

## THE DEVELOPMENT TEAM

The completion of any building can be divided into three main states:-

- i) the translation into spatial terms of the client's requirements for accommodation and amenities within a defined cost plan.
- ii) the development of the design and the documentation process;
- iii) the construction of the building.

Over the years the complexity of buildings has increased to the point where specialisation in all the design areas became inevitable. This has led to the evolution of a system in which each area of specialisation has been segregated into separate disciplines in terms of training, use of knowledge and contribution of experience.

The architect designs the building, the structural engineer designs the structure to fit the design envelope and the services engineers fit in the services accordingly. By the time the design is completed, the builder, unless he is included as a member of the design team, is unable to contribute any of his knowledge on the practical issues related to the construction process.

Whilst this process has been well established for many years, it does not mean that the best design solution and the most economical and efficient development is achieved. Innovation is often stifled due to the inability of members of the Development Team to see beyond the problems associated with their own area of expertise and they often have difficulty understanding the long term economic considerations of a development.

Consequently, the establishment of "The Development Team" is one of the most critical stages in any development. Unless the right combination of skills and people can be brought together, there is little likelihood of the optimum development, both in aesthetic and financial terms, being achieved.

There have been various approaches to establishing the development team over the years depending on who the client is and the type of contracting method being used (e.g. traditional contracts, fast tracking methods, project management, construction management). Although the extent of responsibility of the key consultants can vary considerably, depending upon the approach taken, the typical procedure for a development project is well-established and is set out in Appendix 1. The sequence of some of the activities shown may change from project to project depending on the circumstances and constraints that may exist at the time.

In this paper I will discuss the roles and responsibilities of the key parties in any development team. Obviously the client is the most important member and can have a great deal of influence over the total project. The extent of the client's influence and involvement will depend on the type of organisation and what its aims and expectations from the project are. An owner/occupier will have very different objectives to those of a developer who intends to dispose of the project on completion.

The level of expertise regarding property development and the building process varies greatly between organisations. However regardless of the level of knowledge, most, if not all, require professional advice and assistance during the project. This advice may relate to planning, design, documentation, legal and financial aspects, to name a few.

In order to achieve its objectives, the client organisation must play an active and effective role in the decision making processes throughout the project. The first important step is to ensure that the brief to be issued to the Consultants clearly states the client's objectives, requirements and expectations and that each member of the development team clearly understands his role in the project. Too often the client's brief is not fully understood and on occasions disregarded, much to the pain of some members of the team at later stages in the project.

It is worthwhile stressing at this point that the client does not always know what he wants and that the development of the brief can be a gradual process of refining the design with the development team. Nevertheless, it is necessary to constantly reinforce the client's brief during the design process to ensure that the consultants do not lose sight of the objectives of the one member in the team who is putting up the money.

