New Zealand industry terminology

Term	Meaning
Feasibility study	Feasibility studies determine the financial and planning viability of a particular site or piece of land. They explore design options, bulk and location studies, and market pricing to help you arrive at a fully informed decision as to what you could do with specific areas.
Massing options	Different options and possibilities for the arrangement, volume, density, height, and shape of a building or group of buildings on a piece of land.
Masterplan	A detailed plan for a defined area of land, e.g. a new community or a new urban development.
	Masterplans integrate massing and yield studies into one large, holistic design. They also include the physical form of the buildings and the inbetween spaces (carparking, roads, walkways, public amenity, landscaping, etc.) that connect the built forms.
Measure-up	The process of measuring a building or site's dimensions and using that data to generate a virtual (usually 3D) model of said building or site.
	Traditional measure-ups are done with tools such as tape measures and laser measures and can take a significant amount of time and manual effort. Digital tools such as 3D scanners can considerably reduce this time.
	You need an accurate understanding of a building or site's measurements before you can start design planning.
Building and planning rules	The set of rules and legislation that governs building and planning in New Zealand. These rules come largely from the Resource Management Act, the Building Act, and the Building Code.
Site constraints and opportunities	An analysis of site-specific limitations (constraints) and potential opportunities (what can be achieved on the site).
	Limitations or constraints can include anything from rules around removing surrounding native bush to specific design rules for steep inclines to height restrictions for developments.
	Opportunities can include the likes of increased potential yield for better returns, passive solar gain or sunlight capture from a specific face, integration of landscape design within the built forms, and improved sustainability outcomes.
	An analysis of site constraints and opportunities is performed in order to achieve the best possible design and financial outcomes for the client.

Concept design	Concept design begins once the project's objectives and scope are established. It can be a highly creative phase and involves the architect and wider design team coming up with design solutions that answer the client brief.
	The design options may be developed through sketches, plans, computer renderings, 3D fly-throughs, or 3D-printed models.
Developed design	Developed design begins once a concept has been agreed upon.
	In this stage, your design team tests the ideas, refines the details, and shapes the final design. Materials and finishes are worked through at this stage.
Pre-application meeting	Pre-application meetings involve the design team meeting with Council before applying for consents, permits, or licences.
	While the meeting does not guarantee success of the application, it's helpful to get Council on board with your plans. It also helps you understand what hurdles or challenges there could be at the consenting stage and what can be done within your design plan from Council's perspective.
	After the meeting, the design team may amend their proposal to accommodate any Council recommendations.
Urban Design Panel	Urban Design Panels are independent advisory bodies that work for Councils. They're appointed by Councils to ensure the urban design outcomes of proposed projects meet Council's planning and urban design objectives.

Generally specific to particular cities (i.e. the Auckland Urban Design Panel or the Christchurch Urban Design Panel), these experts promote quality urban design outcomes by providing advice:

- To developers and Council in pre-application stage.
- To Council on large or controversial projects.
- To Council on proposed policy and statutory tools that have an urban design impact.

Clients and design teams must present their design proposals to the Council's Urban Design Panel. The panels then provide urban design reports on the project. Councils expect the design team and client to take on board the Urban Design Panel's recommendations as part of their applications.

Planning applications often include recommendations or commentary from the panel as part of the urban design report.

Assessment of Environmental Effects

Also known as an AFF

AEEs are written statements, submitted along with resource consent applications, that identify the environmental effects of your proposed development so Council can assess the potential impact of your project.

These include long-term, short-term, positive, and negative effects such as:

- Noise and vibration.
- Traffic and parking.
- Flooding.
- Land stability.
- Infrastructure.
- Heritage character.
- Streetscape character.
- Overshadowing of surrounding properties.
- Privacy considerations.
- People and community.

Your AEE should identify measures that can be taken to avoid or reduce negative environmental impacts.

Environment Court hearing

The Environment Court is chiefly involved in Resource Management Act (RMA) enforcement matters.

If Council publicly notifies your resource consent application (meaning the general public is notified of a project with the potential for major environmental effects) and a member of the public makes a submission on your application, a hearing is then held.

In a hearing, the Environment Court rules on applications and appeals of resource consents, plans, and the like.

Resource consent

A resource consent is written, formal approval from Council to proceed with designing and building a project, after the Council has determined that the project falls within its planning rules, has consent from neighbours or other stakeholders, and mitigates environmental impacts.

Resource consents are needed for almost every building project in New Zealand, including:

- Using or subdividing land.
- Building houses.
- Retail, commercial, or industrial buildings.
- Earthworks.

Pre-sales of land developments, earthworks, demolition, and construction works cannot happen until you've got a resource consent.

Council RFIs

Requests for further information (RFIs).

During the building consent application processing period, Council may issue an RFI (or multiple RFIs) asking for further detail on your project.

RFIs are issued when Council officers want to gain more clarity on a design or planning details to help them make a decision on your application.

The processing clock stops when they issue an RFI and only starts again once the requested information has been provided.

