SECTION 96 APPLICATION

SHEET 1

PLANS PREPARED BY

Kim Gerrish

IN CONJUNCTION WITH THE FOLLOWING CONSULTANTS

NORTHROP

PROJECT: PROPOSED SECTION 96 APPLICATION TO DA 2015/0508 APPROVED SUBDIVISION AND RESIDENTIAL DEVELOPMENT

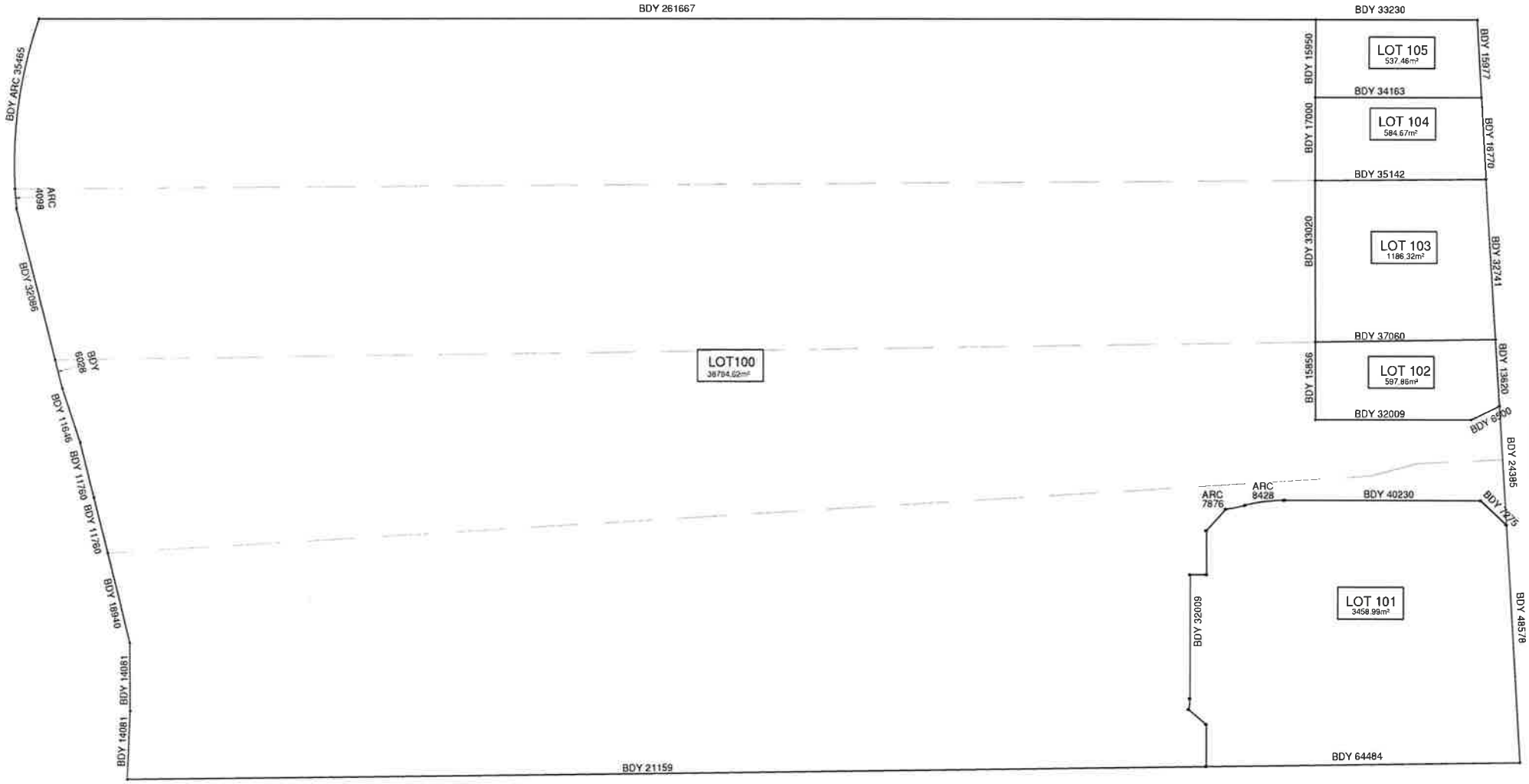
LOCATION: NO 150, LOT A, DP350420, NO 152, LOT 1, DP725264, NO 154, LOT A DP394165, NO 156, LOT B, DP394165, LAKE RD., ELERMORE VALE.

CLIENT: SNL BUILDING CONSTRUCTIONS PTY LTD

DATE: 3 SEPTEMBER 2015

SCALE: 1:500 @ A1

ISSUE	COMMENTS	DATE
1	PRELIMINARY SECTION 96	22-07-16
2	PRELIMINARY SECTION 96	12-08-16
3	PRELIMINARY SECTION 96	25-08-16
4	FINAL SECTION 96	07-09-16



SUBDIVISION & REALIGNMENT OF BOUNDARIES PLAN

LOT AREA CALCULATIONS	
NEW LOT 100	36794.62m²
NEW LOT 101	3458.99m²
NEW LOT 102	597.86m²
NEW LOT 103	1186.32m²
NEW LOT 104	584.67m²
NEW LOT 105	537.46m²

14911526

SECTION 96 APPLICATION

PLANS PREPARED BY: Kim Gerrish

IN CONJUNCTION WITH THE FOLLOWING CONSULTANTS: NORTHROP

PROJECT: PROPOSED SECTION 96 APPLICATION TO DA 2015/0508 APPROVED SUBDIVISION AND RESIDENTIAL DEVELOPMENT

LOCATION: NO 150, LOT A, DP350420, NO 152, LOT 1, DP725264, NO 154, LOT A, DP394165, NO 156, LOT B, DP394165, LAKE RD., ELERMORE VALE.

CLIENT: SNL BUILDING CONSTRUCTIONS PTY LTD

DATE: 8 SEPTEMBER 2016

ISSUE	COMMENTS	DATE
1	PRELIMINARY SECTION 96	23-07-16
2	PRELIMINARY SECTION 96	12-08-16
3	PRELIMINARY SECTION 96	29-08-16
4	FINAL SECTION 96	02-09-16

SHEET 2

PROPOSED STAGING PLAN

SCALE 1:400 at A1

STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6
PROPOSED SUBDIVISION CONSOLIDATE AND REDEFINED BOUNDARIES FOR: LOT A, D.P. 350420 LOT 1, D.P. 725264 PART A, D.P. 394165 PART B, DP 394165 NOW LOT 101	UNITS 19, 20, 21, 22, 23 UNITS 24, 25, 26, 27 UNITS 44, 45, 46, 47, 48, 49 UNITS 50, 51, 52, 53, 54 CONSTRUCTION OF ALL ROADS, PATHWAYS AND LANDSCAPING ASSOCIATED WITH THIS STAGE STORMWATER INFRASTRUCTURE IN ACCORDANCE WITH STORMWATER MANAGEMENT STRATEGY	UNITS 78, 79, 80, 81, 82, 83 UNITS 84, 85, 86, 87, 88 UNITS 95, 96, 97, 98, 99, 100 UNITS 101, 102, 103, 104 CONSTRUCTION OF ALL ROADS, PATHWAYS AND LANDSCAPING ASSOCIATED WITH THIS STAGE STORMWATER INFRASTRUCTURE IN ACCORDANCE WITH STORMWATER MANAGEMENT STRATEGY	UNITS 1, 2, 3, 4, 5, 6, 7, 8, 9 UNITS 10, 11, 12, 13, 14, 15, 16, 17, 18 UNITS 28, 29, 30, 31, 32, 33 CONSTRUCTION OF ALL ROADS, PATHWAYS AND LANDSCAPING ASSOCIATED WITH THIS STAGE STORMWATER INFRASTRUCTURE IN ACCORDANCE WITH STORMWATER MANAGEMENT STRATEGY	UNITS 34, 35, 36 UNITS 37, 38, 39, 40, 41, 42, 43 UNITS 55, 56, 57, 58, 59, 60 UNITS 61, 62 CONSTRUCTION OF ALL ROADS, PATHWAYS AND LANDSCAPING ASSOCIATED WITH THIS STAGE STORMWATER INFRASTRUCTURE IN ACCORDANCE WITH STORMWATER MANAGEMENT STRATEGY	UNITS 63, 64, 65, 66, 67, 68, 69 UNITS 70, 71 UNITS 72, 73, 74, 75, 76, 77 UNITS 89, 90, 91, 92, 93, 94 CONSTRUCTION OF ALL ROADS, PATHWAYS AND LANDSCAPING ASSOCIATED WITH THIS STAGE STORMWATER INFRASTRUCTURE IN ACCORDANCE WITH STORMWATER MANAGEMENT STRATEGY

PLANS PREPARED BY: Kim Gerrish

IN CONJUNCTION WITH THE FOLLOWING CONSULTANTS: NORTHROP

PROJECT: PROPOSED SECTION 96 APPLICATION TO DA 2015/0508 APPROVED SUBDIVISION AND RESIDENTIAL DEVELOPMENT

LOCATION: NO. 150, LOT A, DP350420, NO. 152, LOT 1, DP725264, NO. 154, LOT A, DP394165, NO. 156, LOT B, DP394165, LAKE RD., ELERMORE VALE.

CLIENT: SNL BUILDING CONSTRUCTIONS PTY LTD

DATE	3 SEPTEMBER 2016
SHEET	1 of 3
SCALE	1:400 @ A1

ISSUE	COMMENTS	DATE
1	PRELIMINARY SECTION 96	22-07-16
2	PRELIMINARY SECTION 96	12-08-16
3	PRELIMINARY SECTION 96	26-08-16
4	FINAL SECTION 96	02-09-16

SECTION 96 APPLICATION

SHEET 3

SEE SHEET 5 AND SHEET 6 FOR DWELLING TYPOLOGY DETAILS

OVERALL SITE LAYOUT - BUILDING TYPOLOGY AND MAIN FFLS

SCALE : 1:100 @ A1

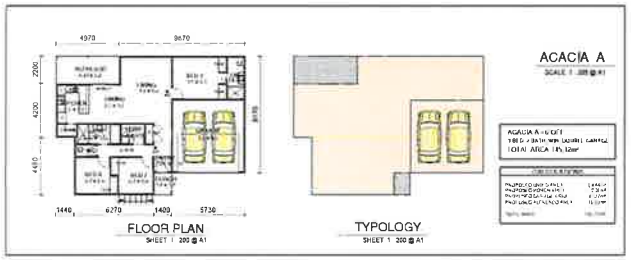
SEDIMENTATION NOTES

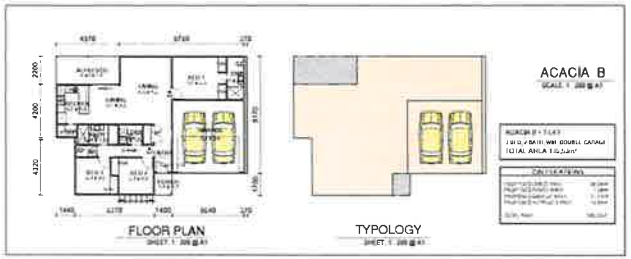
SECTION 96 APPLICATION

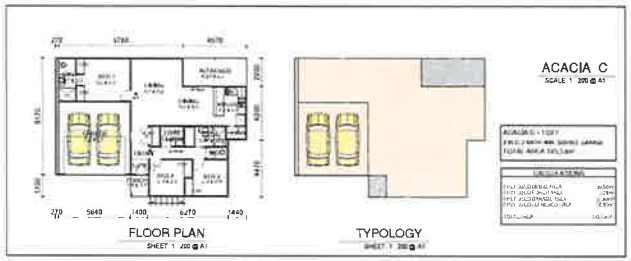
PROPOSED SECTION 96 APPLICATION TO DA 2015/0508
APPROVED SUBDIVISION AND RESIDENTIAL DEVELOPMENT
NO 150, LOT A, DP350420, NO 152, LOT 1, DP725264, NO 154 LOT A, DP394165, NO 156, LOT B, DP394165, LAKE RD., ELERMORE VALE.

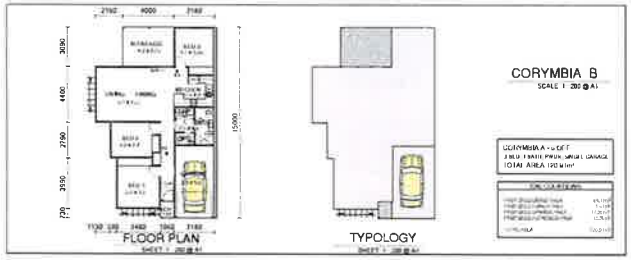
SNL BUILDING CONSTRUCTIONS PTY LTD

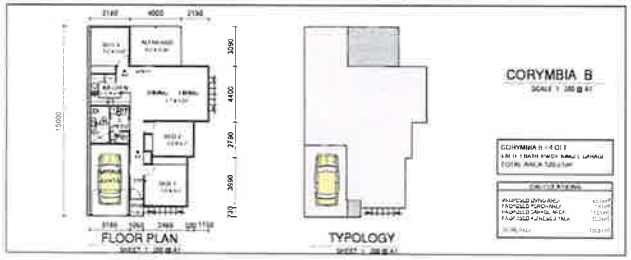
SHEET 4

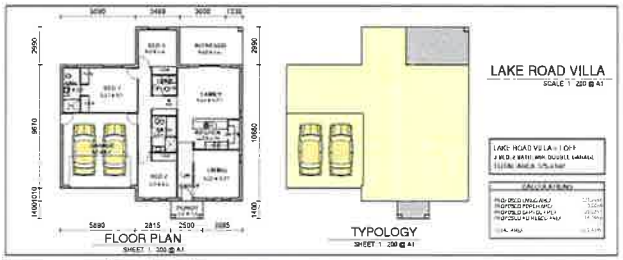


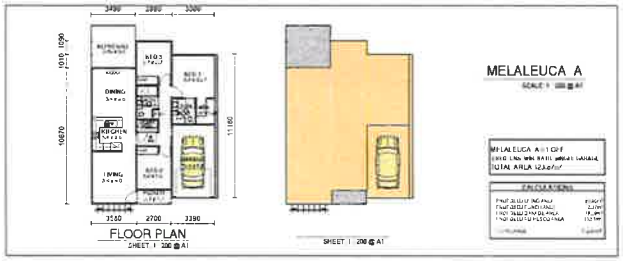


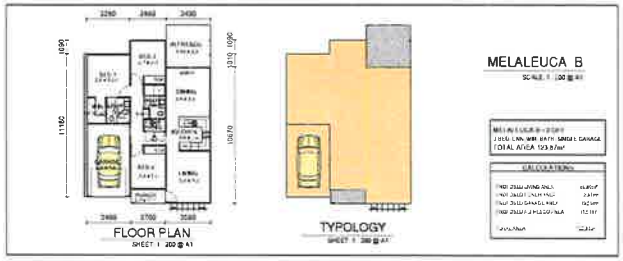


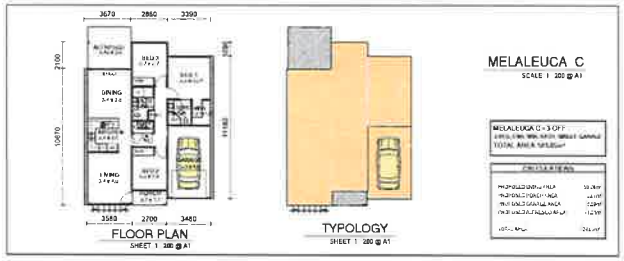


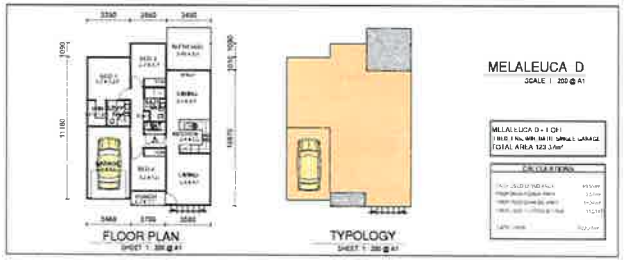


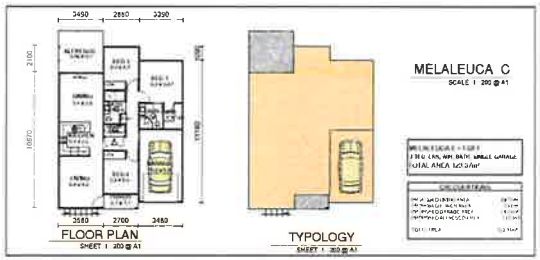


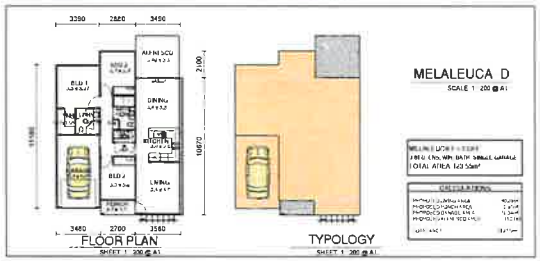


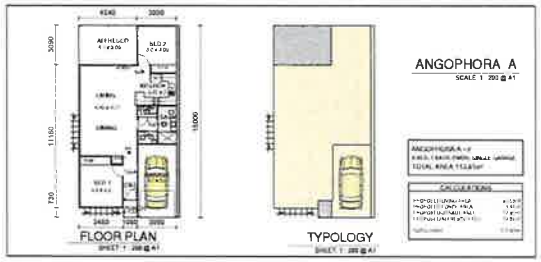


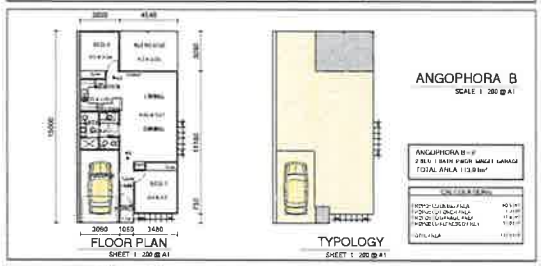


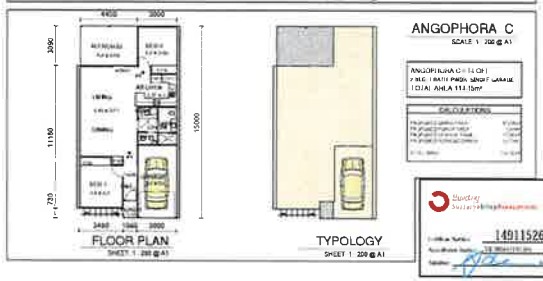












14911526

SECTION 96 APPLICATION

PLANS PREPARED BY

Gerrish

IN CONJUNCTION WITH THE FOLLOWING CONSULTANTS

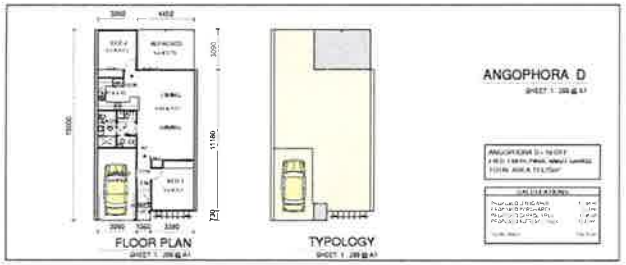
NORTHROP

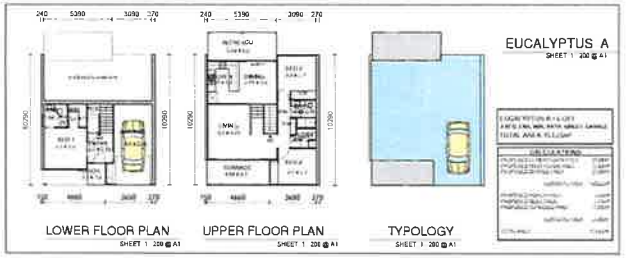
PROPOSED SECTION 96 APPLICATION TO DA 2015/0508
APPROVED SUBDIVISION AND RESIDENTIAL DEVELOPMENT
NO 150, LOT A, DP350420, NO 152, LOT 1, DP725964, NO 154, LOT A, DP394165, NO 156, LOT B, DP394165, LAKE RD., ELERMORE VALE.

