client to the architect should be confirmed in writing by the architect so that at final account stage there is no doubt about which costs have been incurred by the client. Architects should never give instructions to the contractor which involve variations and extra cost unless so instructed by the client. It sometimes happens that, towards the end of the contract, the architect may make savings which could usefully be spent on improving some aspect of the building. In such instances, the architect should never instruct the contractor without first seeking appropriate authorisation from the client.

Architects should always keep in mind that no matter how experienced the client or how firm his views, it is for the architect alone, assisted by the quantity surveyor, to carry out the function of determining the final account. It is helpful if the contractor agrees the figure, but if not and if the architect and quantity surveyor are of one mind on the matter, they should simply inform the client that there has been no agreement with the contractor. It is always open to the client to come to some agreement with the contractor as the two parties to the contract. This has nothing to do with the architect and the quantity surveyor and in such an instance, the architect will not issue a final certificate, because the architect cannot certify a sum of money unless he is of the opinion that it has been calculated in accordance with the contract.

Under the ECC there is no reference as such to a 'final account'. If for example the contract procedures are followed for option A, in that quotations are submitted by the contractor and either accepted by the project manager or if not accepted, then the project manager undertakes his own assessment, the natural consequence is the preparation of what would amount to a final account. The last payment to the contractor is made 4 weeks following the issue of the defects certificate.

## 21.4 Final certificate

It is worthwhile looking at the conclusiveness of the final certificate under SBC and IC in some detail. The effect of this certificate is a matter of contract (i.e. it is a consequence of the specific terms in these particular contracts). The position is not the same under all standard form contracts, e.g. MW and ECC.

At one time, when the architect issued the final certificate it was considered to be a statement that the whole of the Works were complete in all respects in accordance with the contract. That was certainly the position under some early editions of JCT63. In later editions of JCT63 and under JCT80 and IFC84 the position was substantially modified.

Some forms of contract made the issue of the final certificate conclusive on certain matters. Other forms did not state that it was conclusive about anything, not even the amount finally due. The final certificate under the MW and MWD and the ECC are examples of the latter category. Therefore, these comments, relating to the conclusiveness of the final certificate, did not, and do not, apply to MW, MWD or ECC. At the other extreme, JCT80 made the final certificate conclusive in four instances. CD81 and IFC 84 had similar wordings.

When the final certificate is said to be 'conclusive' what is meant is that if neither party has commenced adjudication, litigation or arbitration proceedings before the issue of the certificate and does not do so within a stipulated period (e.g. 28 days) after its issue, the certificate is conclusive (i.e. unchallengeable) evidence in any such proceedings in regard to the expressly stipulated matters. Thus, if a final certificate is said to be conclusive in regard to the amount of the final sum certified, it will not prevent an aggrieved party from commencing adjudication or arbitration proceedings if they consider the sum to be wrong.<sup>23</sup> However, the other party has simply to produce the final certificate as evidence in defence for the matter to be at an end.

Certificates under JCT80 and IFC 84 were conclusive in respect of the following.

- *That where the quality of materials and standards of workmanship are to be to the reasonable satisfaction of the architect, the architect is so satisfied:* This referred back to an early clause (2.1 in JCT80) stating the contractor's obligations, and it was a failure to realise what this meant, which gave rise to many misconceptions. Parts of the contractor's obligations were to ensure that if the architect had stated that certain things were to be to the architect's satisfaction, such things were to their satisfaction. Note that the architect must first have stated (presumably in the specification, on the drawings or in the bills of quantities) that certain things were to be to the architect's satisfaction. This may have been done by stating that specified items must be 'approved' or 'to the architect's satisfaction' or some other form of words to the same effect. When the final certificate was issued, it was conclusive evidence that the architect was satisfied with any matters which were so specified whether or not the architect had in fact specifically expressed approval or even looked at the item in question. It will readily be appreciated that

to insert some such phrase as 'All workmanship and material unless otherwise stated, must be to the architect's satisfaction' was opening the door to the blanket conclusiveness of the final certificate. It was the business of the architect's satisfaction which gave rise to all the problems and it will be considered in detail below.