RFIs can slow down the consenting process and delay your project programme. You need to take RFIs into consideration when you prepare a programme and build in contingency for dealing with them.

The most common reasons for RFIs are:

- More information requested from consultants on specific details.
- Incomplete forms.
- Questions around Building Code compliance.
- Request for additional relevant approvals.

Detailed design

Detailed design follows developed design and commences once resource consent is achieved.

In this stage, your design takes on a level of detail that allows a contractor or builder to understand the full scope of the project. Sometimes called working drawings, detailed design includes construction details, materials, components, systems, and finishes.

At the end of detailed design, you'll have a complete set of working drawings that can be built from. These designs or drawings are then submitted to Council — called lodging for building consent — with a view to achieving a building consent.

You cannot start building work in New Zealand without a building consent.

Working drawings

The detailed design plans that form a building consent and that a builder or contractor works from.

These drawings cover details such as structure, bracing, drainage, roof, façades, cross-sections, elevations, and construction details. Other documentation included in working drawings includes materials specifications and calculations.

Building consent	A building consent is written approval from Council to carry out building work on a specific site. The building consent is Council approval that the proposed building work complies with the Building Act and meets the New Zealand Building Code.
	A building consent ensures that the proposed work is safe and durable and that it doesn't endanger the health and safety of anyone using the building.
	Building work considered low-risk or minor may not need a building consent under the Building Act.
Procurement	Procurement is the process of finding and working out the contract terms with a builder or contractor to build the project.
	How to procure a project will depend on whether you wish to negotiate directly with a contractor or builder or go to tender and ask multiple builders to price the project.
Construction documentation	The construction documentation stage prepares your detailed design plans for construction on site.
	Construction drawings build on the detailed design building plans and include plans, elevations, and sections, as well as other details and schedules
	Specifications and schedules are further developed to describe the quality of materials and finishes and the overall quality of work.
Site observation	During the construction phase, your architect or designer may carry out site observations. This involves regular visits to your project site to observe the progress and quality of the work being carried out by contractors.
	Site observation allows your design team to ensure the work is proceeding ir accordance with the contract documents and in line with the project's design intent.
Payment certification	Payment certification results in the client making payment to the contractor.
	Payment certification may be issued regularly throughout the course of the project or may signify that a particular stage has been achieved, such as

Certificate of Practical Completion	Practical completion signifies the date the project is handed back over to the client for occupation or whatever end use the building is intended for.
	A practical completion certificate is issued when all of the works in the contract have been carried out. This typically triggers a final payment of some sort, as well as the issue of certain documents to the client, including:
	Building warranties. A building owner's manual. A building user's guide. The health and safety file.
As-built documentation	As-built documentation is typically provided to the client at completion of a project. It records the final measurements, visual records, and data records of the project's built form.
	It's a collection of documents that includes:
	 The descriptions and drawings necessary for the implementation of the project. All the applied changes made throughout the course of the project. Recorded as-built measurements and data.
Defects liability period	Defects liability is the period after practical completion during which the contractor is responsible for fixing any defects or failures in construction and finishes.
	Defects liability generally extends for at least 12 months after practical completion. The contractor's role is complete once the defects liability period ends.
	Upon completion, site maintenance is guided by a site maintenance plan that covers performance expectations of everything from furniture to surface finishes.
Code Compliance Certificate (CCC)	Code Compliance Certificates are issued by a building consent authority (such as Council) and confirm that certain building works have been completed and comply with the building consent and the Building Code.
Warranties	Warranties cover certain periods and specified products and materials used

in the project. They effectively cover you for quality workmanship and for any

Warranties apply for up to 10 years regardless of whether you have a written

failures within the warranty period.

contract or what the contract terms stipulate.

The Building Code is contained in regulations under the Building Act 2004.
The Building Act and associated legislation and regulations govern the building sector and determine the rules for the construction, alteration, demolition, and maintenance of new and existing buildings in New Zealand.
All buildings, new and existing, must meet the Building Code.
The Resource Management Act 1991 (RMA) is the piece of legislation that governs how New Zealand manages its environment. It promotes the sustainable management of our natural and physical resources including land and water and plays a substantial role in the design process — namely in the approval of resource consents.
The degree to which a building is water-resistant inside and out. This is a significant issue in New Zealand with our maritime environment.
There have been many failures in the past 20 years with houses not being weathertight, leading to rotting or leaking structures. This is commonly referred to as 'leaky home syndrome' and is addressed through remediation work.
New Zealand is earthquake-prone. The seismic rating (or NBS score) is a percentage system; a building must achieve a specific percentage (e.g. 67% NBS in most of New Zealand) to be seismically compliant.
A building practitioner whose name has been entered into the Ministry of Business, Innovation, and Employment's register of licenced building practitioners and who is permitted to design, construct, or supervise restricted building work.

