Appendix B – AMENDED APPLICATION

D08347740

King Street

LEGEND

- Floor Level
- Power Pole
- Water Tap
- Water Meter
- Light Pole
- Telephone Pit
- Fuel Access Chamber
- Fuel Tank Measuring Vents
- Kerb Inlet (Grate)
- Grated Pit
- Sign
- Shrub
- Tree Trunk
- Melaluca
- Palm
- Moll Gum
- Eucalypt
- Casurina
- Jacaranda
- Camphor Laurel
- Cedar Wattle
- Grevillea
- Stop Valve
- Hydrant
- Ridge
- Facia
- Window Head
- Window Sill
- Floor Level
- Gutter

Note:

This survey is for design purposes only, the BOUNDARIES have been finalised. Critical relationships to boundaries require more extensive boundary investigation.

Only visible SERVICES have been located, confirmation by relevant authorities should be undertaken prior to

DATES OF SURVEY
27/9/2002 survey of lots 1,2 & 3 DP155951
15/7/2002 survey of lots 1 DP90877 & lot 122 DP578045
15/2/2000 survey of lots 3& 4 DP32518

DRAWING FILE: DWG 7622
REDUCTION RATIO(S): 1:200
ORIGIN OF LEVELS: PM4994 R.L. 10.351
DATUM: AHD
CONTOUR INTERVAL:
CHECKED BY: C.C.
Surveyor Registered under The Surveying

PREPARED BY:
CADMAN CONSULTANTS
Land & Engineering Services
Suite 10 No.1 THE BOULEVARDE
TORONTO
TELE : (02) 49503003
FAX : (02) 49597145
P.O. BOX 3
TORONTO 2283

Detail & Contour Surveys
Cnr Howard & King Streets
& The Esplanade
Warners Bay

SHEET No. 1 OF 1 SHEET

INSTRUCTION No.
8395

D08347740 Req:R693397 /Doc:DP 0032518 E /Rev:11-Sep-1995 /Sta:OK.OK /Prt:01-Jul-2015 12:28 /Pgs:ALL /Seq:2 of 4
Ref:Sputko Belmore Lawyers /Sec:D
P.011/015
No.: R545 L1
01/07/2015 14:12

Shire of Lake Macquarie

DP 32518 (E)

DP 32518

PLAN

of part of J. Warners 1280 acre grant.

PARISH OF KAHIBAH COUNTY OF NORTHUMBERLAND.

Scale 100 ft to an inch.

I hereby certify that the roads streets and lanes shown on this plan have been dedicated to the Council of the Shire of Lake Macquarie for public use but I do hereby expressly except and reserve unto myself my heirs executors administrators and assigns all coal mines veins and seams of coal and all other mines metals minerals whatsoever and all quarries of stone in and under the land (including the roads streets and lanes) shown hereon with full liberty and power for myself my heirs executors administrators and assigns my and their workmen servants and agents at my and their free will and pleasure to search for dig raise work and carry away the said coal stone and other minerals and metals but by underground workings only and without entering upon or in any manner affecting or exercising any rights powers whatsoever in or over the surface of the said lands and without liability to pay compensation to the owners or occupiers of the said land their lessees and tenants for any damage to buildings or works on any lands conveyed or transferred to them or for the draining of water from underneath the same by the working of the mining reserved or the adjoining mine or mines or in pumping operations connected therewith.

Reference to title Conveyance No 178 Book 1078

KING ST

Lot	Area
1	34¼p.
2	27¾p.
3	26¾p.
4	27p.
10	27½p.
11	27½p.
12	29¾p.
13	30¼p.
14	30¾p.
15	1r. 5¼p.
16	1r. 6½p.
17	1r. 7¼p.
18	1r. 8¾p.
19	1r. 18½p.
20	1r. 19p.
21	1r. 14¼p.
	1r. 9¾p.

LAKE

DP 32518 (E)

Registered: Orig. catalogued as Regd. Plan 18 on 27-10-21

C.A.: of 24-5-21

Title System: Old System

Purpose: Subdivision

Ref. Map: Roll Plan 704

Last Plan: "

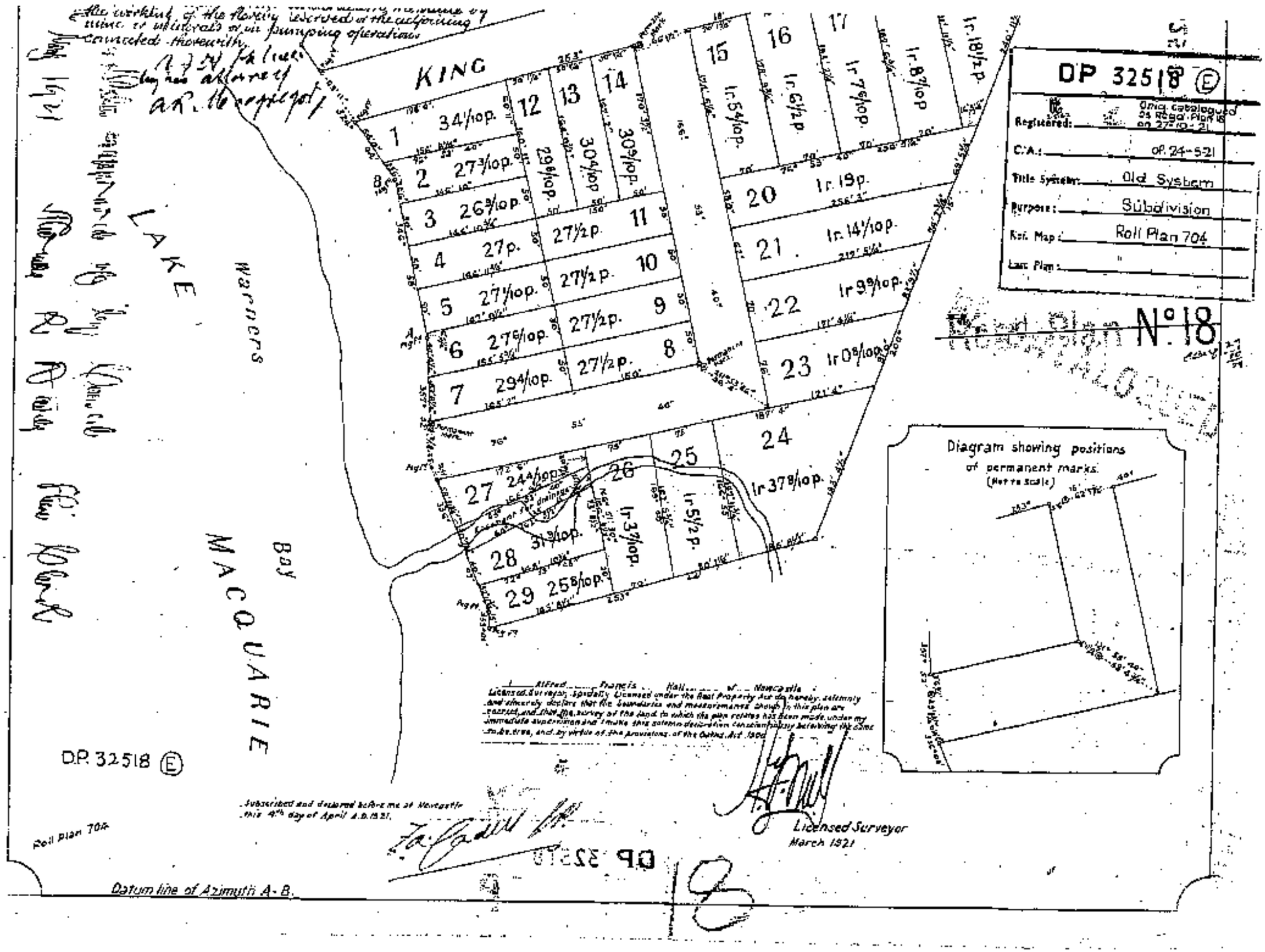
D08347740

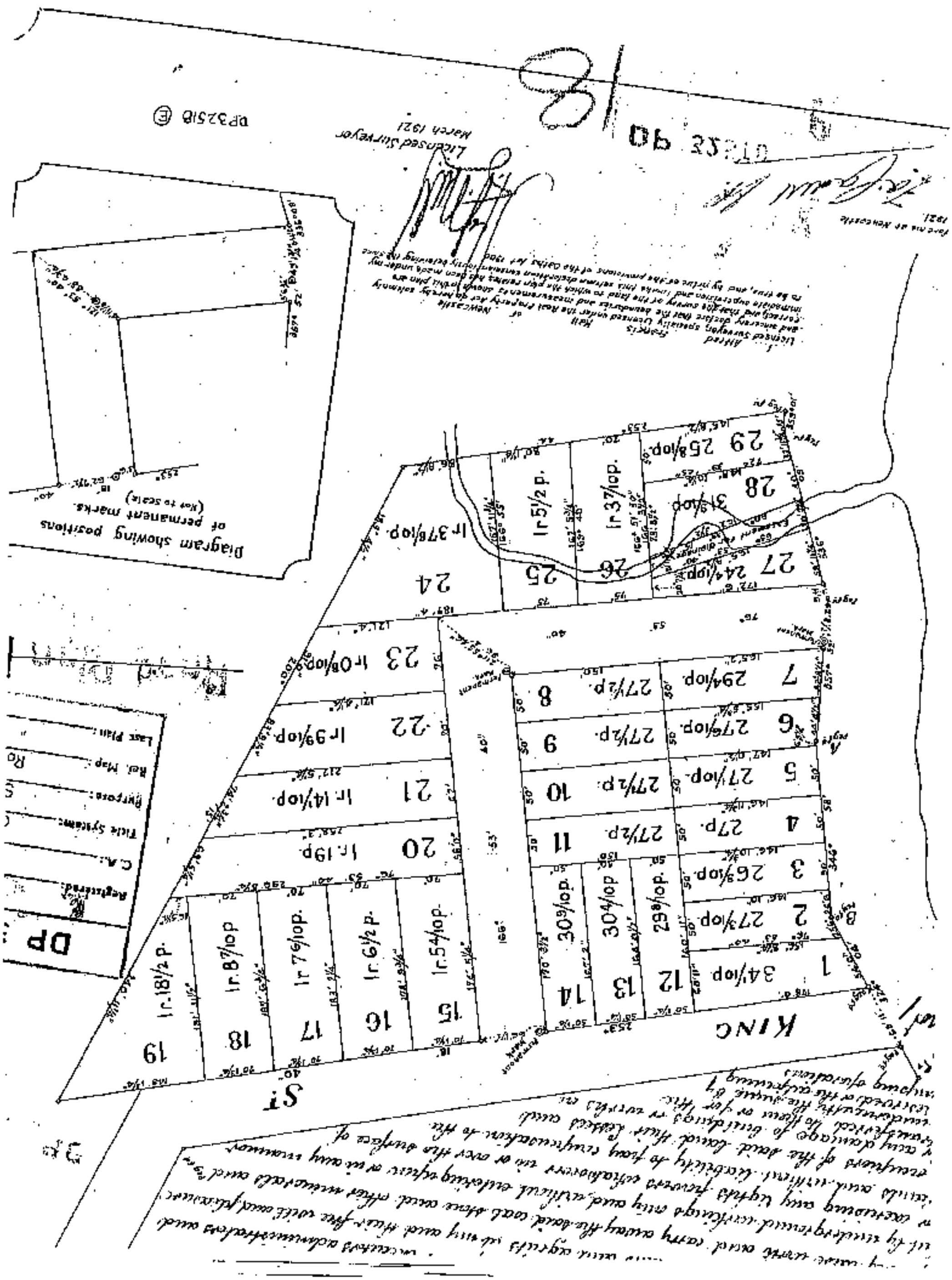
Req:R837397 /Doc:DP 0032518 P /Rev:11-Sep-1993 /Sts:OK.OK /Prt:01-Jul-2015 12:29 /Pgs:ALL /Seq:2 of 4
Ref:Sparke Helmore Lawyers /Scr:P

P.012/015

No.: R545 L1

01/07/2015 14:12





executors administrators and
and agents at any and their free will and pleasure
may mine work and carry away the said coal stone and other minerals and
ut by underground workings only and without entering upon or in any manner
or exercising any rights powers whatsoever in or over the surface of
lands and without liability to pay compensation to the
occupiers of the said land their lessees and
r any damage to buildings or works or
transferred to them or for the
undermining the same by
reserved or the adjoining
mining operations

KING ST
1 34¼op.
2 27¾op.
3 26⁶⁄₁₀p.
4 27p.
5 27¼op.
6 27⁶⁄₁₀p.
7 29⁴⁄₁₀p.
8 27½p.
9 27½p.
10 27½p.
11 27½p.
12 29⁸⁄₁₀p.
13 30⁴⁄₁₀p.
14 30⁹⁄₁₀p.
15 1r.5⁴⁄₁₀p.
16 1r.6½p.
17 1r.7⁶⁄₁₀p.
18 1r.8⁷⁄₁₀p.
19 1r.18½p.
20 1r.19p.
21 1r.14¼op.
22 1r 9⁹⁄₁₀p.
23 1r 0⁸⁄₁₀p.
24 1r 37⁶⁄₁₀p.
25 1r.5½p.
26 1r.37⁄₁₀p.
27 24⁴⁄₁₀p.
28 31⁹⁄₁₀p.
29 25⁸⁄₁₀p.
Permanent Mark
Easement for drainage
40'
53'
76'
150'

DP

Registered:

C.A.:

Title System:

Purpose:

Ref. Map:

Last Plan:

Diagram showing positions of permanent marks.
(Not to scale)
253'
18'
40'

I, Alfred Francis Hall of Newcastle Licensed Surveyor, specially licensed under the Real Property Act do hereby solemnly and sincerely declare that the boundaries and measurements shown in this plan are correct, and that the survey of the land to which the plan relates has been made under my immediate supervision and I make this solemn declaration conscientiously believing the same to be true, and by virtue of the provisions of the Oaths Act 1900.

Before me at Newcastle
1921.

A F Hall
Licensed Surveyor
March 1921

DP 32510

DP32518 Ⓔ

Req:R637397 /Doc:DP 0032518 P /Rev:11-Sep-1995 /Sts:OK.OK /Prt:01-Jul-2015 12:29 /Pgs:ALL /Seq:4 of 4
Ref:Sparke Helmore Lawyers /Scr:P

CONVERSION TABLE ADDED IN
REGISTRAR GENERAL'S DEPARTMENT

DP 32518

FEET	INCHES	METRES
5	3/4	1.867
3	3/4	1.086
7	1 1/4	1.905
6	1/4	1.962
1	6	0.152
14	1/4	4.267
20	1/4	6.096
21	1/4	6.426
29	3/4	9.068
26	6	8.077
30	1/4	9.220
52	1/4	15.926
49	1/2	15.024
54	1/2	16.459
46	3/4	14.160
40	1/4	12.294
42	1/4	12.909
52	1/2	15.850
44	1/2	13.564
54	1/2	16.459
54	1/2	16.459
61	1/4	18.669
60	1/4	18.364
42	1/2	12.954
96	1/2	29.261
64	1/4	19.558
60	1/4	18.364
70	1/2	21.336
44	1/2	13.564
44	1/2	13.564
54	1/2	16.459
60	1/4	18.364
70	1/2	21.336
70	1/2	21.336
70	1/2	21.336

D.P. 155951

F.P. 155951

24468B

Shire of Lake Macquarie

PLAN

of subdivision of Lots 13 & 14 ~~Reg^d Plan No 18~~ D.P. 32518.

WARNERS BAY Parish of Kahibah

County of Northumberland

Scale 50 feet to an inch.

Reference to last survey was registered

No 786 Bk 1902

No 785 Bk 1902

M p S O.S.)

5951

Approved by Council and covered by Shire Clerk's Certificate No 22 of 1/11/64.

Shire Clerk

1108

PALMER, TURNER & BRUYN

Registered Surveyors

NEWCASTLE 9-10-4

I, Jack Howard Nelson, Registrar General, certify that this negative is a photograph made as a permanent record of an instrument in my custody this 1st day of February 1967.

D08347740

PLAN FORM 1

WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION

* OFFICE USE ONLY

Council Clerk's Certificate

I hereby certify that –

(a) the requirements of the Local Government Act, 1919 (other than the requirement for the registration of plans), and

*(b) the requirements of section 342 of the Metropolitan Water, Sewerage, and Drainage Act, 1924, as amended, Hunter District Water, Sewerage, and Drainage Act, 1938, as amended,

have been complied with by the applicant in relation to the proposed ..... (Insert "new road", "subdivision" or "consolidation" as the case may be)

Subdivision No. .....

Date .....

(Signature) .....
Council Clerk

*This part of certificate to be deleted where the application is made for a consolidation, or on the opening of a new road or where the land to be subdivided is wholly outside the area of operations of the Metropolitan Water Sewerage and Drainage Board and the Hunter District Water Board.

(Delete if inapplicable)

Surveyor's Certificate

I, MICHAEL NIELSEN APITZ
MICHAEL N. APITZ & ASSOCIATES
of 450 HUNTER ST. NEWCASTLE

a surveyor registered under the Surveyors Act, 1929, as amended, hereby certify that the survey represented in this plan .....

is accurate and has been made *(1) by me/~~under my supervision~~ in accordance with the Survey Practice Regulations 1933, and was completed on 1 ..... 11TH NOVEMBER 1974.

Signature .....

Surveyor registered under Surveyors Act, 1929, as amended.
Delete Line of Allotment A or B
*Delete part within (1) or (2). Please state of survey.

PLAN OF LOT 12 DP 32518

~~Mun~~/Shire ~~City~~ : LAKE MACQUARIE

Locality: WARNERS BAY

Parish: KAHIBAH

County: NORTHUMBERLAND

Reduction Ratio 1: 500

Lengths are in metres

D.P. 578045

Registered: BS 5/11/1975

C.A.: .....

Title System: OLD SYSTEM

Purpose: P.A. 51801

Ref. Map: LAKE MACQUARIE 5H73

Last Plan: D.P. 32518

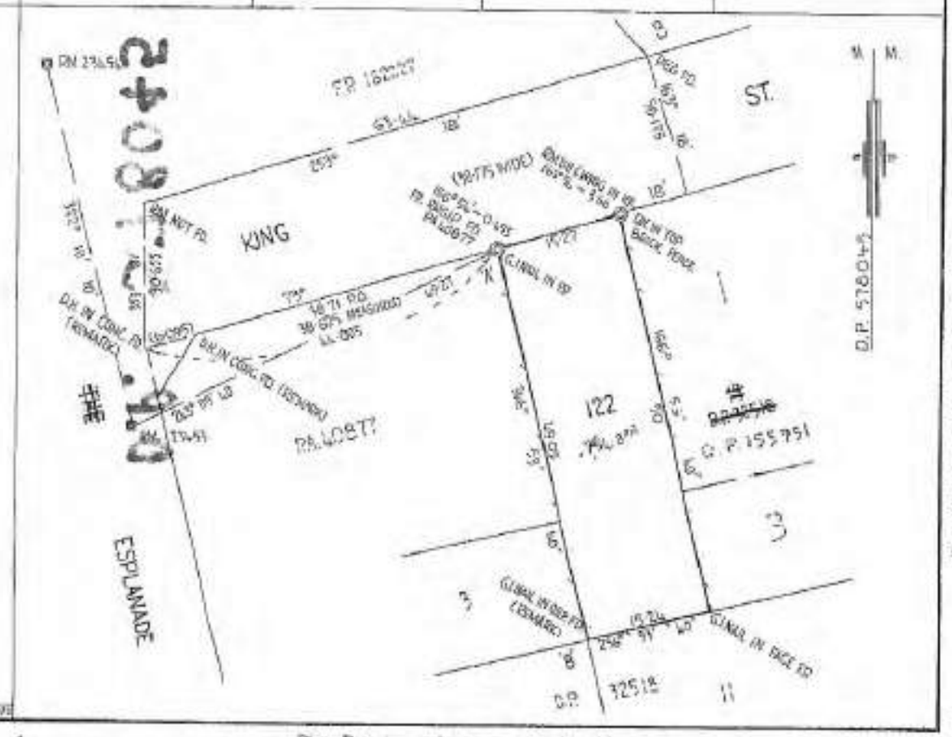
N O T J I C

Signatures, seals and statements of intention to dedicate public roads or to create public reserves, drainage reserves, easements or restrictions as to user.

SIGNED in my presence by JOHN STANLEY NEIGHBOUR as the duly constituted Attorney of BP AUSTRALIA LIMITED who is personally known to me and who states that at the time of execution of the within instrument he has no notice of the revocation of the power of Attorney registered No 141511 Miscellaneous Register under the authority of which he has just executed this instrument:

BP AUSTRALIA LIMITED
by its Attorney

Brewer J.P.



Plan Drawing only to appear in this space

SURVEYOR'S REFERENCE S.3899

Plan Drawing only to appear in this space

I, Jack Hayward Watson, Registrar General for New South Wales, certify that this negative is a photograph made as a permanent record of a document in my custody this 7th day of November, 1975.

Req:R463974 /Doc:DP 0578045 P /Rev:30-Oct-1992 /Sts:OK.OK/Prt:24-Jan-2002 15:54 /Pgs:1
/Ref:11643 /Src:M

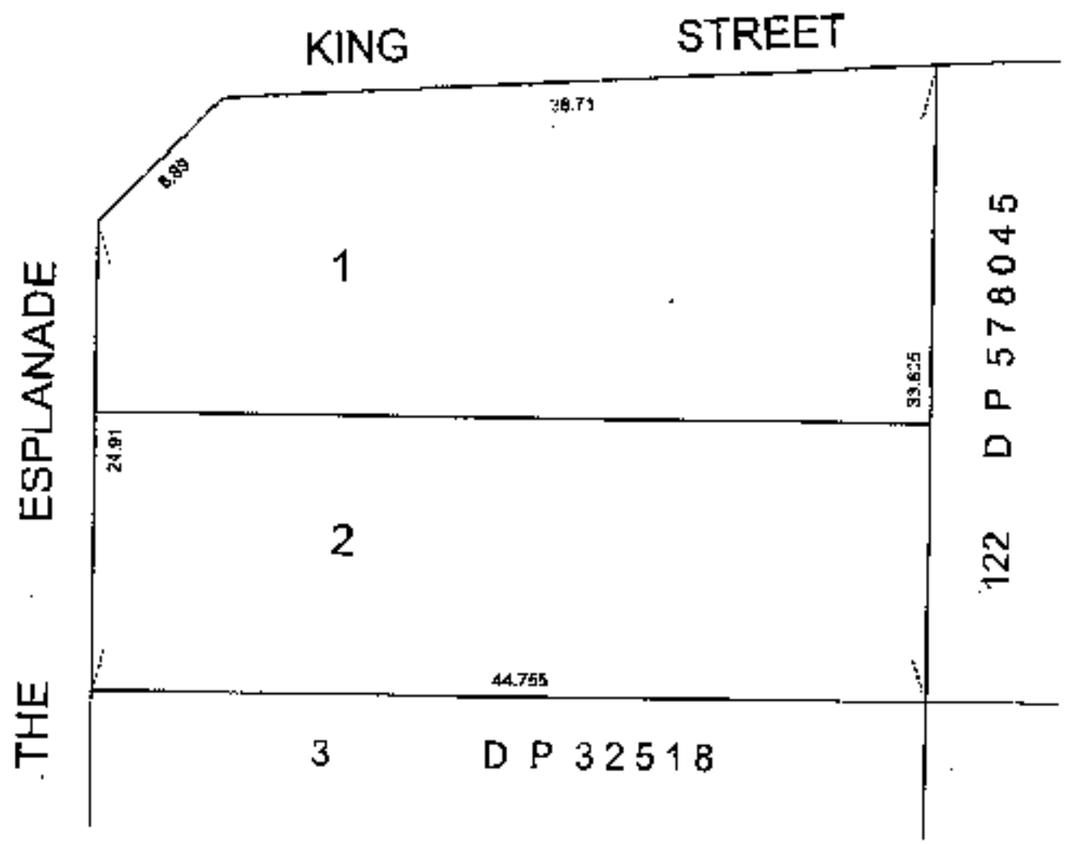
Req:R837398 /Doc:DP 1116535 P /Rev:16-Aug-2007 /Sts:SC.OK /Prt:01-Jul-2015 12:29 /Pgs:ALL /Seq:1 of 1
Ref:Sparke Helmore Lawyers /Scr:P

D08347740

P.009/015

e-departmental

Full dimensions and/or area(s) are not available for all lots. Any division of the lands herein may necessitate the lodgement of a plan of survey.



TOTAL AREA: 1429 m²

DP 1116535

Registered : 08.08.2007

Title System : TORRENS

Purpose : DEPARTMENTAL

Ref. Map : U5442-31

Last Plan : DP32518

PLAN OF PART OF LOTS 1 & 2 IN DP32518

COMPRISED IN VOL 8014 FOL 91

Lengths are in metres. Reduction Ratio - NTS
LPI Ref. : TC945

Sheet 1 of 1 sheet

L.G.A. : LAKE MACQUARIE

LOCALITY: WARNERS BAY

PARISH: KAHIBAH

COUNTY: NORTHUMBERLAND

LOT	PRIOR IDENTITY
1	PT LOT 1 IN DP 32518
2	PT LOT 2 IN DP 32518

THIS PLAN HAS BEEN PREPARED TO PROVIDE AN UNIQUE IDENTITY FOR THE LAND IN THE CERTIFICATE OF TITLE REFERRED TO ABOVE.

IT IS NOT A CURRENT PLAN IN THE TERMS OF 7A OF THE CONVEYANCING ACT, 1919.

No.: R545 L1
01/07/2015 14:12

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Title Search

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LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 1/155951

SEARCH DATE	TIME	EDITION NO	DATE
3/4/2017	5:36 PM	5	1/10/2016

LAND

LOT 1 IN DEPOSITED PLAN 155951
AT WARNERS BAY
LOCAL GOVERNMENT AREA LAKE MACQUARIE
PARISH OF KAHIBAH COUNTY OF NORTHUMBERLAND
TITLE DIAGRAM DP155951

FIRST SCHEDULE

Y.P.I. YAHAV PROPERTY INVESTMENTS (WARNERS BAY) PTY LIMITED
(T AK712090)

SECOND SCHEDULE (5 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2 QUALIFIED TITLE. CAUTION PURSUANT TO SECTION 28J OF THE REAL PROPERTY ACT, 1900. ENTERED 6.9.2005 BK 4467 NO 745
3 LIMITED TITLE. LIMITATION PURSUANT TO SECTION 28T(4) OF THE REAL PROPERTY ACT, 1900. THE BOUNDARIES OF THE LAND COMPRISED HEREIN HAVE NOT BEEN INVESTIGATED BY THE REGISTRAR GENERAL.
4 BK 1674 NO 740 LAND EXCLUDES MINERALS AND IS SUBJECT TO RIGHTS TO MINE
5 AK805314 MORTGAGE TO AUSTRALIA AND NEW ZEALAND BANKING GROUP LIMITED

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

* Any entries preceded by an asterisk do not appear on the current edition of the Certificate of Title. Warning: the information appearing under notations has not been formally recorded in the Register. InfoTrack an approved NSW Information Broker hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.

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LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: AUTO CONSOL 8014-91

SEARCH DATE	TIME	EDITION NO	DATE
3/4/2017	5:36 PM	2	2/9/2016

LAND

LAND DESCRIBED IN SCHEDULE OF PARCELS
AT WARNERS BAY
LOCAL GOVERNMENT AREA LAKE MACQUARIE
PARISH OF KAHIBAH COUNTY OF NORTHUMBERLAND
TITLE DIAGRAM DP1116535

FIRST SCHEDULE

Y.P.I. YAHAV PROPERTY INVESTMENTS (WARNERS BAY) PTY LIMITED
(T AK712090)

SECOND SCHEDULE (3 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2 BK 1425 NO 703 LAND EXCLUDES MINERALS WITHIN LOT 1 IN DP1116535 - SEE CROWN GRANT
3 BK 1557 NO 459 LAND EXCLUDES MINERALS WITHIN LOT 2 IN DP1116535 - SEE CROWN GRANT

NOTATIONS

UNREGISTERED DEALINGS: NIL

SCHEDULE OF PARCELS

LOTS 1-2 IN DP1116535.

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LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 2/155951

SEARCH DATE	TIME	EDITION NO	DATE
3/4/2017	5:36 PM	8	1/10/2016

LAND

LOT 2 IN DEPOSITED PLAN 155951
AT WARNERS BAY
LOCAL GOVERNMENT AREA LAKE MACQUARIE
PARISH OF KAHIBAH COUNTY OF NORTHUMBERLAND
TITLE DIAGRAM DP155951

FIRST SCHEDULE

Y.P.I. YAHAV PROPERTY INVESTMENTS (WARNERS BAY) PTY LIMITED
(T AK712090)

SECOND SCHEDULE (5 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2 QUALIFIED TITLE. CAUTION PURSUANT TO SECTION 28J OF THE REAL PROPERTY ACT, 1900. ENTERED 6.9.2005 BK 4467 NO 744
3 LIMITED TITLE. LIMITATION PURSUANT TO SECTION 28T(4) OF THE REAL PROPERTY ACT, 1900. THE BOUNDARIES OF THE LAND COMPRISED HEREIN HAVE NOT BEEN INVESTIGATED BY THE REGISTRAR GENERAL.
4 BK 1674 NO 741 LAND EXCLUDES MINERALS AND IS SUBJECT TO RIGHTS TO MINE
5 AK805257 MORTGAGE TO AUSTRALIA AND NEW ZEALAND BANKING GROUP LIMITED

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

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LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: AUTO CONSOL 8014-91

SEARCH DATE	TIME	EDITION NO	DATE
3/4/2017	5:36 PM	2	2/9/2016

LAND

LAND DESCRIBED IN SCHEDULE OF PARCELS
AT WARNERS BAY
LOCAL GOVERNMENT AREA LAKE MACQUARIE
PARISH OF KAHIBAH COUNTY OF NORTHUMBERLAND
TITLE DIAGRAM DP1116535

FIRST SCHEDULE

Y.P.I. YAHAV PROPERTY INVESTMENTS (WARNERS BAY) PTY LIMITED
(T AK712090)

SECOND SCHEDULE (3 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2 BK 1425 NO 703 LAND EXCLUDES MINERALS WITHIN LOT 1 IN DP1116535 - SEE CROWN GRANT
3 BK 1557 NO 459 LAND EXCLUDES MINERALS WITHIN LOT 2 IN DP1116535 - SEE CROWN GRANT

NOTATIONS

UNREGISTERED DEALINGS: NIL

SCHEDULE OF PARCELS

LOTS 1-2 IN DP1116535.

*** END OF SEARCH ***

* Any entries preceded by an asterisk do not appear on the current edition of the Certificate of Title. Warning: the information appearing under notations has not been formally recorded in the Register. InfoTrack an approved NSW Information Broker hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.

