

CIBC5022 Site Survey Preparation and Analysis Site Reports

Introduction

We look at Site Reports. These are a description or a brief of the scope of works and the basis by which a construction plan for, say tendering, and the eventual winning tenderer's site management plan is formulated.

1. The **construction plan** is not a programme. A programme is a quantifiable network or Gantt chart composed of durations to arrive at an exact completion date.
2. A **construction plan**, in contrast, is a technical essay - a written play composed only of those key scenes and players, plus onstage cast and crew, sufficient to describe the plot.
3. If you could **summarize** each act and each scene, together with their fixed and moveable background props – it may be a method statement,



Example - Actors in an Operatic Scene

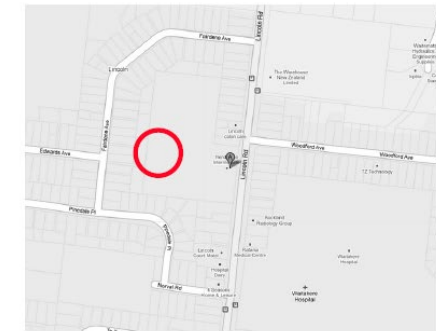
GWD 03.1 Fixed Oral Health Care Units

ARCHITECTURAL DRAWING LIST

- 00 COVER SHEET / LOCALITY MAPS
- 01 SITE EXISTING / DEMO PLAN
- 02 PROPOSED SITE PLAN
- 03 FLOOR PLAN, ELEVATIONS & SECTION



AERIAL VIEW MAP



SITE LOCALITY MAP

KAY & KEYS
architects
Status: OUTLINE PLAN OF WORKS Date: 13/04/2010

Fixed Oral Health Care Units
6 CHAIR FACILITY
HENDERSON INTERMEDIATE
70 LINCOLN ROAD
HENDERSON 0610
AUCKLAND

Example - The Cover of a NZ Resource Consent Application reused for height, breadth, depth of Temporary Building Works.



Different Groups

Frequently, the person (or groups of people) preparing the plan are not the same group as those supervising and undertaking the work.

Different Times and History

This often occurs because there is a time lag between tendering / bidding for the work (when the initial plans are made) and the start of the work on site.

Different Authors

Often a supervisor arrives on site and is presented with a plan / schedule in which they had little or no involvement.



Example

To re-establish key elements the earlier Traffic Plan of the development on surrounding areas is reused for Construction Traffic - Write a method statement.

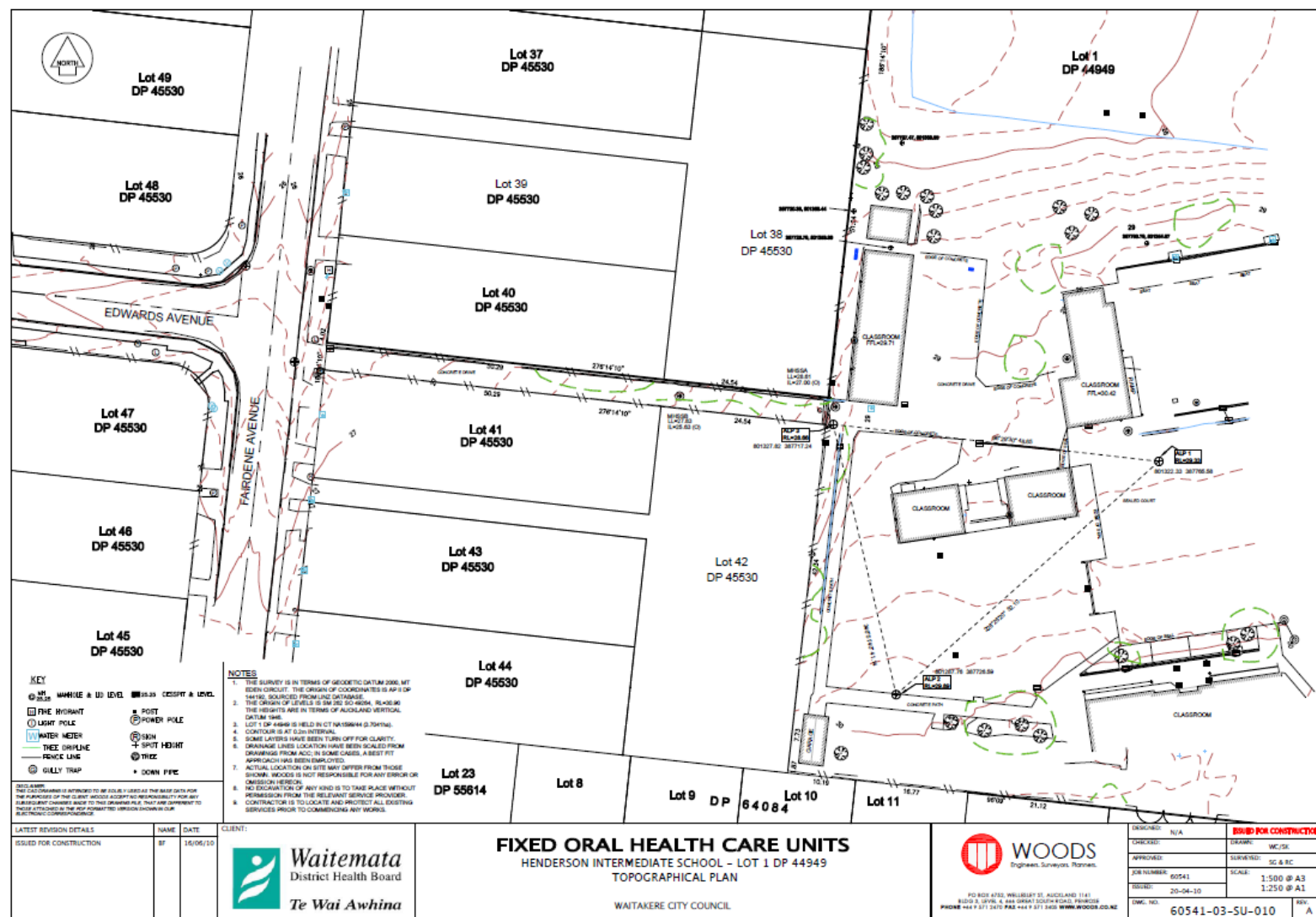
Figure 4: Bus Routes within the vicinity of Henderson Intermediate School





