The Home Renovation Guide: how, where, when, why?

scott connell ARCHITECTS

Renovation and extension projects are one of the most common forms of construction undertaken. Different to new construction, these projects must work within the fabric and constraints of the existing building to add, modify or modernize as required. There is no "common or standard" renovation project. This type of work can range from as simple as renovating a bathroom, to adding a room or to lifting and completely re-modelling a house.

So, where and how do I start? This is often one of the first questions asked. At this stage there is the idea or the requirement that something needs or has to be done. This guide will briefly explain the renovation process, some of the main legislative and regulation requirements and answer some of the most typical questions asked.

The Process:
Undertaking renovations of you home is a step by step process, where each phase is dependent on the one before. In outlining this process the key elements will be addressed.

Stage 1: Is the briefing and project commencement. Here the extent and scope of the works are established and initial information gathered for the project. This can be in the form of site measuring existing structures, reviewing existing plans and collecting information about the site from council.

Stage 2: Is the Sketch or concept design process. Here is where the initial ideas are discussed and presented. The floor plans and layouts are prepared first to ensure the spaces fit the functionality and requirements of the brief. From there the visuals and external aesthetics are prepared. Once a sign off is achieved and the stage complete the works move.

Stage 3: Is the town planning stage if required. On projects that require town planning approval documents are prepared for lodgement with council for a Development Application or DA approval. Depending on the complexity and type of project this process can vary in length and requirements.

Stage 4: Is the construction documentation stage. Following the sketch design or town planning if required, the documents for construction are prepared. These include technical drawings suitable for the builder to use to construct the works. The drawings encompass a high degree of detail showing the extent of the proposed work. These documents will always include drawings and will sometimes include a written specification for the works if requested.

Stage 5: Following the completion of the architectural documents, engineering and certification is undertaken. At this stage the works can also be tendered to builders for quotations to undertake the construction.

Stage 6: Once a builder has been selected, construction commences, during this phase, the architect can be engaged to administer the contract on the client's behalf. Whether this is required or requested is generally dependent on how comfortable the client is with dealing with builders directly and the associated contracts.

t: (07) 3397 0443 f: (07) 3324 2167 m:0414 926 196
email: scarchitects@bigpond.com
scott connell ARCHITECTS

Rules & Requirements:

All building projects have to meet a variety of government rules, codes and regulations. These codes range from the Building Code of Australia which covers technical elements like construction requirements, room ventilation and lighting to the safety and amenity of the residence. Overlaid on these are various Australian Standards and statutory regulations. At a more local level are building and planning regulations of the local council. These cover more general or building extent requirements such as how close the property can be built from the boundaries, to how high above the ground building can be.

These documents are quite detailed, complex and a long read. To cover all elements here would be impossible. However a few quick main points can aid in the understanding of the process and the constraints and requirements imposed by these regulations:

Boundary Setbacks: Depending on the size of the block, the locality and the zoning there will be the requirement for certain setbacks away from the property boundaries. These setbacks are prescribed in the documents the Queensland Development Code and the Local authority House and Small Lot Codes. Generally, the setbacks are 6.0m to the street frontage, 1.5m to the side boundaries of a single storey building and 2.0m to the side boundaries of a 2 storey building. These setbacks are measured to what is called the outer most projection, which is the fascia. This is the board that the gutter is fixed to. If the proposed work fits within these building envelopes the work will be conforming regardless of the site. Some sites listed as either small lots or in character areas have concessions or alternatives to these setbacks to preserve the amenity of that area.

Building Height: When lifting a property or extending an upper level the overall building height can become a critical element. The height that a house can be built above ground level is capped by the local authority to a height of 8.5m above ground level. This height is measured vertically an all elements of the building must be below it. The best way to understand this requirement is to imagine a sheet of paper is place over the entire block of land if nothing was there. This sheet would naturally follow the contour and shape of the site. If that sheet was then lifted 8.5m straight up in the air it would form a height line reflective of the ground below. Provided that the building proposed is positioned below this height then it is compliant.

Ceiling Heights/ Light and Ventilation: Often when working with older properties, rooms or areas have been enclosed to make new habitable rooms. Habitable rooms are areas such as bedrooms, living rooms, dining rooms, kitchens. These rooms have the requirements of having a minimum ceiling height of 2.4m and also needing light and ventilation from the outside. Non habitable rooms such as bathrooms, laundries and storage spaces can have a reduced ceiling height to 2.1m and can be mechanically ventilated and artificially lit.

There are many other regulations that are specific to your project, too many to go through here. Please feel free to ask any queries or questions you may have in relation to these.

FAQS:

Q1: "I have an old highset house is it better to excavate below or lift the property to add a lower storey?"

A1: There are many factors that affect this decision, from the nature of the site and the building to the cost involved in the work. The ability to lift a house depends on the structure. It needs to be timber framed, with no masonry on the upper part that is being lifted. Lifting, generally will enhance the quality of the spaces. A greater elevation will often provide additional light, ventilation and a view from the property. Additionally the lower level will have greater access to these elements as well. However, lifting has many additional regulatory requirements, these include the height capping of the building to 8.5m above ground level, increased side boundary setbacks and often the need for town planning approval in established areas. Excavating and building below while simplifying many of these issues requires the solving of other problems with respect to access below, excavation and retaining and waterproofing the walls below ground level. The best solution for individual properties is site specific and depends on the number, size and requirements of the spaces that are being added.

Q2: "Town planning approval, Do I need one and why?"