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LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 3/32518

SEARCH DATE	TIME	EDITION NO	DATE
3/4/2017	5:36 PM	10	1/10/2016

LAND

LOT 3 IN DEPOSITED PLAN 32518
AT WARNERS BAY
LOCAL GOVERNMENT AREA LAKE MACQUARIE
PARISH OF KAHIBAH COUNTY OF NORTHUMBERLAND
TITLE DIAGRAM DP32518

FIRST SCHEDULE

Y.P.I. YAHAV PROPERTY INVESTMENTS (WARNERS BAY) PTY LIMITED
(T AK712090)

SECOND SCHEDULE (2 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2 AK805280 MORTGAGE TO AUSTRALIA AND NEW ZEALAND BANKING GROUP LIMITED

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

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LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 3/155951

SEARCH DATE	TIME	EDITION NO	DATE
3/4/2017	5:45 PM	5	1/10/2016

LAND

LOT 3 IN DEPOSITED PLAN 155951
AT WARNERS BAY
LOCAL GOVERNMENT AREA LAKE MACQUARIE
PARISH OF KAHIBAH COUNTY OF NORTHUMBERLAND
TITLE DIAGRAM DP155951

FIRST SCHEDULE

Y.P.I. YAHAV PROPERTY INVESTMENTS (WARNERS BAY) PTY LIMITED
(T AK712090)

SECOND SCHEDULE (5 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2 QUALIFIED TITLE. CAUTION PURSUANT TO SECTION 28J OF THE REAL PROPERTY ACT, 1900. ENTERED 6.9.2005 BK 4467 NO 746
3 LIMITED TITLE. LIMITATION PURSUANT TO SECTION 28T(4) OF THE REAL PROPERTY ACT, 1900. THE BOUNDARIES OF THE LAND COMPRISED HEREIN HAVE NOT BEEN INVESTIGATED BY THE REGISTRAR GENERAL.
4 LAND EXCLUDES THE MINERALS REFERRED TO IN DEED BK 2308 NO 170
5 AK805232 MORTGAGE TO AUSTRALIA AND NEW ZEALAND BANKING GROUP LIMITED

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

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LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 4/32518

SEARCH DATE	TIME	EDITION NO	DATE
3/4/2017	5:36 PM	9	1/10/2016

LAND

LOT 4 IN DEPOSITED PLAN 32518
AT WARNERS BAY
LOCAL GOVERNMENT AREA LAKE MACQUARIE
PARISH OF KAHIBAH COUNTY OF NORTHUMBERLAND
TITLE DIAGRAM DP32518

FIRST SCHEDULE

Y.P.I. YAHAV PROPERTY INVESTMENTS (WARNERS BAY) PTY LIMITED
(T AK712090)

SECOND SCHEDULE (3 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2 BK 3278 NO 887 LAND EXCLUDES MINERALS AND IS SUBJECT TO RIGHTS TO MINE
3 AK805280 MORTGAGE TO AUSTRALIA AND NEW ZEALAND BANKING GROUP LIMITED

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

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LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 122/578045

SEARCH DATE	TIME	EDITION NO	DATE
3/4/2017	5:36 PM	4	2/9/2016

LAND

LOT 122 IN DEPOSITED PLAN 578045
AT WARNERS BAY
LOCAL GOVERNMENT AREA LAKE MACQUARIE
PARISH OF KAHIBAH COUNTY OF NORTHUMBERLAND
TITLE DIAGRAM DP578045

FIRST SCHEDULE

Y.P.I. YAHAV PROPERTY INVESTMENTS (WARNERS BAY) PTY LIMITED
(T AK712090)

SECOND SCHEDULE (2 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2 BK 1557 NO 459 LAND EXCLUDES MINERALS

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

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D08347734

ADW JOHNSON PTY LIMITED
ABN 62 129 445 398

Central Coast
5 Pioneer Avenue
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Planning

Working Beyond Expectations

Statement of Environmental Effects

Mixed Use Development
(Residential Flat Building, Commercial Premises and Associated Works)

Property:

482, 486 and 488 The Esplanade,
12 - 16 King Street and 1 Howard Street, Warners Bay.
Lots 1 & 2 DP 1116535, Lots 3 & 4 DP 32518,
Lots 1, 2 & 3 DP 155951 and Lot 122 DP 578045

Applicant:
YPI Yahav Property Investments
(Warners Bay) Pty Ltd

Date:
April 2017

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Project Management • Town Planning • Engineering • Surveying
Visualisation • Economic Analysis • Social Impact • Urban Planning

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Document Control Sheet

Issue No.	Amendment	Date	Prepared By	Checked By
A	Draft	10/04/2017	BS	
B	Final	21/04/2017	BS	SH

Limitations Statement

This report has been prepared in accordance with and for the purposes outlined in the scope of services agreed between ADW Johnson Pty Ltd and the Client. It has been prepared based on the information supplied by the Client, as well as investigation undertaken by ADW Johnson and the sub-consultants engaged by the Client for the project.

Unless otherwise specified in this report, information and advice received from external parties during the course of this project was not independently verified. However, any such information was, in our opinion, deemed to be current and relevant prior to its use. Whilst all reasonable skill, diligence and care have been taken to provide accurate information and appropriate recommendations, it is not warranted or guaranteed and no responsibility or liability for any information, opinion or commentary contained herein or for any consequences of its use will be accepted by ADW Johnson or by any person involved in the preparation of this assessment and report.

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The Client should be aware that this report does not guarantee the approval of any application by any Council, Government agency or any other regulatory authority.

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1.0 Introduction

1.1 INTRODUCTION AND DEVELOPMENT OVEVIEW

ADW Johnson has been engaged by YPI Yahav Property Investments (Warners Bay) Pty Ltd to prepare a Statement of Environmental Effects (SoEE) for a mixed use development comprising a residential flat building (112 residential apartments) and 1514m^2 of commercial floor space on land bounded by The Esplanade, King Street and Howard Street, Warners Bay.

The subject site is located in the southern part of the Warners Bay Town Centre opposite the Warners Bay foreshore and adjoins other mixed use development. The site's location will provide future residents with a high level of amenity including excellent access to the lake foreshore as well as supermarkets, cafes, restaurants and other essential services that are located within close proximity to the site in the core of the Warners Bay Town centre.

The Warners Bay Area Plan was adopted by Council on 5 December 2016. The Area Plan envisages Warners Bay developing as a specialty centre with a variety of uses. The proposed development is consistent with the desired future character envisaged for Warners Bay and particularly this site.

The land is within the B2 Local Centre Zone under the Lake Macquarie Local Environmental Plan 2014 (LEP), where the proposed development is permissible with consent.

The development will make a positive contribution to the Warners Bay Town Centre by bringing in additional residents and providing additional commercial opportunities. Significant design effort has been undertaken to provide a building design that is functional, economically feasible and appropriate for the site locality. Various iterations of the design have been considered by the SEPP 65 Design Review Panel. The proposed development along with the Shearwater development currently under construction will help realise the objectives of the Warners Bay Town Centre Area Plan and enhance the vitality of the town centre by introducing additional residences and an active street frontage with increased commercial opportunity to the locality.

The proposed development includes the demolition of the existing service station and 4 existing dwellings on the site, tree removal and redevelopment of the site for the purpose of mixed use housing and commercial development and associated works. The footways surrounding the site will be upgraded to provide full width paving. Tree planting is proposed in The Esplanade parking lane as street tree planting opportunities are limited by proposed awnings on the building. The building comprises 2 distinct building elements separated by an area of communal open space on a podium above the basement car parking which is accessed from Howard Street. The building presents as 7 storeys to the street.

The sloping nature of the site creates challenges in integrating the development with the public domain. Building setbacks at the street level to King Street have been used to provide an appropriate public domain interface. Each of the proposed residential apartments will enjoy a high level of amenity with views to the lake and / or the central open space area.

The proposed development generally complies with the relevant provisions of the LEP and Lake Macquarie Development Control Plan 2014 (DCP). The key exception being the number of storeys proposed and the setbacks to the southern boundary of the site for levels 2, 3 and 4. There is a minor exceedance of the height limits for part of the roof structure and lift over runs. The roof itself does not exceed the height limit by more than 300mm whereas the lift over-runs are up to 900 mm. A clause 4.6 report for an exception to a development standard has been prepared and is included as an appendix to this report.

1.2 DEVELOPMENT APPLICATION DETAILS

STATEMENT OF ENVIRONMENTAL EFFECTS PREPARED BY:	
Name:	ADW Johnson Pty Ltd Unit 7, 335 Hillsborough Road WARNERS BAY NSW 2282
Contact:	Brett Stein – Senior Planner Ph: (02) 4978 5100 Fax: (02) 4978 5199 Email: bretts@adwjohnson.com.au
PROJECT DETAILS:	
Applicant Name:	YPI Yahav Property Investments (Warners Bay) PTY Ltd
Applicant Address:	18 National Circuit, Bartin ACT 2600
Owners' Details:	YPI Yahav Property Investments (Warners Bay) PTY Ltd
Property Description:	482, 486 and 488 The Esplanade, 12-16 King Street and 1 Howard Street, Warners Bay. Lots 1 & 2 DP 1116535, Lots 3 & 4 DP 32518, Lots 1, 2 & 3 DP 155951 and Lot 122 DP 578045
Project Description:	Mixed Use Development – Residential Flat Building (112 Residential Apartments) 1514 m² commercial premises and associated works.
PROJECT TEAM:	
Architect	Stewart Architecture
Town Planner	ADW Johnson
Environmental	Aurora Environmental Consulting & Coffey
BASIX	Building Sustainability Assessments
Stormwater & Servicing	RGH Consulting
Landscape an Visual	Terras Landscape Architects
Building services	Marline Newcastle Pty Ltd
Traffic	Intersect traffic Pty Ltd
Noise	Spectrum Acoustics
Access Reporting	Philip Chun Building Compliance
CPTED	James Marshall and Associates

2.0 The Site

2.1 LAND TITLE

The subject site includes Lots 1 & 2 DP 1116535, Lots 3 & 4 DP 32518, Lots 1, 2 & 3 DP 155951 and Lot 122 DP 578045 referred to as 482, 486 and 488 The Esplanade, 12 - 16 King Street and 1 Howard Street, Warners Bay.

The site has an area of 5093.9 m². A survey detail plan of the site is included in **Appendix 1**

A copy of the Deposited Plans are also provided in **Appendix 1**.

Figure 1: LPI Cadastral Records Report.

2.2 OWNERSHIP

The site is owned by YPI Yahav Property Investments (Warners Bay) Pty Ltd.

A copy of each of the Certificates of Title is included in **Appendix 1**. Some of the lots have qualified title and it is proposed to do a plan of consolidation as part of the development.

2.3 LOCATION

The subject site has boundaries to The Esplanade, King Street and Howard Street in Warners Bay (see **Figure 3** and **4**). The site is located in the southern part of the Warners Bay Town Centre. Being a corner site within the town centre opposite Lake Macquarie makes this an important site.

Figure 2: Aerial photo of the subject site.

Figure 3: Locality Map of the subject site within the broader context of Warners Bay.

The following extract from the Warners Bay Area Plan also shows the site in its local context. It is relevant for this proposal to be considered in the context of further development occurring within the Warners Bay Town Centre. The height limit in the core of the town centre is 33 metres. Increased height compared to existing development is also permitted around the edges of the main commercial area. Within the immediate vicinity of the site the Shearwater development is under construction. This development and the Shearwater development will bring significant change to Warners Bay.

Sections are provided in the architectural drawings showing permissible building envelopes adjacent to the subject land. Reference should also be made to the Height of Building Map in Lake Macquarie Local Environmental Plan 2014 (refer to section 4 Planning Controls of this report)

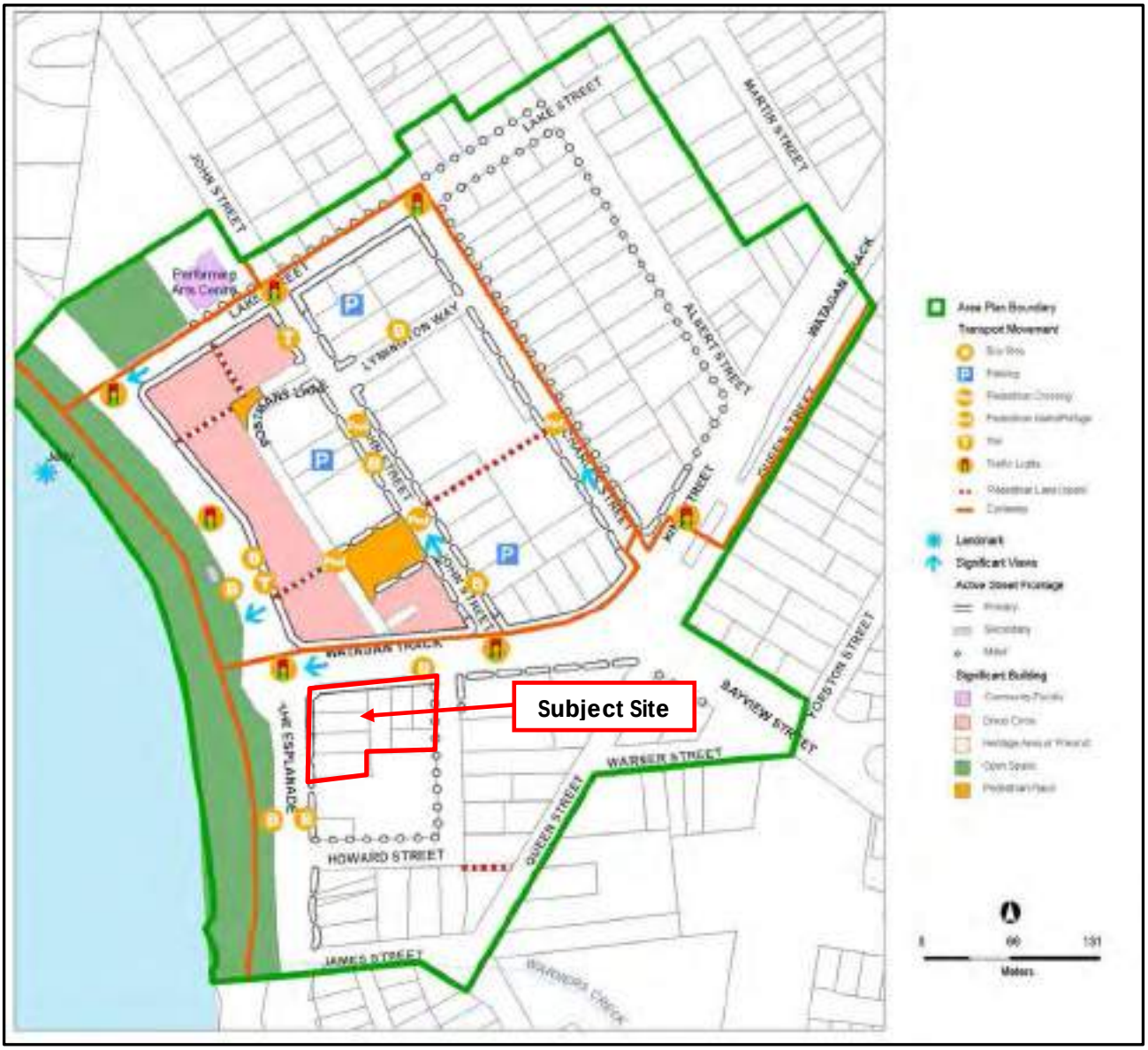

Figure 4: Locality Map of the subject site within the local context of Warners Bay Local Area Plan.

2.4 PHYSICAL DESCRIPTION

Site

The subject site is a generally rectangular in shape and slopes from east to west towards Lake Macquarie. The elevation change across the lot is approximately 4 metres. The site is currently occupied by a service station and 4 residential dwellings which will be demolished as part of this proposal. One of the subject lots is vacant land. Existing trees within the site will be removed.

Fuel storage associated with the service station raises potential issues in relation to site contamination. Environmental and geotechnical investigation have been undertaken to support this application.

The site is within a mine subsidence zone and the proposal will need to be approved by the Mine Subsidence Board.

Figure 5: Aerial Image of site.

Photographs of the site and surrounds are provided below:

Photo 1: King Street from John Street towards Lake Macquarie.

Photo 2: House on King Street to be demolished.

Photo 3: King Street at Service Station.

Photo 4: The Esplanade from the Intersection at King Street.

Photo 5: Vacant Site on the Esplanade. Trees to be removed.

Photo 6: Dwelling on the Esplanade to be demolished.

Photo 7: Adjoining 5 storey property to the South of the site fronting The Esplanade.

Photo 8: Adjoining 3 storey development on Howard Street.

Photo 9: Dwelling on Howard Street to be demolished.

Photo 10: George and Howard Street to be demolished. Trees to be removed.

3.0 Description of the Proposed Development

The proposed development involves the demolition of the existing service station and dwellings and removal of existing trees to allow redevelopment for the purpose of providing a multi storey mixed use residential and commercial development on the site.

The development includes 2 levels of parking the lower level being a basement with the upper level (Lower Ground (G)) incorporating commercial floor space at street level on The Esplanade. The development includes 214 parking spaces. The carpark will be mechanically ventilated.

The upper ground level (L1) provides residential units above the commercial space, communal open space on a "podium" and commercial floor space at the street level on Howard Street. A further 6 floors of residential development are provided on levels 2 to 7.

Above the podium / upper ground level the development presents as two buildings referred to as the Lake Front Building and the Howard Street Building. Architecturally the building is divided into a top, middle and bottom.

The development mix includes 26 x 1 bedroom, 32 x 2 bedroom, 24 x 2 bedroom skip/stop apartments, and 30 x 3 bedroom apartments, resulting in a total of 112 residential apartments. 1514 m^2 of commercial space is proposed 949m^2 in the Lakefront Building and 565m^2 in the Howard Street Building. 11 of the apartments are designed as adaptable dwellings and 22 apartments incorporate Liveable Housing Guidelines silver level universal design features as referenced in the Apartment design Guide.

The key landscape elements include a feature shelter and landscaping at the King Street entry to the podium, deep soil planting at the step in the southern site boundary, landscaping in pre-fabricated planter boxes throughout the podium area, roof top garden fronting Howard Street at level 2 and entry setbacks incorporating planting on frontage to The Esplanade.

The proposed development also involves connection to all services including water, electricity, sewer, NBN, telephone etc. Existing overhead electricity will be replaced with underground electricity supply and a new chamber substation integrated into the building element off Howard Street.

Architectural Plans for the proposed development are provided as **Appendix 2**. Landscape Plans are provided as **Appendix 3** and a visual analysis of the proposal is included as **Appendix 4**.

This proposal also aims to provide excellent amenity to its residents. Most units have opportunity for a lake outlook. Furthermore, the unit designs allow both excellent solar and cross-ventilation opportunities.

Key Design Principles include:

- A relaxed mixed-use development appropriate for the Warners Bay context.
- Fine-grain commercial modulation at ground floors.
- Extensive central gardens for residents.
- Clear residential address points and circulation.
- All residences receive morning and/or afternoon sun.
- Majority of residences have excellent natural ventilation.

4.0 Planning Controls

In determining a development application a consent authority is to take into account matters specified in clause 79C of the environmental Planning and Assessment Act including:

The provisions of:

I. Any environmental planning instrument;
II. Any proposed instrument;
III. Any development control plan;
IV. Any planning agreement;
V. The regulations; and
VI. Any Coastal Zone Management Plan.

that apply to the land to which the development application relates.

This section of the report discusses the relevant legislative requirements applicable to the proposal. There is no Planning Agreement or Coastal Zone Management Plan relating to the site.

4.1 LAKE MACQUARIE LOCAL ENVIRONMENTAL PLAN 2014

4.1.1 Zoning

The subject site is zoned B2 Local Centre under the Lake Macquarie Local Environmental Plan 2014 (LMLEP2014) (see **Figure 7**). This is the same zoning as the main part of the Warners Bay Town Centre across King Street to the east across Howard Street and directly adjoining the site to the south.

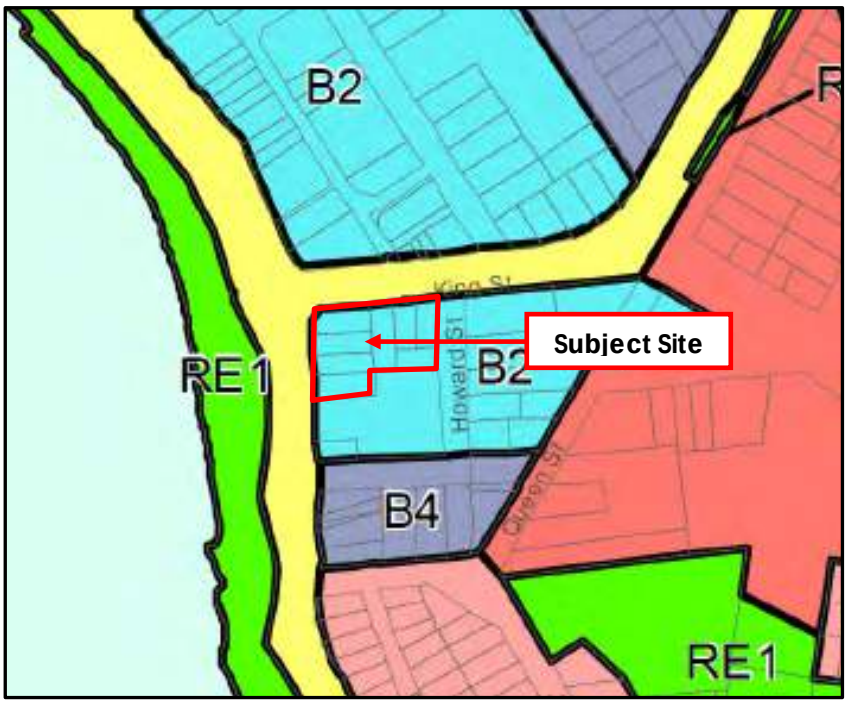

Figure 7: Zoning Map.

The proposed development is defined under LMLEP 2014 as 'mixed use development, as follows:

> "***mixed use development*** means a building or place comprising 2 or more different land uses."

Specifically the development includes ***Residential Flat Building*** and ***Commercial Premises.***

residential flat building means a building containing 3 or more dwellings, but does not include an attached dwelling or multi dwelling housing.

commercial premises means any of the following:
(a) business premises,
(b) office premises,
(c) retail premises.

4.1.2 Clause 2.3 Land Use Table

Clause 2.3 of the LMLEP 2014 stipulates that the consent authority must have regard to the objectives for a development in a zone when determining a development application in respect of land within the zone. The objectives of the B2 Local Centre zone are:

- *To provide a range of retail, business, entertainment and community uses that serve the needs of people who live in, work in and visit the local area.*
- *To encourage employment opportunities in accessible locations.*
- *To maximise public transport patronage and encourage walking and cycling.*
- *To create spaces that are accessible and are a central focus for the community.*
- *To provide for housing as part of mixed use developments.*

The proposed development will provide additional housing and commercial opportunities within the Warners Bay Town centre. It will complement adjacent residential development and revitalise the area through its design and presentation to the street. The development will boost the character of the surrounding area.

Taking the above into consideration, the development implicitly achieves the objectives of the B2 Zone.

The proposed uses as defined in **Section 4.1.1** are permitted with consent in the B2 zone.

4.1.3 Clause 2.7 – Demolition

Clause 2.7 specifies that demolition of building or work requires development consent. Accordingly development consent is sought for the demolition of existing improvements on the site. A demolition plan is included as part of **Appendix 2.**

4.1.4 Clause 4.3 – Height of Buildings

The subject site is identified as having a prescribed maximum building height area 'R' which has a Maximum Building Height of 22 metres. As indicated in the extract from Council's LEP map below.

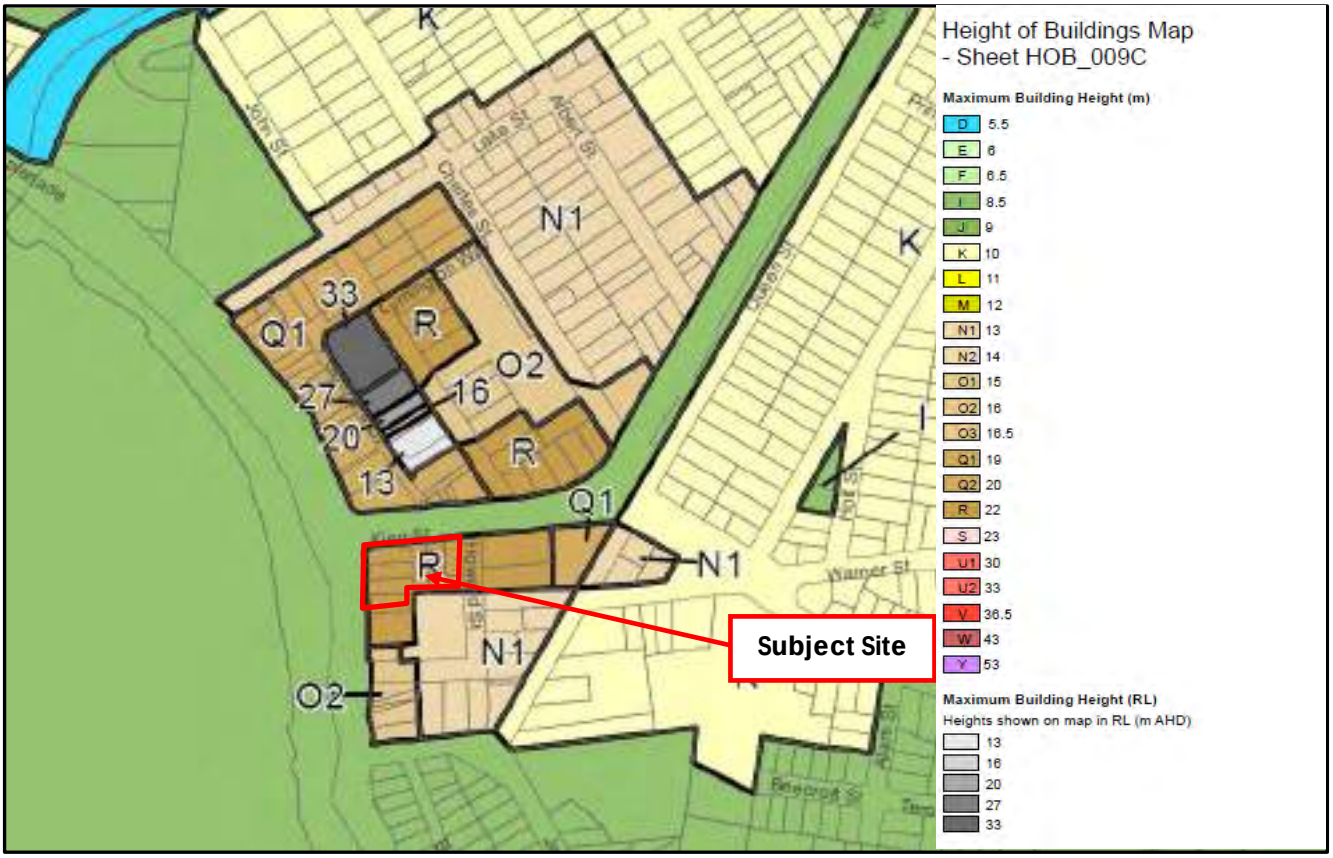

Figure 8: Maximum Building Heights Map.

Height is measured relative to the natural surface of the land hence the height level relative to a datum varies across the site. Building height includes plant and lift overruns, but excluding communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like.

Due to the site topography (which varies across the site) the level of the Howard Street Building is higher than the Lakefront Building. Localised variations in levels across the site also influence the height plane. The 22m height plane is shown in yellow in Figure 9. While the building height sits within the height plane around the perimeter of the site there are minor exceedances towards the centre of the site as indicated for parts of the roof structure and lift over runs.

Figure 9: Image of 22m height plane and minor exceedances.

Clause 4.6 of Lake Macquarie LEP 2014 includes provisions that allow for the consideration of exceptions to development standards. A clause 4.6 report is included as **Appendix 16.**

4.1.5 Clause 5.6 – Architectural Roof features

Clause 5.6 provides that development that includes an architectural roof feature that exceeds or causes a building to exceed the height limit may be carried out provided the consent authority is satisfied that the architectural roof feature:

- Comprises a decorative element on the uppermost portion of the building;
- Is not an advertising structure;
- And does not include floor space area and is not reasonably capable of modification to include floor area; and
- Will cause minimal overshadowing.

The proposed roof is a flat concrete roof (2 degree pitch). Lift over runs are located towards the centre of the building. The proposal does not include any architectural roof features and this clause is therefore not applicable. Architectural roof features could be added if deemed appropriate.

4.1.6 Clause 5.5 – Development within the Coastal Zone

The subject site is identified on the Department of Planning's Coastal Zone Mapping as being located within the prescribed coastal zone (see **Figure 10**). Clause 5.5 generally emulates the provisions of SEPP 71 Coastal Protection which is discussed in detail within **Section 4.2**.

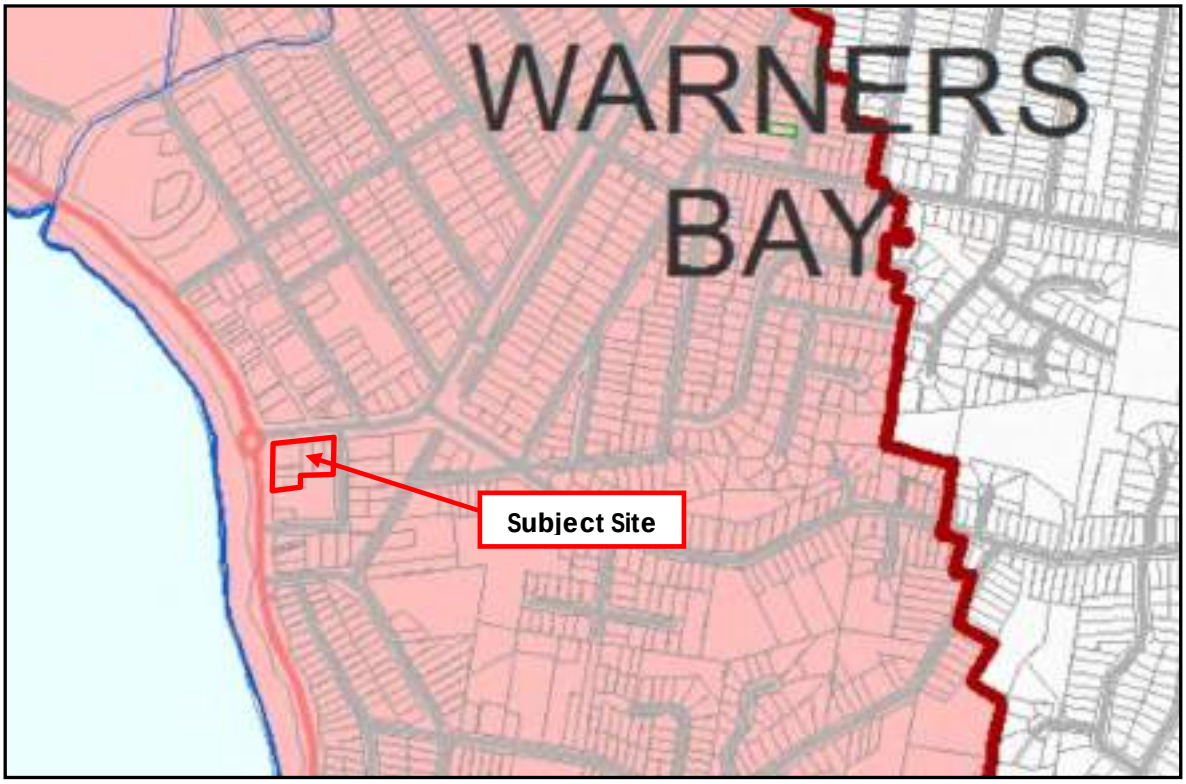

Figure 10: Coastal Zone Map.

4.1.7 Clause 5.9 – Preservation of Trees or Vegetation

The proposed development includes the removal of a number of trees from within the property. Pursuant to Clause 5.9, development consent is sought for the removal of the tree from the subject site.

4.1.8 Clause 7.1 – Acid Sulfate Soils

The subject site is identified as containing Class 5 Acid Sulfate Soils (see **Figure 11**). Clause 7.1 defines works for Class 5 Acid Sulfate Soils to be:

> *"Works within 500m of adjacent Class 1, 2, 3 or 4 land, that is below 5m Australian Height Datum and by which the water table is likely to be lowered below 1m Australian Height Datum on adjacent Class 1, 2, 3 or 4 land."*

As the proposed development is within 500m of adjacent Class 4 land management of Acid Sulphate Soils may be required. A preliminary assessment of soils has been undertaken by Aurora Environmental Consulting (refer to **Appendix 11**. Sampling indicated that oxidation of soils does not result in the production of sulphuric acid and so the soils are not classed as Acid Sulfate Soils and no management will be required.

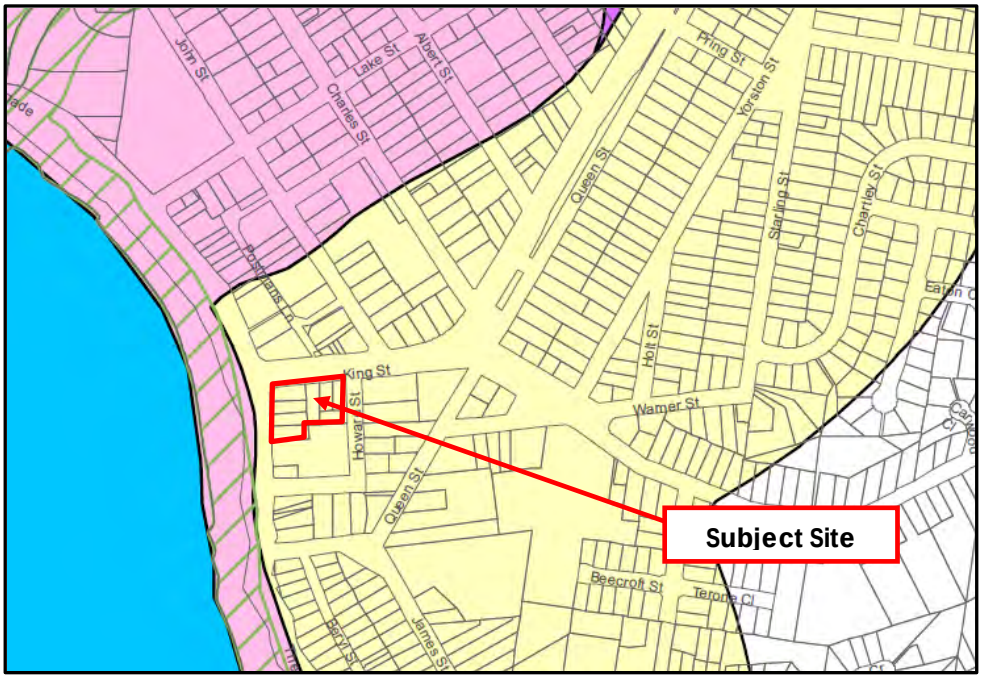

Figure 11: Acid Sulfate Soils Map.

