

A Client's Guide to Architecture

How an architect will lead your project





Studio B Architects

T: 03 9486 4425 W: studiob.net.au E: info@studiob.net.au SH2.03, Sacred Heart Building, Abbotsford Convent, 1 St Heliers Street, Abbotsford, Vic 3067

Contents	2
Introduction	0
Feasibility Study	4
Masterplanning	5
Concept Design	6
Design Development	7
Town Planning	8
Construction Documentation	9
Contractor Selection	10
Construction	11
Completion	12
Cost of Services	13



Who has this been written for?

This document is provided to assist clients unfamiliar with the construction process. How does an architect provide a valuable leadership, advisory and client focused role throughout design and construction of a project up to \$10m construction cost?

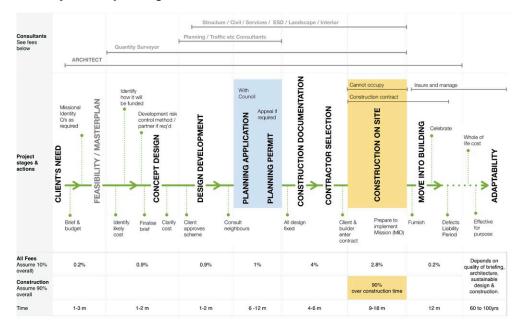
Studio B is keen to inform clients of the skills and services available to efficiently design and then manage a project on a client's behalf and identify the role of the client in the process.

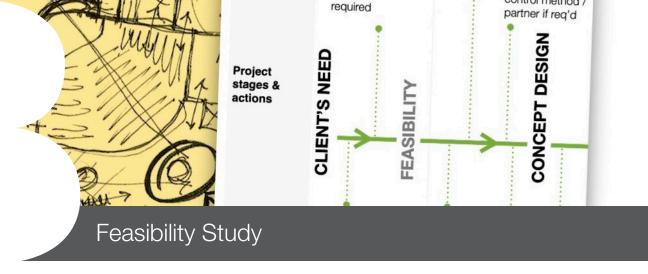
Why has this been provided?

There is a lot of misunderstanding about the role of an architect in the construction process.

- Are architects just concept designers?
- What is the extent of their practical construction knowledge?
- Do they get involved during construction?
- How is a budget controlled?
- What is meant by an independent professional acting in a client's best interests?

Anatomy Of A Project Diagram





A low cost starter service if the brief or capacity of the site is unclear

Starting Point

Your architect first needs to know what you want to achieve - what is the brief? If you are not clear about what you will need we can help you to make a schedule of rooms or spaces to meet your needs.

Perhaps you have a more open brief and want to know how much development your site or existing buildings can accommodate. We can do that, but it would be good to know your priorities: to maximise return, to demonstrate sustainability, to provide affordable housing, to teach students or something else.

Leave it to us and other experts to obtain land survey and research the planning controls for you. We can identify the specialist consultants needed to advise you properly and obtain fee proposals for your approval.

Budget

At this stage the anticipated cost of construction will be estimated by a quantity surveyor based on market experience. Do you have a budget to work towards or do you need to know what it will cost to achieve your needs? Is it a matter of how much usable floor area can be provided? There can be different starting points.

Options

There may be an obvious solution or there may be alternatives to consider. Your architect will be considering site features including access, solar direction, existing buildings, neighbouring property, views out, overlooking, street presence, potential massing, existing trees and of course your needs.

Checklist - tell us

- What do you need?
- Your site address
- Your priorities including budget
- Meet with us to discuss and workshop our ideas
- Sign off for moving to Concept

Design stage

Feasibility study stage isn't always needed, particularly if you have a clear brief. But it can be a cost effective way of testing-out a site to see what is achievable before committing to full design and fees. We like to understand your core business purposes so we can be sure to support that with our solutions.



Preparing for the long term.

Staging Over Time

Some projects need to be staged either for budget reasons or just to plan for future growth. If you think that you will need more in the future, be prepared for it in what you build first. We architects can plan your Stage1 to allow future stages with minimal disruption or demolition, providing we know about the likelihood.

Perhaps you have priorities that can help us to suggest stages for your project if its market cost exceeds your budget. Let us know.

Value From Your Site

Maybe you want to obtain value from part of your site to enable you to meet your needs on the retained remainder. This type of Masterplan is more of a mixed use investigation and plan. Some of our projects have needed our appreciation of both heritage opportunities and developer know how; a rare combination.

