

DEVELOPMENT CONSENT  
Development Consent No. 1510875  
18 DEC 2014  
SUTHERLAND SHIRE COUNCIL

## 2 SITE CALCULATIONS

FLOOR AREA  
(BASED ON DEC 2013 SSLEP 2006 DEFINITION)

SITE AREA	CITY VIEW	PARKVIEW
FLOOR AREAS (excluding lifts, common stairs & voids)		
CARPARK	298.67	431.30
GROUND FLOOR	279.90	412.99
FIRST FLOOR	287.89	430.63
SECOND FLOOR	104.50	218.58
LOFT (9@1400 high)		
TOTAL FLOOR AREA		
less REQUIRED CARPARKING (741.70)		
less REQUIRED STORAGE (86.86)		
less BIN AREA, SERVICES (36.74)		
RATIO		

LANDSCAPED AREA	approx m²
SITE AREA	2270.00
LANDSCAPE AREA	2270.00
BUILDING FOOTPRINT	1257.40
DRIVEWAY	40.83
PATHS, RAMPS & STEPS	106.58
TOTAL SITE COVER	1404.81
AVAILABLE LANDSCAPE AREA	865.19
plus PODIUM PLANTING (85.38)	950.57
%	41.9%

## REVISED PLANS 11.4.2014

REVISIONS TO ADDRESS DEFERRED COMMENCEMENT CONDITIONS

**Violation of a additional sustainable landscaping spaces.**  
An application to modify the development consent has been lodged to remove this condition, as it was included in the consent in error.

**Violation of carpark space to ensure pedestrian safety around lift 3**  
The carpark has been redesigned. The space around the lift 3 now the carpark space C3. There is now adequate area for manoeuvring around the carpark space. The inclusion of a bollard at the entry of the lift entrance provides an safety. The revised carpark design has been certified in accordance with DA Consent Conditions 24.41 and 42.

**Violation of pedestrian entry**  
The design of the entry has been modified in accordance with the preliminary plans presented at the lift meeting. The design of the entry has been modified in order to meet the level contained in Council Heritage design, resulting in additional walkway to meet the full landing of the required Road design level. The design of the pedestrian entry has been certified by Accessible Building Solutions (Access Consultant).

**Violation of path and stairs to podium level**  
The path and stairs have been revised to be again the podium and a landscaped extended adjacent to the area.

**Violation of lift to carpark level**  
The exterior finish and noise has been amended to show a carpark colour to the carpark level.

**Violation of podium level parties**  
The podium level has been extended to provide covered access between the Cityview and Parkview buildings.

**Violation of carpark space to ensure pedestrian safety around lift 3**  
The podium level courtyard has been extended to 5m depth. Adjustable down privacy screens have been included on the north wall of each courtyard to 1.8m high. Generous garden planters have been provided in the corner areas to four of each courtyard.

**Violation of access to eastern external stairs**  
The eastern external stairs have been moved north to align with path through podium terrace.

**Violation of carpark space to ensure pedestrian safety around lift 3**  
The podium level courtyard has been extended to 5m depth. Adjustable down privacy screens have been included on the north wall of each courtyard to 1.8m high. Generous garden planters have been provided in the corner areas to four of each courtyard.

**Violation of carpark space to ensure pedestrian safety around lift 3**  
The podium level courtyard has been extended to 5m depth. Adjustable down privacy screens have been included on the north wall of each courtyard to 1.8m high. Generous garden planters have been provided in the corner areas to four of each courtyard.

AMENDMENTS  
DRAWING TITLE  
SITE PLAN

PROJECT STATUS  
APPLICATION FOR DEVELOPMENT  
PROPOSED RESIDENTIAL UNIT DEVELOPMENT

ADDRESS  
10-14 MOANI AVE  
GYMEA  
CLIENT  
I J NORMAN NOMINEES Pty Ltd

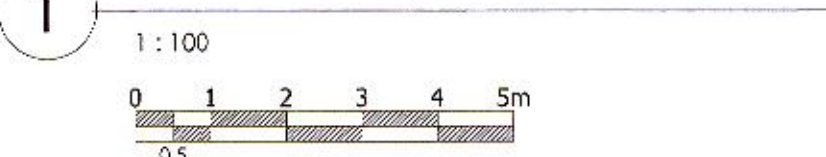
Date: 17.9.2013  
Drawing No: 13.26  
Sheet No: A 01  
Scale: 1 : 100  
Drawn: RJP  
Checked: JMH



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principal  
John Hinch  
chartered fellow member  
building design australia nsw chapter  
member master building association  
M 0447 681 736

**IB IAN BASSETT & PARTNERS**  
ARCHITECTURE & PROJECT PLANNING  
bda BUILDING DESIGNERS ASSOCIATION AUSTRALIA  
17 DEC 2014  
SUTHERLAND SHIRE COUNCIL  
innovative ARCHITECTS

## 1 SITE PLAN & ROOF PLAN



moani avenue







ALL UNITS TO BE SUPPLIED WITH ONE FOLD-DOWN DRYING RACK FOR USE IN BALCONIES OFF LIVING AREAS OR COURTYARDS. REFER PC ITEMS SCHEDULE

SUTHERLAND SHIRE COUNCIL

15/04/2014 10:21:34 AM

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15/04/2014 10:21:34 AM A







## NOTES

EMERGENCY LIGHTING & EXIT SIGNS TO COMPLY WITH BCA E.4 AND AS 2293

OPENINGS IN FLOORS, WALLS AND SERVICE SHAFTS TO COMPLY WITH BCA C3.1.5

SERVICE INSTALLATIONS IN HALLWAYS AND FOYERS LEADING TO REQUIRED EXITS TO BE ENCLOSED BY NON-COMBUSTIBLE CONSTRUCTION OR A FIRE PROTECTIVE COVERING IN ACCORDANCE WITH BCA D2.7

PUBLIC STAIRS AND RAMPS TO COMPLY WITH BCA D2 CONSTRUCTION OF EXITS AND AS1428.1

ALL UNITS TO BE SUPPLIED WITH ONE FOLD-DOWN DRYING RACK FOR USE IN BALCONIES OFF LIVING AREAS OR COURTYARDS. REFER PC ITEMS SCHEDULE



## REVISED PLANS 11.4.2014

### REVISIONS TO ADDRESS DEFERRED COMMENCEMENT CONDITIONS

**Inclusion of a additional accessible carpark spaces.**  
An application to modify the development consent has been lodged to remove this condition, as it was included in the consent in error.

**Relocation of access space to ensure pedestrian safety around lift 3.**  
The access space has been relocated. The proposed lift 3 has the accessible space (5.0m x 2.0m) now adequately sized for maneuvering around the carpark space. The inclusion of a balcony at the entry of the lift ensures pedestrian safety. The revised carpark design has been certified in accordance with DA Consent Conditions 26, 41 and 42.

**Relocation of pedestrian entry.**  
The design of the entry has been modified in accordance with the accessibility standards at the lift meeting, but with further modifications in order to meet the level constraints in Council's design, requiring an additional rampway to meet the first landing of the required foot design level.

**Relocation of path and stairs to podium level.**  
The path and stairs have been relocated to be against the podium, and landscaping extended adjacent to the area.

**Relocation of path to carpark level.**  
The exterior path access has been amended to show a direct access to the carpark level.

**Relocation of podium level access.**  
The podium on the podium level has been extended to provide covered access between the Cityview and Parkview Buildings.

**Relocation of Carports P19, P20, P21, P22, P23, P24.**  
The podium level carports have been extended to 5m depth. Individual house privacy screens have been included on the rear wall of each carport to 1.8m high. Grassed garden planters have been provided in the carport area in front of each carport.

**Relocation of access to western external stairs.**  
The western external stairs have been moved north to align with path through podium terrace.

**Relocation of access to lift 3.**  
The access level of these apartments have been redesigned to locate the walkways between the bedroom and study, as shown on plans on external stairs.

**Relocation of access to lift 3 and lift 11.**  
The entry level of carpark level and podium level above and the approach to lift 12 have been redesigned in line with the lift meeting, with minor amendments to ensure accessibility. The design has been approved by Accessible Building Solutions (Access Consultants).

### AMENDMENTS

#### DRAWING TITLE

## SECOND FLOOR (LEVEL 04) GENERAL PLAN

### PROJECT STATUS

## APPLICATION FOR DEVELOPMENT

### PROJECT

## PROPOSED RESIDENTIAL UNIT DEVELOPMENT

### ADDRESS

## 10-14 MOANI AVE GYMEA

### CLIENT

## I J NORMAN NOMINEES Pty Ltd

### Date:

17.9.2013

### Drawing No:

13\_26

### Sheet No:

A 05

### Scale:

1 : 100

### Drawn:

RJP

### Checked:

JMH

The whole works to be in accordance with the Building Code of Australia, all relevant Australian standards and all other governing authorities concerned.

All dimensions to be in millimetres unless otherwise stated.

Use written dimensions in preference to scaled dimensions.

The builder to check all dimensions on the site to the commencement of work.

No responsibility will be accepted by JMH (Living Design) for builder's details, methods, layout or design contradictions, nor cannot variations and conditions. If in doubt, ask.

This set of drawings is subject to copyright and may not be used or copied without the consent of JMH Living Design.

**principal**  
John Hatch  
Principal, JMH Living Design

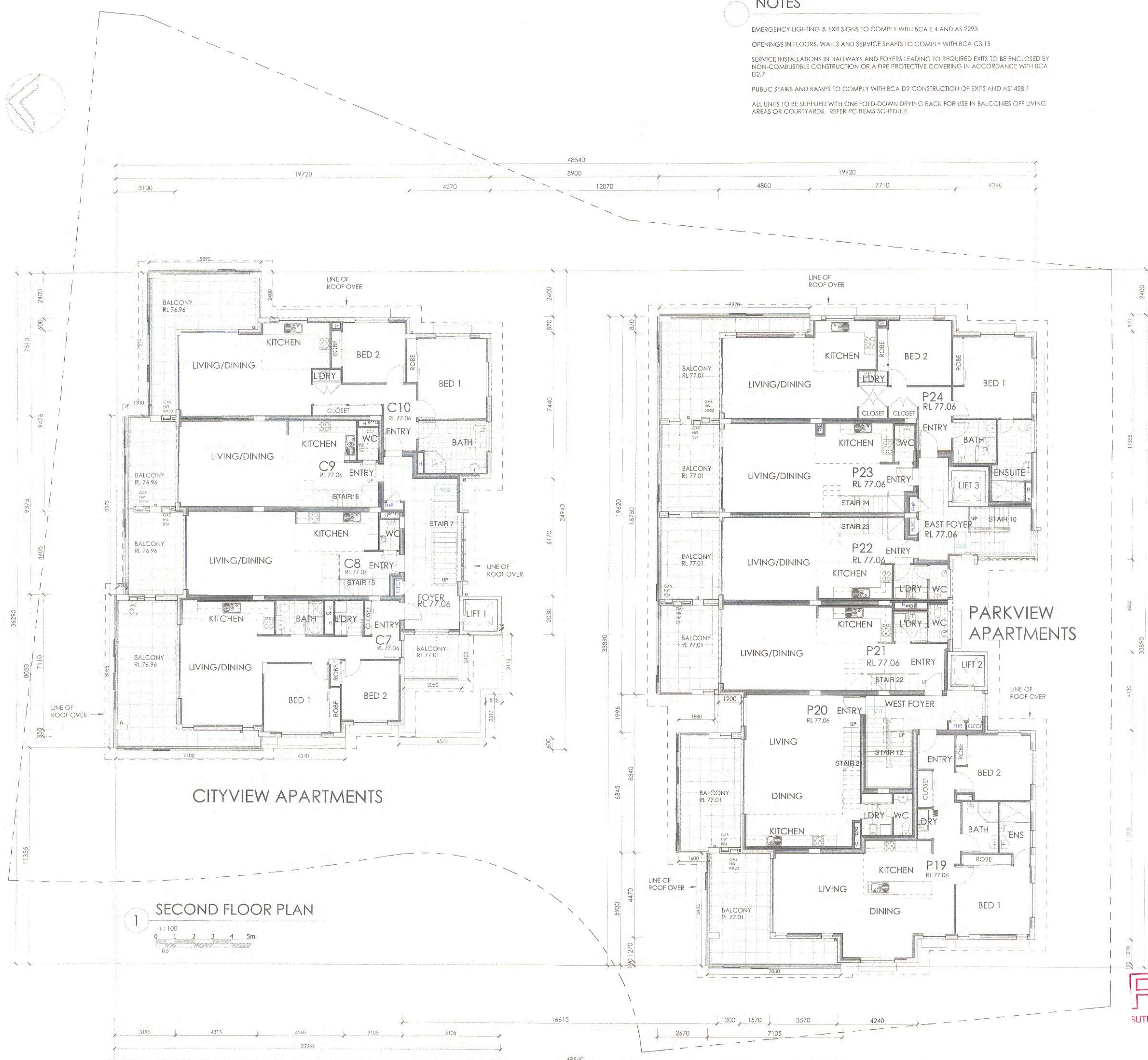
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**Reg No: 8087**  
**18 Lake Road**  
**PORT MACQUARIE**  
**NSW 2444**  
**Phone: 02 6584 2001**  
**Mobile: 0414 484 286**  
**Fax: 02 6584 4254**  
**BUILDER RESPONSIBLE**  
**AUSTRALIA**



