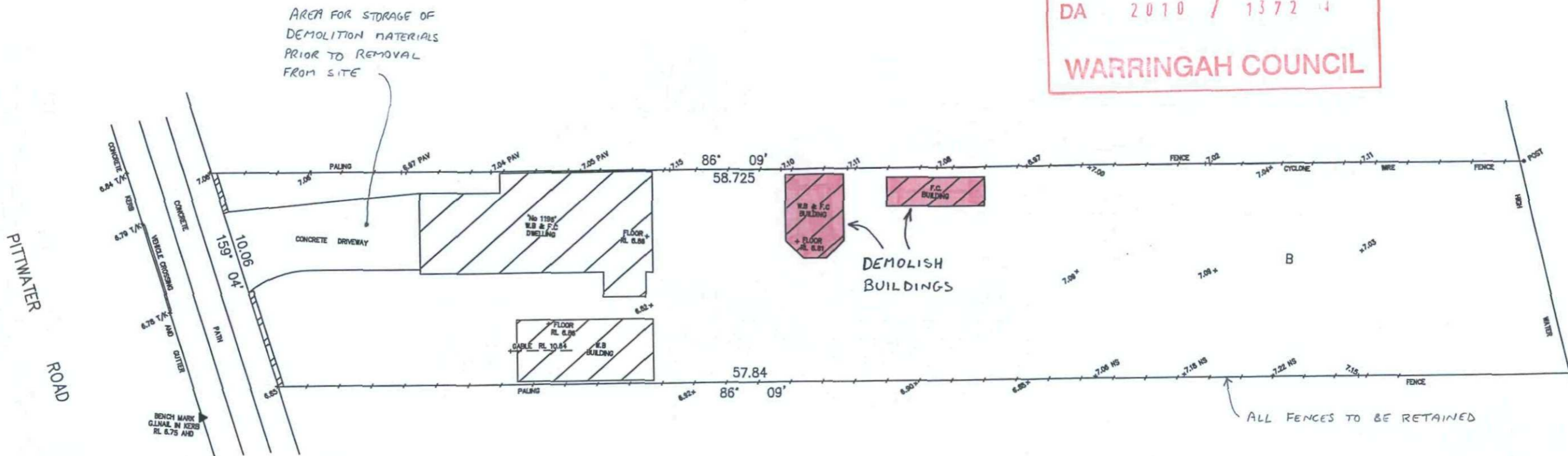




THIS PLAN IS TO BE READ  
IN CONJUNCTION WITH  
DA 2010 / 1372 4  
WARRINGAH COUNCIL



Title DEMOLITION PLAN		Date 15/8/10	Project.....1196 PITTWATER RD SOUTH NARRABEEN	Sketch No.	Rev.
Job No	Scale 1: 200 @ A3	Self Check	Date	DA01	A
			Job Name.....	Task No.....	



Eastern building line of No. 1204 is on this alignment

Site Plan

Scale 1:200  
North  
1196 Pittwater Rd  
Landscape, vis  
Drawn 22/8/08  
Ver. 1  
J. Barnes

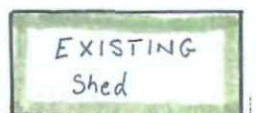
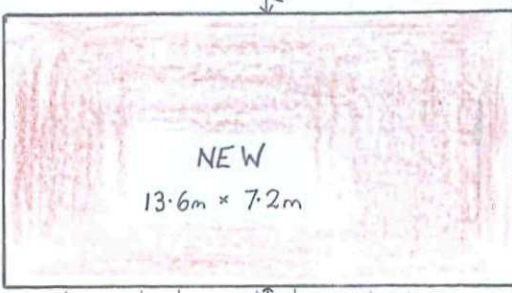
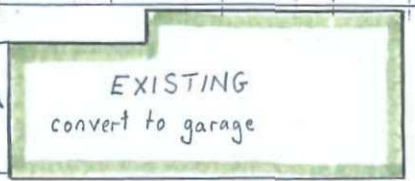
South Narrabeen Surf Life Saving Club  
No. 1200