Missional Identity (MiD)

Our Missional Identity (MiD) process helps church communities to distill their own specific local mission and identify the shortcomings of their current and commonly arbitrary property strategy. A proposal is presented by the architect on how they might better use their property and assets to serve their vision and aspirations. This presents a great opportunity to galvanise the church community and mobilise their members around this freshly-defined mission.

Budget

The quantity surveyor can forecast the cost of carrying out each stage. A development advisor can predict the beneficial development value. Architects can advise and coordinate the specialist consultants.

Checklist

- Current and future needs.
- Existing plans (as for Feasibility Study).
- Appoint architect and required expert consultants.
- Masterplan type: budget based, long term need, mixed use or mission enabling - request seperate information on our Missional Identity process.
- Meet with us to workshop our ideas
- Be sure you fully understand keep asking if not
- Sign off for moving to Concept Design stage

You will be committing substantial funds when you start to build. Getting the future planning right now costs a tiny sum by comparison and is wise spending. Studio B is skilled and experienced in these areas



Developing the basic idea.

Concept Design (sometimes referred to as Schematic Design) is frequently described as the key architects skill. It is where most architect's education is concentrated and it is often where the greatest value for clients is created.

The architect becomes a detective at this stage: seeking to fully understand the client's requirements together with the background aims for the project and then considering every aspect of the site; where the wind blows most often, how the sun tracks around, where does the access come from, what is the shape of the ground, its landscape features and adjoining property, and many other things that could influence the opportunity that the site presents.

During this process the architect often continues to work on the design until he or she feels comfortable with it; that it has reached a point where the architect is satisfied that it is the basis of the solution and asks:

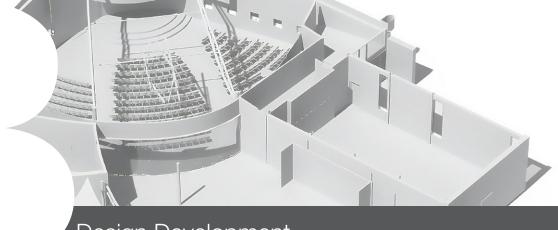
- Does it meet clients needs and support their basic purposes?
- Does it respond to the site and its microclimate?
- Will it incorporate sustainability principles?
- Will it be enjoyable to use?
- Will it be beautiful?
- Can it be built within budget and will it have lasting value?

Envisioning

This is all taken into the melting pot of consideration by the architect who often has to apply lateral thinking in addition to experience and education. Out of this emerges the embryo of a design solution that needs to be tested and developed before it can be presented and workshopped with the client.

This process often results in a logical solution. It can be a better use of design time than asking the architect to prepare several alternative designs for selection by the client.

At this stage, what the architect conveys in drawing or model form to the client, is only part of the solution that they have developed in their mind with the aid of sketches or other representation. After receiving feedback and reaching agreement on the principles of the design, the project can move on to Design Development stage to put the "flesh on the bones".



Design Development

4

Clarity

Once the concept design has been agreed and signed off by the client, it's time to move on to create some more clarity around the intention. This means clarity for the architect as they explore the potential spaces in his or her mind using programs and sketches. During this process the design moves from being plastic where it is still being manipulated, to becoming a clear fixed intent.

The architect anticipates each of the spaces, fixes their spatial relationships, and presents a schedule of materials.

Coordinating Other Expertise

Specialist consultants that cover cost, structure, electrics, ventilation, cooling and heating, plumbing and other issues become engaged in the process to provide their advice through the architect who coordinates it into the design and reports to the client.

Checklist

- Is the prospective reality fully understood; firstly by the architect and then conveyed to the client?
- How is light controlled and manipulated within and around the proposed project
- Check its relationship to surroundings including landscape, solar response and levels
- Does the specialist advice received for structure, services and others require adjusting the design?
- Check the proposed materials
- Check the choreography the people-flow between spaces.
- Check the predicted cost and client's budget do they align?

We have now reached 2nd base camp and can continue the ascent towards Town Planning (Development Approval) preparation for submission.



This is sometimes referred to as Development Application (DA)

Town Planning is not for the faint of heart

This is where everyone wishes they had started earlier - the process, once lodged with council, normally takes several months, it cannot be predicted when the permit (hopefully) will be issued. Managing this stage carefully, either by the architect or by a planning consultant is important to steering the project through council efficiently and successfully. Getting a planning permit used to be discretionary - did the councillors like your scheme?

