



18 August 2022
Ref 21727

Mary 88 Development Pty Ltd

Attn: Mr Michael Ferraro
michaelf@aland.com.au

Dear Michael,

DA14/0513
12 CARSON LANE, ST MARYS
PROPOSED MODIFICATIONS TO AN APPROVED RESIDENTIAL FLAT BUILDING

Introduction

This statement has been prepared to accompany a s4.55 Application to Penrith City Council for the proposed modifications to a previously approved residential development located at 12 Carson Lane, St Marys.

Site

The subject site is located on the western side of Carson Lane, adjoining Lane Park to the north and is Council's public car park to the east. The site has a street frontage of approximately 108m in length to Carson Lane and occupies an area of approximately 10,720m²

The subject site is situated within the St Marys Town Centre and is located approximately 700m south-west of St Marys Railway Station as well as within 100m walking distance north-west of St Marys Village Shopping Centre. The site is currently vacant, as indicated in the recent aerial image reproduced below.



Vehicular access to the site is currently provided via two separate driveways located off the Carson Lane site frontage.

Suite 6, 20 Young Street, Neutral Bay NSW 2089 - PO Box 1868, Neutral Bay NSW 2089 - Ph: 9904 3224

Approved Development – DA14/0513

In September 2015, Council granted development consent for DA14/0513, which involved the demolition of the existing structures on the site and the construction of four new 8-storey residential apartment buildings, comprising a total of 289 units, as follows:

DA14/0513 Approved Unit Mix

1 bedroom apartments:	52
2 bedroom apartments:	214
3 bedroom apartments:	23
TOTAL APARTMENTS:	289

Off-street parking was approved for a total of 378 cars (including 58 visitor spaces), *plus* a dedicated car wash bay within a new two-level basement parking area, in accordance with Council's *DCP 2014* requirements. In this regard, there were 6 x 'time restricted' visitor parking spaces and 2 x dedicated removalist bays approved to be provided at-grade within the future central internal road for convenient at-grade access to each respective building.

Vehicular access to the site was approved via a new entry/exit driveway located along the Carson Lane site frontage, with a central internal road which will allow separated access to the at-grade visitor parking and loading bay areas as well as the basement parking facilities.

Waste collection was approved to be undertaken by Council's waste trucks up to 10.5m in length, with a dedicated loading area located on the upper basement parking level. Whilst the service area was designed to allow the trucks to enter and exit the site in a forward direction, the manoeuvring area required the truck to traverse into the central portion of the basement parking area to service the bins.

Plans of the approved DA14/0513 scheme were prepared by *Dickson Rothschild* and are attached.

Proposed Modifications

The proposed modifications to the previously approved DA14/0513 scheme primarily relate to bringing the design in line with the new Class 2 building requirements recently introduced under the *Design and Building Practitioners Act 2020* and Regulations.

The proposed modifications being sought under this s4.55 application, from a traffic perspective, therefore involve the following:

- modifying the parking layout, including the approved basement footprint for improved internal circulation
- introducing transitions on the basement access ramp to allow for the *approved* HRV garbage truck to access the site from GF-B2 loading area without scraping
- *slightly* modifying/reconfiguring the approved apartment layout and mix, whilst retaining the approved apartment yields
- a *reduction* in the total number of approved basement parking spaces from 378 spaces to 376 spaces – i.e. a *loss* of 2 parking spaces
- relocation/reconfiguration of the HRV loading area closer to the basement access ramp to allow for safer access/delineation from the car parking areas
- introducing a truck turntable within the loading dock area to allow trucks to enter/exit in a forward direction *at all times*, in accordance with Council's *DCP* requirements
- coordinated design for services including pump room, waste holding rooms, vents, access ramp, sprinkler rooms in accordance with relevant requirements
- new substation and hydrant boosters
- increased floor to floor heights to 3.1m high.

The proposed modifications to the approved design results in a revised unit mix as follows:

Proposed s4.55 Unit Mix

1 bedroom apartments:	49
2 bedroom apartments:	217
3 bedroom apartments:	23
TOTAL APARTMENTS:	289

Off-street parking in the s4.55 scheme is proposed for a total of 376 cars (including 58 visitor spaces), with the majority of the parking located within a reconfigured two-level basement parking area beneath the buildings, in accordance with Council's requirements. In this regard, the previously approved 6 x at-grade parking and 2 x loading areas remains generally *unchanged*.