4.1.9 Clause 7.2 - Earthworks

Clause 7.2 of LMLEP 2014 requires amongst other things consideration of impacts on soil stability in the locality of the development; the effect on the existing and likely amenity of adjoining properties; and measures proposed to avoid, minimise or mitigate the impacts of the development.

The proposal requires excavation of the basement. No cut is required at street level on The Esplanade however cut at Howard Street is approximately 6.0 metres. The depth of cut varies across the site due the slope of the land. Due to the depth of excavation bored piles and shotcrete or similar will likely be required to support excavated walls around part of the site perimeter.

The earthworks are ancillary to the development of the land. The material to be excavated has been assessed by Aurora Environmental Consulting. Refer to **Appendix 11** Waste Classification Report and ENM classification for soils across the site. Material under the operational area of the service station in the vicinity of underground storage tanks has been classified as General Solid Waste and will require disposal to an approved waste facility.

4.1.10 Clause 7.3 – Flood Planning

The subject site is not identified as being in a flood planning area (see **Figure 12**).

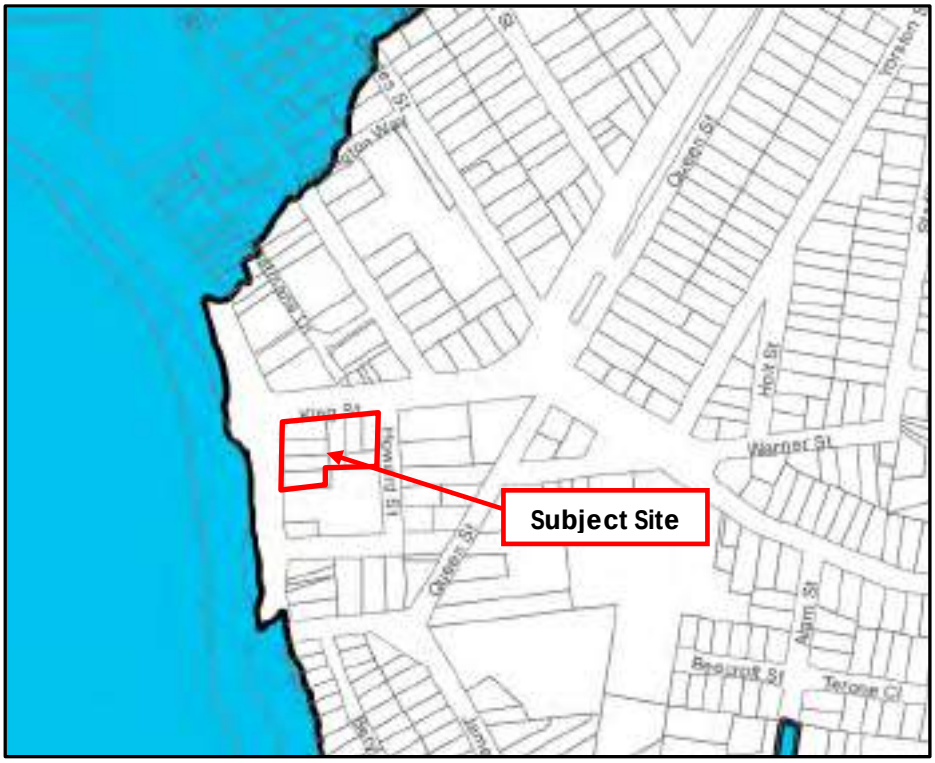

Figure 12: Flood Planning Map.

4.1.11 Clause 7.10 Residential Development in Certain Business Zones

This clause ensures stand-alone residential development is not provided in a business zone. The proposal incorporates an appropriate amount of commercial development. Clause 7.10 (4) requires most of the ground floor facing the primary street frontage have an active street frontage that will be used for commercial purposes. The ability to provide full active frontage along King Street is limited by the slope of the land. Access along the King Street frontage to the Howard Street Building will be via a raised balcony with at grade access at the Howard Street frontage and to the Esplanade.

4.1.12 Remainder of LEP Mapping Layers

With respect to the remaining mapping layers under the LEP, the following is noted:

- The subject site does not have a prescribed minimum lot size. Future strata subdivision is not relevant to the LEP lot size standard;
- The subject site is not identified as a heritage item or as being within a heritage conservation area;
- The subject site is not identified as containing terrestrial biodiversity;
- The subject site is not identified as being within a coastal risk area;
- The subject site is not identified as being within a foreshore area;
- The subject site is not identified as environmentally sensitive land;
- The subject site is not identified as being within a sensitive Aboriginal landscape area;
- The subject site is not identified as a key site;
- The subject site is not identified as being subject to land reclassification;
- The subject site is not identified as being land reserved for acquisition; and
- The subject site is not identified as being within an urban release area.

Taking the above into consideration, the proposed development is consistent with the LEP.

4.2 STATE ENVIRONMENTAL PLANNING POLICIES ("SEPP'S")

4.2.1 SEPP BASIX 2004

As required by Schedule 1 of the Environmental Planning and Assessment Regulation 2000, a BASIX assessment has been undertaken by an accredited BASIX assessor for the proposed development. This assessment indicates compliance with the relevant thermal comfort, greenhouse gas emission and water reduction targets. A copy of the BASIX certificate is provided in **Appendix 2**.

4.2.2 SEPP Infrastructure

Schedule 3 of SEPP Infrastructure identifies those developments that due to either their scale or location (on or near arterial road), require referral to Roads and Maritime Services (RMS) as traffic generating development.

The proposed development will trigger the need for referral to RMS as the access is within 90 metres of a major road and serves more than 75 dwellings. Discussions with RMS have resulted in vehicular access to the proposal be provided from Howard Street rather than The Esplanade or from King Street. A traffic assessment report has been prepared and is included as **Appendix 8.**

4.2.3 SEPP 55 – Remediation of Land

Contamination and remediation is to be considered in determining a development application. Reports undertaken by Aurora Environmental (refer to **Appendix 11**) identify contaminated land associated with the service station use on the site. Affected soils have been classified as General Solid Waste and will require disposal at an approved land fill.

4.2.4 SEPP 65 – Design Quality of Residential Apartment Development

The policy aims to improve the quality of residential apartment development in NSW. The Apartment Design Guide published by the NSW Department of Planning and Environment (June 2015) provides guidance and controls on range of issues relevant to the development. Nine design quality principles are set out in SEPP 65. These are Context & Neighbourhood, Character, Built Form and Scale, Density; Sustainability; Landscape; Amenity; Safety; Housing Diversity & Social Interaction, and Aesthetics.

Concept drawings of the proposed development were considered by the SEPP 65 Design Review Panel most recently on 14 December 2016. Comments from the panel are included in **Appendix 5.**

Since the Design Review Panel meeting the design has been refined for the Development Application. A Design Verification Statement has been prepared by the project architect and is included in **Appendix 6.** A SEPP 65 report addressing the design principles and an evaluation of the proposals design quality and a tabulated compliance table with respect to the Apartment Design Guide are also included in **Appendix 6.**

In summary the project architects support the design quality of the proposal taking into account the design principles and the Apartment Design Guide and that adequate regard has been given to the these requirements. Areas of non-compliance are addressed in the Apartment design Guide Compliance Statement.

4.2.5 SEPP 71 Coastal Protection

The provisions of SEPP 71 require the consent authority to consider the aims and objectives of the SEPP together with the matters for consideration listed in Clause 8, when determining an application within the coastal zone. As identified within **Section 4.1.6**, the subject site falls within the coastal zone.

An assessment of the proposed development against the provisions of Clause 8 is included in the table below:

SEPP 71 – COASTAL PROTECTION	
CLAUSE 8	
Matters for Consideration	**Proposed**
A *The aims of the Policy:* *(a) to protect and manage the natural, cultural, recreational and economic attributes of the New South Wales coast, and* *(b) to protect and improve existing public access to and along coastal foreshores to the extent that this is compatible with the natural attributes of the coastal foreshore, and* *(c) to ensure that new opportunities for public access to and along coastal foreshores are identified and realised to the extent that this is compatible with the natural attributes of the coastal foreshore, and* *(d) to protect and preserve Aboriginal cultural heritage, and Aboriginal places, values, customs, beliefs and traditional knowledge, and* *(e) to ensure that the visual amenity of the coast is protected, and* *(f) to protect and preserve beach environments and beach amenity, and* *(g) to protect and preserve native coastal vegetation, and* *(h) to protect and preserve the marine environment of New South Wales, and* *(i) to protect and preserve rock platforms, and* *(j) to manage the coastal zone in accordance with the principles of ecologically sustainable development (within*	a) The proposed development will enhance the cultural, recreational and economic attributes of Warners Bay by developing an underutilised site within an area zoned for mixed use development. (b) Discussed below (c) Discussed below (d) Discussed below (e) Discussed below (f) N/A (g) The proposed development will have no impact on native coastal vegetation. (h) The proposed development will have no impact on the marine environment of New South Wales. (i) The proposed development will have no impact on rock platforms. (j) The proposed development is considered to achieve a balance in terms of ecologically sustainable development. (k) The proposed development is of an appropriate scale. Reference is made to the planning controls and visual impact assessment.

the meaning of section 6 (2) of the Protection of the Environment Administration Act 1991), and *(k) to ensure that the type, bulk, scale and size of development is appropriate for the location and protects and improves the natural scenic quality of the surrounding area,*	
B *Existing public access to and along the coastal foreshore for pedestrians or persons with a disability should be retained and, where possible, public access to and along the coastal foreshore for pedestrians or persons with a disability should be improved.*	The proposed development will not remove any existing public access to Warners Bay foreshore.
C *Opportunities to provide new public access to and along the coastal foreshore for pedestrians or persons with a disability.*	Footpaths will be upgraded as part of the development which will improve public access to the Warners Bay foreshore.
D *The suitability of development given its type, location and design and its relationship with the surrounding area.*	The proposed development will complement the surrounding area by providing additional residential and commercial opportunities consistent with the planning vision for the area documented in Council's DCP.
E *Any detrimental impact that development may have on the amenity of the coastal foreshore, including any significant overshadowing of the coastal foreshore and any significant loss of views from a public place to the coastal foreshore.*	The proposed development will not overshadow the coastal foreshore or reduce views of Warners Bay foreshore from any surrounding public place. Refer to visual impact assessment Appendix 4 and shadow diagrams in Appendix 2.
F *The scenic qualities of the New South Wales coast, and means to protect and improve these qualities.*	The proposed development is considered to enhance the scenic qualities of the coast by providing a modern architecturally designed development on a currently underutilised site zoned for the proposed built form. Refer appendix 4 as above.
G *Measures to conserve animals (within the meaning of the Threatened Species Conservation Act 1995) and plants (within the meaning of that Act), and their habitats.*	The proposed development will have no impact on any threatened species under the TSC Act or FM Act.
H *Measures to conserve fish (within the meaning of Part 7A of the Fisheries Management Act 1994) and marine vegetation (within the meaning of that Part), and their habitats.*	
I *Existing wildlife corridors and the impact of development on these corridors.*	The proposed development will have no impact on any existing wildlife corridors.

J *The likely impact of coastal processes and coastal hazards on development and any likely impacts of development on coastal processes and coastal hazards.*	The proposed development is setback from Warners Bay foreshore and will have no impact on any associated coastal processes.
K *Measures to reduce the potential for conflict between land-based and water-based coastal activities.*	N/A
L *Measures to protect the cultural places, values, customs, beliefs and traditional knowledge of Aboriginals.*	The proposed development will have no impact on any matters of Aboriginal significance.
M *Likely impacts of development on the water quality of coastal water bodies.*	The development will incorporate stormwater controls and erosion and sedimentation controls to ensure it does not impact on the water quality of coastal waters.
N *The conservation and preservation of items of heritage, archaeological or historic significance.*	N/A
O *Only in cases in which a council prepares a draft local environmental plan that applies to land to which this Policy applies, the means to encourage compact towns and cities.*	N/A

Part 4 of SEPP 71 Development Control references flexible zone provisions, impeding public access to or along a coastal foreshore, effluent disposal to a non-reticulated sewer system and disposal of untreated stormwater into a coastal lake or similar water body.

Taking the above into consideration, the proposed development is consistent with the aims and objectives of SEPP 71.

4.3 LAKE MACQUARIE DEVELOPMENT CONTROL PLAN 2014

4.3.1 Part 4 – Development in Business Zones

Part 4 applies to all development within the B2 Local Development Zone. The B2 Local Centre Zone is intended to provide a range of retail, business, office, entertainment, community and other suitable land uses that serve the needs of the local community.

The DCP identifies a range of matters that need to be considered in the design of the development. These include:

- Context and Setting;
- Streets and Public Space;
- Active Street Frontages;
- Access and parking;
- Development Design; and

- Landscape Design.

A complete compliance table against Part 4 of the DCP is provided in **Appendix 7.**

Part 4 contains general development controls. Additional controls are contained in the specific land use provisions refer to **Section 4.3.2** below and in the Warners Bay Area Plan (Part 10.3 of the DCP). Where conflict arises between different parts of the DCP the Warners Bay Area Plan takes precedence.

4.3.2 Part 9.13 – Specific land Uses – Residential Flat Buildings

Part 9.13 provides specific requirements for residential flat building. Where a conflict exists between this section and the general development part of the LMDCP 2014 (i.e. Part 4) this section prevails.

A complete compliance table against Part 9 is provided in **Appendix 7**.

4.3.3 Part 10.3 – Town Centre Area Plans – Warners Bay

Part 10.3 contains local objectives and controls for development in the Warners Bay Town Centre. This part of the DCP provides guidance in relation to Desired Future Character, Built Form, Land Uses, Parking and Street and Foreshore Improvements.

Where conflict arises between different parts of the DCP the Warners Bay Area Plan takes precedence. The key provisions of the DCP relative to the site are Desired Future Character which is to be enhanced by providing residential, tourist and visitor accommodation within the core area and providing guidance on future built form and car parking requirements.

The building design type for the site depicted in the DCP is Type C. The site is adjoined by land identified as type G development. A typical street elevation for building design type C as depicted in the DCP is shown below. The proposed building is consistent with the building design type envisaged fort he site.

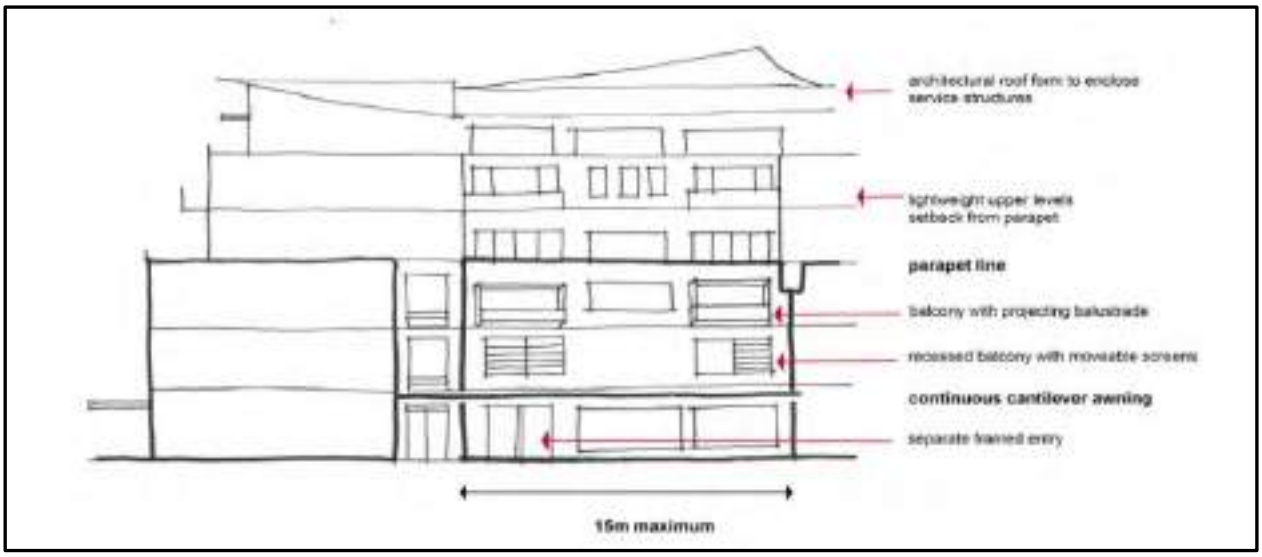

Figure 13: Street Elevation.

A complete compliance table against Part 10 is provided in **Appendix 7.**

4.4 CONTRIBUTIONS

It is noted that development contributions under the adopted relevant Section 94 Plan will be levied for new dwellings proposed and will form a condition of consent. The proponent has indicated a willingness to undertake works in kind if deemed appropriate by Council.

4.5 INTEGRATED DEVELOPMENT

The proposed development is classified as integrated development under Section 91 of the Environmental Planning and Assessment Act 1979, as the site is identified as being within a Mine Subsidence District and therefore requires approval under Section 15 of the Mine Subsidence Compensation Act 1961. Approvals under s138 of the Roads Act are also required but as the proposal requires development consent this does not mean the development is Integrated development for that purpose..

4.6 HUNTER REGIONAL PLAN 2036

The Hunter Regional Plan has just recently been released (October 2016). The plan outlines the visions, goals and actions that are geared to growing the regional economy, accelerating housing supply, and protecting and enhancing the natural environment.

Goal 4 of the plan '*Greater housing choice and jobs'* - identifies the need for an additional 70,000 dwellings in the region by 2036, and focuses on providing new housing in established areas through infill development, as well as continuing to greenfield development.

The proposed development is considered to be consistent with the goals and directions for the Hunter Region in that:

- The proposal is consistent with Direction 21 '*Create a compact settlement'* – in that the proposal will provide a medium density housing development in a location with established services and infrastructure, increasing the appeal for new residents. Given the sites good access to public transport, it provides an opportunity for redevelopment and renewal through single-lot redevelopment; and
- The proposal is consistent with Direction 22 'Promote housing diversity' – in that the proposal will assist to increase the overall supply of housing and will encourage housing diversity.

4.7 LIFESTYLE 2030 STRATEGY

The Lifestyle 2030 Strategy was adopted by Council in 2013 to replace the Lifestyle 2020 Strategy. The Lifestyle 2030 Strategy is a strategic plan that provides the direction for the future urban and rural land use pattern that is based on achieving the principles of ecological sustainability.

The proposed development is considered to be consistent with the vision, core values and aims for the City of Lake Macquarie in that:

- The proposal is consistent with Strategic Direction 3 '*A well designed adaptable and liveable city*' – in that the proposal will provide a housing and commercial development on land that is zoned allow mixed use development as a part of the revitalisation of the Warners Bay Town Centre. The proposal will not undermine the

scenic qualities of the lake and is compatible with surrounding land uses;

- The proposal is consistent with Strategic Direction 4 '*A well serviced and equitable city*' in that the proposal will provide additional housing options within close proximity to Warners Bay Town Centre and public bus services which provide connection to Glendale, Charlestown and Broadmeadow. Placing housing close to public transport reduces reliance on car travel, reducing traffic congestion and improving our environment; and
- The proposal is consistent with Strategic Direction 6 '*A city responsive to wellbeing of its residents*' in that the proposal will provide a mix of housing types and sizes that will cater to diverse household demographics.

5.0 Environmental Assessment

In addition to the relevant planning instruments as addressed in **Section 4.0** and attachments to this report Section 79c of the Environmental Planning and Assessment Act requires the following to be considered in the determination of a development application:

- The likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality;
- The suitability of the site for the development;
- Any submissions made in accordance with this Act or the regulations; and
- The public interest.

5.1 THE LIKELY IMPACTS OF DEVELOPMENT (S79C(1)(B))

In addition to the design and planning control considerations addressed elsewhere this section discusses potential impacts arising from the development including:

- Traffic and parking impacts;
- Visual impact;
- Loss of trees;
- Stormwater management;
- Amenity impacts on neighbours; and
- Social and economic impacts.

5.1.1 Access, Transport and Traffic

Access

All vehicular access to the site will be via Howard Street. This acknowledges the status of King Street and The Esplanade as major roads. All street frontages will be activated for pedestrians through commercial development. Pedestrian access to upper level residential apartments will be available via lifts and stairwells. Pedestrian access may need to be controlled through appropriate fencing and security gates.

Traffic

A traffic assessment report has been undertaken by Intersect Traffic Pty Ltd and is included as **Appendix 8.**

The report considers both the internal operation of the development and the potential external impacts and concludes that the development as proposed is satisfactory.

Parking

Parking requirements are prescribed in Section 5.4 of the Warners Bay Area Plan. The applicable parking rates are:

Residential:	1 bedroom	0.5 spaces per dwelling
	2 bedroom	0.75 spaces per dwelling
	3 bedroom	1.0 spaces per dwelling
	Visitors	0.25 spaces per dwelling

Commercial: 1 space per 40m^2 GFA Note 1 space in 40 can be deleted in lieu of providing a bus shelter.

1 space per 50 spaces is required for disability parking although additional accessible parking is required for adaptable living units.

Overall the proposal provides adequate total on-site parking in addition to DCP requirements. Specific details are provided in the traffic report and architectural plans. Provision has also been made for motor cycle parking and bicycle storage (with designated storage areas in the basement car aprk).

The proponent is seeking to optimise the number of car parking spaces allocated to residential tenancies hence a reduction in the number of visitor spaces provided relative to the DCP requirements.

Public Transport and Pedestrian Facilities

The subject site has access to frequent bus services providing connection to Glendale, Charlestown and Broadmeadow. It is proposed to provide a bus shelter on King Street as identified in the Warners Bay Area Plan to improve accessibility to public transport.

As part of the development the adjacent footways will be upgraded. Areas adjacent to the King Street footways will enhance the public domain. This will add to the character and vibrancy of the street. Opportunities may be available to incorporate footpath dining.

5.1.2 Visual Impact

A visual impact assessment has been undertaken for the proposal. The development largely sits within the height controls specified in Council's LEP other than some minor exceedances in the centre of the site. A visual impact assessment is included as **Appendix 4.** The site is on a corner location opposite the foreshore reserve and will be visible from a number of vantage points.

The proposal shall undeniably present a visible difference to that currently present on site as it shall be six storeys higher that the existing single storey structures. Considered building design including articulated frontages addressing The Esplanade and King Street and smaller commercial premises located at the street level provide a human scale at this level.

When observed southward along The Enterprise, the lower levels read as a continuation of the existing streetscape. This is achieved by the use of slightly different building material selection and style and the setting back of the upper levels from the street frontage. The resulting impression is of the upper levels being a separate building, constructed to the rear of the lower levels.

When viewed from the lake the proposal will be visually prominent although not entirely out of context with the existing surrounding development, especially that under construction to the rear of the site. Established vegetation on the lake foreshore shall provide some filtering of views, however the top of the canopy does not conceal the upper levels of the buildings. Subdued colour selections assist in integrating the built form with the surrounding environment.

Figure 14: View from Lake Macquarie.

Figure 15: View from off The Esplanade.

Figure 16: View from The Esplanade and Lake Street.

Figure 17: View from the intersection of The Esplanade and Howard Street.

5.1.3 Vegetation Loss and Landscaping

The subject site has a number of trees that will be removed to facilitate the development of the site. The vegetation is not considered to be significant having regard for the site context. Landscaping is proposed as part of the proposed development. Landscape plans are included in **Appendix 3.** Landscaping is also addressed in **Appendix 6** as part of the SEPP 65 considerations.

5.1.4 Stormwater and Groundwater

The site is not subject to flooding. A stormwater management strategy has been developed for the proposal incorporating water reuse and water quality controls. Stormwater detention facilities are not required given the proximity of the site to Lake Macquarie foreshore. A stormwater management plan is included as **Appendix 9.**

Given the above, it is considered that the proposed development can adequately manage and address all items surrounding flooding and stormwater.

Ground water management is addressed in s5.3.7 of the Remediation Action Plan prepared by Coffey Services Pty Ltd included as **Appendix 10.** Ground water is anticipated to be present at between 3 and 5 metres below ground surface. Options for the management of excess ground water are provided in the RAP.

5.1.5 Amenity Impacts on Neighbours

The proposed built form is significantly different to the existing. Construction of a large building adjacent to existing residential development has the potential for impacts including noise, privacy, overshadowing and loss of light to the adjoining residents.

The adjacent buildings to the south fronting The Esplanade and Howard Street are set back from the boundary and include windows. The adjoining dwellings have been designed to rely upon open space and sunlight access away from their side boundary and facing their street frontages or internal to their own development.

No openings are proposed in the southern façade of The Esplanade Building other than bathroom windows which have been set back from the boundary and will include frosted glazing limiting privacy impacts. The Howard Street building has no openings other than the stair core. No habitable rooms or balconies face the side boundary.

The DCP setbacks to side boundaries are specified as 3.0 metres for residential flat buildings, however development in a business zone allows for a depth of 12 metres from the street boundary to be built to boundary for the first 2 levels. Beyond 12 metres depth the building is to be setback 1.5 metres for the first and second level and for the third level and above the development is to be setback 3.0 metres. The Warners Bay Area Plan states that each façade must be at least three storeys high at the street boundary.

On the basis of these controls we have determined that the applicable site boundary setback for the southern boundary is zero set back for the first 3 levels for a depth of 12 metres then 3.0 metres above the third level and 1.5 metres where the depth of the building is greater than 12 metres for the first 2 levels then 3.0 metres above this level.

In addition to the DCP the Apartment Design Guide discusses the need for building separation to achieve adequate sunlight, privacy and appropriate built form. As discussed above the adjoining development is not reliant on north facing windows for solar access and amenity. Shadow diagrams have prepared for the proposed development and a development meeting the setback requirements of the DCP. As the top levels of the proposal are compliant with the DCP there is no significant difference in the amount of overshadowing on the adjoining building between the complying option and the proposal.

The Howard Street Building is set back from the property boundary. The deep soil planting zone will provide a transition between the development site and the adjoining property. Landscaping and screening is also proposed along the southern boundary of the site to minimise impacts. It is considered sufficient space is available to allow light and ventilation to the northern elevation of the adjoining building.

The proposed development will impact views from the Shearwater development on the eastern side of Howard Street. As discussed in the planning controls and elsewhere the proposed development form is consistent with desired future development in Warners Bay.

Construction Impacts

Potential construction impacts will occur. Times for construction will be limited to normal daylight hours i.e.:

Monday to Friday 7am to 6pm
Saturday 7 am to 1pm
No work on Sundays or Public Holidays.

It is expected the construction period will be approximately 18 months.

A construction traffic management plan will be prepared as part of the construction certificate documentation.

5.1.6 Social and Economic Impact

The proposed development will provide additional housing options in an area with exceptionally high amenity close to shops, restaurants and the lake foreshore. This in turn will provide a increase in the demand on existing and future local business.

The proposal aligns with Council's intentions for the area to increase housing densities and the development will contribute to a varied housing stock to cater for different housing needs in a diverse demographic. The development will also provide additional employment opportunities within the commercial component of the development.

Given the strategic planning undertaken by Council for the locality, the site's zoning and development controls including SEPP 65 and general consistency with those, it is not considered that a social or economic impact statement is required or will add any value to the assessment process.

The proposed development has been designed in accordance with the Crime Prevention Through Environmental Design (CPTED) principles with:

- Ample opportunity for casual surveillance through the provision of active street frontages;
- Clear definition between public and private spaces by utilising courtyard fencing and appropriate landscaping;
- Secure building entries and car parking;
- Appropriate landscaping that minimises opportunities for offenders to hide; and
- Low maintenance design ensuring the development will be easily maintained by future occupant.

A CPTED report is included as **Appendix 14**. An Access Design Review has been undertaken and is included as **Appendix 15.** There are a number of recommendations in the access report that have not been currently adopted in the design process and will need to be resolved prior to construction.

Overall the development will have a positive social and economic impact.

5.1.7 Waste

A Site Waste Minimisation Management Plan (pro-forma) has been prepared for the proposed development and is provided as **Appendix 12**.

Demolition and Construction Phase

The demolition works will be undertaken by an appropriate contractor who will be responsible for identifying and ensuring appropriate disposal of the various building materials.

With regards to the construction aspect of the development, as with most best-practice building projects, the amount of waste to be generated during the construction phase will generally be minimal due to the use of pre-ordered and pre-fabricated building materials to ensure wastage and hence cost is minimised.

Waste generated during the demolition and construction phase will be sorted and taken to a materials recycling facility where possible. All non-recyclable waste will be removed to Council's Waste Depot.

Excavated material classified as General Solid Waste will be disposed of to landfill. Excavated Natural Material can be disposed of to sites requiring fill material.

Operation

The proposed development includes sufficient space for the storage of the waste receptacles.

Collection will be via private waste collection service on a needs basis. It is proposed that bins will generally be collected form the kerbside in Howard Street. It will be the responsibility of the occupants (and site manager) to place their bins out for collection.

5.1.8 Noise

The site is located adjacent to major roads. A noise assessment of the proposal has been undertaken to address window and door requirements to achieve internal acoustic

amenity.
Noise from mechanical plant and car park vents has also been considered and shown that there will be no adverse impacts on receivers. A copy of the noise assessment report is included in **Appendix 13.**

5.2 THE SUITABILITY OF THE SITE FOR DEVELOPMENT (S79C(1)(C)

Context and Setting

The proposed development is of a type and form which is consistent with the stated objectives of the B2 zone. The site is located within the Warners Bay Town Centre and development of this type and scale is supported by Council's planning controls.

The area is, and will continue to undergo change as the vision for the Warners Bay Town Centre is realised. The proposal will make a positive contribution to the revitalisation of Warners Bay.

The proposed development is considered suitable given its ideal location.

Flooding

The site is not subject to flooding

Bushfire

The subject site is not identified as bushfire prone land on Council's Bushfire Prone Lands Map.

Geotechnical

The proposal is within a mine subsidence area and approval of the Mine Subsidence Board is required.

The proposal involves a significant amount of cut to construct the basement car parking. As discussed in **Section 4.17** the depth of cut varies across the site due the slope of the land. Due to the depth of excavation bored piles and shotcrete or similar will likely be required to support excavated walls around part of the site perimeter. A geotechnical report for the site has been prepared by Coffey. Refer **Appendix 10**. A structural engineers certificate has also reviewed the proposed development.

Environmental

Environmental reporting for the site has been undertaken by Aurora Environmental Consulting. Refer to **Appendix 11.** A waste classification report and ENM classification have been undertaken for soils across the site. Material under the operational area of the service station in the vicinity of underground storage tanks has been classified as General Solid Waste. The remainder of the site is regarded as meeting requirements for excavated natural material.

5.3 ANY SUBMISSIONS MADE IN ACCORDANCE WITH THE ACT (S79C(1)(D))

The proposed development will require public notification in accordance with Part 1 of the LMDCP 2014.

5.4 THE PUBLIC INTEREST (S79C(1)(E))

The proposed development will consolidate a number of existing underutilised lots within the Warners Bay Town Centre into a single development site that will deliver additional apartment style housing to the area as well as activate the street through commercial uses.

The proposed development is considered to be in the public interest.

6.0 Conclusion

The proposed mixed commercial and residential development implicitly achieves the objectives of the Warners Bay Area Plan and the objectives of the B2 Local Centre Zone.

The proposed development aligns with the strategic intention of the zoning which is to increase the residential density of the area capitalising on the site location within the Warners Bay town centre, and adjacent to the Lake Macquarie foreshore.

The proposed development has been architecturally designed to achieve a quality design outcome. The design process has benefited from consultation with Council and the SEPP 65 Design Review Panel.

The proposed development complies with the relevant provisions of the Lake Macquarie Local Environmental Plan 2014 (as supported by a clause 4.6 exception to building height limits for very minor exceedances of recessed roof and lift structures) as well as the aims and objectives of the Lake Macquarie Development Control Plan 2014.

There are some variations to controls specified in the Development Control Plan however these are considered reasonable variations when considered in the context of the consideration of the design quality principles and State Based Apartment Design Guide and the proposed development. It is therefore considered suitable for approval.

