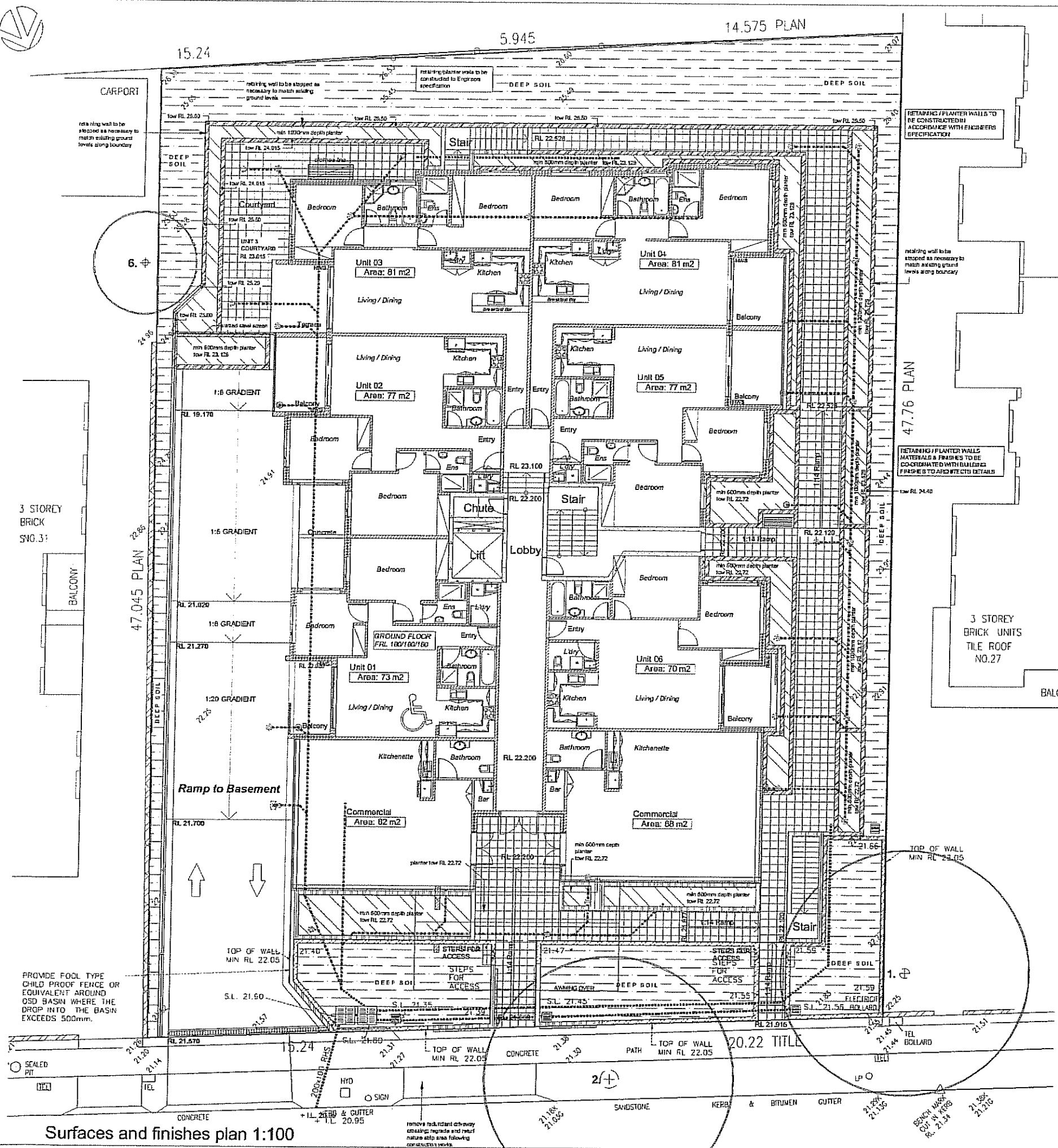




- Legend
- Existing trees to be retained
 - Selected Tiles
 - Stormwater lines and pits
 - Existing levels
 - Proposed levels
 - Proposed top of wall
 - Deep soil area
 - Garden/ Planter
 - Retaining / Planter walls

DISCLAIMER
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NOTES
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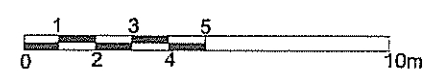
B	street tree & roof revisions	28.10.11
A	review panel revisions	3.8.11
Rev. no.	Description	Date
ARBORIST:	URBAN TREE MANAGEMENT	
SURVEY:	W.BUXTON PL	
HYDRAULIC:		
ARCHITECT:	IDRAFT BUILDING DESIGNS	
CLIENT:	SAADE CONSTRUCTIONS	

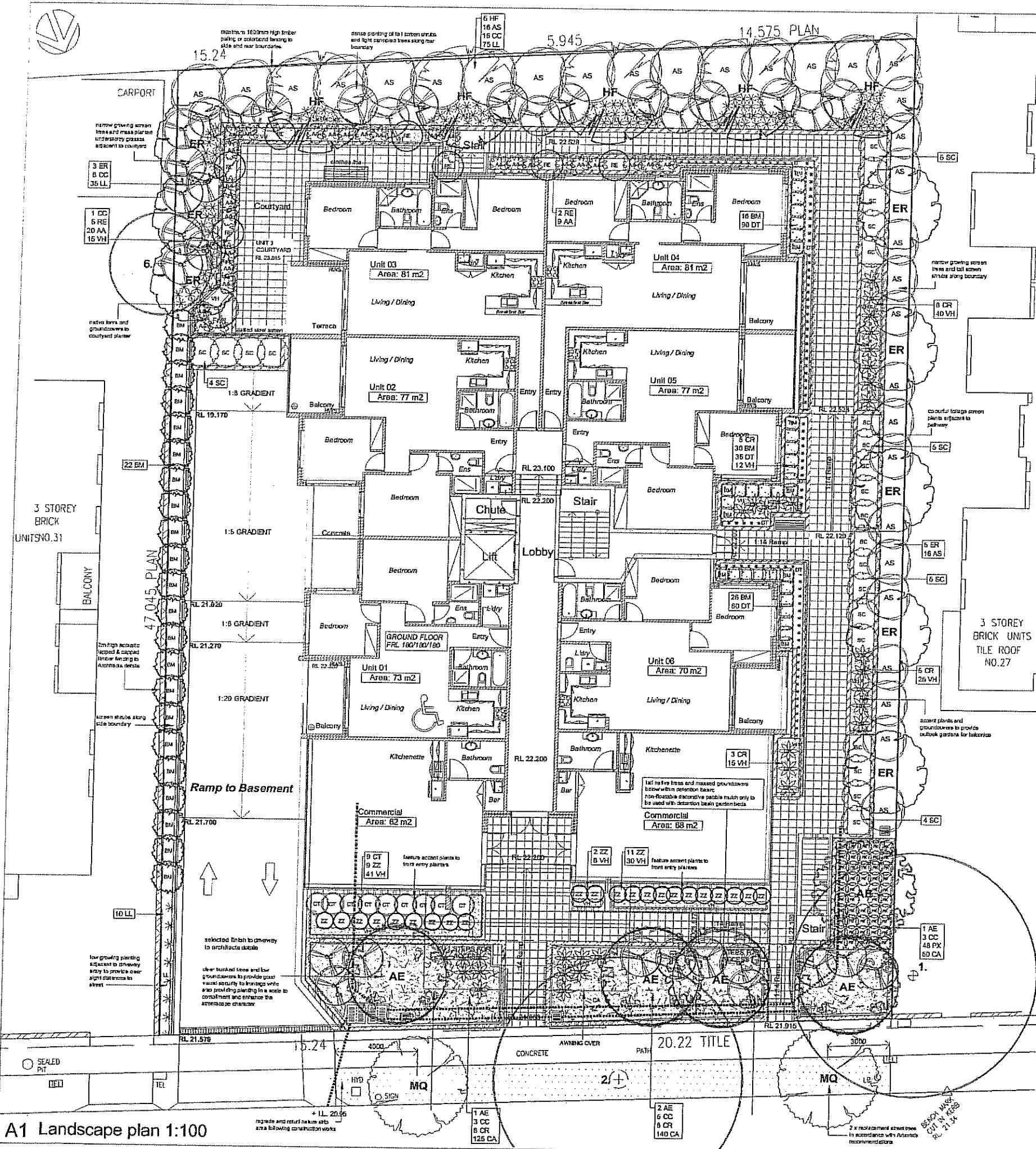


29 & 29A CAMPBELL ST PARRAMATTA

TITLE	LANDSCAPE PLAN - GROUND FLOOR	REVISION:	B
STATUS:	DA	SCALE:	1:100
DRAWN:	MAG	SHEET:	1 OF 4
CHECKED:	MFG	DRAWING NO:	11-2406
DATE:	10.5.11		

