

2023

Get Certified

Certified Professional Land Development Engineer

Candidate Guide



**Survey
and Spatial
New Zealand**
TĀTAI WHENUA

Author: J ALBISTON – Copyright Survey &
Spatial New Zealand

7/2/2023

Welcome to our ‘Get Certified: Candidate Guide for applying to become a ‘Certified Professional Land Development Engineer’	2
Get Certified: What the overall Process looks like	2
Get Certified – How Candidates are assessed	3
Overview of Assessment for S+SNZ Certified Professional Land Development Engineer	3
Part A: General Professional Competence	4
Part B: Technical Competence – Land Development Engineering	4
Certification of Professional Land Development Engineering Competence	5
Purpose Statement	5
Competence Standard	5
Certified Professional Land Development Engineer: Eligibility Criteria Guide	6
Before you start: Generic Requirements for Your Application	7
Summary of Competencies for Land Development Engineering Part A – General Professional Competence:	8
Requirements and Guide for Land Development Engineering Part A – General Professional Competence:	9
Preparing to Apply for Certification: Checklist for Part A – Professional Conduct, Communication Skills, Good business Practice	10
Summary of Competencies for Land Development Engineering Part B – Technical Competence:	11
Requirements and Guide for Land Development Engineering Part B – Technical Competence:	12
Preparing to Apply for Certification: Checklist for Part B – Engineering Design	13
Preparing to Apply for Certification: Checklist for Part B – Build	13
Preparing to Apply for Certification: Checklist for Part B – Manage	14
Preparing to Apply for Certification: Checklist for Part B – Third Party Validation and Interactive Assessment	15
Final Advice	15

Welcome to our 'Get Certified: Candidate Guide for applying to become a 'Certified Professional Land Development Engineer'

Congratulations on setting a goal to become a Survey and Spatial New Zealand Certified Professional Land Development Engineer. This Guide is designed to inform you about the prerequisites for assessment and the details you need in order to successfully navigate the application and assessment process. Our aim is to make every step of the way as user friendly as possible. We invite you to give feedback on your experience.

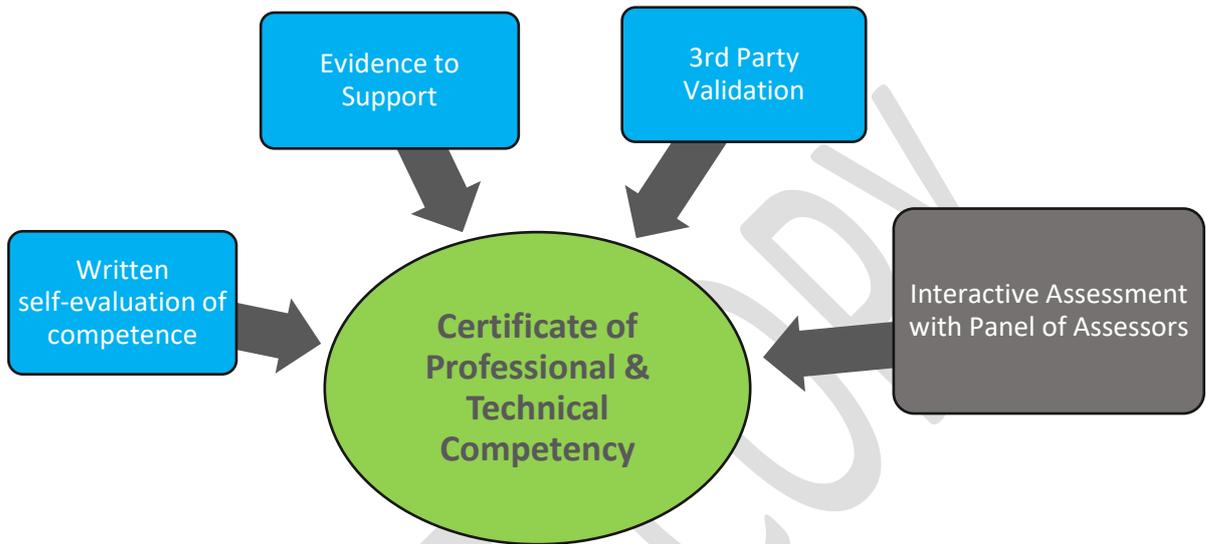
Get Certified: What the overall Process looks like

This diagram shows you what the process of getting certified entails. It starts at the top with a person gaining work experience in Land Development Engineering, along with qualifications that bring them to the level of competence required for getting certified. In general, 7 years work experience in Land Development Engineering is *strongly recommended*, before applying for this Certification.