15/04/2014 10:21:50 AM

A1



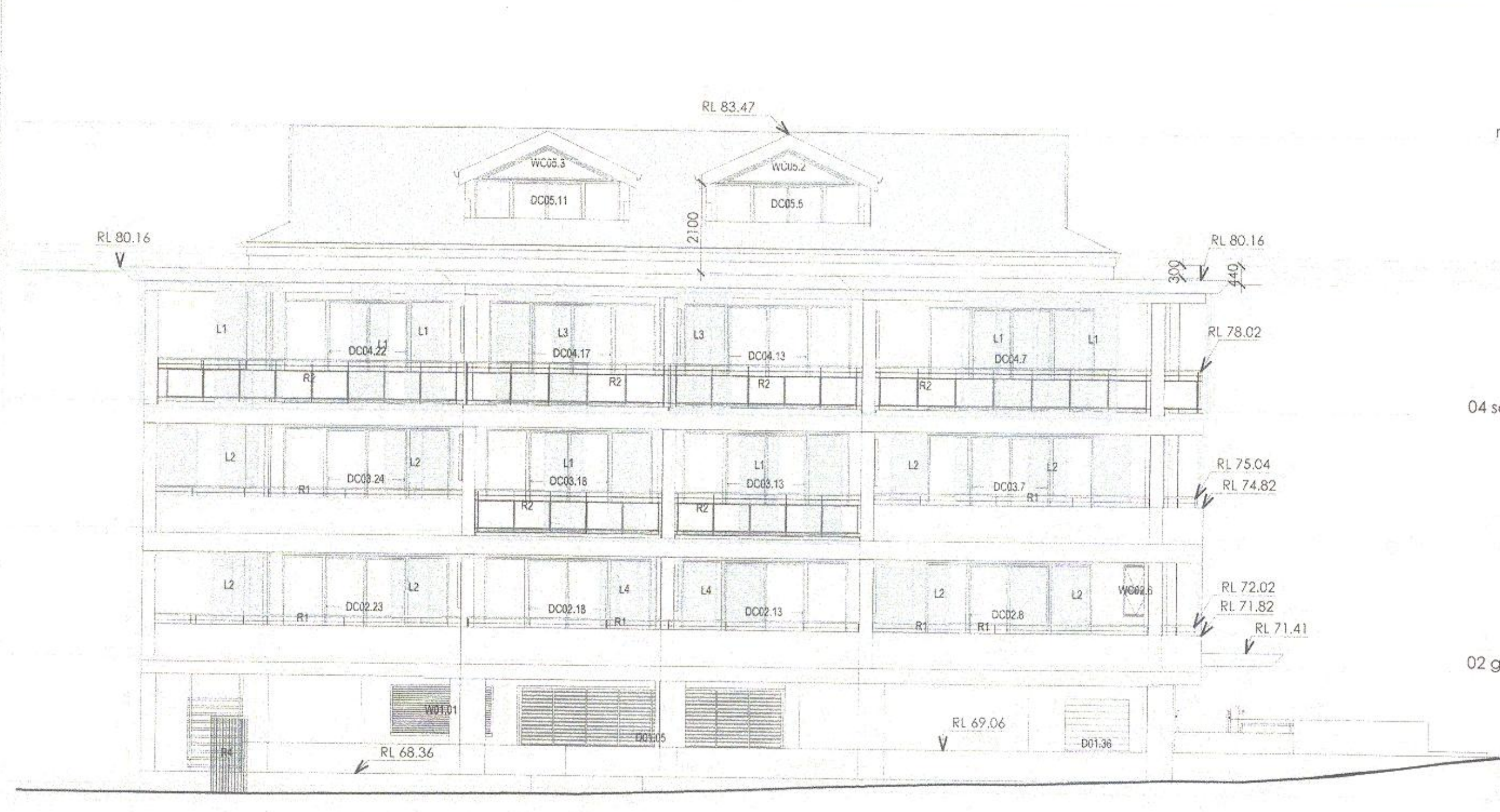




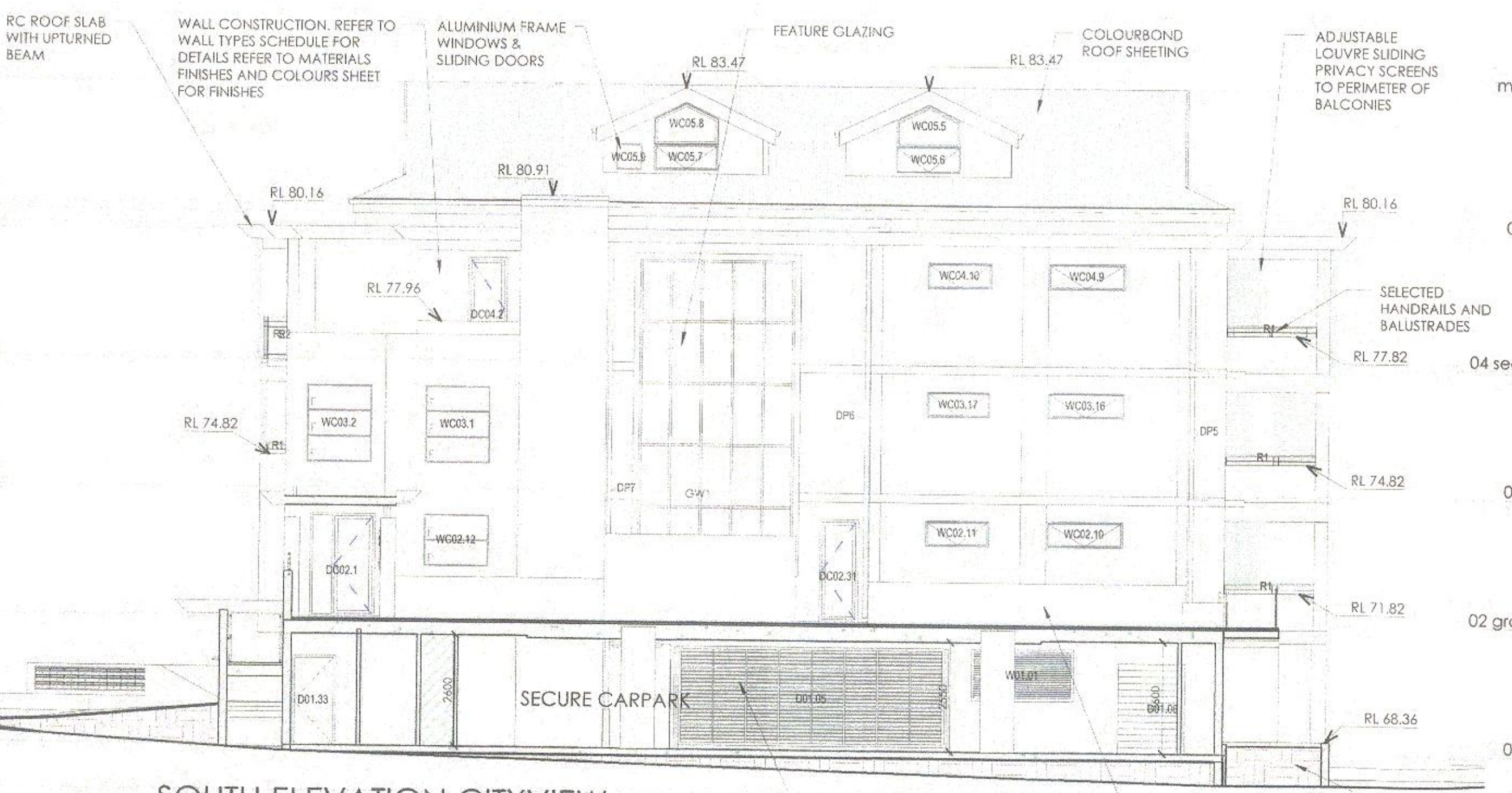




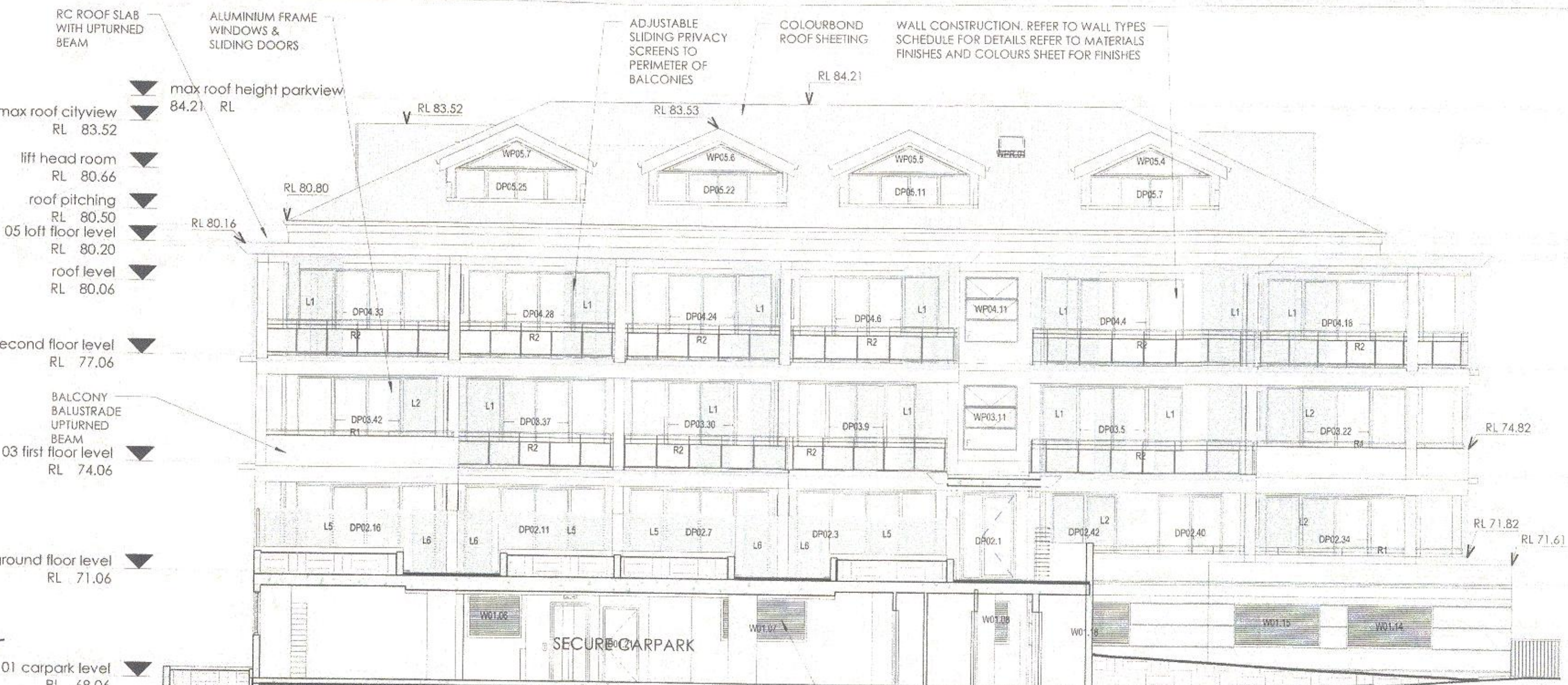




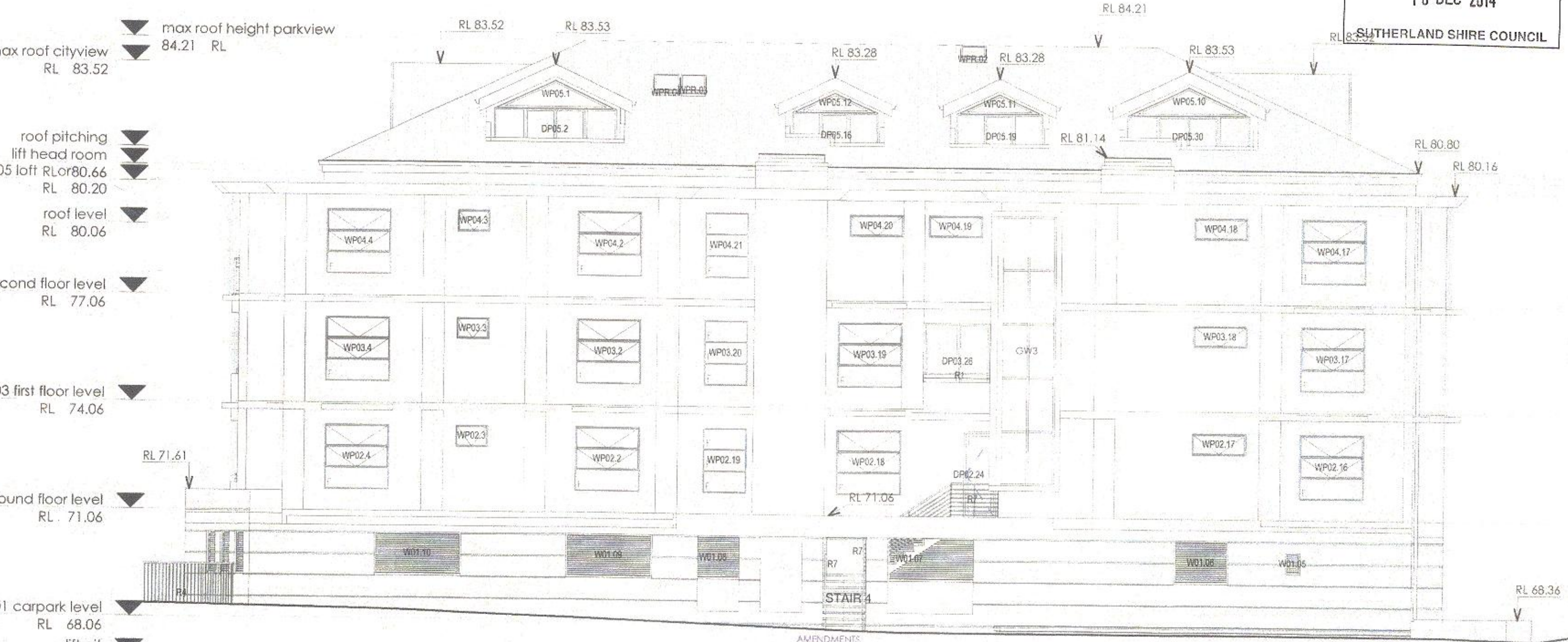
**1 NORTH ELEVATION CITYVIEW**  
1 : 100



**2 SOUTH ELEVATION CITYVIEW**  
1 : 100



**3 NORTH ELEVATION PARKVIEW**  
1 : 100



**4 SOUTH ELEVATION PARKVIEW**  
1 : 100

**REVISED PLANS 11.4.2014**

**REVISIONS TO ADDRESS DEFERRED COMMENCEMENT CONDITIONS**

**Division of 2 additional accessible carpark spaces.**  
An application to modify the development consent has been lodged to remove this condition, as it was included in the consent in error.

**Relocation of carpark access to ensure pedestrian safety around L2.**  
The secure carpark has been redesigned. The space around the lift tower, the adjacent carpark L2, there is now adequate space for maneuvering around the carpark space. The inclusion of a barrier at the entry of the lift tower ensures pedestrian safety. The revised carpark design has been certified by Accessible Building Solutions (ABS) in accordance with the Conditions 24, 41 and 42.

**Relocation of Pedestrian entry.**  
The design of the entry has been modified in accordance with the preliminary plans produced at the JNH meeting, but with further modification in order to meet the needs contained in Council's landscape design, including additional walkway to meet the lift landing at the required level design level. The design of the pedestrian entry has been certified by Accessible Building Solutions (ABS) in accordance with the Conditions 24, 41 and 42.

**Extension of carpark level.**  
The path and stairs have been relocated to be adjacent to the podium, and landscaping extended adjacent to the area.

**Extension of carpark level.**  
The carpark level has been amended to show a darker colour to the carpark level.

**Extension of podium level.**  
The podium on the podium level has been extended to provide covered access between the Cityview and Parkview buildings.

**Widened Courtyards P12, P13, P14, P15.**  
The podium level courtyards have been extended to 1m depth. Adjustable louvre privacy screens have been included on the northern wall of each courtyard to 1.8m high. Concrete garden planters have been provided in the courtyard area in front of each courtyard.

**Widened access to eastern external stairs.**  
The eastern external stairs have been widened to align with path through podium terrace.

**Widened access to eastern external stairs.**  
The upper level of these apartments have been redesigned to locate the staircases between the bedroom and study, as shown on plans as tabled at JNH meeting.

**Relocation of carpark level and lift.**  
The carpark level and lift tower have been redesigned to align with the carpark level and ground floor level above and the approach to lift 2 have been redesigned as tabled at the JNH meeting, with minor amendment to ensure accessibility. The design has been approved by Accessible Building Solutions (ABS) in accordance with the Conditions 24, 41 and 42.