- *All the provisions of the contract requiring adjustment of the contract sum have been complied with:* The mechanics of this were covered in section 21.3, but the final certificate was conclusive evidence that all necessary adjustments had been properly carried out. Claims by the contractor after the appropriate period had elapsed following issue of the certificate, that the figures were wrong would be fruitless. The only exceptions were if there had been accidental inclusion or omission of work or materials, fraud or if there is an obvious arithmetical error. This sub-clause still applies unchanged in SBC and IC though the clause numbers are different.
- *All due extensions of time have been given:* This was to prevent the contractor raising the question after the final certificate when the client may have deducted liquidated damages and all financial matters appear to have been settled. This sub-clause still applies unchanged in SBC and IC though the clause numbers are different.
- *That reimbursement of loss and/or expense is in final settlement of all contractor's claims in respect of clause 26 matters whether the claims are for breach of contract, duty of care, statutory duty or otherwise:* This was a very widely drawn clause intended principally, like the previous clause, to ensure that the final certificate really did conclude the financial matters. It should be noted, however, that the conclusiveness was effective only in respect of the clause 26 (loss and/or expense) matters. It did not operate to prevent the contractor from making claims in regard to breaches of contract outside the parameters of clause 26. This sub-clause still applies unchanged in SBC and IC though the clause numbers are different.

The effect of the issue of the final certificate, especially in regard to the architect's satisfaction with workmanship and materials was considered by the Court of Appeal.<sup>24</sup> Much to the concern of architects, the court decided that the final certificate under JCT80 was conclusive that the architect was satisfied with the quality and standards of **all** materials, goods and workmanship. The consequence was that the client found it very difficult to take subsequent action against the contractor for latent defects. Various ruses were promoted to avoid the effects of the decision, but none of them were effective.

When the Court of Appeal considered the effect of the final certificate and came to its decision, it was not making new law. What it was doing was telling everyone what the terms of the contract meant even though until that moment perhaps no one (including the Court of Appeal) had realised it. What the parties intend to do when they enter into a contract is, of course, important, but only in so far as they give effect to their intentions by the written terms they agree in the contract. In turn, the court can only interpret their intentions by looking at the contract terms. Evidence as to their intentions outside a written contract is normally inadmissible. The court's interpretation of the contract term was very

much in the contractor's favour, but that is what the parties agreed in law when they signed the contract.

As far as the contractor was concerned, nothing had changed. The terms of the contract required architects to issue final certificates within specific timescales. If architects did not issue the certificate they, and through them possibly the employers, were in breach. The architect's position was straightforward if he or she had been engaged on the usual (then SFA92) terms of engagement or similar. During the progress of the Works the architect must carry out inspections with reasonable skill and care. There is a duty to issue the final certificate in accordance with the building contract. If subsequently and following the expiry of the specified 28 day period, a latent defect was discovered, the employer may have been unable to recover the cost of remedial work from the contractor, i.e. the final certificate giving him a defence. The employer might then have turned their attention to the architect. If the employer was to have been successful in recovering the loss from the architect in negligence, it would have to be shown that the architect failed to carry out administrative duties, including inspections, with reasonable skill and care. That would not have been very easy, but perhaps easier than most architects would have wished.

It was common, in former times, for architects to be so concerned about the conclusiveness of the final certificate that they often neglected to issue a final certificate at all, leaving a minute sum of money outstanding in the knowledge that the contractor would not seek arbitration in respect of such a small amount. By this method it was hoped that the matters otherwise made conclusive by the final certificate would be left open and the employer would not be precluded from obtaining redress from the contractor if any latent defects appeared. Of course, it had also to be borne in mind that, if successful, such a ploy would effectively deprive the client of the conclusive benefit of the other three matters. The courts have put an end to any likelihood that an employer could proceed against the contractor when the final certificate was not issued in accordance with the contract. The court's view was that if the failure to issue amounted to a breach of contract, the employer could not take advantage of that breach.<sup>25</sup> SBC and IC provide that the architect must issue the final certificate within a stipulated time if it is to be valid.

Following the *Crown Estates* case, the JCT issued amendments to each of the affected forms of contract which were intended to remove the effect of the Court of Appeal decision by re-wording the sub-clauses relating to the conclusiveness of the '*architect's satisfaction*'. Essentially, therefore, the position was restored that the final certificate was conclusive about the architect's satisfaction only if the architect had specifically stated in the bills of quantities or specification or drawing or architect's instruction that some item of goods, materials or workmanship was to be to their satisfaction or approval.