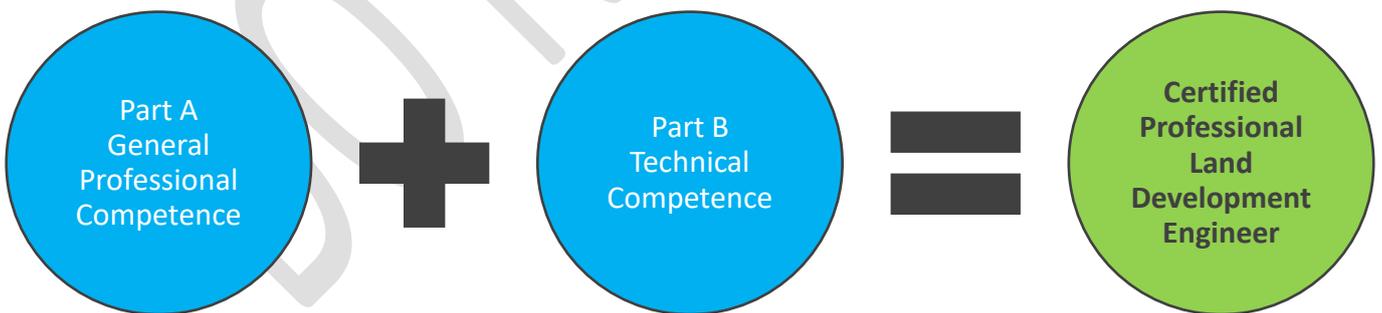


Get Certified – How Candidates are assessed

The Assessment has two parts. Part A (General Professional Competence) and Part B (Technical Competence) both have their own set of competencies. These competencies are assessed in four different ways as in the diagram below. The first three in blue, are part of the online application. The fourth in brown, is scheduled after the online application has been assessed.

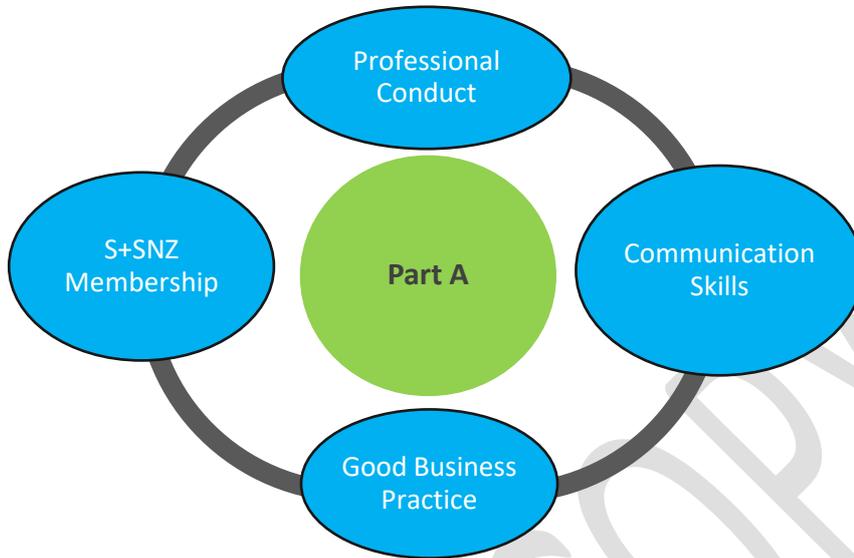


Overview of Assessment for S+SNZ Certified Professional Land Development Engineer