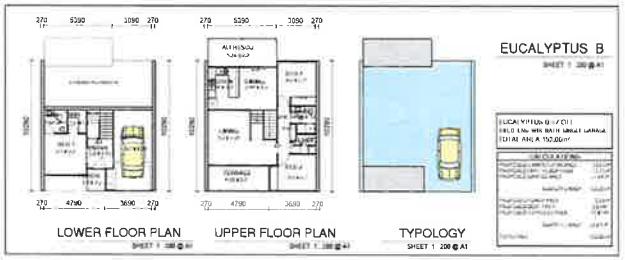
BNL BUILDING CONSTRUCTIONS PTY LTD

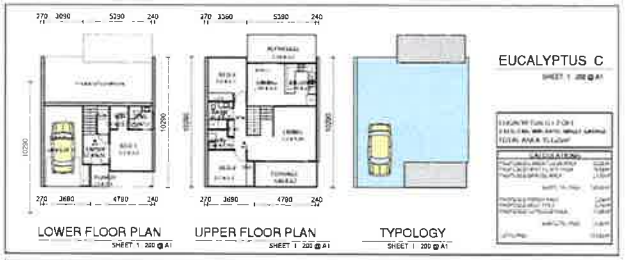
1	PRELIMINARY SECTION 96	22-07-16
2	PRELIMINARY SECTION 96	12-08-16
3	PRELIMINARY SECTION 96	29-09-16
4	FINAL SECTION 96	07-09-16

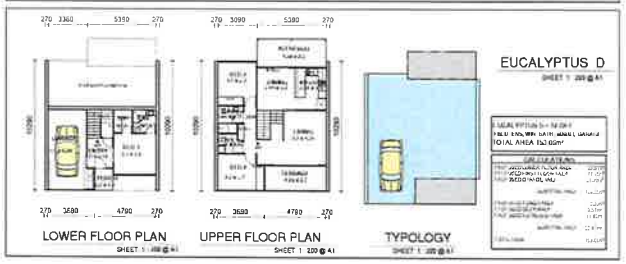
SHEET 5

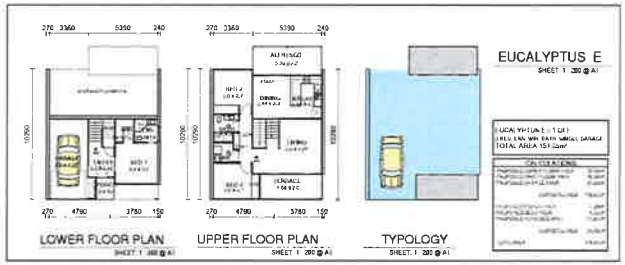


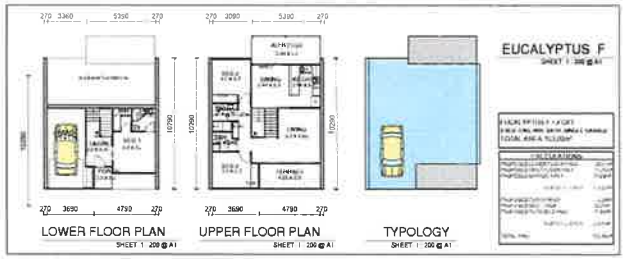


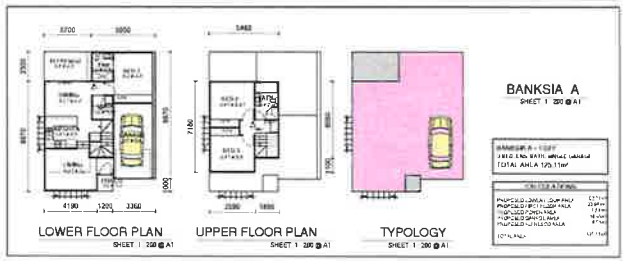


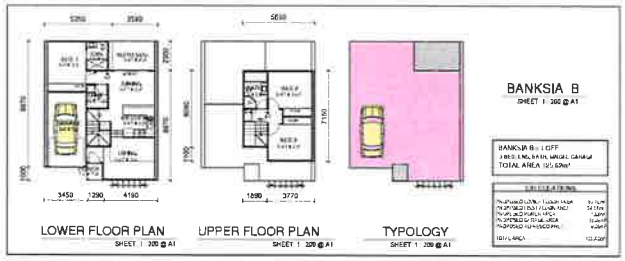


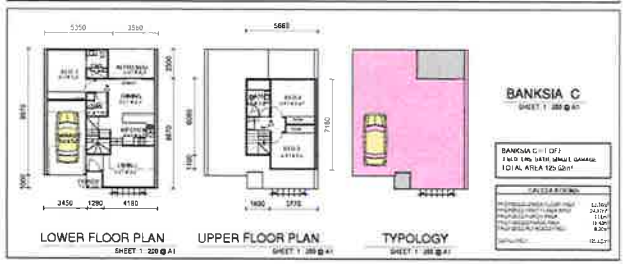


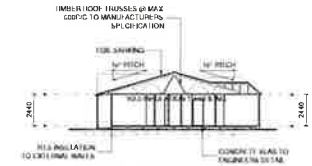


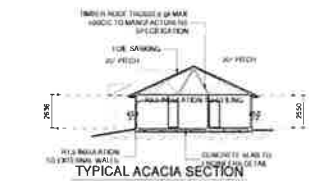


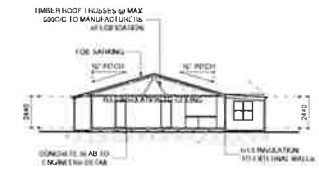


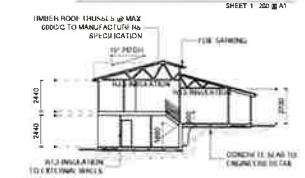


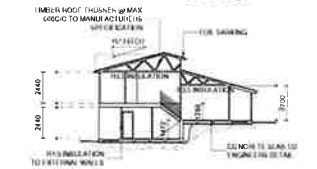




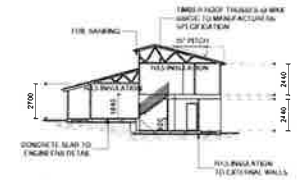








Building Sustainability Assessments
14911526



BASIX

PLANS PREPARED BY
Kim Gerrish

IN CONJUNCTION WITH THE FOLLOWING CONSULTANTS

NORTHROP

PROJECT: PROPOSED SECTION 96 APPLICATION TO DA 2015/0505 APPROVED SUBDIVISION AND RESIDENTIAL DEVELOPMENT
NO 150, LOT A DP350490, NO 152, LOT 1, DP725264, NO 154, LOT A DP394165, NO 156, LOT B, DP394165, LAKE RD., ELERMORE VALE.

CLIENT: SNL BUILDING CONSTRUCTIONS PTY LTD

DATE	2 SEPTEMBER 2016
PROJECT	1607E
SCALE	1 : 200 @ A1

ISSUE	COMMENTS	DATE
1	PRELIMINARY SECTION 96	22-07-16
2	PRELIMINARY SECTION 96	12-08-16
3	PRELIMINARY SECTION 96	26-08-16
4	FINAL SECTION 96	02-09-16

SECTION 96 APPLICATION

SHEET 6

SECTION 96 APPLICATION

RETAINING WALL LOCATION

LANDSCAPED AREA USED IN CALCULATIONS

OVERALL SITE LANDSCAPE AREA CALCULATIONS
SCALE 1:100 @ A1

Building Certification Assessments
Certificate Number: 14911526

LANDSCAPE CALCULATIONS	
TOTAL SITE AREA	38891.9m²
30% PLANTING FOR GREENFIELD (IF REQUIRED)	11668 m²
15% DEEP SOIL PLANTING (IF REQUIRED)	5834 m²
70m2 LANDSCAPING PER UNIT (IF REQUIRED)	7210 m²
TOTAL USABLE LANDSCAPED AREA PROVIDED	15376.46m²
LESS 4x4 PRIVATE OPEN SPACE INCLUDED IN CALC	- 1648.00m²
PROPOSED TOTAL USABLE LANDSCAPED AREA	13728.46m²

PLANS PREPARED BY
Kim Gerrish

IN CONJUNCTION WITH THE FOLLOWING CONSULTANTS
NORTHROP

PROJECT: PROPOSED SECTION 96 APPLICATION TO DA 2015/0508 APPROVED SUBDIVISION AND RESIDENTIAL DEVELOPMENT
LOCATION: NO 150, LOT A, DP350420, NO 152, LOT 1, DP725864, NO 154, LOT A, DP394165, NO 156, LOT B, DP394165, LAKE RD., ELERMORE VALE.
CLIENT: SNL BUILDING CONSTRUCTIONS PTY LTD

DATE: 2 SEPTEMBER 2015
REVISION: 14972
SCALE: 1:400 @ A1

REVISION	COMMENTS	DATE
1	PRELIMINARY SECTION 96	23-07-15
2	PRELIMINARY SECTION 96	12-08-15
3	PRELIMINARY SECTION 96	26-08-15
4	FINAL SECTION 96	02-09-15

SHEET 7

OVERALL SITE LOWER FLOOR PLANS

SCALE 1:400 @ A1

14911526

SECTION 96 APPLICATION

SHEET 8

PLANS PREPARED BY

Kim Gerrish

IN CONJUNCTION WITH THE FOLLOWING CONSULTANTS

NORTHROP

PROJECT: PROPOSED SECTION 96 APPLICATION TO DA 2015/0508 APPROVED SUBDIVISION AND RESIDENTIAL DEVELOPMENT

LOCATION: NO. 150, LOT A, DP359429, NO. 152, LOT 1, DP725264, NO. 154, LOT A, DP394165, NO. 156, LOT B, DP394165, LAKE RD., ELERMORE VALE.

CLIENT: SNL BUILDING CONSTRUCTIONS PTY LTD

DATE: 2 SEPTEMBER 2016

JOB NO: 16072

SCALE: 1:400 @ A1

ISSUE	COMMENTS	DATE
A	PRELIMINARY SECTION 96	22-07-16
B	PRELIMINARY SECTION 96	29-08-16
C	PRELIMINARY SECTION 96	29-08-16
D	FINAL SECTION 96	02-09-16

OVERALL SITE UPPER FLOOR PLANS

SCALE 1:100 @ A1

14911526

SECTION 96 APPLICATION

SHEET 9

PLANS PREPARED BY

Kim Gerrish

IN CONJUNCTION WITH THE FOLLOWING CONSULTANTS

NORTHROP

PROJECT: PROPOSED SECTION 96 APPLICATION TO DA 2015/0508 APPROVED SUBDIVISION AND RESIDENTIAL DEVELOPMENT

ADDRESS: NO. 150, LOT A, DP350493, NO. 152, LOT 1, DP725264, NO. 154, LOT A, DP394165, NO. 156, LOT B, DP394165, LAKE RD., ELERMORE VALE.

CLIENT: SNL BUILDING CONSTRUCTIONS PTY LTD

DATE: 2 SEPTEMBER 2016

JOB NO: 14072

SCALE: 1:100 @ A1

ISSUE	COMMENTS	DATE
1	PRELIMINARY SECTION 96	22-07-16
4	PRELIMINARY SECTION 96	12-08-16
5	PRELIMINARY SECTION 96	25-08-16
6	FINAL SECTION 96	02-09-16

ROOF PLAN

SCALE 1:400 @ A1

14911526

SECTION 96 APPLICATION

SHEET 10

Kim Gerrish

NORTHROP

RPS

PROPOSED SECTION 96 APPLICATION TO DA 2015/0508
APPROVED SUBDIVISION AND RESIDENTIAL DEVELOPMENT
NO. 150, LOT A, DP350420, NO. 152, LOT 1, DP725264, NO. 154, LOT A, DP394165, NO. 156, LOT B, DP394165, LAKE RD., ELERMORE VALE.

SNL BUILDING CONSTRUCTIONS PTY LTD

2 SEPTEMBER 2016

14072

1:400 @ A1

ISSUE	COMMENTS	DATE
1	PRELIMINARY SECTION 96	22-07-16
4	PRELIMINARY SECTION 96	12-08-16
5	PRELIMINARY SECTION 96	29-08-16
6	FINAL SECTION 96	02-09-16

BUILDING SHADOW

SHADOW DIAGRAMS - 9AM ON 22ND JUNE

SECTION 96 APPLICATION

SHEET 20

PLANS PREPARED BY

Kim Gerrish

IN COLLABORATION WITH THE FOLLOWING CONSULTANTS

NORTHROP

PROJECT: PROPOSED SECTION 96 APPLICATION TO DA 2015/0506 APPROVED SUBDIVISION AND RESIDENTIAL DEVELOPMENT

LOCATION: NO 150 , LOT A, DP350420, NO 152, LOT 1, DP725264, NO 154 , LOT A, DP394165, NO 156 , LOT B, DP394165, LAKE RD., ELERMORE VALE.

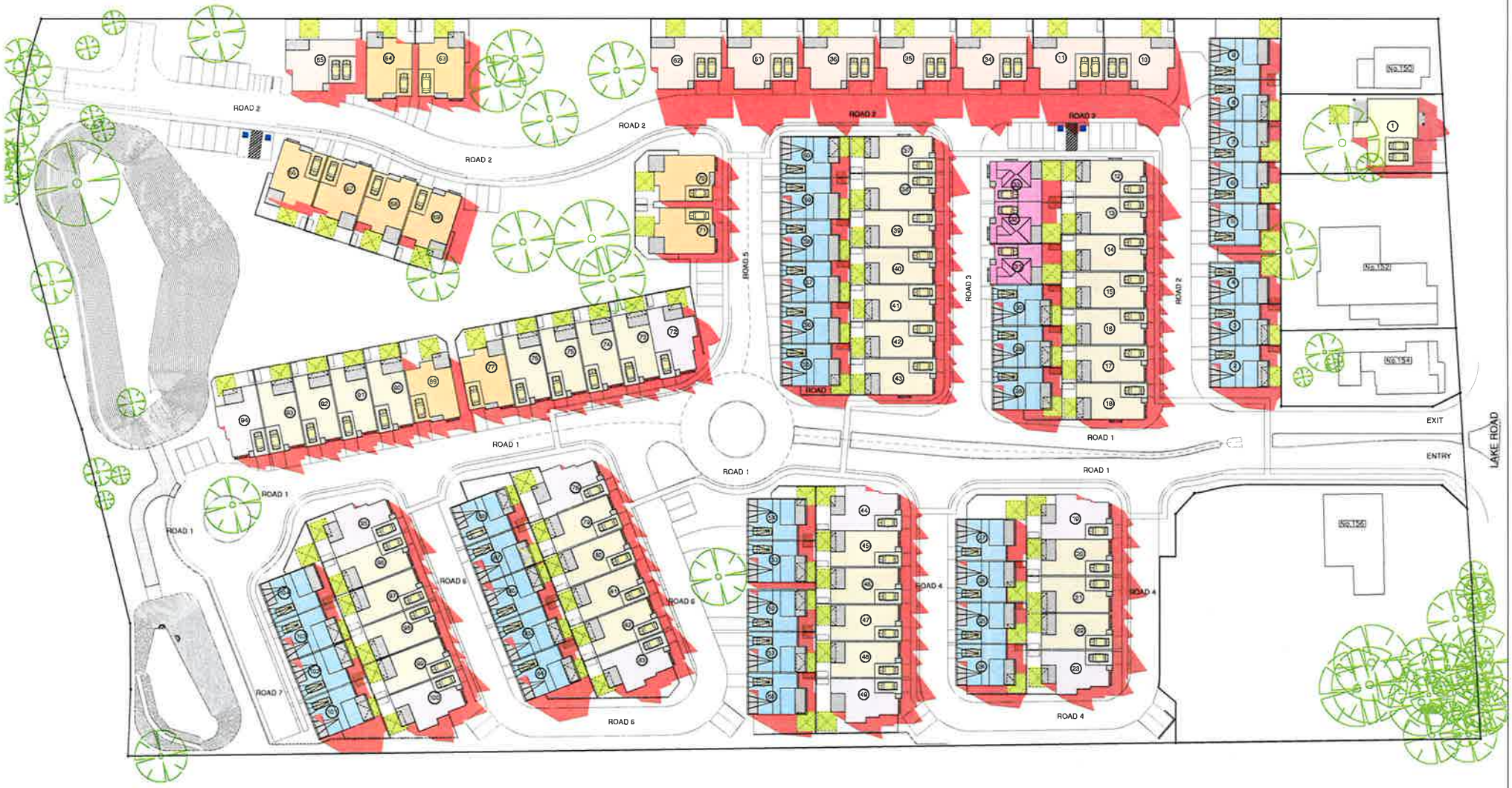
CLIENT: SNL BUILDING CONSTRUCTIONS PTY LTD

DATE: 2 SEP 2015

REV NO: 16373

SCALE: 1:400 @ A1

REV	COMMENTS	DATE
1	PRELIMINARY SECTION 96	22-07-13
2	PRELIMINARY SECTION 96	12-08-13
3	PRELIMINARY SECTION 96	28-08-13
4	FINAL SECTION 96	02-09-13



BUILDING SHADOW

SHADOW DIAGRAMS - 12NOON ON 22ND JUNE

SCALE 1:400 @ A1

SECTION 96 APPLICATION

PLANS PREPARED BY

Kim Gerrish

IN CONSULTATION WITH THE FOLLOWING CONSULTANTS

NORTHROP

PROJECT: PROPOSED SECTION 96 APPLICATION TO DA 2015/0508 APPROVED SUBDIVISION AND RESIDENTIAL DEVELOPMENT

NO 150, LOT A, DP350420, NO 152, LOT 1, DP725264, NO 154, LOT A, DP394165, NO 156, LOT B, DP394165, LAKE RD, ELERMORE VALE.

CLIENT: SNL BUILDING CONSTRUCTIONS PTY LTD

DATE: 3 SEP 2016

REF NO: 15073

SCALE: 1:400 @ A1

ISSUE	DESCRIPTION	DATE
1	PRELIMINARY SECTION 96	23-07-15
4	PRELIMINARY SECTION 96	13-08-15
5	PRELIMINARY SECTION 96	26-08-15
6	FINAL SECTION 96	03-09-15

SHEET 21

BUILDING SHADOW

SHADOW DIAGRAMS - 3PM ON 22ND JUNE

SECTION 96 APPLICATION

SHEET 22

PLANS PREPARED BY

Kim Gerrish

IN CONJUNCTION WITH THE FOLLOWING CONSULTANTS

NORTHROP

PROJECT: PROPOSED SECTION 96 APPLICATION TO DA 2015/0508 APPROVED SUBDIVISION AND RESIDENTIAL DEVELOPMENT

LOCATION: NO 150, LOT A, DP350420, NO 152, LOT 1, DP725264, NO 154, LOT A, DP394165, NO 156, LOT B, DP394165, LAKE RD., ELERMORE VALE.

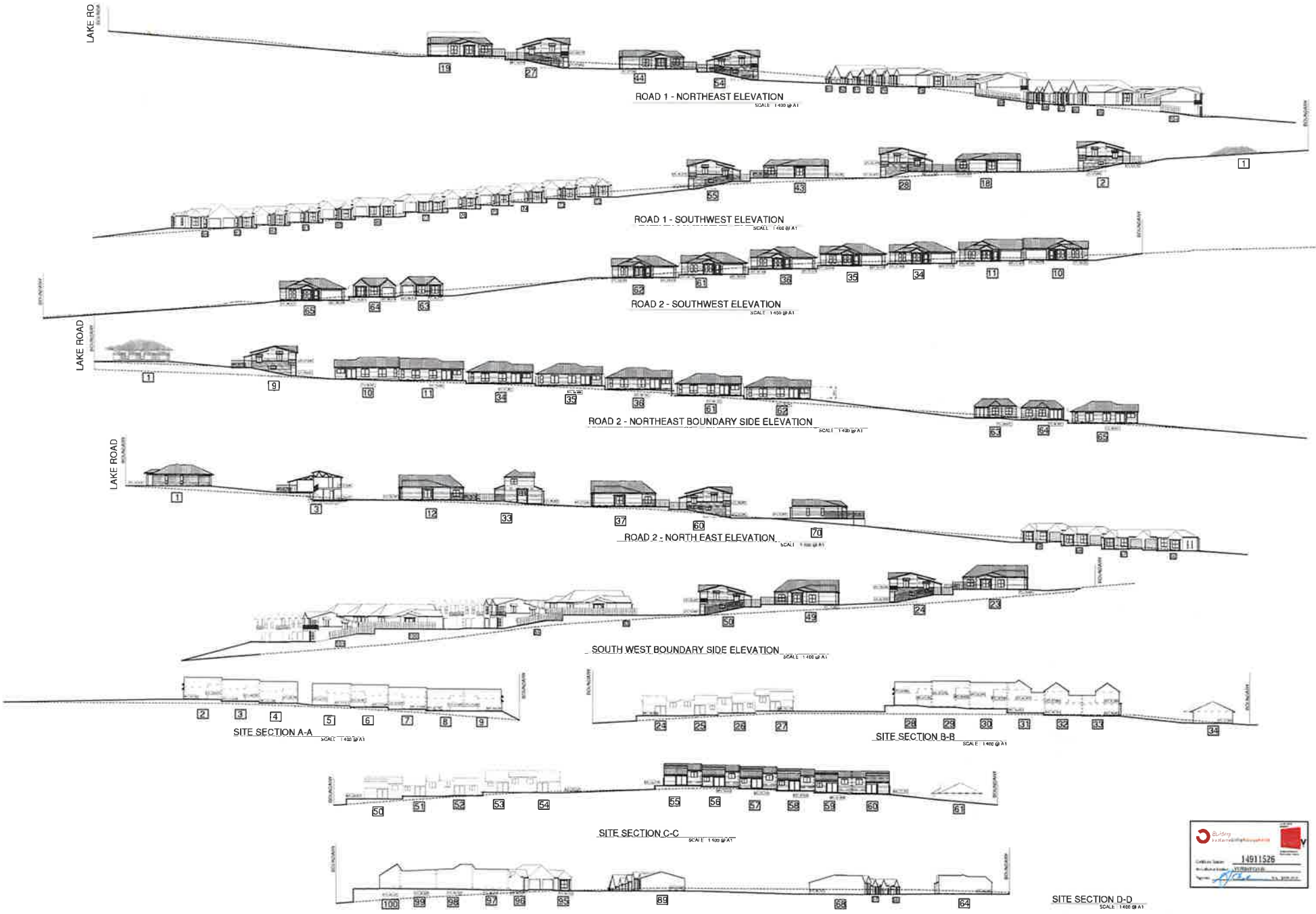
CLIENT: BNL BUILDING CONSTRUCTIONS PTY LTD

DATE: 3 SEP 2015

JOB NO: 15075

SCALES: 1:400 @ A1

REVISION	COMMENTS	DATE
A	PRELIMINARY SECTION 96	22-07-15
B	PRELIMINARY SECTION 96	12-08-15
C	PRELIMINARY SECTION 96	28-08-15
D	FINAL SECTION 96	02-09-15



14911526

PLANS PREPARED BY
Kim Gerrish

IN CONJUNCTION WITH THE FOLLOWING CONSULTANTS
NORTHROP

PROJECT: PROPOSED SECTION 96 APPLICATION TO DA 2015/0508
APPROVED SUBDIVISION AND RESIDENTIAL DEVELOPMENT
NO 150, LOT A DP353429, NO 152, LOT 1, DP725264, NO 154, LOT A, DP394165, NO 156, LOT B, DP394165, LAKE RD., ELERMORE VALE.