Whilst there are now policies to guide the council planning officers, it can also be subject to political pressures at councillor level. We have applied the following to assist:

- Understand the Planning Zoning and any Overlays to which the site is subject.
- Is the proposed use of the site Permitted (but may still need a permit to cover an Overlay issue), is it Permit Required or is the use Prohibited?
- Take advice from a planning consultant and/or we meet with the council's planning officers early.and understand their issues and process for your project.
- Prepare a thorough set of drawings and reports to address the likely issues.
- Include a landscape scheme and any specialist reports such as arborist, ESD and bushfire report.
- Ask if the Fast-track process is available for this application.
- Monitor the progress in the council's system is anything holding up progress / have there been any objections?

In the unlikely event that a permit is not forthcoming at council, an appeal is possible (to VCAT in Victoria or similar legal bodies in other states). Whether the proposal complies with, or conflicts with the stated Planning Policy will then be important in determining the outcome.

It is important for clients to understand that development is often controversial, particularly for neighbours. There are some reasonable protections built into the planning framework to balance protecting nearby owners rights whilst enabling reasonable development for society in the future. A planning consultant can advise on managing sensitive situations and assemble the fully supported application to council.



This has also been referred to as Contract Documentation or Working Drawings.

Construction Fully Described

The building that has been designed in the earlier stages needs to be fully described so that:

- Building contractors can tender on a level playing field.
- There is no ambiguity about what is required.
- The project can be built from these fully dimensioned drawings, specification and schedules prepared by the architect.
- Expert independent specialists will fully describe the foundations and structure, the hydraulic, electrical and mechanical services needed, and a quantity surveyor will predict the likely construction cost.
 Other specialists such as landscaping will provide their own detailed drawings and schedules.
- All of this will be coordinated by the architect to ensure that it all fits together.
- The architect and each specialist carries professional responsibility and insurance for their design.

The Standard You Need

Without this, building contractors will determine their own quality of finish and the client not have the benefit of truly competitive tenders or a building fit for the long term. These documents will form the basis of a clear contract to build with full financial control by the client and their professional team.

So Everything Fits Together

To do this the architect develops the scheme with dimensioned and detailed drawings, incorporating the detailed work of the specialist consultants and seeking the required Building Permit for the design stage. Standards are set for the contractor to follow in due course. The client's preferences are written into the documents; for instance, you can ask for a higher than minimum level of insulation in order to minimise carbon footprint and reduce future energy costs.

This package of documents becomes the point of reference during construction and will be the basis of the contractor's tender.



This has also been referred to as Construction Procurement or Tenders.

Studio B will advise on the best way to find an appropriate building contractor for your project. Getting a cheap price from a builder that is unreliable or goes bust will be more costly in the end. Competitive tendering remains the usual process in order to test the market for value. The design team's quantity surveyor should have been able to predict the likely tender range so that cost will not be a shock. However there are pros and cons to competitive tendering and alternatives to suit particular circumstances:

Full Design Package Tenders

The design team need sufficient time to develop and coordinate a thorough set of drawings, reports and specification. This does not usually start until planning permit has been received. Builders have to carry the cost of unsuccessful tenders onto other projects. They must carry the risk of missing something during the threeor four-week tender period. Having the architect as a contract administrator provides expert independent assessment for monthly valuations of work completed and provides design control for any changes that may be requested.

Negotiated Price

In a busy construction market it may be difficult to find an appropriate builder with availability. If your project needs special skills, such as a Passivhaus certified tradesperson you may not be able to find two tenderers and must negotiate a price with one. Quantity surveyor should be involved in this process to advise whether the proposed cost is appropriate in the current market. The architect can provide Contract Administration as above. It is still important to have a full design package.

Design Build

This arrangement is not usually used on projects below \$10 million. While it can accelerate a building program, under this contract the builder assumes both design and construction risks following a preliminary (often reduced) tender process. While this has the potential to save money for the client, most often it also reduces the level of quality control the client has over the final building. The design team is often transferred (novated) to the builder during Documentation stage. The architect and design team is no longer acting independently for the client, but for the builder. Someone else (that may be less familiar with the design intent) must act independently for the client.

Cost Plus

This is where the builder simply applies an overhead to each of the costs they receive. This is often considered to be the most costly method of construction. However it can be the fastest which may be important, particularly for retail fit out projects. There are other arrangements, but the key to all of them is having a good tried and tested form of contract. There is little use having a bespoke contract if a dispute requires hundreds of thousand of dollars on legal fees to define issues. Standard forms of building contract have legal precedent.