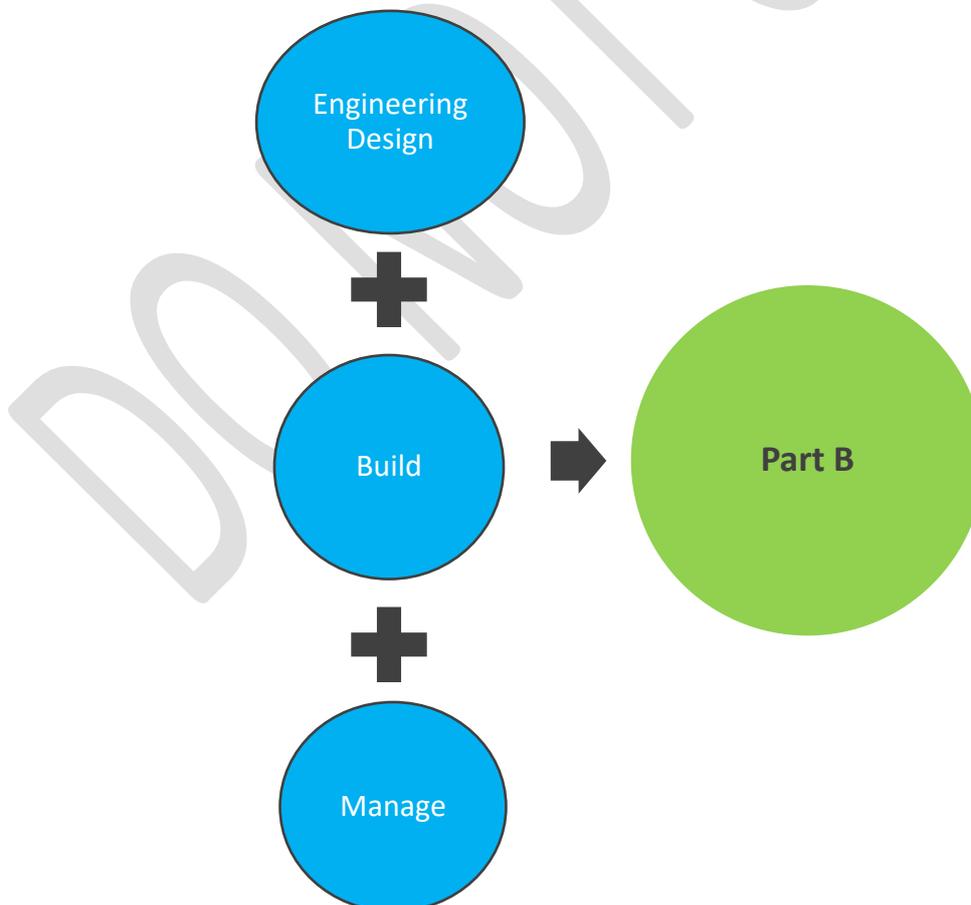
Part A: General Professional Competence

Part A is the assessment of General Professional Competence. It assesses competence in the following areas:



Part B: Technical Competence – Land Development Engineering

Part B is the assessment of Technical Competence in Land Development Engineering. It assesses competence in the following areas:



Certification of Professional Land Development Engineering Competence

Purpose Statement

The Certification of Professional Land Development Engineering Competence is formal recognition by Survey and Spatial New Zealand of those who have been assessed against a defined set of professional and technical competencies which meet the Civil Engineering standards and technical sign off criteria required by Private and Public Asset Owners, Territorial and Local Authorities and other such Entities (as it relates to Land Development).

The Annual Practising Certificate as a *Survey and Spatial New Zealand Certified Professional Land Development Engineer* sets a quality benchmark for the industry to maintain public confidence across the following areas:

- Earthworks, Erosion and Sediment Control
- Access, Roding and Transportation
- 3 Waters (Stormwater Management, Wastewater Management, Potable Water)
- Utilities (Energy and Communication)

Competence Standard

This Certification recognises prior learning and current competency to the standard required to sign (but not limited to):¹

- Engineering Design Certificate of Land Development and Subdivision (Engineering Plan Approval Stage 1 – Design, NZS 4404 Schedule 1A or equivalent)
- Certificate upon Completion of Land Development/Subdivision or equivalent (e.g., Engineering Plan Approval Stage 3 – Completion and Handover, NZS4404 Schedule 1C)
- Engineering Design Certificate of 3 Waters Assets (or any component) - (Compliance Statement Design-CS1 or equivalent)
- Construction Monitoring Certificate of 3 Waters Assets (or any component) – (Compliance Statement Construction Monitoring – CS4 or equivalent)

¹ This Certification assesses to the standards required and recommended by (but not limited to): NZS 4404 (2010), NZS 3910, the Construction Contracts Act 2002 and the Resource Management Act (RMA); specifically, the s223 and s224c RMA process.