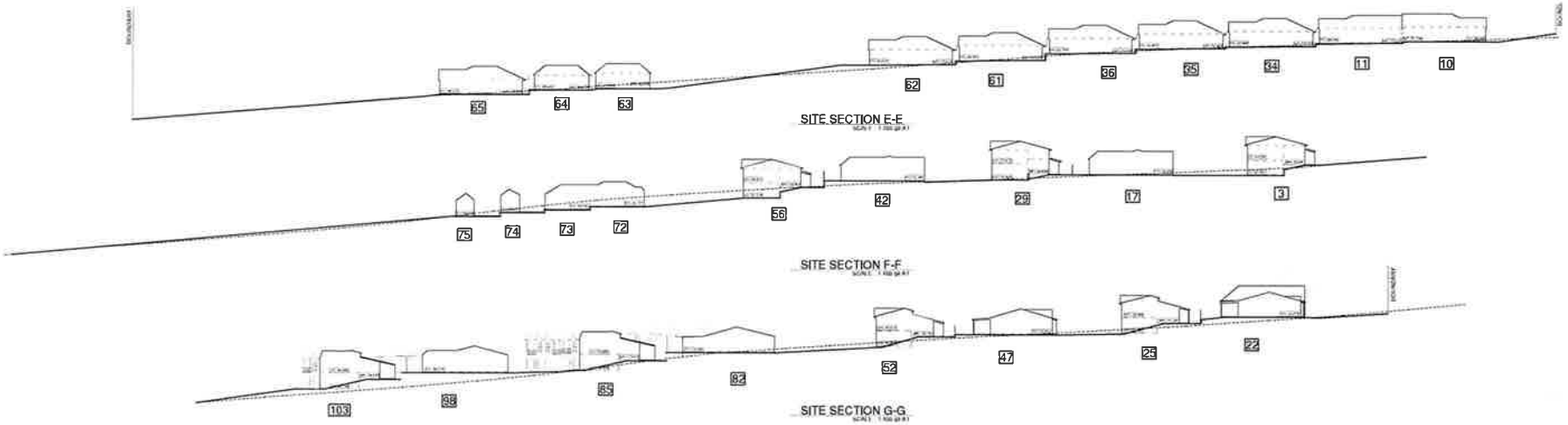
CLIENT: SNL BUILDING CONSTRUCTIONS PTY LTD

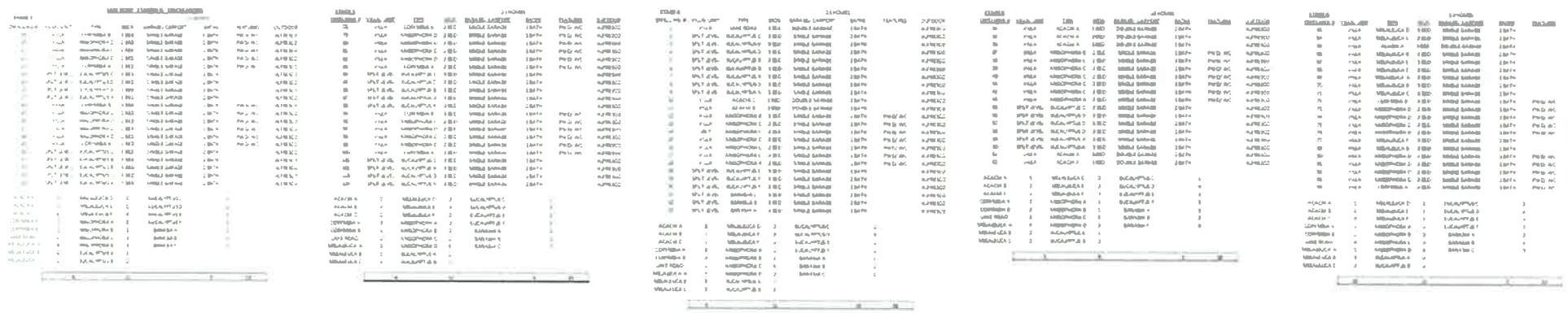
DATE: 2 SEPTEMBER 2016
REVISION: 1673
SCALE: 1:400 @ A1

REVISION	DOCUMENTS	DATE
1	PRELIMINARY SECTION 96	23-07-15
2	PRELIMINARY SECTION 96	12-08-15
3	PRELIMINARY SECTION 96	29-08-15
4	FINAL SECTION 96	02-09-15

SECTION 96 APPLICATION

SHEET 18





PLANS PREPARED BY

Kim Gerrish

IN CONJUNCTION WITH THE FOLLOWING CONSULTANTS

NORTHROP

PROJECT: PROPOSED SECTION 96 APPLICATION TO DA 2015/0508 APPROVED SUBDIVISION AND RESIDENTIAL DEVELOPMENT

LOCATION: NO 150, LOT A, DP350429, NO 152, LOT 1, DP725264, NO 154, LOT A, DP394165, NO 156, LOT B, DP394165, LAKE RD., ELERMORE VALE.

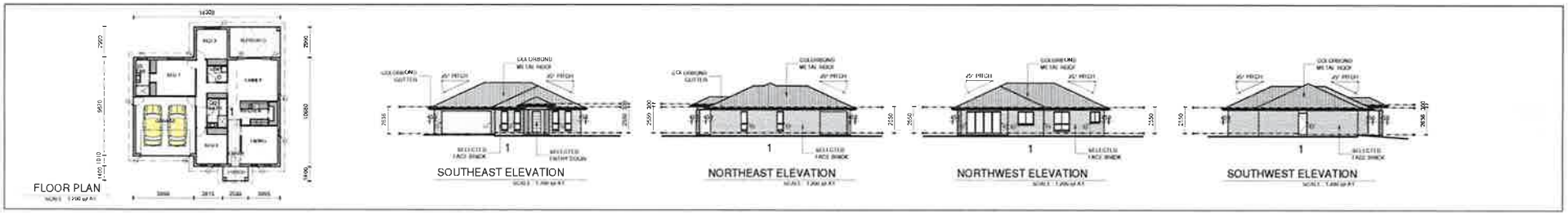
CLIENT: SNL BUILDING CONSTRUCTIONS PTY LTD

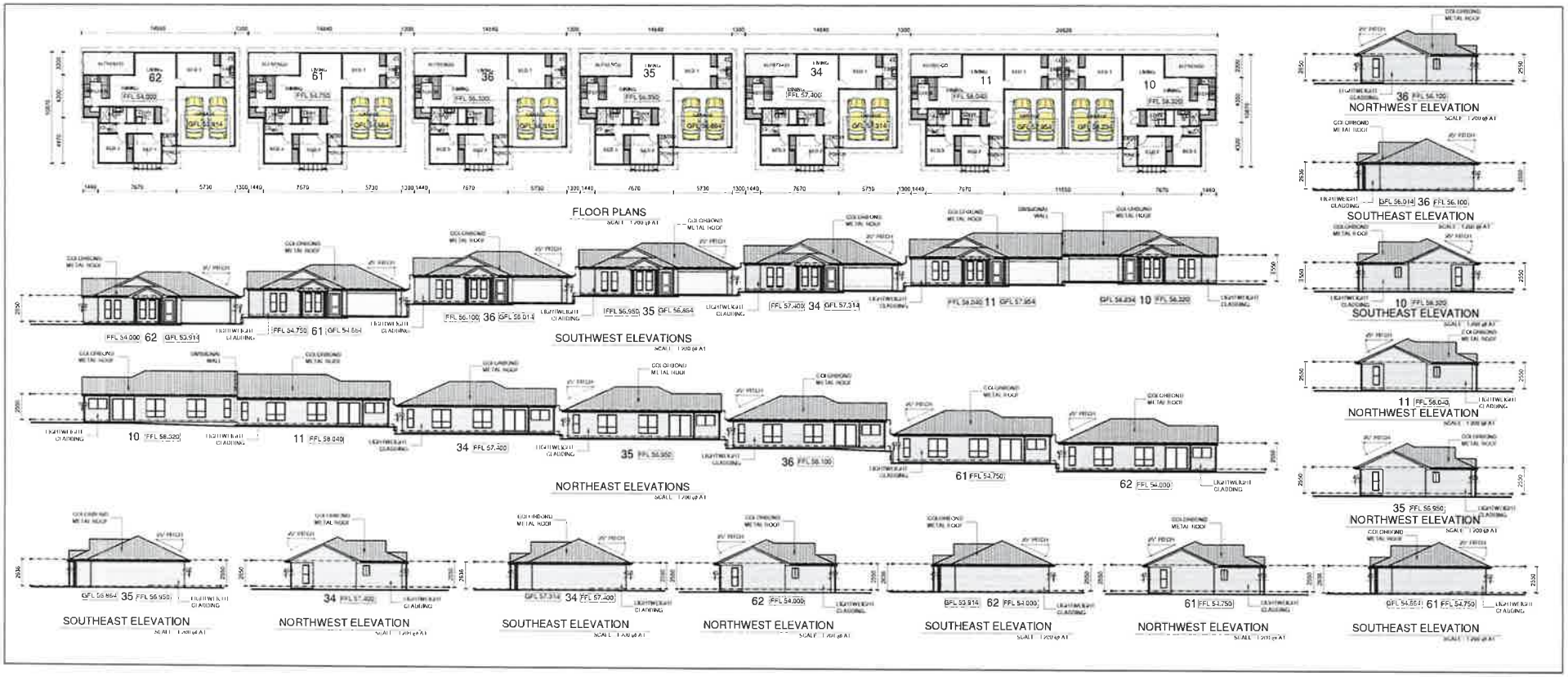
DATE	3 SEPTEMBER 2018
REF NO	15073
DRAWN	A. ABD @ A3

ISSUE	SUBMISSION TO	DATE
A	PRELIMINARY SECTION 96	22-07-18
B	PRELIMINARY SECTION 96	12-08-18
C	PRELIMINARY SECTION 96	29-08-18
D	FINAL SECTION 96	03-09-18

SECTION 96 APPLICATION

SHEET 18





14011526

PLANS PREPARED BY

Kim Gerrish

IN CONJUNCTION WITH THE FOLLOWING CONSULTANTS

RPS

NORTHROP

PROJECT: PROPOSED SECTION 96 APPLICATION TO DA 2015/0508
APPROVED SUBDIVISION AND RESIDENTIAL DEVELOPMENT
NO 150, LOT A, DP350400, NO 152, LOT 1, DP725364, NO 154, LOT A, DP384165, NO 156, LOT B, DP384165, LAKE RD., ELERMORE VALE.

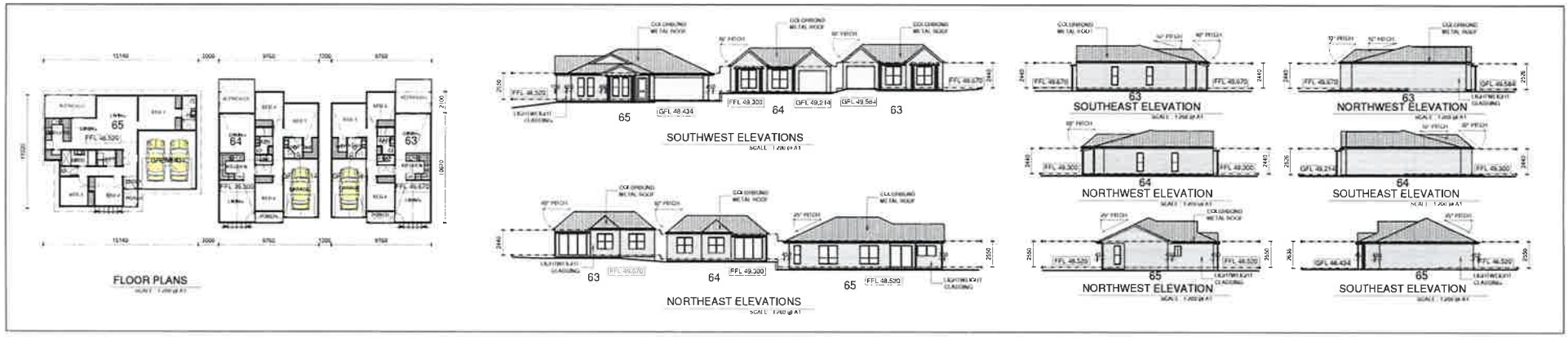
CLIENT: SAL BUILDING CONSTRUCTIONS PTY LTD

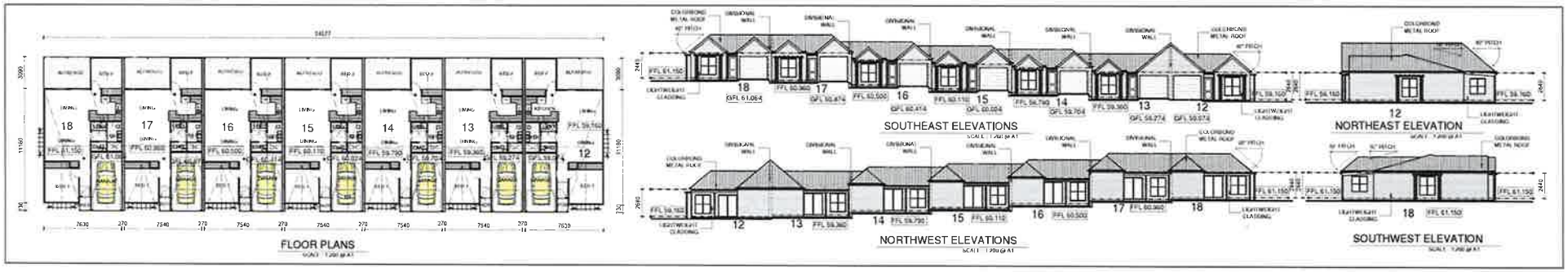
DATE: 2 SEPTEMBER 2015
SCALE: 1:200 @ A1

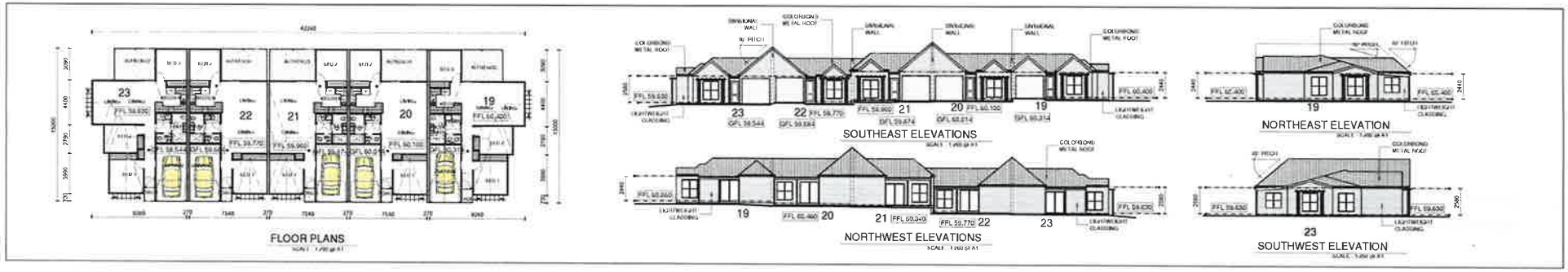
ISSUE	COMMENTS	DATE
1	PRELIMINARY SECTION 96	22-07-16
2	PRELIMINARY SECTION 96	12-08-16
3	PRELIMINARY SECTION 96	26-09-16
4	FINAL SECTION 96	03-04-18

SECTION 96 APPLICATION

SHEET 11







SECTION 96 APPLICATION

Certificate Number: 14911526

PLANS PREPARED BY: Kim Gerrish

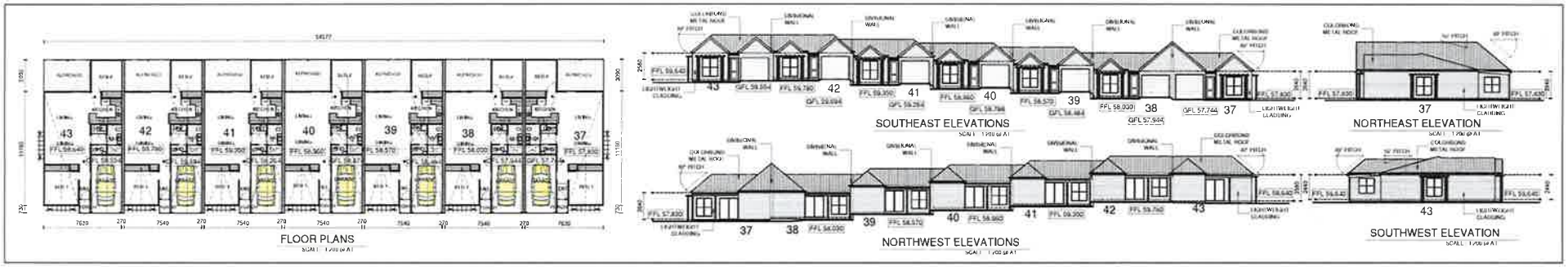
IN CONJUNCTION WITH THE FOLLOWING CONSULTANTS: RPS, NORTHROP

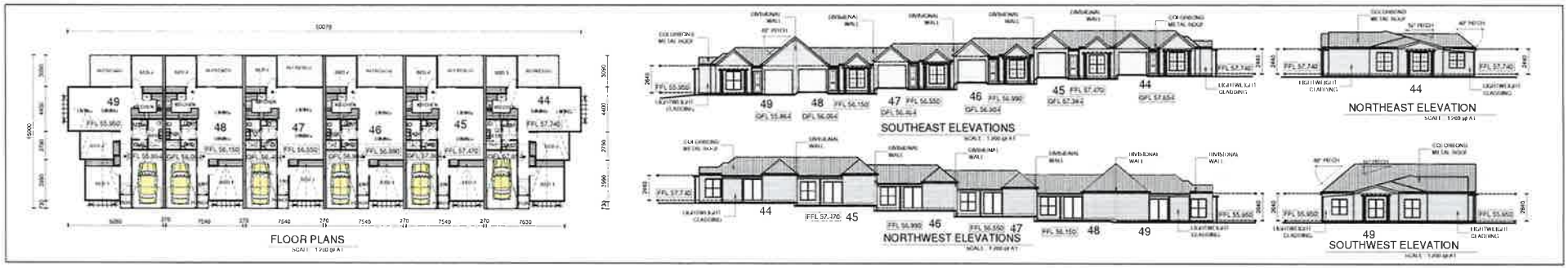
PROPOSED SECTION 96 APPLICATION TO DA 2015/0506
APPROVED SUBDIVISION AND RESIDENTIAL DEVELOPMENT
NO 150, LOT A, DP350420, NO 152, LOT 1, DP725264, NO 154, LOT A, DP394165, NO 156, LOT B, DP394185, LAKE RD., ELERMORE VALE.