A2: For many properties in the inner and established suburbs of Brisbane a town planning approval is required for major renovation work to your house. The 2 most common types of property that fall within this category are those on a small lot, which is defined as being less than 450sqm in area or having a width of less than 15m across, or those listed in a demolition control precinct. The need for town planning approvals for house renovations was established by the council to protect and preserve the character and quality of suburban Brisbane. This policy while having benefits and disadvantages is a requirement that must be met. Not all renovation work on this type of property requires a town planning approval, and some areas of substantial work are possible provided they comply with the code requirements. These codes are quite lengthy and complex and highlighting all the requirements and exemptions is to difficult. However in basic form, internal works, simple structures such as open carports or extensions at the rear of the building away from the street are exempt from requiring town planning approval. The nature of your project and whether it will require a town planning approval can be discussed at the briefing stage of the project.

Q3: "Apart from my architect who else will I need?"

A3: This often depends on the size and the scale of the project. But generally the following additional consultants and people will be required;

Land Surveyor: They provide a contour survey of the property showing the locations of existing elements on the site, the site boundaries, fall of the land and the height in relationship to the ground. This is required to determine and prove building setbacks and overall heights on the site while also providing critical information to allow the construction of the property.

Structural Engineer: Once the project involves structural work through the removing of walls, extending, lifting or adding new area and engineer is required for the structural design. Their work involves the sizing of beams and columns, retaining walls, concrete slab and footing depths and widths and the associated works with them. Within the scope of these works a soil test will be required. This shows the ground conditions on the site and determines the size and strength of elements in the ground.

Building Certifier: To add, extend or change a property requires a building approval. In the past this work was provided the local council building department. However this was process was changed in the 90's to be undertaken by private firms. These days private certifiers assess and approve the works under the legislation. The main advantage of the process now is that it is much quicker than before. It is also worth noting that this process is separate and required for projects that have achieved town planning approval. The town planning approval is an additional step and doesn't negate the need for the building approval.

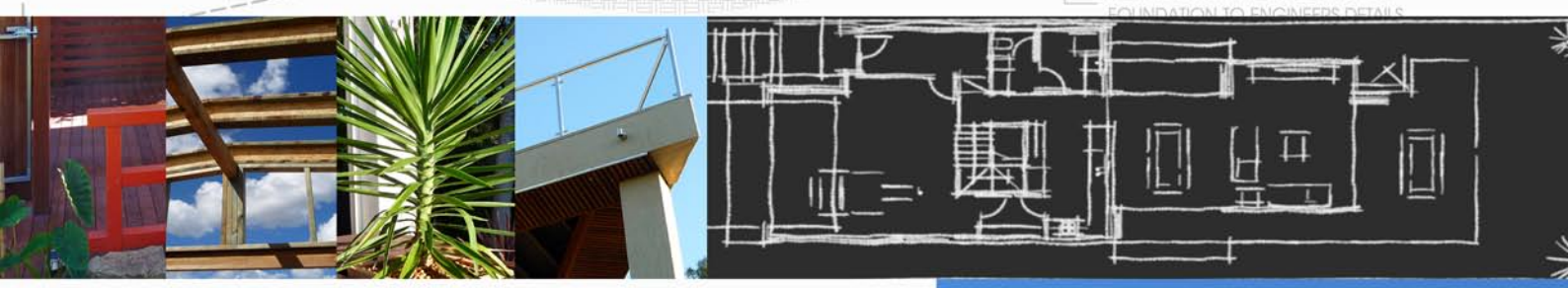
Builder: Finally, the project will need a builder. They will take responsibility for constructing the works. Selecting the right builder is one of the key issues. It is important to develop an understanding and trust with the builder and to develop communication. Before selecting look at examples of their work, talk to previous clients and review their history. A good builder and a strong relationship with the client is essential for the successful completion to the project.

Why should I use an architect?

The decision to undertake renovating your home is never an easier one. It is a complicated process with many steps along the way. That's where an architect can help. Their job is to help facilitate this process and guide you through it step by step to make it as easy possible and to ensure the best outcome at the end of the project. The initial stages of the project are the most important within the works. The assessment of conditions and design of the work to suit the existing building, the site and it's environs, while making the work cost and client effective are what a architect offers.

Many people consider architects to be expensive without knowing exactly what they do. Often the thought of using a drafting or cheaper is perceived to be a more cost effective alternative. In reality, in terms of the overall project cost most often the opposite is true. The advantages of a well designed project actually save the client the money in both construction and also the life cycle and running costs of the property. By designing the project efficiently, excessive and "wasted" spaces are eliminated. For example the poor planning of a project could require the inclusion of an additional corridor to access some rooms. This space while not usable still has to be built and as a result costs money. Often the result of poorly designed works can lead to costs in the thousands of dollars extra for the client.

Additional to this is the complexity and ease of "buildability" of the work. An architect is trained to work with existing constraints to ensure the new work suits the most efficient and cost effective construction methods and techniques. While the savings enjoyed from these items add up to considerable amounts, it is in the "livability" of spaces created for the end user that architect is of most use. Being mindful of the environment and it's impact in the future, the correct design can creates spaces that are enjoyable and practical to use. As well as being more cost effective to maintain through reduced heating and cooling costs.



Further Information:

The following are some sources of material for further reading on your project.

Brisbane City Council: www.brisbane.qld.gov.au
The BCC website provides access through the planning/building section to copies of the relevant planning codes and requirements. Additionally they have a publication "planning- simple guide to planning and development in Brisbane" available to download.

Home Improvement Pages: www.homeimprovementpages.com.au
A great resource of information and trade contacts for the national and local area.

Your Home: www.yourhome.gov.au
A government website for developing and promoting sustainable housing practices within Australia.

The Lourve; once a house, now a museum. With the additional pyramid by renowned American architect I.M.Pei. It is probably the greatest renovation project in the world.

scott connell ARCHITECTS
t: (07) 3397 0443 f: (07) 3324 2167 m:0414 926 196
email: scarchitects@bigpond.com