The JCT 2011 forms (i.e. SBC, IC, ICD and DB) incorporate the amendment. The current position is dealt with under clause 1.9.1.1 in SBC, IC and ICD. It provides that the final certificate is conclusive evidence that if the contract bills or drawings or any architect's instruction or further issue of drawings states clearly that if particular qualities of materials or goods or particular standards

of workmanship is to be to the architect's approval, the particular quality or standards are to the architect's reasonable satisfaction. However, the final sentence makes clear that the final certificate is not conclusive that any of those qualities or standards or indeed any other materials, goods or workmanship comply with any other requirement of the contract. Therefore, even if the architect has inadvertently specified that something is to be to his or her satisfaction, it will not prevent a client seeking redress for work or materials which do not comply with the contract documents in other ways. The DB contract contains clause 1.8.1.1 which is to similar effect except that it refers to the final statement instead of the final certificate and to the employer rather than to the architect for obvious reasons.

Any workmanship or materials which have to be carried out to the architect's satisfaction, without reference to any requirements in the contract documents, are being measured against a subjective standard i.e. that of the architect. It is not objective in the sense that they are to be measured against a British standard or manufacturer's directions. Therefore, it would seem reasonable that the contractor's liability for this workmanship or materials is limited. It would be very difficult for a tribunal at some future date to determine the standard to be applied in order to resolve whether a defect existed or not. The architect's satisfaction is such a nebulous and imprecise standard.

The current position under MW, MWD and ECC are unaffected, because the final certificate is not conclusive under those contracts.

Architects should be mindful that it is not always the contractor who may wish to challenge the final certificate. In *Cantrell v. Wright & Fuller*<sup>26</sup> it was the client who was unhappy with a final certificate. In his view, the sum due to the contractor had been over certified. The problem was that he was well beyond the time limit for commencing proceeding following the issue of the final certificate under the JCT80 form of contract. Giving he was out of time the client could not challenge the adjustment to the contract sum if the certificate had been validly issued. So the client argued that the architect had not followed the correct administration procedures under the contract prior to the issue of the final certificate and therefore, as the final certificate had not been correctly issued, the certificate itself was not valid. The client was successful on appeal on a point of law from an arbitrator's award. As the final certificate had not been validly issued the client could challenge the amount of the final account which he believed the architect had over valued by including amounts for work which were not variations. The judgment is rather long but sections 4 and 5<sup>27</sup> are worth reading, given they address the contract conditions and the issue of the final certificate. In doing so the judge had to address the general position including the relationship between the client and architect when the architect certifies.

The main thing which can be said of the final certificate under all building contracts is that after the architect has issued the final certificate, he or she is said to be *functus officio*, having no further powers under the contract. The architect, for example, cannot then issue further extensions of time.

An example of a final certificate for SBC is shown in Figure 21.4



**Final Certificate**

**SBC/IC/CD**

Issued by: Smith & Jones Architects LLP  
address: Design Studios, High Street, Notown XX1 3BB

Employer: Willow Developments Limited  
address: High Street, Notown XX1 4RB

Job reference: 0055  
Date of issue: 20 January 2017

Contractor: ABC Builders Limited  
address: 10-12 Builders Way, Notown XX2 2ER

Due date: 18 January 2017  
Final date for payment: 15 February 2017

Works: Golf Club  
situated at: Park Arcres, Notown XX3 1RR

Contract dated: 12 January 2015

This Final Certificate is issued under the terms of the above-mentioned Contract.

Contract Sum adjusted in accordance with clause 4.3..... (calculation attached)	£ 2,155,435.02
Sum of amounts already stated as due in Interim Certificates plus amount of any advance payment and payments in respect of any Interim Payment Notices .....	£ 2,071,272.00
<hr/>	
Difference between the above stated amounts .....	<b>£ 84,163.02</b>

*All amounts are exclusive of VAT.  
The Employer shall in addition  
pay the amount of VAT properly  
chargeable.*

I/We hereby certify the sum of (in words)

Eighty four thousand one hundred and sixty three pounds and two  
pence

as a **balance due:**

\*Delete as appropriate

\* to the Contractor from the Employer.  
~~\* to the Employer from the Contractor.~~

To be signed by or for the issuer named above

Signed J. Swift

**This is not a Tax Invoice.**

Distribution	<input checked="" type="checkbox"/> Employer	<input checked="" type="checkbox"/> Contractor	<input checked="" type="checkbox"/> Quantity Surveyor	<input checked="" type="checkbox"/> File Copy
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for SBC/IC/CD

CONTRACT ADMINISTRATION FORMS

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**Fig. 21.4** RIBA final certificate. Reproduced by kind permission of RIBA and RIBA Publishing.