Certified Professional Land Development Engineer: Eligibility Criteria Guide

The following table is a general guide to candidates looking to apply to become Certified Professional Land Development Engineers. Everyone's experience is different depending on the company they work for, the projects they work on, the level of responsibility they are given, how driven they are to advance and how much effort they put into learning from peers and upline management. In general, we have seen that most candidates require 7 years solid Land Development Engineering experience to meet the competency required to be a Certified Professional Land Development Engineer. We will continue to review this and report as our data set of applications grows.

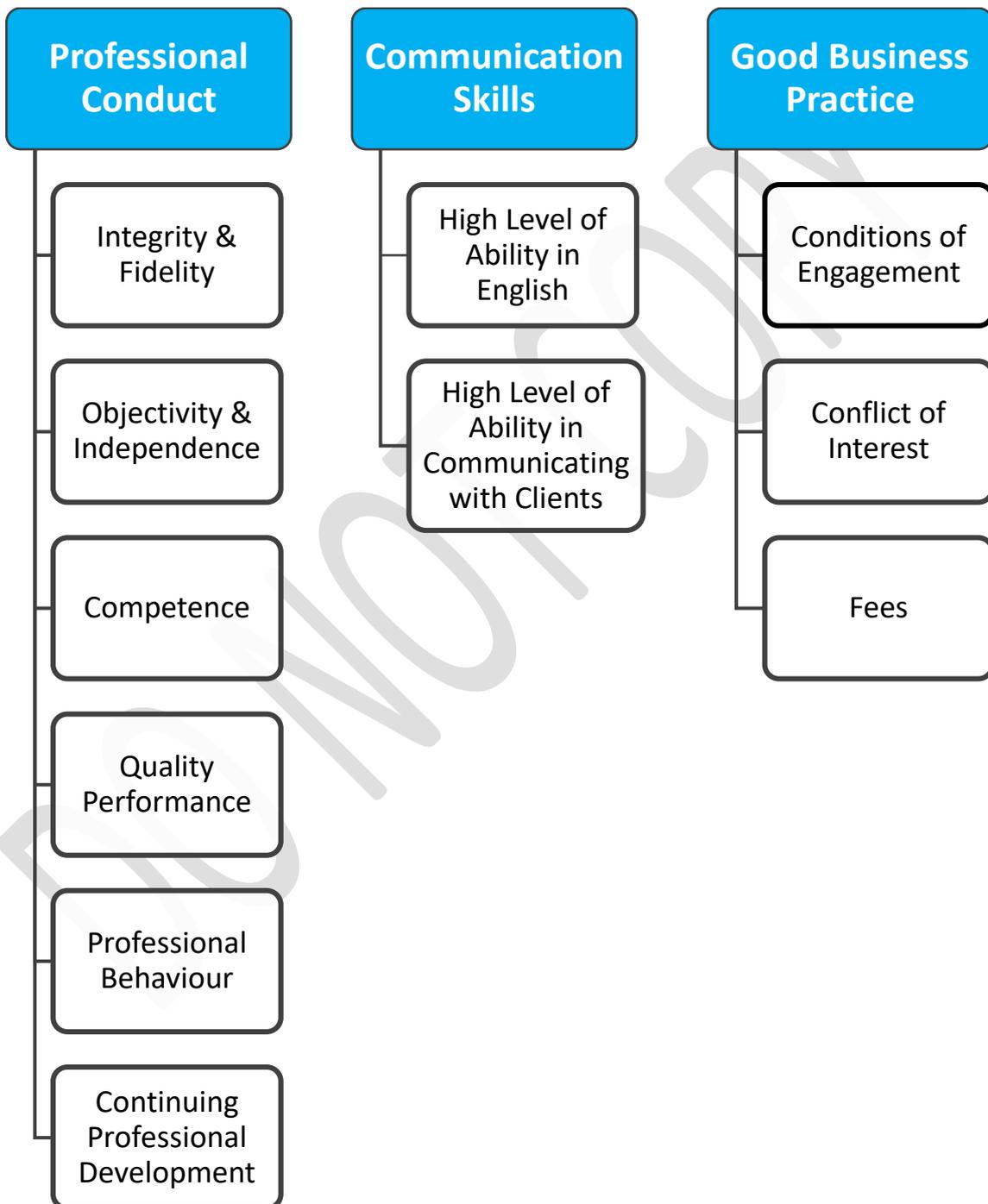
DO NOT COPY

Before you start: Generic Requirements for Your Application

-  S+SNZ Membership (either Associate or Full)
Screen shot of Member Profile viewable by the Public (must have privacy setting set so that everyone can view your profile)
Member Profile filled out with Profile Photo
-  Up to date CV (can be a PDF of LinkedIn Profile)
-  Photo ID (Driver's Licence or Passport
Most recent LCS (if applicable))
-  Belong to the Land Development & Urban Design Stream

Summary of Competencies for Land Development Engineering Part A – General Professional Competence:

Certified Professional Land Development Engineers must have a foundational knowledge and understanding of, a commitment to and ability in, the following:



Requirements and Guide for Land Development Engineering Part A – General Professional Competence:

Written self-evaluation of competence