Furthermore, the previously approved vehicular access arrangements, central internal road and garbage collection arrangements also remain generally *unchanged*. Notwithstanding, it is noted the basement access driveway grades/transition lengths and the location of the B1 to B2 internal ramp have been modified to ensure the approved HRV garbage truck servicing the site can be accommodated, without scraping and overhead clearance issues.

Plans of the proposed s4.55 scheme have been prepared by *Design Corp Architects Pty Ltd* and are also attached.

Traffic Assessment

The traffic implications of development proposals primarily concern the effects of the *additional* traffic flows generated as a result of a development and its impact on the operational performance of the adjacent road network, particularly during the weekday commuter peak periods. Any increase in traffic volumes as part of the proposed residential development proposal would only arise as a consequence of an increase the number of dwellings proposed; however, *no change* is proposed in the number of dwellings on the site.

As such, the proposed s4.55 scheme is expected to result in *zero* change to the traffic generation potential of the site as the approved unit yield remains *unchanged*. The proposed modifications will therefore clearly not result in any unacceptable traffic implications in terms of road network capacity.

Off-Street Parking Requirements

The off-street car parking rates applicable to the s4.55 development proposal are specified in Council's *Development Control Plan 2014, Part C10: Transport, Access and Parking* document in the following terms:

Residential Flat Building

1 bedroom apartment:	1 space per dwelling
2 bedroom apartment:	1 space per dwelling
3 bedroom apartment:	2 spaces per dwelling
Visitors:	1 space per 5 dwellings
Service Bay:	1 space for every 40 dwellings

Application of the above parking rates to the proposed new unit mix as outlined in the s4.55 development proposal, yields an off-street car parking requirement of 370 spaces, as set out below:

Proposed s4.55 Application

49 x 1 bedroom apartments @ 1 space per dwellings:	49 spaces
217 x 2 bedroom apartments @ 1 space per dwellings:	217 spaces
23 x 3 bedroom apartments @ 2 spaces per dwellings:	46 spaces
289 x apartments @ 1 space per 5 dwellings:	58 spaces
TOTAL REQUIRED:	370 spaces

The proposed development makes provision for a total of 376 off-street car parking spaces, comprising 318 residential spaces, 58 visitor spaces (including 6 x at-grade spaces), *plus* a dedicated car wash bay and 2 at-grade service bays, thereby satisfying Council’s *DCP 2014* parking requirements.

The geometric design layout of the proposed reconfigured car parking facilities have been designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 1 - Off-Street Car Parking AS2890.1:2004* in respect of driveway gradients, transitions and widths, overhead clearances, parking bay dimensions and aisle widths.

Loading/Servicing Provisions

Waste collection for the s4.55 scheme is again expected to be undertaken on site by Council’s 10.5m long garbage truck. Specifications of Council’s waste truck is reproduced below.

2.3.2 Heavy Rigid Waste Collection Vehicle

Note: The following vehicle to be used for developments comprised of 80 or more dwellings. Alternate solutions which propose the use of the low entry 9.7m heavy rigid waste collection vehicle (section 2.3.1) will be reviewed in accordance with section 2.5.

Vehicle Classifications	Heavy Rigid Vehicle Dimensions
Overall Length (m)	10.5
Operational Length (m)	12.5
Design Width (m)	2.8
Design Height (m)	3.7
Swept Circle (m)	22.5
Clearance (travel height) (m)	4.5
Roadway/ramp grade (max)	1:6.5 (15.4%)
Rate of change of grade (max)	1:16 (6.25%) in 7.0m of travel
Gross Weight (max tonnes)	28.0
Front Chassis Clearance	13°
Rear Chassis Clearance	16°