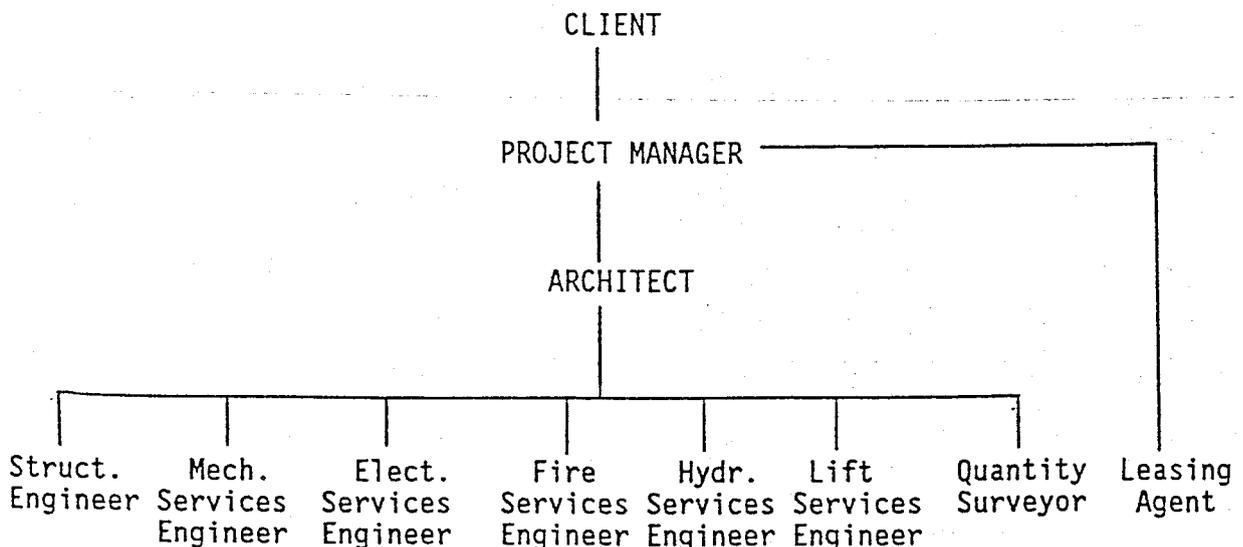
For the purpose of this paper I have assumed that the client has appointed a project manager to act as the client's representative and be responsible for all aspects of the project in terms of time and cost. The title of project manager is widely used these days and is applied to many different roles. Therefore, it is also important that the role of the project manager be clearly defined and that the other members of the team understand the extent of his authority in representing the client.

The appointment of a consultant project manager does not automatically take away all of the client's problems. An external appointee is not often familiar with the workings and philosophy of the client organisation and it may take some time for both parties to fully understand each other.

Equally, the client is not always prepared to give the project manager the necessary authorities to allow him to adequately perform his role. Unless these issues are resolved upfront, frustrations will emerge even before the design team is brought together.

The project manager must have adequate authority over all the elements of the building project if he is to achieve a satisfactory end result. Decisions have to be made constantly by the building team members and the project manager and without the ability to make those decisions, delays will inevitably occur. The success of the project management role largely depends upon the character and experience of the individual involved. Unless he can gain the confidence and respect of the team members, he will not be able to achieve the team effort required to produce the optimum project.

The chart below sets out the consultants normally involved on a commercial or retail project and the line of communication which is often adopted by the Development team:



Other specialist Consultants:

- Landscape architect
- Traffic Engineer
- Acoustic Consultant
- Land Surveyor
- Carpet Consultant
- Legal Adviser
- Insurance Consultant
- Building Consultant

Appointment of Consultants

When the client intends to engage a Project Manager, he should be appointed at the earliest possible stage of the project to ensure that he is involved in the key planning decisions for the project. The Project Manager should also be involved in the selection of Consultants as he will have the responsibility for the ultimate performance of the team. Clients may have their own preferences when consultants are being engaged, but any concern the Project Manager may have about the client-preferred consultants must be resolved quickly.

If the client has no preferences, the Project Manager should seek submissions from two or three prospective consultants for each discipline setting out:-

- their previous experience in the type of project planned;
- the personnel to be used on the project;
- proposed fee basis.

All engagements should be confirmed by letter and should outline the basis of engagement by specifically mentioning the following issues:

- the client is the party engaging the consultants and remains responsible for fee payments;
- the agreed fee is not to be exceeded without prior written agreement by the client. It is highly desirable that lump sum fee limits, only varied if the scope of works changes significantly, be agreed with each consultant as early as possible;
- that personnel be nominated for the project, particularly the Partner responsible, and that he is not to be changed without the client's consent;
- the client reserves the right to suspend or cancel the project at any time and if so, fees will only be paid on a time basis up to the time of suspension or cancellation;
- if the engagement is only for the concept stage, the client is under no obligation to continue with the same consultant for subsequent stages should the project proceed;
- the consultant will enter into a formal agreement with the client if required at a later stage;
- the time to complete the work required.

At the commencement of their involvement, all Consultants should produce a copy of their Professional Indemnity policy. The amount of cover should bear some relationship to the value of works under the control of each consultant and the policies should be checked by the client's broker to

ensure that the terms of the policies are adequate for the type of project proposed.

