

A close-up, slightly angled view of a blue architectural blueprint. A large, bold, red rectangular stamp with rounded corners is placed over the center of the blueprint. The word "APPROVED" is written in a thick, red, sans-serif font within the stamp. The blueprint lines are faint and blue, showing various geometric shapes and lines typical of a site plan or floor plan.

APPROVED

12 STEPS

OF THE DEVELOPMENT PROCESS

**STEP TWO BONUS: ARCHITECTS,
ENGINEERS & TOWN PLANNERS**



Your three most important consultants in the development process is certainly Architects, Engineers and Town Planners. Without good advice in these areas can be the downfall of any successful development. So let's look at them individually.

WHAT DOES THE ARCHITECT DO?

Most people would naturally and quite rightly say, "Architects designs buildings". But a good architect does much more than that. A good architect can co-ordinate all of the design consultants, assist with the town planning process and even supervise the construction phase of your project.

In fact, you could have the architect working on your project involved with;

- Site selection
- Feasibility studies
- Designing and planning
- Managing the building budget
- Selecting and managing the project team
- Interior design
- Landscape design

Not all architects will undertake this type of full project management; however there are some who will be willing and able to manage your entire project from start to finish. The risk of this approach is that you are effectively "giving away" control of your project to a third party, who may not have the same motivations as you in delivering the final project.

The design process is more of a "creative" process as opposed to a budget driven approach. Many Architects can be more concerned with their "vision" of the project rather than the practicality of construction or the costs involved. The more you are involved in the design, and understanding the implications of certain features or inclusions, the better you will get at containing expensive design aspects. Whilst they might look good, do they add value to the end user? Spending excessive money on good design does not make a good development unless it translates to additional profit.

WORKING WITH AN ARCHITECT

A good architect will add value to your project by designing a product that will be appealing to your target market and appropriate for your end goals, whether you intend to rent or on-sell the completed development.

Some beginners try to save money at this stage and enlist the cheaper services of drafts people. Investing a little more at the important design stage of your project means you have a better chance of ending up with a development that has good appeal and a proposal which should work its way through council much quicker.

However, tread carefully when it comes to handing over complete control of your project to your architect. Although they will be a critical part of your team and lend necessary creative vision to the development, many architects do not take into account important factors such as the final cost or complexity of construction. Involve the rest of your team in this process to ensure that you come up with a financially viable project.

SELECTING AN ARCHITECT

Word of mouth recommendations from previous, satisfied clients are one of the best ways to source a good architect for your project. Alternatively, you may have seen a development designed by a particular architect that you liked. I suggest looking at other projects of a similar nature that are already being built as a great first place to start.

Check out the look and feel of the development, paying particular attention to the interior size and flow of the development. One thing is to design on paper, another is the actual completed product. Room sizes and the flow of the design is crucial to the success of the sales process, and there is nothing like actually inspecting completed projects to give you a better feel for this than looking at a 2D representation on a piece of paper.

Starting out, talk to a number of architects to get a better idea of how they can help and what type of work they like to do. It is pointless working with a high rise specialist when you are planning a small duplex development. Another critical part of this relationship is how you are able to relate and communicate with your architect. A face-to-face meeting will help you both get to know each other a little. Explain the services you want them to undertake and enquire about the fees you will have to pay. They will probably be able to give you a cost estimate at this stage, as the project parameters have not yet been determined. Make sure you feel comfortable with the architect and the responses they provide to your enquiries, because you will be working with them for a year or more.

Ask them to provide you with a list of their recently completed projects for you to look at as well as the names of some past clients to contact for a professional reference.

THE ARCHITECTURAL BRIEF

After selecting your architect, the next step is to provide them with a brief. The brief should give them an indication of the nature of the project you want, its general shape and the number of dwellings to be built, and may include some broad design elements such as the materials you'd like to use.

After analysing your design brief the architect will then visit the site, clarify the zoning for your property, assess its conditions and constraints and determine the best location and orientation for your project. If necessary they will also consult with the council's town planners to gain complete familiarity with their planning requirements.

After completing these initial steps, the architect should then develop a rough concept sketch to illustrate the number and type of dwellings the site can accommodate.

- Your architect will usually start their design with the front setback from the street, which is regulated by the planning controls and influenced by your adjoining neighbours' setbacks.
- They will allow room for driveways, garages and turning circles and ensure that vehicles can enter and exit the site in a forward motion.
- They also need to allocate the appropriate amount of private open space for each dwelling, which varies from council to council.
- After all of these aspects have been accounted for, they can determine the footprint for your dwellings.

Review these concept design drawings, which usually include a rough floorplan plus one elevation, for your consideration and comments. These preliminary drawings will allow you to do a more detailed feasibility as you will have a better idea of what you may eventually be able to build on your site.