A1 Surfaces and finishes plan 1:100





PLANT SCHEDULE - GROUND FLOOR						
SYMBOL	SPECIES	No.	Pot Size	Mat. Hgt.	Stake	COMMON NAME
AE	Alphitonia excelsa	4	75tr	8m	yes	Red Ash
HF	Hymenosporum flavum	5	75tr	8m	yes	Native Frangipani
MQ	Melaleuca quinquenervia	5	00tr	8m	yes	Broad Leaf Paperbark
ER	Elaeagnus reticulata	8	45tr	6m	yes	Blueberry Ash
AS	Acmena smithii var. minor	32	45tr	4m	no	Small Leaf Lilly Pilly
BM	Cyrtospora cooperi	34	45tr	4m	no	Straw Tree Fern
RE	Backhousia myrtifolia	22	25tr	3m	no	Grey Myrtle
RE	Rhapla esculca	7	25tr	3m	no	Slender Lady Palm
SC	Syzygium 'Cascade'	23	25tr	2.5m	no	Weeping Lilly Pilly
CT	Ctenanthe oppositifolia 'Tricolor'	9	200mm	1.5m	no	Never Never Plant
CT	Cycas revoluta	33	200mm	1m	no	Sago Palm
ZZ	Zamioculcas zamiifolia 'Zanzibar Gem'	22	200mm	1m	no	Zanzibar Gem
AA	Asplenium australasicum	29	200mm	1m	no	Birds Nest Fern
LI	Lomandra longifolia	120	150mm	1m	no	Mat Rush
BU	Buxus microphylla 'Japanica'	72	200mm	0.7m	no	Japanese Box
PK	Philodendron 'Xanadu'	48	200mm	0.7m	no	Dwarf Philodendron
DT	Dianella laurifolia 'Toonah'	105	150mm	0.4m	no	Flax Lily
CA	Cissus antarctica	315	150mm	g.cover	no	Kangaroo Vine
VH	Viola hederaea	184	150mm	g.cover	no	Native Violet
	Soft Leaf Buffalo Turf					

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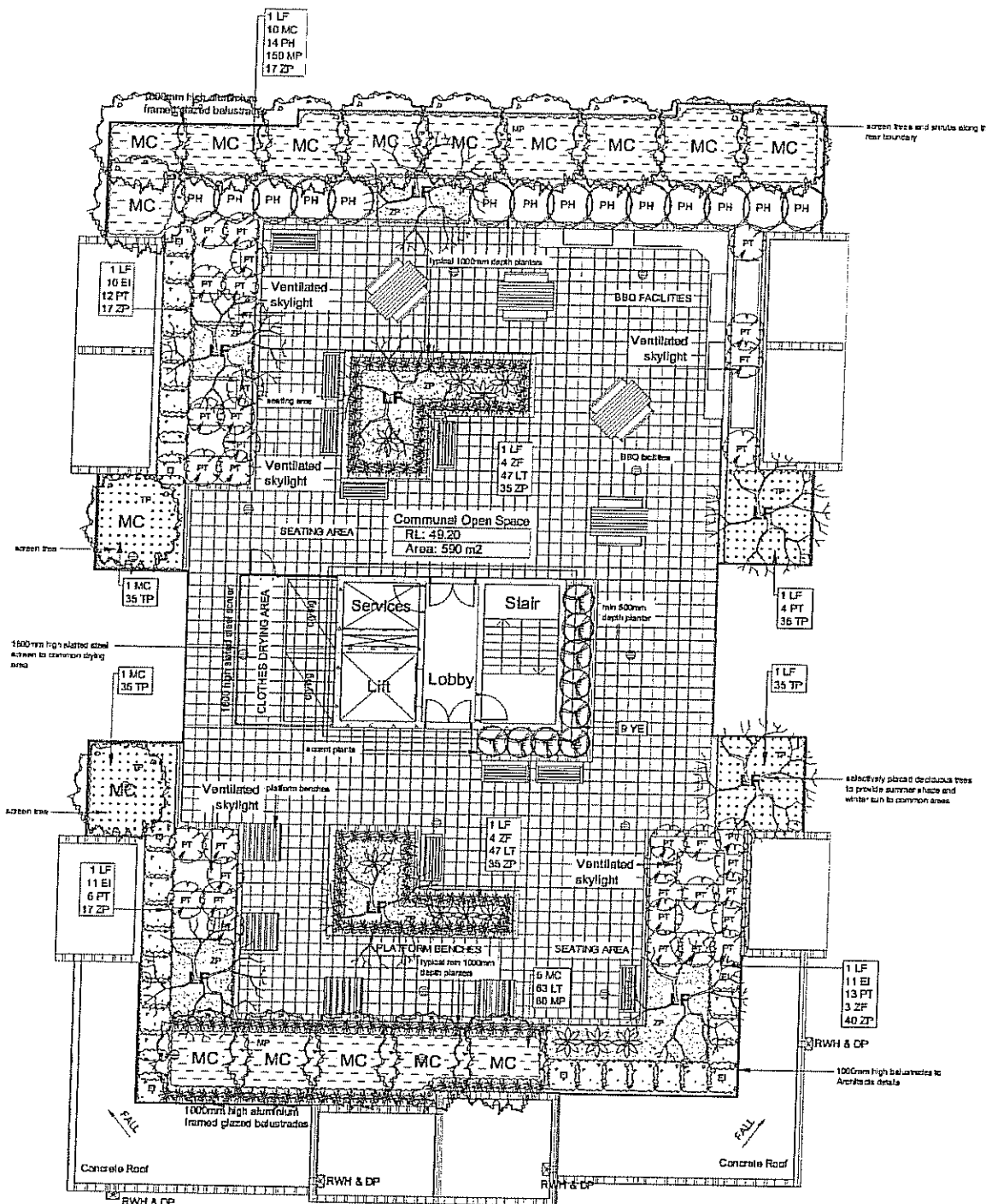
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**29 & 29A CAMPBELL ST
PARRAMATTA**

TITLE:	LANDSCAPE PLAN - GROUND FLOOR
STATUS:	DA
SCALE:	1:100
DRAWN:	MAG
CHECKED:	MFG
DATE:	10.5.11
SHEET:	2 OF 4
DRAWING NO:	11-2406
REVISION:	B

A1 Landscape plan 1:100



PLANT SCHEDULE - ROOFTOP						
SYMBOL	SPECIES	No.	Pol Size	Med. Hgt.	Stake	COMMON NAME
LF	Lagerstroemia speciosa 'White'	8	75tr	8m	yes	White Crape Myrtle
MC	Myrsine communis	17	45tr	4m	yes	Common Myrtle
PH	Photinia glabra 'Rubens'	14	25tr	2m	no	Red Photinia
ES	Escallonia 'Iveyi'	32	200mm	1.5m	no	Escallonia
YE	Yucca elephantipes	9	200mm	1.5m	no	Spineless Yucca
PH	Phormium tenax 'Maori Queen'	26	200mm	1.2m	no	NZ Flax
ZP	Zamia furfuracea	11	200mm	1m	no	Cardboard Palm
LT	Lomandra longifolia 'Tanka'	157	150mm	0.6m	no	Dwarf Lomandra
TP	Tradescantia pallida 'Purple Heart'	140	150mm	g.cover	no	Purple Heart
MP	Myoporum laetifolium	210	160mm	g.cover	no	Creeping Boobialla
ZP	Zieria prostrata 'Pink Flecks'	161	150mm	g.cover	no	Zieria