Wave Impact Line

Beach

Site area  
580.4m<sup>2</sup>

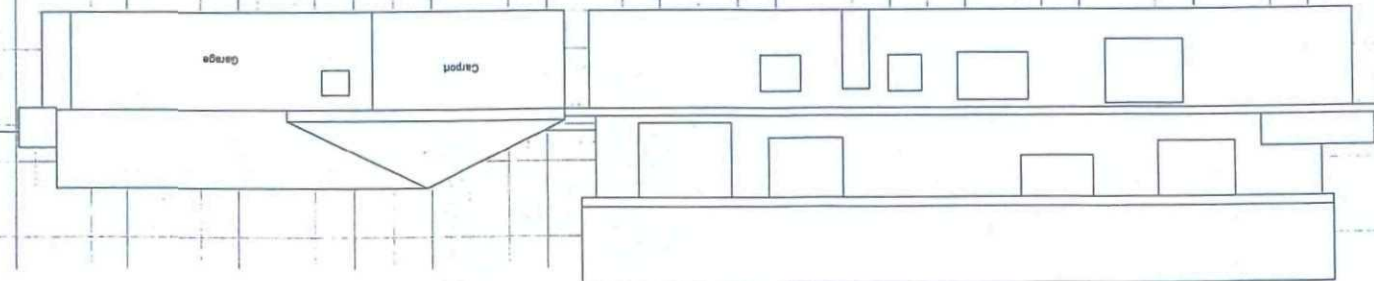
NEW  
GARAGE  
DOOR



21300 13600 22940

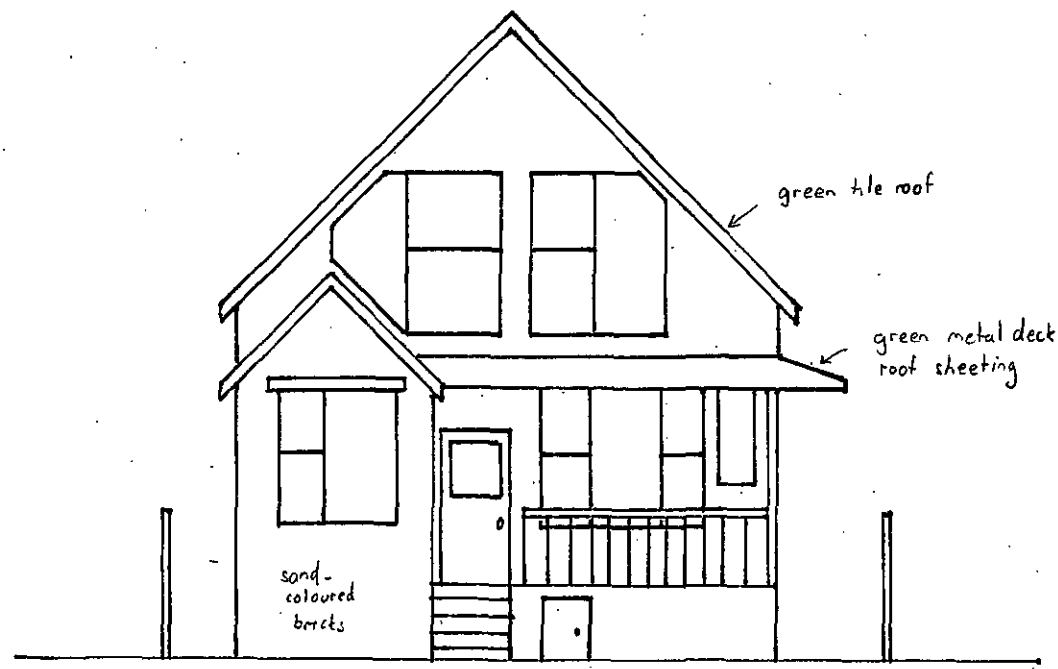
Southern Neighbour  
No. 1194

Pittwater Road

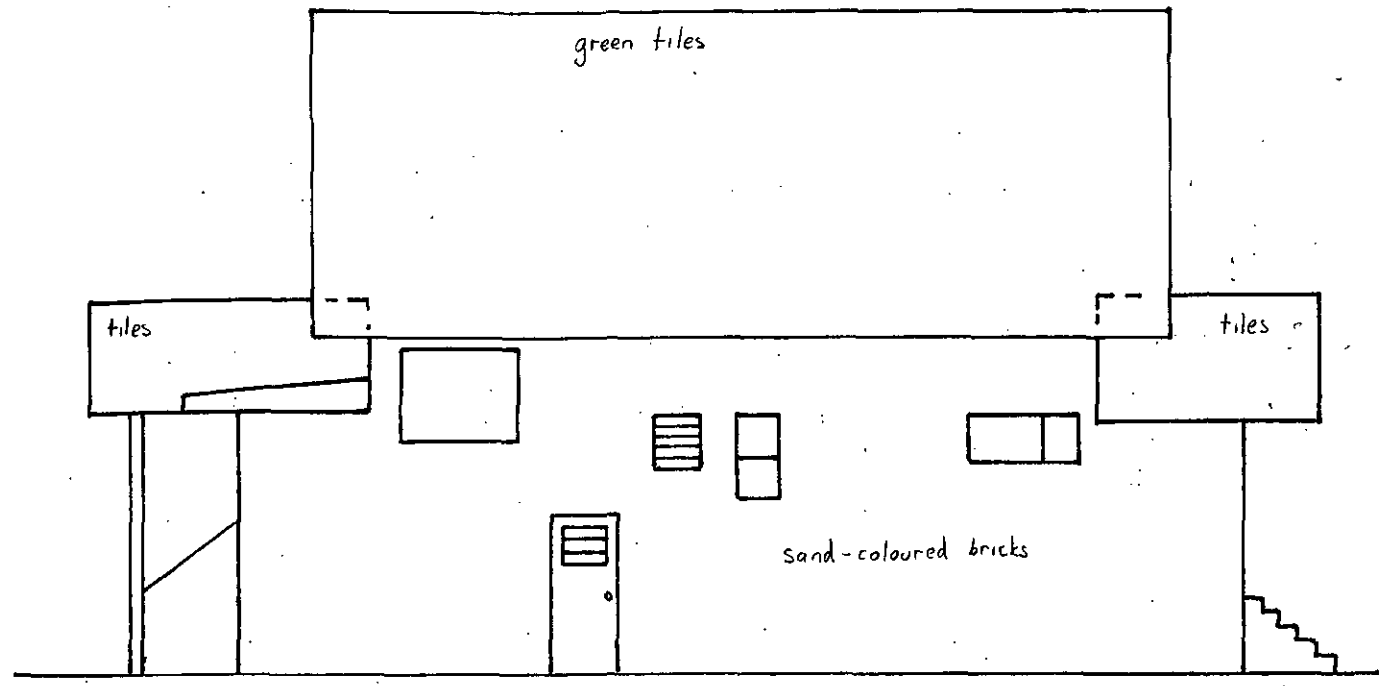


THIS PLAN IS TO BE READ  
IN CONJUNCTION WITH  
DA 2010 / 1372 14  
WARRINGAH COUNCIL

Title SITE ANALYSIS PLAN		Date 15/8/10	Project 1196 PITWATER RD SOUTH NARRABEEN	Sketch No. DA02	Rev A
Job No	Scale 1:200 @ A3	Self Check	Date	Job Name	Task No