**References and notes**

1. See ‘The RIBA Plan of Work 2013 Overview’, Editor Dale Sinclair, published by the RIBA London, p. 7.
2. *Emson Eastern Ltd (in receivership) v. EME Developments Ltd* (1991) 55 BLR 114.
3. *Salmon LJ, Westminster City Council v. J Jarvis & Sons Ltd* [1969] 1 All ER 1025, CA.

4. *H W Neville (Sunblest) Ltd v. William Press & Son Ltd* (1981) 20 BLR 78.
5. *Westminster City Council v. J Jarvis & Sons Ltd* (1970) 7 BLR 64 HL.
6. *Mariner International Hotels Ltd and Another v. Atlas Ltd and Another* (2006).
7. *Menolly Investments 3 SARL v. Cerep SARL* (2009) Commentary in 125 ConLR 77.
8. *BFI Group of Companies Ltd v. DCB Integration Systems Ltd* (1987) CILL 348.
9. *Skanska Construction (Regions) Ltd v. Anglo-Amsterdam Corp Ltd* (2002) 84 Con LR 100.
10. *McGlenn v. Waltham Contractors Ltd and Others* (No. 3) (2007) 111 Con LR 1 at paragraph 104.
11. *William Tomkinson & Sons Ltd v. The Parochial Church Council of St Michael's and Others* (1990) 6 Const LJ 319.
12. Now the Construction (Design and Management) Regulations 2015. See JCT Amendment 1: CDM Regulations issued March 2015.
13. This has been amended as a consequence of the Construction (Design and Management) Regulations 2015. See JCT Amendment 1: CDM Regulations issued March 2015.
14. *McGlenn v. Waltham Contractors Ltd and Others* (No. 3) (2007) 111 Con LR 1 at paragraph 255.
15. SBC and IC include provision (i.e. clause 2.6) which permits the employer to early use or occupation of the site or the works. The contractor's consent is required. Under this provision the works are not deemed to be practically complete.
16. For example, see SBC clauses 2.6 and 2.33.
17. *M J Gleeson (Contractors) Ltd v. Hillingdon Borough Council* (1970) 215 EG 165.
18. *City Axis Ltd v. Daniel P Jackson* (1998) CILL 1382.
19. *Mul v. Hutton Construction Ltd* [2014] EWHC 1797 (TCC).
20. *William Tomkinson & Sons Ltd v. The Parochial Church Council of St Michael's and Others* (1990) 6 Const LJ 319.
21. *Pearce & High v. Baxter* (1999) 90 BLR 101.
22. For example MW and MWD.
23. *P & M Kay Ltd v. Hosier & Dickinson* (1972) 10 BLR 126.
24. *Crown Estates Commissioners v. John Mowlem & Co* (1994) 70 BLR 1.
25. *Matthew Ortech Ltd v. Tarmac Roadstone Ltd* (1998) 87 BLR 96.
26. [2003] EWHC 1545 (TCC).
27. [2003] EWHC 1545 (TCC) at paragraph 79.



# 22

## Stage 7: In Use

This stage is described by the RIBA as follows:

‘In Use is a new stage which includes Post-occupancy Evaluation and review of Project Performance as well as new duties that can be undertaken during the In Use period of a building.’<sup>1</sup>

### 22.1 Review of project

This is a new stage within the RIBA plan of work. It is likely that many architects will find its relevance, to their projects, difficult to identify. Most architects’ duties will be complete at Stage 6 Handover and Close Out, with their appointment concluding on the issue of the final or last certificate. The client will have taken occupation of the building at practical completion and any handover strategy implemented at that time.

The guidance overview published by the RIBA<sup>2</sup> simply states under the ‘Core Objectives’ that the architect is to undertake the ‘In Use’ services in accordance with the schedule of services. Any services undertaken during stage 7 will need to be clearly identified in the architect’s appointment. There is limited guidance in the RIBA overview as to what these services might be, with the two principal categories being ‘post occupancy evaluation’ and ‘project performance’. It envisages the possibility of the architect providing services, under the original appointment, for the client during the period the building is in use. Future refurbishment or maintenance work would likely be covered under a separate appointment.