**NORTH & SOUTH ELEVATIONS**

**APPLICATION FOR DEVELOPMENT**

PROJECT: PROPOSED RESIDENTIAL UNIT DEVELOPMENT

ADDRESS: 10-14 MOANI AVE GYMEA

CLIENT: I J NORMAN NOMINEES Pty Ltd

**IB P IAN BASSETT & PARTNERS**  
ARCHITECTURE & PROJECT PLANNING

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**innovative ARCHITECTS**

**jmh living design**

17 DEC 2014  
SUTHERLAND SHIRE COUNCIL

Principal: John Hatch  
10/14 Moani Ave, Gympie NSW 2564  
0447 481 736

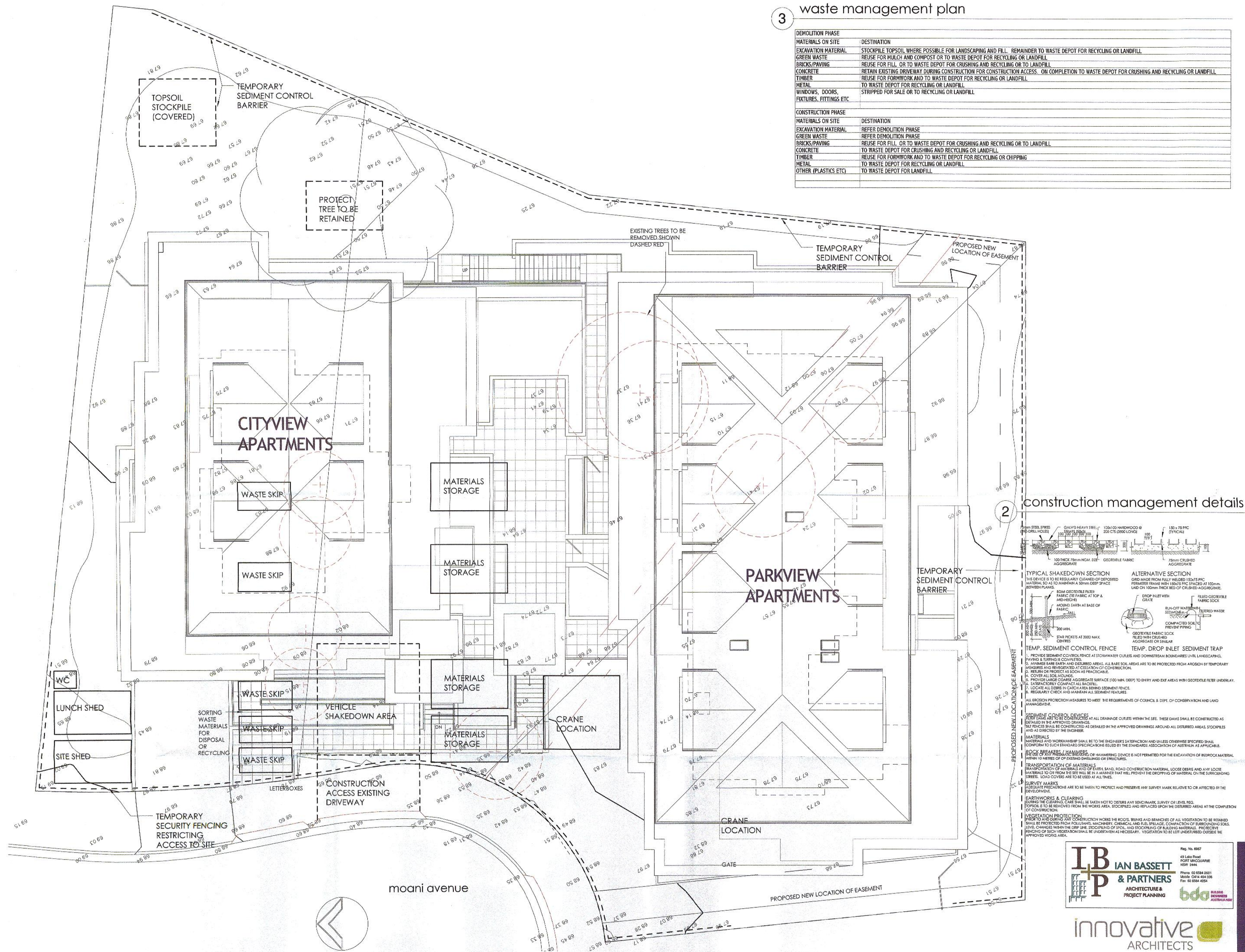
**DEVELOPMENT CONSENT**  
Development Consent No. 13/0878  
This plan is a supporting document for the part of the above development consent.  
**18 DEC 2014**  
**SUTHERLAND SHIRE COUNCIL**



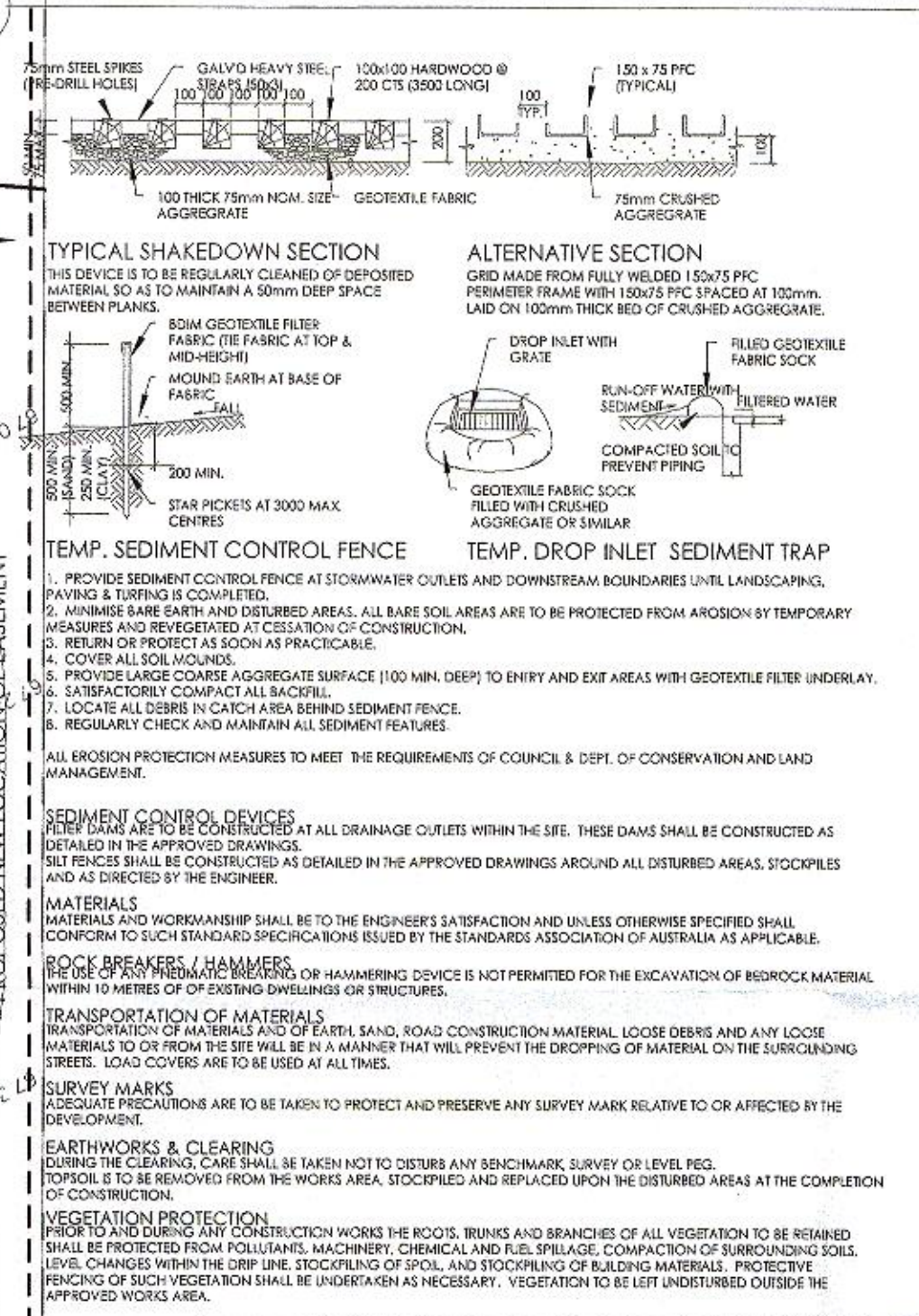




DEMOLITION PHASE	
MATERIALS ON SITE	DESTINATION
EXCAVATION MATERIAL	STOCKPILE TOPSOIL WHERE POSSIBLE FOR LANDSCAPING AND FILL. REMAINDER TO WASTE DEPOT FOR RECYCLING OR LANDFILL.
GREEN WASTE	REUSE FOR MULCH AND COMPOST OR TO WASTE DEPOT FOR RECYCLING OR LANDFILL.
BRICKS/PAVING	REUSE FOR FILL. OR TO WASTE DEPOT FOR CRUSHING AND RECYCLING OR TO LANDFILL.
CONCRETE	REUSE FOR FORMWORK DURING CONSTRUCTION FOR CONSTRUCTION ACCESS. ON COMPLETION TO WASTE DEPOT FOR CRUSHING AND RECYCLING OR LANDFILL.
TIMBER	REUSE FOR FORMWORK AND TO WASTE DEPOT FOR RECYCLING OR LANDFILL.
METAL	TO WASTE DEPOT FOR RECYCLING OR LANDFILL.
WINDOWS, DOORS, FIXTURES, FITTINGS ETC	STRIPPED FOR SALE OR TO RECYCLING OR LANDFILL.
CONSTRUCTION PHASE	
MATERIALS ON SITE	DESTINATION
EXCAVATION MATERIAL	REFER DEMOLITION PHASE
GREEN WASTE	REFER DEMOLITION PHASE
BRICKS/PAVING	REUSE FOR FILL. OR TO WASTE DEPOT FOR CRUSHING AND RECYCLING OR TO LANDFILL.
CONCRETE	TO WASTE DEPOT FOR CRUSHING AND RECYCLING OR LANDFILL.
TIMBER	REUSE FOR FORMWORK AND TO WASTE DEPOT FOR RECYCLING OR CHIPPING
METAL	TO WASTE DEPOT FOR RECYCLING OR LANDFILL.
OTHER (PLASTICS ETC)	TO WASTE DEPOT FOR LANDFILL.



2 construction management details

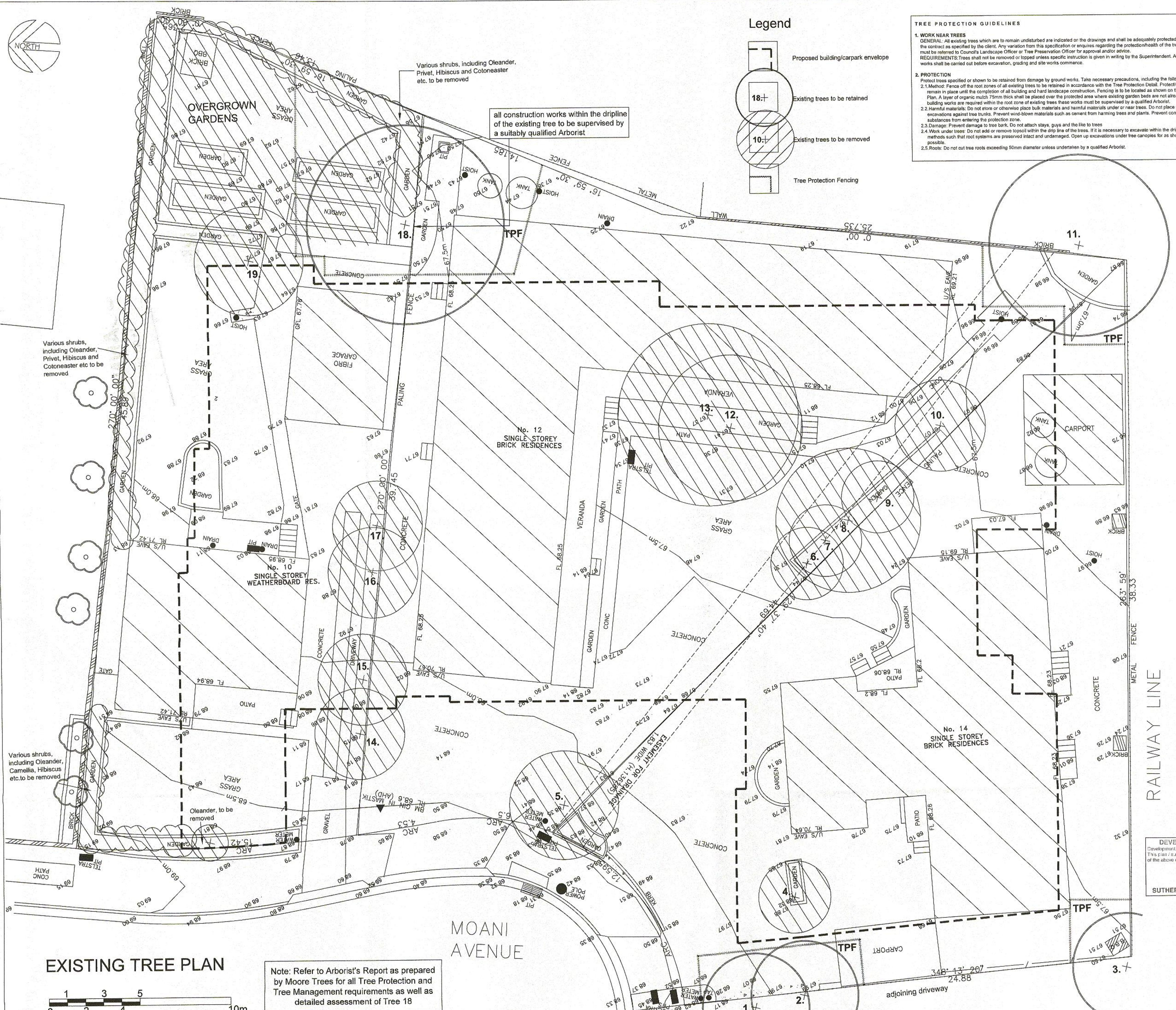
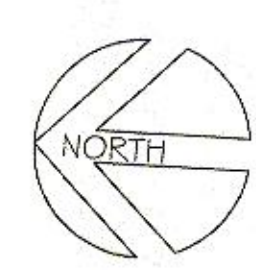


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Development Consent No. 13/0878  
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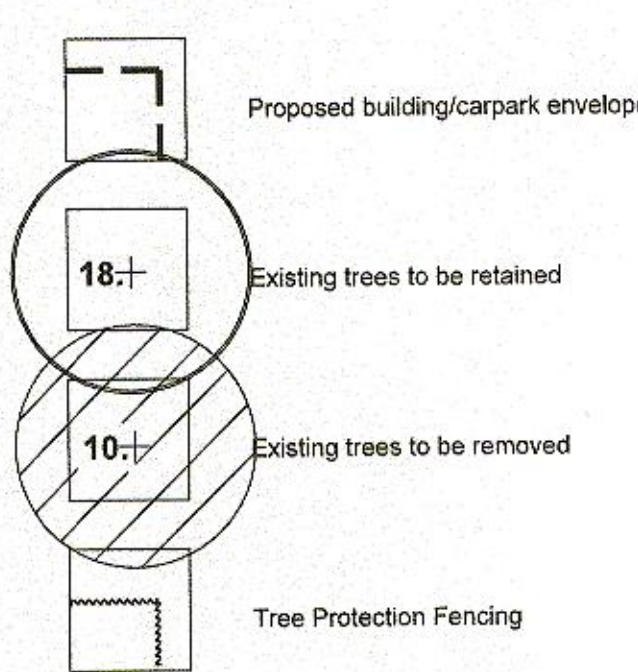
**IB** IAN BASSETT  
& PARTNERS  
ARCHITECTURE & PROJECT PLANNING  
bda  
19/09/2013 3:07:09 PM