Table 2: Standard dimensions in accordance with AS 2890.2

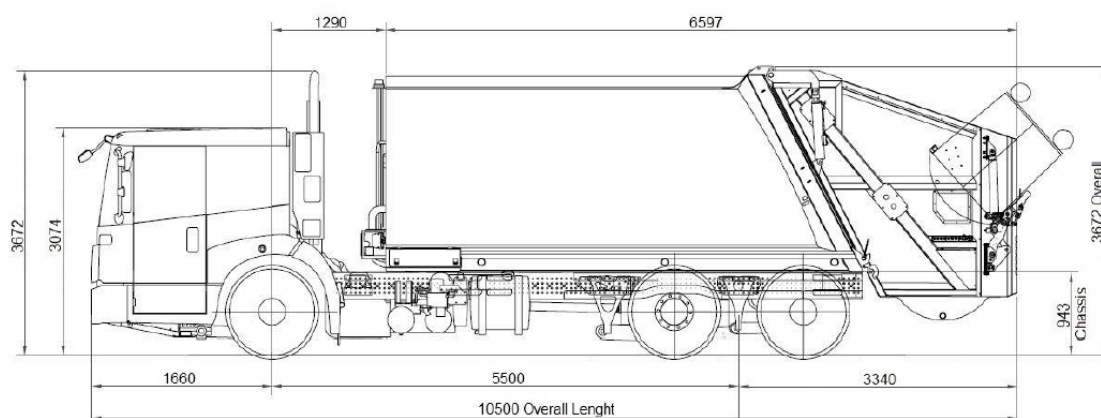


Figure 2: 10.5m Heavy Rigid Rear Load Waste Collection Vehicle specifications

A dedicated loading bay area is again proposed within the basement floor level, however, has been relocated to the lower basement in order to accommodate a compliant ramp design, in accordance with *AS2890.2*, albeit with shorter transition lengths at the bottom of the ramp.

In this regard, the modified loading bay area has also been relocated closer to the basement entry ramp and incorporates a truck turn table, thereby allowing a safe separation between the basement car parking areas and trucks to enter and exit in a forward direction *at all times*.

Furthermore, it is noted that the approved GF-B1 access ramp *does not* comply with the requirements of AS2890.2:2018, with the rate of change in grades exceeding 6.25% (1 in 16) in grade.

As such, this s4.55 scheme proposes to rectify the clearance issues to accommodate the HRV truck in accordance with AS2890.2:2018 requirements, including a maximum ramp grade not exceeding 15.4%, with suitable transitions at the top and bottom of the ramp.

Attached are *swept turning path* diagrams of the HRV truck, undertaken using the *Autodesk Vehicle Tracking 2022* program in accordance with the requirements of AS2890.2:2018.

The templates confirm that:

- the service vehicle manoeuvring area has been designed to accommodate the swept turning path requirements of an HRV truck, noting a 0.5m unobstructed clearance envelope has been provided along the entire travel path of the truck, in accordance with discussions previously held with Council
- Council's 10.5m long rear-loading garbage truck will be able to enter and exit the site in a forward direction *at all times*
- the maximum gradient on the entry ramp is 15.4%, with an overhead clearance of 4.5m in accordance with Council's *Residential Flat Building Waste Management Guidelines* document and the AS2890.2:2018 requirements
- a minimum 2m loading area is provided at the rear of the loading bay.

The geometric design layout of the proposed loading facilities have been designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 2: Off-Street Commercial Vehicle Facilities AS2890.2* in respect of maximum ramp gradients, loading dock dimensions and service area requirements for HRV trucks.

Conclusion

In essence, the primary changes from the previously approved scheme to the proposed modified scheme, from a traffic and parking perspective, involves a slight change of unit mix (whilst retaining the approved yield), and slight reconfiguration of the basement parking and loading bay areas, thereby allowing the *approved* HRV truck to service the site.

In particular, the previously approved residential yield, vehicular access and waste collection arrangements remain generally *unchanged*.

