

## Consultants (Other than the Architect)

Even small projects usually need a few professional consultants other than the Architect to get the complete building layout, setout and servicing design ready to leap off the page into reality. The list below outlines a few of the key consultants who are regularly required on a residential project. This list is a guide to some of the disciplines that may be involved. This is neither exhaustive nor prescriptive but intended to assist anyone unfamiliar with the production of a bespoke building design in understanding the what people do and why they are needed.

Engaging consultants need not be confusing, your Architect can assist you in engaging the required consultants by sourcing fee proposals from a range of consultant for your consideration.

### **Structural Engineer (may include Civil Engineering as well)**

The structure of your project must be designed and certified by a Structural Engineer. Australian building regulations govern that structural adequacy is not able to be certified by your Architect so you will need to engage a Structural Engineer. Your Architect will work with your Structural Engineer to ensure the structural design is integrated with the Architecture.

### **Surveyor**

Most of us obtain a basic survey or Title drawings when we purchase a property, this can sometimes be enough for you architect to assemble a conceptual design for your site however it is insufficient to proceed further. In commissioning a Surveyor to record your site, a number of items that may be required for the DA or construction setout of the building as well as recording key site features. Common inclusions are: Boundaries/fences, slope of site, trees, in-ground services, location of neighbours windows, roof ridge heights, existing building footprints etc.

### **Town Planner**

The Town Planner can manage the Development Application process for you if desired. This can be desirable if you are in a Heritage Precinct or have a site located in a sensitive area. Town Planners often write the Statement of Environmental Effects (SOEE) that form part of the DA submission and can have significant insight and skill in negotiating the local and State Government guidelines and laws.

### **Environmental Consultant**

The Environmental Consultant is engaged with the energy efficiency and thermal comfort of your project's design. The Building Code of Australia required all new homes to meet certain criterion. Whilst compliance can usually be demonstrated by your architect in filling out the required BASIX forms for assessment, the Environmental Consultant can demonstrate that the building meets the required energy targets via modelling and through detailed advice on methods for improving the passive thermal performance of the design on your site.

### **Quantity Surveyor (QS)**

This is the consultant who audits the design at a design documentation stage. Based on scaled and quantities information, materials, site conditions, current market labour rates, profit margins etc. provides an estimate of what the building is likely to cost. A detailed QS report can assist the client and Architect in identifying potential cost saving items and further limit disproportionate costs compared to value for the client.

### **Geotechnical Engineer**

The Geotechnical Engineer is typically required by the Structural Engineer to identify the ground conditions for the structural design. A Geotechnical report is also often required by Local Government authorises when your project is on a sloping site or if you are on ground that is potentially problematic. Reactive clay, landslide areas, areas with known coal seams, unknown water tables are just some of the many reasons you may require a Geotechnical investigation.

### **Ecologist and or bushfire consultant**

Early in reviewing local government zoning, you will discover if your site is in a bushfire zone, a habitat protection area, ecologically sensitive area or the like. If this is the case you are likely to need a specialist consultant to assist in the classification and strategies to guide and minimise the impact of the regulations on the design and minimise the impact of your project on the Ecology.

### **Hydraulic Engineer**

This consultant designs everything that will be installed by the plumber. Gas, water, sewage, drainage and rainwater harvesting, irrigation etc are in the scope of the Hydraulic Engineer.

### **Electrical Engineer**

This consultant designs the power circuits for your project. Services can include lighting design, power layouts, automated building systems, security systems, advice on the requirements for solar arrays and air conditioning systems etc.

### **Heritage Architect**

If your project is associated with a heritage listed building or site or even in a heritage precinct you will likely need the endorsement of a Heritage Architect to accompany your DA. The advice of the Heritage Architect guides the Design Architect in characteristics or constraints that will satisfy authorities that you proposed project with not diminish anything of heritage value.