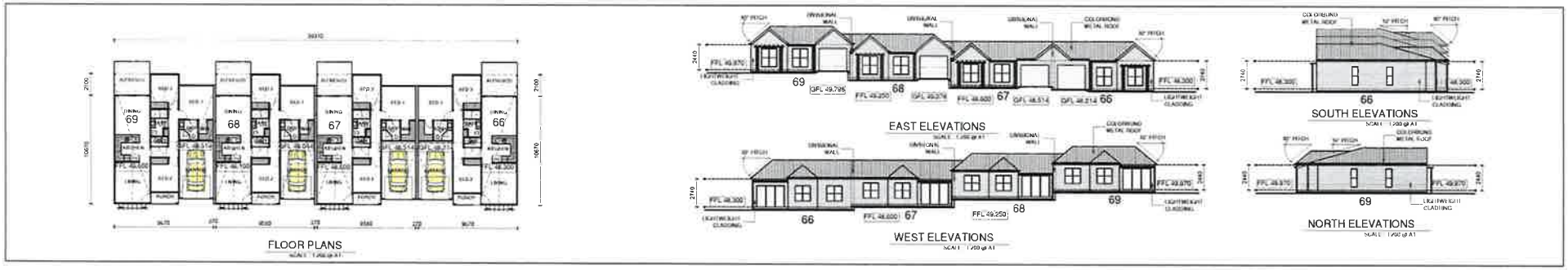
SAL BUILDING CONSTRUCTIONS PTY LTD

ISSUE	COMMENTS	DATE
1	PRELIMINARY SECTION 96	12-06-14
2	PRELIMINARY SECTION 96	12-06-14
3	PRELIMINARY SECTION 96	26-06-14
4	FINAL SECTION 96	12-08-14

SHEET 12







Certificate Number: 14911526

FILING PREPARED BY: Kim Gerrish

IN CONJUNCTION WITH THE FOLLOWING CONSULTANTS: RPS, NORTHROP

PROJECT: PROPOSED SECTION 96 APPLICATION TO DA 2015/0508 APPROVED SUBDIVISION AND RESIDENTIAL DEVELOPMENT

ADDRESS: NO 150, LOT A, DP350420, NO 152, LOT 1, DP725264, NO 154, LOT A, DP394165, NO 156, LOT B, DP394165, LAKE RD, ELERMORE VALE.

CLIENT: SNL BUILDING CONSTRUCTIONS PTY LTD

DATE: 2 SEPTEMBER 2016

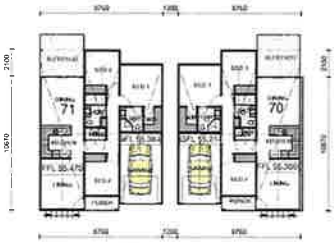
JOB NO: 15073

SCALE: 1:100 @ A1

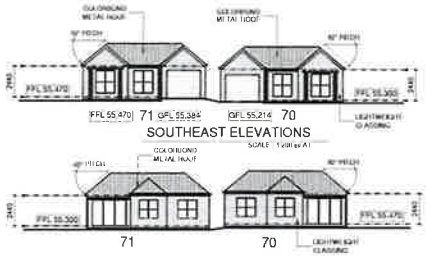
ISSUE	COMMENTS	DATE
1	PRELIMINARY SECTION 96	22-07-16
2	PRELIMINARY SECTION 96	12-08-16
3	PRELIMINARY SECTION 96	26-08-16
4	FINAL SECTION 96	02-09-16

SECTION 96 APPLICATION

SHEET 13

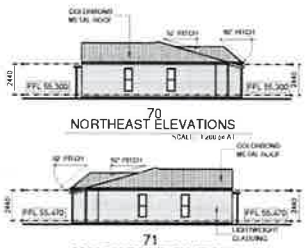


FLOOR PLANS



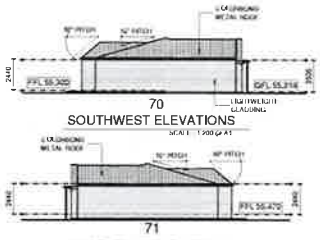
SOUTHEAST ELEVATIONS

NORTHWEST ELEVATIONS



NORTHEAST ELEVATIONS

SOUTHWEST ELEVATIONS



SOUTHWEST ELEVATIONS

NORTHEAST ELEVATIONS

FLOOR PLANS

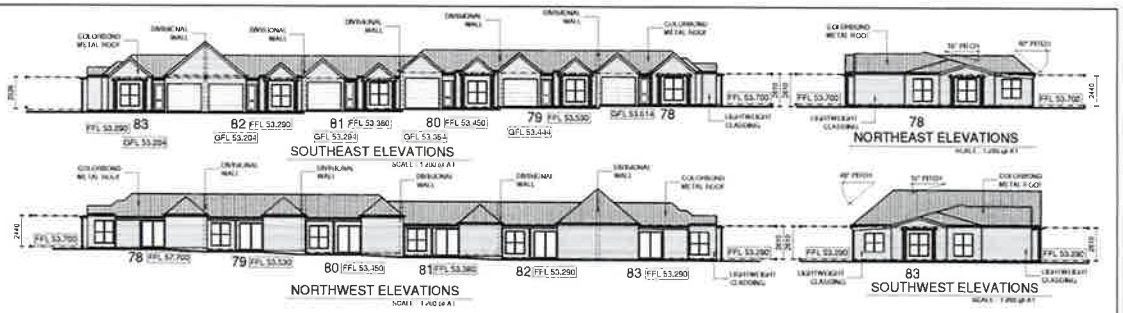
SOUTHWEST ELEVATIONS

SOUTHEAST ELEVATIONS

NORTHEAST ELEVATIONS

NORTHWEST ELEVATIONS

FLOOR PLANS



SOUTHEAST ELEVATIONS

NORTHEAST ELEVATIONS

NORTHWEST ELEVATIONS

SOUTHWEST ELEVATIONS

SECTION 96 APPLICATION

Certificate No: 14911526

PLANS PREPARED BY: Kim Gerrish

IN CONJUNCTION WITH THE FOLLOWING CONSULTANTS: NORTHROP

PROJECT: PROPOSED SECTION 96 APPLICATION TO DA 2015/0506 APPROVED SUBDIVISION AND RESIDENTIAL DEVELOPMENT

PURPOSE: NO 150, LOT A DP350420, NO 152, LOT 1 DP725964, NO 154, LOT A DP394165, NO 156, LOT B, DP394165, LAKE RD., ELERMORE VALE.

CLIENT: SAL BUILDING CONSTRUCTIONS PTY LTD

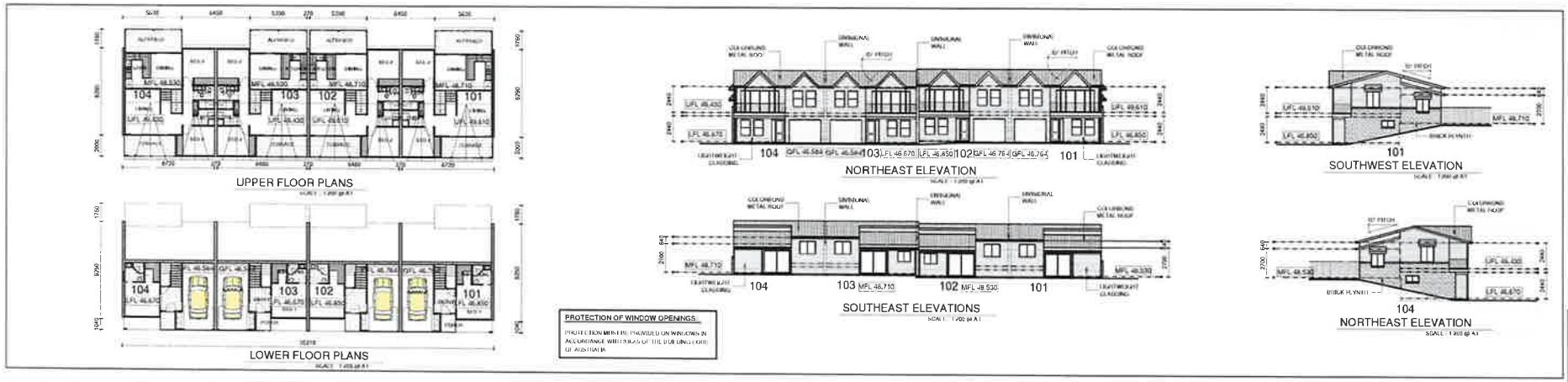
DATE: 2 SEPTEMBER 2016

JOB NO: 16073

SCALE: 1:100 @ A1

ISSUE	COMMENTS	DATE
A	PRELIMINARY SECTION 96	22-07-16
B	PRELIMINARY SECTION 96	12-08-16
C	PRELIMINARY SECTION 96	25-08-16
D	FINAL SECTION 96	02-09-16

SHEET 14



Certificate Number: 14911526

PLANS PREPARED BY: Kim Gerrish

IN CONJUNCTION WITH THE FOLLOWING CONSULTANTS: RPS, NORTHROP

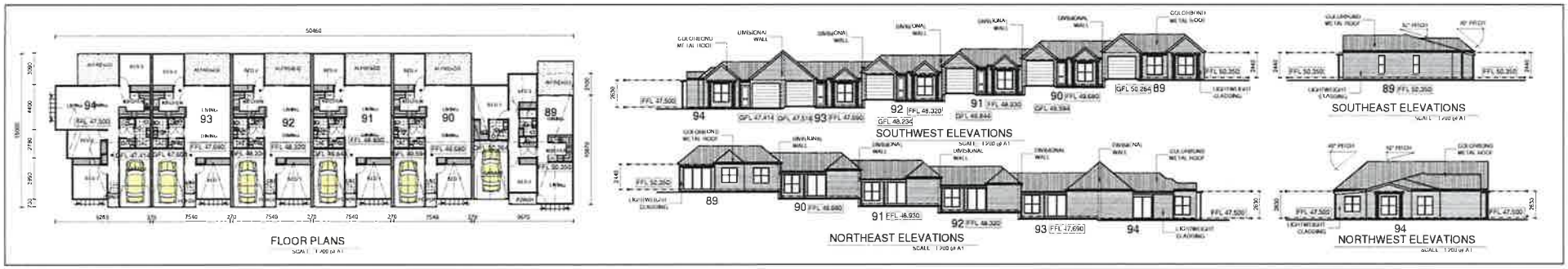
PROJECT: PROPOSED SECTION 96 APPLICATION TO DA 2015/0508
APPROVED SUBDIVISION AND RESIDENTIAL DEVELOPMENT
NO.150, LOT A, DP356420, NO.152, LOT 1, DP725264, NO.154 LOT A, DP394165, NO.156, LOT B, DP394165, LAKE RD., ELERMORE VALE.

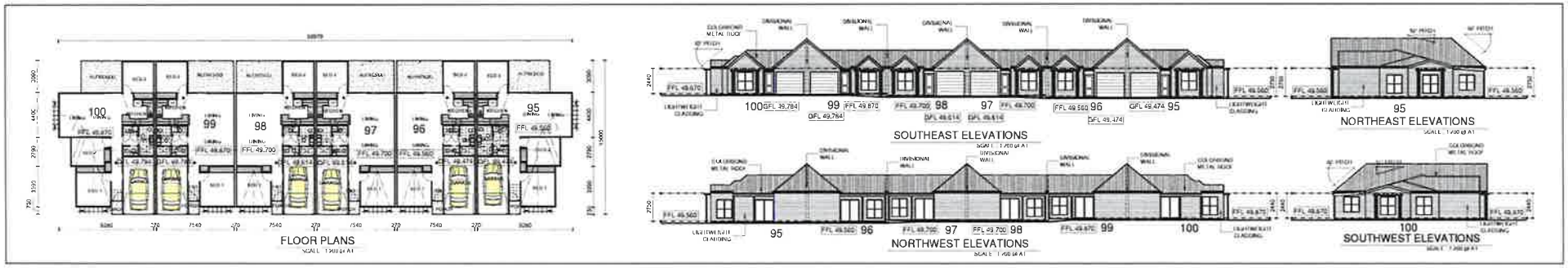
CLIENT: SNL BUILDING CONSTRUCTIONS PTY LTD

DATE	COMMENTS
22-07-16	PRELIMINARY SECTION 96
12-09-16	PRELIMINARY SECTION 96
26-09-16	PRELIMINARY SECTION 96
03-04-18	FINAL SECTION 96

SECTION 96 APPLICATION

SHEET 17





PROTECTION OF WINDOW OPENINGS

PROTECTION MUST BE PROVIDED ON WINDOWS IN ACCORDANCE WITH SAS 2.5 OF THE BUILDING CODE OF AUSTRALIA.

14911526

PLANS PREPARED BY

Kim Gerrish

IN CONJUNCTION WITH THE FOLLOWING CONSULTANTS

NORTHROP

PROJECT: PROPOSED SECTION 96 APPLICATION TO DA 2015/0509 APPROVED SUBDIVISION AND RESIDENTIAL DEVELOPMENT

ADDRESS: NO 150, LOT A, DP350420, NO 152, LOT 1, DP725354, NO 154, LOT A, DP394165, NO 156, LOT B, DP394165, LAKE RD., ELERMORE VALE.

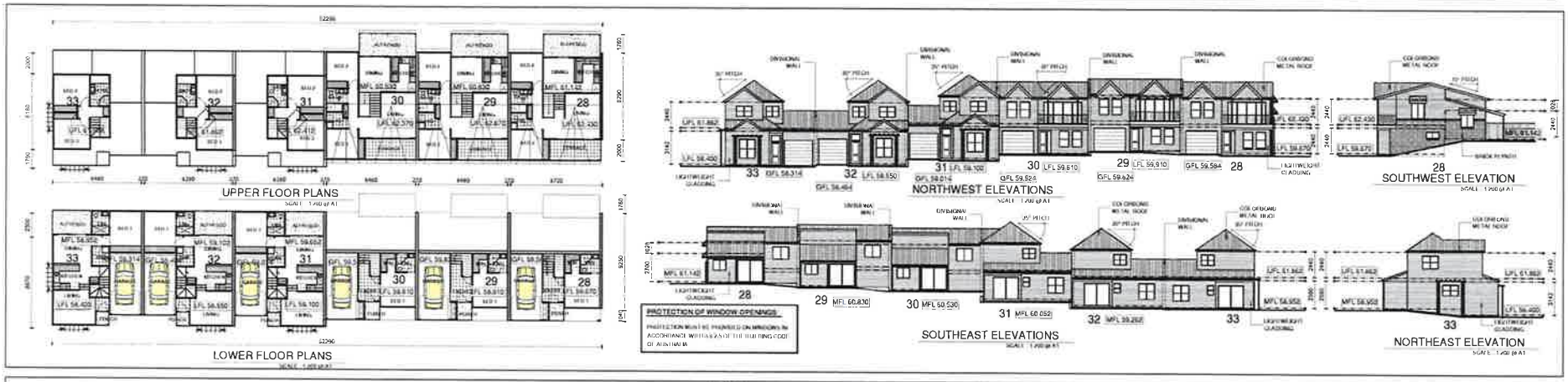
CLIENT: SAL BUILDING CONSTRUCTIONS PTY LTD

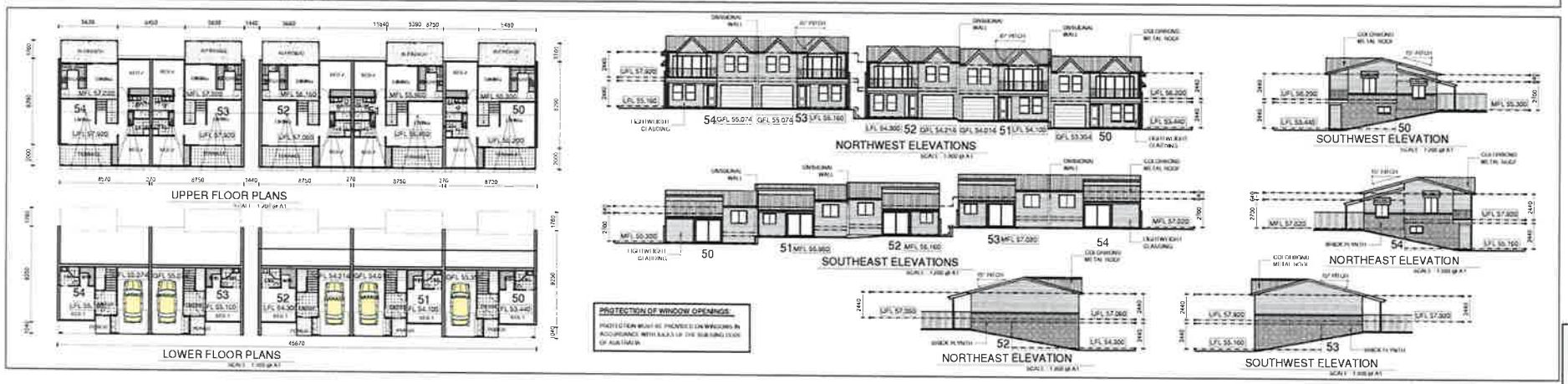
DATE: 2 SEPTEMBER 2016

ISSUE	COMMENTS	DATE
A	PRELIMINARY SECTION 96	22-07-16
B	PRELIMINARY SECTION 96	12-08-16
C	PRELIMINARY SECTION 96	25-08-16
D	FINAL SECTION 96	02-09-16

SHEET 15

SECTION 96 APPLICATION





Building Certifiers

14911526

PLANS PREPARED BY: Gerrish

IN CONSULTATION WITH THE FOLLOWING CONSULTANTS: NORTHROP

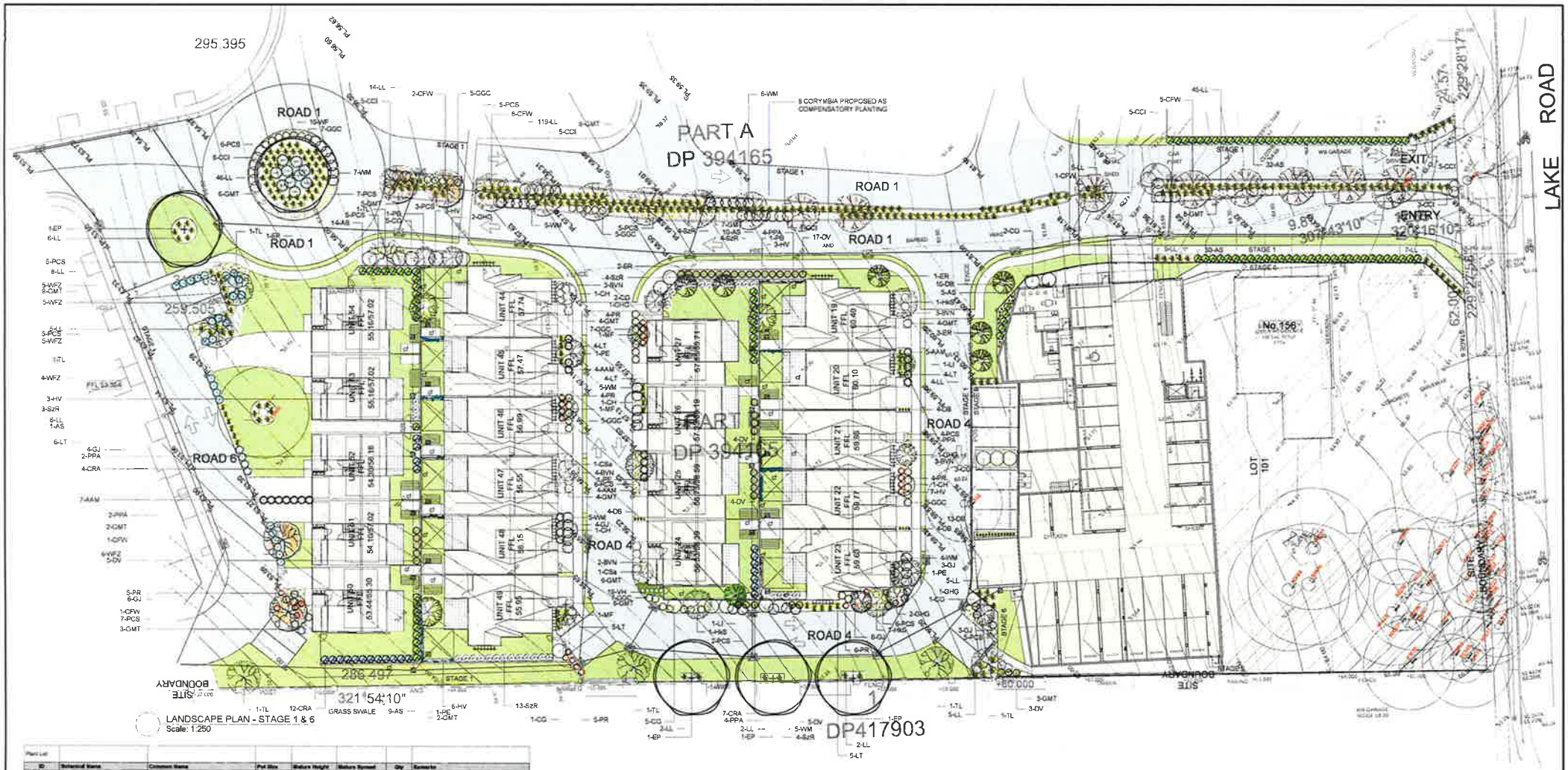
PROPOSED SECTION 96 APPLICATION TO DA 2015/0508
APPROVED SUBDIVISION AND RESIDENTIAL DEVELOPMENT
NO 150, LOT A, DP350420, NO 152, LOT 1, DP125264, NO 154, LOT A, DP394165, NO 156, LOT B, DP394165, LAKE RD., ELERMORE VALE