Example

Another check of key scenes - the Topographical Plan can be used to check the surrounding ground levels and to check the positions of Geotechnical Investigations. Write a method statement.





Cost Plans Can Be Out Of Date

The plan often lacks detail or makes assumptions about the scope of work, productivity rates, work methods, resources to be used and other pertinent information.

Start and Finish Dates

It may have been assumed, for example, that the work will start during good weather, but as a result of delays in awarding the contract, commencement may not occur until after inclement season weather.

Key Resources

Furthermore, key resources assumed to be available may no longer be available and the scope of work may change between the initial plan being formulated and the start on site.

Engineering Log - Hand Auger

Client: **WAITEMATA DISTRICT HEALTH BOARD**

Principal:

Project: **DENTAL FACILITY - HENDERSON INTERMEDIATE**

Hand Auger Location: *Refer to site plan*

Hand Auger No. **HIHA01**

Sheet 1 of 1




Project No: **GENZSILV14388AA-I**

Date started: **5.8.2009**

Date completed: **5.8.2009**

Logged by: **LS**

Checked by: **LS**

Vane No: 466/ia				Easting: m		Slope: -90°		R.L. Surface: 28.14 m			
Hole diameter: 50 mm				Northing: m		Bearing:		Datum:			
drilling information				material substance							
stratigraphy	water	notes samples, tests, etc	RL	depth metres	graphic log	classification symbol	material Soil type, colour, structure, Grading, bedding, plasticity, sensitivity. Secondary and minor components, additional information	moisture condition	consistency/ density index	vane shear (remoulded peak) kPa	structure and additional observations
Fill			28.0				TOPSOIL		VS		
			27.5	0.5		MH	Clayey SILT; light brown/light grey, streaked orange, medium plasticity with minor root etc	M		●	X
				1.0		CL	Silty CLAY, grey, streaked orange, medium plasticity	W	SI	●	X

Example

Check FFL's (Finished Floor Levels), or RL's (Reduced Levels), by observing what excavating material we require and monitoring them. Write a method statement.





The Contract Documents

Many different types of plans and programmes are drawn up to cover the various aspects of the construction work.