Once you have approved the concept designs, the architect will complete the formal drawings required for council to consider your application. At this stage you may need to nominate building materials and finishes. This point alone may determine the financial viability of your project. The more conversations you have had with your entire team will help you navigate potential costly errors.

Remember that your Architect is a "creative". There can be substantial differences in the cost of materials, which often will have a similar look and feel to either more expensive or cost effective alternatives. A good relationship with your builder should help identify more building alternatives to help manage the cost to build your architects design. Once you have an approved Development Application the Architect will then draft working drawings which, when combined with the engineering, structural and civil engineering drawings, give you a full set of construction drawings. At this stage, your Architect will liaise with your other Engineering consultants to determine "how" to build the project.

These drawings are needed in order to obtain a “Construction Certificate” (permission to actually build it) and even obtain accurate construction quotes. These drawings are very detailed, illustrating all dimensions, levels, ceiling heights, window and door locations, material finishes, plumbing, etc.

Planning guidelines vary from council to council and from state to state. Your architect must take all of the council’s regulations into account when assessing the site, allowing for any unusual shapes or obstructions which may restrict your development.

DESIGN TRAPS TO AVOID

While you may have a specific vision for your development in mind, it is important to remain objective when planning the style and design for your project. Many budding developers get caught up in their own likes and dislikes and fail to plan appropriately for their target market and according to local planning guidelines.

Here are a few design traps you should try to avoid at all costs;

- Many first time developers think that because other projects have been built in the street it sets some type of precedent to allow them to build similar projects. This is not necessarily so as planning rules change over time and it’s possible that the rules have changed and you can no longer create the same outcome.
- Ensure you have enough land on your site to allow for the proposed development including private open space, garages, turning circles and driveways. Be cautious of narrow sites, irregular boundaries or unusual setback requirements as this could affect the number of dwellings you can get on the site. Where possible choose a level site, as steep slopes can cause considerable expense in excavations and footing design.
- If you can, choose an area where neighbours will celebrate the fact that you are demolishing the property and improving the street scape. We try to avoid areas where local residents have a reputation for opposing proposed developments, it’s just not worth the headache!



WHAT DOES AN ENGINEER DO?

So where do we start with engineers? You might need a number of different engineering consultants as part of your team. They will work closely with your architect, so while you should understand their role, you may not be required to give any input into their brief. However as the ultimate responsibility and impact of design falls on you, you need to question if there is ever a more cost effective method to achieve the same outcomes in their design.

Your team of Engineers will probably include:

- **GEOTECHNICAL OR SOIL ENGINEERS**

They will do a soil test to establish the conditions necessary for a structural engineer to design the footings or foundations for your building. They look at the types of soil and its suitability for construction purposes. Think of it a bit like a strength test, along with its susceptibility to shrink or contract, which can make a huge impact on what is required to ensure these conditions do not damage the buildings you intend to build.

- **STRUCTURAL ENGINEERS**

Their work is above the ground and their role is to develop a structural design that is functional and cost-effective to build. They will work together with the architect to provide a set of engineering drawings.

The structure of a building is like the skeleton of your body. Without it a building would not remain standing. Imagine the forces that come into play in a multi-storey apartment building. The most obvious one is the weight of the concrete and steel. What about the weight to fall the furniture, windows and cars in the building? All of this weight has a vertical impact and must be calculated by the structural engineer, so that the foundations of the building are of sufficient strength and are founded on solid sub-strata natural material, like rock.

What if you are building on a seaside block of land. How does the structural engineer handle this weight if there is no rock, but just sand for say 20 meters under the building?

Apart from the weight factor, what about the wind? If you are living in a multi-storey apartment building and it was hit by a strong wind, would you really like to feel the building move? These are just some of the forces the Structural Engineer must allow for in their design.

While you may not be intending to build high rise buildings, it is easier to understand the forces at play on a big building and then relate them to a smaller structure that you may be involved with.



Your two storey townhouse may experience all of the same forces, which must be allowed for in the design of the structure. In some parts of the country extra precautions must be taken because of susceptibility to floods, earthquakes or cyclones. In a typical residential development project the engineer will make the necessary calculations to design all reinforced concrete and structural steelwork and the footings.

The drawings will show the sizes of all slabs together with details of all reinforced steel and structural components. They will decide whether you build your project on a concrete slab, strip footings or piers.

They will also decide whether you need steel beams to support the upper level or whether cheaper timber beams will suffice. They can also advise whether the architect's design will be too expensive to build and may come up with ideas as how to save costs during the construction process.