LANDSCAPE GUIDELINES	
1. GENERAL	
1.1	The Contractor shall familiarise themselves with the site prior to construction.
1.2	The Contractor shall be held responsible for any damage to utility services, pipes, existing structures, paving, lawns, fencing, etc., caused by the construction.
1.3	The site is to be left in a clean and tidy condition at the completion of works to the satisfaction of the Supervisor.
1.4	No work involving an excavation shall be undertaken without approval in writing from the Supervisor.
1.5	No excavation of material shall be made unless approved in writing by the Supervisor.
1.6	The Contractor shall continuously maintain all areas of the site during the progress of the works specified.
2. SITE PREPARATION	
2.1	Prepared sub-grade is to be free of stones larger than 100mm diameter, cement, rubble and any other foreign materials that could harm plant growth.
3. MASS PLANTED AREAS	
3.1	Once clear of weed growth, grass and debris, sub-grade should be subsoiled to a minimum depth of 150mm incorporating Dynalene Litter or equivalent at the manufacturer's recommended rates.
3.2	Weeds shall be controlled by a combination of chemical and hand removal techniques.
4. PLANTING	
4.1	All plant material is to be delivered to the site, checked and stored in a secure and safe place. Plants are to be protected and stored until ready for planting.
4.2	All plants are to be removed from their containers prior to planting with a 50mm distance to the root system as possible.
4.3	Planting shall not be carried out in dry soil or extreme weather conditions.
4.4	Plants should be planted at the same depth as the plants were in the containers and allow for a shadow length of soil to be formed around the plant to aid the penetration of water.
4.5	All plant material should be watered thoroughly immediately after planting.
4.6	The Contractor shall be responsible for the failure of plants during construction, except for weeding and watering.
5. STAKING	
5.1	Stakes should be firmly attached to the stakes, in a way to avoid damage to the plant material during a small degree of movement.
6. TURF AREAS	
6.1	Turf areas should be cut and stored before laying or handling.
6.2	At the completion of laying the turf areas shall be thoroughly soaked and kept moist until the completion of landscape works.
7. MULCH	
7.1	Mulch for all general mass planted areas shall be 100mm Dynalene Litter as supplied by ANL or a similar.
7.2	Mulch for lawn areas in garden beds shall be 100mm Wapiti River Paludosa as supplied by ANL or a similar.
8. SOIL MIXES	
8.1	Soil mix for mass planted areas shall be 3 parts soil to 1 part 'Organic Garden Mix' as supplied by ANL or a similar.
8.2	Soil mix for lawn areas and planting over shall shall be 'Preston River Mix' as supplied by ANL or a similar.

MAINTENANCE	
1. These works shall be in addition to the construction contract.	
2. The Contractor shall commence and fully implement the short term maintenance after Practical Completion has been confirmed by the Supervisor.	
3. The Contractor shall carry out maintenance works for a minimum period of 26 weeks.	
4. Maintenance works shall include the following work:	
a. Mow lawns and trim edges each 10 days to a maximum of 40mm height.	
b. Water all planting and lawn areas in order to ensure adequate soil moisture at all times.	
c. Remove any weed growth from all planting areas.	
d. Spray and control pests and diseases as required.	
e. Replace plants which fail with plants of similar size and quality as originally planted.	
f. Adjust lawns to true as necessary.	
g. Make a good any erosion or soil subsidence which may occur.	
h. Maintain all mulched areas in a clean and tidy condition to the standard originally specified.	
i. 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.	
5. Acknowledgement shall be individually inspected at least once a month to determine the health of the plants. Should the trees show 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. If recommended treatment shall then be commenced within 7 days and will continue until the problem is resolved.	
6. When the maintenance period is completed the Contractor shall notify the Supervisor. The standard then be inspected and if to the satisfaction of the Supervisor the responsibility will be handed over to the Client for ongoing maintenance.	

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These drawings may be printed in whole or in part for any other purpose without the prior permission of Zenith Landscape Design.

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A	review panel revisions	3.8.11
Rev. no.	Description	Date
ARBORIST: URBAN TREE MANAGEMENT		
SURVEY: W.BUXTON P/L		
HYDRAULIC:		
ARCHITECT: IDRAFT BUILDING DESIGNS		
CLIENT: SAADE CONSTRUCTIONS		

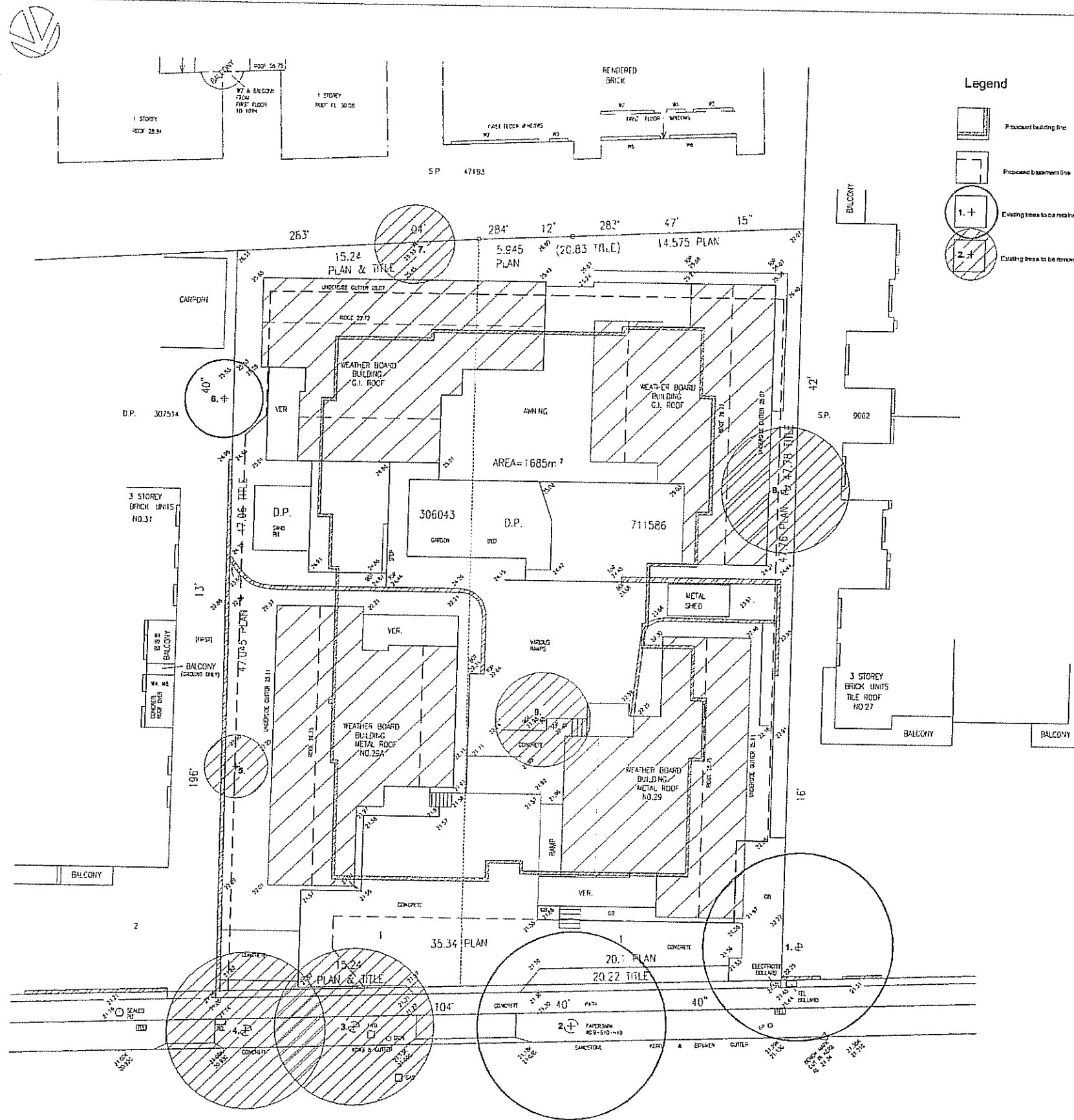


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**29 & 29A CAMPBELL ST
PARRAMATTA**

