

Draftsperson

Workplace Functions, Knowledge and Skills Analysis

Thank you for participating in the workshop and completing this *Workplace Functions, Knowledge and Skills Analysis* form.

The purpose of the Analysis is to gather information from draftspeople across the country using a common format – this will help the technical development team to build a clear picture of the nature of the work performed by draftspeople and the breadth and range of skills and knowledge required. This in turn will help with the writing of both units of competency and qualifications.

In addition to a 'checklist' you are also asked to add information where there are gaps and where you believe the project team may benefit from other ideas – please make use of this section. The more information we have the better!

Would you be willing to be contacted in the future if the project's technical development team needs to clarify content or seek advice? (We promise not to take up too much of your time!):

Yes:

No:

A bit about you:

Your name: _____

Phone number: _____

Email: _____

What is your current role?(eg principal or director of a drafting or building design firm; entry level draftspeople; experienced draftspeople within a building company etc):

How many employees work in your firm (or drafting department of a larger firm eg building company)?

How long have you been in the industry?_____

What are your qualifications?_____

Please complete the following questions. The intent of this process is to gather an understanding of the breadth of functions performed from *your* perspective and reflecting the work you currently perform.

1. In your state or territory, are there regulatory or licensing restrictions on the type of work you can do? Please describe briefly:

2. Please indicate the type of drafting projects *you* currently undertake (this helps us 'scope' the work environment). Please note you may tick more than one:

Types of projects			
	Frequently	Occasionally	Not at all
Single residential dwelling (new)			
Single residential dwelling (extension or renovation)			
Multi-unit residential			
Medium density residential			
Urban design – subdivision for mixed use			

Types of projects			
	Frequently	Occasionally	Not at all
Commercial (eg office buildings; restaurants; shops;)			
<i>If you do undertake commercial work please provide a brief list showing the range of work you undertake:</i>			
Public use building (eg aged care facilities; schools)			
Interior and corporate design			
What have we missed? <i>Other specialised drafting projects undertaken include:</i>			

3. Please indicate the tasks you perform as part of your role.

<p>Please provide a short description of the role you currently perform. This will enable an analysis of the tasks (below) performed by your role. Please also remember to help us 'fill in the gaps' by providing outlines of tasks that you undertake in your role but that are not listed.</p>	<p>Role undertaken:</p>
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Note these tasks are presented in a 'roughly' logical sequence but please do not be concerned if you feel one task should be undertaken before another – this will not affect the preparation of units of competency within a qualification.

4. Do you have any preference for the title of the qualification that may be developed and that you believe best reflects your profession? For example, Certificate IV in Drafting; Certificate IV in Architectural Drafting; Certificate IV in Building Design Technology. Please write your preference here:

5. Drafting Tasks

	Very Important	Moderately Important	Important	Not part of my role
Collect, read, understand, apply and file project information (survey, dial before you dig, etc)				
Research/clarify constraints and compliance requirements				
Set up hard copy project files				
Set up project in Revit (or alternate software)				
What software do you use or will use in the near future? Please name below:				
Import CAD drawings eg land survey				
Take on-site measurements				
Note on-site observations				
Take photographs on-site				
Analyse materials used in existing buildings on the site (eg for renovation/extension)				
Analyse methods of construction used in existing buildings on the site (eg for renovation/extension)				
Analyse architectural style on the site and in neighbourhood				

	Very Important	Moderately Important	Important	Not part of my role
Create measured drawings – including existing buildings				
Create sketch plans – from rough sketch, client brief or designer’s brief, notes or instructions				
Create design concepts – from rough sketch, client brief or designer’s brief, notes or instructions				
Conduct client consultations – independently				
Attend client consultations – as documenter assisting designer (eg ‘drive’ Revit while designer talks client through)				
Attend builder consultations – as documenter assisting designer				
Make free-hand sketches of alternatives at client/builder consultations				
Make amendments to Revit drawings – client’s preferences/changes as notified by designer				
Check – that client’s changes are compliant with requirements				
Create drawings required for development approval (planning approval), plans, elevations, perspectives, sections				
Collect documentation for development approval				
Help us understand the documentation that has to be prepared and lodged. <i>List the range of documentation you prepare:</i>				

	Very Important	Moderately Important	Important	Not part of my role
Amend drawings in response to council feedback eg heritage roof form and shape, height amendment, gross floor area, car parking spaces				
Prepare documentation to apply for 'relaxation' or explaining non-compliance				
Create drawings for construction certificate (building approval)				
Create full framing drawings - tie-downs, bracing structures				
Create shadow drawings eg 9am, 12am,3pm on midwinter's				
Research finishes - ie find manufacturer's specs for floors, tiles, benchtops, paint colours, handles, vanity, bath, windows, doors etc				
Create detailed drawings - eg where fittings to be attached in bathroom; kitchen cabinetry and joinery - show quality of fittings and sizing of panels				
Create detailed floor plans - to show how furniture will fit - how people can move through the rooms				
Create landscape drawings (eg existing trees)				
Collect documentation for construction certificate (building approval)				