When a project proceeds to the documentation stage, the Consultants should enter into formal agreements rather than proceed merely on an exchange of letters. These agreements should be prepared by the legal advisor involved in the preparation of the building contract to ensure there is consistency in the documents.

The extent of the formal agreements will depend on a number of factors. The value and complexity of the project, the requirements of the consultants and the contracting method adopted are three key factors which will influence the documentation.

Any formal agreement should at least cover the following areas:-

- Basic services provided by the Consultant;
- Stages of services;
- Reporting procedures;
- Nomination of the senior personnel to be involved in the project;
- An outline of the Proprietor's responsibilities;
- The role of the other consultants, and in particular, the role and extent of authority of the Project Manager where one is appointed by the client;
- The authority of the consultant and the communication process;
- The extent of documentation to be provided;
- The liability of the consultant;

- Termination provisions;
- Remuneration.

### Architectural Services

The appointment of the Architect is one of the most important selections to be made. His function is that of creative functional design in association with economic solutions to the technical problems involved in the building process. Therefore, the architectural firm selected must have proven design capability, whilst being able to deal with economic constraints which may influence the design. The firm must also have the ability to manage, co-ordinate and integrate the work of the other building consultants. The administrative capability of the office and the type and quantity of other work being handled by the office should be investigated.

The Royal Australian Institute of Architects defines the services to be provided as follows:-

1. Schematic Design Stage.  
Preparation of schematic design, illustrated by preliminary sketch drawings and / or reports and provisions of indicative cost estimates.
2. Design Development Stage.  
Preparation of developed design, including as appropriate developed sketch drawings, reports, advice on preliminary designs of engineering and other specialist services and provision of time program and estimates of cost.
3. Contract Documentation Stage.  
Preparation of documents sufficient for the calling of tenders, including as appropriate co-ordination and integration of consultants' work. Revision of estimates of costs.

4. Contract Administration Stage.

(a) Calling and reporting on Tenders. Calling of tenders in conjunction with or behalf of the client and answering tenderer's queries.

Analysis and advice in respect of tenders received. Negotiation, preparation of documents and arrangements for execution of contract.

b) Administering the Contract.

Administration of the contract and inspection of the works including, as appropriate, supply information, checking claims and issuing certificates, negotiating Variations and cost adjustments and dealing with claims for extensions of time and other matters included in the building contract.

The Architect is clearly a key member of the team and in the structure outlined earlier in the paper, has the responsibility of controlling the other building consultants on the team. It is, therefore, vitally important for the roles of the Project Manager and the Architect to be clearly understood by all parties involved if the project is to run smoothly.

The Architect has the responsibility of administering the building contract and therefore all instructions to the builder must be communicated through the Architect's Office to ensure that the scope of works and costs are adequately monitored and controlled.

Equally, all of the client's requirements should be communicated through the Project Manager and the Architect's responses to the client should be handled through the Project Manager. However, it is generally understood that should the Architect, or for that matter any other consultant, wish to

communicate with the client directly on specific issues, he may do so provided that Project Manager is kept informed.

The remuneration payable by the client to the Architect is generally on the basis of a percentage fee of the cost of the works. The percentage applied will vary depending on the type of project, its value and complexity. It is essential that the term "cost of the works" is clearly defined and understood by both parties so that any disputes over the amount of fees to be paid can be avoided.

Where the scope of works changes for any reason, the basis upon which the fee payment may change should also be clearly defined.

Alternatively, a lump sum fee may be agreed. The point of time at which a lump sum may be agreed by the parties will vary from project to project and will depend largely on the extent of documentation completed and the degree of accuracy of the cost estimates prepared.

Fees may also be changed on a time basis. It is common in the very early stages of a project for fees to be paid on a time basis until a total fee for the job can be quantified and negotiated. Once the fee is agreed, then any fees already paid would be included in the total amount payable.

The Architect is also generally entitled to the reimbursement of certain expenses, including travelling costs where the project site is in excess of a nominated distance from the Architect's office.