- You are required to write 3 paragraphs for the 3 subsections: Professional Conduct, Communication skills, Good business Practice (each one to be 400-600 words), outlining why you believe you meet the competencies under those sections. This is intended as a self-reflection style of assessment, giving you the opportunity to write what really makes you stand out in terms of the values you incorporate into your work, your ethics, moral compass and how that influences your engagement and communication with clients and in your general business practice.

Evidence to Support the Self-Evaluation

- You are required to provide specific examples of evidence from work situations and projects that prove you meet the standards required for the 3 subsections. Note that for Part A, this is mainly values based as per the competencies under Professional Conduct, ability to communicate under Communication Skills, and under Good Business Practice, it is based on proving your ability and experience in dealing with contracts, conditions of engagement, fees, conflicts of interest, including risk and liability. It is recommended also to note the foundational knowledge and understanding required and to include evidence of those points, if you have it. Evidence can include (but is not limited to) emails (communication with clients, peers, superiors and others), references, client feedback and quality assurance documentation.

3rd Party Validation of Competency

- This section requires written validation from two 3rd Parties, of your ability to meet, and commitment to uphold, the General Professional Competencies: Your employer or equivalent, AND Your Choice of referee (such as Local Authority/Council personnel who are familiar with your work or suitably qualified peers). At least 1 referee must be a member of Survey and Spatial New Zealand. Family members are NOT allowed to be referees. Upload 2 References that have been PDFed & emailed to you, when your Referees filled in the S+SNZ Part A General Professional Reference Forms online.