1 – BASIX

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THERMAL PERFORMANCE REPORT

Technical Assessment of Design Drawings

Thermal Performance Assessment and BASIX Report

Lakehouse Village, Warners Bay

21 April 2017
Revision B

Document Control

Rev No	Date	Revision Details	BA	Author	Verifier	Approver
A	11 Apr 2016	Draft	506	AV	MH	MH
B	21 Apr 2017	Final Compliance	506	AV	MH	MH

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1. Thermal Performance Requirements

1.1 Introduction

An assessment has been carried out by Certis Energy to check compliance with Building Sustainability Index (BASIX) requirement in NSW. The alterations and additions section of the BASIX assessment tool aims to reduce the energy required to heat and cool homes through improved glazing, insulation, building design and construction materials

This report provides the outcomes of this assessment showing that the new works is compliant with BASIX.

1.2 Scope

The assessment of the thermal performance compliance has been carried out for the class 2 building at:

- 482 The esplanade, Warners Bay, NSW

1.3 Definition of terms

Complies – indicates the documents as assessed, demonstrate compliance has been achieved with the design.

Envelope – The building *envelope* is defined as the building's fabric that separates a conditioned space or habitable room from;

a) the exterior of the building; or
b) a non-conditioned space including;
   i) the floor of a rooftop plant room, lift machine room or the like; and
   ii) the floor above a car park or warehouse; and
   iii) the common wall with a car park or warehouse or the like,

other than a non-conditioned space through which conditioned air is being exhausted or relieved such as an internal corridor, cleaner's room, chemical storage room or exhaust riser.

1.4 Building Envelope Properties

Based on documentation and input from project manager, the following building envelope properties for the new roof have been used for this assessment.

1. Roofing - All roof/ceiling elements shall have an insulation provision of minimum R-1.0 insulation on the underside, reflective foil on the inside and ceiling insulation of R-4.0
2. Roofing - Exterior roof finish is assumed to be medium tone, with a solar absorptance value of around 0.5.
3. Floor (Units) - Ground Level floor concrete slab is assumed to have no insulation
4. External Wall - All external walls are considered to be brickwork with a minimum insulation provision of R-2.0
5. External Wall - All external wall finishes are assumed to be of medium tone, with a solar absorptance value of around 0.5
6. Internal Wall – The inter-unit wall is assumed to have a minimum insulation provision of R-1.0
7. Internal Wall - All other internal walls are assumed to have no insulation provision

The following windows and doors (glazed) specifications are assumed for this assessment:

- U-value of 4.7 W/m^2.k and SHGC of 0.50

Measurements of glazed openings and shading devices are taken as per the design drawings.

All windows and glazed doors are assumed to have operability.

All window and doors are assumed to have weather-stripped.

No ceiling fan has been considered

Bathrooms / Ensuites are assumed to have provided with sealed exhaust fans.

More details of these properties / assumptions are given in *Appendix A.*

Hot water	Domestic hot water is electric instantaneous type.
Water fixtures	• Shower heads are to be 3 star (>4.5 but<= 6l/min) • Toilets are with 4 Stars • Kitchen taps are with 4 Stars • Bathrooms are with 5 Stars • Common toilet is with 5 star toilets and 5 star taps
Landscape	Area of landscape as indicated in the drawings
Rain water tank	Two rain water tanks of 3000l capacity each to be installed in location as shown in the drawing
Lighting numbers	According to the BASIX default numbers, refer NatHERS certificates for the exact numbers. The insulation loss due to each Downlight is to be not more than 160X160mm. For units 28 & 30 in lakefront building (also known as 'the esplanade' building) the lighting type is surface mounted LED Hence there is no ceiling insulation loss
Lighting types	Fluorescent type down lights in all units except unit 28 & 30 of lakefront building where it is LED's.
Cooking appliances	Cooking appliances are to be "Electric cooktop with electric oven" type
Ventilation fans:	Kitchen, laundry & bathrooms are with exhaust fans with manual ON/OFF switch. The exhaust fans are ducted type connected to façade or roof.
Notes:	1. The dwelling design should allow for insulation to be installed in compliance with the National Construction Code Part 3.12.1.1.
	2. The dwelling design should allow for the requirements of the National Construction Code Part 3.12.5 for the design, location and insulation of services to be met.
	3. Windows to be sealed with weather stripped.

1.5 Thermal Assessment Method

Approved computer software (AccuRate Sustainability V2.3.3.13 SP3) was used to for the simulation method.

1.6 BASIX Results and Conclusion

With the construction details indicated in Section 1.4 of this report, the proposed dwellings would meet the above mentioned thermal load requirements

The project team shall note the following:

1. All assumptions related to construction details given in Section 1.4 and Appendix A of this report need to be reviewed and confirmed by design team.

2. Any glazing selection for final design should be verified from the Window Energy Rating Scheme website (WERS).

3. Any building performance details other than the one assumed in this report shall be informed to CERTIS Energy for re-assessment

CERTIS ENERGY ASSESSMENT

CERTIS Energy
THERMAL PERFORMANCE REPORT
Technical Assessment of Design Drawings

Star Ratings

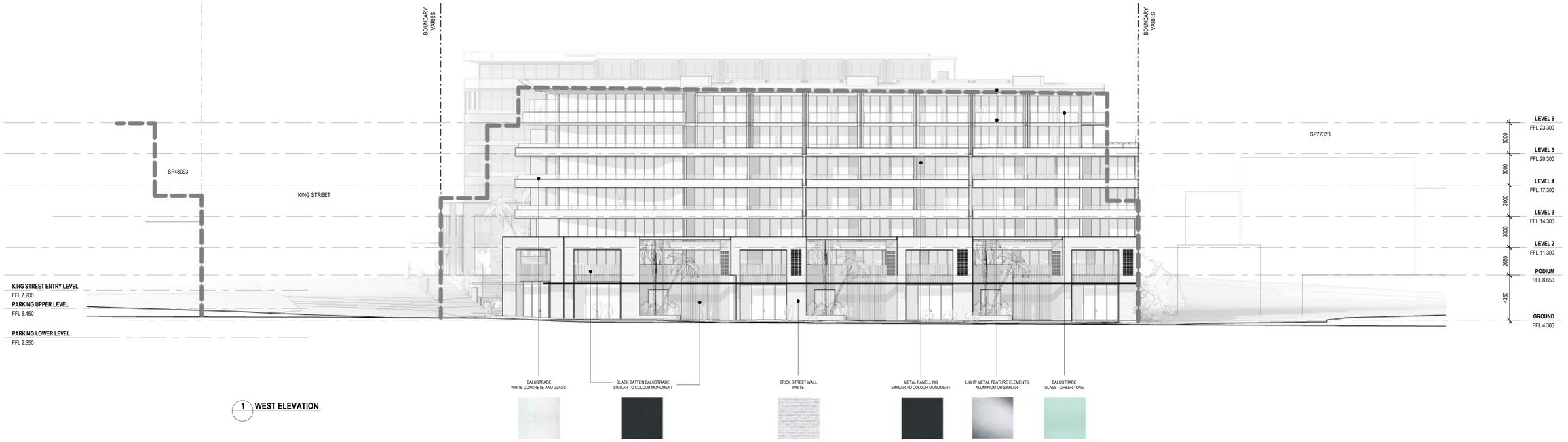
	The esplande			BASIX Area			
Unit number	**Conditioned Area**	**un con area**	**Con Area**	**Un con Area**	**Heating**	**Cooling**	**star ratings**
48	100.6	3.9	104.5		69.5	13.6	5.1
49	107.1	3.9	111		50.6	15.2	6.1
31	107.4	3.9	111.3		47.1	14.2	6.3
32	107.1	3.9	111		48.3	14.8	6.2
1	83.9	0.8	84.7		59	17.1	5.4
2	46.5	2.1	48.6		100.9	13.7	3.9
3	99.8	1.5	101.3		77	30.9	4.2
4	79.5	2.9	82.4		43.2	17.9	6.3
5	99.4	1.5	100.9		97.8	23.8	3.8
50	75.2	3.7	78.9		41.2	16.2	6.5
51	46.6	2.1	48.7		54.2	16.4	5.8
8	99.8	1.5	101.3		68.5	34	4.4
9	79.9	2.9	82.8		32.6	20.7	6.8
10	99.8	1.5	101.3		63.6	29.8	4.7
59	146.2	4.6	150.8		58	22.6	5.3
23	99.8	1.5	101.3		72.2	29.5	4.4
60	146.2	4.6	150.8		99.1	32.8	3.5
24	79.9	3.6	83.5		35.1	20.9	6.6
25	99.8	1.5	101.3		71.9	26.8	4.4
29	79.9	3.5	83.4		74.5	32.2	4.2
30	99.8	1.5	101.3		104.9	36.8	3.3
28	99.8	1.5	101.3		111.6	37.8	3.2
52	84.1	0.8	84.9		41.9	17	6.4
33	84.6	0.8	85.4		39.9	10.7	6.9
35	84.6	0.8	85.4		43.2	10.8	6.8
34	46.9	2.1	49		54.3	17.2	5.8
7	46.9	2.1	49		54.6	17.5	5.7
6	84.6	0.8	85.4		40.3	10.8	6.9
26	84.6	0.8	85.4		84.5	17.3	4.4
27	46.9	2.1	49		100.9	24.8	3.7
45	84.6	0.8	85.4		82.6	17.8	4.4
47	84.6	0.8	85.4		86.6	17.9	4.3
46	46.9	2.1	49		100.1	25.3	3.7
27	46.9	2.1	49		99.9	25.6	3.7
26	84.6	0.8	85.4		82.2	17.7	4.4
23	46.9	2.1	49		87.1	22.1	4.1
21	84.6	0.8	85.4		41.3	10.7	6.9
44	84.6	0.8	85.4		45.1	11	6.6

43	46.9	2.1	49		58.3	16.8	5.5
42	84.6	0.8	85.4		70.1	13.5	5.1
20	99.8	1.5	101.3		72.5	26.7	4.4
19	79.9	3.4	83.3		34.3	20.8	6.7
18	99.8	1.5	101.3		72.4	33.2	4.3
17	46.9	2.1	49		78.7	18.8	4.5
22	46.9	2.1	49		81.5	20.1	4.4
16	84.6	0.8	85.4		40.9	10.8	6.9
41	84.6	0.8	85.4		44.7	11.2	6.6
40	76.9	2.1	79		55.3	15.2	5.8
39	84.6	0.8	85.4		69.8	13.4	5.1
58	84.6	0.8	85.4		73.7	13.5	4.9
57	46.9	2.1	49		55.3	15.2	5.8
56	75.2	3.7	78.9		56.5	12.3	5.9
53	75.2	3.7	78.9		67.5	11.9	5.9
15	99.8	1.5	101.3		71.5	26.9	4.4
14	79.9	3.7	83.6		34.2	20.9	6.7
13	99.8	1.5	101.3		71.1	34.8	4.3
12	46.9	2.1	49		77.8	18.7	4.6
11	84.6	0.8	85.4		40.7	11.1	6.9
38	84.6	0.8	85.4		44	11	6.7
37	46.9	2.1	49		54.5	15.5	5.8
36	84.6	0.8	85.4		69	13.4	5.2
55	84.6	0.8	85.4		72.9	13.7	4.9
54	46.9	2.1	49		54.5	15.5	5.8

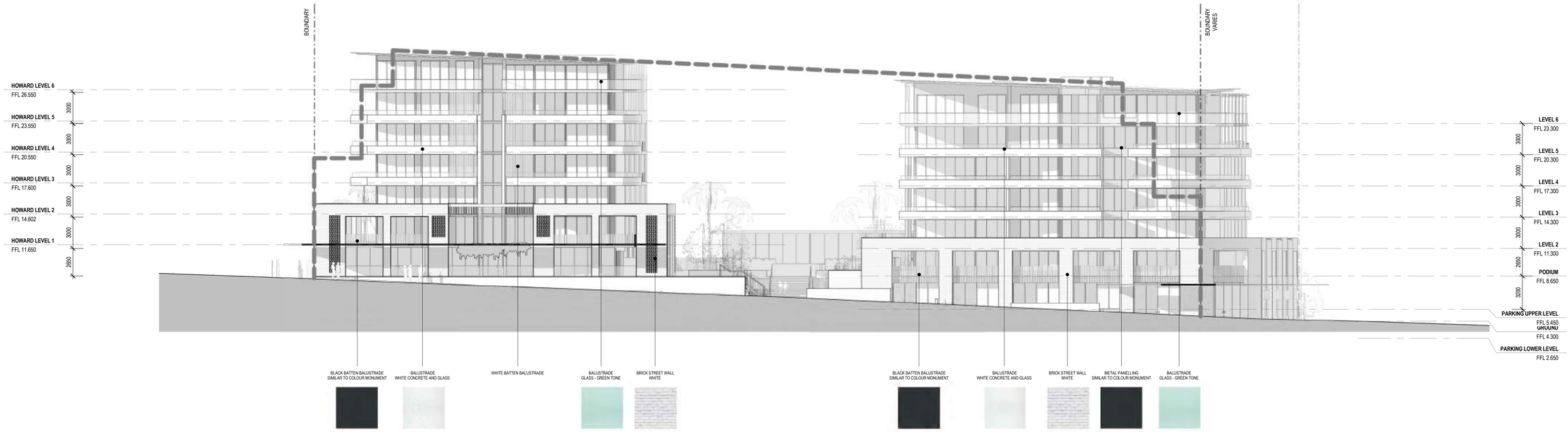
	Howard street			BASIX Area			
Unit number	**Conditioned Area**	**un con area**	**Con Area**	**Un con Area**	**Heating**	**Cooling**	**star ratings**
3	65.7	3.4	69.1		76.3	20.2	4.6
1	65.7	3.4	69.1		82.7	17.8	4.4
5	54.6	4.2	58.8		57.3	16.8	5.6
9	89.9	1.7	91.6		57.2	30.2	4.9
10	92.2	1.5	93.7		47.8	29.3	5.4
11	83.2	3.3	86.5		31.1	15.7	7.2
18	83.3	3.3	86.6		45.3	16.5	6.3
50	83.3	3.3	86.6		71.5	28	4.4
17	83.3	3.3	86.6		41.9	14.7	6.6
49	83.3	3.3	86.6		62.6	26.9	4.9
48	83.3	3.3	86.6		67.3	26.4	4.7
47	83.3	3.3	86.6		62.6	26.9	4.9
46	83.3	3.3	86.6		67.3	26.4	4.7

45	83.3	3.3	86.6		62.6	26.9	4.9
44	83.3	3.3	86.6		67.3	26.4	4.7
443	83.3	3.3	86.6		62.6	26.9	4.9
2	65.7	3.4	69.1		76.3	20.2	4.6
4	65.7	3.4	69.1		72.9	19.8	4.7
6	54.6	4.2	58.8		54.8	16.2	5.8
7	54.6	4.2	58.8		54.8	16.2	5.8
8	54.6	4.2	58.8		55	15.9	5.8
21	54.6	4.2	58.8		65.1	13.6	5.4
22	54.6	4.2	58.8		62.4	12.9	5.5
23	54.6	4.2	58.8		62.9	12.9	5.5
24	54.6	4.2	58.8		62.5	12.8	5.5
34	83.3	3.3	86.6		39.3	14.9	6.7
33	83.3	3.3	86.6		32.8	11.8	7.3
32	83.3	3.3	86.6		32.8	11.8	7.3
31	83.3	3.3	86.6		32.6	12	7.3
12	83.2	3.3	86.5		24.6	15.7	7.6
13	83.2	3.3	86.5		31	15.8	7.2
14	83.2	3.3	86.5		24.5	15.6	7.6
15			0		31	15.8	7.2
16			0		24.5	15.6	7.6
37	54.6	4.2	58.8		67.1	13.2	5.3
38	54.6	4.2	58.8		64.7	12.5	5.4
39	54.6	4.2	58.8		64.7	12.5	5.4
40	54.6	4.2	58.8		64.6	12.6	5.4
27	83.2	3.3	86.5		36.6	13..5	6.9
28	83.2	3.3	86.5		29.7	13.6	6.9
29	83.2	3.3	86.5		36.5	13.6	6.9
30	83.2	3.3	86.5		32.1	13	7.3
19	89.9	1.7	91.6		61.7	29.6	4.8
20	92.2	1.5	93.7		42.6	30.2	5.7
26	92.2	1.5	93.7		38.5	30	5.9
25	89.9	1.7	91.6		59.4	29.8	4.9
35	89.9	1.7	91.6		60.4	29.4	4.8
36	92.2	1.5	93.7		39.3	30.2	5.9
41	89.9	1.7	91.6		60.3	29.2	4.9
42	92.2	1.5	93.7		39.8	30	5.8
51	89.9	1.7	91.6		71.3	40.2	4.1
52	92.2	1.5	93.7		71.3	40.2	4.1

2 – FLOOR PLANS



1 **WEST ELEVATION**



2 **NORTH ELEVATION**

REV	DESCRIPTION	DATE
A	DRAFT SUBMISSION	03.04.2017
B	ISSUE FOR DEVELOPMENT APPLICATION	13.04.2017

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PROJECT **LAKEHOUSE VILLAGE**
LOT 3&4 DP 32518, LOT 1 DP 90877, LOT 1-3 DP 155951, LOT 112 DP 578045
482 THE ESPLANADE, WARNERS BAY

PROJECT No. **1635**

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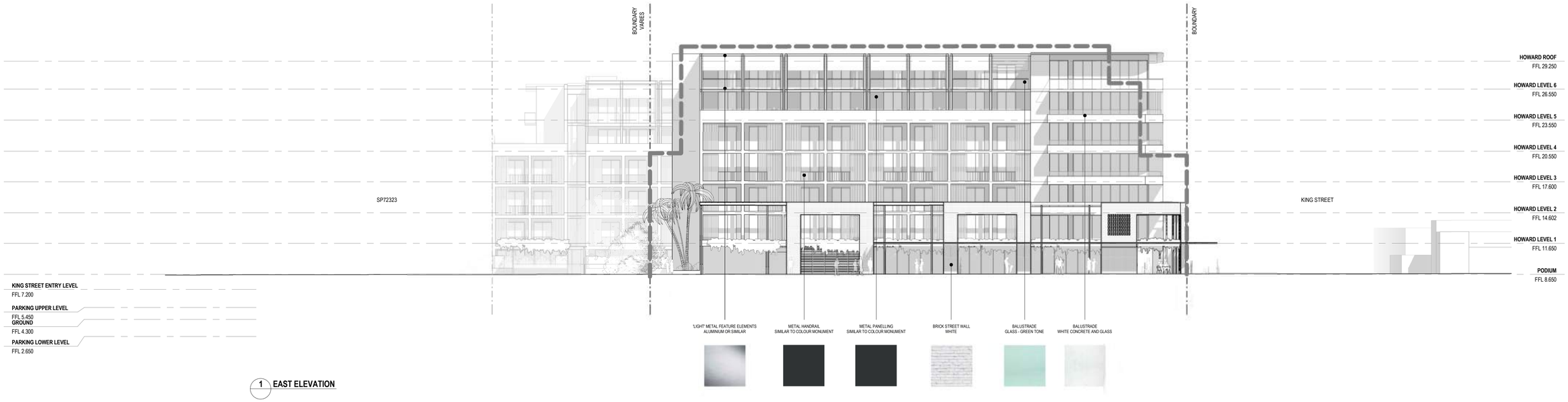
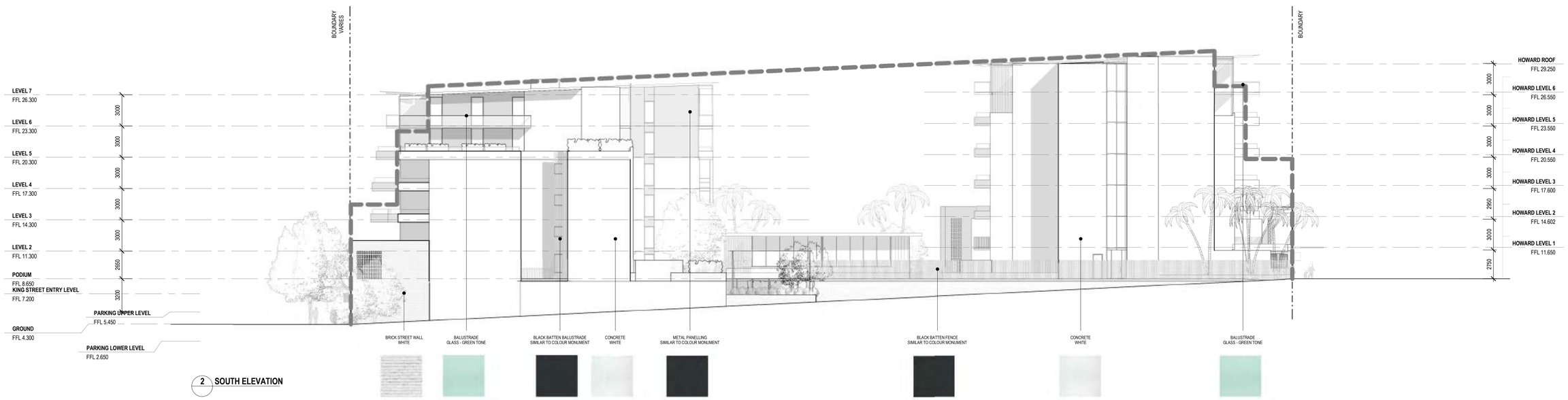
DRAWING No. **DA201**
DRAWING TITLE **ELEVATIONS - WEST / NORTH**
SCALE **1 : 200 @ A1**
DATE **2017**



1 EAST ELEVATION



2 SOUTH ELEVATION

REV	DESCRIPTION	DATE
A	DRAFT SUBMISSION	03.04.2017
B	ISSUE FOR DEVELOPMENT APPLICATION	13.04.2017

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DRAWING No. **DA202**
DRAWING TITLE **ELEVATIONS - EAST / SOUTH**
SCALE **1 : 200 @ A1**
DATE **2017**

1 **INTERNAL - ESPLANADE BUILDING**

2 **INTERNAL - HOWARD ST BUILDING**

REV	DESCRIPTION	DATE
A	DRAFT SUBMISSION	03.04.2017
B	ISSUE FOR DEVELOPMENT APPLICATION	13.04.2017

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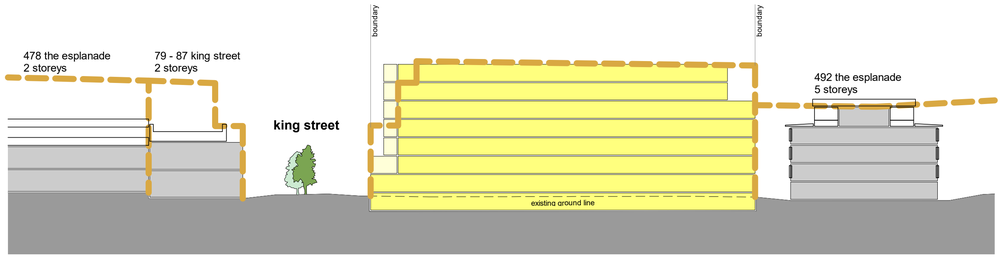
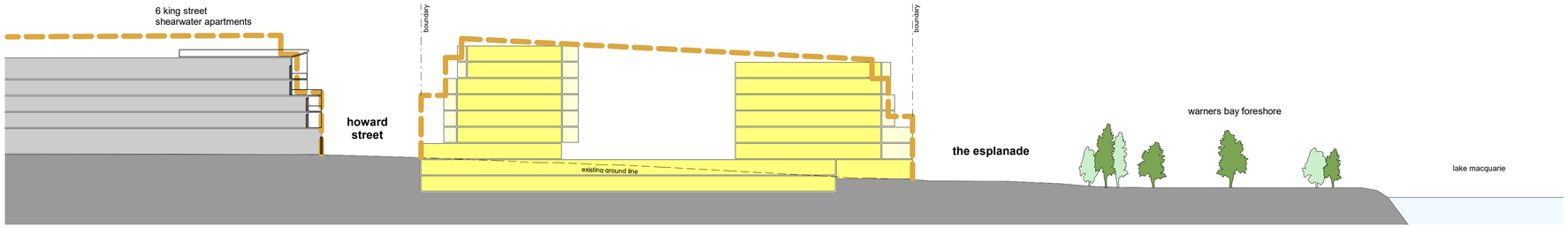
DRAWING No. **DA203**
DRAWING TITLE **ELEVATIONS - INTERNAL**
SCALE **1 : 200 @ A1**
DATE **2017**



SECTION NORTH/SOUTH



SECTION EAST/WEST

KEY

- EXISTING BUILT CONTEXT
- PROPOSED BUILDING ENVELOPE
- WARNERS BAY TOWN CENTRE PLAN BUILDING ENVELOPES

view of site corner on howard + king streets

view across king street to site

view across king street to site

REV	DESCRIPTION	DATE
A	DRAFT SUBMISSION	03.04.2017
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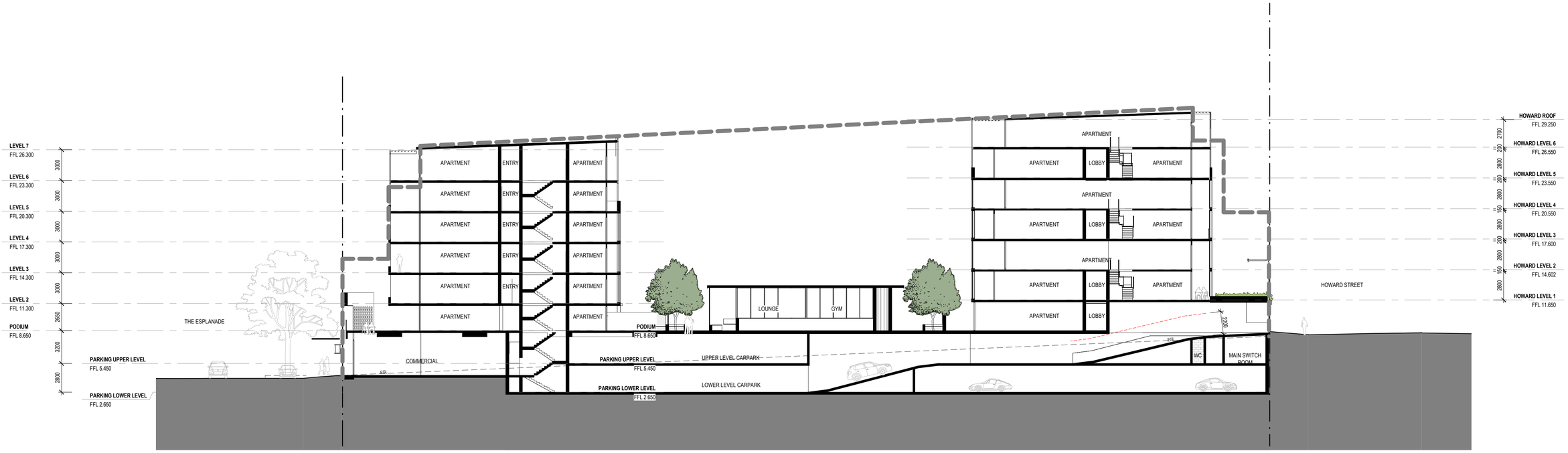
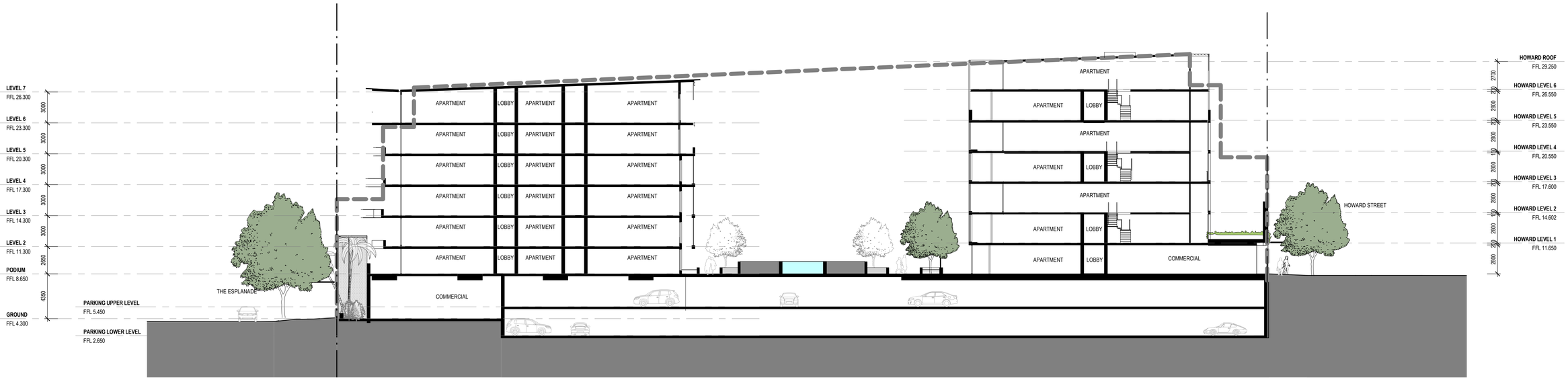
DRAWING No. **DA300**
DRAWING TITLE **SITE SECTIONS**
SCALE **1 : 500 @ A1**
DATE **2017**



AA SECTION AA



BB SECTION BB

REV	DESCRIPTION	DATE
A	SEPP 65 DESIGN REVIEW PANEL	23.11.2016
B	ISSUE FOR DEVELOPMENT APPLICATION	13.04.2017

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PROJECT **LAKEHOUSE VILLAGE**
LOT 3&4 DP 32518, LOT 1 DP 90877, LOT 1-3 DP 155951, LOT 112 DP 578045
482 THE ESPLANADE, WARNERS BAY

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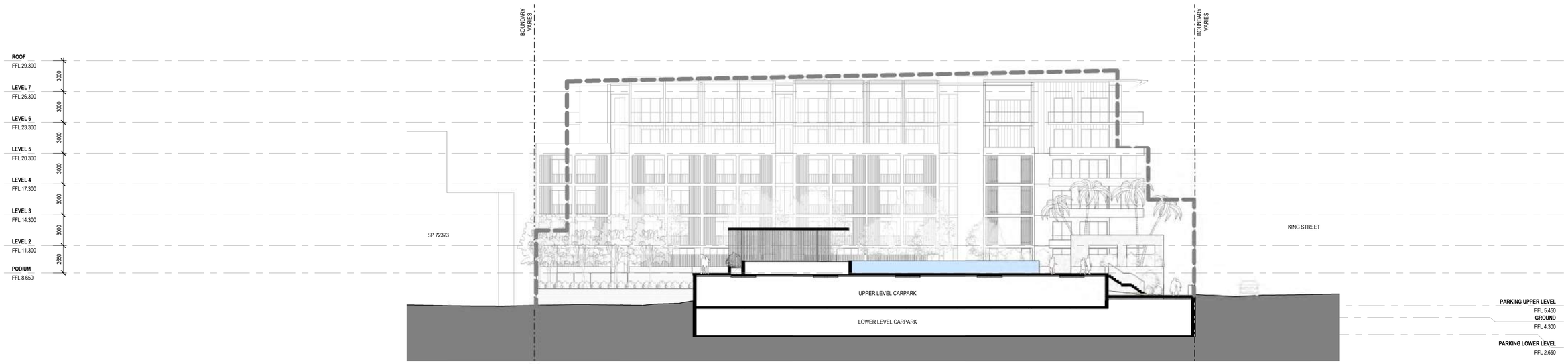
DRAWING No. **DA301**
DRAWING TITLE **SECTIONS**
SCALE **1 : 200 @ A1**
DATE **2017**



CC SECTION CC

REV	DESCRIPTION	DATE
A	DRAFT SUBMISSION	03.04.2017
B	ISSUE FOR DEVELOPMENT APPLICATION	13.04.2017

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DRAWING No. **DA302**
DRAWING TITLE **SECTIONS**
SCALE **1 : 200 @ A1**
DATE **2017**

REV	DESCRIPTION	DATE
A	SEPP 65 DESIGN REVIEW PANEL	23.11.2016
B	DRAFT SUBMISSION	03.04.2017
C	ISSUE FOR DEVELOPMENT APPLICATION	13.04.2017

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DRAWING No. **DA401**
DRAWING TITLE **PERSPECTIVE**
SCALE
DATE **2017**

REV	DESCRIPTION	DATE
A	DRAFT SUBMISSION	03.04.2017
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PROJECT **LAKEHOUSE VILLAGE**
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482 THE ESPLANADE, WARNERS BAY