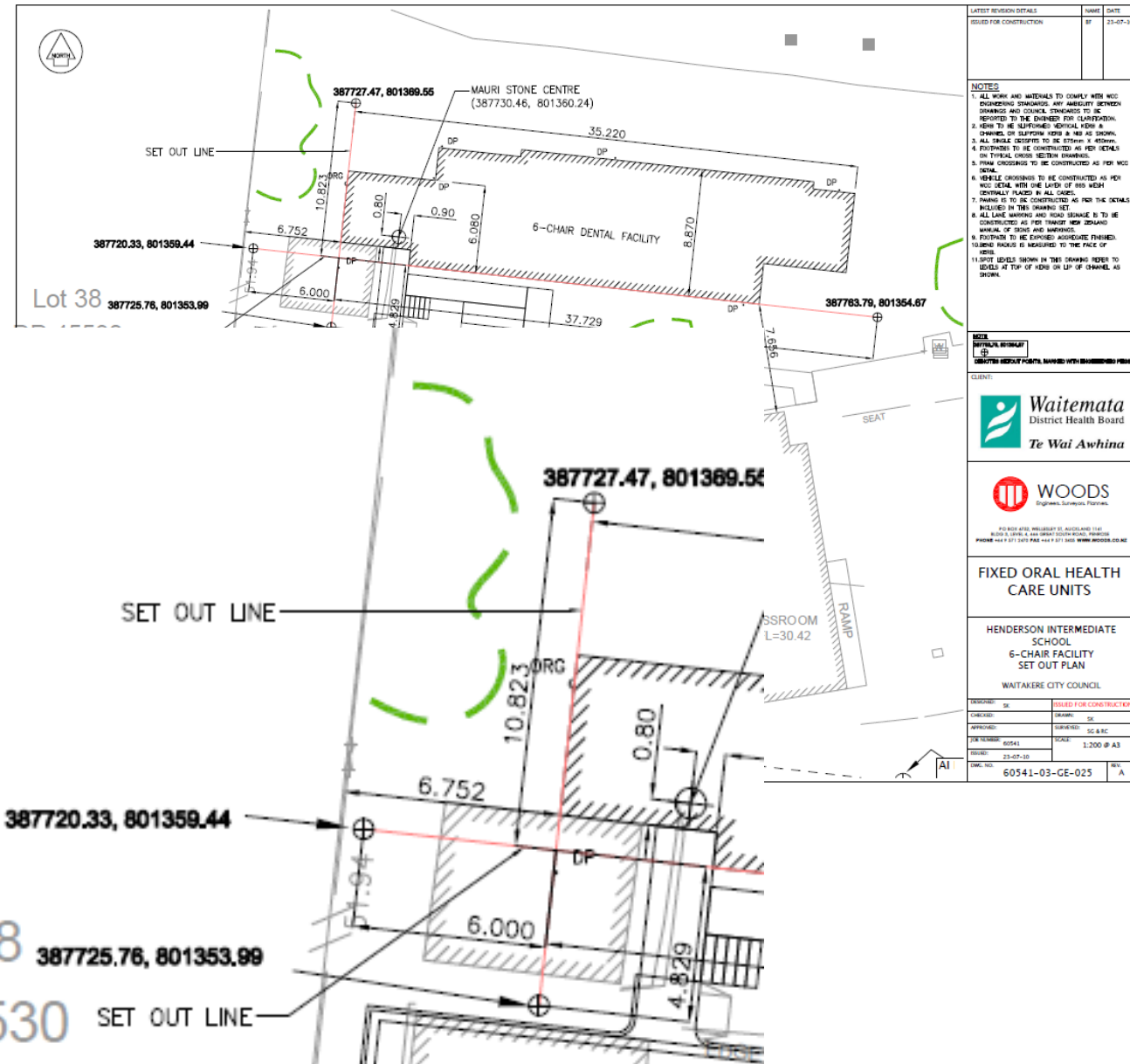
Key Documents

Depending on the objective of your individual element or supply planning exercise, the scope of the plan or programme may vary considerably, as well as the degree of detail included between each Element or Supply.



Example

The Site Setting Out Plan should show bench marks from which we can obtain site levels and check our heights and distances. Write a method statement.