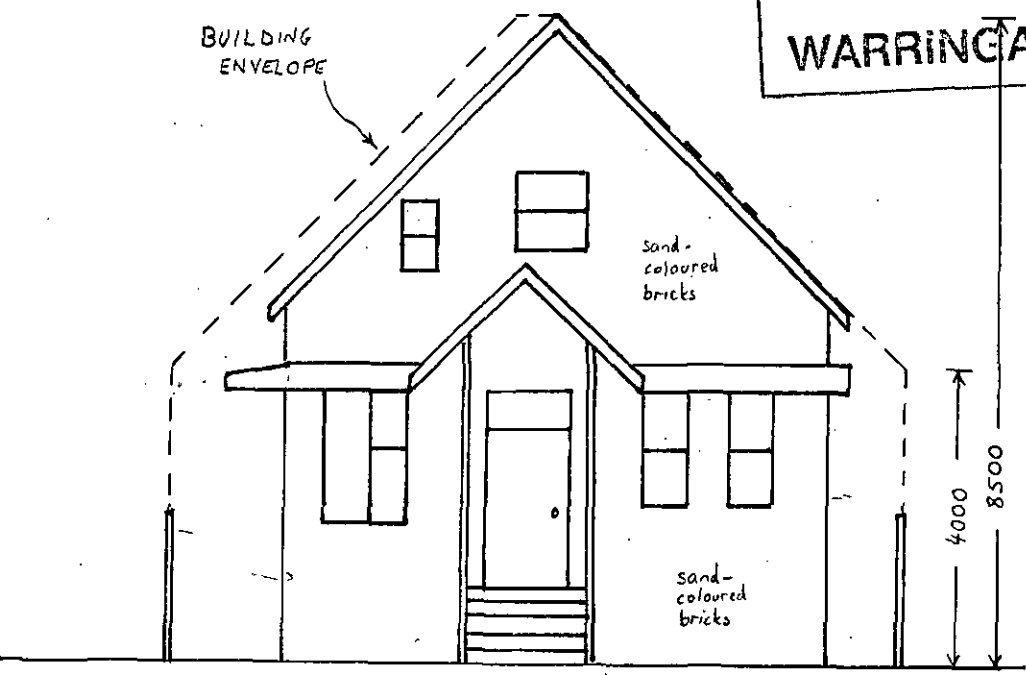


EAST

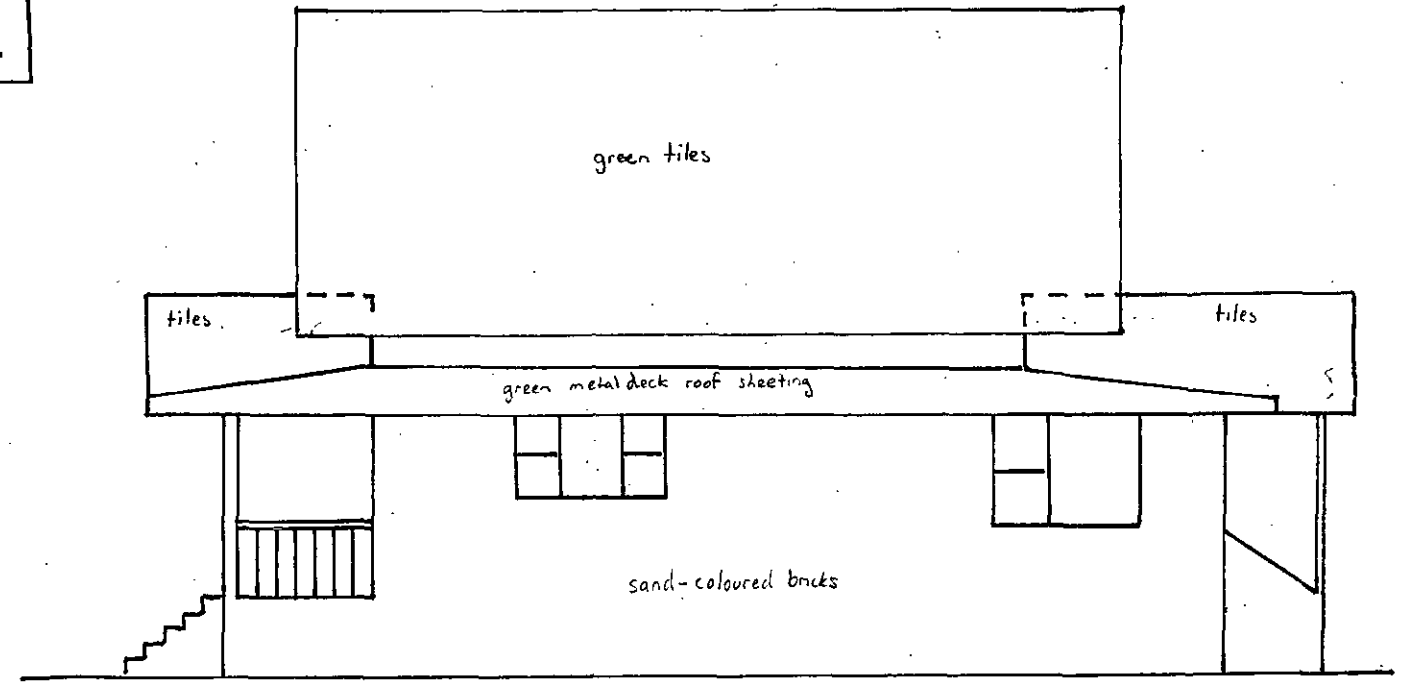


SOUTH

THIS PLAN IS TO BE READ  
IN CONJUNCTION WITH  
DA 2010 / 1372 14  
WARRINGAH COUNCIL



WEST



NORTH