PROJECT No. **1635**

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DRAWING No. **DA402**
DRAWING TITLE **PERSPECTIVE**
SCALE
DATE **2017**

REV	DESCRIPTION	DATE
A	DRAFT SUBMISSION	03.04.2017
B	ISSUE FOR DEVELOPMENT APPLICATION	13.04.2017

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PROJECT **LAKEHOUSE VILLAGE**
LOT 3&4 DP 32518, LOT 1 DP 90877, LOT 1-3 DP 155951, LOT 112 DP 578045
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PROJECT No. **1635**

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DRAWING No. **DA403**
DRAWING TITLE **PERSPECTIVE**
SCALE **@ A1**
DATE **2017**

REV	DESCRIPTION	DATE
A	DRAFT SUBMISSION	03.04.2017
B	ISSUE FOR DEVELOPMENT APPLICATION	13.04.2017

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PROJECT **LAKEHOUSE VILLAGE**
LOT 3&4 DP 32518, LOT 1 DP 90877, LOT 1-3 DP 155951, LOT 112 DP 578045
482 THE ESPLANADE, WARNERS BAY

PROJECT No. **1635**

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DRAWING No. **DA404**
DRAWING TITLE **PERSPECTIVE**
SCALE
DATE **2017**

REV	DESCRIPTION	DATE
A	DRAFT SUBMISSION	03.04.2017
B	ISSUE FOR DEVELOPMENT APPLICATION	13.04.2017

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PROJECT **LAKEHOUSE VILLAGE**
LOT 3&4 DP 32518, LOT 1 DP 90877, LOT 1-3 DP 155951, LOT 112 DP 578045
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PROJECT No. **1635**

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DRAWING No. **DA405**
DRAWING TITLE **PERSPECTIVE**
SCALE **@ A1**
DATE **2017**

1 SOUTH PERSPECTIVE

REV	DESCRIPTION	DATE
A	ISSUE FOR DEVELOPMENT APPLICATION	13.04.2017

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PROJECT **LAKEHOUSE VILLAGE**
LOT 3&4 DP 32518, LOT 1 DP 90877, LOT 1-3 DP 155951, LOT 112 DP 578045
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PROJECT No. **1635**

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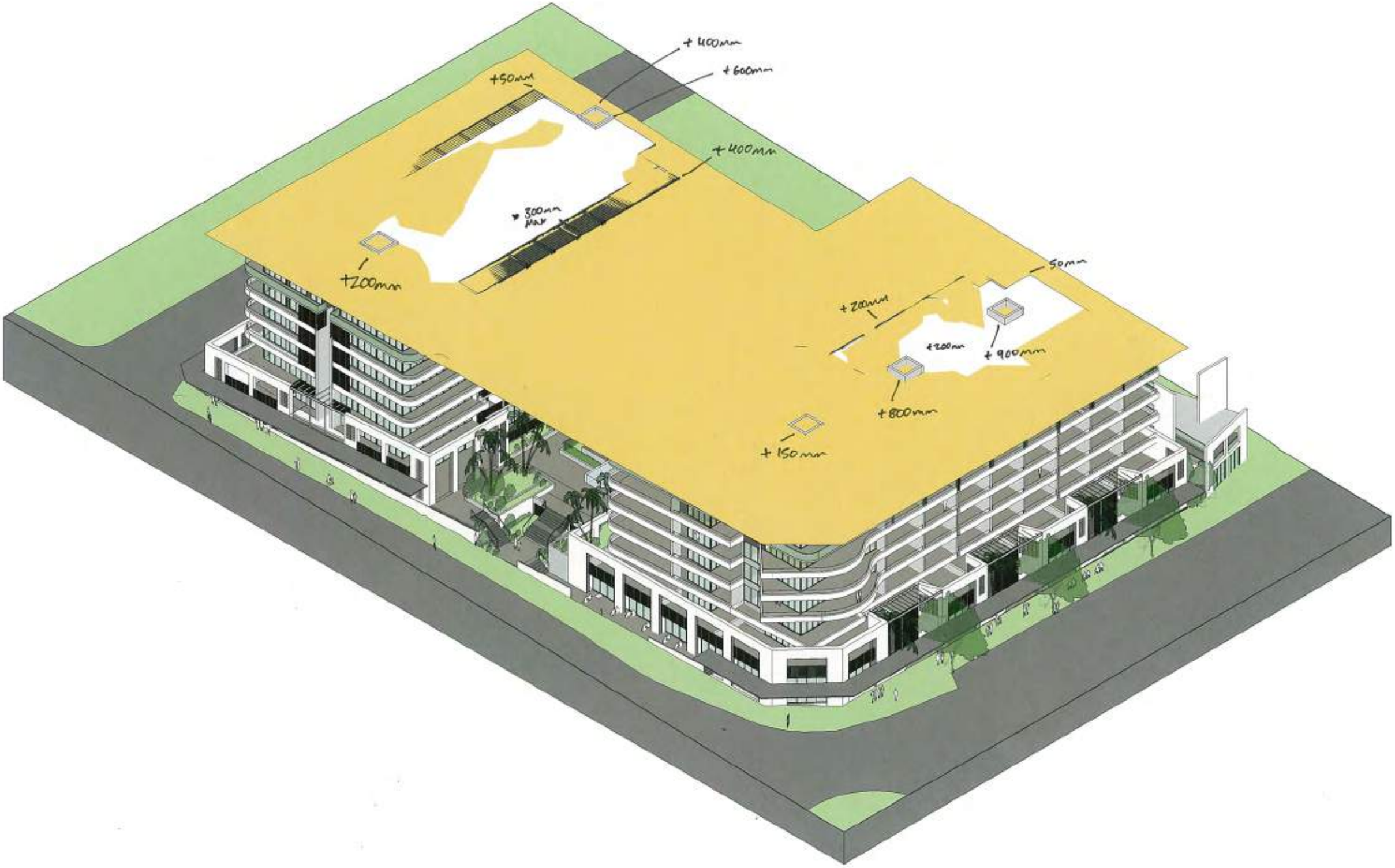
DRAWING No. **DA406**
DRAWING TITLE **PERSPECTIVE**
SCALE **@ A1**
DATE **2017**



UNCONTROLLED ISSUE

REV	DESCRIPTION	DATE

SHAC

STEWART ARCHITECTURE

PROJECT LAKEHOUSE VILLAGE
LOT 364 DP 30518, LOT 1 DP 60871, LOT 1-3 DP 15969, LOT 112 DP 57005
460 THE ESPLANADE WARNERS BAY

PROJECT No. 1635

DRAWING No. DA400
DRAWING TITLE Renewal
SCALE @ A1
DATE 2017

LAKEHOUSE VILLAGE

LOT 3&4 DP 32518, LOT 1 DP 90877, LOT 1-3
DP 155951, LOT 112 DP 578045
482 THE ESPLANADE, WARNERS BAY

DEVELOPMENT APPLICATION SHEET LIST

DA000	LOCATION & DRAWING SCHEDULE	B
DA001	PLAN - CONTEXT	B
DA002	PLAN - SITE ANALYSIS	C
DA005	PLAN - DEMOLITION	C
DA006	PLAN - CONSOLIDATION	B
DA007	PLAN - SITE	C
DA008	SHADOW DIAGRAMS	B
DA009	SHADOW DIAGRAMS	B
DA010	SHADOW DIAGRAMS	A
DA101	PLAN - BASEMENT 1	B
DA102	PLAN - LOWER GROUND	B
DA103	PLAN - UPPER GROUND	B
DA104	PLAN - LEVEL 2	B
DA105	PLAN - LEVEL 3	B
DA106	PLAN - LEVEL 4	B
DA107	PLAN - LEVEL 5	B
DA108	PLAN - LEVEL 6	B
DA109	PLAN - LEVEL 7	B
DA110	PLAN - ROOF	B
DA181	PLAN - ADAPTABLE UNITS	B
DA182	PLAN - ADAPTABLE UNITS	B
DA183	PLAN - ADAPTABLE UNITS	B
DA200	STREETSCAPE ELEVATIONS	B
DA201	ELEVATIONS - WEST / NORTH	B
DA202	ELEVATIONS - EAST / SOUTH	B
DA203	ELEVATIONS - INTERNAL	B
DA300	SITE SECTIONS	B
DA301	SECTIONS	B
DA302	SECTIONS	B
DA401	PERSPECTIVE	C
DA402	PERSPECTIVE	B
DA403	PERSPECTIVE	B
DA404	PERSPECTIVE	B
DA405	PERSPECTIVE	B
DA406	PERSPECTIVE	A
DA501	WINDOW SCHEDULE	A

REV	DESCRIPTION	DATE
A	DRAFT SUBMISSION	03.04.2017
B	ISSUE FOR DEVELOPMENT APPLICATION	13.04.2017

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PROJECT **LAKEHOUSE VILLAGE**
LOT 3&4 DP 32518, LOT 1 DP 90877, LOT 1-3
DP 155951, LOT 112 DP 578045
482 THE ESPLANADE, WARNERS BAY

PROJECT No. **1635**

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DRAWING No. **DA000**
DRAWING TITLE **LOCATION & DRAWING SCHEDULE**
SCALE **1 : 8 @ A1**
DATE **2017**

EXISTING BUILT CONTEXT
ROADS
PUBLIC OPEN SPACE
LOCAL BUSINESS CENTRE
WARNERS BAY TOWN CENTRE PLAN EXTENT
PRIMARY BUS ROUTE
EXISTING CYCLE PATH
PROPOSED CYCLE PATH
BUS STOP

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DRAWING No. **DA001**
DRAWING TITLE **PLAN - CONTEXT**
SCALE **1 : 1000 @ A1**
DATE **2017**

EXISTING SITE BUILDINGS

1 16 king street
single storey
service station

site potentially underlain
by contaminated soil

2 14 king street
single storey
weatherboard residence

3 12 king street
single storey
corner shop / cafe

4 1 howard street
single storey
masonry residence

5 486 - 488 the esplanade
double storey
weatherboard residence

EXISTING BUILT CONTEXT
ROADS
PUBLIC OPEN SPACE
PROPOSED PUBLIC SQUARE
POTENTIAL CONTAMINATED SOIL
PROPOSED SITE ACCESS POINT
CYCLE PATH
DRESS CIRCLE STREETSCAPE
TOWN CENTRE CORE STREETSCAPE

REV	DESCRIPTION	DATE
A	SEPP 65 DESIGN REVIEW PANEL	23.11.2016
B	DRAFT SUBMISSION	03.04.2017
C	ISSUE FOR DEVELOPMENT APPLICATION	13.04.2017

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DRAWING No. **DA002**
DRAWING TITLE **PLAN - SITE ANALYSIS**
SCALE **1 : 500 @ A1**
DATE **2017**

LEGEND

- TREES TO BE RETAINED
- TREES TO BE REMOVED
- EXISTING STRUCTURE TO BE DEMOLISHED
- HARD SURFACES TO BE DEMOLISHED
- VERGE CROSSING TO BE DEMOLISHED / RECONSTRUCTED
- BOUNDARY SITE
- BOUNDARY CONTEXT
- MAJOR CONTOURS
- MINOR CONTOURS
- SIGN
- STREET LIGHT
- BOLLARD
- ELECTRICITY POLE
- SEWER MANHOLE
- STORM WATER MANHOLE
- WATER METRE PIT
- COMMUNICATIONS PIT
- FIRE HYDRANT
- SERVICES PIT

DEMOLITION STRATEGY

PROPOSED METHOD:
DISMANTLE TILE ROOFS, TIMBER TRUSSES AND TIMBER BEAMS FOR SALVAGE AND SALE. BRICKS FROM BRICK VENEER WALLS TO BE DISMANTLED BY HAND AND SOLD. ANY BROKEN REMAINS TO BE CRUSHED FOR RECYCLING. INTERNAL WALLS AND FRAMES AND EXTERNAL WALL FRAMES TO BE DISMANTLED BY HAND AND TAKEN TO TIP. THE REMAINING CONCRETE SLABS TO BE DELIVERED TO AN APPROPRIATE CONCRETE RECYCLING FACILITY FOR RECYCLING

POLLUTION:
AS PER AUSTRALIAN STANDARDS AND NSW POLLUTION CONTROL LAWS

ASBESTOS:
SHOULD THERE BE ANY TRACE OF ASBESTOS IT SHOULD BE DISPOSED OF BY A SUITABLY QUALIFIED AND LICENSED PERSON AS PER AUSTRALIAN STANDARDS

EXISTING SERVICES:
ELECTRICITY TO BE DISCONNECTED AS PER AUSGRID REQUIREMENTS AND RELOCATED THROUGH TEMPORARY SUPPLY. SEWERAGE AND STORMWATER TO BE CAPPED OFF. WATER SUPPLY TO BE TERMINATED AND CONNECTED ON A TEMPORARY SUPPLY BASIS. TELEPHONE TO BE DISCONNECTED AND THE LINE REMOVED BY TELSTRA

VEGETATION:
TREES FOR REMOVAL ARE TO BE REMOVED WITHOUT DISTURBANCE TO THOSE TREES TO BE RETAINED AND TAKEN TO THE APPROPRIATE AREA OF THE TIP. CARE MUST BE TAKEN IN RELATION TO OVER-HEAD POWER LINES

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DRAWING No. **DA005**
DRAWING TITLE **PLAN - DEMOLITION**
SCALE **1 : 200 @ A1**
DATE **2017**

D08347747

NOTE: LOT 3&4 DP 32518, LOT 1 DP 90877, LOT 1-3 DP 155951 & LOT 112 DP 578045 ARE TO BE CONSOLIDATED.

FOR CLARITY SUB-BOUNDRIES ARE NOT SHOWN THROUGH THE REMAINDER OF THE ARCHITECTURAL DRAWINGS

REV	DESCRIPTION	DATE
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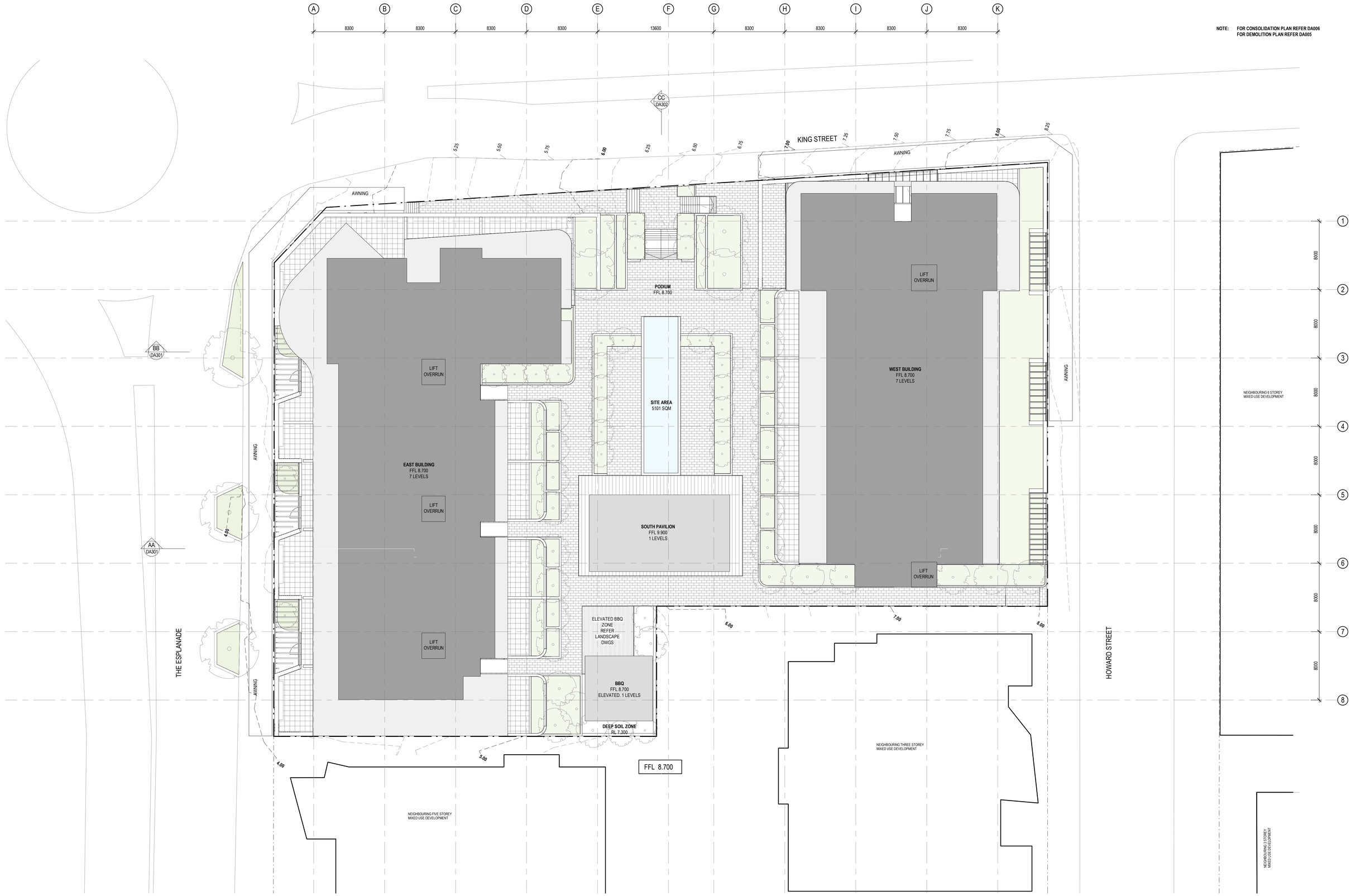
DRAWING No. **DA006**
DRAWING TITLE **PLAN - CONSOLIDATION**
SCALE **1 : 200 @ A1**
DATE **2017**

NOTE: FOR CONSOLIDATION PLAN REFER DA006
FOR DEMOLITION PLAN REFER DA005



REV	DESCRIPTION	DATE
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DRAWING No. **DA007**
DRAWING TITLE **PLAN - SITE**
SCALE **1 : 200 @ A1**
DATE **2017**

D08347747

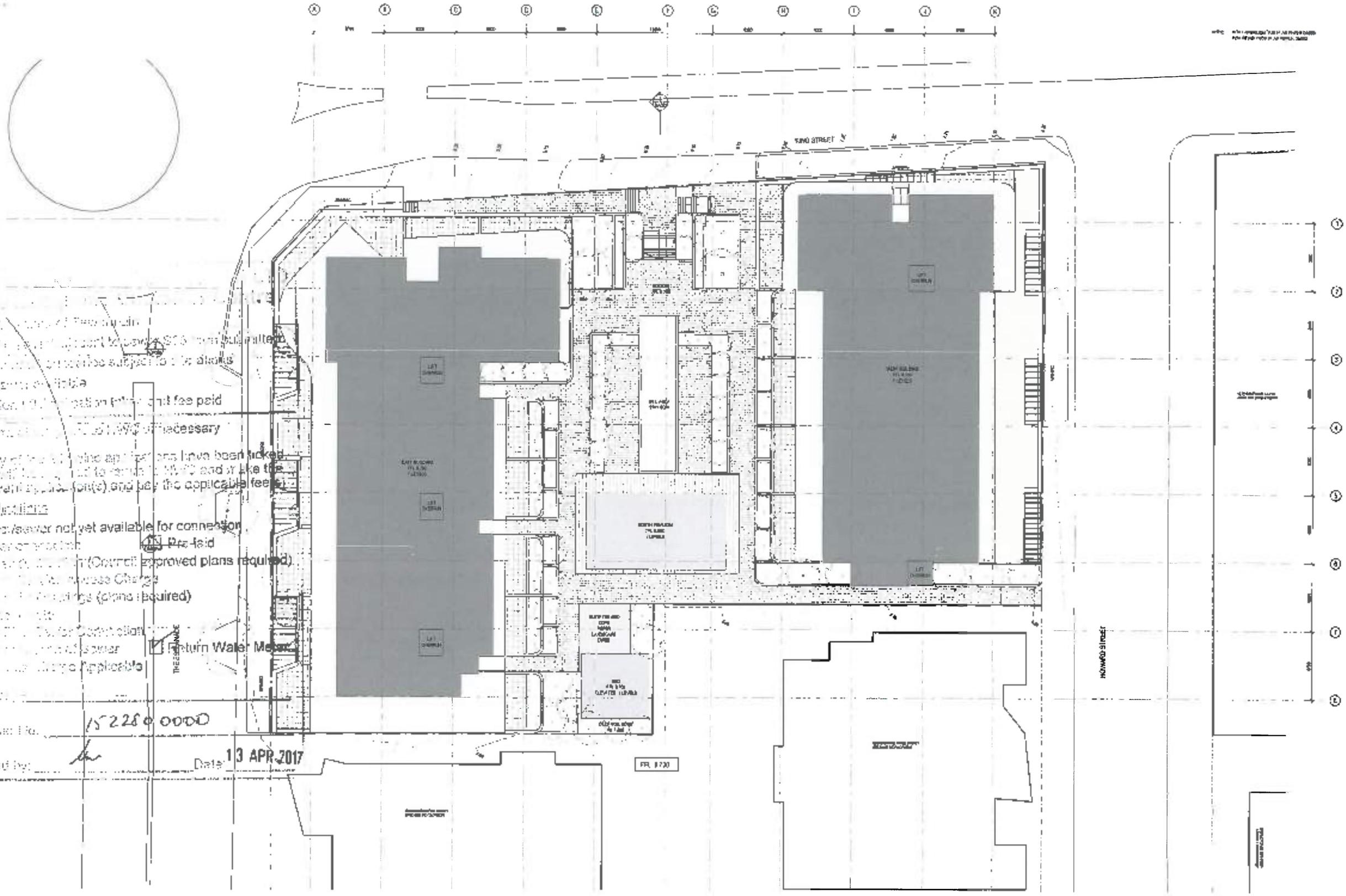
- [ ] Rainwater / Tank water
- [x] Building consent to cover SCS form submitted
- [ ] Motor vehicle crossings subject to Traffic Bylaws
- [ ] No commercial activity
- [x] Section 12 / Application Form and fee paid
- [ ] Reticulation plans / WWS if necessary
- [x] If any of the above applications have been ticked you will need to remain in touch and or like the relevant applications(s) and pay the applicable fee(s)

Applications

- [ ] Water/sewer not yet available for connection
- [x] Water connection — [x] Pre-laid
- [x] Sewer connection (Council approved plans required)
- [ ] Stormwater Connection Charge
- [x] Trade waste (plans required)
- [x] Trade waste
- [ ] Fire Water Connection
- [x] Domestic water/sewer — [x] Return Water Meter
- [ ] Sprinkler plans if applicable
- [ ] Other

Customer File: 15 228 0 0000

Checked by: [illegible] Date: 13 APR 2017



UNCONTROLLED ISSUE

No.	Description	Date
4.	[illegible]	[illegible]
3	[illegible]	[illegible]
1.	[illegible]	xxx

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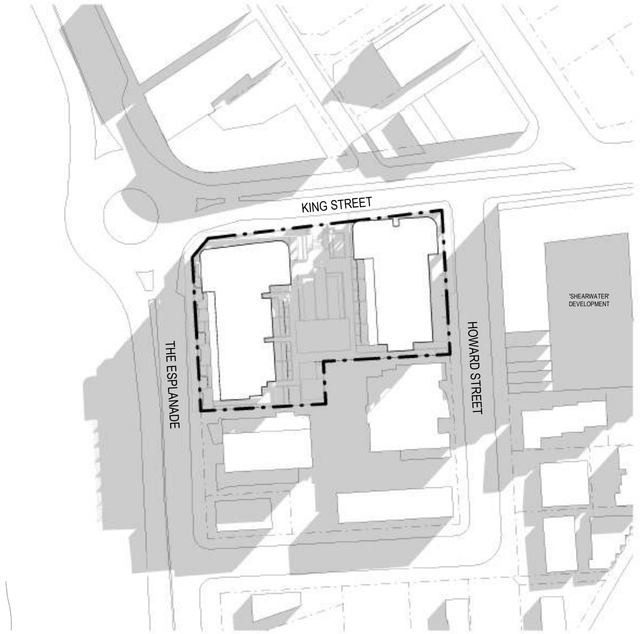
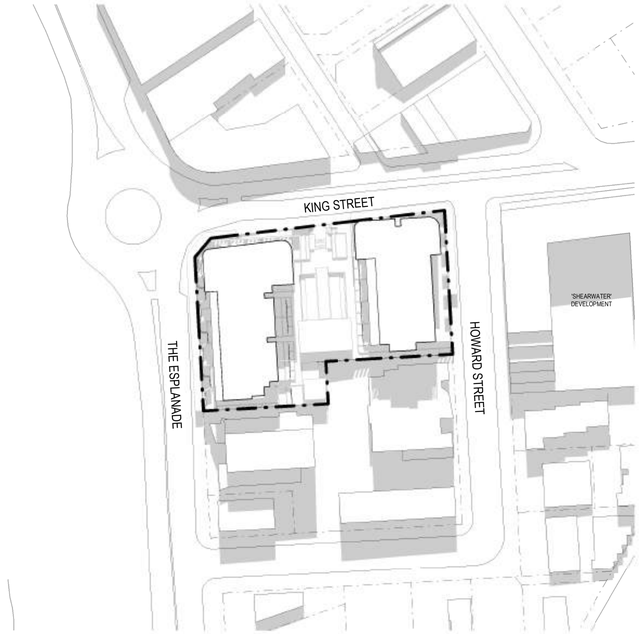
PROJECT: LAKEHOUSE VILLAGE
[illegible] LOT 1 DP [illegible], LOT 1-3 DP [illegible], LOT 1-17 DP [illegible]
[illegible] THE ESPLANADE, WAIMATE [illegible]

PROJECT No. 1635

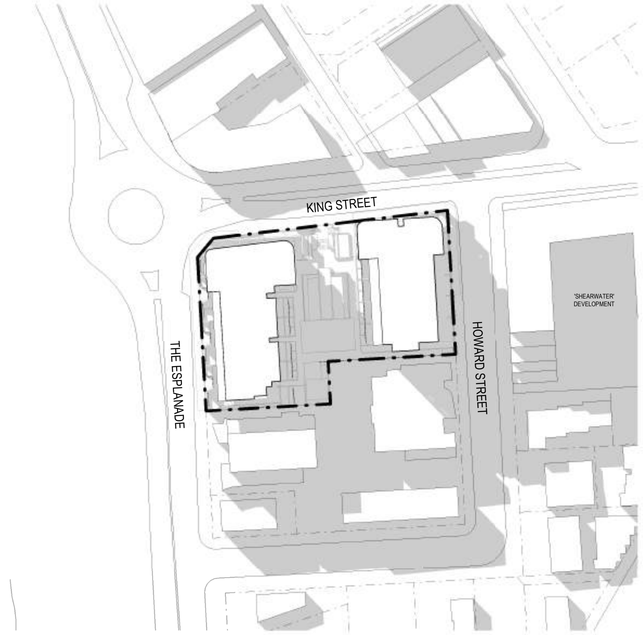
DRAWING No. [illegible]
DRAWING TITLE: PLAN SITE
SCALE: 1:500 @ A4
DATE: [illegible]



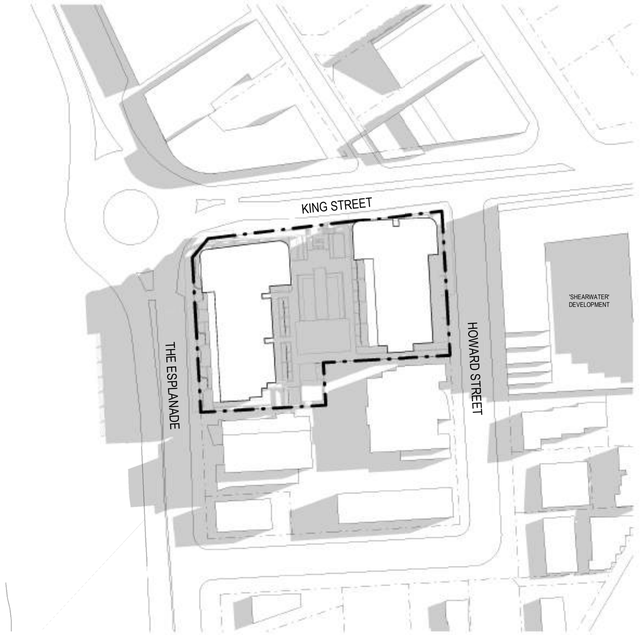
1 WINTER SOLSTICE 9am



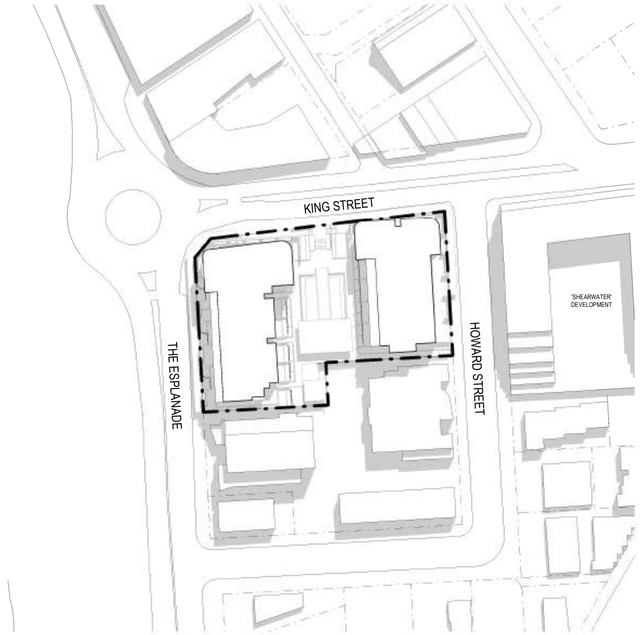
2 WINTER SOLSTICE 12pm



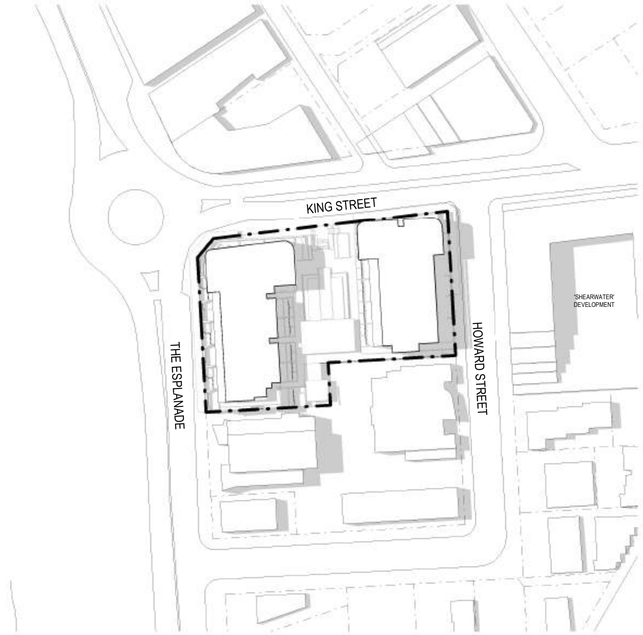
3 WINTER SOLSTICE 3pm



4 SUMMER SOLSTICE 9am



5 SUMMER SOLSTICE 12pm



6 SUMMER SOLSTICE 3pm

NOTE: ORIENTATION BASED ON SIX MAPS

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482 THE ESPLANADE, WARNERS BAY