**jmh**  
living design





Legend

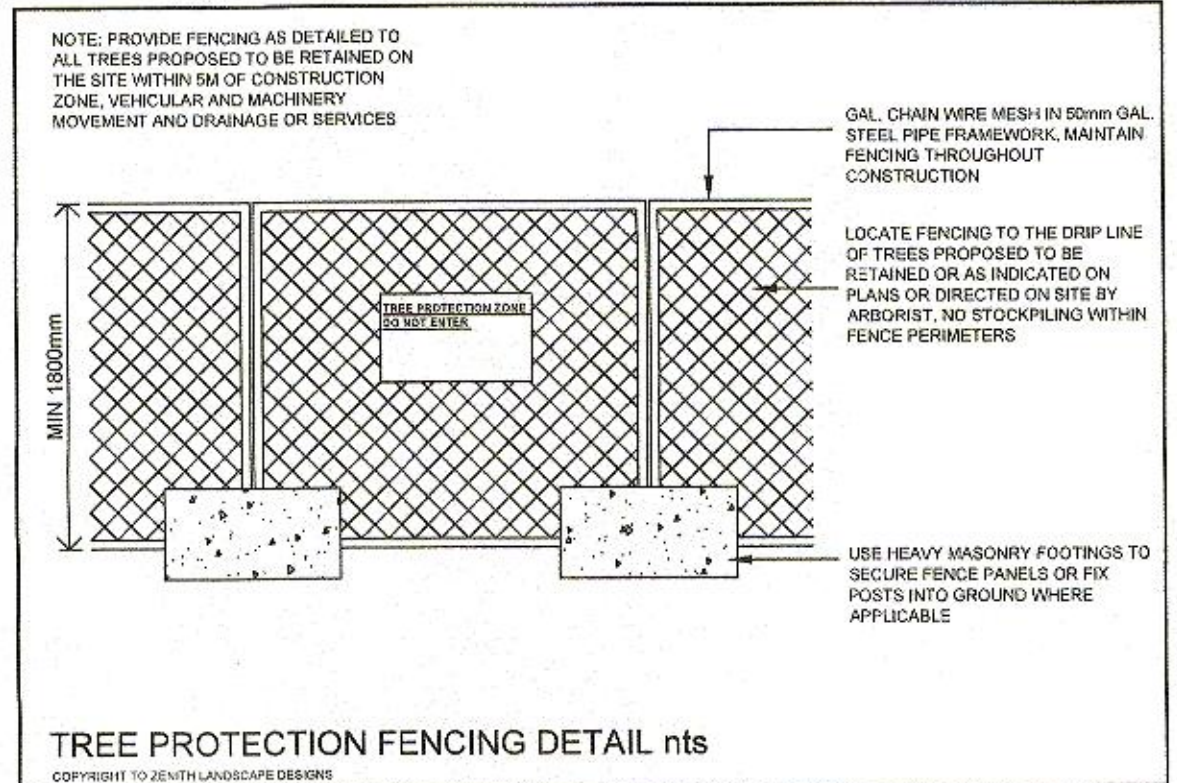


**TREE PROTECTION GUIDELINES**

**1. WORK NEAR TREES**  
GENERAL: All existing trees which are to remain undisturbed are indicated on the drawings and shall be adequately protected for the duration of the contract as specified by the client. Any variation from this specification or enquires regarding the protection/health of the trees to be retained must be referred to Council's Landscape Officer or Tree Preservation Officer for approval and/or advice.  
REQUIREMENTS: Trees shall not be removed or topped unless specific instruction is given in writing by the Superintendent. All tree protection works shall be carried out before excavation, grading and site works commence.

**2. PROTECTION**  
Protect trees specified or to be retained from damage by ground works. Take necessary precautions, including the following:  
2.1 Method: Fence off the root zones of all existing trees to be retained in accordance with the Tree Protection Detail. Protective fencing is to remain in place until the completion of all building and hard landscape construction. Fencing is to be located as shown on the Existing Tree Plan. A layer of organic mulch 75mm thick shall be placed over the protected area where existing garden beds are not already present. Where building works are required within the root zone of existing trees these works must be supervised by a qualified Arborist.  
2.2 Harmful materials: Do not store or otherwise place bulk materials and harmful materials under or near trees. Do not place spoil from excavations against tree trunks. Prevent wind-blown materials such as cement from harming trees and plants. Prevent concrete wash or other substances from entering the protection zone.  
2.3 Damage: Prevent damage to tree bark. Do not attach stays, guys and the like to trees.  
2.4 Work under trees: Do not add or remove topsoil within the drip line of the trees. If it is necessary to excavate within the drip line, use hand methods such that root systems are preserved intact and undamaged. Open up excavations under tree canopies for as short a period as possible.  
2.5 Roots: Do not cut tree roots exceeding 50mm diameter unless undertaken by a qualified Arborist.

EXISTING TREE SCHEDULE						
TREE No.	TREE	HGT. (m)	CAN. (m)	TNK. (m)	condition	retain/ remove
1	Pine Tree	7	6	multi	poor	RETAIN
2	Cotoneaster	5	6	multi	fair	RETAIN
3	Jacaranda	8	6	0.3	fair	RETAIN
4	Bangalow Palm	5	4	0.1	fair	remove
5	Sweet Pittosporum	7	6	0.4	fair	remove
6	Cotoneaster	4	4	multi	poor	remove
7	Sweet Pittosporum	3	4	multi	fair	remove
8	Crape Myrtle	6	8	0.5	good	remove
9	Unidentified	6	4	0.2	poor	remove
10	Cotoneaster	5	5	0.3	poor	remove
11	Camphor laurel	12	10	0.5	fair	RETAIN
12	Unidentified	8	8	multi	poor	remove
13	Unidentified	10	10	0.4	poor	remove
14	Cypress Pine	10	5	multi	fair	remove
15	Cypress Pine	10	5	multi	fair	remove
16	Cypress Pine	10	5	multi	fair	remove
17	Cypress Pine	10	5	multi	fair	remove
18	Swamp Mahogany	21	11	1.0	good	RETAIN
19	Cypress Pine	10	6	multi	poor	remove



**DISCLAIMER**  
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These drawings may be printed in whole. The drawings and parts thereof remain the intellectual property of Zenith Landscape Designs and may not be used in part or whole for any other purpose without the prior permission of Zenith Landscape Designs.

- NOTES**
1. Vehicular pavement, fencing and built structure details shall be to Architect's specification.
  2. All surface and sub-surface drainage requirements shall be to Engineers details.
  3. Numeric dimensions should be taken in preference to scaling.
  4. All dimensions should be checked on-site prior to commencing construction.
  5. Contractors shall verify the location of all site features prior to commencing works.
  6. Soil testing has not been undertaken as part of the preparation of this design; Contractors shall determine the need for soil testing prior to any planting works.
  7. A search of underground services has not been undertaken as part of the preparation of this design; it is recommended that Contractors contact DIAL BEFORE YOU DIG ON 1100 prior to commencing any works.
  8. This plan is to be read in conjunction with the architectural and engineering plans.
  9. It is recommended that an approved root barrier be installed to manufacturers recommendations to all tree planting in the vicinity of structures, walls and hard pavement areas.
  10. Common mass planted beds will require a fully automated irrigation system which is to be designed and installed by an irrigation consultant prior to planting.

J	REVISED DA	17.09.13
I	CC ISSUE	1.5.13
Rev. no.	Description:	Date:
ARBORIST:	MOORE TREES	
SURVEY:	COOPER & RICHARDS SURVEYORS	
HYDRAULIC:	ALAN DEAN & ASSOC.	
ARCHITECT:	JMH LIVING DESIGN	
CLIENT:	I J NORMAN NOMINEES P/L	

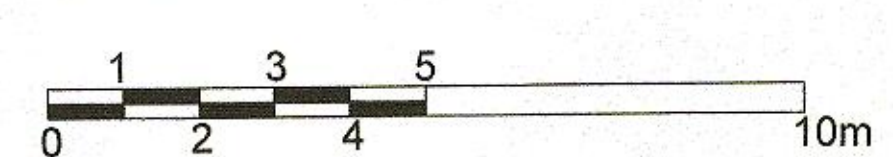
DEVELOPMENT CONSENT  
Development Consent No. 13/0879  
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18 DEC 2014  
SUTHERLAND SHIRE COUNCIL

**ZENITH**  
Landscape Designs  
19 Araluen Place Sutherland  
Ph: 9445 5200 Fax: 9445 5300  
E: info@zenithlandscapes.com.au

**10-14 MOANI AVENUE  
GYMEA**

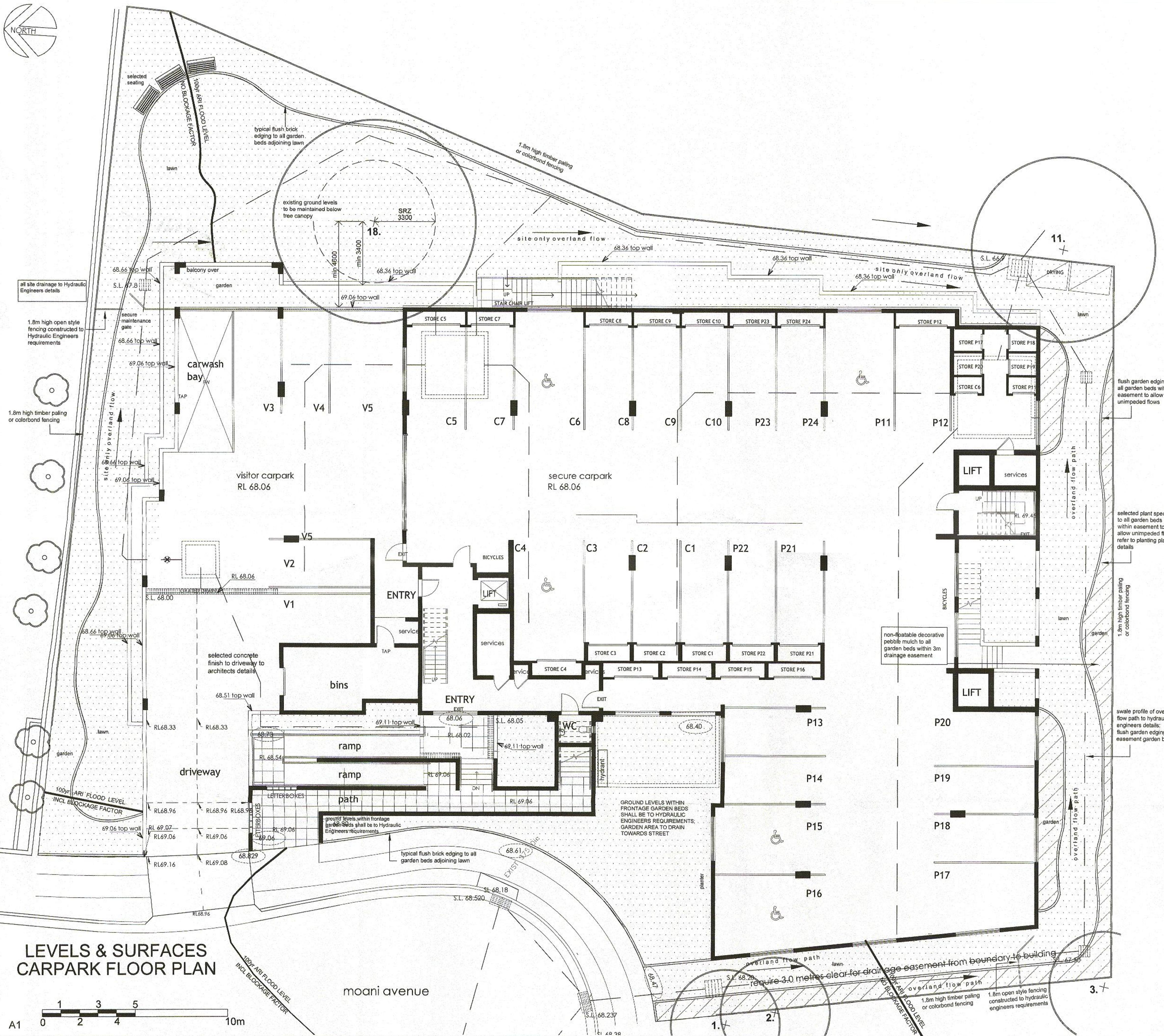
TITLE: EXISTING TREE PLAN		
STATUS: CC	SCALES: 1:100	
DRAWN: MAG	SHEET: 1 OF 6	REVISION:
CHECKED: MFG	DRAWING No. 13-2699 LO1	
DATE: 1.5.13		J

EXISTING TREE PLAN

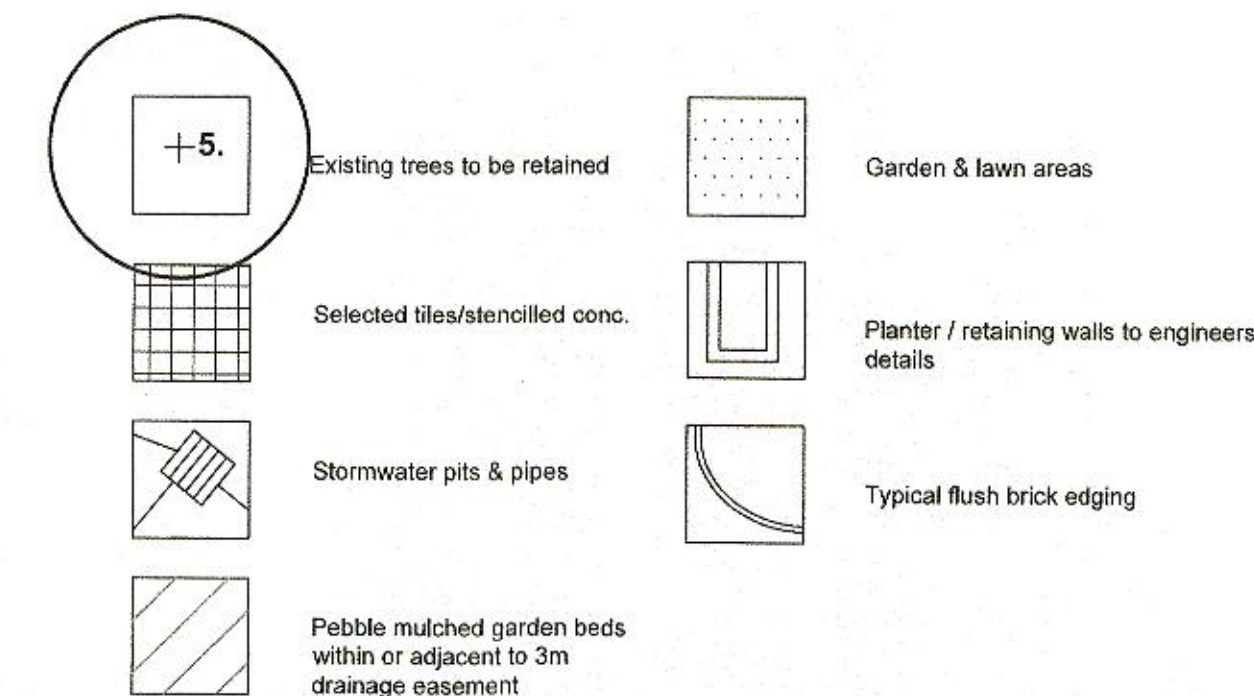


Note: Refer to Arborist's Report as prepared by Moore Trees for all Tree Protection and Tree Management requirements as well as detailed assessment of Tree 18





### Legend



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**NOTES**

1. Vehicular pavement, fencing and built structure details shall be to Architect's specification.
2. All surface and sub-surface drainage requirements shall be to Engineers detail.
3. Numeric dimensions should be taken in preference to scaling.
4. All dimensions should be checked on-site prior to commencing construction.
5. Contractors shall verify the location of all site features prior to commencing work.
6. Soil testing has not been undertaken as part of the preparation of this design; Contractors shall determine the need for soil testing prior to any planting works.
7. A search of underground services has not been undertaken as part of the preparation of this design; it is recommended that Contractors contact DIAL BEFORE YOU DIG ON 100 prior to commencing any works.
8. This plan is to be read in conjunction with the architectural and engineering plans.
9. It is recommended that an approved root barrier be installed to manufacturers recommendations to all tree planting in the vicinity of structures, walls and hard pavement areas.
10. Common mass planted beds will require a fully automated irrigation system which is to be designed and installed by an irrigation consultant prior to planting.