Building projects are generally a prototype and as such, a client only really finds out what they have purchased when they take possession and even then, it may not fully appreciate its purchase until sometime into its occupation. As such, buildings are unlikely to fit perfectly with the requirements and aspirations of a client. It is inevitable that there will be issues. The more informed and reasonable clients will appreciate this and any evaluation of the performance of the finished building would take this into account. However, the post-occupancy evaluations on the performance of the building may not be a pleasurable experience for those architects where the building does not meet with the requirements and aspirations of the client. This may be down to shortcomings on the part of the architect in not fully appreciating the client’s brief;

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it could also be down to the client not fully understanding what they require or it may be down to the quality of the contractor's construction. No matter what the underlying cause, in the client's mind, it is simply a shortcoming in the building and therefore must be the fault of the architect.

## 22.2 Architect's review

This used to be termed 'feedback' and it is an important step in the project. The architect's review is likely to be restricted to looking at how efficiently and successfully it undertook the services at each stage and, how they dealt with the client and the other consultants. It will be very much from the architect's standpoint. A valuable reference point will be the architect's experience during the project but memory alone is not an efficient review tool; it grows dim over time and often confuses facts. Therefore, maintaining good project record becomes increasingly important, especially as the number of projects undertaken and completed increases. These records can prove invaluable to a firm looking to improve and 'do better'.

At the end of each project it should become routine to extract the maximum amount of useful information from the project files and staff. Useful information is not only things that went well but also things that did not go so well. Ideally, records should build up during the running of the project. In reality, everyone connected with the project will be so busy during the construction process that they will put off doing anything which does not seem urgent or important relative to completing the physical works. An architect's work does not simply come to a conclusion on a scheme and then the following day start on another. The reality is that work on one scheme overlaps with the work from another. Depending on their size and complexity, an architect may well be working on several different schemes at once. Finding time to undertake a feedback and appraisal review will not usually be a priority; it is not obviously productive, viewed as a waste of time. It has to be done, however, if a business is to develop. Typically, we learn more from the unsuccessful or difficult schemes than those which go well. We should be looking to identify the reasons behind the successful project and aim to build those reasons into the firm's procedures and protocols. Similarly, once the cause or causes contributing to an unsuccessful scheme has been identified, the architect should be looking to develop strategies and implement procedures to avoid those from happening again.

In an ideal world, all the parties would gather around a table for the appraisal; this would include the client, contractor and possibly the principal sub-contractors. Theoretically, everyone would be open and frank with each other; criticism would be constructive and taken on that basis. There is no doubt that such a session would be very useful, but the chances of it happening are remote. By the end of the project, everyone probably knows what they think of each other. They may not even be on speaking terms at that stage and in a minority of cases, regrettably, arbitration or litigation may be in the air with an adjudication already having taken place. The chances of an objective appraisal in those circumstances would be zero.

Architects can produce a lot of useful information simply by consulting their files; possibly spending an afternoon discussing amongst the team within the architects' office just what was done and whether it could have been done better. It is important that the discussion is carefully structured, possibly around an agenda, or it will achieve nothing. The first thing, in preparation for a discussion, is to record the key dates and other key information. Some suggested items, though not an exhaustive list, may be:

- the planned and actual dates of commencement of each Plan of Work stage (e.g. when was the first contact with the client? when was planning obtained?)
- planned and actual dates for commencement and completion of the works on site
- the cost history for the project, e.g. estimates of cost from inception to tender stage, then accepted tender price, contract sum and the finally adjusted contract sum
- design input and responsibility, e.g. services, contractor designed work, specialist sub-contractor design
- procurement option and form of contract including amendments, e.g. administration problems.

This is a useful starting point for discussion which should attempt to answer the question 'why?' in relation to each item. Other matters which should be examined are:

- drawing preparation and issue
- architect's instructions, content, pricing, reasons for issue
- insurance
- site meetings and minutes
- cost control
- claims, both financial and time-related
- communications within the design team, with the client and the contractor
- client's brief compared to finished building, compared to building in use
- appropriateness of materials including reviews at set time periods
- appropriateness of details including reviews at set time periods
- areas where improvements could be made.