SNL BUILDING CONSTRUCTIONS PTY LTD

DATE	ISSUE	COMMENTS	DATE
3 SEPTEMBER 2015	A	PRELIMINARY SECTION 96	22-05-16
16/03	B	PRELIMINARY SECTION 96	17-06-16
	C	PRELIMINARY SECTION 96	26-06-16
	D	FINAL SECTION 96	02-08-16

SECTION 96 APPLICATION

SHEET 16



ID	Botanical Name	Common Name	Pot Size	Mature Height	Mature Spread	Qty	Remarks
Trees							
Ch	Callistemon 'Harkness'	Harkness Bottlebrush	45L	4-6m	2m	4	
Cs	Camellia sasanqua	Camellia sasanqua	45L	2 - 4m	2 - 4m	2	
CFW	Corymbia ficifolia 'Wildfire'	Dwarf Flowering Gum	45L	8m	6m	18	Compensatory Planting
EK	Elaeocarpus reticulatus	Blueberry Ash	45L	5 - 10m	3.5 - 6m	4	Compensatory Planting
EP	Eucalyptus punctata	Grey Gum	45L	25 - 30m	6 - 10m	8	Compensatory Planting
HaC	Hakea salicifolia	Willow Leaved Hakea	25L	4-6m	6m	3	
LI	Lagerstroemia 'Yuma'	Yuma Crape Myrtle	45L	4m	3m	2	
MF	Michelia figo	Port Wine Magnolia	45L	4m	3m	3	
PS	Prunus cerasifera	Cherry Flowering Plum	45L	3m	3m	4	
PB	Prunus X blireiana	Double Flowering Plum	45L	6m	4m	3	
TL	Tristaniopsis laurina	Water Gum	45L	8-15m	6m	7	Compensatory Planting
Shrubs							
AAM	Acmena 'Allyn's Magic'	Allyn's Magic	300mm	1m	1m	20	
AG	Acmena smithii 'Minor'	Lilly Pilly	200mm	2- 3m	1- 2m	121	
BVN	Banksia integrifolia nana	Dwarf Banksia	200mm	1m	1m	15	
CRA	Callistemon 'Red Alert'	Red Alert	200mm	2 - 3.4m	1 - 2m	13	
Cc	Correa glabra	Rock Correa	200mm	2.5m	2m	10	
DV	Dianella revoluta 'Portbroad'	Purple Heat Stalk	200mm	2 - 3m	1.5 - 3.5m	35	
GJ	Grevillea sericeifolia 'Jubilee'	Jubilee Grevillea	200mm	1m	1m	26	
GHG	Grevillea 'Honey Gem'	Honey Gem	200mm	3 - 5m	3.5 - 6m	7	
SR	Syzygium 'Resilience'	Resilience	200mm	2m	1m	32	
WF	Westringia fruticosa	Coastal Rosemary	200mm	1.5m	1.5m	10	
WFJ	Westringia fruticosa 'Zena'	Zena Compact Native Rosemary	200mm	1m	1m	29	
WM	Westringia mundi	Mundi	200mm	0.6m	1.5m	37	
Ground Covers							
CCI	Casuarina 'Cousin It'	Casuarina 'Cousin It'	300mm	0.6m	2 - 3.5m	36	
DB	Dianella 'Breeze'	Breeze	140mm	0.45 - 0.6m	0.6 - 0.9m	35	
GGC	Grevillea 'Gin Gin Cluster'	Gin Gin Cluster	200mm	0.6m	1m	41	
GMT	Grevillea 'Mt Tamborine'	Mt Tamborine Grevillea	140mm	0.3 - 0.45m	1.2 - 2.5m	75	
PCS	Phalaris 'Cascade of Stars'	Phalaris 'Cascade of Stars'	140mm	0.5m	1m	71	
VH	Viola hederacea	Native Violet	100mm	0.2 - 0.3m	1.2 - 2.5m	19	
Grasses							
LT	Lomandra 'Tanika'	Dwarf mat rush	140mm	0.45 - 0.6m	0.6 - 0.8m	25	
LL	Lomandra longifolia	Spiny headed Mat-Rush	tube	0.75 - 0.9m	0.9 - 1.2m	292	
PM	Pennisetum 'Rubrum'	Purple Fountain Grass	140mm	0.6 - 0.75m	0.3 - 0.6m	28	
Climbers							
Hv	Hardenbergia violacea	False Sarsaparilla	140mm	0.3 - 0.45m	2 - 3m	22	To Cable Climbing Supports to Fence
PRA	Pandorea pandorana	Wonga Wonga Vine	140mm	3 - 5m	0.6 - 0.8m	18	To Cable Climbing Supports to Fence

Existing Trees	H ft	Condition	Action	Crown Projection
11508 Pyrus calleryana (Ornamental Pear)	8.4	Good	Retain	
11702 Cinnamomum cumphorw (Cumphor Laurel)	14.6	Good	Remove	47.492m²
80604 Corymbia maculata (Spotted Gum)	22.6	Good	Retain	
80430 Corymbia maculata (Spotted Gum)	22.6	Good	Retain	
80287 Corymbia maculata (Spotted Gum)	22.10	Good	Retain	
80635 Corymbia maculata (Spotted Gum)	24.8	Good	Retain	
80174 Corymbia maculata (Spotted Gum)	22.7	Good	Retain	
80346 Corymbia maculata (Spotted Gum)	12.5	Good	Retain	
80492 Corymbia maculata (Spotted Gum)	9.5	Fair/Good	Retain	
80517 Corymbia maculata (Spotted Gum)	12.4	Fair/Good	Retain	
80571 Corymbia maculata (Spotted Gum)	20.7	Fair/Good	Retain	
80199 Corymbia maculata (Spotted Gum)	22.8	Good	Retain	
80396 Shrub not covered by Arborist Report			Retain	
80222 Shrub not covered by Arborist Report			Retain	
80373 Corymbia maculata (Spotted Gum)	17.6	Fair/Good	Retain	
80255 Corymbia maculata (Spotted Gum)	12.5	Fair/Good	Retain	
80367 Shrub not covered by Arborist Report			Retain	
80537 Shrub not covered by Arborist Report			Retain	
80544 Corymbia maculata (Spotted Gum)	16.4	Fair/Good	Retain	
80428 Corymbia maculata (Spotted Gum)	21.5	Good	Retain	
80228 Not found on Arborist Report			Retain	
80513 Shrub not covered by Arborist Report			Retain	
80194 Shrub not covered by Arborist Report			Retain	
80602 Corymbia maculata (Spotted Gum)	20.4	Fair/Good	Retain	
80401 Not found on Arborist Report			Retain	
80172 Shrub not covered by Arborist Report			Retain	
80341 Shrub not covered by Arborist Report			Retain	
80317 Corymbia maculata (Spotted Gum)	11.5	Good	Retain	
80462 Corymbia maculata (Spotted Gum)	12.5	Fair/Good	Retain	
80491 Shrub not covered by Arborist Report			Retain	
80514 Shrub not covered by Arborist Report			Retain	
80195 Shrub not covered by Arborist Report			Retain	
80534 Corymbia maculata (Spotted Gum)	22.6	Good	Retain	
80372 Not found on Arborist Report			Retain	

Existing Trees	H ft	Condition	Action	Crown Projection
11586 Acacia melanoxylon (Blackwood)	5.3	Good	Remove	14.13m²
11636 Corymbia maculata (Spotted Gum)	16.7	Fair/Good	Remove	61.326m²
80543 Not found on Arborist Report			Retain	
80227 Corymbia maculata (Spotted Gum)	22.7	Good	Retain	
80257 Not found on Arborist Report			Retain	
80573 Corymbia maculata (Spotted Gum)	4.3	Good	Retain	
80572 Corymbia maculata (Spotted Gum)	22.4	Good	Retain	
80400 Not found on Arborist Report			Retain	
80256 Corymbia maculata (Spotted Gum)	17.3	Good	Retain	
80429 Corymbia maculata (Spotted Gum)	22.6	Good	Retain	
80603 Corymbia maculata (Spotted Gum)	18.2	Fair	Retain	
80286 Not found on Arborist Report			Retain	
80463 Corymbia maculata (Spotted Gum)	8.3	Fair	Retain	
80318 Corymbia maculata (Spotted Gum)	9.5	Fair/Good	Retain	

Please see Arborist Report by Treeology Pty Ltd dated 4th November 2014 for further details

NOTE: THE REMOVAL OF 3 TREES WITHIN STAGE 1 AND 6 IS PROPOSED, WITH A COMBINED CROWN PROJECTION OF 122.95m² AND REQUIRES COMPENSATORY PLANTING OF 7 STANDARD TREES.

36 TREES HAVE BEEN PROPOSED AS/FALL WITHIN THE DEFINITION OF COMPENSATORY PLANTING IN STAGE 1 AND 6

Legend

- Proposed Dwelling
- Lawn
- Shared Road
- Driveway Crossover leads out
- Paving to Site if Selected
- Ceiling to be Retained
- Existing Shelter Bed
- Stepping Stones
- 1.8m High Colorbond Fence Painted to Footpath
- Extent of Open road (Kerb and Guttering) after Kerbing Outside Existing Wires in Good Condition
- Steps (Identifiers)
- Existing Trees to be Retained
- Existing Trees to be Removed

B PER COUNCIL RFI	12.12.14
C GENERAL CHANGES	08.08.15

SNL

Proposed Residential Development
LAKE ROAD
ELERMORE VALE

Landscape Plan - Stage 1 & 6

MAY 2015

1:250 @ A1

1/5

US 41091 LP.01C

FORUM URBAN SANCTUM landscape design

NOTE: THE REMOVAL OF 8 TREES WITHIN STAGE 2 AND PART OF STAGE 5 IS PROPOSED, WITH A COMBINED CROWN PROJECTION OF 359.554m² AND REQUIRES COMPENSATORY PLANTING OF 19 STANDARD TREES.

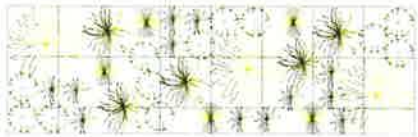
33 TREES HAVE BEEN PROPOSED AS/FALL WITHIN THE DEFINITION OF COMPENSATORY PLANTING IN STAGE 2 AND THE WESTERN PORTION OF STAGE 5

LANDSCAPE PLAN - STAGE 2 & 5 (PARTIAL)
Scale: 1:250

DP 417019

Plant List

ID	Botanical Name	Common Name	Pot Size	Mature Height	Mature Spread	Qty	Remarks
Trees							
CH	Callistemon Harkness	Harkness Bottlebrush	45L	4-6m	2m	3	
CSe	Camellia sasanqua	Camellia sasanqua	45L	3 - 4m	3 - 4m	3	
EF	Elaeocarpus reticulatus	Blueberry Ash	45L	3 - 10m	2.5 - 6m	13	Compensatory Planting
EP	Eucalyptus perriniana	Grey Gum	45L	20 - 30m	6 - 15m	5	Compensatory Planting
HKS	Hakea salicifolia	Willow Leaved Hakea	25L	4-8m	4m	4	
LI	Lagerstroemia 'Yuma	Yuma Crape Myrtle	45L	4m	3m	4	
ML	Melaleuca linariifolia	Bracelet Honeymyrtle	45L	8m	6m	12	Compensatory Planting
MF	Michelia figo	Port Wine Magnolia	45L	4m	3m	3	
PE	Prunus Elvins	Elvins Flowering Plum	45L	3m	2m	4	
PR	Prunus 'X Blireiana	Double Flowering Plum	45L	6m	6m	3	
TL	Tristaniopsis laurina	Water Gum	45L	6-8m	4m	3	Compensatory Planting
Shrubs							
AAM	Acmena 'Allyn's Magic'	Allyn's Magic	200mm	1m	1m	10	
AS	Acmena smithii Minor	Lilly Pilly	200mm	2-3m	1-2m	25	
BVN	Baeckea virgata nana	Dwarf Baeckea	200mm	1m	1m	17	
CKA	Callistemon 'Red Alert'	Red Alert	200mm	2 - 2.5m	1 - 2m	10	
CG	Correa glabra	Rock Correa	200mm	2.5m	2m	4	
DV	Dodonaea viscosa 'Purpurea'	Purple Hop Bush	200mm	3 - 5m	2.5 - 3.5m	13	
ETT	Eremophila 'Tom Thumb'	Tom Thumb	200mm	500mm	500mm	12	
GJ	Grevillea australiana 'Jubilee'	Jubilee Grevillea	200mm	1m	1m	15	
GHO	Grevillea 'Honey Gem'	Honey Gem	200mm	3 - 5m	3.5 - 5m	33	
JU	Juncus usitatus	Common Rush	tube	0.3 - 0.45m	1.2 - 2.0m	347	
SHR	Strybgyne 'Rosebucket'	Rosebucket	200mm	2m	1m	15	
RF	Westringia fruticosa	Coastal Rosemary	200mm	1.5m	1.5m	19	
WM	Westringia 'Mundi'	Mundi	200mm	0.8m	1.5m	24	
Ground Covers							
CCI	Carpobrotus 'Cascade 8'	Carpobrotus 'Cascade 8'	200mm	0.6m	3 - 5.5m	6	
DE	Dianella 'Breeze'	Breeze	140mm	0.45 - 0.6m	0.6 - 0.8m	30	
GGC	Grevillea 'Gold Cluster'	Gold Cluster	200mm	0.5m	1m	20	
GMT	Grevillea 'Mt Tamborine'	Woolly Grevillea	140mm	0.3 - 0.45m	1.2 - 2.0m	27	
PCS	Phebalium 'Cascade of Stars'	Phebalium 'Cascade of Stars'	140mm	0.5m	1m	8	
VH	Viola hederacea	Native Violet	100mm	0.2 - 0.3m	1.2 - 2.0m	50	
Grasses							
CAI	Carex apressa	Tussock Sedge	tube	1m	0.8 - 1.2m	110	
DS	Dianella sebriana	Sevi Sedge	tube	1.5 - 2m	1.2 - 2.0m	110	
Ju	Juncus usitatus	Knotted Club Rush	tube	0.45 - 0.6m	0.8 - 0.8m	347	
LT	Lomandra 'Tanika'	Dwarf mat rush	140mm	0.45 - 0.6m	0.8 - 0.8m	85	
LL	Lomandra longifolia	Spiny headed Mat-rush	tube	0.75 - 0.9m	0.8 - 1.2m	156	
PM	Pennisetum 'Rubrum'	Purple Fountain Grass	140mm	0.6 - 0.75m	0.8 - 0.9m	12	
Climbers							
HV	Hardenbergia violacea	False Sarsaparilla	140mm	0.3 - 0.45m	2 - 3m	47	To Cable Climbing Supports to Fence
PPA	Pandorea pandorana	Wonga Wonga Vine	140mm	1 - 5m	0.8 - 0.8m	26	To Cable Climbing Supports to Fence



INDICATIVE PLANTING SET OUT - DRAINAGE BASIN
Scale: 1:100

NOTE: 2.5x8m SETOUT INDICATIVE OF PATTERN AND SPACINGS. PATTERN TO BE TESSELATED OVER OVERLAND FLOW PATH AND FLIPPED/TURNED AS DESIRED TO GIVE VAIRIETY TO ADJOINING 2.5x8m AREAS. SETOUT ALL PLANTS BEFORE PLANTING. ADJUST NUMBERS TO GROUPINGS TO SUIT QUANTITIES ON PLANT SCHEDULE AS REQUIRED.

Existing Trees	H &	Condition	Action	Crown Projection
11617 Angophora floribunda (Rough barked Apple Gum)	16.5	Fair/Good	Retain	
11618 Eucalyptus piperita (Sydney Peppermint)	14.4	Poor/Good	Retain	
11619 Eucalyptus acmenoides (White Mahogany)	9.4	Good	Retain	
11620 Cinnamomum camphora (Camphor Laurel)	8.4	Fair/Good	Remove	14.13m²
11619 Angophora costata (Smooth Barked Red Gum)	22.10	Poor/Moderate	Remove	71.534m²
11618 Eucalyptus grandis (White Stringybark)	14.4	Poor/Moderate	Remove	11.86m²
11617 Angophora costata (Smooth Barked Red Gum)	17.6	Good	Remove	43.28m²
11618 Angophora costata (Smooth Barked Red Gum)	17.3	Poor/Good	Remove	28.358m²
11550 Angophora costata (Smooth Barked Red Gum)	18.7	Fair/Good	Remove	61.328m²
11551 Cinnamomum camphora (Camphor Laurel)	8.7	Good	Remove	82.524m²
11582 Eucalyptus acmenoides (White Mahogany)	14.9	Fair/Good	Remove	56.52m²

KEY:

JUNCUS USITATUS

CAREX APRESSA

GAHNIA SIEBERIANA

ISOLEPSIS NODOSA

LOMANDRA LONGIFOLIA

Legend

B	PER COUNCIL RFI 12.10.15
C	GENERAL CHANGES 09.09.16

SNL

Proposed Residential Development
LAKE ROAD
ELERMORE VALE

Landscape Plan - Stage 2 & 5 (PARTIAL)