TITLE	LANDSCAPE PLAN - ROOF & DETAILS
STATUS	DA
SCALE	1:100
DRAWN	MAG
CHECKED	MFG
DATE	10.5.11
SHEET	3 OF 4
DRAWING NO.	11-2406
REVISION	B

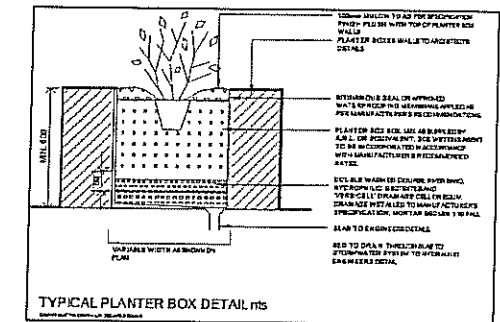
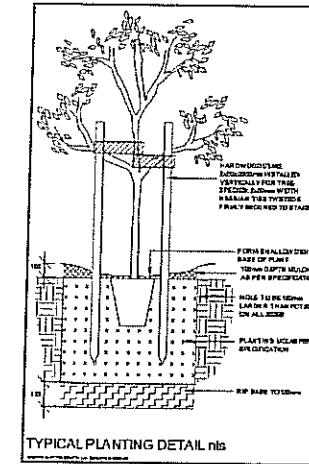
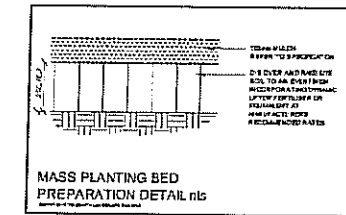
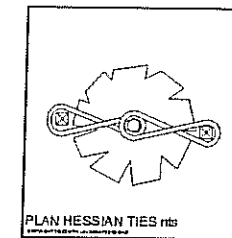
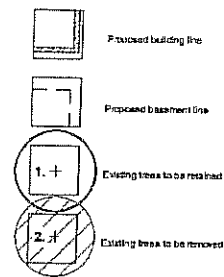




Existing tree plan 1:150



Legend



EXISTING TREE SCHEDULE						
TREE No.	TREE	HGT. (m)	CAN. (m)	condition	retain/ remove	COMMENTS
1	Southern Mahogany	10	12	good	RETAIN	adjoining property
2	Board-leaved Paperbark	14	12	good	RETAIN	street tree
3	Board-leaved Paperbark	12	10	good	remove	in construction zone
4	Board-leaved Paperbark	12	10	good	remove	in construction zone
5	Swamp She-Oak	9	4	fair	remove	in construction zone
6	Cupressus	13	6	fair	RETAIN	adjoining property
7	Chinese Nettle Tree	10	5	fair	remove	in construction zone
8	Camphor Laurel	16	8	fair	remove	in construction zone
9	Swamp She-Oak	16	16	good	remove	in construction zone

REFER TO ARBORIST REPORT AS PREPARED BY URBAN TREE MANAGEMENT FOR DETAILED TREE INVENTORY, TREE PROTECTION AND TREE MANAGEMENT REQUIREMENTS

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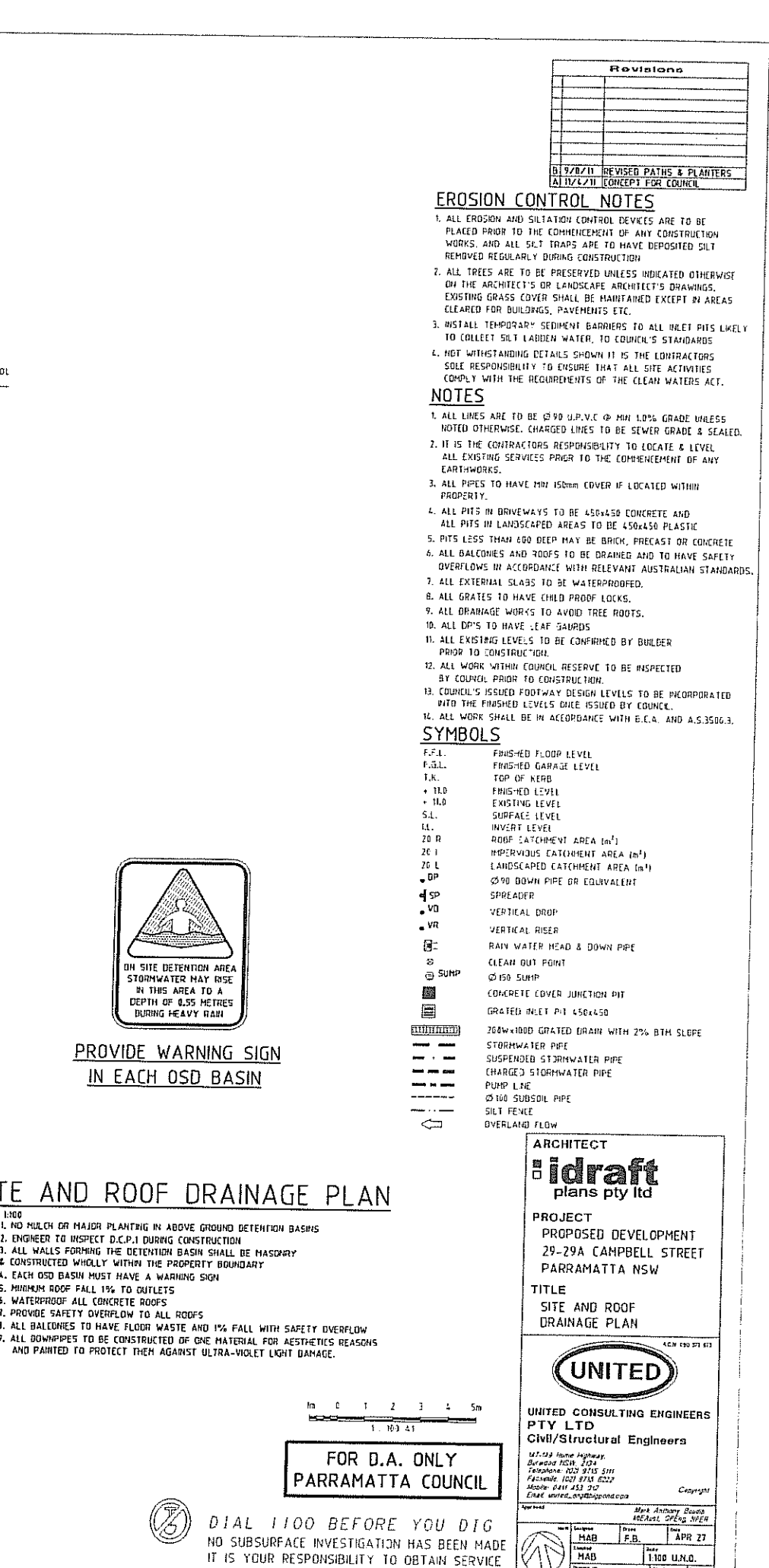
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**29 & 29A CAMPBELL ST
PARRAMATTA**

TITLE: EXISTING TREE & DETAILS PLAN			
STATUS: DA	SCALE: as spec.		
DRAWN: MAG	SHEET: 4 OF 4	DRAWING No:	REVISION:
CHECKED: MFG	11-2406		
DATE: 10.5.11			B