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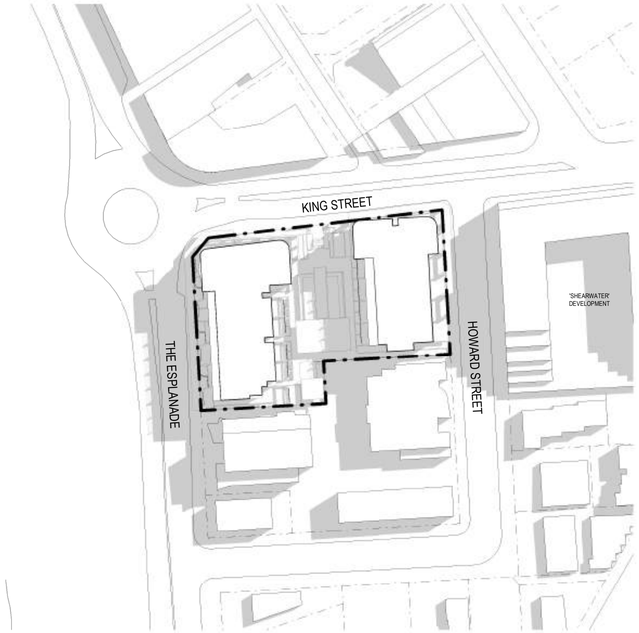
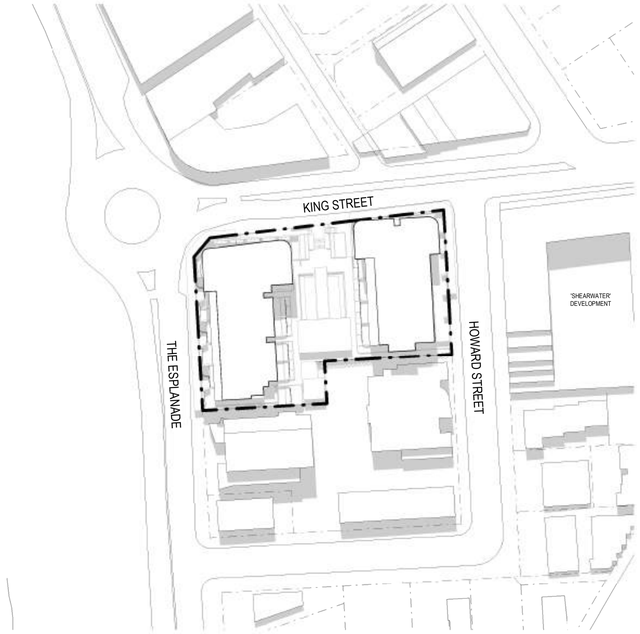
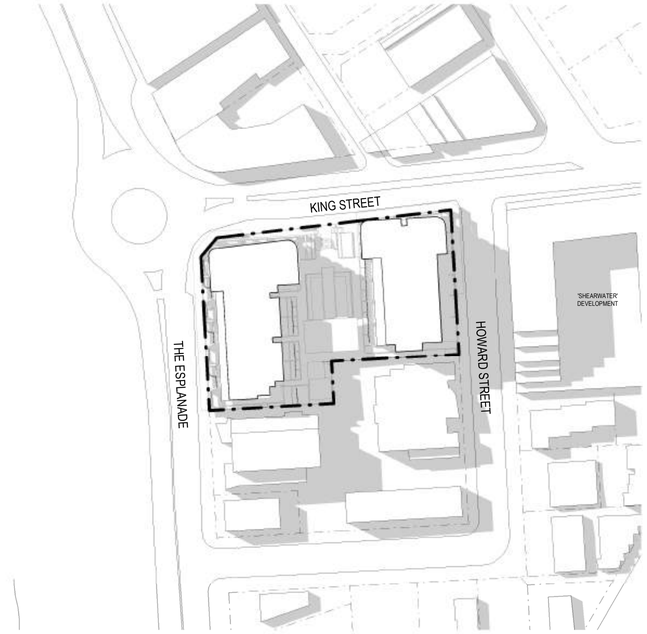
DRAWING No. **DA008**
DRAWING TITLE **SHADOW DIAGRAMS**
SCALE
DATE **2017**



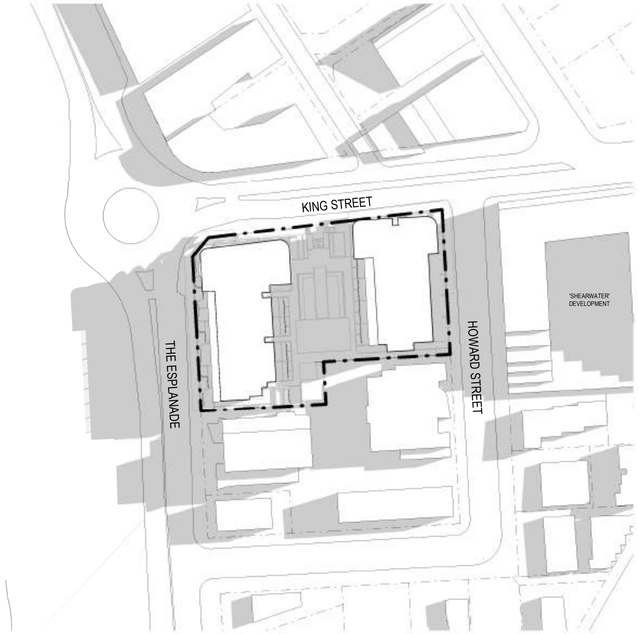
1 SEPTEMBER EQUINOX 9am



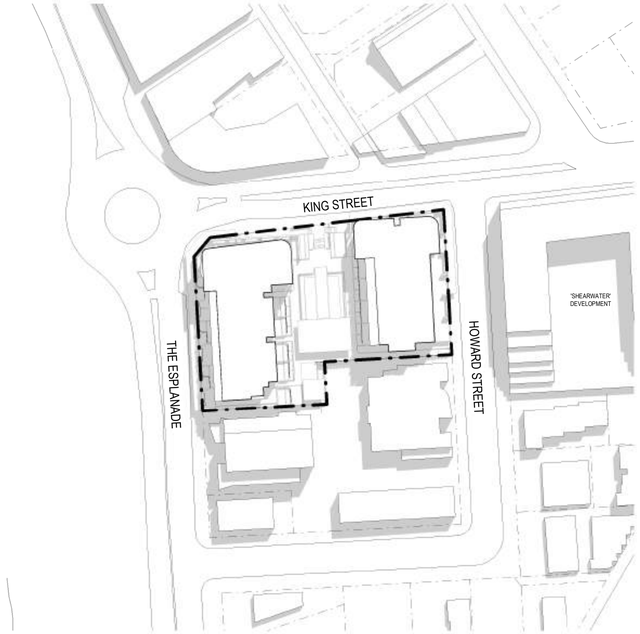
2 SEPTEMBER EQUINOX 12pm



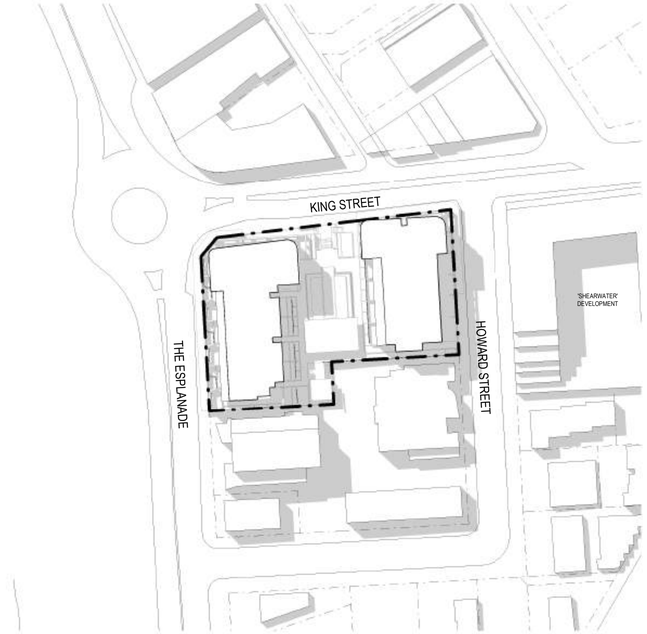
3 SEPTEMBER EQUINOX 3pm



4 MARCH EQUINOX 9am



5 MARCH EQUINOX 12pm



6 MARCH EQUINOX 3pm

NOTE: ORIENTATION BASED ON SIX MAPS

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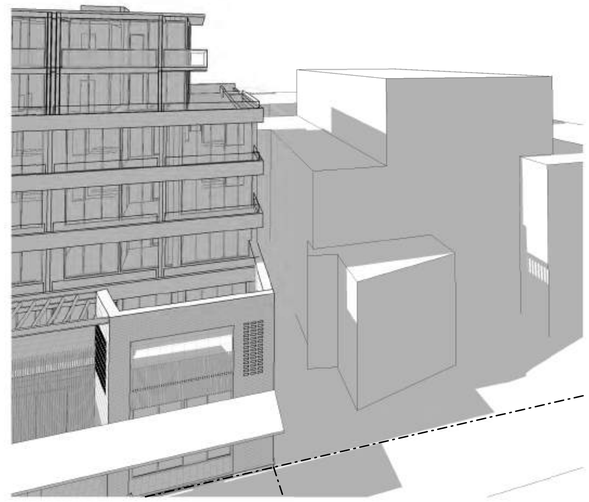
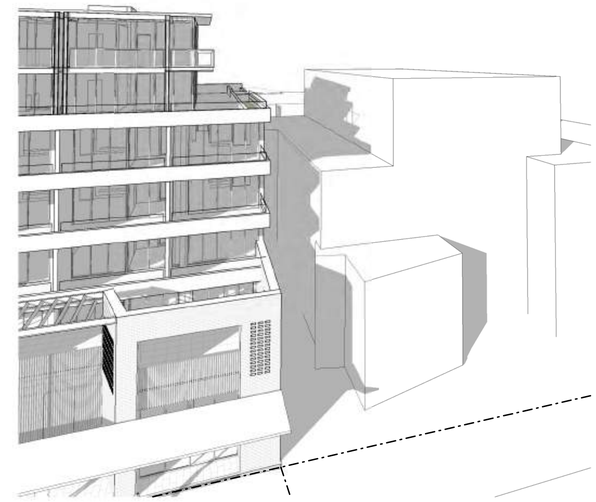
DRAWING No. **DA009**
DRAWING TITLE **SHADOW DIAGRAMS**
SCALE **1 : 1100 @ A1**
DATE **2017**

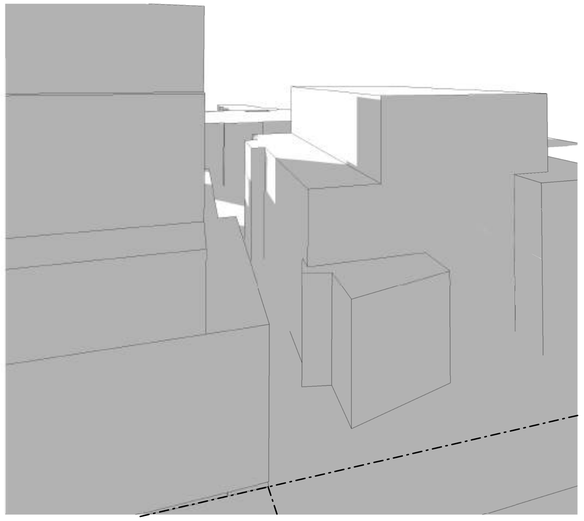
1 PROPOSED DESIGN - 9AM WINTER SOLSTICE



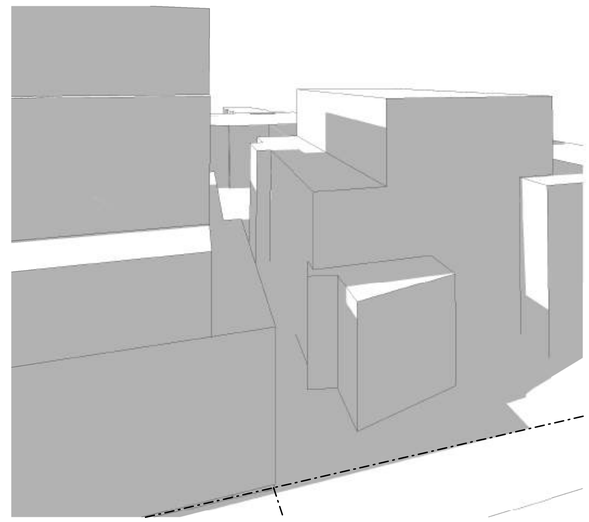
2 PROPOSED DESIGN - 12PM WINTER SOLSTICE



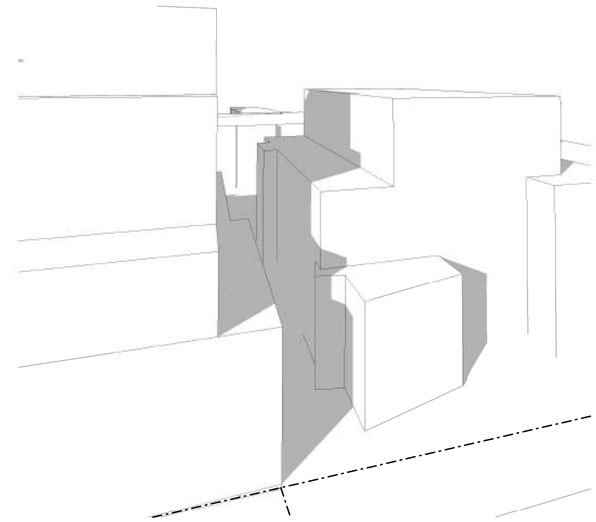
3 PROPOSED DESIGN - 3PM WINTER SOLSTICE



4 PERMITED FORM - 9AM WINTER SOLSTICE



5 PERMITED FORM - 12PM WINTER SOLSTICE



6 PERMITED FORM - 3PM WINTER SOLSTICE

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DRAWING No. **DA010**
DRAWING TITLE **SHADOW DIAGRAMS**
SCALE **@ A1**
DATE **2017**

LAKEFRONT BUILDING
60 Apartments

Level	1 Bed	2 Bed	3 Bed	Commercial	Parking
Level 7					
Level 6	2	4	3		
Level 5	2	4	3		
Level 4	3	6	2		
Level 3	3	6	2		
Level 2	3	6	2		
Upper Ground (L1)	1	2	6		
Lower Ground (G)				980sqm	
Totals	14	28	18	980sqm	

HOWARD STREET BUILDING
52 Apartments

Level	1 Bed	2 Bed	3 Bed	2 Bed Skip / Stop	Commercial
Level 7			2		
Level 6	4		2	8	
Level 5			2		
Level 4	4		2	8	
Level 3			2		
Level 2	4		2	8	
Upper Ground		4			510sqm
Lower Ground					
Totals	12	4	12	24	510sqm

ADAPTABLE DWELLING REQUIREMENTS
As per part 9 of the LMCC DCP: Adaptable Dwellings

1 adaptable per 10 dwellings
Therefore: 11 adaptable dwellings.

PARKING GENERATION
As per part 10 of the LMCC DCP: Town Centre Area Plan Car Parking Rates
Accessible car parking rates as per part 4 of the LMCC DCP: Development in Business Zones

	QTY	RATE	GENERATION	PROVIDED
1 Bed Apartments	26	0.5	13	161
2 Bed Apartments	56	0.75	42	
3 Bed Apartments	30	1	30	
Commercial	1490sqm	1/40m^2	37.27	30
Visitor		0.25/dwelling	28	23
Totals	112 Dwellings		151	214
Motorbike (Commercial)		1 / 20 spaces	2	2
Bike (Commercial)		1 / 20 spaces	2	2

NOTE:
Lower Ground = 91
Basement = 123
Total = 214
Surplus = 63 spaces per Council generation (Zoning: B2 – Local Centre)
+5 commercial spaces to The Esplanade
+4 commercial spaces to Howard Street

12 disabled spaces provided for residents + 1 space for commercial / visitors

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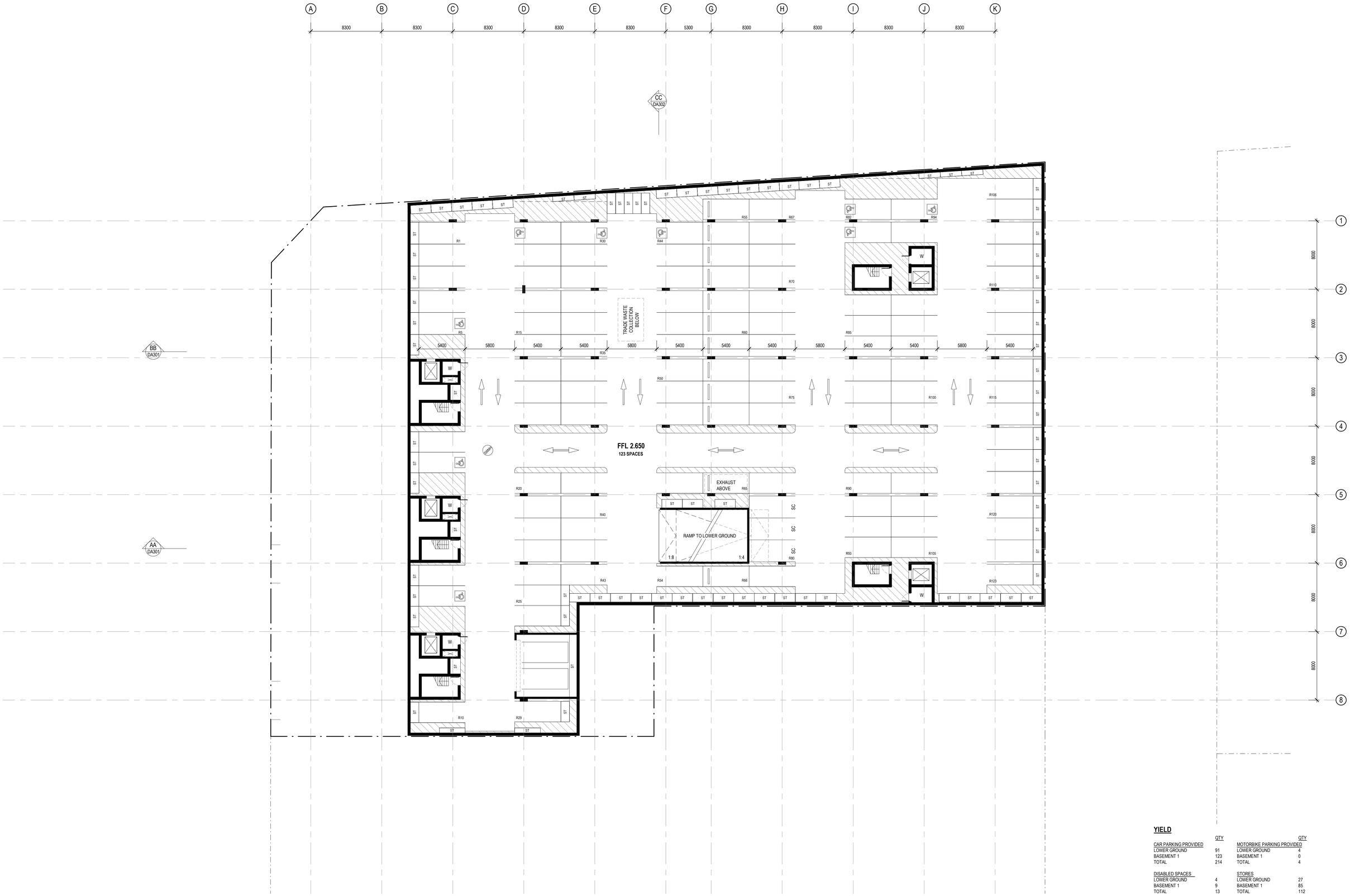
DRAWING No. **DA011**
DRAWING TITLE **DEVELOPMENT SUMMARY**
SCALE
DATE **2017**



YIELD

CAR PARKING PROVIDED	QTY
LOWER GROUND	91
BASEMENT 1	123
TOTAL	214

DISABLED SPACES	
LOWER GROUND	4
BASEMENT 1	9
TOTAL	13

MOTORBIKE PARKING PROVIDED	QTY
LOWER GROUND	4
BASEMENT 1	0
TOTAL	4

STORES	
LOWER GROUND	27
BASEMENT 1	85
TOTAL	112

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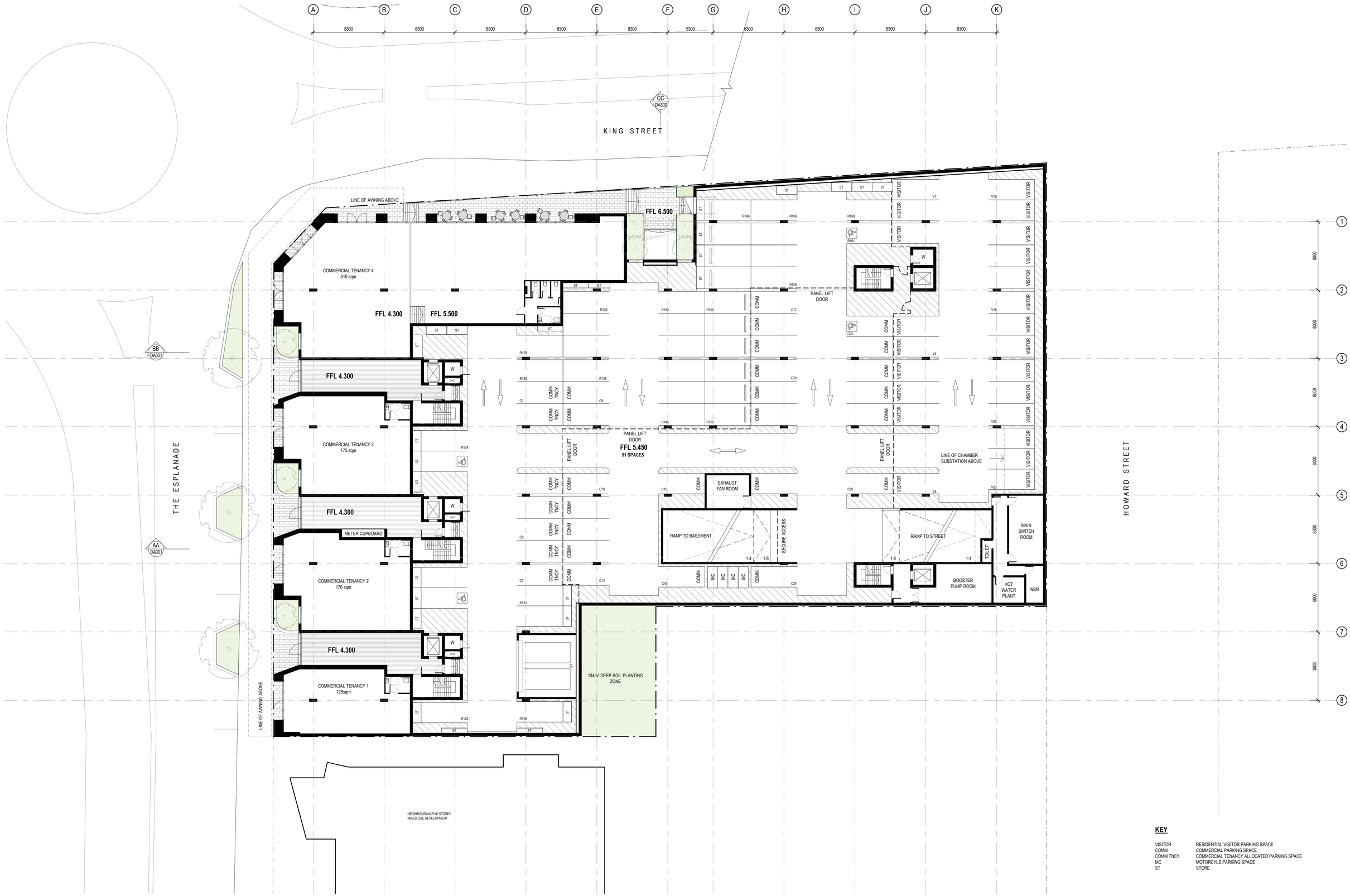
DRAWING No. **DA101**
DRAWING TITLE **PLAN - BASEMENT 1**
SCALE **1 : 200 @ A1**
DATE **2017**



KEY

VISITOR	RESIDENTIAL VISITOR PARKING SPACE
COMM	COMMERCIAL PARKING SPACE
COMM TNCY	COMMERCIAL TENANCY ALLOCATED PARKING SPACE
MC	MOTORCYLE PARKING SPACE
ST	STORE

REV	DESCRIPTION	DATE
A	SEPP 65 DESIGN REVIEW PANEL	23.11.2016
B	ISSUE FOR DEVELOPMENT APPLICATION	13.04.2017

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PROJECT **LAKEHOUSE VILLAGE**
LOT 3&4 DP 32518, LOT 1 DP 90877, LOT 1-3 DP 155951, LOT 112 DP 578045
482 THE ESPLANADE, WARNERS BAY

PROJECT No. **1635**

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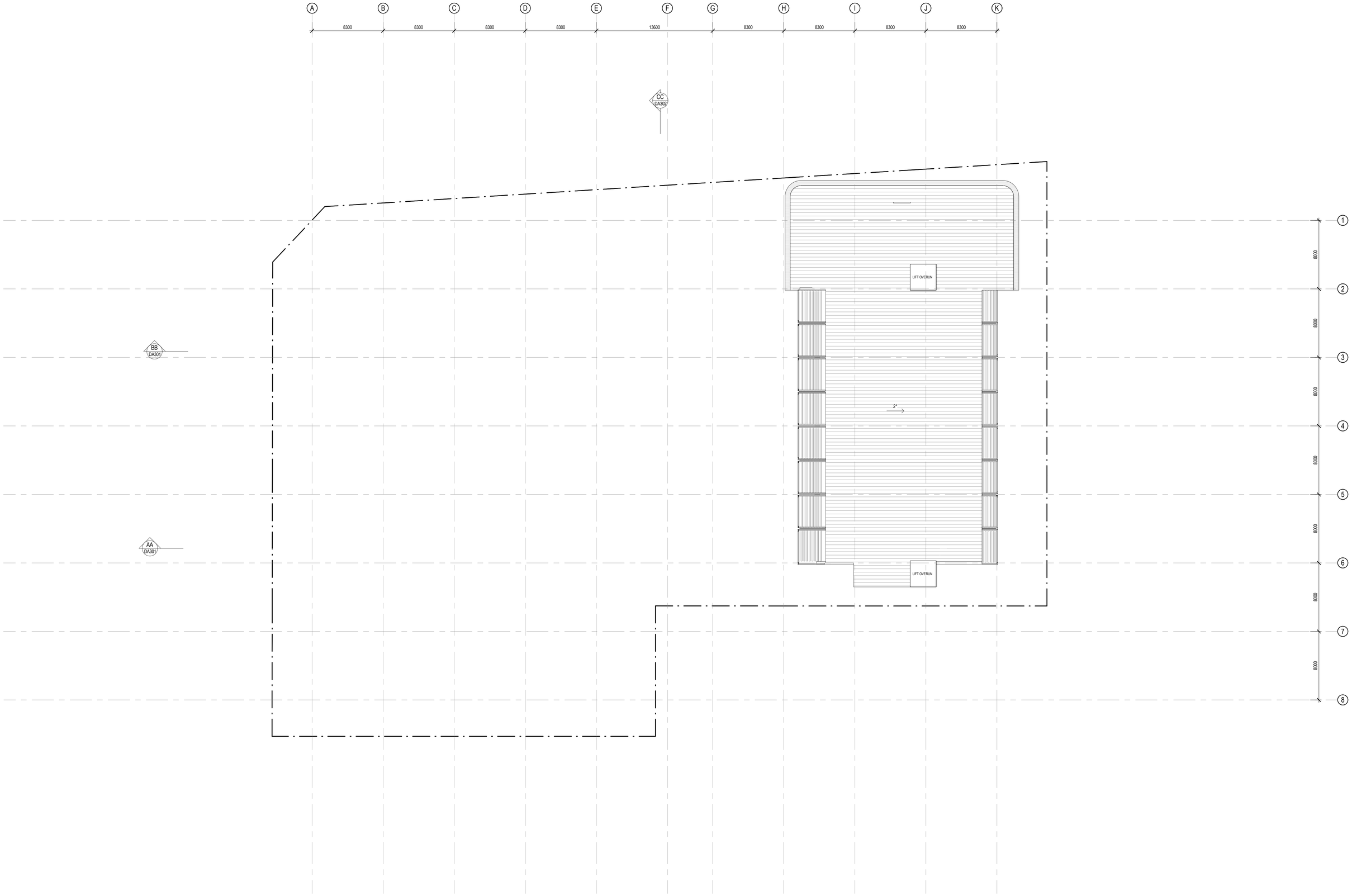
DRAWING No. **DA102**
DRAWING TITLE **PLAN - LOWER GROUND**
SCALE **1 : 200 @ A1**
DATE **2017**



REV	DESCRIPTION	DATE
A	DRAFT SUBMISSION	03.04.2017
B	ISSUE FOR DEVELOPMENT APPLICATION	13.04.2017

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PROJECT **LAKEHOUSE VILLAGE**
LOT 3&4 DP 32518, LOT 1 DP 90877, LOT 1-3 DP 159951, LOT 112 DP 578045
482 THE ESPLANADE, WARNERS BAY

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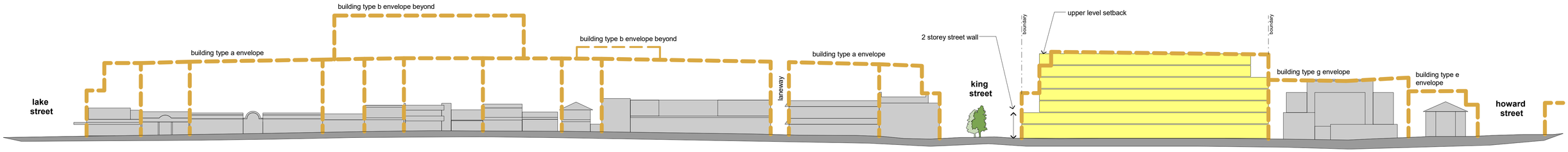
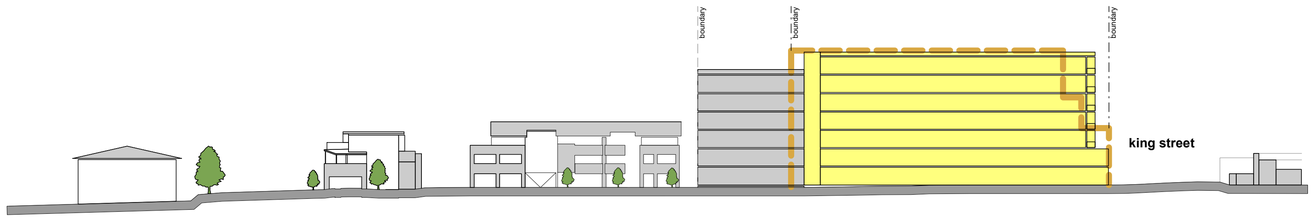
DRAWING No. **DA110**
DRAWING TITLE **PLAN - ROOF**
SCALE **1 : 200 @ A1**
DATE **2017**



THE ESPLANADE

KING STREET



HOWARD STREET

KEY

- EXISTING BUILT CONTEXT
- PROPOSED BUILDING ENVELOPE
- WARNERS BAY TOWN CENTRE PLAN BUILDING ENVELOPES

view west along king street

view of site from roundabout

view of site from foreshore

view of site from foreshore - existing 5 storey neighbour to right

REV	DESCRIPTION	DATE
A	DRAFT SUBMISSION	03.04.2017
B	ISSUE FOR DEVELOPMENT APPLICATION	13.04.2017

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482 THE ESPLANADE, WARNERS BAY

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DRAWING No. **DA200**
DRAWING TITLE **STREETSCAPE ELEVATIONS**
SCALE **1 : 500 @ A1**
DATE **2017**

REV	DESCRIPTION	DATE
A	DRAFT SUBMISSION	03.04.2017
B	ISSUE FOR DEVELOPMENT APPLICATION	13.04.2017

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PROJECT **LAKEHOUSE VILLAGE**
LOT 3&4 DP 32518, LOT 1 DP 90877, LOT 1-3 DP 155951, LOT 112 DP 578045
482 THE ESPLANADE, WARNERS BAY

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DRAWING No. **DA103**
DRAWING TITLE **PLAN - UPPER GROUND**
SCALE **1 : 200 @ A1**
DATE **2017**

REV	DESCRIPTION	DATE
A	DRAFT SUBMISSION	03.04.2017
B	ISSUE FOR DEVELOPMENT APPLICATION	13.04.2017

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LOT 3&4 DP 32518, LOT 1 DP 90877, LOT 1-3 DP 155951, LOT 112 DP 578045
482 THE ESPLANADE, WARNERS BAY