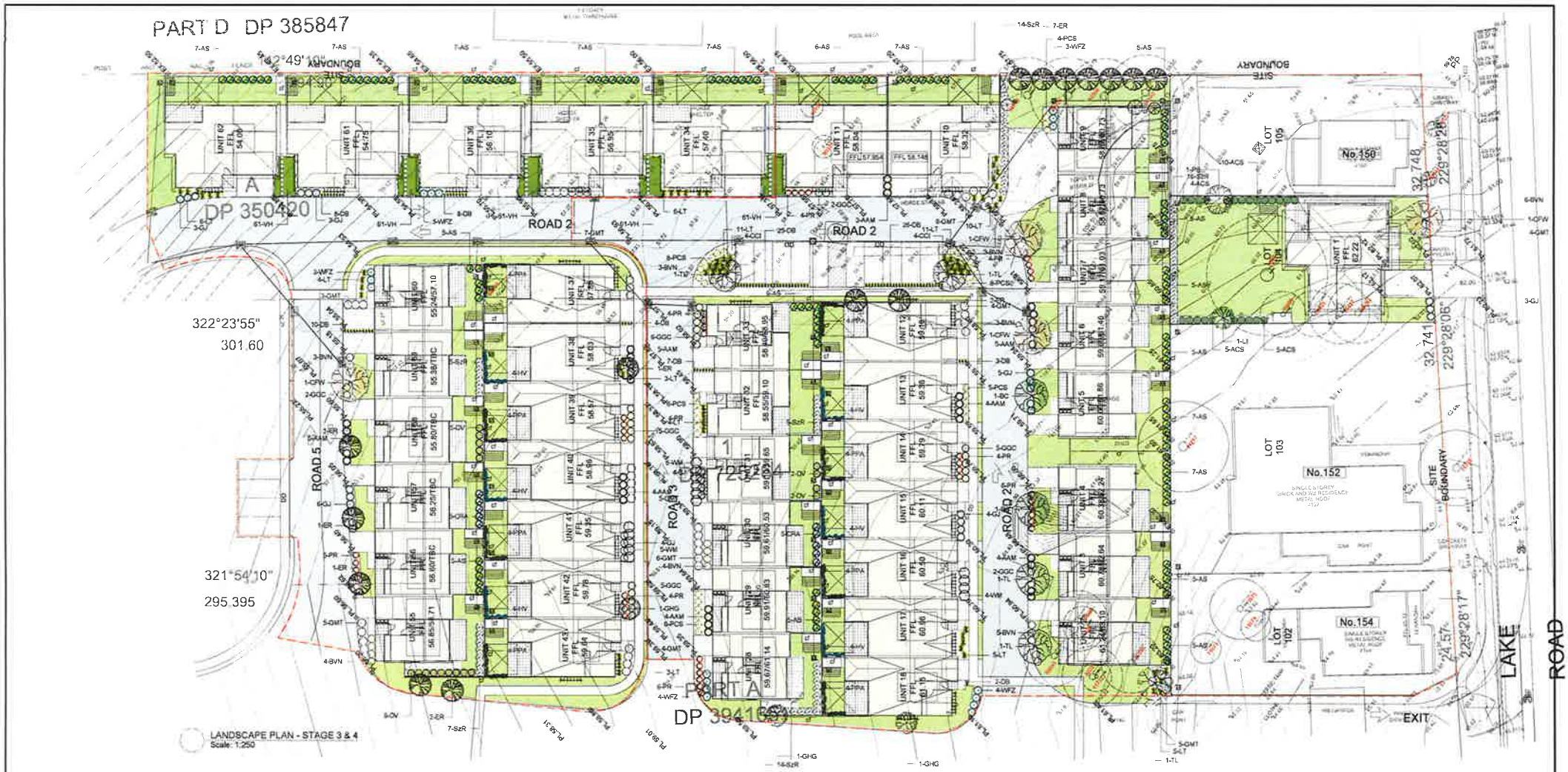
MAY 2015

1:250 @ A1

DA

US 41091 LP.02C

FORUM URBAN SANCTUM landscape design



Plant List							
ID	Botanical Name	Common Name	Pot Size	Mature Height	Mature Spread	Qty	Remarks
Trees							
BC	Buckinghamia celsissima	Ivory Curl Tree	45L	8 - 8m	3.5 - 6m	2	
CFW	Corymbia ficifolia 'Wildfire'	Dwarf Flowering Gum	75L	8m	6m	4	Compensatory Planting
EX	Elaeocarpus reticulatus	Blueberry Ash	45L	5 - 10m	2.5 - 4m	15	Compensatory Planting
LI	Lagerstroemia 'Tuma'	Tuma Crape Myrtle	45L	8m	3m	1	
PE	Prunus X Blireana	Double Flowering Plum	45L	8m	4m	1	
TL	Tristaniopsis laurina	Water Gum	45L	6-8m	6m	5	Compensatory Planting
Shrubs							
AAM	Acmena 'Allyn's Magic'	Allyn's Magic	200mm	1m	1m	34	
ACS	Acmena 'Cherry Surprise'	Cherry Surprise	200mm	3m	1m	24	
AE	Acmena smithii 'Minor'	Lilly Pilly	200mm	2-3m	1-2m	116	
BWN	Banksia integrifolia nana	Dwarf Banksia	200mm	1m	1m	21	
EKM	Callistemon 'Red Alert'	Red Alert	200mm	2 - 2.4m	1 - 2m	10	
DV	Dodonaea viscosa 'Purpurea'	Purple Hop Bush	200mm	2 - 3m	2.5 - 3.5m	18	
GJ	Grevillea australiana 'Jubilee'	Jubilee Grevillea	200mm	1m	1m	12	
GHG	Grevillea 'Honey Gem'	Honey Gem	200mm	2 - 3m	2.5 - 3m	3	
GWT	Grevillea 'Mt Tamborine'	Woolly Grevillea	140mm	0.3 - 0.40m	1.2 - 2.2m	51	
HCS	Hibbertia 'Cascade of Stars'	Hibbertia 'Cascade of Stars'	140mm	0.3m	1m	57	
SR	Syzygium 'Resilience'	Resilience	200mm	3m	1m	61	
WTZ	Westringia fruticosa 'Zena'	Zena Compact Native Rosemary	200mm	1m	1m	17	
WM	Westringia 'mundi'	Mundi	200mm	0.8m	1.2m	15	
Ground Covers							
CC1	Casuarina 'Cousin It'	Casuarina 'Cousin It'	200mm	0.6m	2 - 3.0m	8	
DB	Dianella 'Breeze'	Breeze	140mm	0.45 - 0.6m	0.6 - 0.8m	63	
GGC	Grevillea 'Gold Cluster'	Gold Cluster	200mm	0.2m	1m	27	
VH	Viola hederacea	Native Violet	100mm	0.05 - 0.2m	1.2 - 2.0m	305	
Grasses							
LT	Lomandra 'Tanika'	Sweet Mat rush	140mm	0.45 - 0.6m	0.6 - 0.8m	48	
PM	Pennisetum 'Rubrum'	Purple Fountain Grass	140	0.6 - 0.75m	0.5 - 0.6m	41	
Climbers							
MV	Hardenbergia violacea	False Sarsaparilla	140mm	0.2 - 0.40m	2 - 3m	24	To Cable Climbing Supports to Fence
PRA	Pandorea pandorana	Wonga Wonga Vine	140mm	2 - 5m	0.6 - 0.8m	22	To Cable Climbing Supports to Fence

Excess Trees	H.B	Condition	Action	Crown Projection
80370 Not found on Arborist Report			Remove	
80198 Not found on Arborist Report			Remove	
80371 Syagrus romanzoffianum (Cocos Palm)	12.3	Good	Remove	14.13m²
80542 Liquidambar styraciflua (Liquidamber)	6.3	Good	Remove	14.13m²
80226 Liquidambar styraciflua (Liquidamber)	8.4	Good	Remove	33.166m²
80299 Liquidambar styraciflua (Liquidamber)	8.4	Good	Remove	50.24m²
80570 Liquidambar styraciflua (Liquidamber)	8.5	Good	Remove	78.58m²
80251 Not found on Arborist Report			Retain	
80344 Not found on Arborist Report			Retain	
80451 Not found on Arborist Report			Remove	
80285 Pinus radiata (Monterey Pine)	6.2	Good	Remove	12.56m²
80501 Pinus radiata (Monterey Pine)	7.3	Good	Remove	6.26m²
80427 Pinus radiata (Monterey Pine)	10.3	Good	Remove	9.6m²
80254 Pinus radiata (Monterey Pine)	9.0	Fair/Good	Remove	4.8m²
11217 Eucalyptus ellimonoides (White Mahogany)	15.7	Poor	Remove	4.8m²
11217 Corymbia citriodora (Lemon Scented Gum)	20.6	Good	Retain	
11035 Cedrus deodara (Himalayan cedar)	6.6	Fair/Good	Retain	
80569 Not found on Arborist Report			Remove	
11226 Not found on Arborist Report			Remove	
80541 Ficus benjamina (Weeping Fig)	5.3	Good	Remove	14.13m²
80225 Not found on Arborist Report			Remove	
11732 Corymbia maculata (Spotted Gum)	12.6	Good	Remove	39.25m²
80398 Corymbia maculata (Spotted Gum)	12.6	Good	Remove	39.25m²
11673 Callistemon viminalis (Bottlebrush)	5.3	Good	Retain	
11675 Glochidion ferdinandi (Cheese Tree)	7.6	Good	Retain	
11674 Syagrus romanzoffianum (Cocos Palm)	10.2	Good	Retain	

Please see Arborist Report by Treeology Pty Ltd dated 4th November 2014 for further details

NOTE: THE REMOVAL OF 13 TREES WITHIN STAGE 3 AND 4 IS PROPOSED, WITH A COMBINED CROWN PROJECTION OF 321.12m² AND REQUIRES COMPENSATORY PLANTING OF 17 STANDARD TREES.
FURTHERMORE, THERE ARE 5 ADDITIONAL TREES PROPOSED TO BE REMOVED WHICH ARE NOT FOUND ON THE ARBORIST REPORT.

24 TREES HAVE BEEN PROPOSED AS/FALL WITHIN THE DEFINITION OF COMPENSATORY PLANTING IN STAGE 3 AND 4

Legend

B	12.10.16
C	19.09.16

Proposed Residential Development
LAKE ROAD
ELERMORE VALE

Landscape Plan - Stage 3 & 4

MAY 2015

1:250 @ A1

3/5

US 41081 LP 03C

FORUM URBAN SANCTUM
landscape design

Existing Trees	HS	Condition	Action	Upper Projection
85748 Not found on Arbonist Report			Retain	
85528 Not found on Arbonist Report			Retain	
85868 Not found on Arbonist Report			Retain	
80343 Corymbia maculata (Spotted Gum)	9.4	Good	Retain	
80344 Corymbia maculata (Spotted Gum)	21.0	Fair/Good	Remove	26.36m
80377 Corymbia maculata (Spotted Gum)	22.8	Good	Retain	
80378 Corymbia maculata (Spotted Gum)	21.9	Fair/Good	Retain	
80496 Corymbia maculata (Spotted Gum)	20.0	Fair/Good	Retain	
80499 Eucalyptus punctata (Grey Gum)	10.0	Good	Retain	
80751 Corymbia maculata (Spotted Gum)	12.1	Good	Retain	
80848 Eucalyptus punctata (Grey Gum)	15.10	Fair	Retain	
80849 Not found on Arbonist Report			Retain	
80924 Not found on Arbonist Report			Retain	
80475 Corymbia maculata (Spotted Gum)	20.7	Fair	Retain	
80932 Corymbia maculata (Spotted Gum)	20.8	Poor/Good	Retain	
80939 Not found on Arbonist Report			Remove	
80197 Cinnamomum camphora (Camphor Laurel)	9.1	Good	Remove	14.10m
80929 Not found on Arbonist Report			Remove	
80173 Corymbia maculata (Spotted Gum)	24.8	Good	Remove	28.31m
80220 Cinnamomum camphora (Camphor Laurel)	6.0	Good	Remove	14.10m
11808 Eucalyptus punctata (Grey Gum)	20.8	Fair	Retain	
11809 Angophora costata (Smooth Barked Red Gum)	16.0	Good	Retain	
11810 Eucalyptus punctata (Grey Gum)	17.8	Fair	Retain	
11814 Eucalyptus acmenioides (White Mahogany)	23.5	Good	Retain	
11816 Eucalyptus globoidea (White Stringybark)	9.0	Good	Retain	
11810 Angophora costata (Smooth Barked Red Gum)	20.5	Good	Remove	31.60m
80271 Shrub not covered by Arbonist Report			Remove	
80269 Shrub not covered by Arbonist Report			Remove	
80284 Eucalyptus punctata (Grey Gum)	24.5	Fair/Good	Remove	32.00m
80274 Eucalyptus punctata (Grey Gum)	16.9	Good	Remove	47.40m
80397 Eucalyptus punctata (Grey Gum)	16.14	Fair	Remove	207.63m
80394 Not found on Arbonist Report			Remove	
80600 Eucalyptus punctata (Grey Gum)	16.7	Fair	Retain	
80603 Not found on Arbonist Report			Retain	
80255 Eucalyptus punctata (Grey Gum)	16.8	Fair	Retain	
80460 Eucalyptus punctata (Grey Gum)	16.7	Good	Retain	
11827 Eucalyptus acmenioides (White Mahogany)	10.0	Good	Retain	
11767 Not found on Arbonist Report			Retain	
11760 Corymbia gummifera (Red Bloodwood)	20.9	Good	Retain	
11792 Eucalyptus punctata (Grey Gum)	22.10	Good	Retain	
11733 Eucalyptus punctata (Grey Gum)	22.8	Fair/Good	Retain	
11725 Eucalyptus punctata (Grey Gum)	22.8	Fair/Good	Retain	
11734 Eucalyptus punctata (Grey Gum)	23.11	Fair	Retain	
11676 Eucalyptus acmenioides (White Mahogany)	19.7	Good	Retain	
11612 Cinnamomum camphora (Camphor Laurel)	12.6	Good	Remove	06.00m
11611 Angophora costata (Smooth Barked Red Gum)	20.9	Good	Remove	76.90m
11613 Eucalyptus globoidea (White Stringybark)	8.5	Poor/Good	Remove	28.30cm
11643 Eucalyptus globoidea (White Stringybark)	10.3	Good	Retain	
11644 Cinnamomum camphora (Camphor Laurel)	7.4	Good	Remove	22.07km
11642 Eucalyptus globoidea (White Stringybark)	10.3	Good	Remove	22.07km
11642 Eucalyptus globoidea (White Stringybark)	10.1	Poor	Remove	0.00km
11637 Cinnamomum camphora (Camphor Laurel)	7.2	Good	Remove	22.07km
11638 Cinnamomum camphora (Camphor Laurel)	7.0	Good	Remove	38.25m
11636 Eucalyptus acmenioides (White Mahogany)	12.0	Good	Retain	
11640 Cinnamomum camphora (Camphor Laurel)	8.4	Fair/Good	Retain	
11641 Cinnamomum camphora (Camphor Laurel)	9.0	Good	Retain	

Please see Arborist Report by Treeology Pty Ltd dated 6th November 2014 for further details

LANDSCAPE PLAN - STAGE 5
Scale: 1:300

NOTE: THE REMOVAL OF 13 TREES WITHIN THE EASTERN PORTION OF STAGE 5 IS PROPOSED, WITH A COMBINED CROWN PROJECTION OF 791.57m² AND REQUIRES COMPENSATORY PLANTING OF 40 STANDARD TREES. FURTHERMORE, THERE ARE 3 ADDITIONAL TREES PROPOSED TO BE REMOVED WHICH ARE NOT FOUND ON THE ARBORIST REPORT.

56 TREES HAVE BEEN PROPOSED AS/FALL WITHIN THE DEFINITION OF COMPENSATORY PLANTING WITHIN THE EASTERN PORTION OF STAGE 5

Plant List

ID	Botanical Name	Common Name	Pot Size	Mature Height	Mature Spread	Qty	Remarks
Trees							
CH	Callistemon 'Harkness'	Harkness Bottlebrush	45L	4-6m	3m	1	
CFW	Corymbia ficifolia 'Wildfire'	Dwarf Flowering Gum	75L	6m	6m	2	Compensatory Planting
DN	Dianella nemorosa	Blueberry Ash	45L	5 - 10m	3.5 - 5m	17	Compensatory Planting
EP	Eucalyptus punctata	Grey Gum	45L	25 - 30m	6 - 15m	11	Compensatory Planting
ML	Melaleuca linariifolia	Flaxleaf Honeysuckle	45L	8m	6m	13	Compensatory Planting
PE	Prunus Elvins	Elvins Flowering Plum	45L	3m	3m	1	
TL	Tristaniopsis laurina	Water Gum	45L	6-8m	8m	13	Compensatory Planting
Shrubs							
AAM	Acmena 'Allyn's Magic'	Allyn's Magic	200mm	1m	1m	14	
AS	Acmena smithii 'Minor'	Lilly Pilly	200mm	2 - 3m	1 - 2m	42	
BVN	Backhousia myrtifolia 'nana'	Dwarf Grove	200mm	1m	1m	13	
CG	Correa glabra	Rock Correa	200mm	2.7m	2m	4	
DE	Doryanthes excelsa	Gymea Lily, Giant Lily	200mm	1.5 - 3m	1.2 - 2.0m	12	
GJ	Grevillea aureoflora 'Jubilee'	Jubilee Grevillea	200mm	1m	1m	15	
GHG	Grevillea 'Honey Gem'	Honey Gem	200mm	3 - 3m	3.5 - 6m	7	
GMT	Grevillea 'Mt Tamborine'	Woolly Grevillea	140mm	0.3 - 0.45m	1.2 - 2.0m	44	
JU	Juncus usitatus	Common Rush	tube	0.3 - 0.45m	1.2 - 2.0m	1258	
OC	Ozothamnus 'Cascade'	Cascade	200mm	2 - 4m	2m	11	
SR	Syzygium 'Resilience'	Resilience	200mm	2m	1m	17	
WFZ	Westringia fruticosa 'Zena'	Zena Compact Native Rosemary	200mm	1m	1m	36	
Ground Covers							
CG	Carpobrotus glaucescens	Pigface	140mm	0.0 - 0.3m	1.2 - 2.0m	90	
DB	Dianella 'Breeze'	Breeze	140mm	0.45 - 0.6m	0.6 - 0.9m	8	
GGC	Grevillea 'Gold Cluster'	Gold Cluster	200mm	0.6m	1m	4	
PCS	Pratia/hera 'Cascade of Stars'	Pratia/hera 'Cascade of Stars'	140mm	0.2m	1m	14	
Grasses							
CAr	Carex apressa	Tussock Sedge	tube	1m	0.3 - 1.2m	418	
GS	Gahnia sieberiana	Saw Sedge	tube	1.5 - 2m	1.2 - 2.0m	418	
IN	Isolepsis nodosa	Knobby Club Rush	tube	0.45 - 0.6m	0.6 - 0.9m	1209	
LT	Lomandra 'Tanika'	Dwarf mat rush	140mm	0.45 - 0.6m	0.6 - 0.9m	34	
LL	Lomandra longifolia	Sonnyhaven Mat-Rush	tube	0.75 - 0.9m	0.9 - 1.2m	433	
PM	Pennisetum 'Rubrum'	Purple Fountain Grass	140mm	0.6 - 0.75m	0.3 - 0.6m	23	
Climbers							
HV	Hardenbergia violacea	False Sarsaparilla	140mm	0.3 - 0.45m	2 - 3m	12	To Cable Climbing Supports to Fence
PPA	Pandorea pandorana	Wonga Wonga Vine	140mm	2 - 3m	0.6 - 0.9m	6	To Cable Climbing Supports to Fence

INDICATIVE PLANTING SET OUT - DRAINAGE BASIN
Scale: 1:100

NOTE: 2.5x8m SETOUT INDICATIVE OF PATTERN AND SPACINGS. PATTERN TO BE TESSELATED OVER OVERLAND FLOW PATH AND FLIPPED/TURNED AS DESIRED TO GIVE VAIRIETY TO ADJOINING 2.5x8m AREAS. SETOUT ALL PLANTS BEFORE PLANTING, ADJUST NUMBERS TO GROUPINGS TO SUIT QUANTITIES ON PLANT SCHEDULE AS REQUIRED.

KEY

- JUNCUS USITATUS
- CAREX APRESSA
- GAHNIA SIEBERIANA
- ISOLEPSIS NODOSA
- LOMANDRA LONGIFOLIA

B FOR COUNCIL RFI	12.10.15
C GENERAL CHANGES	11.09.15

SNL

Proposed Residential Development
LAKE ROAD
ELERMORE VALE

Landscape Plan - Stage 5

MAY 2015

1:300 @ A1

4/5

US 41091 LP.04C

FORUM URBAN SANCTUM landscape design

LANDSCAPE WORK SPECIFICATION
Project

PRELIMINARIES

1.01 GENERAL

The following general conditions should be considered prior to the commencement of landscape works

The landscape plans should be read in conjunction with the architectural plans, hydraulic plans, service plans and survey prepared for the proposed development.

All services including existing drainage should be accurately located prior to the commencement of landscape installation. Any proposed tree planting which falls close to services will be relocated on site under the instruction of the landscape architect.

Installation of conduit for required irrigation, electrical and other services shall be completed prior to the commencement of hardscape works and hardstand pours.

All outdoor lighting specified by architect or client to be installed by qualified electrician

Anomalies that occur in these plans should be brought to our immediate attention.

Where an Australian Standard applies for any landscape material testing or installation technique, that standard shall be followed

1.02 PROTECTION OF ADJACENT FINISHES

The Contractor shall take all precautions to prevent damage to all or any adjacent finishes by providing adequate protection to these areas / surfaces prior to the commencement of the Works

1.03 PROTECTION OF EXISTING TREES

Existing trees identified to be retained shall be done so in accordance with AS 4970-2009. Where general works are occuring around such trees, or pruning is required, a qualified Arborist shall be engaged to oversee such works and manage tree health.
Existing trees designated on the drawing for retention shall be protected at all times during the construction period. Any soil within the drip-line of existing trees shall be excavated and removed by hand only. No stockpiling shall occur within the root zone of existing trees to be retained.

Any roots larger in diameter than 50mm shall only be severed under instruction by a qualified arborist. Roots smaller than 50mm diameter shall be cut cleanly with a saw.

1.8m high temporary fencing shall be installed around the base of all trees to be retained prior to the commencement of landscape works. The location of this fencing will be as per the TPZ defined by the consulting Arborist. If no Arborists report is available, install fence around the drip line of these trees, or a minimum of 3m from the trunk. The fencing shall be maintained for the full construction period.

1.04 EROSION & POLLUTION CONTROL

The Contractor shall take all proper precautions to prevent the erosion of soil from the subject site. The contractor shall install erosion & sediment control barriers and as required by council and maintain these barriers throughout the construction period. Note that the sediment control measures adopted should reflect the soil type and erosion characteristics of the site.

Erosion & pollution control measures shall incorporate the following
- Construction of a sediment trap at the vehicle access point to the subject site.
- Sediment fencing using a geotextile filter fabric in the location indicated on the erosion control plan or as instructed on site by the landscape architect.
- Earth banks to prevent scour of stockpiles
- Sandbag kerb sediment traps
- Straw bale & geotextile sediment filter.
- Exposed banks shall be pegged with an approved Jute matting in preparation for mass planting

Refer to "Sitewise Reference Kit" as prepared by DLWC & WSROC (1997) for construction techniques

SOIL WORKS

2.01 MATERIALS

Specified Soil Conditioner - Mass planting in natural ground
The specified soil conditioner for mass planting shall be an organic mix, equal to "Soil conditioner", as supplied by Oz Landscaping Supplies.
Note that for sites where soil testing indicates lawns or extremes in pH, or soils that are extremely poor, allow to excavate and supply 300mm of imported soil mix.

Specified Soil Mix - Turf
The specified soil mix for all turf areas shall be a min 75mm layer of imported soil mix consisting of 80% washed river sand (reasonably coarse), and 20% composted organic matter equivalent to mushroom compost or soil conditioner, or other approved lawn top dress.