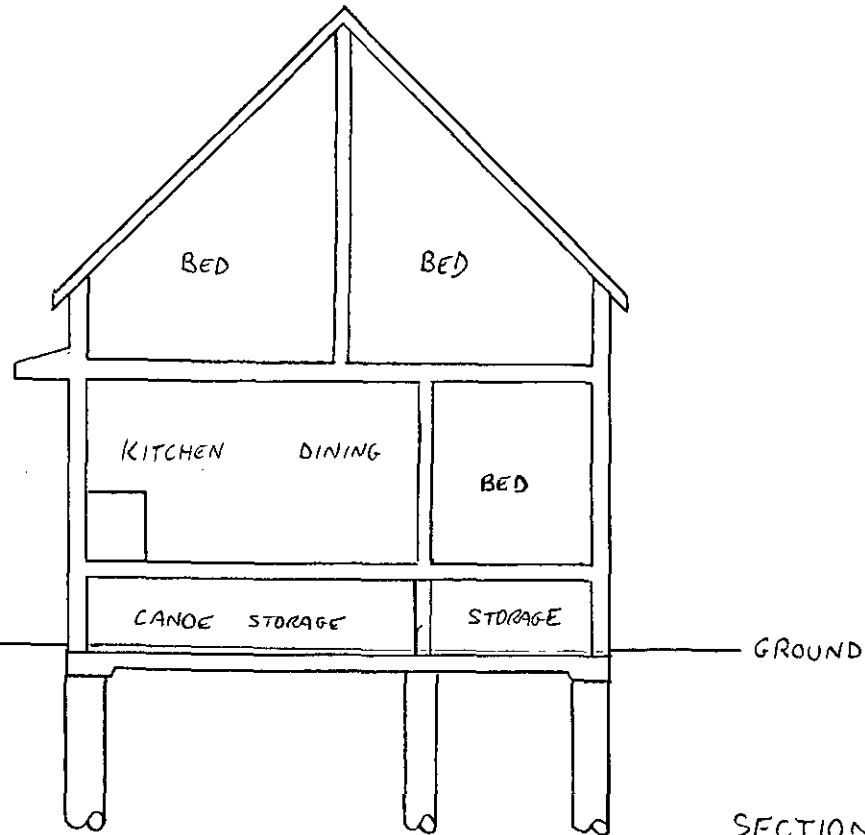
Title NEW BUILDING ELEVATIONS			Date 15/8/10	Project 1196 PITWATER RD SOUTH NARRABEEN	Sketch No. DA04	Rev A
Job No	Scale 1:100 @ A3	Self Check	Date	Job Name	Task No	