This has also been referred to as Contract Administration.

Few buildings are identical. This is where we build the prototype and plan to get it right first time. But what does the architect contribute during construction?

A Contract for Quality

Your architect will help you to set up a tried and tested contract between you and the builder that includes drawings and specification. Standards are described for longevity and an agreed price is fixed. A program for the work is prepared by the builder and progress again which is monitored by Studio B towards the completion date. Any adjustment is then predicted and needs to be justified by the builder. 5% of the cost is retained by the client from the contractor during construction.

Avoiding Overpayment

The builder is entitled to payment for the value of work completed on your site each month. Studio B will assess the value completed on site and certify stage payment for clients to make so that there is no overpayment. Cost is then controlled on behalf of the client based on construction knowledge and experience. This minimises financial risk for the client.

Is it Being Built as Designed?

After all the work that has gone into the design it is important to see that is realised in the build. The responsibility to achieve the design described in the contract remains with the builder, but having regular observation by Studio B's architect at site meetings can identify any errors early or answer any queries.

Controlling Any Additional Items

Any changes that you request or that may be needed once excavation starts are clearly described to meet the design standards and their cost fairly is controlled by the architect as the contract administrator.

Regular Site meetings

Every fortnight or month, depending on the project size, a meeting is convened with the builder. Minutes record progress, any queries raised and often the client representative attends.

Independent Due Diligence

Where community projects are funded by a client that represent many stakeholders, the administration of the building contract by a professional independent of the builder provides peace of mind.



Here you have the reality at last. Time to enjoy and celebrate. How does the architect ensure proper completion for you?

Completion Certificates

- The building contractor will invite the building surveyor to issue a Certificate of Occupancy. This is needed to satisfy that the statutory building code has been complied with, and the building is safe to occupy.
- Your architect will need to issue a Certificate of Practical Completion to confirm that, as far as they are aware, the building contract has been carried out, any immediate defects have been identified and a plan for rectification agreed. Instruction manuals should be provided to you by the builder and 50% of the retention money is released to the builder. The site and new building should be left clean and tidy.
- The owner takes on insurance responsibility and the builder's insurance cover ceases.

Furnishing and Celebration

- If you have an interior designer, they will be ensuring that furniture is provided or the client maybe organising this themselves. Any audiovisual installation is often carried out at this time if it is not in the original contract.
- This is a good time to celebrate the completion of the project, and many clients
 have held an opening event or some other celebration. This often includes the wider
 client body and any of that have contributed to funding the project together with the
 building team and professionals involved.

Defects Liability Period (DLP)

- The Certificate of Practical Completion is also the start of the 12 months defects liability period where the contractor remains responsible for defects that occur. Any urgent defects are to be rectified immediately, and others need to be remedied before the end of the 12 months defect period. Your architect remains involved to assist with identifying these and asking the builder to resolve them.
- At the end of this 12 months period, when any defects that have been identified
 have been rectified, your architect will issue a final certificate, complete the contract
 and to approve the release of the remaining retention money.

Final Account

The final account for the cost of the works, including any agreed, variations, is normally resolved during the DLP by your architect as the contract administrator.

Whole of Life Cost

- Every building has an ongoing cost. Cleaning is always needed. Maintenance such
 as cleaning gutters should be a regular contract. Designing to an efficient plan
 reduces the wasted space and saves money here in the long term
- When sustainability is designed in, energy cost is minimised. This also includes adaptability to new uses in the future and enabling it used often each week.
- Enjoy your building!



Our charges cover our professional time spent providing our skills and working in your best interests.

Feasibility Study and Masterplanning

Normally carried out on a fixed fee basis assessed on the time required for the complexity of the task

- Concept Design
- Design Development
- Town Planning
- Construction Documentation
- Contractor Selection
- Contract Administration
- Completion

These stages are often carried out consecutively based upon a clear brief from the client and charged as a fixed fee where the scope is clear and the budget fixed, or as a percentage of the Total Construction Cost.

Fees are always agreed in advance of services. Time charges apply for any ad hoc services.

We save clients' money in construction costs by planning efficiently and avoiding costly wasted space. Every square metre should be useful and easy to maintain.

Enquiries are welcome and free of charge.

Please call us on 03 9486 4425 to discuss your needs or arrange an appointment.

Directors:

Fred Batterton DipArch (Oxford) Architect
Firdaus Kartika BArchitecture (RMIT) MMDesign (Monash) RAIA
Rod Neil BPD/BArch (Melbourne)