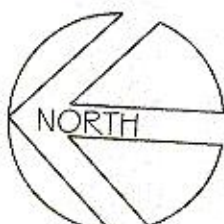
J	REVISED DA	17.09.13
I	CC ISSUE	1.5.13
Rev. no.	Description:	Date:
ARBORIST:	MOORE TREES	
SURVEY:	COOPER & RICHARDS SURVEYORS	
HYDRAULIC:	ALAN DEAN & ASSOC.	
ARCHITECT:	JMH LIVING DESIGN	
CLIENT:	I J NORMAN NOMINEES P/L	



10-14 MOANI AVENUE  
GYMEA

TITLE: LEVELS & SURFACES - CARPARK LEVEL			
STATUS: CC		SCALE: 1:100	
DRAWN: MAG		SHEET: 2 OF 6	
CHECKED: MFG		DRAWING No.	
DATE: 15.13		13-2699 LO2	
		REVISION: J	





Legend

+5.

Existing trees to be retained

Selected tiles/stencilled conc.

Stormwater pits & pipes

Pebble mulched garden beds within or adjacent to 3m drainage easement

Garden & lawn areas

Planter / retaining walls to engineers details

Typical flush brick edging

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I	CC ISSUE	1.5.13
Rev. no.	Description:	Date:
ARBORIST:	MOORE TREES	
SURVEY:	COOPER & RICHARDS SURVEYORS	
HYDRAULIC:	ALAN DEAN & ASSOC.	
ARCHITECT:	JMH LIVING DESIGN	
CLIENT:	I J NORMAN NOMINEES P/L	

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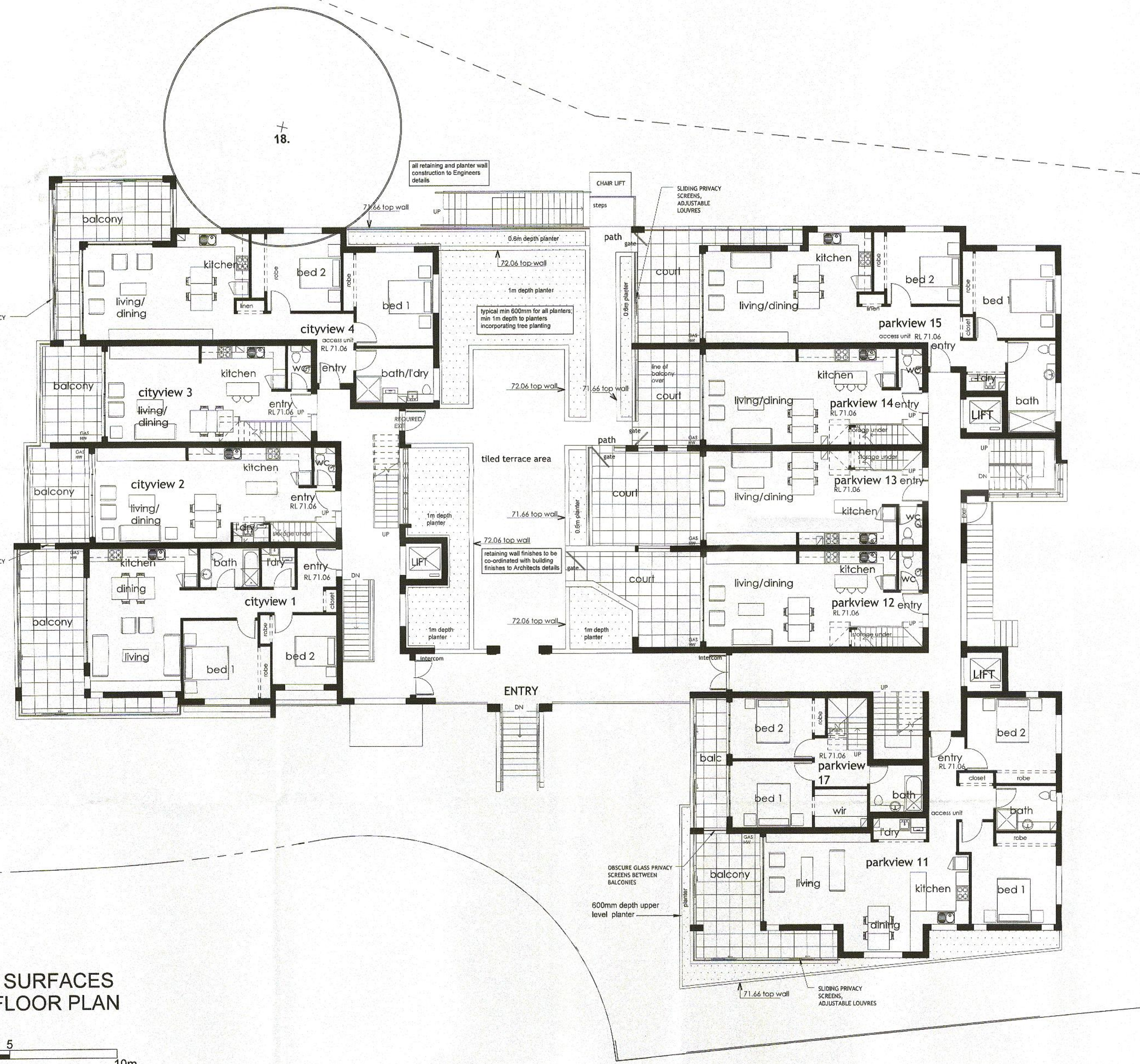
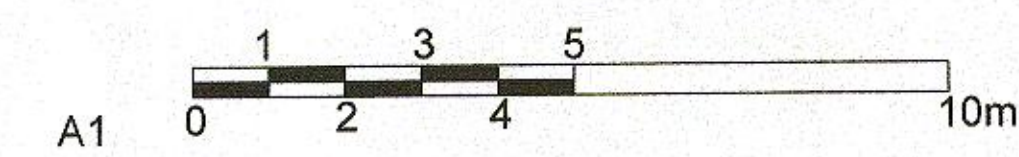
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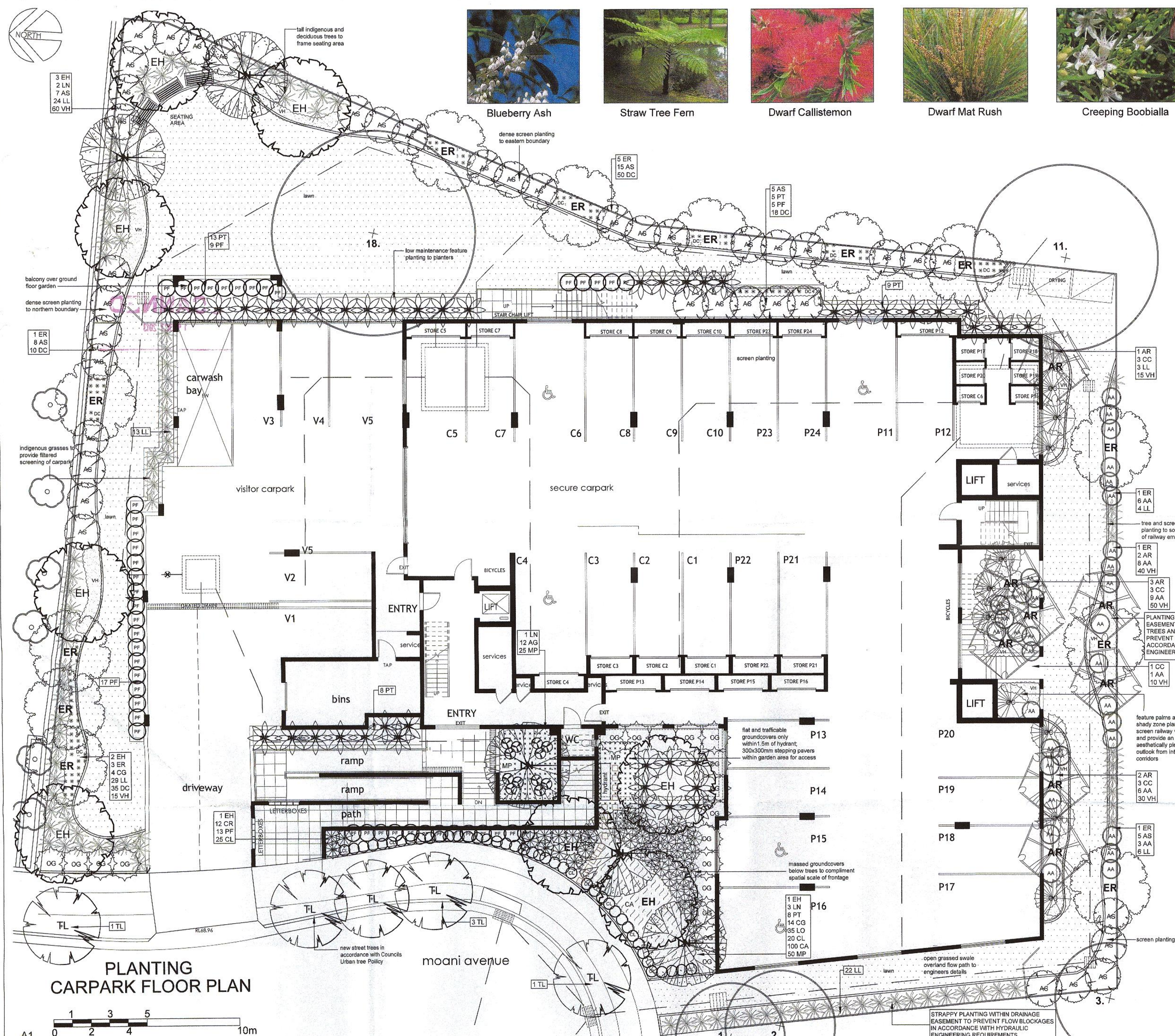
10-14 MOANI AVENUE  
GYMEA

TITLE:	LEVELS & SURFACES - GROUND FLOOR	SCALES:	1:100	REVISION:	
STATUS:	CC				
DRAWN:	MAG	SHEET:	3 OF 6		
CHECKED:	MFG	DRAWING No.	13-2699 LO3		
DATE:	1.5.13				J

LEVELS & SURFACES  
GROUND FLOOR PLAN







Blueberry Ash



Straw Tree Fern



Dwarf Callistemon



Dwarf Mat Rush



Creeping Boobialla

PLANT SCHEDULE - CARPARK LEVEL

SYMBOL	SPECIES	No.	Pot Size	Mat. Hgt.	Stake	COMMON NAME
EH	Eucalyptus haemastoma	7	75ltr	10m	yes	Scribbly Gum
ER	Elaeocarpus reticulatus (clear trunked to min.1m a.g.l.)	12	75ltr	8m	yes	Blueberry Ash
AR	Lagerstroemia indica 'Natchez'	7	75ltr	8m	yes	White Crepe Myrtle
TL	Archontophoenix sp. (clear trunked to min.2m a.g.l.)	8	100ltr	8m	yes	Bangalow Palm
TL	Tristanopsis laurina	5	45ltr	5m	yes	Water Gum
CC	Acmena smithii var. minor	40	25ltr	4m	no	Small Leaf Lilly Pilly
CC	Cyathocha cooperi (clear trunked to min.0.5m a.g.l.)	10	25ltr	4m	no	Straw Tree Fern
PF	Phormium tenax 'Purpurea'	45	200mm	1.7m	no	Purple NZ Flax
CR	Cordyline 'Red Star'	6	25ltr	1.7m	no	Red Cordyline
CG	Callistemon salignus 'Great Balls of Fire'	18	200mm	1.5m	no	Dwarf Callistemon
PF	Phormium tenax 'Flamin'	49	200mm	1m	no	Red NZ Flax
AA	Asplenium australasicum	33	200mm	1m	no	Bird Nest Fern
LL	Lomandra longifolia 'Katrinus'	107	150mm	1m	no	Mat Rush
LO	Lomandra longifolia 'Nyalia'	58	150mm	0.8m	no	Blue Mat Rush
CL	Callistemon 'Little John'	51	200mm	0.5m	no	Dwarf Bottlebrush
AG	Agave attenuata	14	200mm	0.5m	no	Agave
OC	Dianella caerulea 'Breeze'	113	150mm	0.5m	no	Flax Lily
CA	Cissus antarctica	100	150mm	g.cover	no	Kangaroo Vine
MP	Myoporum parvifolium	145	150mm	g.cover	no	Creeping Boobialla
VH	Viola hederacea	220	150mm	g.cover	no	Native Violet
	ST26 buffalo turf					

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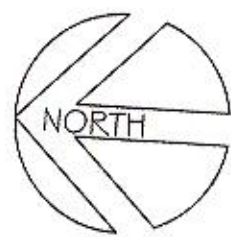
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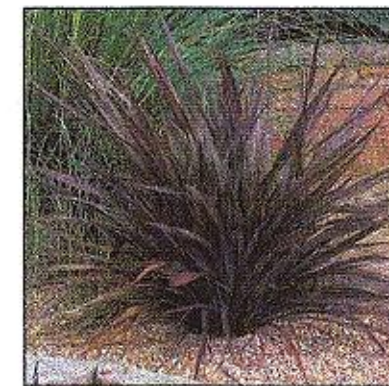
**10-14 MOANI AVENUE  
GYMEA**

TITLE:	PLANTING - CARPARK LEVEL
STATUS:	CC
DRAWN:	MAG
CHECKED:	MFG
DATE:	1.5.13
SHEET:	4 OF 6
DRAWING No:	13-2699 LO4
REVISION:	J





White Crepe Myrtle



Purple NZ Flax



Dwarf Lilly Pilly



Native Pigface



Zieria

PLANT SCHEDULE - GROUND FLOOR LEVEL						
	SPECIES	No.	Pot Size	Mat. Hgt.	Stake	COMMON NAME
	Lagerstroemia indica 'Natchez'	2	75ltr	8m	yes	White Crepe Myrtle
	Fraxinus griffithii	1	35ltr	4m	yes	Evergreen Ash
	Phormium tenax 'Purpurea'	18	200mm	1.7m	no	Purple NZ Flax
	Acmena 'Hedgemaster'	178	200mm	0.7m	no	Dwarf Lilly Pilly
	Carpobrotus glaucescens	55	150mm	g.cover	no	Native Pigface
	Zieria prostrata 'Pink Flecks'	148	150mm	g.cover	no	Zieria