RL 15.7 ▽

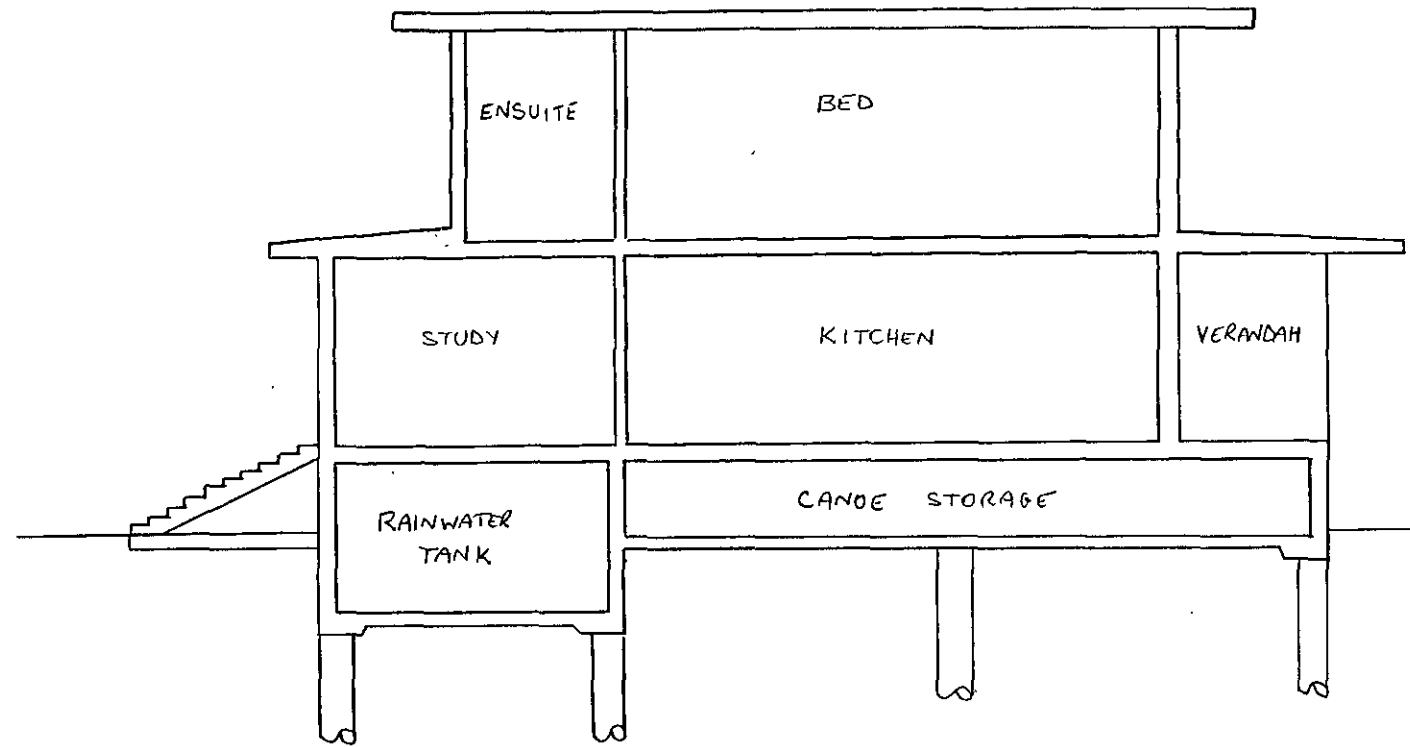
SL 11.00 ▽

SL 8.35 ▽

RL 7.2 ▽



SECTION A



SECTION C

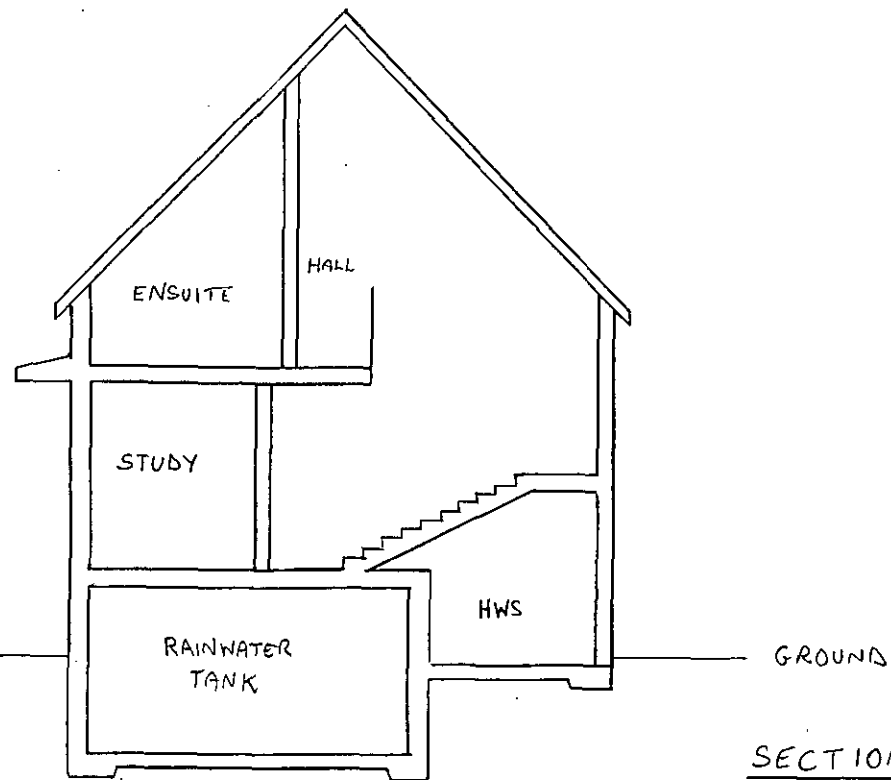
RL 15.7 ▽

SL 11.00 ▽

SL 8.35 ▽

RL 7.2 ▽

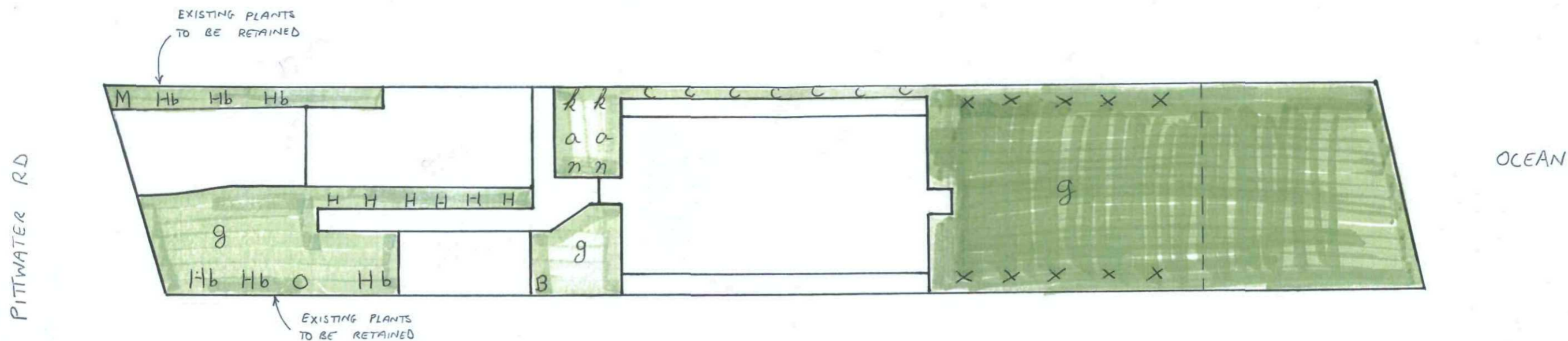
SL 6.10 ▽



SECTION B

THIS PLAN IS TO BE READ  
 IN CONJUNCTION WITH  
 DA 2010 / 1372  
 WARRINGAH COUNCIL

Title <b>SECTIONS</b>			Date 15/8/10	Project... 1196 PITWATER RD SOUTH NARRABEEN	Sketch No.	Rev