Consultants you work with in New Zealand

Consultant	What do they do?
Urban designer	Urban designers create masterplans (integrated plans that unite the social, cultural, economic, and environmental aspects of a centre or new urban development) that lay the groundwork for the places where people live, work, learn, and play.
	They're responsible for designing places and spaces that positively contribute to the health of our urban environments (towns, cities, streets, spaces, walkways, transport links, amenity, wayfinding, etc.).

Architect	Architects plan and design buildings and developments, as well as oversee their construction.
	They design a range of structures, including houses, apartment buildings, schools, libraries, mixed-use developments, and commercial buildings.
	Architects can work across the field in general, or they can specialise in areas such as heritage work, urban environments, landscape architecture, and the like.
Landscape architect	Landscape architects focus on the natural environment, how we interact with it, and how it can be enhanced through sustainable design and integration with built forms.
	Their work is generally inextricable from sustainability and conservation, and they design places where people, plants, and animals can thrive in equal measure.
Interior designer	Interior designers plan, design, decorate, and furnish spaces in residential, commercial, retail, and leisure environments. They're concerned primarily with the interior of buildings, designing and reimagining interior spaces using mood boards, colour palettes, interior finishes, furnishings, soft fitouts, and lighting.
Land surveyor	Land surveyors plan, direct, and conduct survey work to determine the position of boundaries, locations, topographic features, and built structures.
	They provide site configuration information that architects use to accurately design buildings and services (such as water entry, storm sewer outfalls, and connections to street services).
Quantity surveyor	Quantity surveyors estimate costs for construction projects. They calculate budgets based on clients' requirements and prepare detailed cost estimates to ensure budgets match the construction and project costs.
	Cost estimates aren't just for building work; they also include all consultant cost estimates, Council consent and development costs, GST, etc.
	Quantity surveyors are often engaged during the concept and developed design phases in order to estimate costs for the whole project upfront.
Project manager	Project managers oversee the management of a building project, from developing building programmes and budgets to coordinating consultants and ensuring a project meets legislative standards.
	Responsible for the smooth progression of a project, project managers liaise with clients and consultants to keep projects on track. They schedule different stages of the building programme, monitor progress, and coordinate activity.

Services engineer	Building services engineers advise on, design, install, and maintain cost- effective and energy-efficient systems for building services such as water, lighting, heating, air conditioning, and lifts.
	They're responsible for ensuring the proper performance of the electrical and mechanical aspects of buildings.
Structural engineer	Structural engineers analyse, design, plan, and research structural components and systems to achieve design goals and to ensure the safety of occupants. Ultimately, they ensure the building has the structural support necessary to stand up.
	Their work involves safety, technical, economic, and environmental concerns.
	Structural engineers work closely with architects and other consultants to coordinate design data and information into design plans.
Geotechnical engineer	Geotechnical engineers examine and analyse the makeup of underground foundations. They determine the impact a particular topography or geological formation will have on a construction project (i.e. how deep the foundations need to go).
	Using scientific and mathematical processes, they examine the formation of the earth beneath and around buildings.
Sustainability consultant	Sustainability consultants provide advice on how to integrate sustainable solutions into a construction project.
	Their job is to minimise the carbon footprint and environmental impact of a given project and to plan the use of limited resources.
	They can be involved in a project from the very beginning (designing in sustainability solutions from the start), or they can be brought on later in the process.
Planner	Planners develop plans and programmes for the use of land. They have in-depth knowledge of town and district planning rules and help clients understand what can be done on a piece of land and how that land's use should integrate with the wider community around it.
	Planners help communities manage the economic, social, and environmental issues associated with growth. Their job is to determine the best use of land and resources for residential, commercial, and recreational purposes.
Acoustic engineer	Acoustic engineers specialise in sound and vibrations. They control noise that can affect individuals (such as between apartment units in a residential development) and improve acoustic environments.

Hydraulic engineer	Hydraulic engineers analyse the flow of fluids such as stormwater and sewage. Their role is to develop appropriate systems for the collection, storage, control, and regulation of water and fluids.
Façade engineer	Façade engineers work with a building's 'skin' — in other words, the external cladding that contains the inner workings of a structure. They analyse the performance of the façade with respect to outcomes such as weathertightness, structural longevity and safety, thermal gains and losses, occupant comfort, energy efficiency, ventilation, and more.
Traffic engineer	Traffic engineers are responsible for transportation flows and networks. They design systems such as roads, highways, and streets and analyse the potential impact of proposed traffic on the environment and the surroundings of a given project.
Fire engineer	Fire engineers plan and design safety features that detect, control, or reduce fire and smoke in buildings and structures. They also analyse how fire behaves and how safety features perform in emergency situations.
Civil engineer	Civil engineers plan, organise, and oversee the building and maintenance of structures such as dams, bridges, sewerage systems, and roads.
Graphic and wayfinding designer	Graphic and wayfinding designers create the visual strategy by which people navigate a given area, building (e.g. hospital), or development. They manage design elements such as signage and brand storytelling.

We've got this

We hope you found this guide helpful and informative. For more information about how Context can help you make your design dream a reality, please email us at hello@context.nz or give us a call on **09** 358 0140.

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