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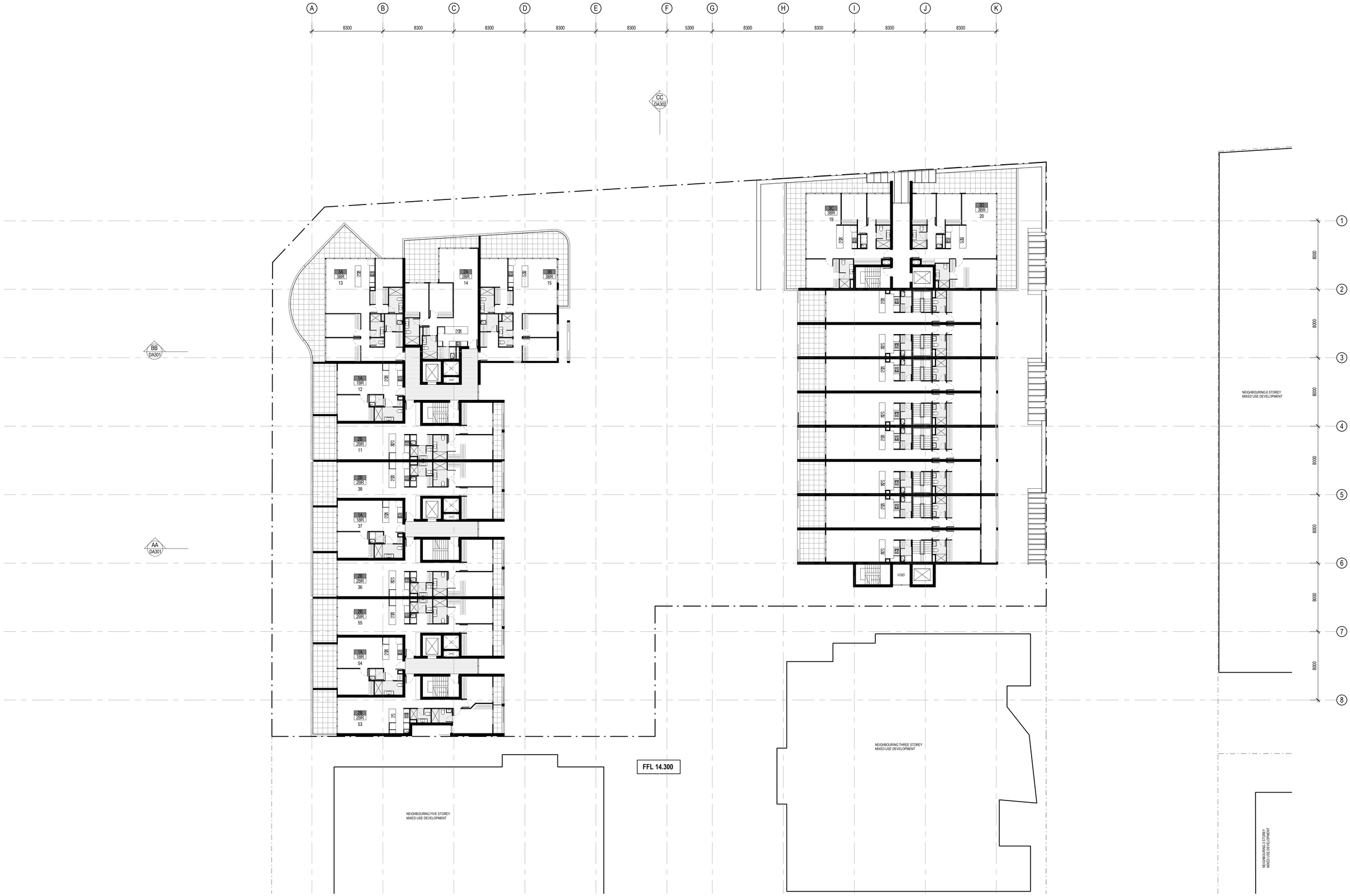
DRAWING No. **DA104**
DRAWING TITLE **PLAN - LEVEL 2**
SCALE **1 : 200 @ A1**
DATE **2017**



REV	DESCRIPTION	DATE
A	DRAFT SUBMISSION	03.04.2017
B	ISSUE FOR DEVELOPMENT APPLICATION	13.04.2017

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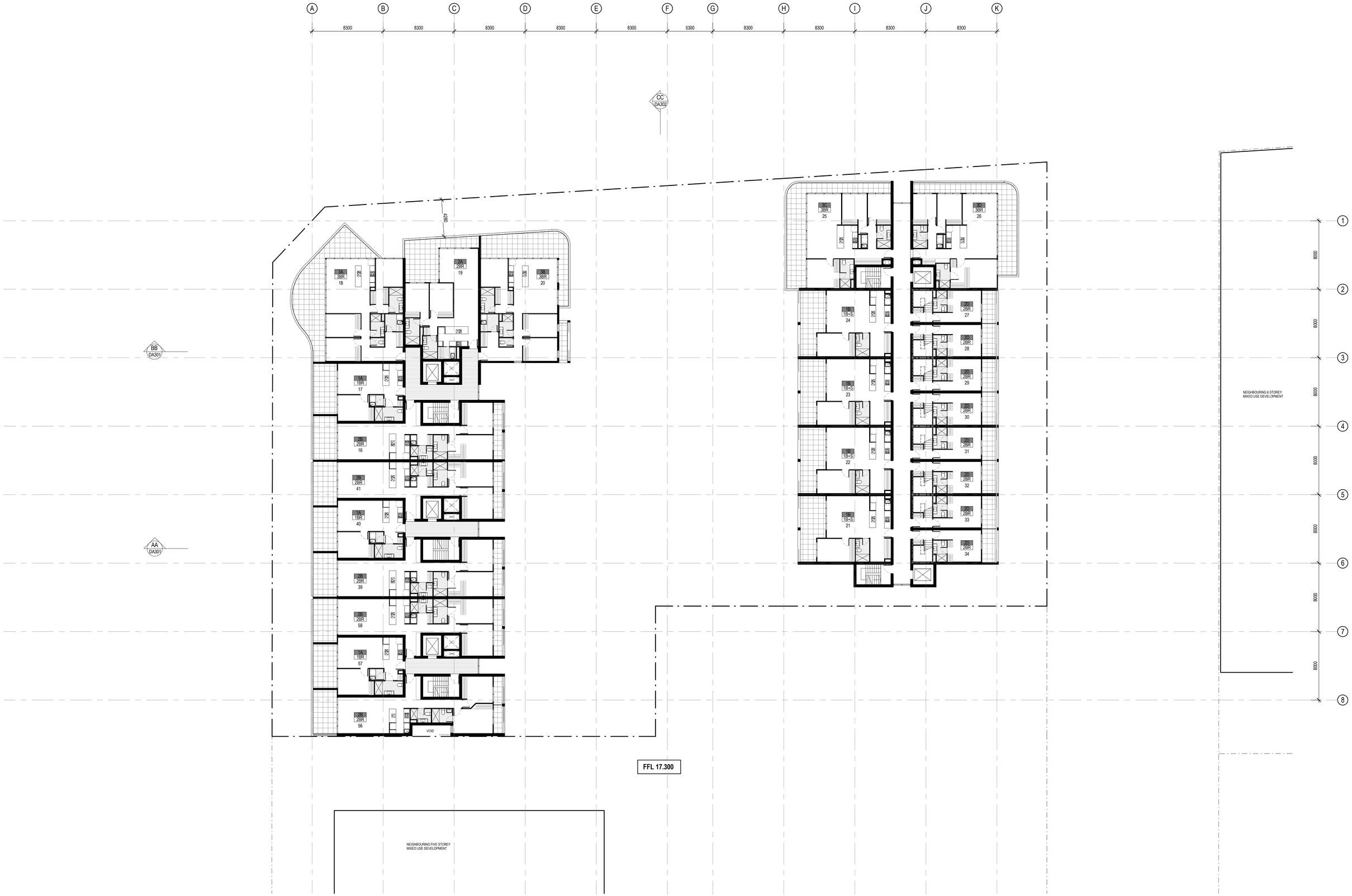
DRAWING No. **DA105**
DRAWING TITLE **PLAN - LEVEL 3**
SCALE **1 : 200 @ A1**
DATE **2017**



REV	DESCRIPTION	DATE
A	DRAFT SUBMISSION	03.04.2017
B	ISSUE FOR DEVELOPMENT APPLICATION	13.04.2017

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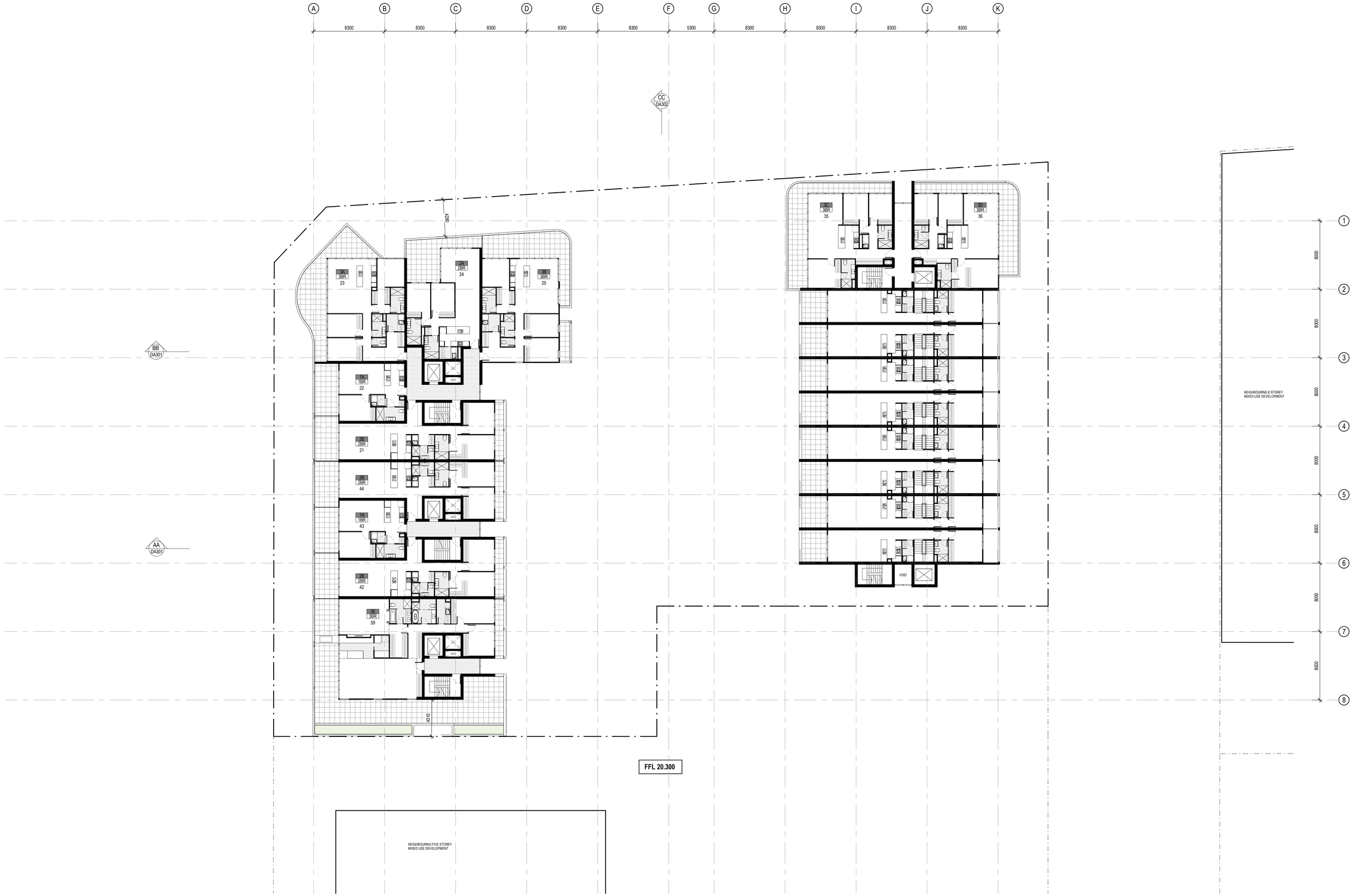
DRAWING No. **DA106**
DRAWING TITLE **PLAN - LEVEL 4**
SCALE **1 : 200 @ A1**
DATE **2017**



REV	DESCRIPTION	DATE
A	DRAFT SUBMISSION	03.04.2017
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PROJECT **LAKEHOUSE VILLAGE**
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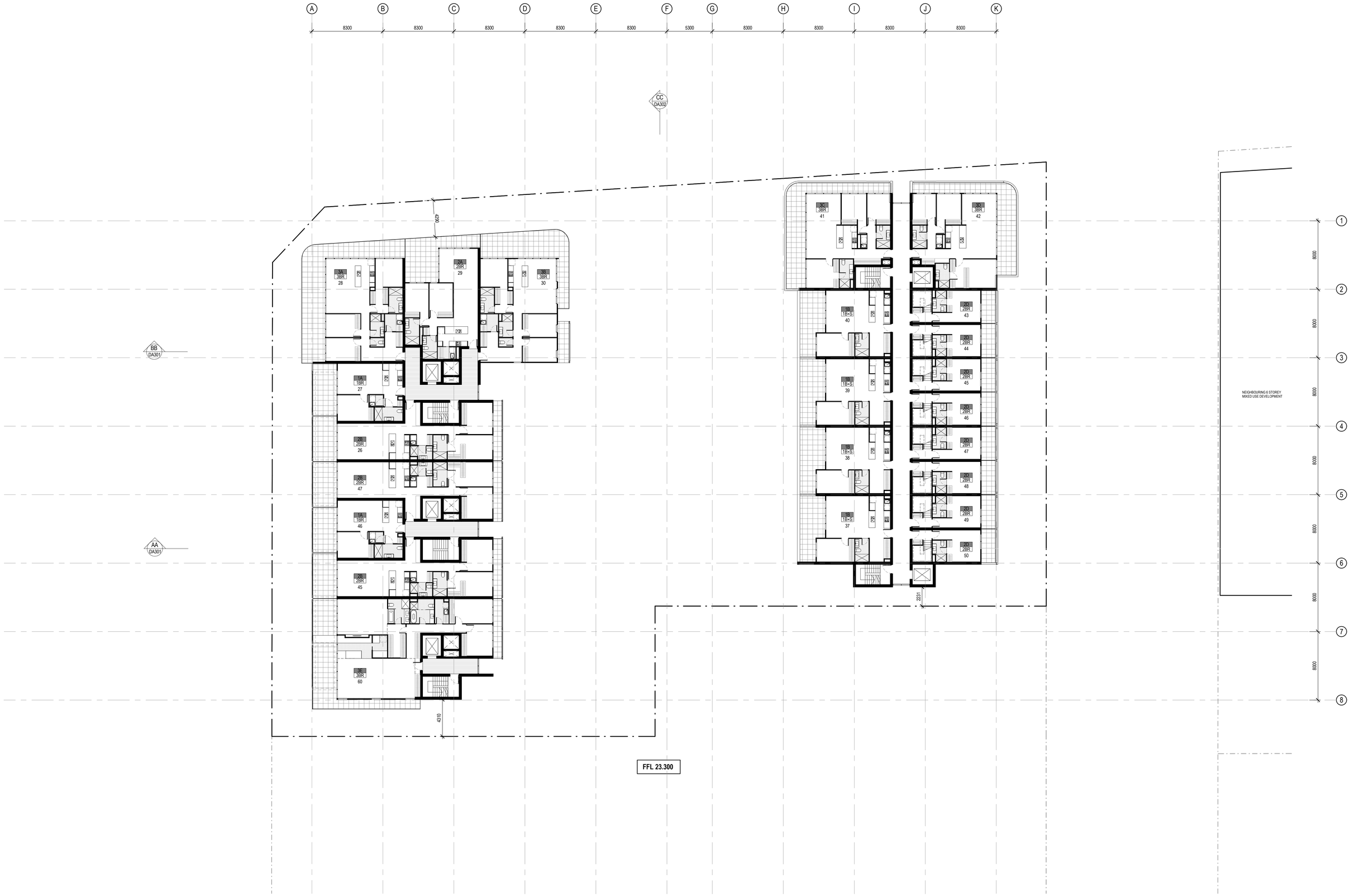
DRAWING No. **DA107**
DRAWING TITLE **PLAN - LEVEL 5**
SCALE **1 : 200 @ A1**
DATE **2017**



REV	DESCRIPTION	DATE
A	DRAFT SUBMISSION	03.04.2017
B	ISSUE FOR DEVELOPMENT APPLICATION	13.04.2017

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PROJECT **LAKEHOUSE VILLAGE**
LOT 3&4 DP 32518, LOT 1 DP 90877, LOT 1-3 DP 155951, LOT 112 DP 578045
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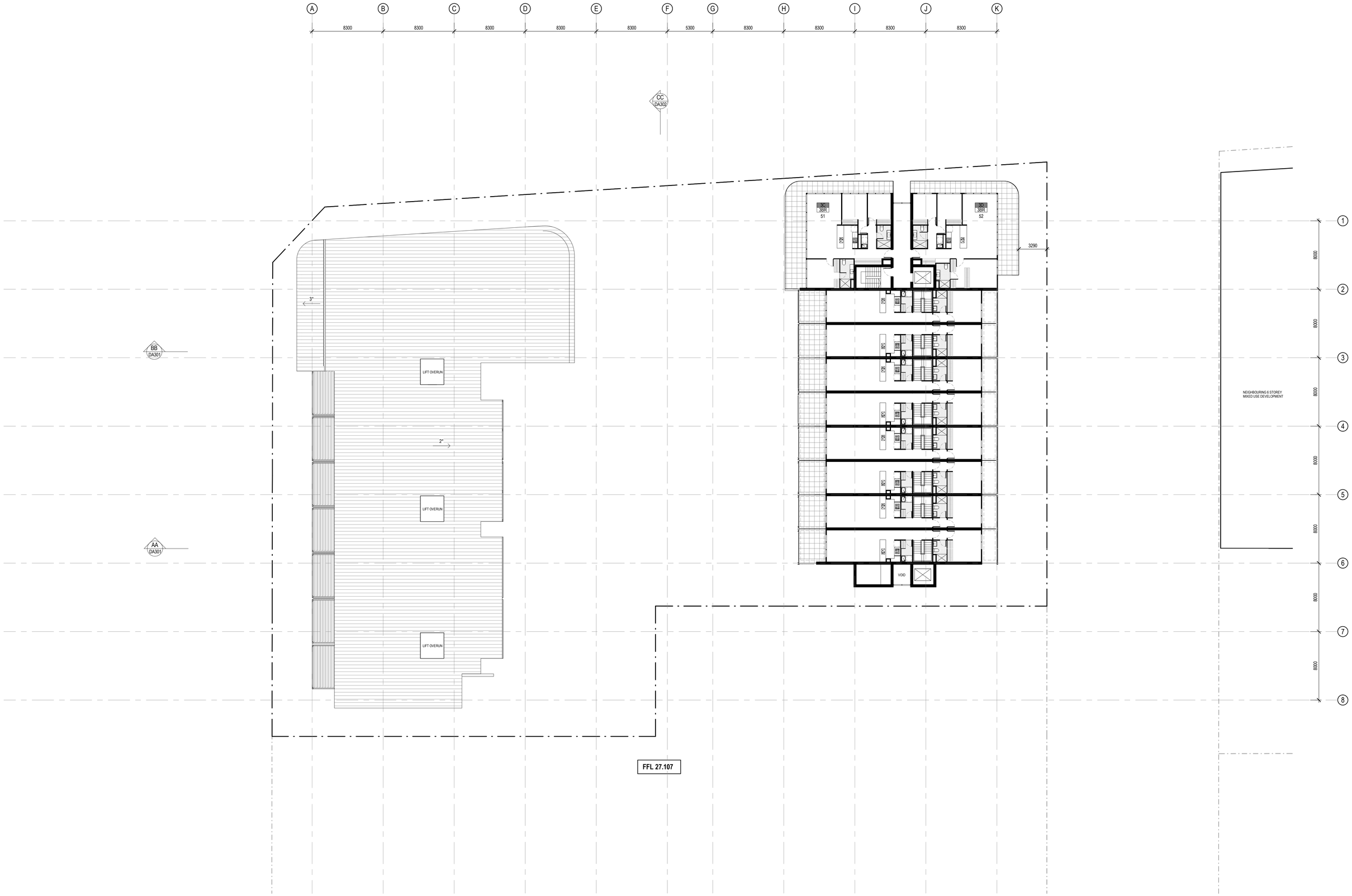
DRAWING No. **DA108**
DRAWING TITLE **PLAN - LEVEL 6**
SCALE **1 : 200 @ A1**
DATE **2017**



REV	DESCRIPTION	DATE
A	DRAFT SUBMISSION	03.04.2017
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PROJECT **LAKEHOUSE VILLAGE**
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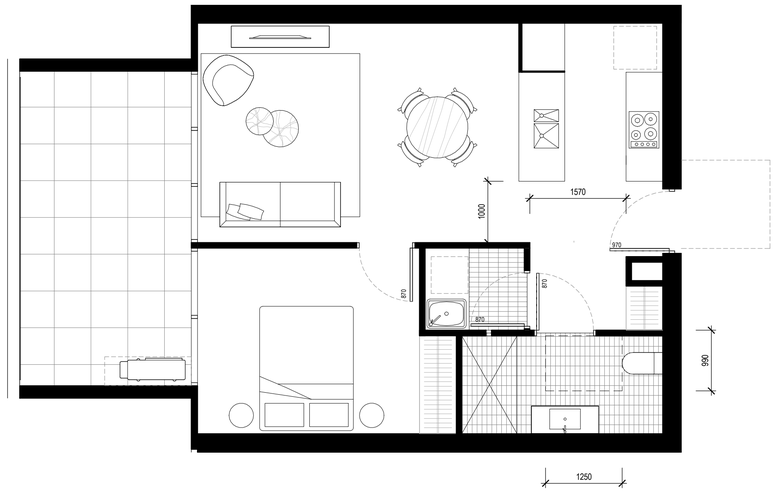
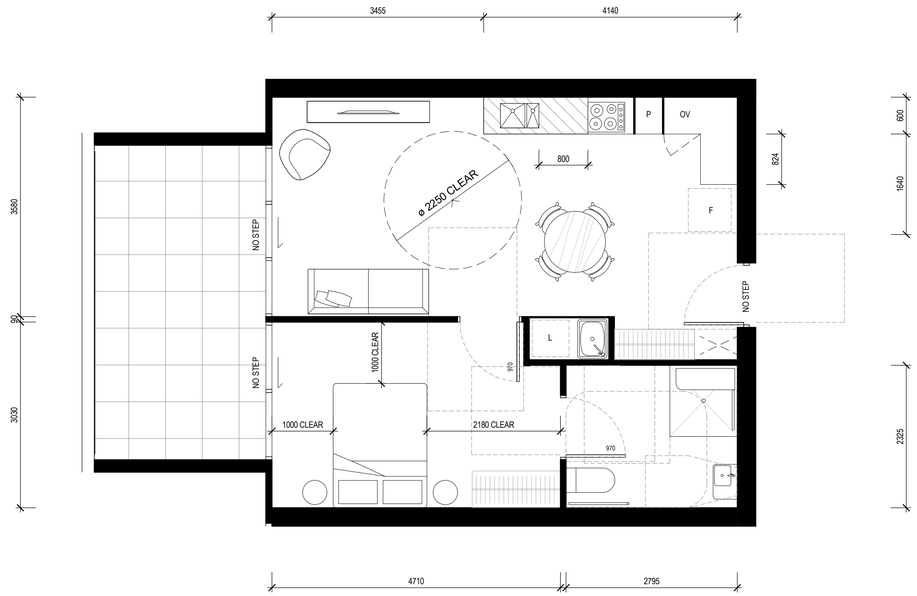
DRAWING No. **DA109**
DRAWING TITLE **PLAN - LEVEL 7**
SCALE **1 : 200 @ A1**
DATE **2017**



2 UNIT TYPE 1A



1 UNIT TYPE 1A - ADAPTED

LIVABLE HOUSING (SILVER)

DWELLING ACCESS

- 1000 mm clear width to path of travel
- Max 1:14 slope
- 1200 mm landings

DWELLING ENTRANCE

- Min 820 mm clear opening
- No step at door (may have a 50 mm step with ramping)
- 1200 mm x 1200 mm landing FINISHED FLOOR LEVEL

CAR PARKING

- NOT APPLICABLE AS NOT A PART OF THE DWELLING ENTRANCE

INERNAL DOORS & CORRIDORS

- All internal doors 820 mm clear opening
- All corridors 1000 mm minimum width

TOILET

- A minimum clear 900 width
- 1200 mm clear in front of the toilet
- LOCATED IN THE CORNER OF THE ROOM TO ALLOW FUTURE INSTALLATION OF GRAB RAILS

SHOWER

- HOBLESS SHOWER ENTRY
- LOCATED IN THE CORNER OF THE ROOM TO ALLOW FUTURE INSTALLATION OF GRAB RAILS

WALL REINFORECEMENT

- WALLS AROUND TOILET AND SHOWE RTO HAVE 12MM PLYWOOD TO ALLOW FUTURE INSTALLATION OF GRABRAILS

INTERNAL STAIRWAYS

- 1000mm CLEAR WITH CONTINUOUS HANDRAIL

KITCHEN

- NIL REQUIREMENTS

LAUNDRY

- NIL REQUIREMENTS

GROUND (OR ENTRY) FLOOR BEDROOMS

- NIL REQUIREMENTS

SWITCHED & POWER POINTS

- NIL REQUIREMENTS

DOOR & TAP HARDWARE

- NIL REQUIREMENTS

FAMILY / LIVING ROOM SPACE

- NIL REQUIREMENTS

WINDOW SILLS

- NIL REQUIREMENTS

FLOORING

- NIL REQUIREMENTS

ADAPTABLE NOTES

GENERALLY

- SWITCHES LOCATED AT 900 - 1100 ABOVE FLOOR AND IN LINE WITH DOOR HANDLES
- GPO ADJACENT TO TELEPHONE
- GPO'S LOCATED NO LOWER THAN 300mm ABOVE FLOOR UNLESS NOTED OTHERWISE
- ENTRY DOOR HANDLES & HARDWARE TO AS1428.2
- DOOR HARDWARE TO BE OPERABLE WITH ONE HAND AND LOCATED 900-1100 ABOVE FFL
- ALL DOORS TO HAVE 850mm MIN CLEARANCE
- CORRIDORS MIN WIDTH OF 1200mm (UNLESS NOTED OTHERWISE)
- COMPLIANCE WITH AS1428.1 FOR DOOR APPROACHES

BATHROOMS

- BATHROOM WATERPROOFED TO AS3740
- FALL TO WASTE TO MEET AS1428.1
- PROVIDE RECESSED SOAP HOLDER
- POSITION SHOWER MIXER AS PER AS1428.1
- POSITION SHOWER MIXER BETWEEN 900 AND 1100mm ABOVE THE FINISHED FLOOR LEVEL
- SHOWER RAIL TO BE 580-600mm FROM CORNER OF SHOWER, WITH OUTLET
  LOCATED BELOW THE RAIL AT 700mm ABOVE THE FINISHED FLOOR LEVEL.
- PROVIDE REINFORCED AREAS TO WALLS FOR INSTALLATION OF GRAB RAILS TO SHOWER AND WC TO AS1428.1
- LEVER MIXER TO BASIN
- SLIP RESISTANT FLOOR TO AS/NZS3661.1
- PROVIDE ONE DOUBLE GPO LOCATED BESIDE MIRROR TO AS1428.1
- SHOWER WASTE MIN DIAMETER 80mm
- BASIN, WC, GRAB RAILS & FOLDING SHOWER SEAT TO COMPLY WITH AS1428.1
- PROVIDE SHOWER CURTAIN AND RAIL

LAUNDRY

- PROVIDE DOUBLE GPO
- SLIP RESISTANT FLOOR TO AS/NZS 3661.1
- INSTALLATION OF THERMOSTATIC MIXING VALVES
- PROVIDE 1550mm CLEAR IN FRONT OF WASHING MACHINE
- TUB MIXER TO FRONT OF TUB

KITCHEN

- 1 DOUBLE GPO WITHIN 300mm OF FRONT OF WORK SURFACE
- SLIP RESISTANT FLOOR TO AS/NZS3661.1
- RAISED CROSS BAR TO CONTROLS
- ISOLATING SWITCH TO COOKTOP
- REFRIGERATOR ADJACENT WORK SURFACE
- GPO FOR REFRIGERATOR TO BE EASILY WITHIN REACH
- INSTALLATION OF THERMOSTATIC MIXING VALVES
- LOCATE HANDLES TOWARDS THE TOP OF UNDER-BENCH CUPBOARDS AND TO THE BOTTOM OF OVER-BENCH CUPBOARDS
- PROVIDE SPACE FOR MICROWAVE IN OVER-BENCH CUPBOARD

LIVING

- POTENTIAL ILLUMINATION TO BE MIN 300LUX
- PROVISION FOR CIRCULATION SPACE OF MIN 2250mm DIAMETER
- MIN 4 DOUBLE GPOS

BEDROOM

- MIN 1000mm UNOBSTRUCTED SPACE ALONG 1 SIDE OF BED
- PROVISION FOR CIRCULATION SPACE OF MIN 1540mm X 2070 IN DIRECTION OF TRAVEL
- MIN 2 DOUBLE GPOS

EXTERIOR

- SLIP RESISTANT FLOOR TO AS/NZS3661.1
- MAX 5mm STEP BETWEEN EXTERNAL FLOORING AND INTERNAL FLOORING
  AND TO FULL WIDTH OF DOOR OPENING

NOTE: ADAPTABLE UNIT TO MEET AS4299-2009 ON COMPLETION
ALL DIMENSION TO STUD WALL

INDICATES ADJUSTABLE BENCHTOP

REV	DESCRIPTION	DATE
A	DRAFT SUBMISSION	03.04.2017
B	ISSUE FOR DEVELOPMENT APPLICATION	13.04.2017

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PROJECT **LAKEHOUSE VILLAGE**
LOT 3&4 DP 32518, LOT 1 DP 90877, LOT 1-3 DP 155951, LOT 112 DP 578045
482 THE ESPLANADE, WARNERS BAY

PROJECT No. **1635**

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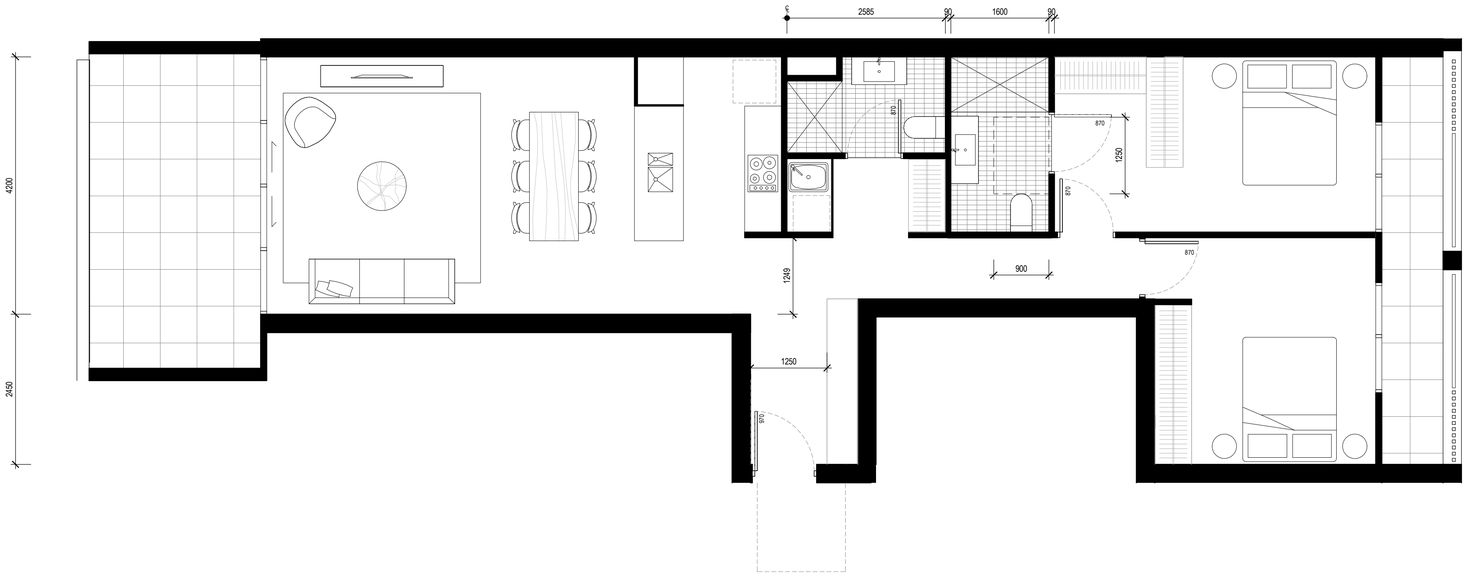
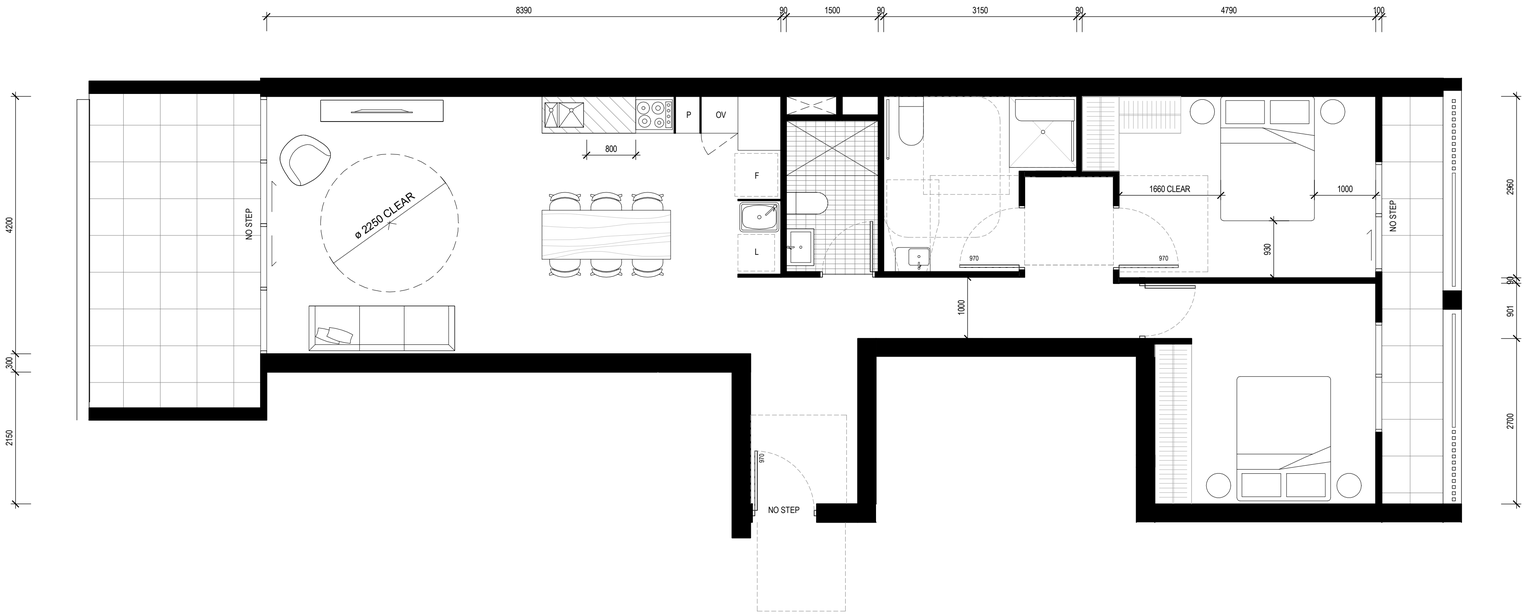
DRAWING No. **DA181**
DRAWING TITLE **PLAN - ADAPTABLE UNITS**
SCALE **1 : 50 @ A1**
DATE **2017**