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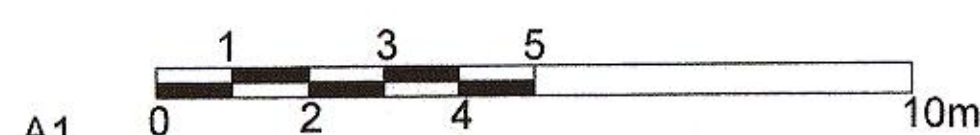
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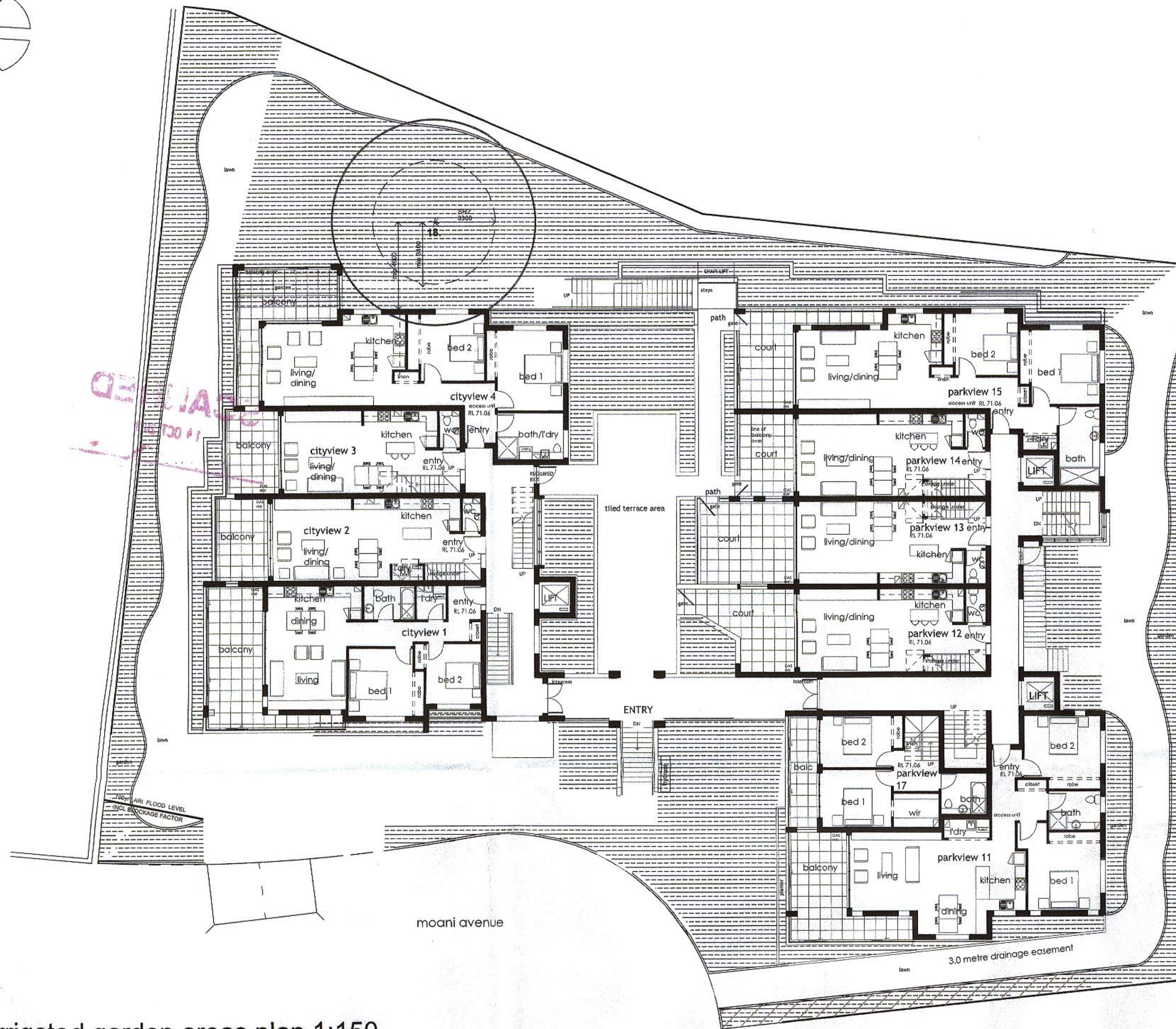
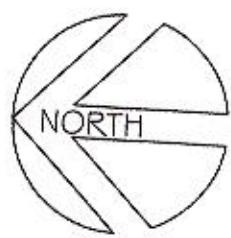
TITLE:	PLANTING - GROUND FLOOR	SCALES:	1:100	REVISION:	
STATUS:	CC				
DRAWN:	MAG	SHEET:	5 OF 6		
CHECKED:	MFG	DRAWING No:	13-2699 LO5		
DATE:	1.5.13				J

## PLANTING GROUND FLOOR PLAN



A1





#### IRRIGATION GUIDELINES

##### GENERAL REQUIREMENTS

- All common planting areas as shown on the plan are to be irrigated using a water efficient irrigation system; irrigation system details are to be designed by an irrigation consultant on a design and construct basis during the building construction phase of development.
- The irrigation system shall be designed and installed in accordance with all relevant Australian Standards and the current water restrictions that are in place at the time of construction.
- The design of the irrigation system shall only be carried out after water pressure testing has been undertaken.
- Installation shall only be carried out by a qualified tradesperson.
- The irrigation system shall be installed and in full working order prior to any planting works taking place.
- The site superintendent and all other relevant personnel shall be fully conversant with the operational requirements of the system prior to planting taking place.
- A copy of the irrigation layout and all instruction manuals shall be kept on-site at all times during construction.

##### SYSTEM REQUIREMENTS

- A minimum of two separate automatic systems shall be installed as follows:
  - A. A station outdoor controller for carpark level areas and
  - B. A station outdoor controller for ground floor garden areas.
- Water backflow prevention valves shall be used on all tap systems.
- House cocks / OCVs are to be provided at a minimum of 1 per 60 sq.m's of landscaped area.
- All pipework above ground is to be 20mm table 8 copper with silver soldered fittings.
- Joints and fittings shall not be located under paths or other sealed surfaces.
- Drip tubes shall not be used under paths or through penetrations.
- All irrigation piping is to be 16mm poly pipe connecting to solenoid valves connected to the pressure pipe.
- All mainline irrigation pipes are to be laid a minimum of 200mm below soil levels - driptube and link pipes are to be laid a minimum 100mm below soil levels.
- Drip line rows are to be spaced equally and shall be offset a maximum of 250mm from the edges of garden beds.
- All solenoid valves are to be encased in valve boxes.

##### DOCUMENTATION REQUIREMENTS TO BE PROVIDED TO CLIENT

- As constructed drawings including the locations of all pipes, valves and sensors.
- Copy of backflow tests.
- Copy of system manuals and maintenance documents for all equipment and fittings.
- All warranty certificates.

#### LANDSCAPE GUIDELINES

##### 1. GENERAL

- The Contractor shall familiarise themselves with the site prior to tender.
- The Contractor will be held responsible for any damage to utility services, pipes, building structures, paving surfaces, fencing, footways, kerbs, roads and existing plant material.
- The site is to be left in a clean and tidy condition at the completion of works to the satisfaction of the Superintendent.
- No work involving an extra shall be undertaken unless approval is first obtained from the Superintendent.
- No substitute of material shall be made unless approval is given by the Superintendent.
- The Contractor shall continuously maintain all areas of the Contract during progress of the works specified.

##### 2. SITE PREPARATION

- Prepared sub-grade is to be free of stones larger than 100mm diameter, cement, rubbish and any other foreign matter that could hinder plant growth.
- MASS PLANTED AREAS**
- Once clear of weed growth, grass and debris, sub-grade should be cultivated to a minimum depth of 150mm incorporating 'Dynamic Lifter' or equivalent at the manufacturers recommended rates.
- Weeds shall be controlled by a combination of chemical and hand removal techniques.

##### 3. PLANTING

- All plant material is to be hardened off, disease and insect free and true to species, type and variety. Plants are to be well grown but not root bound and shall comply with Nalpac - 'Guide to Purchasing Landscape Trees'.
- All plants are to be removed from their containers prior to planting with as little disturbance to the root system as possible.
- Planting shall not be carried out in dry soil or extreme weather conditions.
- Plants should be planted at the same depth as the plants were in the containers and allow for a shallow saucer of soil to be formed around the plant to aid the penetration of water.
- All plant material should be watered thoroughly immediately after planting.
- The Contractor shall be responsible for the failure of plants during construction, except for acts of vandalism.
- Labels shall be removed entirely from the plants.

##### 4. STAKING

- Ties should be firmly attached to the stakes, in a way to avoid damage to the stem while allowing a small degree of movement.

##### 5. TURF AREAS

- Turf areas should be cultivated before turbing by ripping or harrowing.
- At the completion of turbing the whole area shall be thoroughly soaked and kept moist till the completion of landscape works.

##### 6. MULCH

- Mulch for all mass planted beds shall be 'Droughtmaster' mulch as supplied by A.N.L. or similar.
- Mulch to southern boundary garden beds in overland flow path shall be 20mm Nepean River Gravel or similar laid to a minimum 75mm depth.
- SOIL MIXES**
- Soil mix for mass planted areas shall be 3 parts site soil to 1 part 'Organic Garden Mix' as supplied by A.N.L. or equivalent.
- Soil mix for planter boxes and planting over slab shall be 'Planter Box Mix' as supplied by A.N.L. or equivalent.
- Soil mix for street tree planting shall be 1 part site soil to 1 part 'Organic Garden Mix' as supplied by A.N.L. or equivalent.

#### MAINTENANCE

- These works shall be in addition to the construction contract.
- The Contractor shall commence and fully implement the short term maintenance after Practical Completion has been confirmed by the Superintendent.
- The Contractor shall carry out maintenance works for a minimum period of 26 weeks.
- Maintenance works shall include the following works:

- Mow lawns and trim edges each 10 days in summer and each 14 days in winter.
- Water all planting and lawn areas in order to ensure adequate soil moisture at all times.
- Remove any weed growth from all planting areas.
- Spray and control pests and diseases as required.
- Replace plants which fail with plants of similar size and quality as originally planted.
- Adjust ties to trees as necessary.
- Make good any erosion or soil subsidence which may occur.
- Maintain all mulched areas in a clean and tidy condition to the depth as originally specified.
- Make good any defects or faults arising from defective workmanship.

Note: The Contractor is not to be held responsible for the theft or vandalism of any plants during the maintenance period.

- Advanced trees shall be individually inspected at least once a month in order to determine their health and vigour. Should the trees exhibit any signs of disease, pest infestation or poor growth then a qualified arborist shall be consulted within 14 days in order to determine the most appropriate course of action. Recommended treatment shall then be commenced within 7 days and shall continue until the problem is eliminated.
- When the maintenance period is completed the Contractor shall notify the Superintendent. The site shall then be inspected and if to the satisfaction of the Superintendent the responsibility will be handed over to the Client for on-going maintenance.