#### Engineering Services

The basis on which Engineering Consultants are engaged is generally consistent for all of the disciplines included in the chart set out earlier in this paper. Before any selection is made the same issues should be

considered as for the appointment of an Architect i.e. capability of the firm, other work commitments etc.

It is essential that the brief for each Consultant is clearly defined and that the lines of communication are understood from the outset. When forming a development team, it is often considered to be an advantage to have the one firm involved in more than one area of the project (e.g. Mechanical and Fire Services) that problems arising from the co-ordination of the design documents are minimised. However, this approach should only be adopted if the firm is considered to be sufficiently competent and capable in each of the area being considered.

The basis for remuneration of these Consultants is generally the same as the alternatives outlined for architectural services.

#### Quantity Surveyor

Proper cost control is a design tool which establishes realistic guidelines right from the start of a project. It allows the architect and other consultants to work within a defined framework, eliminates guesswork and permits all parties to know where the project stands financially at any point in time.

Until the last decade the <sup>QC</sup>Quantity Surveyor in Australia was almost exclusively involved in the production and use of Bills of Quantities or measurement of variations resulting from them. However, building methods, tendering procedures and budgeting requirements are changing and as a consequence the role of the Quantity Surveyor has had to change to meet the needs of current day projects.

Estimating used to be rather a simple unsophisticated procedure, with the costs usually being arrived at by interpolating from previous costs per square metre of buildings of a similar nature, to which was added a contingency for design and price increase or risk. This approach constantly gave rise to wide discrepancies between the estimate and the fund cost, particularly as there was no follow through control of costs during the construction period.

With the increased pressure from clients to control costs, it became vital that estimating had to be upgraded and more reliable and whilst it will always contain a measure of intuitive judgement based on experience, it must also be based on detailed costing of the components of all items necessary for the particular project.

Therefore when appointing a Quantity Surveyor, it is important to establish whether the firm has the people experienced in the type of project being considered and that their record on past projects of a similar nature is good.

The services which can be provided by a Quantity Surveyor include:-

- . Estimating and Cost Planning Services
- . Preparing Bills of Quantities
- . Post - Contract Services including measurement of variations

The extent of the services required will depend on the type of building contract to be adopted and the extent of responsibility a Project-Manager may have in respect of cost control.

The fees are generally determined by applying a percentage to the cost of works. It is important that the definition of "cost of works" is clearly understood and that the total fee payable reflects the extent of involvement of the Consultant.

#### Real Estate

The role of the Real Estate Agent in the development team can vary considerably depending on the type of project and the extent of real estate knowledge the client can bring to the project. If the client has the concept developed but has not yet acquired the site, then the agent may be involved in the acquisition of the property.

The real estate agent is often included in the development team at an early stage to comment on the marketing aspects of the project and to provide specific input on the design elements which will be critical to the leasing of the space. He would normally be an addition to the team of building consultants and his activities would be co-ordinated by the project manager rather than the Architect.

As the design and documentation progresses he would develop a marketing strategy and prepare an advertising campaign and at the appropriate time would actively seek commitments from prospective tenants.

The extent to which the agent is involved in the leasing and tenancy fit-out processes again depends upon the client and the way in which the project is structured. The agent may only be involved until a lease document is signed and the fitout process co-ordinated by the client and his project team. Alternatively, the agent may be involved during the total process.

Again the expertise of the firm and its track record on previous projects must be carefully examined before an appointment is made. On major projects it is not uncommon to appoint more than one firm in a joint role in an attempt to ensure that all areas of the potential market for the project are covered.

The basis of remuneration can vary from project to project but in general terms a percentage will be applied to the base rental. The length of the lease term may also influence the percentage applied. If the agent is included in the development team in the early stages of a project it would be normal to pay a separate fee.

#### Conclusion

The performance of the Development Team on any project is closely related to the managerial skills of the people involved in the control of the works and the management procedures adopted. It is therefore essential for the client to have the assurance that the best available people are engaged on its projects.