2 UNIT TYPE 2B



1 UNIT TYPE 2B - ADAPTED

LIVABLE HOUSING (SILVER)

DWELLING ACCESS

- 1000 mm clear width to path of travel
- Max 1:14 slope
- 1200 mm landings

DWELLING ENTRANCE

- Min 820 mm clear opening
- No step at door (may have a 50 mm step with ramping)
- 1200 mm x 1200 mm landing FINISHED FLOOR LEVEL

CAR PARKING

- NOT APPLICABLE AS NOT A PART OF THE DWELLING ENTRANCE

INERNAL DOORS & CORRIDORS

- All internal doors 820 mm clear opening
- All corridors 1000 mm minimum width

TOILET

- A minimum clear 900 width
- 1200 mm clear in front of the toilet
- LOCATED IN THE CORNER OF THE ROOM TO ALLOW FUTURE INSTALLATION OF GRAB RAILS

SHOWER

- HOBLESS SHOWER ENTRY
- LOCATED IN THE CORNER OF THE ROOM TO ALLOW FUTURE INSTALLATION OF GRAB RAILS

WALL REINFORECEMENT

- WALLS AROUND TOILET AND SHOWE RTO HAVE 12MM PLYWOOD TO ALLOW FUTURE INSTALLATION OF GRABRAILS

INTERNAL STAIRWAYS

- 1000mm CLEAR WITH CONTINUOUS HANDRAIL

KITCHEN

- NIL REQUIREMENTS

LAUNDRY

- NIL REQUIREMENTS

GROUND (OR ENTRY) FLOOR BEDROOMS

- NIL REQUIREMENTS

SWITCHED & POWER POINTS

- NIL REQUIREMENTS

DOOR & TAP HARDWARE

- NIL REQUIREMENTS

FAMILY / LIVING ROOM SPACE

- NIL REQUIREMENTS

WINDOW SILLS

- NIL REQUIREMENTS

FLOORING

- NIL REQUIREMENTS

ADAPTABLE NOTES

GENERALLY

- SWITCHES LOCATED AT 900 - 1100 ABOVE FLOOR AND IN LINE WITH DOOR HANDLES
- GPO ADJACENT TO TELEPHONE
- GPO'S LOCATED NO LOWER THAN 300mm ABOVE FLOOR UNLESS NOTED OTHERWISE
- ENTRY DOOR HANDLES & HARDWARE TO AS1428.2
- DOOR HARDWARE TO BE OPERABLE WITH ONE HAND AND LOCATED 900-1100 ABOVE FFL
- ALL DOORS TO HAVE 850mm MIN CLEARANCE
- CORRIDORS MIN WIDTH OF 1200mm (UNLESS NOTED OTHERWISE)
- COMPLIANCE WITH AS1428.1 FOR DOOR APPROACHES

BATHROOMS

- BATHROOM WATERPROOFED TO AS3740
- FALL TO WASTE TO MEET AS1428.1
- PROVIDE RECESSED SOAP HOLDER
- POSITION SHOWER MIXER AS PER AS1428.1
- POSITION SHOWER MIXER BETWEEN 900 AND 1100mm ABOVE THE FINISHED FLOOR LEVEL
- SHOWER RAIL TO BE 580-600mm FROM CORNER OF SHOWER, WITH OUTLET LOCATED BELOW THE RAIL AT 700mm ABOVE THE FINISHED FLOOR LEVEL.
- PROVIDE REINFORCED AREAS TO WALLS FOR INSTALLATION OF GRAB RAILS TO SHOWER AND WC TO AS1428.1
- LEVER MIXER TO BASIN
- SLIP RESISTANT FLOOR TO AS/NZS3661.1
- PROVIDE ONE DOUBLE GPO LOCATED BESIDE MIRROR TO AS1428.1
- SHOWER WASTE MIN DIAMETER 80mm
- BASIN, W/C, GRAB RAILS & FOLDING SHOWER SEAT TO COMPLY WITH AS1428.1
- PROVIDE SHOWER CURTAIN AND RAIL

LAUNDRY

- PROVIDE DOUBLE GPO
- SLIP RESISTANT FLOOR TO AS/NZS 3661.1
- INSTALLATION OF THERMOSTATIC MIXING VALVES
- PROVIDE 1550mm CLEAR IN FRONT OF WASHING MACHINE
- TUB MIXER TO FRONT OF TUB

KITCHEN

- 1 DOUBLE GPO WITHIN 300mm OF FRONT OF WORK SURFACE
- SLIP RESISTANT FLOOR TO AS/NZS3661.1
- RAISED CROSS BAR TO CONTROLS
- ISOLATING SWITCH TO COOKTOP
- REFRIGERATOR ADJACENT WORK SURFACE
- GPO FOR REFRIGERATOR TO BE EASILY WITHIN REACH
- INSTALLATION OF THERMOSTATIC MIXING VALVES
- LOCATE HANDLES TOWARDS THE TOP OF UNDER-BENCH CUPBOARDS AND TO THE BOTTOM OF OVER-BENCH CUPBOARDS
- PROVIDE SPACE FOR MICROWAVE IN OVER-BENCH CUPBOARD

LIVING

- POTENTIAL ILLUMINATION TO BE MIN 300LUX
- PROVISION FOR CIRCULATION SPACE OF MIN 2250mm DIAMETER
- MIN 4 DOUBLE GPOS

BEDROOM

- MIN 1000mm UNOBSTRUCTED SPACE ALONG 1 SIDE OF BED
- PROVISION FOR CIRCULATION SPACE OF MIN 1540mm X 2070 IN DIRECTION OF TRAVEL
- MIN 2 DOUBLE GPOS

EXTERIOR

- SLIP RESISTANT FLOOR TO AS/NZS3661.1
- MAX 5mm STEP BETWEEN EXTERNAL FLOORING AND INTERNAL FLOORING AND TO FULL WIDTH OF DOOR OPENING

NOTE: ADAPTABLE UNIT TO MEET AS4299-2009 ON COMPLETION
ALL DIMENSION TO STUD WALL

INDICATES ADJUSTABLE BENCHTOP

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482 THE ESPLANADE, WARNERS BAY

PROJECT No. **1635**

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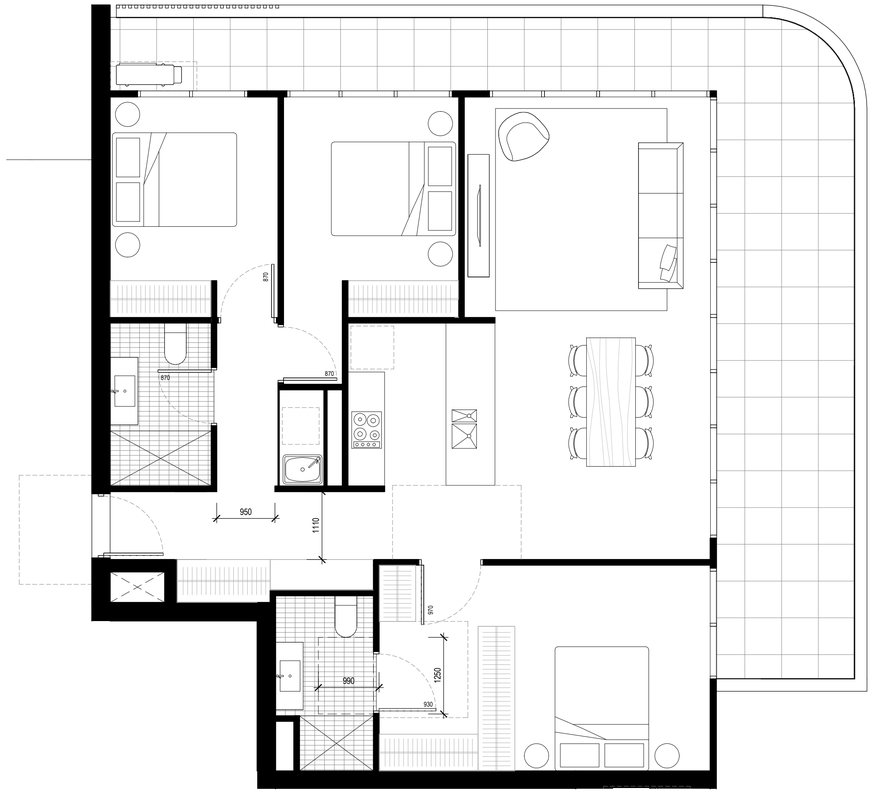
DRAWING No. **DA182**
DRAWING TITLE **PLAN - ADAPTABLE UNITS**
SCALE **1 : 50 @ A1**
DATE **2017**



2 UNIT TYPE 3D

1 UNIT TYPE 3D - ADAPTED

ADAPTABLE NOTES

GENERALLY

- SWITCHES LOCATED AT 900 - 1100 ABOVE FLOOR AND IN LINE WITH DOOR HANDLES
- GPO ADJACENT TO TELEPHONE
- GPO'S LOCATED NO LOWER THAN 300mm ABOVE FLOOR UNLESS NOTED OTHERWISE
- ENTRY DOOR HANDLES & HARDWARE TO AS1428.2
- DOOR HARDWARE TO BE OPERABLE WITH ONE HAND AND LOCATED 900-1100 ABOVE FFL
- ALL DOORS TO HAVE 850mm MIN CLEARANCE
- CORRIDORS MIN WIDTH OF 1200mm (UNLESS NOTED OTHERWISE)
- COMPLIANCE WITH AS1428.1 FOR DOOR APPROACHES

BATHROOMS

- BATHROOM WATERPROOFED TO AS3740
- FALL TO WASTE TO MEET AS1428.1
- PROVIDE RECESSED SOAP HOLDER
- POSITION SHOWER MIXER AS PER AS1428.1
- POSITION SHOWER MIXER BETWEEN 900 AND 1100mm ABOVE THE FINISHED FLOOR LEVEL
- SHOWER RAIL TO BE 580-600mm FROM CORNER OF SHOWER, WITH OUTLET LOCATED BELOW THE RAIL AT 700mm ABOVE THE FINISHED FLOOR LEVEL.
- PROVIDE REINFORCED AREAS TO WALLS FOR INSTALLATION OF GRAB RAILS TO SHOWER AND WC TO AS1428.1
- LEVER MIXER TO BASIN
- SLIP RESISTANT FLOOR TO AS/NZS3661.1
- PROVIDE ONE DOUBLE GPO LOCATED BESIDE MIRROR TO AS1428.1
- SHOWER WASTE MIN DIAMETER 80mm
- BASIN, W/C, GRAB RAILS & FOLDING SHOWER SEAT TO COMPLY WITH AS1428.1
- PROVIDE SHOWER CURTAIN AND RAIL

LAUNDRY

- PROVIDE DOUBLE GPO
- SLIP RESISTANT FLOOR TO AS/NZS 3661.1
- INSTALLATION OF THERMOSTATIC MIXING VALVES
- PROVIDE 1550mm CLEAR IN FRONT OF WASHING MACHINE
- TUB MIXER TO FRONT OF TUB

KITCHEN

- 1 DOUBLE GPO WITHIN 300mm OF FRONT OF WORK SURFACE
- SLIP RESISTANT FLOOR TO AS/NZS3661.1
- RAISED CROSS BAR TO CONTROLS
- ISOLATING SWITCH TO COOKTOP
- REFRIGERATOR ADJACENT WORK SURFACE
- GPO FOR REFRIGERATOR TO BE EASILY WITHIN REACH
- INSTALLATION OF THERMOSTATIC MIXING VALVES
- LOCATE HANDLES TOWARDS THE TOP OF UNDER-BENCH CUPBOARDS AND TO THE BOTTOM OF OVER-BENCH CUPBOARDS
- PROVIDE SPACE FOR MICROWAVE IN OVER-BENCH CUPBOARD

LIVING

- POTENTIAL ILLUMINATION TO BE MIN 300LUX
- PROVISION FOR CIRCULATION SPACE OF MIN 2250mm DIAMETER
- MIN 4 DOUBLE GPOS

BEDROOM

- MIN 1000mm UNOBSTRUCTED SPACE ALONG 1 SIDE OF BED
- PROVISION FOR CIRCULATION SPACE OF MIN 1540mm X 2070 IN DIRECTION OF TRAVEL
- MIN 2 DOUBLE GPOS

EXTERIOR

- SLIP RESISTANT FLOOR TO AS/NZS3661.1
- MAX 5mm STEP BETWEEN EXTERNAL FLOORING AND INTERNAL FLOORING AND TO FULL WIDTH OF DOOR OPENING

NOTE: ADAPTABLE UNIT TO MEET AS4299-2009 ON COMPLETION
ALL DIMENSION TO STUD WALL

INDICATES ADJUSTABLE BENCHTOP

REV	DESCRIPTION	DATE
A	DRAFT SUBMISSION	03.04.2017
B	ISSUE FOR DEVELOPMENT APPLICATION	13.04.2017

SHAC

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PROJECT **LAKEHOUSE VILLAGE**
LOT 3&4 DP 32518, LOT 1 DP 90877, LOT 1-3 DP 155951, LOT 112 DP 578045
482 THE ESPLANADE, WARNERS BAY

PROJECT No. **1635**

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This drawings is for development application purposes and not for construction.

DRAWING No. **DA183**
DRAWING TITLE **PLAN - ADAPTABLE UNITS**
SCALE **1 : 50 @ A1**
DATE **2017**

3 – LANDSCAPE PLANS

D08347760

landscape design application

warners bay apartments

proposal:
design application
council:
lake macquarie city council
project no:
11159.5
drawn:
yy
date:
11.04.2017
revision:
a

A

design report

01 design report

B

design analysis

02 site analysis
03 tree removal plan
04 architecture analysis
05 sunlight analysis

C

streetscape

06 concept plan
07 design elements
08 plant palette

D

courtyard garden

09 concept plan - upper ground
10 concept plan - level 02
11 perspective
17 sections
18 design elements
20 plant palette

A

designreport

D0834760

landscape design report

warners bay apartments

01

april 2017

GENERAL SITE DESCRIPTION

The following landscape design report has been prepared in accordance with the requirements of Lake Macquarie City Council Development Control Plan.

The site is located on the corner of King Street, The Esplanade and Howard Street in Warners Bay town centre area. The existing site consists of a BP station on the corner of King Street and The Esplanade, one café on the corner of King Street and Howard Street, and three 1-2 storey residential lots. The project site is facing Lake Macquarie, and across the road from the Warners Bay Village Shopping Centre. Adjacent the site there is a 3 storey residential apartments to the south-east, with some existing trees and shrubs buffer along the boundary. There is a 5 storey residential and commercial building adjacent to the south-west project site, which faces The Esplanade.

Soil

According to LMCC DCP (2014), the project area is on acid sulphate soil (class 3 and class 5). To prevent negative impact on water quality and the receiving waters of the lake, the development must ensure minimise the disturbance of acid sulphate soil. For the project, the whole site will be disturbed, and all landscape soils shall be imported.

LANDSCAPE CHARACTER

There are excellent views from The Esplanade at Warners bay to the south and west across the lake. The foreshore park plays an important role for social and culture activities both on and off shore. It is a recreational hub for water sports, walking and cycling. The Esplanade commercial strip is popular day and night gathering place, with range of cafes and restaurants facing the lake.

PROPOSED DEVELOPMENT

The proposed development involves the demolition of all existing structures and the construction of two 7 storey towers which includes commercial area at ground level and residential apartments above. The proposed development shall also include streetscape along King Street and The Esplanade, and a recreational courtyard which will be located between two towers.

The key issues of the proposed development

1. The visual impact to the neighbours on southern side of the project site.
2. Tree removal on the southern side of the project site, and there are not enough spaces for new trees. The deep soil zone area is the chance to plant some decent size trees/shrubs, also the courtyard entry area.

Proposed landscape works and objectives

The landscape objectives include several key elements:

1. Meet the requirements of Warners Bay Streetscape Masterplan (May, 2015)
2. Provide feature/visual attraction at the courtyard entry to enhance the statement;
3. Provide stronger pedestrian linkage into the courtyard from western side;
4. Lower the deep soil zone level to soften visual impact to the neighbours, and keep the activity area at the same level of courtyard to encourage usage;
5. Provide certain level of privacy to the courtyard from apartments above by installing feature shelters to resting area, also increasing shade and amenity to residents;
6. Aim to reduce the impact of activities in the courtyard to 1st level residents, by installing feature screen and screening plants to the front of residential balcony.

Considering future maintenance, we provide prefabricated lightweight planters, and all pavers laid on pedestal to make the maintenance easier.

REFERENCES

Lake Macquarie City Council, 2014, *Lake Macquarie City Development Control Plan, Part 10 – Town Centre Area Plans – Warners Bay – Revision 12.*
Lake Macquarie City Council, 2015, *Warners Bay Streetscape Master Plan.*

site details:
warners bay
date:
11.04.2017
job number:
11159.5
scale:
n/a
drawn:
yy
revision:
a

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design anaylysis

B

site analysis

warners bay apartments

02

april 2017

N

legend

- pedestrian footpath
- crossing point
- pedestrian crossing
- footpath/cycleway
- project site
- main street
- important view
- open space
- bus stop
- parking

site details:
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trees removal

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03

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N

legend

existing trees to be removed.
(tree canopies are taken from survey plan)

site boundary

site details:
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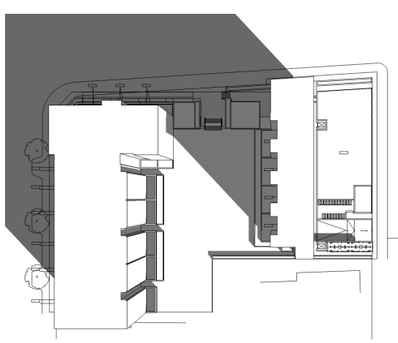
courtyard sunlight analysis

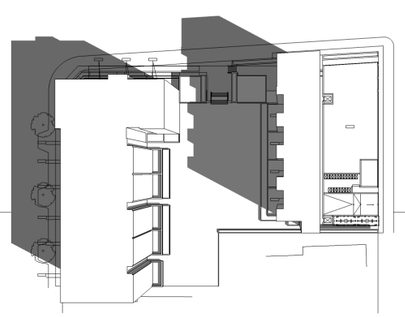
warners bay apartments

05

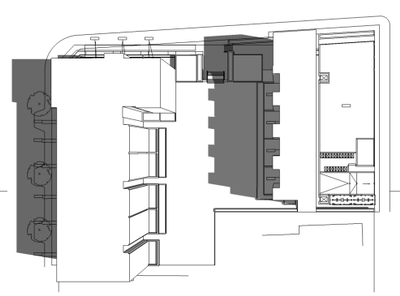
april 2017



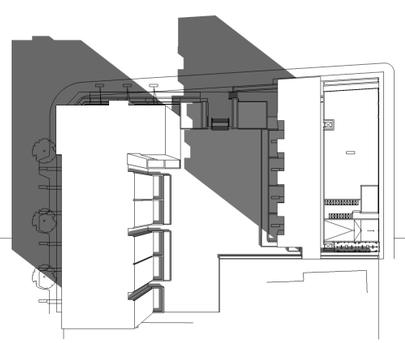
January 9am



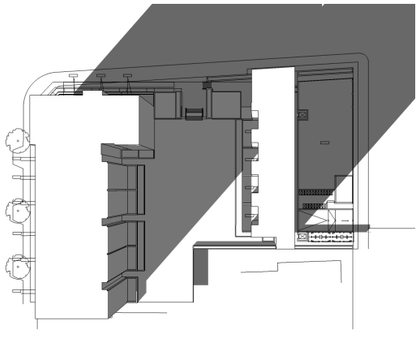
April 9am



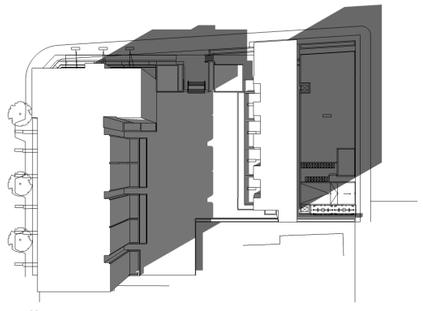
July 9am



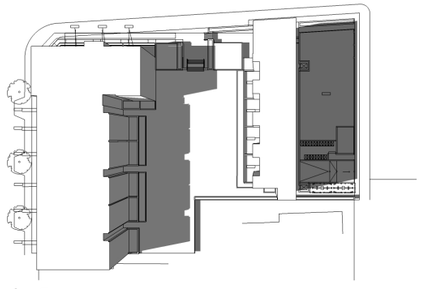
October 9am



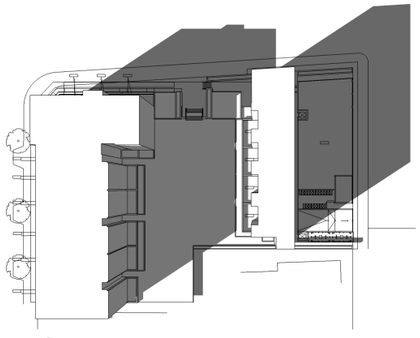
January 3pm



April 3pm



July 3pm



October 3pm

shadow overlay

the north-east corner has more shade than other parts of the courtyard.

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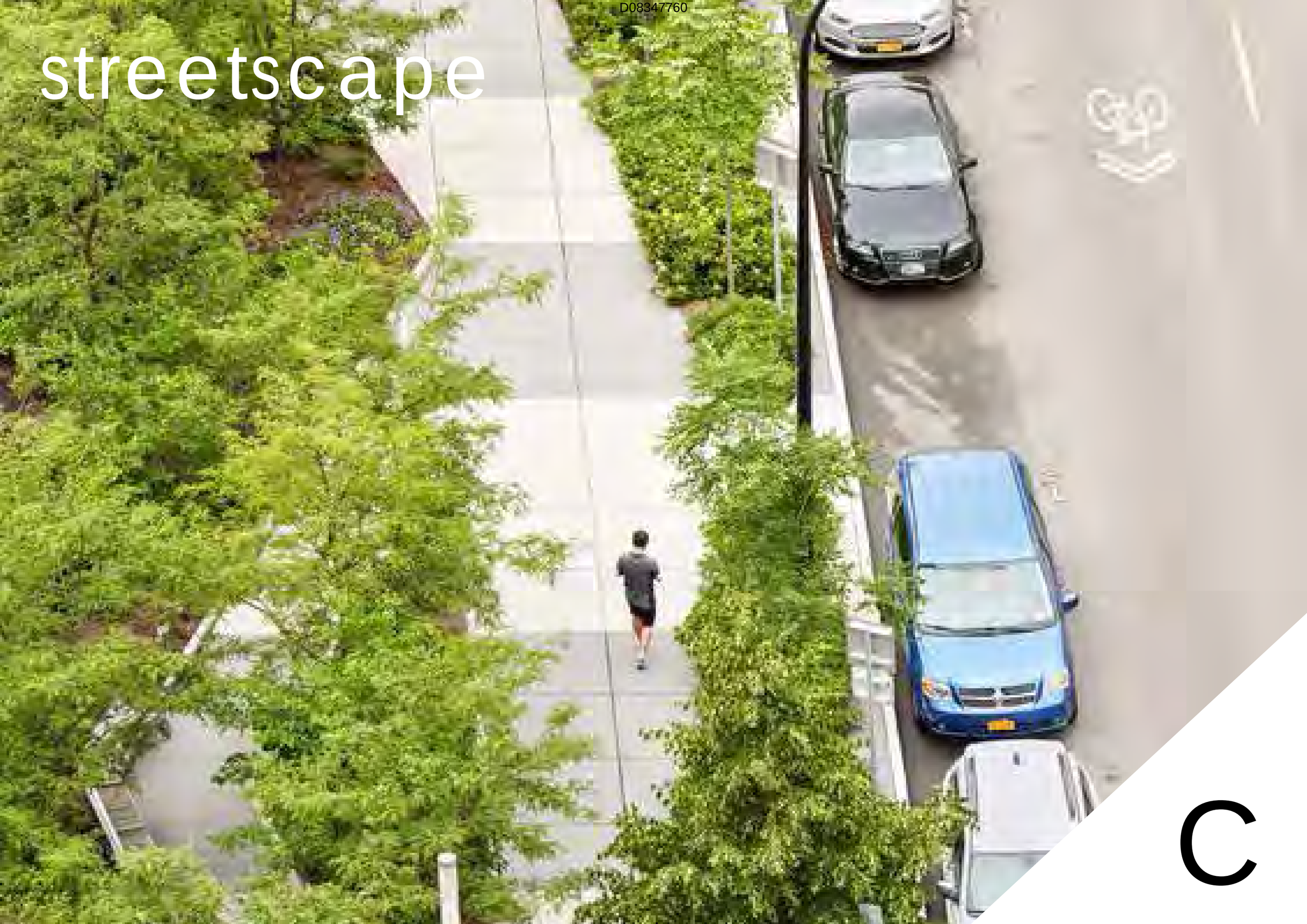
streetscape



C

concept plan

warners bay apartments

06

april 2017

N

Refer to Warners Bay Streetscape Master Plan (13.02.2012)

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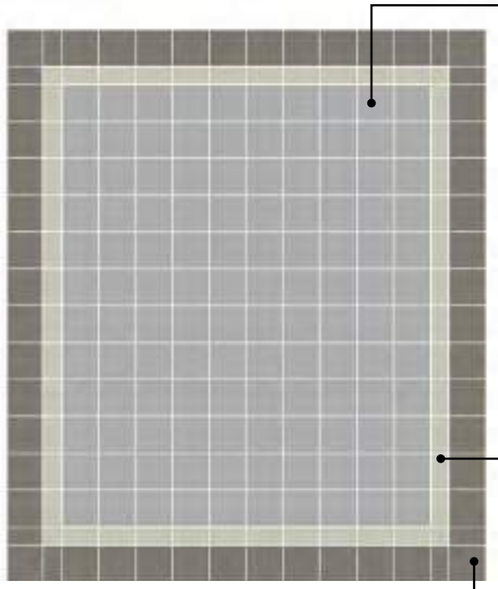
design elements

warners bay apartments

07

april 2017

Refer to Warners Bay Streetscape Master Plan (13.02.2012)



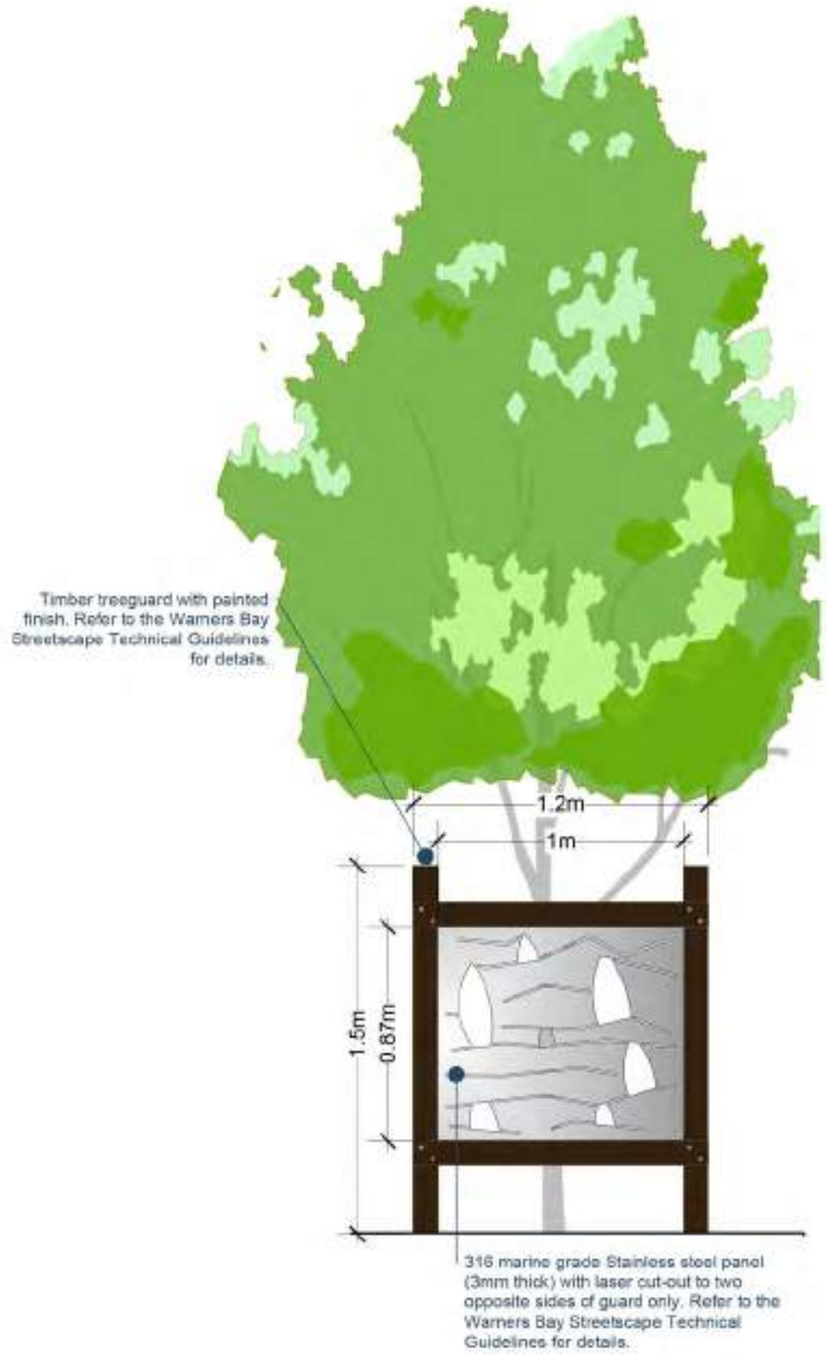
Main Body Paving
Adbri Euro Classic 300 x 300 x 50 in Prague (Charcoal colour). Lay in stackbond pattern.

Header-course
(single row between border, banding and main body paving)
Adbri Euro Honed in Natural (a steel grey with black aggregate) 300x150x50mm.

Borders and Banding- single row
Adbri Euro Honed in Prague (a dark Charcoal colour with black aggregate) 300x300x50mm.

1 LMCC paving detail and materials

scale 1:20 @ A3



2 LMCC Tree Guard - elevation

scale 1:25 @ A3

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