#### DISCLAIMER

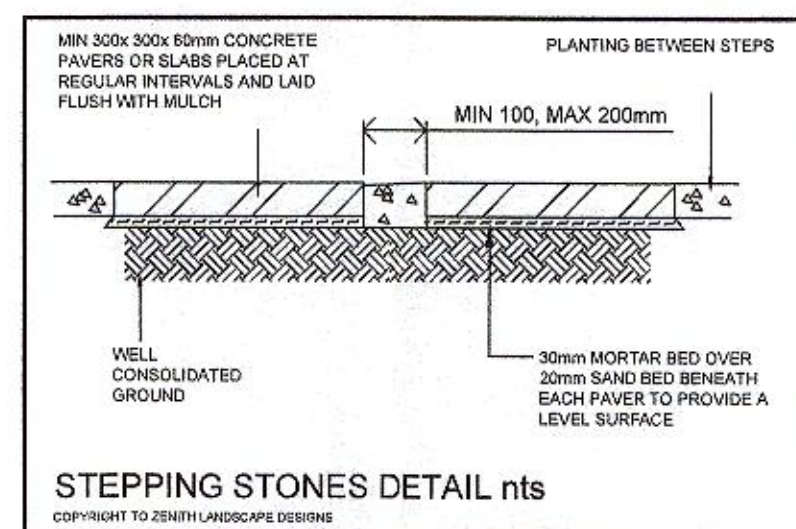
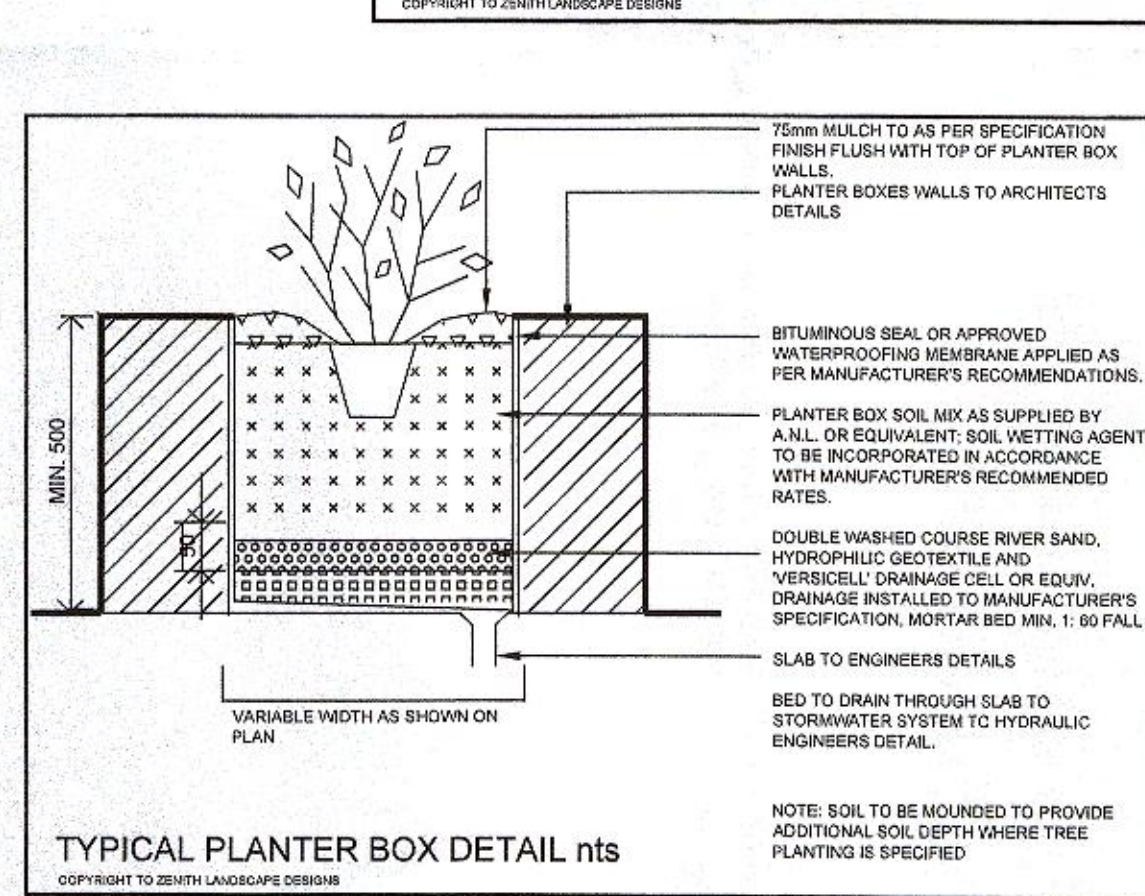
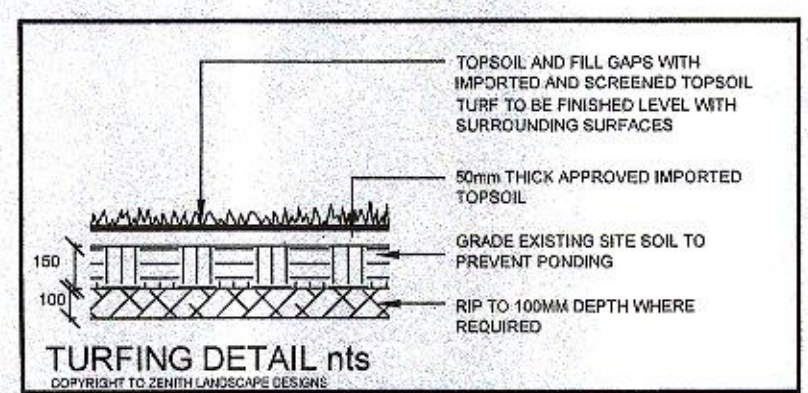
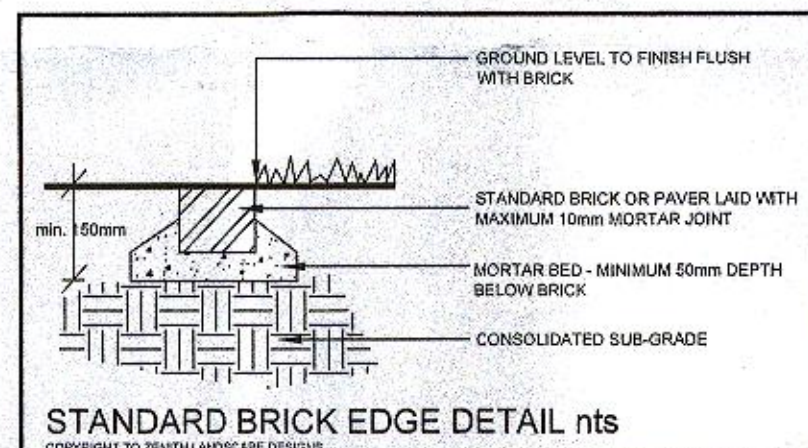
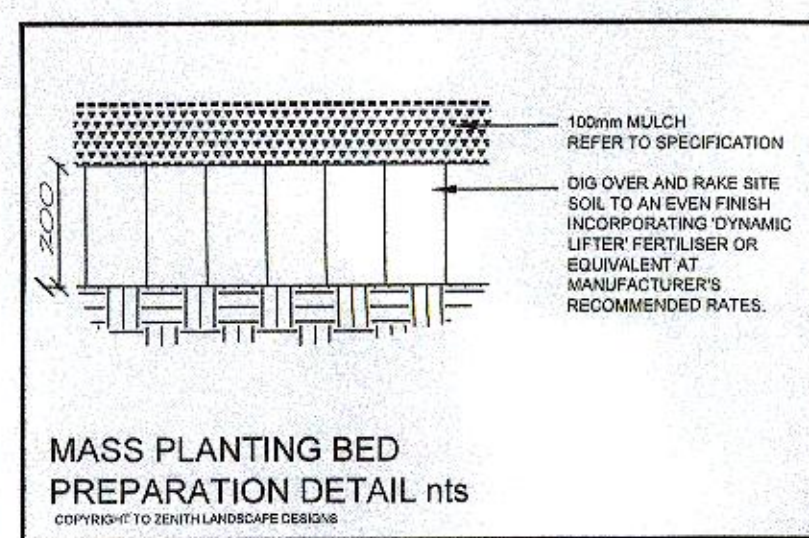
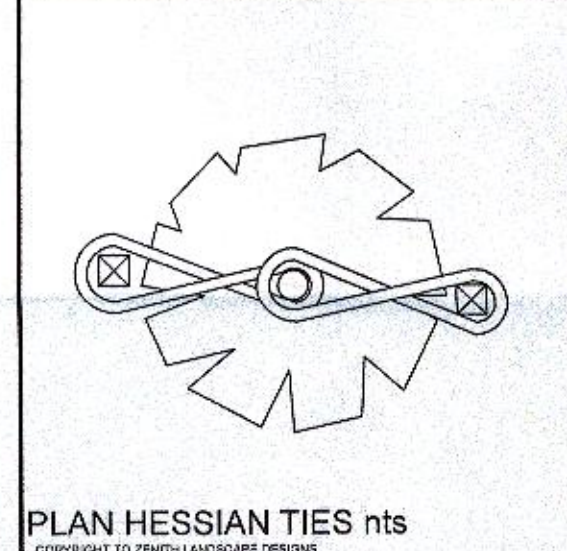
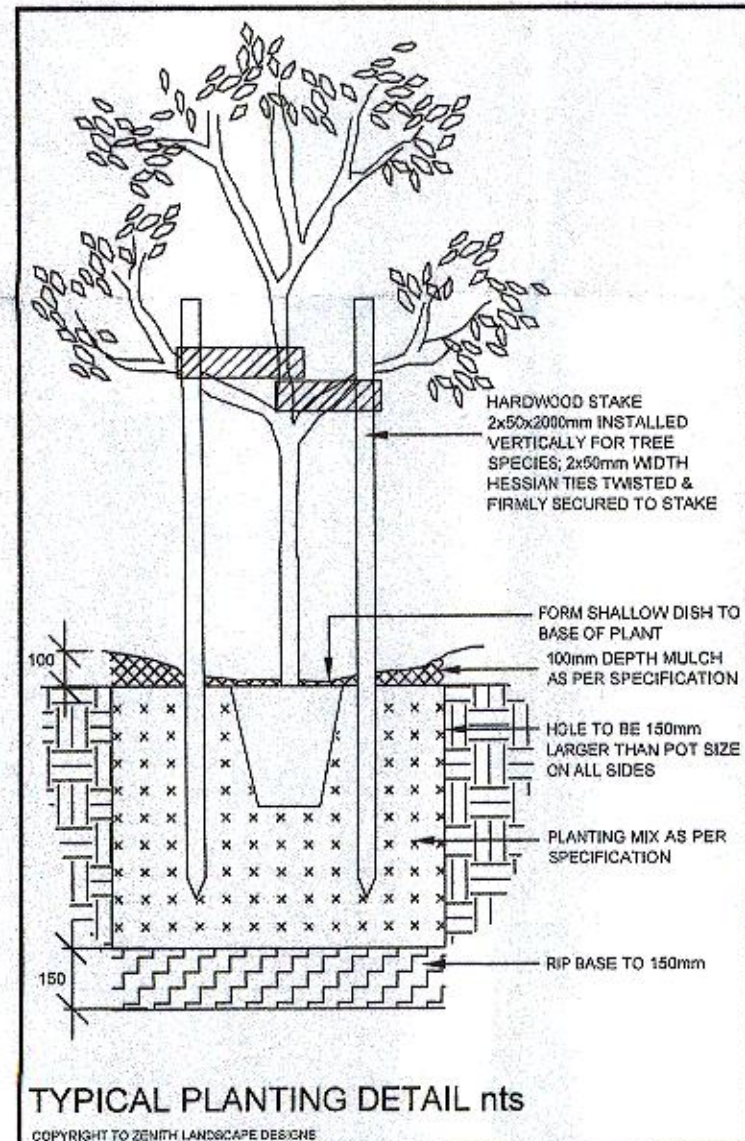
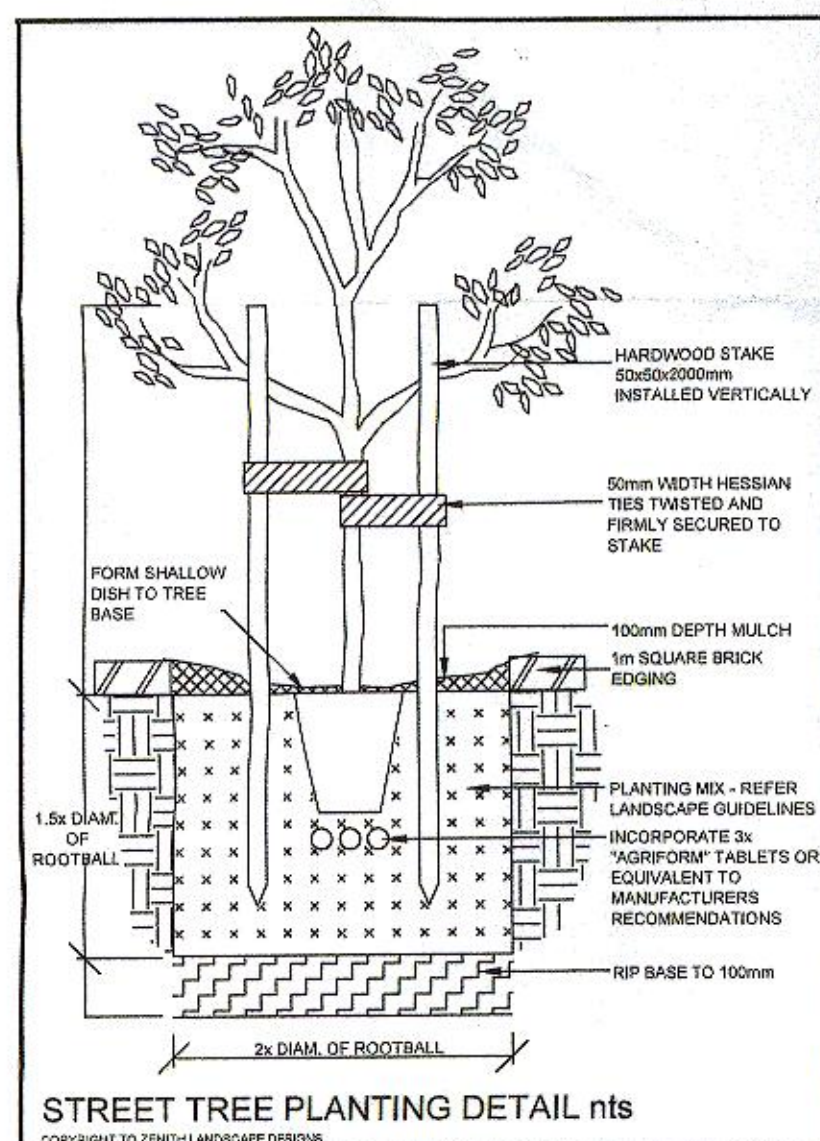
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### irrigated garden areas plan 1:150





# SITE ANALYSIS

SITE AREA	EXISTING	2270.00	2270.00
LANDSCAPE AREA			
BUILDING FOOTPRINT		808.40	1253.11
DRIVEWAY		752.93	39.62
PATHS, RAMPS & STEPS		INCL	116.64
TOTAL SITE COVER		1561.33	1409.37
AVAILABLE LANDSCAPE AREA		708.67	860.63
%		31.20%	37.9%
plus PODIUM PLANTING (78.60)		N/A	942.27
%			41.5%

# STORMWATER DRAINAGE PLAN

SCALE 1:100 on A1

PROVIDE EROSION AND SEDIMENT CONTROLS IN ACCORDANCE WITH THE SOIL AND WATER MANAGEMENT PLAN AND COUNCIL'S REQUIREMENTS

NOTE: LOCATION AND GEOMETRY OF PIT TO BE CONFIRMED UPON EXCAVATION OF THE EXISTING PIPELINE

900\*900 PRECAST SURFACE INLET/SURGE PIT WITH MAXIMESH RH3030 TRASH SCREEN OUTFLOW VIA EXISTING PIPE S.L. 66.9 OUTFLOW I.L. TO MATCH EXISTING

EXISTING SEALED JUNCTION PIT S.L. 67.33 I.L. 65.65

MIN 150mm GAP UNDER FENCE FOR OVERLAND FLOW

EXISTING 3\*1500 Dia RAILWAY CULVERT

15000M3 UNDERGROUND RAINWATER TANK SERVING MIN 645M2 OF ROOF AND PLUMBED FOR IRRIGATION AND CARWASHING IN ACCORDANCE WITH BASIX REPORT. GRAVITY OVERFLOW IS TO BE PROVIDED WITH BACKFLOW PREVENTION VALVE FOR PROTECTION FROM FLOODWATERS. A SECONDARY OVERFLOW IS TO BE PROVIDED DISCHARGING ABOVE RL 69.06 TO OPERATE AS A CHARGED SYSTEM ONLY DURING MAJOR FLOOD EVENTS

Construction Notes

These drawings shall be read in conjunction with all Architectural and other consultants' drawings and specifications. Any discrepancies shall be referred to the Architect for decision before proceeding with the work.

All workmanship and materials shall be in accordance with the requirements of current editions of Australian Standards and the requirements of the relevant building authority.

Dimensions shall not be obtained by scaling the drawings and all levels and setting out dimensions shown on the drawings shall be verified on the site and any discrepancies reported to the superintendent.

All pipes are U.P.V.C. stormwater unless otherwise noted. Minimum size to be 100mm unless otherwise noted. All pipes downstream of a surface inlet pit to be 150mm minimum.

All pipes within the easement and road reserve to be class 2RCP.

All pipes to be laid at a minimum fall of 1%.

Surface flows in landscape and paved areas shall be guided by depressions and directed to the nearest drainage pit.

Rainfall intensities are in accordance with Sutherland Shire Council's Urban Drainage Design Manual, zone 1.

Pits greater than 600mm but less than 1.0m deep to be minimum 600\*600.

Pits of depth greater than 1.0 metres shall be 900 x 900 Precast and fitted with step irons.

All pits and box drains or trench drains, shall have hot dipped galvanised flush fitting surface inlet grates and angle iron surrounds.

Effective cross section of eaves and/or box gutters and gradient are required to comply with AS 3500-2003.

This design has been prepared to accord with Sutherland Shire Council's DCP2006, Sutherland Shire Council's Specification Stormwater Management, Australian Rainfall and Runoff 1987 and with Sutherland Shire Council's Drainage Design Manual and AS 3500-2003.

All known services are shown on the drawing, however it is the builders responsibility to identify & locate all services prior to any excavation and to hand dig in their vicinity to avoid damage to same.

The builder is required to construct the downstream outlet pit first to ensure all pits and pipework is installed to achieve the minimum required falls. If the levels of any pits or pipes cannot be achieved for any reason, refer to the Engineer for instructions.

All works in the public way and the redirected easement to be in accordance with Council's Engineering Specification for Subdivisions and Developments.

Erosion and sediment control to be carried out in accordance with the soil and water management plan.