Job No	Scale 1:100 @ A3	Self Check	Date	Job Name.....	DA 05	
				Job No.....	Task No.....	A



- H HYDRANGEA
- Hb HIBISCUS
- M MAY BUSH
- O OCHNA
- B BOUGANVILLEA
- C CLIVEA
- X DAISIES, GAZANEAS, PIG FACE
- K COPROSMA
- N NATIVE VIOLET
- A ALYSUM.
- G GRASS

LANDSCAPE CALCULATIONS

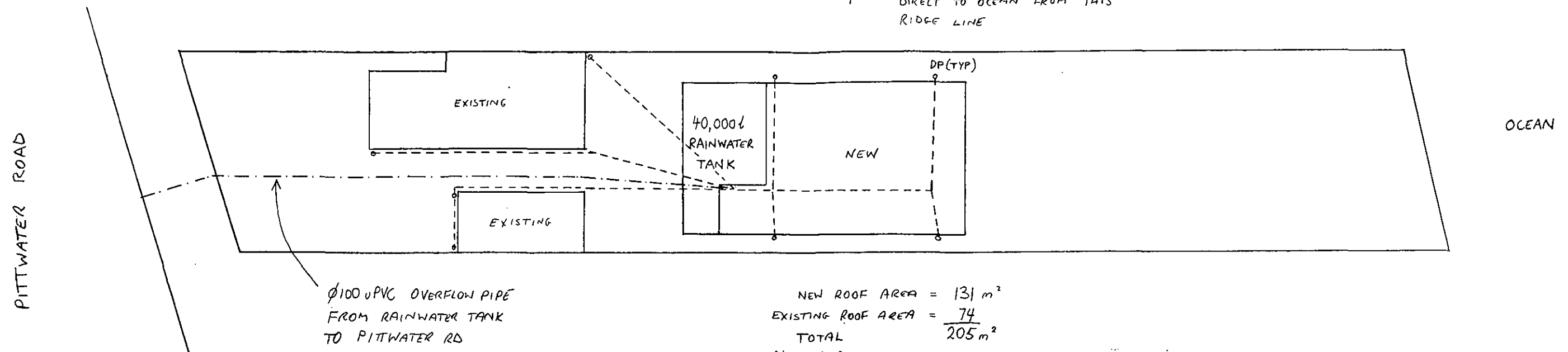
SITE AREA	560 m <sup>2</sup>
ROOF AREAS	205
DRIVEWAYS	26
PATHS	27
TOTAL IMPERVIOUS	258 m <sup>2</sup>
LANDSCAPE AREA	302 m <sup>2</sup>

THIS PLAN IS TO BE READ  