Some architects consider that the client should be involved in the process and a questionnaire sent inviting comment on specific issues. Others think that to do so would be inviting trouble, rather like asking the client to consider whether it is appropriate to pursue an action for negligence. That is perhaps taking too gloomy a view. The client should appreciate that the architect is simply concerned to give a good service and always anxious to improve. Whether the client is involved or not, it is certain that architects will get much out of a thorough review. Among other things, it promotes the questioning of long established but possibly ineffectual practices. Many architects would be astounded to realise just how many times they have issued revised versions of certain drawings, just how long it took them to provide the answer to certain queries from the contractor or just how many staff hours were spent at site meetings.

One final point, the feedback exercise is intended to help the business going forward. It is not intended to be a witch-hunt to discover the culprit behind failed details or exceeded cost targets. If it is used as a method of apportioning blame then there will only ever be the one exercise. One of the authors recalls an office where a senior architect falsified their timesheets, spreading what appeared to be excess time from one project onto other projects. It was pointed out that accurate timesheets were an invaluable aid for estimating the likely cost of carrying out future similar work and that inaccurate timesheets were worse than useless; they were actually misleading. It emerged that the architect falsified the sheets, because in the past he had been taken to task, on the basis of submitted sheets, for spending too much time on a particular project. An office which does not have an ethos of admitting errors of judgment without blame will have nothing on which to base future action (see Chapter 7, section 7.1).

When to undertake a review is a moot point. Should it follow practical completion or the issue of the final certificate? The project is not complete until after the final certificate but this may be too long after the bulk of the services have been completed and the enthusiasm for the review may have waned by the time of the final certificate. In fact, individuals may well have moved on to other things. It is probably better if the review is done following practical completion. An alternative approach would be to undertake two or three smaller reviews at various stages throughout the project. This way changes to office policy and procedures could be implemented sooner.

### **22.3 Client review**

Those clients who undertake a significant amount of building or construction work look to improve on their procurement strategies and procedures. They are continually looking to achieve savings through more efficient methods of working and improved supply chains (Chapter 1, section 1.3). Just like the architect should do, they look to learn and improve their performance on future projects; continually searching to use their resources in a more efficient manner. Some clients such as universities, local authorities and public bodies have formalised procedures in place to evaluate the performance of everyone involved with the scheme. The client may look at key performance indicators (KPIs) in an attempt to measure performance against previous projects or pre-determined benchmarks. These are used to try and introduce an objective element to performance review and thereby allow comparison. For example, the architect may be measured against their ability to provide design information in accordance with the project programme, being able to design within the stated budget and the efficiency with which they communicated with the other project team members.

If the architect is expected to participate in such a review and to be measured against KPIs then it would be normal for this to be made clear in the appointment. The architect should know what they are going to be measured against prior to undertaking the services. It is not unheard of for consultant's fees to be linked against their performance which is measured using KPIs.

This review by the client is likely to involve the client's representatives, the individual consultants together with the contractor and their key sub-contractors and suppliers. It may not always prove to be pleasant listening or reading for an architect or any other parties involved. The objective is not only to point out areas or things which did not go well but also to identify the things that went well. Client's procedures and practices can be reinforced for those matters which were successful and those areas which did not go so well can be reviewed and changed.

## 22.4 Review of building in use

Those clients who build a lot may well monitor the performance of the completed building following occupation and when in use. This will involve looking at the performance of the building or structure not necessarily over a period of months but years. For example, what type and number of defects occur? Are they a product of a poor or particular design detail or are they due to an inappropriately specified material? If so can the detail be revised or the material substituted on future projects? Is the designed space functioning as intended to meet the client's requirements or if not how can it be improved? Alternatively, how do the actual maintenance costs of the building and surrounding space compare with those included in the life cycle cost exercise on which the project's viability was decided? Or how do the maintenance costs compare with those of similar buildings?

It is all about learning from what has been done. Retaining the good and replacing the bad with alternatives that will hopefully work better. It is a continual process of improvement; a business which stands still is likely to be left behind by those that do implement the 'good' and remove the 'bad'.

## References and notes

1. See 'The RIBA Plan of Work 2013 Overview', Editor Dale Sinclair, published by the RIBA London, p. 7.
2. RIBA Plan of Work 2013 Overview (2013), RIBA.

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