- **CIVIL ENGINEER**

Civil engineering covers some major design items like roads and bridges. But, as the name suggests, a Civil Engineer can design your civil works – the earthworks, street improvements, storm water, drainage systems, sewage and water supply to your property.

The increase of medium density developments has meant that many council's drainage systems cannot cope with the extra flow of water from the extra dwellings. It is therefore important for the civil engineers to design systems that will cope with heavy periods of rain and retain water on site to slowly allow it to release back through into the council's assets.

- **HYDRAULIC, ELECTRIC & FIRE ENGINEERS**

You may not require the services of hydraulic and electric engineers for simple single or 2 storey development, but if you are going to develop a high rise apartment or commercial building, somebody is going to have to plan where the power, pipes, water, gas and waste go.

You may also need a fire engineer to design fire hydrant and hose reel systems as well as fire sprinkler services and alarm systems.



WHAT DOES A TOWN PLANNER DO?

Town planners are more engaged with the specific rules around the development process. They are attuned to what is permissible from both a state as well as a local government perspective.

They have often been employed by local councils or planning organisations for a number of years, meaning they know the process and understand how it works. They may also know many of the senior staff at the council as well as the elected councilors. This can be of great benefit as they should know who is easy to get along with, who is going to be a problem and who is going to require special attention. Like your architect, your town planner may help co-ordinate your team, assist with site selection as well as your feasibility. A town planning consultant will also assist by;

1. PROVIDING FEEDBACK DURING THE DESIGN PROCESS

I like to get a town planner involved early in the process to view the plans and give an opinion as to their compliance with State government and local council regulations. By getting involved early in the piece they will save you considerable costs in major redesigns and valuable time in assisting the process through the council maze.

2. WRITING THE DEVELOPMENT APPLICATION

The town planner will try to pre-empt problems by addressing council's expectations right from the start. They will ensure that you lodge all the necessary documentation, including a Statement of Environmental Effects, addressing all the issues required to be considered in any planning approval.

3. HANDLING FURTHER COUNCIL REQUESTS AND OBJECTIONS

Your town planner is generally the central point for all correspondence with council, its planning officers and any objectors. Council often requires further information and your town planner can prepare appropriate responses and advise the architect how to redraft plans accordingly where required.

If there are objections, your town planner can prepare appropriate responses and become your advocate, arguing the case for your project. Some councils hold mediation meetings with objectors, the developer and council officers to try to find an acceptable solution to objectors' concerns and in this instance, the town planner may agree to represent you. With their in-depth knowledge of planning legislation and the rights of objectors and yourself as the applicant, they can handle the case efficiently and objectively on your behalf.



Nine questions you should ask your town planner:

- What is this council's attitude towards development projects?
- What experience do you have with applications to this particular council?
- Do you recommend a pre-development application meeting with the council? Why or why not?
- Do third parties (including neighbours) have a right to object to our proposal? If so, do you recommend neighbourhood consultation?
- How long will the Development Application process take?
- Do I have a right of appeal to the council decision?
- Do third parties (including neighbours) have a right to appeal the council's decision?
- In the event of an appeal, where are the likely costs?
- Will there be a need for additional applications to other authorities and at what cost?



DEALING WITH COUNCILS

Getting Council approval often requires an enormous amount of time and patience and a diplomatic approach. Regardless of whether you believe what you are proposing is a simple development that should have no “issues”, it can still take several months to gain approval. If there are issues with your site, or the neighbours object, the process can become even more drawn out.

I try to resolve any planning issues early in the piece, so we will often have one or a series of pre-development application meetings with the council planning officers before we submit our formal application for approval. Along with councils planning officer (responsible for assessing the application), these meetings are often attended by a number of council staff, representing their different internal divisions. These can include landscaping, engineering, storm water and parking. The larger or more complicated the project, the more officers you will have involved.

The aim of these meetings is to provide a clearer understanding on what council would “like”, and hopefully identify any potential “issues” with the proposal before we get too far down the track. The earlier we can identify solutions to any issues we can speed up the application and save in costly redesigns.

Usually both the town planner and the architect is present at these meetings to answer any questions from the council panel.

DEALING WITH COUNCIL OFFICERS

While many people consider the council planning process to be difficult and anti-development, my experience is that in general staff are hard working professionals who are underpaid and understaffed. If you develop a good relationship with them they can help you navigate your way through the council application maze.

It is important to treat these professionals with the respect they deserve because they hold a lot of power when it comes to your development application.

The key to the entire planning or development approval process is to make it as efficient and straight forward as possible. Try not to ruffle too many feathers when it comes to dealing with the bureaucrats who can give your project the final seal of approval. I have seen many developers burn bridges within local authorities and it is only ever to their own detriment.

At all times remain professional, remain objective and most importantly, remain patient and open minded.