ARCHITECT

 **idraft**
plans pty ltd

PROJECT

PROPOSED DEVELOPMENT
29-29A CAMPBELL STREET
PARRAMATTA NSW

TITLE

SITE AND ROOF
DRAINAGE PLAN

6201 050 071 013



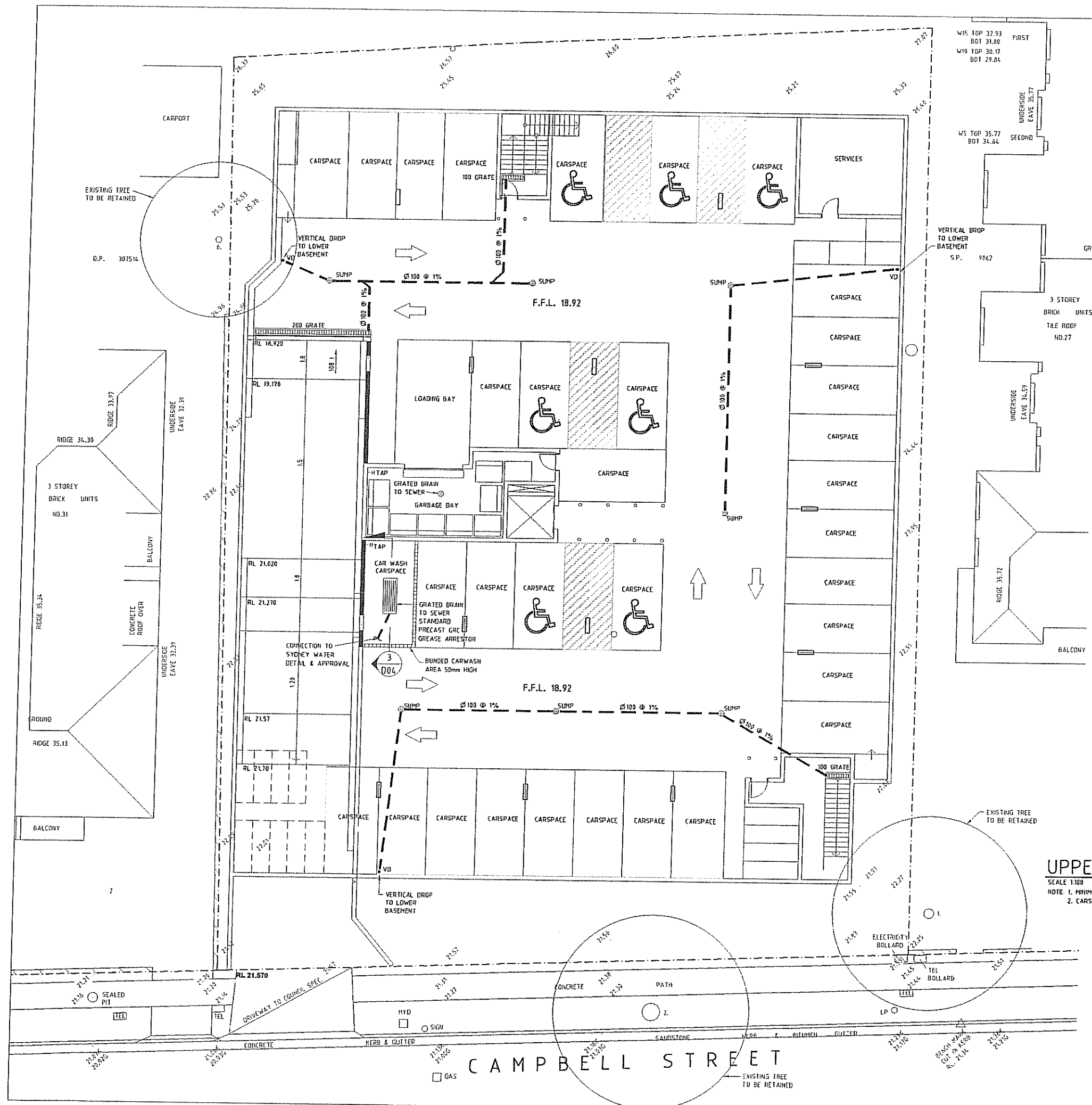
UNITED CIVIL/STRUCTURAL ENGINEERS
PTY LTD
Civil/Structural Engineers

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Prepared by:  Mpt Anthony Evans
ARCHITECT, CIVIL ENGR

no.	Discipline	Drawn	Date
	MAB	F.B.	APR 27
	Checked MAB		
	Drawn by 114454522/U01		
		1:100 U.N.D.	
		1 of 4	
		4 of 4	



UPPER BASEMENT DRAINAGE PLAN

SCALE 1:100

- NOTE 1. MINIMUM BASEMENT FALL 0.2% TOWARD PITS
2. CARSPACES TO BE MINIMUM 100mm ABOVE TWL

Revisions	
NO.	DESCRIPTION
1	CONCEPT FOR COUNCIL

EROSION CONTROL NOTES

1. ALL EROSION AND SILTATION CONTROL DEVICES ARE TO BE PLACED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WORKS, AND ALL SILT TRAPS ARE TO HAVE DEPOSITED SILT REMOVED REGULARLY DURING CONSTRUCTION.
2. ALL TREES ARE TO BE PRESERVED UNLESS INDICATED OTHERWISE ON THE ARCHITECT'S OR LANDSCAPE ARCHITECT'S DRAWINGS. EXISTING GRASS COVER SHALL BE MAINTAINED EXCEPT IN AREAS CLEARED FOR BUILDINGS, PAVEMENTS ETC.
3. INSTALL TEMPORARY SEDIMENT BARRIERS TO ALL WLEY PITS LIKELY TO COLLECT SILT LADEN WATER, TO COUNCIL'S STANDARDS.
4. NOT WITHSTANDING DETAILS SHOWN IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO ENSURE THAT ALL SITE ACTIVITIES COMPLY WITH THE REQUIREMENTS OF THE CLEAN WATERS ACT.

NOTES

1. ALL LINES ARE TO BE 100 U.P.V.C @ MIN 1.0% GRADE UNLESS NOTED OTHERWISE. CHARGED LINES TO BE SEWER GRADE & SEALED.
2. IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE & LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS.
3. ALL PIPES TO HAVE MIN 150mm COVER IF LOCATED WITHIN PROPERTY.
4. ALL PITS IN DRIVEWAYS TO BE 450x450 CONCRETE AND ALL PITS IN LANDSCAPED AREAS TO BE 450x450 PLASTIC.
5. PITS LESS THAN 600 DEEP MAY BE BRICK, PRECAST OR CONCRETE.
6. ALL BALCONIES AND ROOFS TO BE DRAINED AND TO HAVE SAFETY OVERFLOWS IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS.
7. ALL EXTERNAL SLABS TO BE WATERPROOFED.
8. ALL GRATES TO HAVE CHLD PROOF LOCKS.
9. ALL DRAINAGE WORKS TO AVOID TREE ROOTS.
10. ALL D.P.'S TO HAVE LEAF GUARDS.
11. ALL EXISTING LEVELS TO BE CONFIRMED BY BUILDER PRIOR TO CONSTRUCTION.
12. ALL WORK WITHIN COUNCIL RESERVE TO BE INSPECTED BY COUNCIL PRIOR TO CONSTRUCTION.
13. COUNCIL'S ISSUED FOOTWAY DESIGN LEVELS TO BE INCORPORATED INTO THE FINISHED LEVELS ONCE ISSUED BY COUNCIL.
14. ALL WORK SHALL BE IN ACCORDANCE WITH B.C.A. AND A.S.3500.3.

SYMBOLS

F.F.L.	FINISHED FLOOR LEVEL
F.G.L.	FINISHED GARAGE LEVEL
T.K.	TOP OF KERB
• 11.0	FINISHED LEVEL
• 11.6	EXISTING LEVEL
S.L.	SURFACE LEVEL
I.L.	INVERT LEVEL
20 R	ROOF CATCHMENT AREA (m ²)
20 I	IMPERVIOUS CATCHMENT AREA (m ²)
20 L	LANDSCAPED CATCHMENT AREA (m ²)
• DP	100 DOWN PIPE OR EQUIVALENT
• SP	SPREADER
• VD	VERTICAL DROP
• VR	VERTICAL RISER
• D	RAIN WATER HEAD & DOWN PIPE
• S	CLEAN OUT POINT
• SUMP	150 SUMP
• J	CONCRETE COVER JUNCTION PIT
• G	GRATED GILET PIT 450x450
• G	200x1000 GRATED DRAIN WITH 2% BTH SLOPE
• S	STORMWATER PIPE
• S	SUSPENDED STORMWATER PIPE
• S	CHARGED STORMWATER PIPE
• S	PUMP LINE
• S	100 SUBSOIL PIPE
• S	SILT FENCE
• S	OVERLAND FLOW