DETAILS SHOWN ON THESE PLANS MAY NOT BE VARIED UNLESS APPROVED BY THE SUPERVISING ENGINEER, OTHERWISE FINAL CERTIFICATION MAY BE WITHHELD

DA4	ISSUED FOR DEVELOPMENT APPLICATION	23-9-13	AD
B	AMENDMENTS FOR S34 AGREEMENT	31-10-11	AD
A	AMENDMENTS FOR S34 CONFERENCE	17-10-11	AD
S82A	AMENDMENTS FOR S82A SUBMISSION	1-4-11	AD
DA3	AMENDMENTS TO DA SUBMISSION	22-10-10	AD
DA2	AMENDMENTS TO DA SUBMISSION	8-10-10	AD
DA1	ISSUED FOR DEVELOPMENT APPLICATION	16-2-10	AD
REV. NO.	AMENDMENT	DATE	APPROVED

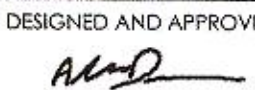
PROJECT: PROPOSED DEVELOPMENT

AT: 10-14 MOANI AVE, GYMEA

FOR: I J NORMAN NOMINEES PTY LTD

DRAWING: CONCEPT STORMWATER MANAGEMENT PLAN

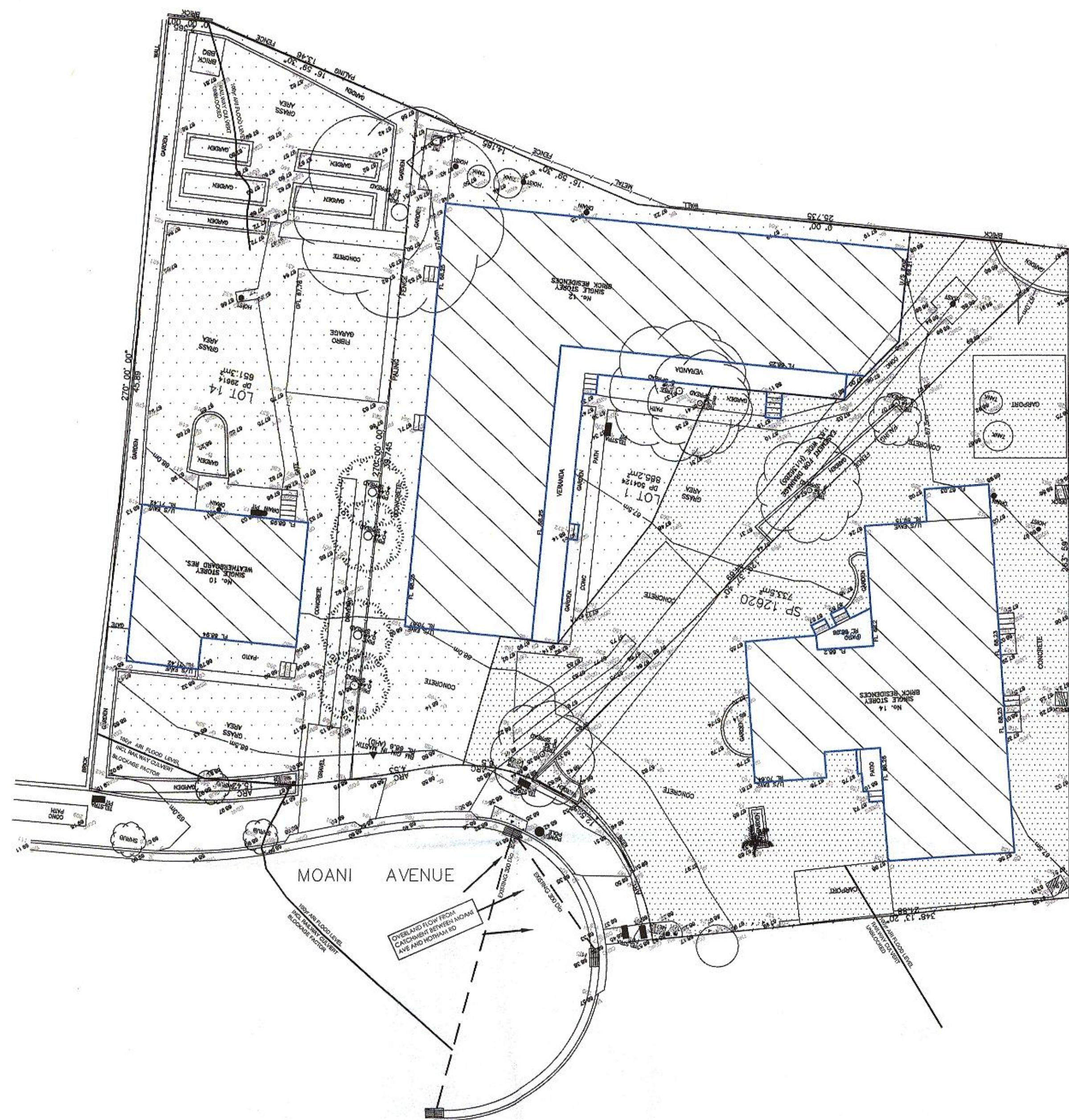
alan dean & associates  
Civil & Structural Engineering  
29 Vernon Ave, Gymea Bay NSW 2227  
Telephone: 9501 1555, Fax: 9501 1555  
Mobile: 0409 501 155  
Email: aldean@optusnet.com.au

DESIGNED AND APPROVED:  DATE: SEPT 2013 DRAWING NO: 2007-09-D1

DAWN: AD SCALE: 1:100 on A1 DA4

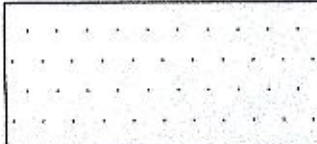
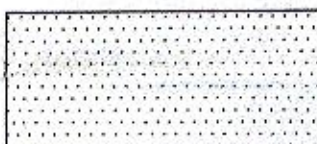
NOTE: ALL WORKS IN THE ROAD RESERVE TO BE CONSTRUCTED IN ACCORDANCE WITH COUNCIL'S DEVELOPMENT FRONTAGE DESIGN DRAWINGS.

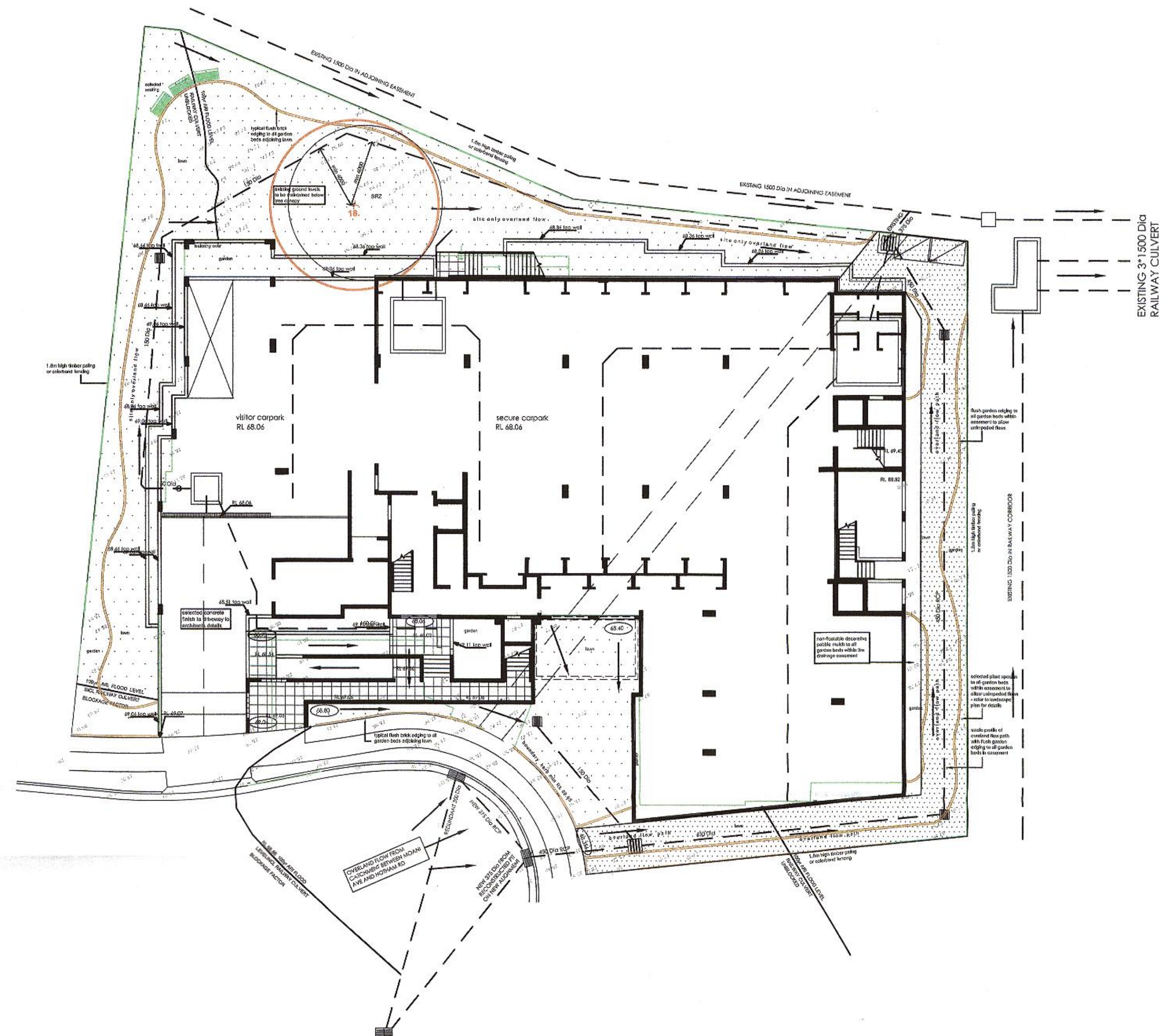




# PRE DEVELOPMENT FLOOD INUNDATION


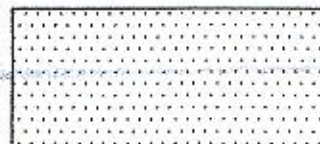
SCALE 1:200 on A1, 1:400 on A3

-  DENOTES 100yr ARI DESIGN FLOOD INUNDATION AREA
-  DENOTES 100yr ARI OVERLAND FLOW PATH WITHIN INUNDATION AREA


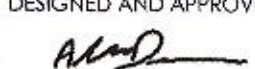


# POST DEVELOPMENT FLOOD INUNDATION

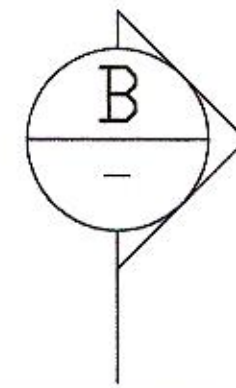
SCALE 1:200 on A1, 1:400 on A3

-  DENOTES 100yr ARI DESIGN FLOOD INUNDATION AREA
-  DENOTES 100yr ARI OVERLAND FLOW PATH WITHIN INUNDATION AREA

DEVELOPMENT CONSENT  
Development Consent No. 13/0878  
This plan is supporting documentation for the consent.  
18 DEC 2014  
SUTHERLAND SHIRE COUNCIL

DA4	ISSUED FOR DEVELOPMENT APPLICATION	23-9-13	AD
B	AMENDMENTS FOR S34 AGREEMENT	31-10-11	AD
A	AMENDMENTS FOR S34 CONFERENCE	17-10-11	AD
S82A	ISSUED FOR S82A APPLICATION	1-4-11	AD
DA	ISSUED FOR DEVELOPMENT APPLICATION	22-10-10	AD
REV. No.	AMENDMENT	DATE	APPROVED
PROJECT: PROPOSED DEVELOPMENT			
AT: 10-14 MOANI AVE, GYMEA			
FOR: I J NORMAN NOMINEES PTY LTD			
DRAWING: FLOOD INUNDATION PLANS			
 alan dean & associates Civil & Structural Engineering 29 Vernon Ave, Gympie Bay NSW 2227 Telephone: 9501 1555, Fax: 9501 1555 Mobile: 0409 501 155 Email: ajdean@optusnet.com.au			
DESIGNED AND APPROVED:	DATE: SEPT 2013	DRAWING NO:	
		DRAWN: AD	2007-09-D2
Alan Dean BE, MIEAust, CPEng	SCALE: 1:200 on A1		DA4





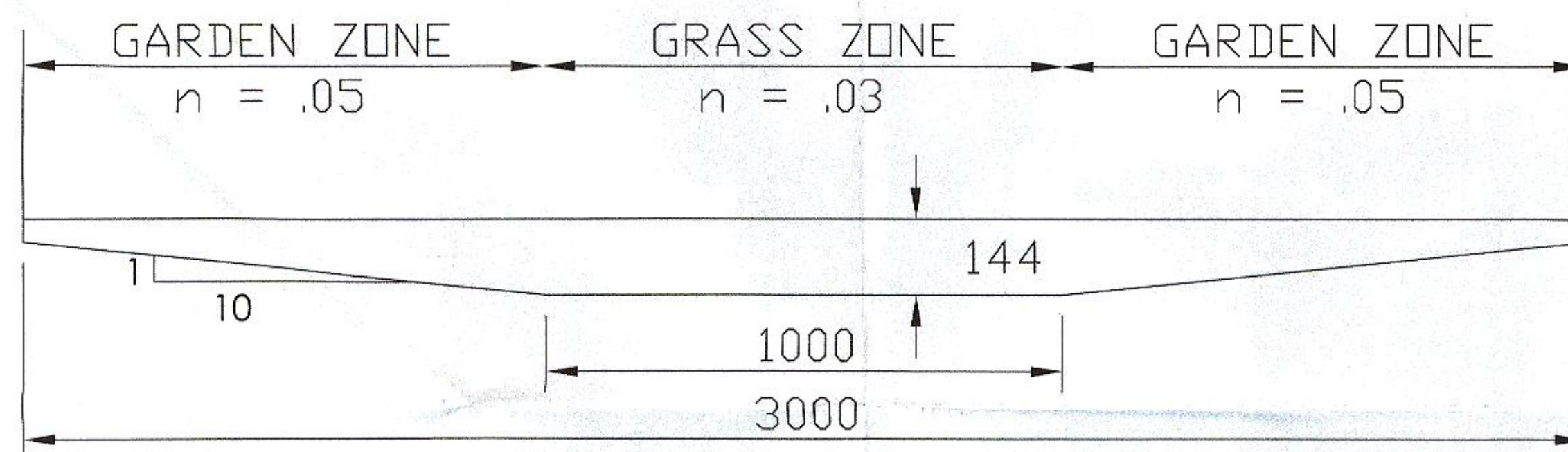
100yr ARI FLOOD LEVEL 68.86

	KI PIT 1/2		KI PIT 2/1	BOUNDARY	PIT		PIT		PIT		PIT
SURFACE RL	68.52		68.437	68.47	68.20		67.50		66.75		66.90
COVER	0.91		0.93		0.89		0.5		0.24		0.45
INVERT RL	67.2		67.1		66.90		66.55		66.06		66.00
CHAINAGE	<13.47>		<6.53>		0.0		20.2		51.1		57.6

## PROPOSED EASEMENT LONGSECTION

SCALE 1:100 on A1  
SCALE 1:200 on A3

A  
D1




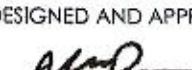
## CROSS SECTION

B

SCALE 1:10 on A1  
SCALE 1:20 on A3

3m WIDE OVERLAND FLOW PATH AT 3.6% GRADE  
MAX FLOW = 388 l/sec  
DEPTH = 144mm  
VELOCITY = 1.17m/sec  
DV = 0.17 m2/sec

DEVELOPMENT CONSENT  
Development Consent No. 1310878  
This plan / supporting document forms part  
of the above development consent.  
18 DEC 2014  
SUTHERLAND SHIRE COUNCIL

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B	AMENDMENTS FOR S34 AGREEMENT	31-10-11	AD
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REV. NO.	AMENDMENT	DATE	APPROVED
PROJECT:	PROPOSED DEVELOPMENT		
AT:	10-14 MOANI AVE, GYMEA		
FOR:	I J NORMAN NOMINEES PTY LTD		
DRAWING:	EASEMENT SECTIONS & DETAILS		
	alan dean & associates Civil & Structural Engineering 29 Vernon Ave, Gympie Bay NSW 2227 Telephone: 9501 1555, Fax: 9501 1555 Mobile: 0409 501 155 Email: ajdean@optusnet.com.au		
DESIGNED AND APPROVED:	DATE: SEPT 2013	DRAWING NO:	
	DRAWN: AD	2007-09-D3	
Alan Dean BE, MIEAust, CPEng	SCALE: AS SHOWN	DA4	