Interactive Assessment with Assessor Panel

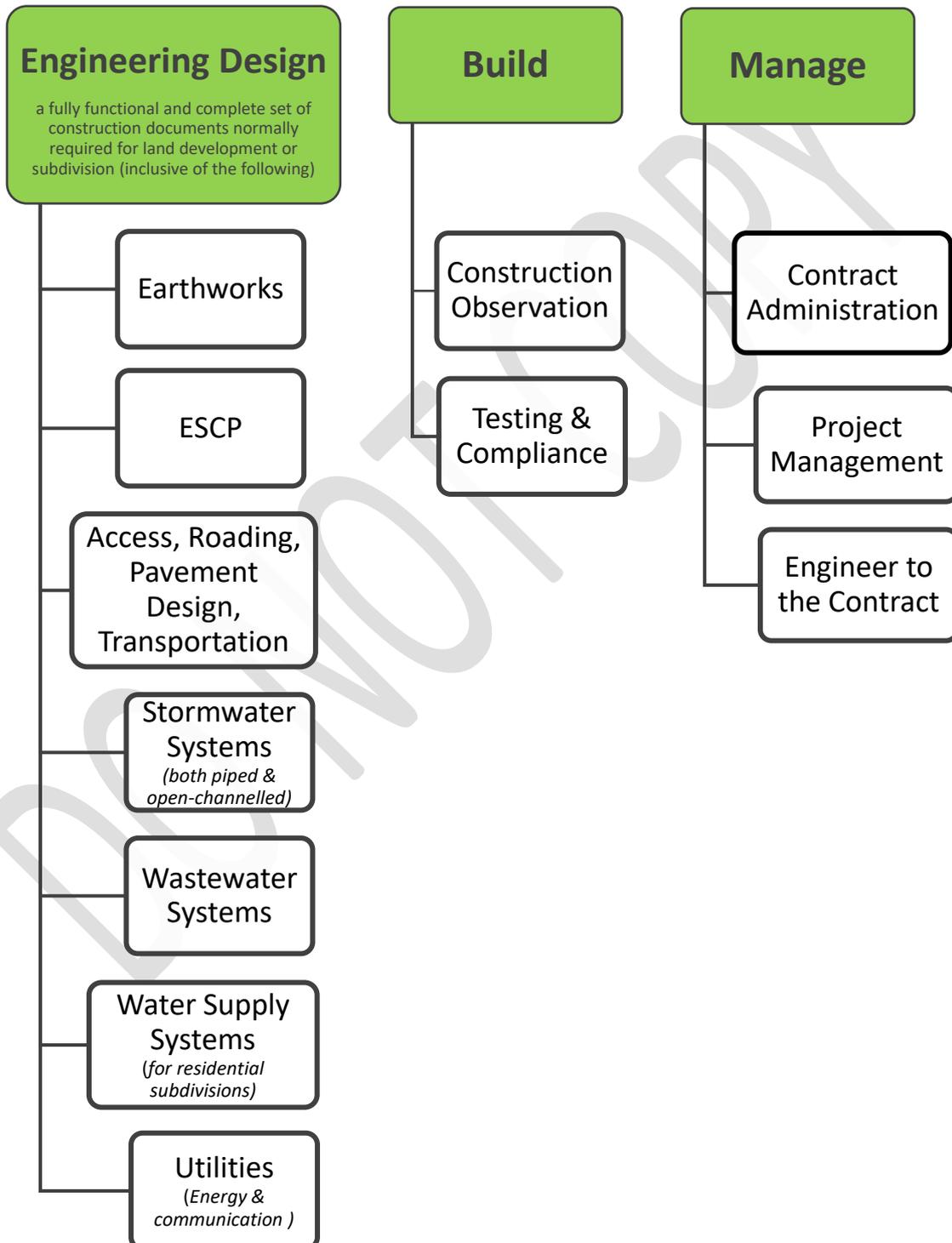
- This is a professional conversation where the Assessors ask you to discuss your application and to address any gaps the Assessors may have found. Ensure that you are prepared to discuss any of the points under 'Foundational Knowledge and Understanding' for each section in Part A, as the Assessors can include these in the Interactive Assessment. The format is of a round table discussion rather than a traditional formal interview. You will receive separate notification of the day and time for your interactive assessment.

Preparing to Apply for Certification: Checklist for Part A – Professional Conduct, Communication Skills, Good business Practice



Summary of Competencies for Land Development Engineering Part B – Technical Competence:

Certified Professional Land Development Engineers must have a sound ability in & solid foundational knowledge of the following:



Requirements and Guide for Land Development Engineering Part B – Technical Competence:

Written self-evaluation of competence

- You are required to write 4 paragraphs for the 3 subsections: Engineering Design, Build and Manage (each one to be 400-600 words), outlining why you believe you meet the competencies under those sections. This is intended as a self-reflection style of assessment, giving you the opportunity to write what really makes you stand out in terms of your technical knowledge, understanding ability, competence and experience in all 3 areas.

Evidence to Support the Self-Evaluation

- You are required to provide specific evidence for each section. These are detailed in the Part B Checklists in this document. You must be prepared to talk through your evidence in the Interactive Assessment and demonstrate a comprehensive understanding of the evidence you have provided.

3rd Party Validation of Competency

- This section requires written validation from three 3rd Parties, of your ability to meet, and commitment to maintain, the Technical Competencies for Land Development Engineering: Your employer or equivalent, AND Your Choice of 2 referees (such as Local Authority/Council personnel who are familiar with your work or suitably qualified peers). At least 1 referee must be a member of Survey and Spatial New Zealand. Family members are NOT allowed to be referees. Upload 3 References that have been PDFed & emailed to you, when your Referees filled in the S+SNZ Part B Technical Competence: Land Development Engineering Reference Forms online.