ARCHITECT

idraft
plans pty ltd

PROJECT
PROPOSED DEVELOPMENT
29-29A CAMPBELL STREET
PARRAMATTA NSW

TITLE
SITE AND ROOF
DRAINAGE PLAN



UNITED CONSULTING ENGINEERS
PTY LTD
Civil/Structural Engineers

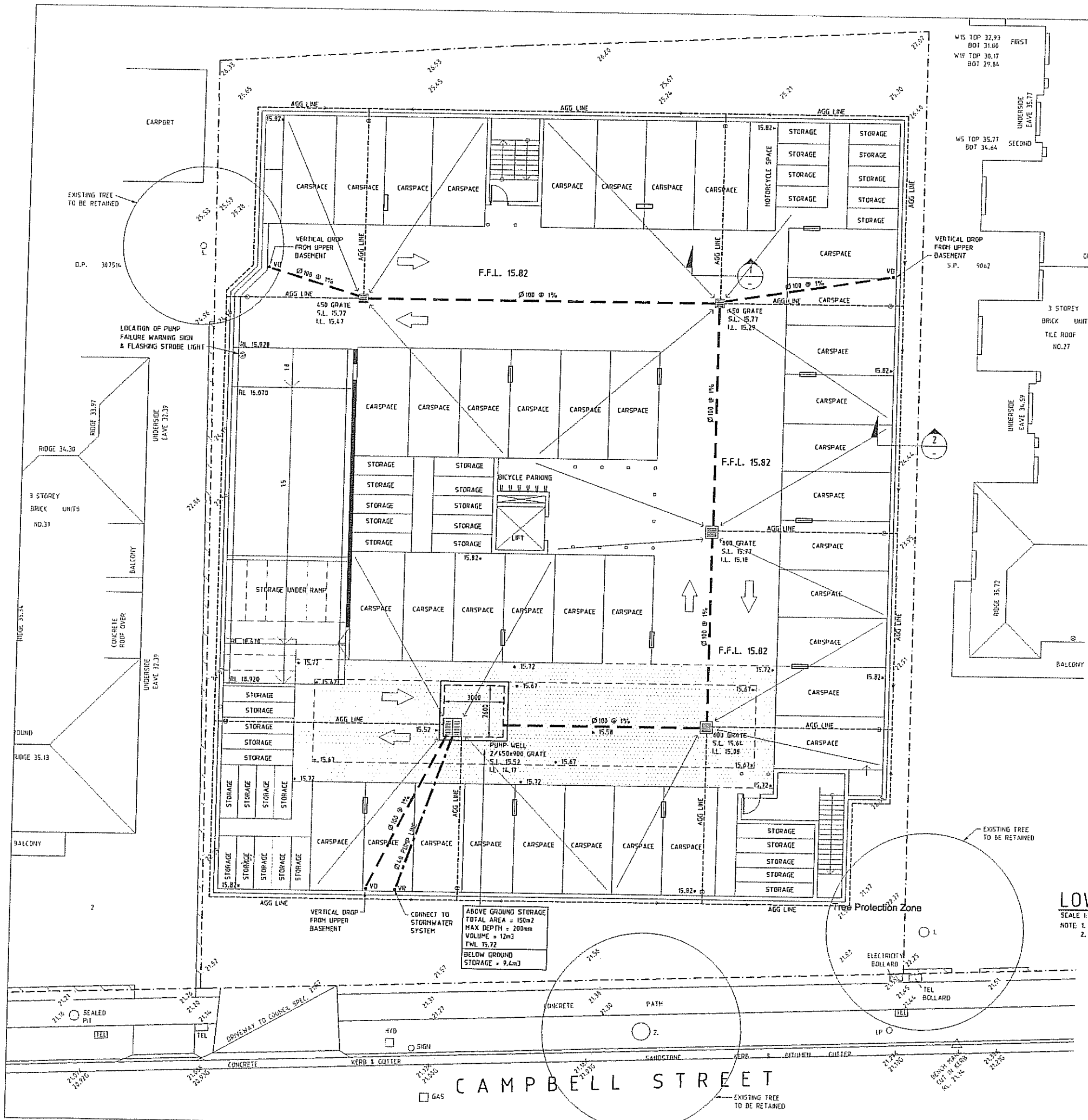
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Author	Design	Check	Date
MAB	F.B.		APR 27
MAB			1:100 U.M.O.
Drawn by	Scale	Sheet	
11MB4622/D02	2 of 4	A	

FOR D.A. ONLY
PARRAMATTA COUNCIL



DIAL 1100 BEFORE YOU DIG
NO SUBSURFACE INVESTIGATION HAS BEEN MADE
IT IS YOUR RESPONSIBILITY TO OBTAIN SERVICE
DIAGRAMS FROM RELEVANT AUTHORITIES



Revisions	

EROSION CONTROL NOTES

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13. COUNCIL'S ISSUED FOOTWAY DESIGN LEVELS TO BE INCORPORATED INTO THE FINISHED LEVELS ONCE ISSUED BY COUNCIL.
14. ALL WORK SHALL BE IN ACCORDANCE WITH B.E.A. AND A.S.3500.3.

SYMBOLS

F.F.L.	FINISHED FLOOR LEVEL
F.G.L.	FINISHED GARAGE LEVEL
T.K.	TOP OF KERB
+ 11.0	FINISHED LEVEL
+ 15.0	EXISTING LEVEL
S.L.	SURFACE LEVEL
I.L.	INVERT LEVEL
20 R	ROOF CATCHMENT AREA (m²)
20 I	IMPERVIOUS CATCHMENT AREA (m²)
20 L	LANDSCAPED CATCHMENT AREA (m²)
Ø90	Ø90 DOWN PIPE OR EQUIVALENT
SP	SPREADER
VD	VERTICAL DROP
VR	VERTICAL RISER
Ø100	RAIN WATER HEAD & DOWN PIPE
Ø150	CLEAN OUT POINT
SUMP	Ø150 SUMP
CONJ	CONCRETE COVER JUNCTION PIT
GRATED	GRATED INLET PIT 450x450
200Wx1000	200Wx1000 GRATED DRAIN WITH 2% BTH SLOPE
STW	STORMWATER PIPE
SUSP	SUSPENDED STORMWATER PIPE
CHG	CHARGED STORMWATER PIPE
PUMP	PUMP LINE
Ø100	Ø100 SUBSON PIPE
SILT	SILT FENCE
OVER	OVERLAND FLOW

A CONFINED SPACE DANGER SIGN SHALL BE PROVIDED AT THE ACCESS GRATE OF THE BELOW GROUND TANK IN ACCORDANCE WITH THE UPPER PARRAMATTA RIVER CATCHMENT TRUST HANDBOOK



CONFINED SPACE WARNING SIGN

LOWER BASEMENT DRAINAGE PLAN

SCALE 1:100
NOTE: 1. MINIMUM BASEMENT FALL 0.7% TOWARD PITS
2. CARSPACES TO BE MINIMUM 100mm ABOVE T.W.L.

1m 0 1 2 3 4 5m
1:100 A1

FOR D.A. ONLY
PARRAMATTA COUNCIL



DIAL 1100 BEFORE YOU DIG
NO SUBSURFACE INVESTIGATION HAS BEEN MADE
IT IS YOUR RESPONSIBILITY TO OBTAIN SERVICE
DIAGRAMS FROM RELEVANT AUTHORITIES