Site Topsoil
Site topsoil is to be clean and free of unwanted matter such as gravel, clay lumps, grass, weeds, tree roots, sticks, rubbish and plastics, and any deleterious materials and materials toxic to plants. The topsoil must have a pH of between 5.5 and 7.

2.02 INSTALLATION

a) Testing
All testing is to be conducted in accordance with AS 4419-2003 Soils for landscaping and garden use for an in depth soil analyses for pre-planting and diagnostic assessment of the soil. Tests shall be taken in several areas where planting is proposed, and site soil modified to ensure conditions are appropriate for planting as stated above.

Note that a soil test conducted by "SESL Australia" or approved equal shall be prepared for all commercial, industrial and multi-unit residential sites. The successful landscape contractor shall implement the recommendations of this test.

b) Set Out of Individual Trees & Mass Planting Areas
All individual tree planting positions and areas designated for mass planting shall be set out with stakes or another form of marking, ready for inspection and approval. Locate all services.

c) Establishing Subgrade Levels
Subgrade levels are defined as the finished base levels prior to the placement of the specified material (i.e. soil conditioner). The following subgrade levels shall apply

Mass Planting Beds - 300mm below existing levels with specified imported soil mix.

Turf areas - 100mm below finished surface level.

Note that all subgrades shall consist of a relatively free draining natural material, consisting of site topsoil placed previously by the Civil Contractor. No builders waste material shall be acceptable.

d) Subgrade Cultivation
Cultivate all subgrades to a minimum depth of 150mm in all planting beds and all turf areas, ensuring a thorough breakup of the subgrade into a reasonably coarse tilth. Grade subgrades to provide falls to surface and subsurface drains, prior to the placement of the final specified soil mix.

e) Drainage Works
Install surface and subsurface drainage where required and as detailed on the drawing. Drain subsurface drains to outlets provided, with a minimum fall of 1:100 to outlets and / or service pits.

f) Placement and Preparation of Specified Soil Conditioner & Mixes.
Trees in turf & beds - Holes shall be twice as wide as root ball and minimum 100mm deeper - backfill hole with 50/50 mix of clean site soil and imported "Organic Garden Mix" as supplied by Oz Landscape Supplies or approved equal.

Mass Planting Beds - Install specified soil conditioner to a compacted depth of 100mm. Place the specified soil conditioner to the required compacted depth and use a rotary hoe to thoroughly mix the conditioner into the top 300mm of garden bed soil. Ensure thorough mixing and the preparation of a reasonably fine tilth and good growing medium in preparation for planting.

Turf Areas - Install specified soil mix to a minimum compacted depth of 75mm. Place the specified soil mix to the required compacted depth and grade to required finished soil levels, in preparation for planting and turfing.

PLANTING

3.01 MATERIALS

a) Quality and Size of Plant Material
In General, the principles & standards outlined in "Specifying Trees - a guide to assessment of tree quality" by Ross Clark will be demanded in the quality of all planting stock specified. These principles include, but are not limited to:
Above - Ground Assessment:
The following plant quality assessment criteria should be followed:
Plant true to type. Good vigour and health, free from pest & diseases, free from injury, self-supporting, good stem taper, has been pruned correctly, is apically dominant, has even crown symmetry, free from included bark & stem junctions, even trunk position in pot, good stem structure. *Below - Ground Assessment:*
Good root division & direction, rootball occupancy, rootball depth, height of crown, non-suckering. For further explanation and description of these assessment criteria, refer to Ross Clark's book.

All Plant material shall be to the type and size specified. No substitutions of plant material shall be permitted without written prior approval by the Landscape Architect. No plant shall be accepted which does not conform to the standards listed above.

b) Fertilizers
Fertilizers shall be approved slow release fertilisers suitable for the proposed planting types. Note that for native plants, specifically Proteaceae family plants including Grevillea species, low phosphorus fertilizers shall be used.

c) Mulch
Mulch shall be leaf litter mulch equal to "Forest Blend" as supplied by ANL. Mulch shall be completely free from any soil, weeds, rubbish or other debris.

d) Turf
Turf shall be "Sir Walter" Buffalo or equivalent (unless stated otherwise), free from any weeds and other grasses, and be in a healthy growing condition.

3.02 INSTALLATION

a) Setting Out
All planting set out shall be in strict accordance with the drawings, or as directed. Note that proposed tree planting located near services should be adjusted at this stage. Notify Landscape Architect for inspection for approval prior to planting.

b) Planting
All plant material shall be planted as soon after delivery as possible. Planting holes for trees shall be excavated as detailed and specified. Plant containers shall be removed and discarded, and the outer roots gently teased from the soil mass. Immediately set plant in hole and backfill with specified soil mix, incorporating the approved quantity of fertiliser for each plant type. Ensure that plants are set plumb vertically and root balls set to the consolidated finished grades detailed on the drawings. Compact the backfilled soil and saturate by hand watering to expel any remaining air pockets immediately after planting.

c) Staking and Tying
Trees shall be of a quality that, when planted, are freestanding, without the aid of stakes or ties, else they will be rejected.

d) Mulching
Mulch should be spread so that a compacted thickness of 75mm is achieved after settlement in all planting beds and around each individual plant. Apply immediately following planting and watering in, ensuring that a 50mm radius is maintained around the trunk of each plant.
In all planter boxes, mulch to finish between 25-50mm below top of planter.
There shall be no mixing of soil and mulch material

e) Turfing
Moisten soil prior to the turf being laid. Turf shall be neatly butt jointed and true to grade to finish flush with adjacent surfaces. Incorporate a lawn fertilizer and thoroughly water in. Keep turf moist until roots have taken and sods/rolls cannot be lifted. Keep all traffic off turf until this has occurred. Allow for top dressing of all turf areas. All turf shall be rolled immediately following installation.

f) Garden edging
The Contractor shall install garden edging to all mass planting beds adjoining turf or gravel mulched areas, and where required. The resultant edge shall be true to line and flush with adjacent surfaces.
Garden Edging *to be Treated Pine Timber edging (Unless otherwise specified by Client)*

g) Root Barrier
Ensure root barrier is installed to all edges/junctions between the garden bed and adjacent hard surfaces including but not limited to retaining walls, carparking, paths, underground pipes and tanks and buildings within a 3m radius of the trunk of any proposed trees.
Root barrier *Equivalent to treemax root barrier*, Install root barrier to manufacturer's instructions.

h) Stepping Stones
Precast concrete slabs of 400-500mm SQ (or similar approved dimensions) shall be placed as indicated on plan at 200mm intervals. Finish and colour of stepping stones shall be nominated by the client. Install stepping stones as detail, flush with adjoining elements. Compact area under stepping stones locally where stepping stones occur in garden areas and generally where stepping stones occur in pea gravel/decorative pebble areas

i) Pea Gravel/Decorative Pebble
Compact area for pea gravel and Decorative Pebble installation with vibrating plate compactor before installation of pea gravel or Decorative Pebble.

Gravel/Pebbles are to be installed loose to the gap between the installed stepping stones. They are to finish flush with the adjacent paved surface and be lopped up should they settle after installation. At the edges of a stepping stone and gravel/pebble area the gravel/pebble is to be retained by a garden edge.

Gravel Inlays *Equivalent to 10mm Indo Cream pea gravel*
Pebbles *Equivalent to 20mm Indo Cream Pebble*

HARDSCAPE WORKS

4.01 GENERAL

The Contractor shall undertake the installation of all hardscape works as detailed on the drawing, or where not detailed, by manufacturers specification

Paving - refer to typical details provided, and applicable Australian Standards
Permeable paving may be used as a suitable means of satisfying Council permeable surface requirements, while providing a useable, hardwearing, practical surface. In most instances, the client shall nominate the appropriate paving material to be used
Planters on-slab - refer to the details provided and the architectural plans for size & dimensions. Waterproof as detailed, and backfill with specified soil mix
Australian Standards shall be adhered to in relation to all concrete, masonry & metal work. Some details are typical and may vary on site. All hardscape works shall be setout as per the drawings, and inspected and approved by the Landscape Architect prior to installation. All workmanship shall be of the highest standard. Any queries or problems that arise from hardscape variations should be bought to the attention of the Landscape Architect.

IRRIGATION WORKS

5.01 GENERAL (PERFORMANCE/SPECIFICATION)

New irrigation systems to planting areas shall be a Commercial Grade Irrigation System conforming to AS 3500 & the latest Sydney Water Code

The irrigation system shall be installed prior to all planting works. It shall incorporate a commercially available irrigation system, with dripper lines for all trees, and suitable jet sprinkler heads for the shrub species specified. It shall also incorporate a suitable back flow prevention device for the scale of works, an in-line filter, check valves, and suitable high and low density poly hose fittings and PVC piping to achieve flow rates suitable for specified planting.

The landscape contractor shall check the existing pressure available from the ring mains and size irrigation piping to suit. Supply shall be from local hose cock where available. All piping and fittings are to be buried 50mm below the finished soil levels in garden bed areas, and secured in position at 5m centre with galv wire pins. Sizing of pipes shall be done so as to ensure that the working pressure at the end of the line does not decrease by more than 5%. Upon completion of installation, the system shall be tested and all components are to be satisfactorily functional and operational prior to approval. Should any defect develop, or the capacity or efficiency of the system decline during the agreed maintenance system, then these faults shall be immediately rectified.

Detailed drawings of the entire proposed irrigation system shall be made available to the client for records and future maintenance of the system.

CONSOLIDATION AND MAINTENANCE

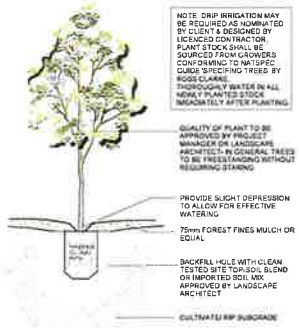
6.01 GENERAL

The consolidation and maintenance period shall be 12 months beginning from the approved completion of the specified construction work (Practical Completion) except in the case of street trees, which shall be maintained for a period of 24 months. A qualified landscape maintenance contractor shall undertake the required landscape maintenance works.
Consolidation and maintenance shall mean the care and maintenance of Contracted works by accepted landscaping or horticultural practices, ensuring that all plants are in optimum growing conditions and appearance at all times, as well as rectifying any defects that become apparent in the contracted works.

This shall include, but not be limited to, the following items where and as required

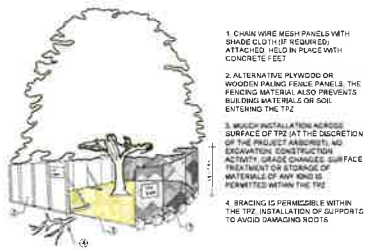
Watering all planting and lawn areas / irrigation maintenance.
Clearing litter and other debris from landscaped areas.
Removing weeds, pruning and general plant maintenance.
Replacement of damaged, stolen or unhealthy plants.
Make good areas of soil subsidence or erosion.
Topping up of mulched areas.
Spray / treatment for insect and disease control.
Fertilizing with approved fertilizers at correct rates.
Mowing lawns & trimming edges each 14 days in summer or 18 days in winter
Maintenance of all paving, retaining and hardscape elements.

On the completion of the maintenance period, the landscape works shall be inspected and at the satisfaction of the superintendent or landscape architect, the responsibility will be signed over to the client.



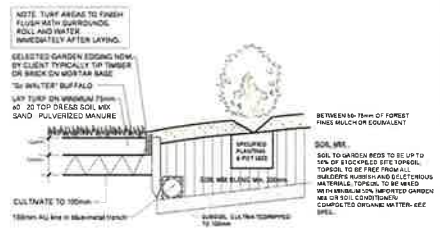
INDIVIDUAL TREE PLANTING DETAIL

approx 1:10



TREE PROTECTION ZONE

approx 1:10



TYPICAL TURFING & GARDEN PREPARATION WITH GARDEN EDGE n.t.s

PLANTING SET OUT n.t.s

SCALE 1 : 200

ANL

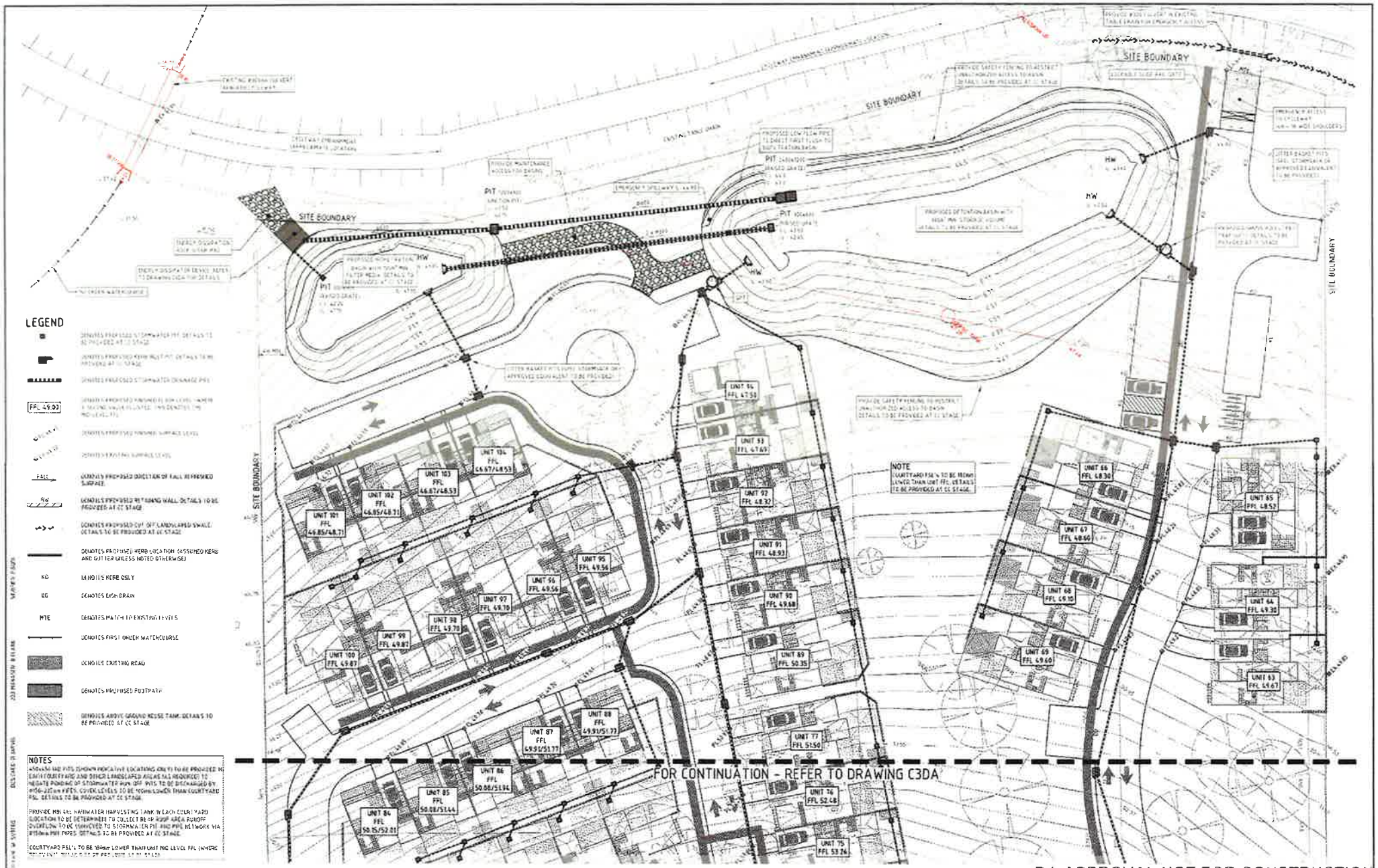
Proposed Residential Development
LAKE ROAD
ELMOREVALE

Details and Spec Sheet
MAY 2013

1:200 @ A1 | 5/5

Lucas Pan
BLARCH (UNSW) | US 41091 LP.05

FORUM URBAN SANCTUM landscape design



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NORTHROP Newcastle

PROJECT: 150 - 156 LAKE ROAD ELEMORE VALE, NSW 2287

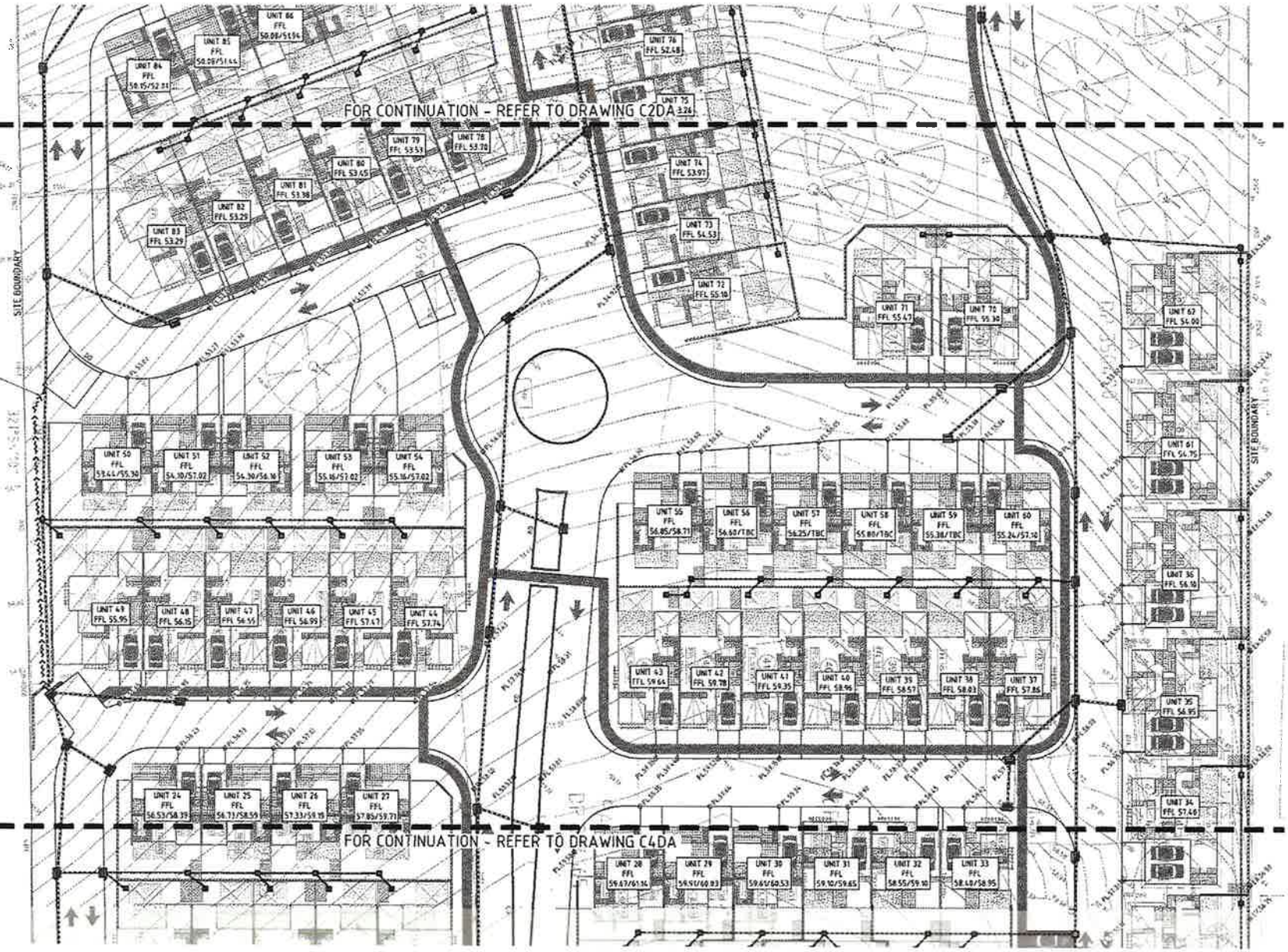
DRAWING TITLE: CONCEPT STORMWATER & LEVELS PLAN SHEET 1 OF 3

JOB NUMBER: NL140429

DRAWING NUMBER: C2DA

REVISION: F

DRAWING SHEET SIZE: A1



LEGEND

REFER TO DRAWING C0DA FOR LEGEND

NOTES

1. SEWAGE AND PIPES (SHOWN INDICATIVE LOCATIONS ONLY) TO BE PROVIDED IN EACH COURTYARD AND OTHER LANDSCAPED AREAS AS REQUIRED TO ENSURE PONDING OF STORMWATER RUNOFF. PITS TO BE DISCHARGED BY 100D-225mm PIPES. COVER LEVELS TO BE 100mm LOWER THAN COURTYARD FFL. DETAILS TO BE PROVIDED AT CC STAGE.

2. PROVIDE MIN 5kL RAINWATER HARVESTING TANK IN EACH COURTYARD LOCATION TO BE DETERMINED. COLLECT REAR ROOF AREA RUNOFF. OVERFLOW TO BE CONVEYED TO STORMWATER PIT AND PIPE NETWORK VIA INTERNAL PITS. PIPES DETAILS TO BE PROVIDED AT CC STAGE.