Interactive Assessment with Assessor Panel

- This is a professional conversation where the Assessors ask you to discuss your application and to address any gaps the Assessors may have found. Ensure that you are prepared to discuss any of the points under 'Foundational Knowledge and Understanding' for each section in Part B, as the Assessors can include these in the Interactive Assessment. The format is of a round table discussion rather than a traditional formal interview. You will receive separate notification of the day and time for your interactive assessment.

Preparing to Apply for Certification: Checklist for Part B – Engineering Design



400-600 word paragraph for Self-Evaluation of Engineering Design (Design of a fully functional and complete set of Construction Documents for land development and/or subdivision: Earthworks, ESCP, Access, Roothing (including pavement design), Transportation, Storm Water Systems (both piped and open channelled), Wastewater systems, Water Supply systems for residential subdivisions, Utilities (energy and communication) . It is recommended that you write this in a Word Document so that you can copy and paste it into the online application form.



Evidence required:

2x **Plan** Sets with supporting documentation.

If you have not personally been designing full plan sets for a while then it is strongly recommended that you provide example 1 - a plan set and supporting docs that you did personally by yourself (even if it is a few years' ago) and for example 2 (in the next box) - a plan set and supporting docs that you oversaw and supervised a drafty doing and that you know every inch of

Preparing to Apply for Certification: Checklist for Part B – Build



400-600 word paragraph for Self-Evaluation of Build (Construction Observation, Testing & Compliance). It is recommended that you write this in a Word Document so that you can copy and paste it into the online application form.



Evidence required:

Construction Observation (Inspecting & Reporting) Upload documents such as site meeting notes, records, reports, correspondence and emails that demonstrate your ability to inspect and report on the construction of: Earthworks (including ESCP), Access, Roothing (including pavement design) and Transportation, Storm Water Systems (both piped and open channelled), Wastewater systems, Water supply systems for residential subdivisions, Utilities (Energy and Communication).

2x successful **224c applications** for the engineering works associated with land development or subdivision that you have prepared and submitted

Preparing to Apply for Certification: Checklist for Part B – Manage



400-600 word paragraph for Self-Evaluation of Manage (Contract Administration, Project Management). It is recommended that you write this in a Word Document so that you can copy and paste it into the online application form.



Evidence required:

Managing the Claims Process and Variations to the Contract Upload documents and communications that show you can confidently manage the claims process, including variations to the contract AND that explain the processes you use, including managing communication across all parties. You are welcome to write this in Word and include screen shots and then PDF.



Evidence required:

Conducting Site Meetings and Visits as per the role and duty of Engineer to the Contract Upload documents such as site meeting reports, agendas and communications that show you can confidently conduct Site Meetings and Visits as per the role and duty of Engineer to the Contract, even if you have only acted as Engineer's Rep to date. The evidence you provide needs to clearly show the usual structure of your Site Meetings and Visits, how they are reported on and the process used to take action post Site Meeting or Visit including confidently managing communication across all parties.

Preparing to Apply for Certification: Checklist for Part B – Third Party Validation and Interactive Assessment



3 References that have been PDFed & emailed to you, when your Referees filled in the S+SNZ Part B Land Development Engineering Reference Forms. Note that you can get as many referees as you like to fill in the form and then select the 3 you want to upload as part of your application online.



Be prepared for the **Interactive Assessment**. Have your application printed out or on an additional screen in front of you, be familiar with what you submitted and be prepared to talk through all your examples and elaborate on them if asked. Make sure you have read through and are prepared to talk about the points under Foundational Knowledge & Understanding as well as the points under the competency subsections. Pay particular attention to competencies you are less familiar with, especially those under the Manage Section. Make sure you can explain what, why and how and upskill if you need to, in order to be well prepared.

Final Advice



The Get Certified Land Development Engineering Competency Doc is your friend. Read it, study it, be super familiar with it, practice talking through it with a peer, be prepared to talk about anything and everything in it. If you are a bit rusty or need to upskill on any of the competencies then do that before applying.

Always get documents from the S+SNZ website - the latest versions will always be uploaded under Certification: Certified Professional Land Development Engineer



Get involved in the Land Development Engineering Stream (Land Development & Urban Design). Email ldud@surveyspatialnz.org to connect.

Get involved with your Local Branch - start networking and meeting other Land Development Engineers and Certified Professional Land Development Engineers

Let us know if you need help - especially if you don't know a S+SNZ Member who can write you a reference. Email us on certification@surveyspatialnz.org