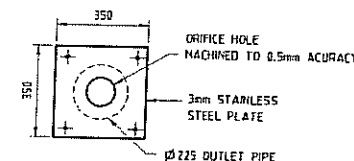
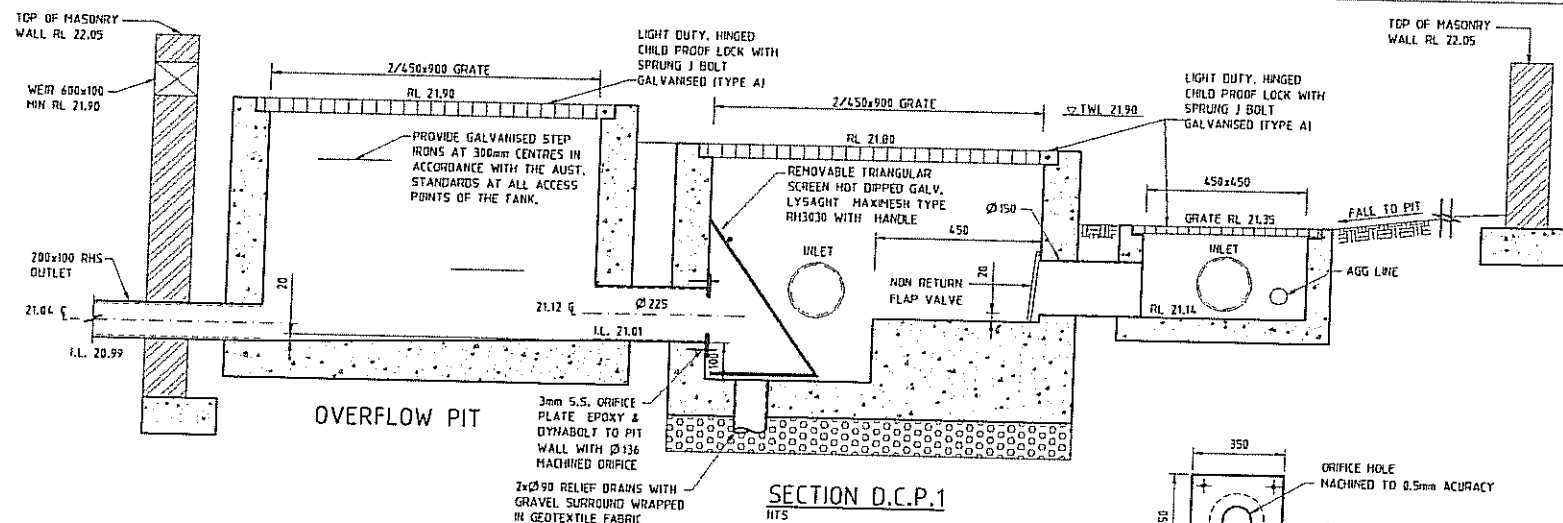
ARCHITECT
idraft
plans pty ltd

PROJECT
PROPOSED DEVELOPMENT
29-29A CAMPBELL STREET
PARRAMATTA NSW

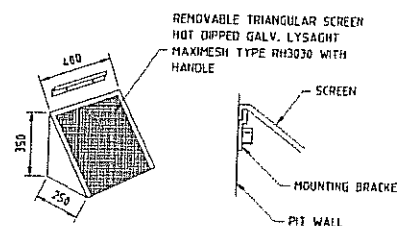
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LOWER BASEMENT
DRAINAGE PLAN

UNITED
UNITED CONSULTING ENGINEERS
PTY LTD
Civil/Structural Engineers
117-119 Harris Highway,
Berrigara NSW 2594
Telephone: (02) 9715 5111
Facsimile: (02) 9715 9222
Mobile: 0811 453 925
Email: united_eng@bigpond.com

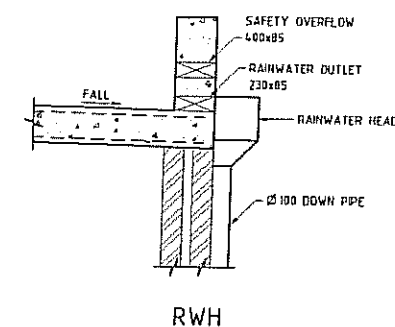
APPROVED
Mark Anthony Bagg
M.E.S.T. 2789 1079
DATE
APR 27
DRAWN
MAD
SCALE
1:100 U.N.D.
SHEET
3 of 4



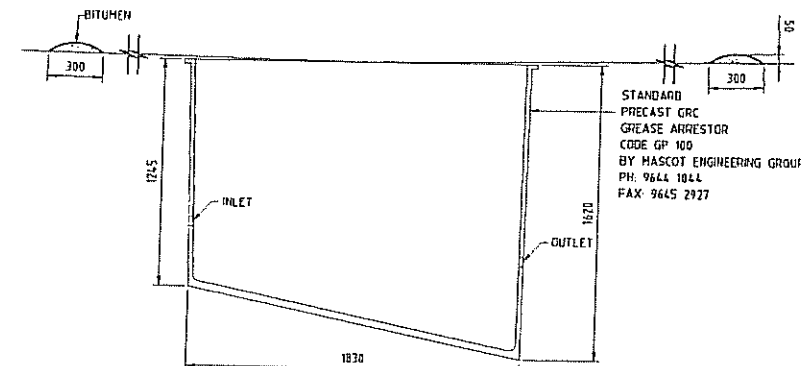
ORIFICE PLATE ELEVATION
SCALE 1:10



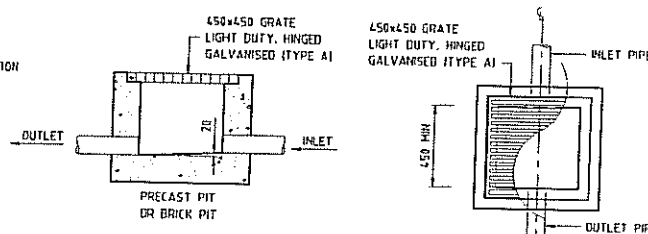
MULTI PURPOSE FILTER SCREEN
SCALE 1:20
PRODUCT CODE: MMPS INASCOT ENGINEERING



RWH
RAIN WATER HEAD DETAIL
SCALE 1:20

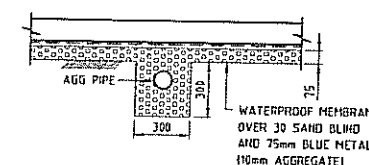


SECTION 3
SCALE 1:20
D02

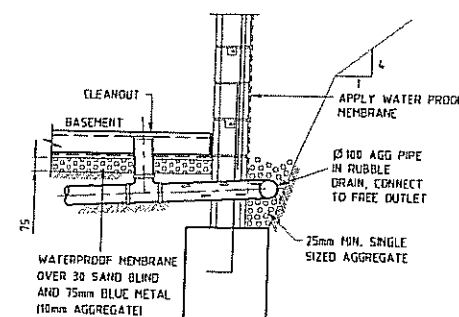


TYPICAL PIT SECTION
SCALE 1:20

STANDARD PIT
SCALE 1:20



SECTION 1
SCALE 1:20
D03



SECTION 2
SCALE 1:20
D03

FOR D.A. ONLY
PARRAMATTA COUNCIL

EROSION CONTROL NOTES

1. ALL EROSION AND SILTATION CONTROL DEVICES ARE TO BE PLACED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WORKS, AND ALL SILT TRAPS ARE TO HAVE DEPOSITED SILT REMOVED REGULARLY DURING CONSTRUCTION.
2. ALL TREES ARE TO BE PRESERVED UNLESS INDICATED OTHERWISE ON THE ARCHITECT'S OR LANDSCAPE ARCHITECT'S DRAWINGS. EXISTING GRASS COVER SHALL BE MAINTAINED EXCEPT IN AREAS CLEARED FOR BUILDINGS, PAVEMENTS ETC.
3. INSTALL TEMPORARY SEDIMENT BARRIERS TO ALL INLET PITS LIKELY TO COLLECT SILT LADEN WATER, TO COUNCIL'S STANDARDS.
4. NOT WITHSTANDING DETAILS SHOWN IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO ENSURE THAT ALL SITE ACTIVITIES COMPLY WITH THE REQUIREMENTS OF THE CLEAN WATERS ACT.