	Very Important	Moderately Important	Important	Not part of my role
Ensure notations are correct and consistent across all drawings				
Ensure all details are included				
Ensure clarity of detail - make the drawings easy to look at - not an excess of detail - too confused				
Prepare planning reports (word)				
Respond to emails requesting changes to drawings				
Prepare specification eg doors and windows (excel)				
Obtain specialist advice from consultants etc: access, traffic, lighting, arborist, hydraulic, fire engineer, mechanical engineer, acoustic, energy efficiency, town planners, structural engineers				
Liaise with sales reps regarding new appliances and finishes, floor tiles etc				
Render drawings to watercolour wash				
Render drawings to photo-realistic finish				
Make variations and revisions to drawings during building work as required				
Create as built drawings				

	Very Important	Moderately Important	Important	Not part of my role
<p>What have we missed (or are there general comments you would care to make)?</p> <p><i>Other tasks that are undertaken include:</i></p>				

6. Drafting – Required Skills and knowledge

	Very Important	Moderately Important	Important	Unimportant
Technical				
Ability to read plans and drawings - including those from other disciplines - eg land survey, hydraulic, fire engineer				
Thorough understanding of Revit - industry standard software - including how to use shortcuts				
How to turn a Revit model into documents such as plans, elevations				

	Very Important	Moderately Important	Important	Unimportant
How to make a drawing look as good as the building				
File management, backup and archiving protocols and skills				
CAD – autoCAD/ArchiCAD				
Word use				
Excel use				
Google and google maps use				
Design terminology				
Knowledge of building construction techniques and processes (simple and complex to enable proper communications with builders and structural engineers etc)				
Knowledge of building materials and their application				
Knowledge of basic principles of structural engineering				
Knowledge of architectural styles				
Knowledge of town planning processes and requirements				
Knowledge of building sustainability (including codes and standards: 'green building'; 5 or 6 star rating etc)				
Knowledge of bushfire attack and design of fire resistant buildings				
OHS requirements (working safely when visiting a site)				

	Very Important	Moderately Important	Important	Unimportant
Take photographs on site - know what photographs required (eg 10 houses either side/opposite)				
Measuring a site and representing measurements accurately and comprehensively -- every wall, window				
Scale - and an understanding of how to use scale to make drawing more easy to understand				
Compliance requirements				
Research skills - to find out all the constraints that could possibly apply				
NCC / BCA				
Australian standards - eg termite proofing, rainwater management, childcare centres, dentist surgery				
Relationship between AS1684 (timber framing) and drawings				
Premises standards				
Help us understand the Acts, Standards, Regulations and Schemes that impact on your work. Please list below:				

	Very Important	Moderately Important	Important	Unimportant
How to represent compliance requirements on a drawing				
Local council codes and requirements				
'Soft' skills and knowledge				
High level communication skills (listening, verbal and writing)				
Conflict resolution				
Presentation (representing the business well)				
Time management (including planning and prioritising work)				
Problem solving				
Analytical skills and interpreting information				
Attitude and aptitude				
Spatial awareness - ability to visualise 3D from 2D drawing				
Awareness of dimension - spaces required for eg laundry, toilets				
Visual awareness - space, colours - make interior functional, practical and aesthetic				
Understand ease of readability of plans - consider the audience - line up levels - consider the layout on a sheet of drawings - make sure it has a logical flow				
Self-directed learning - exploring Revit capabilities, updating compliance requirements				
Meticulous attention to detail - perfectionist				

	Very Important	Moderately Important	Important	Unimportant
Patience				
Problem solving - how to make the area plan work - will the furniture fit etc				
Discuss with designer - clash of ideas - what client wants/ what is allowed				
Ability to adapt to differences in requirements - eg for different councils				
Ability to walk in client's shoes - be sensitive to their needs and preferences				
Observation - on site - know what to look for - features of other houses, streetscape/ character				
Apply intuitiveness to the drawing - clarity and logic				
Methodical approach to site measure - every wall, window				
Scale - and an understanding of how to use scale to make drawing more easy to understand				
Incoming Issues				
BIM software				
Other technology upgrades (please name):				
Changes to compliance requirements				

	Very Important	Moderately Important	Important	Unimportant
Use of tools and equipment				
Laser measure				
Tape measure				
Camera				
Contingencies				
Property boundary incorrect at beginning of job (may have been incorrect information from Land survey)				
Registration, Licensing, Accreditation, Restrictions to practice				

	Very Important	Moderately Important	Important	Unimportant
<p>What have we missed (are there other skills and knowledge that are required)?</p>				

7. Do you have any other comments you would care to make to inform the technical writers?

Thank you for your time, effort and ideas!