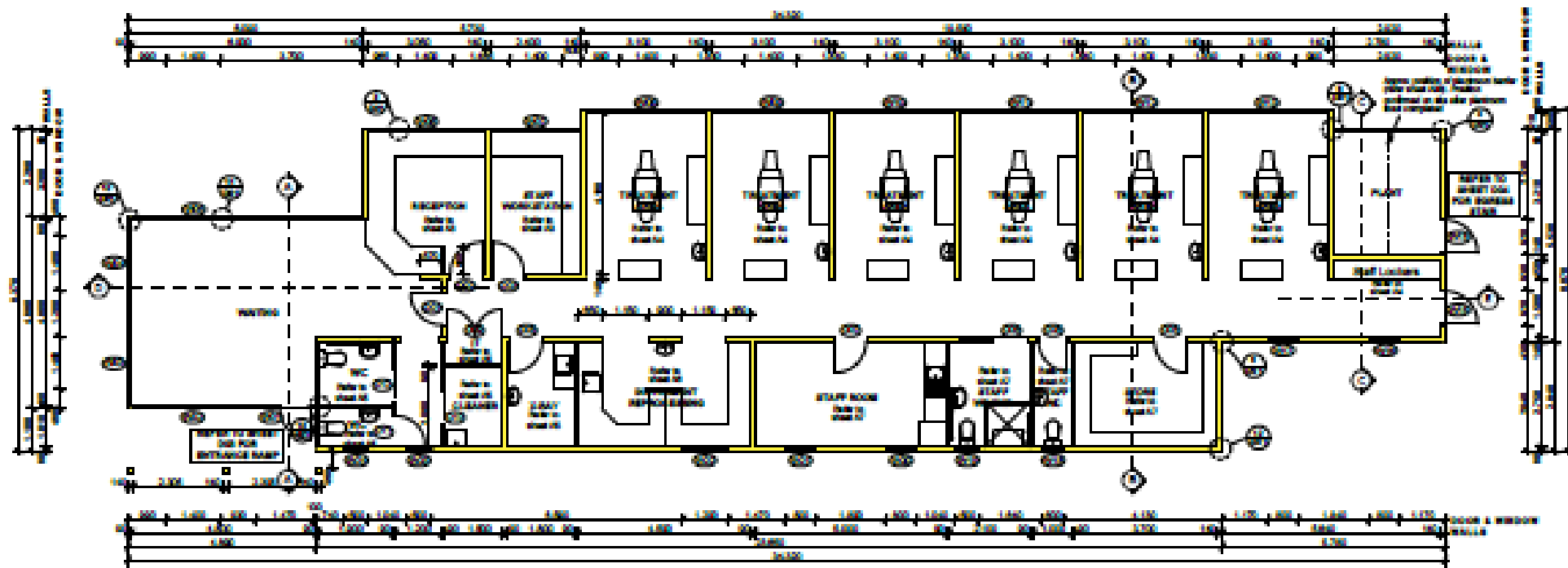
Components

A construction programme is a component of a construction plan. Other components of a construction plan include the:

- Health & Safety Plan
- Quality Assurance Plan
- Construction Methodology Statement



Example – The floor layout plan is of major interest to the client. A method statement as to what the client will see during building operations will form Health and Safety.



FLOOR PLAN, 6 Chair - Level 2
Scale 1:100



Example
Council
Building
Inspections
may form
Contract
Deliverables
for Quality
Assurance.



Waitakere Central
6 Henderson Valley Rd
Henderson 0612
Waitakere

Waitakere City Council
Private Bag 93109
Henderson 0650
Waitakere

Telephone
09 839 0400

TAX INVOICE

GST Registration Number

52-211-247

HENDERSON INTERMEDIATE SCHOOL
70 Lincoln Road
Henderson
WAITAKERE 0610

Date: 26 April 2010
Customer No: 311403
Invoice No: 458835

COPY

Application Location: 70 Lincoln Road, Henderson

Application: COM-2010-413

Fee Code	Transaction Description	Amount
BLDL	Building Levy	96.53
BLDR	Building Research Levy	49.00
COUNTR	Counter Processing Fee	189.00
PLNPRO	Plan Processing Fee	1,027.25



The Contractual Parties

Generally, the higher up the chain of command this is intended for, the broader the view (i.e. macro level), with main activities summarised and milestones identified.

The Elemental and Trade Suppliers

Conversely with programmes prepared for site operation (i.e. micro level) use, the degree of detail increases as the practicalities of the scope of works are outlined.



Logical Links in the Methodology

Look at what each component within the plan influences, and in turn, is influenced by, in terms of iteration of other components.

For example, the construction methodology influences the programme and vice versa.

Component Links

Similarly, the health and safety plan influences methodology and vice versa.

This can result in numerous circular discussions – ‘to-ing and fro-ing’ – during the development of the plan and programme.

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In summary Then For The Construction Plan:

In planning construction work there must be:

- An understanding of what has to be built;
- Establishment of the correct construction method;
- Use of the right plant and right labour to carry out the work;
- Health and Safety considerations;
- Delivery of quality in the most economic manner; and
- Satisfaction of the Client's requirements.



In Summary For the Construction Methodologies - Read The Contract Documents

Understanding what has to be built is essential and this is developed through a study of:

- Drawings;
- Specifications;
- Schedule of Quantities;
- Special Conditions of Contract;
- Statute Law, Codes and Standards; and
- Site conditions.



But How Do We Communicate The Plan and its Methodology to all the Actors and Crew?

The key actors and crew are client and contractor.

1. We present the plan and its methodology parts at Tender to illustrate risks addressed or omitted.
2. If shortlisted, we negotiate the parts of the risk of the Plan during Tender.
3. If awarded the Project, then the final plan and methodology becomes the signed contract documents. Then we can all build one project.