NOTES

1. ALL LINES ARE TO BE Ø90 U.P.V.C. Ø MIN 10% GRADE UNLESS NOTED OTHERWISE. CHARGED LINES TO BE SEWER GRADE & SEALED.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE & LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS.
3. ALL PIPES TO HAVE MIN 150mm COVER IF LOCATED WITHIN PROPERTY.
4. ALL PITS IN DRIVEWAYS TO BE 450x450 CONCRETE AND ALL PITS IN LANDSCAPED AREAS TO BE 450x450 PLASTIC.
5. PITS LESS THAN 600 DEEP MAY BE BRICK, PRECAST OR CONCRETE.
6. ALL BALCONIES AND ROOFS TO BE DRAINED AND TO HAVE SAFETY OVERFLOWS IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS.
7. ALL EXTERNAL SLABS TO BE WATERPROOFED.
8. ALL GRATES TO HAVE CHILD PROOF LOCKS.
9. ALL DRAINAGE WORKS TO AVOID TREE ROOTS.
10. ALL OP'S TO HAVE LEAF GUARDS.
11. ALL EXISTING LEVELS TO BE CONFIRMED BY BUILDER PRIOR TO CONSTRUCTION.
12. ALL WORK WITHIN COUNCIL RESERVE TO BE INSPECTED BY COUNCIL PRIOR TO CONSTRUCTION.
13. COUNCIL'S ISSUED FOOTWAY DESIGN LEVELS TO BE INCORPORATED INTO THE FINISHED LEVELS ONCE ISSUED BY COUNCIL.
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STORMWATER PIPE	STORMWATER PIPE
SUSPENDED STORMWATER PIPE	SUSPENDED STORMWATER PIPE
CHARGED STORMWATER PIPE	CHARGED STORMWATER PIPE
PUMP LINE	PUMP LINE
Ø100 SUBSOL PIPE	Ø100 SUBSOL PIPE
SILT FENCE	SILT FENCE
OVERLAND FLOW	OVERLAND FLOW

ARCHITECT
idraft
plans pty ltd

PROJECT
PROPOSED DEVELOPMENT
29-29A CAMPBELL STREET
PARRAMATTA NSW

TITLE
DRAINAGE
DETAILS

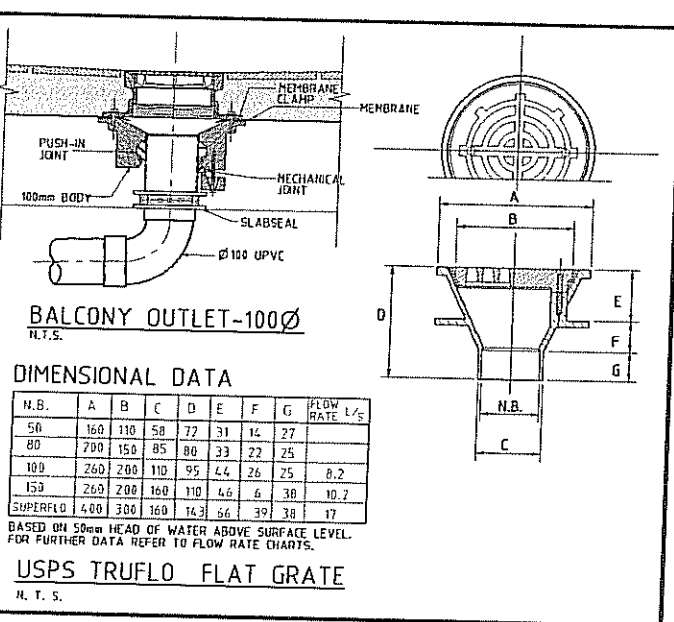
UNITED

UNITED CONSULTING ENGINEERS
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Mobile: 0411 453 212
Email: info@uniteng.com.au

Author	Drawn	Rev	Check	Scale	Date
MAB	MAB	F.B.			APR 27
MAB					1:100 U.S.D.
Drawn by	1184518/D04				2 of 1

DIAL 1100 BEFORE YOU DIG
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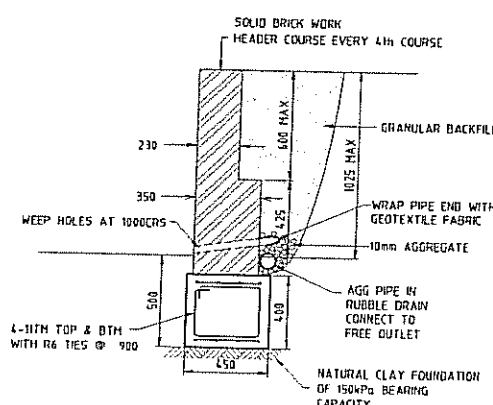


DIMENSIONAL DATA

N.B.	A	B	C	D	E	F	G	FLOW RATE L/S
50	160	110	58	77	31	14	27	
80	200	150	85	80	33	22	25	
100	260	200	110	95	44	26	25	8.2
150	260	200	160	110	45	6	38	10.2
SUPERFLO	400	300	160	163	66	39	38	17

BASED ON 50mm HEAD OF WATER ABOVE SURFACE LEVEL
FOR FURTHER DATA REFER TO FLOW RATE CHARTS.

USPS TRUFLO FLAT GRATE
N.T.S.

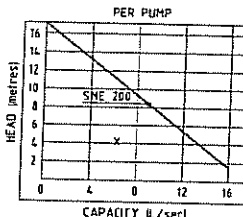


TYPICAL RETAINING WALL
SCALE 1:20
R.W. EXCEEDING 600 TO BE DESIGNED
BY STRUCTURAL ENGINEER

- COMMENTS
1. TWO(2) PUMPS 200L SUBMERSIBLE PUMPS (LVS OR 240W)
 2. ONE(1) PUMPS CONTROL PANEL, REVERSE DESIGN TO ALTERNATE PUMPS ON START ON CONSECUTIVE START OPERATION
 3. TWO(2) GATE VALVES (BRONZE)
 4. TWO(2) CHECK VALVES (SWING TYPE) (BRONZE)
 5. TWO(2) SETS OF DISCHARGE HOSES WITH QUICK RELEASE COUPLINGS
 6. ALL IN TANK PIPING AND PIPE FITTINGS, BRACKETS/SUPPORTS, NO GAL CHAINS
 7. FOUR(4) METURUP LEVEL FLOAT REGULATORS
 8. INSTALLATION IN PROVIDED TANK/PIT
- NOTES
1. TANK PACKAGE/COVERS/HANDRAIL, ALARM BELL, LOW LEVEL ALARM REGULATOR

MODEL	DIS. SIZE	MOTOR kW	POWER	Max Capacity	Max Head
SME 200/272-101 ADO-E	82mm BSP	1.5	4.5v	1000 L/min	17 metres

PUMP SPECIFICATIONS



PUMP PERFORMANCE CURVES
SCALE 1:20

STANDARD PUMP OUT DESIGN NOTES

THE PUMP SHALL BE PROGRAMMED TO WORK ALTERNATIVELY SO AS TO ALLOW BOTH PUMPS TO HAVE AN EQUAL OPERATION LOAD AND PUMP LIFE.

A LOW LEVEL FLOAT SHALL BE PROVIDED TO ENSURE THAT THE MINIMUM REQUIRED WATER LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE BELOW GROUND TANK. IN THIS REGARD THIS FLOAT WILL FUNCTION AS AN OFF SWITCH FOR THE PUMPS.

A SECOND FLOAT SHALL BE PROVIDED AT A HIGHER LEVEL, APPROXIMATELY 300mm ABOVE THE MINIMUM WATER LEVEL, WHEREBY ONE OF THE PUMPS WILL OPERATE AND DRAIN THE TANK TO THE LEVEL OF THE LOW LEVEL FLOAT.

A THIRD FLOAT SHALL BE PROVIDED AT A HIGH LEVEL WHICH IS APPROXIMATELY THE ROOF LEVEL OF THE BELOW GROUND TANK. THIS FLOAT SHOULD START THE OTHER PUMP THAT IS NOT OPERATING AND ACTIVATE THE ALARM.

AN ALARM SYSTEM SHALL BE PROVIDED WITH A FLASHING STROBE LIGHT AN A PUMP FAILURE WARNING SIGN WHICH ARE TO BE LOCATED AT THE DRIVEWAY ENTRANCE TO THE BASEMENT LEVEL. THE ALARM SYSTEM SHALL BE PROVIDED WITH A BATTERY BACK-UP IN CASE OF POWER FAILURE.

PUMP OUT SUMMARY

REFER TO CALCULATION SHEET FOR FULL
PUMP DESIGN VOLUMES SHOWN IN
THIS TABLE ARE THE MINIMUM REQUIRED

108m² OF DRIVEWAY DRAINING TO PUMP
PUMP DISCHARGING @ 6.3l/s
VOLUME BELOW GROUND = 8.9m³
ABOVE GROUND PONDING 11.8m³
MAX HEAD 4.2m. USE DUAL SME 200 PUMPS