 IN CONJUNCTION WITH  
 DA 2010 / 1372  
 WARRINGAH COUNCIL

Title <b>LANDSCAPE PLAN</b>		Date 15/8/10	Project.....1196 PITWATER RD SOUTH NARRABEEN	Sketch No.	Rev
Job No	Scale 1:200 @ A3	Self Check	Date	DA06	
			Job No.....Task No.....		A

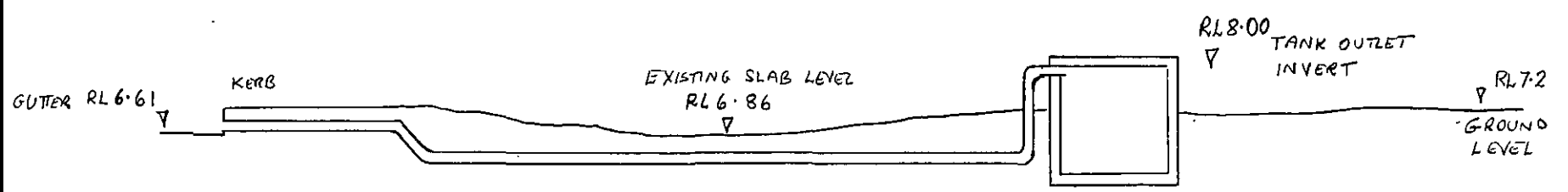


⇒ NATURAL STORMWATER DISCHARGE  
DIRECT TO OCEAN FROM THIS  
RIDGE LINE



NEW ROOF AREA = 131 m<sup>2</sup>  
EXISTING ROOF AREA = 74  
TOTAL 205 m<sup>2</sup>  
ALL TO GO TO RAINWATER TANK