3. COURTYARD FFL'S TO BE 150mm LOWER THAN UNIT FFL LEVEL. FFL WHERE RELEVANT DETAILS TO BE PROVIDED AT CC STAGE.

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REVISION	DESCRIPTION	ISSUED	VERIFD	APPD	DATE
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PROJECT
150 - 156 LAKE ROAD
ELEMORE VALE, NSW 2287

DRAWING TITLE
CONCEPT STORMWATER & LEVELS PLAN
SHEET 2 OF 3

JOB NUMBER
NL140429

DRAWING NUMBER
C3DA

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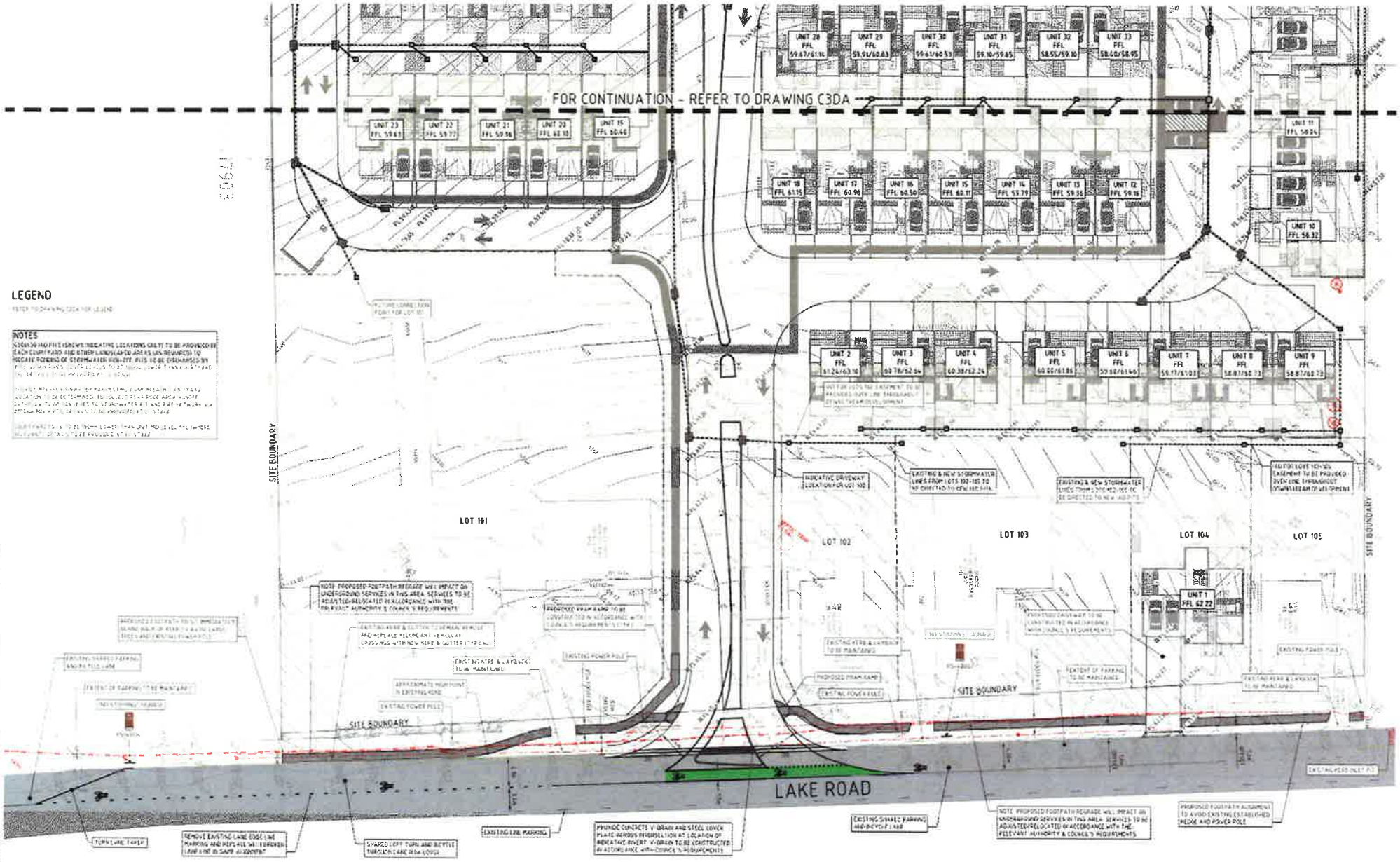
D

DRAWING SHEET SIZE: A1

DESIGNED: G.JAMES
DRAWN: [illegible]
VERIFIED: [illegible]



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PROJECT
150 - 156 LAKE ROAD
ELEMORE VALE, NSW 2287

DRAWING TITLE
CONCEPT STORMWATER & LEVELS PLAN
SHEET 3 OF 3

JOB NUMBER
NL140429

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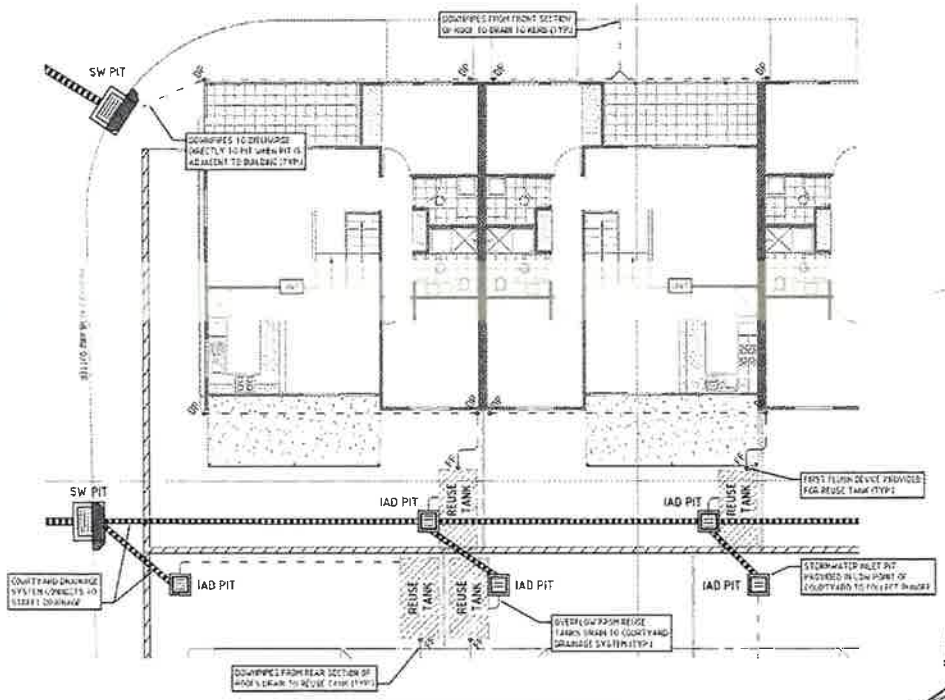
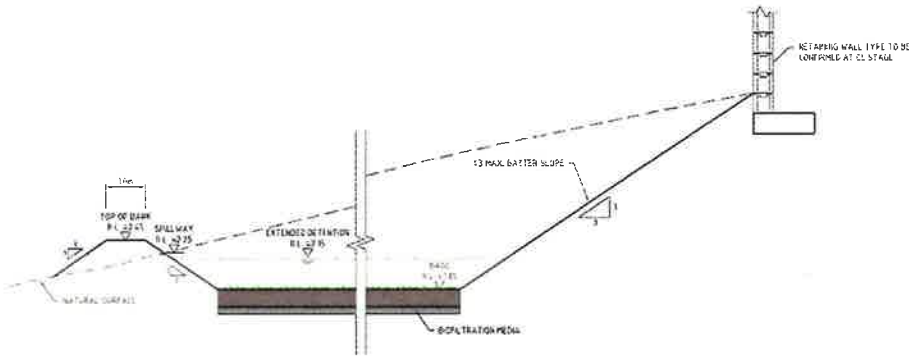


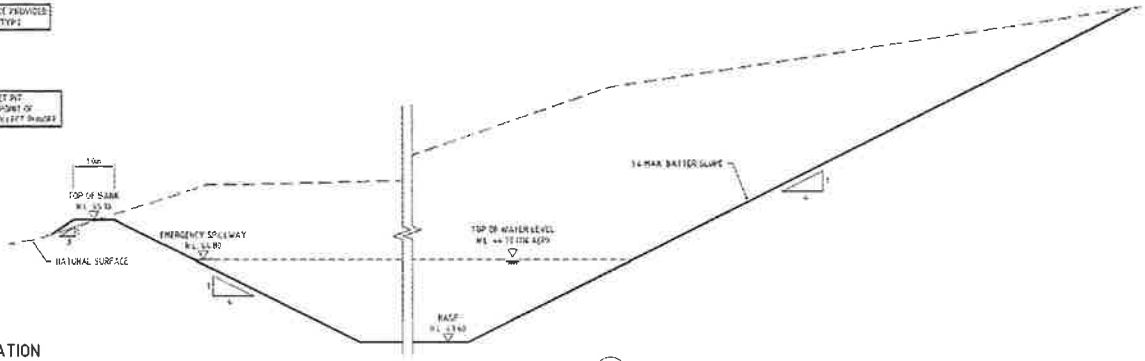
TYPICAL UNIT STORMWATER CONCEPT PLAN

NOT TO SCALE



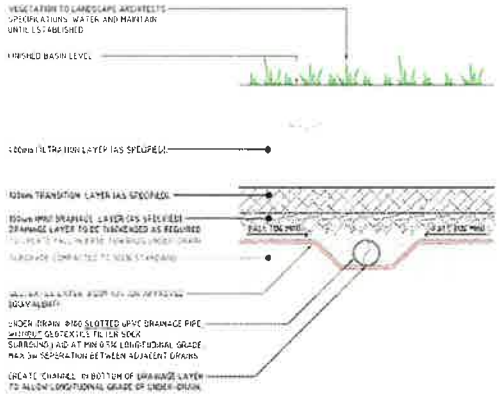
SECTION 1

TYPICAL BIOFILTRATION BASIN



SECTION 2

TYPICAL DETENTION BASIN



BIOFILTRATION SYSTEM TYPICAL SECTION

BIOFILTRATION MATERIAL SPECIFICATION

FILTRATION LAYER

PARTICLE SIZE DISTRIBUTION

FINE SAND	- 10-20%	(0.15 - 0.25mm)
MEDIUM TO COARSE SAND	- 40-60%	(0.25 - 1.0mm)
COARSE SAND	- 7-15%	(1.0 - 2.0mm)
FINE GRAVEL	- <3%	(2.0 - 3.0mm)

SOIL-BASED FILTER MEDIA PROPERTIES

TOTAL NITROGEN (TN) CONTENT	- 400 mg/kg
ORTHOPHOSPHATE (PO4) CONTENT	- 60 mg/kg
ORGANIC MATTER CONTENT	- <3%

TRANSITION LAYER

% PASSING	- 100%
	- 85%
	- 60%
	- 45%

DRAINAGE LAYER

(CLEAN FINE GRAVEL 2-5mm WASHED SCREENINGS)

(REF: GUIDELINE SPECIFICATIONS FOR FILTER MEDIA IN BIORETENTION SYSTEMS, FACULTY FOR ADVANCING WATER BIOFILTRATION 2009)

IMPLEMENTATION OF BIO-FILTRATIOIN BASIN

TO ENSURE THE PERFORMANCE OF THE BIO-RETENTION SYSTEM AND MINIMISE THE POTENTIAL FOR EXPENSIVE REWORK, IT IS IMPERATIVE THAT THE CONSTRUCTION OF BIO-FILTRATION BASIN BE STAGED/INCORPORATED WITH OTHER CONSTRUCTION ACTIVITIES IN THE CATCHMENT.

PHASE 1 - CIVIL CONSTRUCTION PHASE

- EXCAVATE TO OVER EXCAVATION LEVELS AND REMOVE BASE IN FOOD COMPACTED AND LOOSE SEDIMENT
- PREPARE BASE OF BIO-FILTRATION BASIN AND LAY GEOTEXTILE, SLOTTED SUBSOIL DRAINAGE LINES AND INSTALL REQUIRED CLEAN OUT POINTS
- BACKFILL DRAINAGE LAYER MATERIAL ENSURING NOT TO DAMAGE THE SLOTTED SUBSOIL DRAINAGE LINES
- PLACE AND TRIM THE TRANSITION LAYER
- PLACE 420mm OF BIO-FILTRATION MEDIA. FILTER MEDIA MUST BE CORRECTLY INSTALLED WITH AN APPROPRIATE LEVEL OF COMPACTION DURING INSTALLATION. GUIDELINES CURRENTLY RECOMMEND THAT FILTER MEDIA BE LIGHTLY COMPACTED DURING INSTALLATION TO PREVENT MIGRATION OF FINE PARTICLES. IN SMALL SYSTEMS, A SINGLE PASS WITH A VIBRATING PLATE SHOULD BE USED TO COMPACT THE FILTER MEDIA. WHILE IN LARGE SYSTEMS, A SINGLE PASS WITH ROLLER MACHINERY (E.G. A DRUM LAWN ROLLER) SHOULD BE PERFORMED (FAWB 2009). CARE SHOULD BE TAKEN NOT TO OVER COMPACT THE MEDIA AS THIS WILL REDUCE THE REQUIRED HYDRAULIC CONDUCTIVITY, CREATING REDUCED WATER TREATMENT EFFECTIVENESS AND POTENTIALLY THE LOSS OF VEGETATION.
- CAP THE BIO FILTRATION MEDIA WITH A NON WOVEN GEOTEXTILE (NOM A3L OR APPROVED EQUIVALENT) ENSURING TO FOLD DOWN THE SIDES FOR THE DEPTH OF THE BIO-FILTRATION MEDIA FOR TEMPORARY PROTECTION OF THE MEDIA FROM CLOGGING WITH FINES FROM THE UPSTREAM CATCHMENT
- PLACE 100mm OF TOPSOIL AND MAP

PHASE 2 - SITE STABILISED PHASE

(BRINGING THE BIO-FILTRATION BASIN ONLINE)

- ONCE ALL THE CATCHMENT IS DEVELOPED AND STABILISED (INCLUDING RESIDENTIAL DWELLINGS) REMOVE THE TURF, TOPSOIL AND UPPER TEMPORARY GEOTEXTILE LAYER
- REPAIR/REPLACE THE BIO-FILTRATION SYSTEM IN ACCORDANCE WITH THE CIVIL DESIGN AS REQUIRED AND PROVIDE PERMANENT VEGETATION TO THE LANDSCAPE ARCHITECTURAL DRAWINGS
- FLUSH OUT THE UNDER DRAINAGE TO ENSURE IS WORKING ORDER
- MAINTAIN LANDSCAPING TO ENSURE HEALTHY PLANT ESTABLISHMENT INCLUDING IRRIGATION.

DA APPROVAL (NOT FOR CONSTRUCTION)

REVISION	DESCRIPTION	ISSUED	VERF'D	APP'D	DATE
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PLANE 1:100 — PLANS 1:250

NORTHROP Newcastle

PROJECT: 150 - 156 LAKE ROAD ELEMORE VALE, NSW 2287

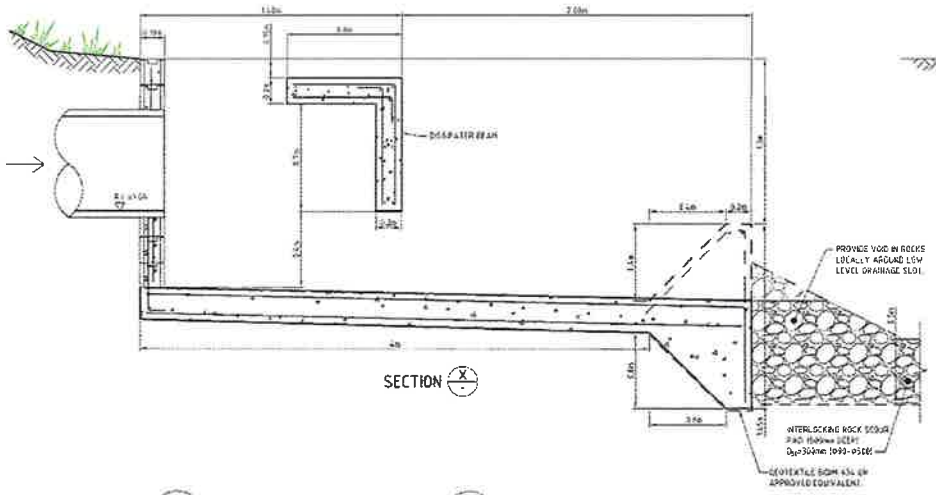
DRAWING TITLE: CIVIL DETAILS SHEET

JOB NUMBER: NL140429

DRAWING NUMBER: C5DA

REVISION: C

DRAWING SHEET SIZE: A1



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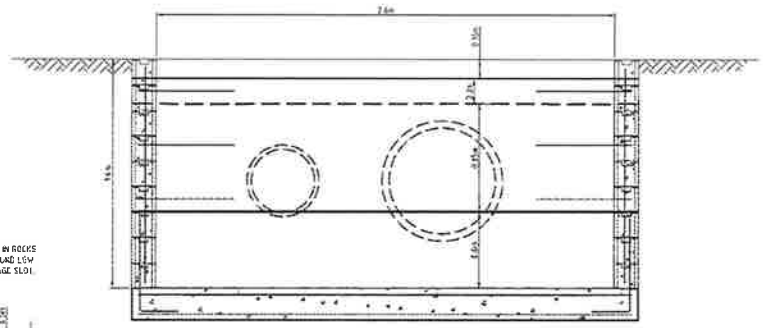

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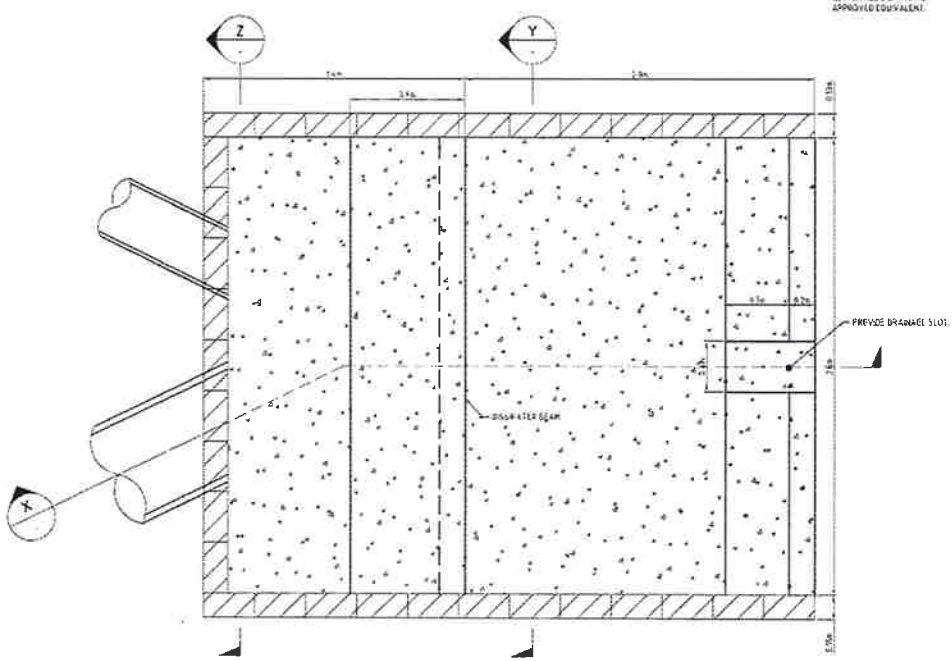
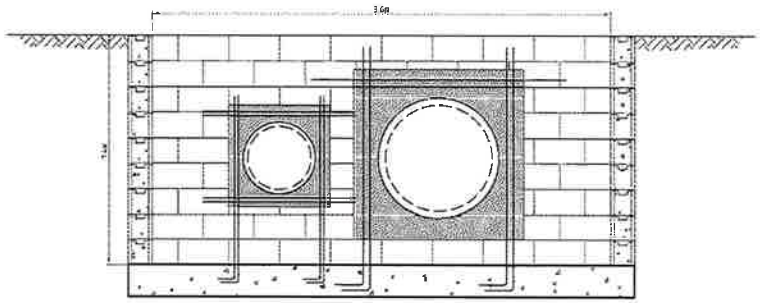


HEADWALL ENERGY DISSIPATER PLAN VIEW
(DETAIL B)

DIMENSIONS SHOWN ARE INDICATIVE ONLY
NOTE: DIMENSIONS AND STEEL REINFORCEMENT TO BE DETERMINED AT CC STAGE



SECTION Z

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ENERGY DISSIPATOR

JOB NUMBER
NL140429

DRAWING NUMBER
C6DA

REVISION
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DRAWING SHEET SIZE : A1