



SITE INSPECTION

Snave construction
38 Grace avenue
Mt. Maunganue
New Zealand

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ANDREAS LÚÐVÍKSSON
7th semester, autumn 2004



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REGION	TAURANGA	SITE NAME	
		JOB CODE NO	DIVING POOL
SITE LOCATION	WINDERMERE	NEAREST MAIN LINE STATION/AIRPORT	TAURANGA AIRPORT
INSPECTION BY	Andreas Ludviksson	DATE	13. july 2004
1. ACCESS (Off site)			
a. Restrictions on existing roads and bridges to site for heavy plant		NO	
b. Restrictions on use of local roads (Reinstatement costs for example if damaged)		NO	
c. Is there a need to build a temporary road during construction		Partly. A load bearing path needs to be established on east & west side for crane access	
2. ACCESS (On site)			
a. Overhead obstructions		NO	
b. Ground level obstructions		NONE	
c. Underground obstructions		Power line goes trough the site and needs to be relocated	
d. Buildings & trees		Trees need to be removed	
e. Old founds. and Basements		NONE	
f. Watercourses		NONE	
3. BOUNDARY CONDITIONS			
a. Adjacent buildings and trees (Height & obstruction value)		NONE	
b. Proximity of Railway lines & public roads (Effect on tower cranes)		NO	
c. Safety of the public (Need for covered ways, etc. Cranes over swing with loads)		NONE	
d. School playgrounds, Park etc.		NONE	
e. Adjacent watercourses		NONE	
f. Adjacent Mains and Sewers		NONE	



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<p>4. NOISE</p> <p>a. Nearby Hospitals, Schools, Offices, etc</p> <p>b. Restrictions on nightwork or weekends</p>	<p>School is located about 200-300 mtrs distance. Does not affect working hours</p> <p>NONE. Restirictions are only in residential arias where work can only take place between 7.30 am to 8 pm, 7 days a week</p>
<p>5. PUBLIC UTILITY SUPPLY FOR CONSTR.</p> <p>a. Water - Availability & Location</p> <p>b. Electricity - Availability & location</p> <p>c. Telephone - Availability & location</p> <p>d. Foul Sewers - Availability & Location</p>	<p>NONE</p> <p>NONE</p> <p>NONE</p> <p>NONE</p>
<p>6. VISUAL SURFACE GROUND CONDITIONS & LOCAL GEOLOGICAL FEATURES</p> <p>Visual surface is grass. Firm foundations is found up to approximately 4,5 mtrs below ground level. See attached geotechnical statement.</p>	
<p>7. LOCAL WORKING WEEK</p> <p>Monday to Friday 7.30 am to 5 pm</p>	
<p>8. LOCAL HOLIDAYS</p> <p>2004 1/1, 2/1, 6/2, (9/4, 12/4 eastern) 25/4, 7/6, 25/10, 25/12, 26/12</p>	
<p>9. LOCAL WEATHER CONDITIONS</p> <p>Warm temperature clomate, average temperatur 14,2°C (average high 18,3°C) Average annual rainfall 1349 mm wich falls on relatively few days. Can be heavy showers during those days. Thunderstorms are not uncommon. Sun hours between 2.200 and 2.400 per year. See attached statement.</p>	
<p>10. REMARKS</p>	

Andreas Lúðvíksson

GEOTECHNICAL

A Geotechnical Report has been obtained, and will be available on site. Firm foundation is found up to approximately 4.5m below ground level. Below this, the ground is unable to support the load required for a building such as this until a depth of 24 – 26m is reached. Here there is firm footing.

Options available under these conditions:

Dynamic testing/Compaction – This is time consuming, expensive, labour intensive, and not suitable for wet ground.

Pre-loading - Similar cost to excavation, takes twelve months, grass must be provided to reduce silt run-off and drainage or ponding facilities must be installed.

Excavation and Replacement – Cost approximately \$50 - \$100k

Friction Piles – Not the best option due to the excessive depth.

Concrete Pads - Require firm ground.

Raft - Most suitable and economic method for this situation. Raft to consist of a tied pad and beam layout. Excavate to a flat site, and box for beams and columns.

DEMOLITION/RELOCATION

There are currently a number of transportable buildings located on the proposed construction site. As indicated on the site plan, a number of these are to be removed and relocated prior to construction commencing. The Polytechnic owns a large area of land on the other side of Windermere Drive, which has been prepared for the relocation of these buildings.

According to the 2001 Census most of Tauranga's population is in the 15-60 age group. 21.9% of the population is 60 or more years old, higher than the national average of 15.4%.

The median age is 37.9 years, higher than the national median age of 34.8 years.

THE CLIMATE

- average temperature 14.2°C (average high of 18.3°C)
- average annual rainfall of 1349 mm
- warm temperate climate with 2,200-2,400 sunshine hours per year
- Highest Recorded Temperature 33.7°C; Lowest Recorded Temperature -5.3°C

The Tauranga District has a warm temperate climate, with an average temperature of 14.2°C (average high of 18.3°C) and average annual rainfall of 1349 mm.

Tauranga receives on average between 1,200-1,600 mm of rainfall every year. While this falls on a relatively few number of days each year, the rain can be quite heavy and thunderstorms are not uncommon.

Tauranga receives between 2,200 and 2,400 hours of sunshine per year making it one of the sunniest places in New Zealand.

BUSINESS & EMPLOYMENT

- approximately 17% of full-time equivalents employed in the manufacturing industry
- a further 10% employed in the construction industry
- approximately 30% of total employment in manufacturing is in the fabricated metal products, machinery and equipment industry
- the food, beverages and tobacco industry accounts for a further 24% of employment in manufacturing

Tauranga District contains 2.7 percent of all businesses in New Zealand. A total of 8,943 businesses were located within the Tauranga District as at February 2003. This was an increase of 6.4% or 540 businesses over the previous year. The principal industry is the property and business services industry, which accounts for 29.9% or 2673 of all businesses within the district.

A total of 38,110 full-time-equivalent employees worked in the Tauranga District as at February 2003. The number of "Registered Unemployed" fluctuates due to seasonal work variations (eg. lower during kiwifruit season) but is typically in the 4,000 to 5,500 range. 5% of people identified themselves as unemployed in the 2001 Census.

HOUSING

- above average proportion of dwellings owned without a mortgage
- below average occupancy rates (2.56 people per dwelling compared with 2.73 for New Zealand)
- above average proportion of private dwellings owned (72.4 percent compared with 70.5 percent nationally)
- below average proportion of separate dwellings (79.6 percent compared with 81.8 percent nationally)
- above average weekly rent (\$180 compared with \$160 nationally)

The 2001 census showed that for the 5 years previous (1996-2001) Tauranga has had a 19.3% growth in new dwellings (houses, apartments etc.) with 6,675 being built. This volume is comparable with more populous areas such as North Shore City, Auckland City, and Christchurch City. 1,400 new dwellings were built in 2002/03 in the Tauranga District, compared with 1,057 in 2001/02.