PLAN



SECTION  
(NTS)

**Stormwater Design**

Stormwater from the new building area will be collected from the roof and fed to a very large rainwater tank. Overflow from this tank will be to Pittwater Road as per previously approved DA.

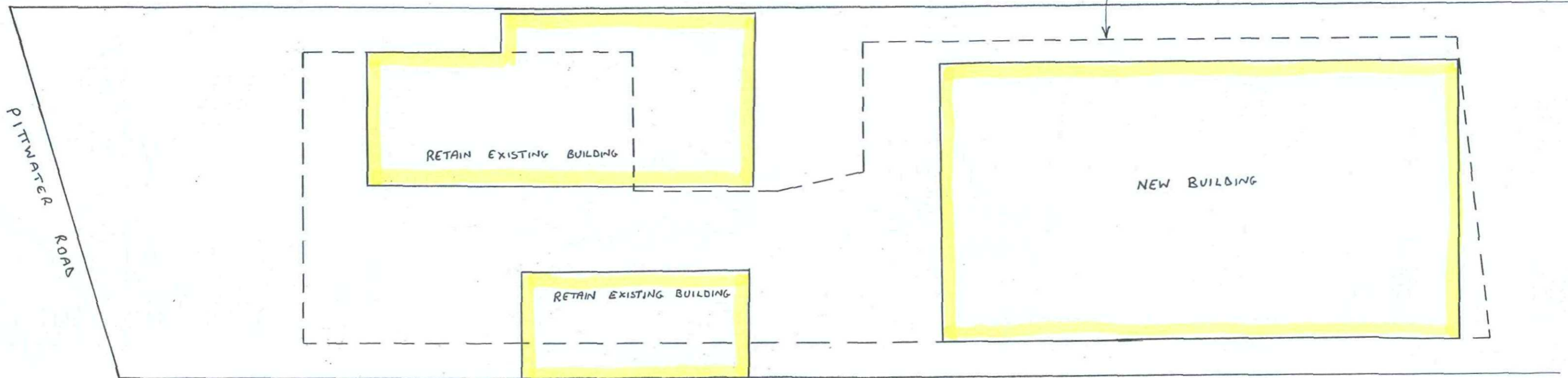
Stormwater from existing driveway and around existing buildings will not change, being absorbed by very sandy soil on site. In extreme flood event, the driveway forms the lowest exit point and overflow would naturally exhaust to Pittwater Rd.

**Drainage Calculations**

- a) Time of Concentration  $t_c=5\text{min}$  for a small catchment and runoff from roof or paved area
- b) Runoff Coefficient assumed equal to 1 (conservative estimate)
- c) Rainfall Intensity  $I=159\text{mm/hr}$  (data from BOM Rainfall Intensity-Frequency-Duration calculator)
- d) Peak Discharge (5min, 5 Year ARI)  $Q=159\text{mm/hr} \times 205\text{m}^2 = 9.1 \text{ L/s}$
- e) Head on discharge overflow pipe  $RL8.0-RL6.6 = 1.4\text{m}$
- f) Capacity of 100mm diameter PVC pipe with  $h=1.4\text{m}$  and  $L=25\text{m}$  is  $Q=21 \text{ L/s}$

**THIS PLAN IS TO BE READ  
IN CONJUNCTION WITH  
DA 2010 / 1372  
WARRINGAH COUNCIL**

Title <b>STORMWATER</b>			Date 15/8/10	Project... 1196 PITTWATER RD SOUTH NARRAGEEN	Sketch No. Rev
Job No	Scale 1:200 @ A3	Self Check	Date	Job Name.....	DA07
				Job No.....	Task No.....
					A



PLAN

THIS PLAN IS TO BE READ  
IN CONJUNCTION WITH  
DA 2010 / 1372  
WARRINGAH COUNCIL

	COMPARISON OF CURRENT AND PROPOSED DA BUILDINGS		15/8/10	1196 PITWATER RD SOUTH NARRABEEN	Rev
		scale 1:100 @ A3		REVISED PLANS	DA10 A