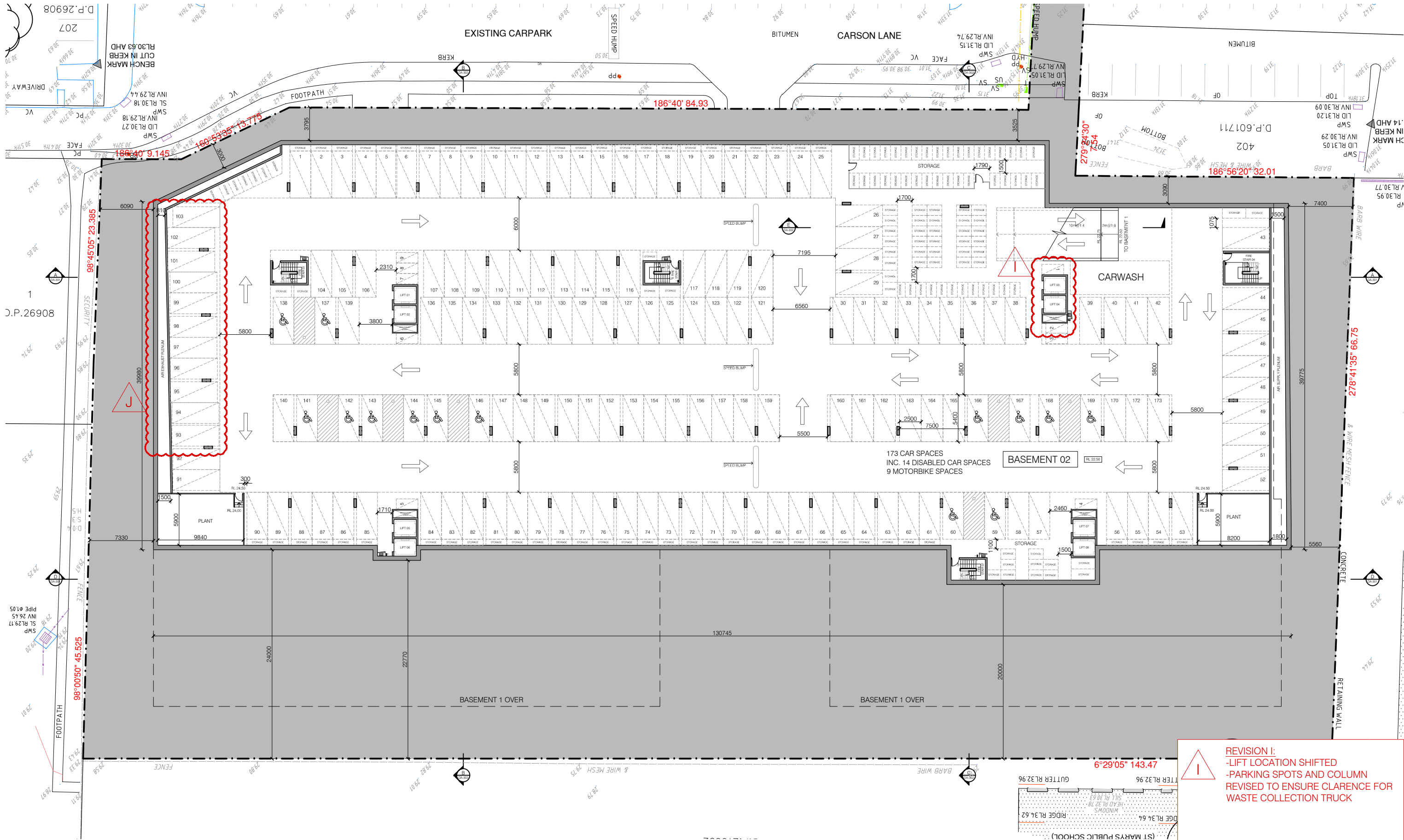
The foregoing assessment has therefore determined that the proposed modifications to the approved design will not have any unacceptable traffic, parking, servicing or site access implications.

Please do not hesitate to contact me on telephone 9904 3224 should you have any enquiries.

Yours sincerely



Donald Lee
Senior Engineer B.Eng (Civil)
Varga Traffic Planning Pty Ltd



Dickson Rothschild
DR Design(NSW)Pty Ltd
9 Argyle Place,
Millers Point, NSW, 2000
Australia

Phone +61 2 9252 2215
NDickson@DicksonRothschild.com.au
www.dicksonrothschild.com.au
Nominated Architect: Robert Nigel Dickson
Registration No: 5364

Do not scale off this drawing. Use figured dimensions only. Resolve discrepancies with The Architect before proceeding. Copyright of this drawing and designs executed remains vested in Dickson Rothschild.

B	22-01-14	ISSUED FOR UDRP MEETING	KR	ND
C	31-03-14	ISSUED FOR UDRP - ELECTRONIC REVIEW	KR	ND
D	16-05-14	ISSUED FOR DEVELOPMENT APPLICATION	KR	ND
E	24-07-14	ISSUED FOR COUNCIL DISCUSSION	KR	ND
F	19-09-14	ISSUED FOR COUNCIL	KR	ND
G	30-01-15	ISSUED FOR COUNCIL	DC	ND
H	19-06-15	ISSUED FOR COUNCIL	KR	ND
I	09-07-15	ISSUED FOR COUNCIL	KR	ND
REV	DATE	DESCRIPTION	DRWN	DR APPD

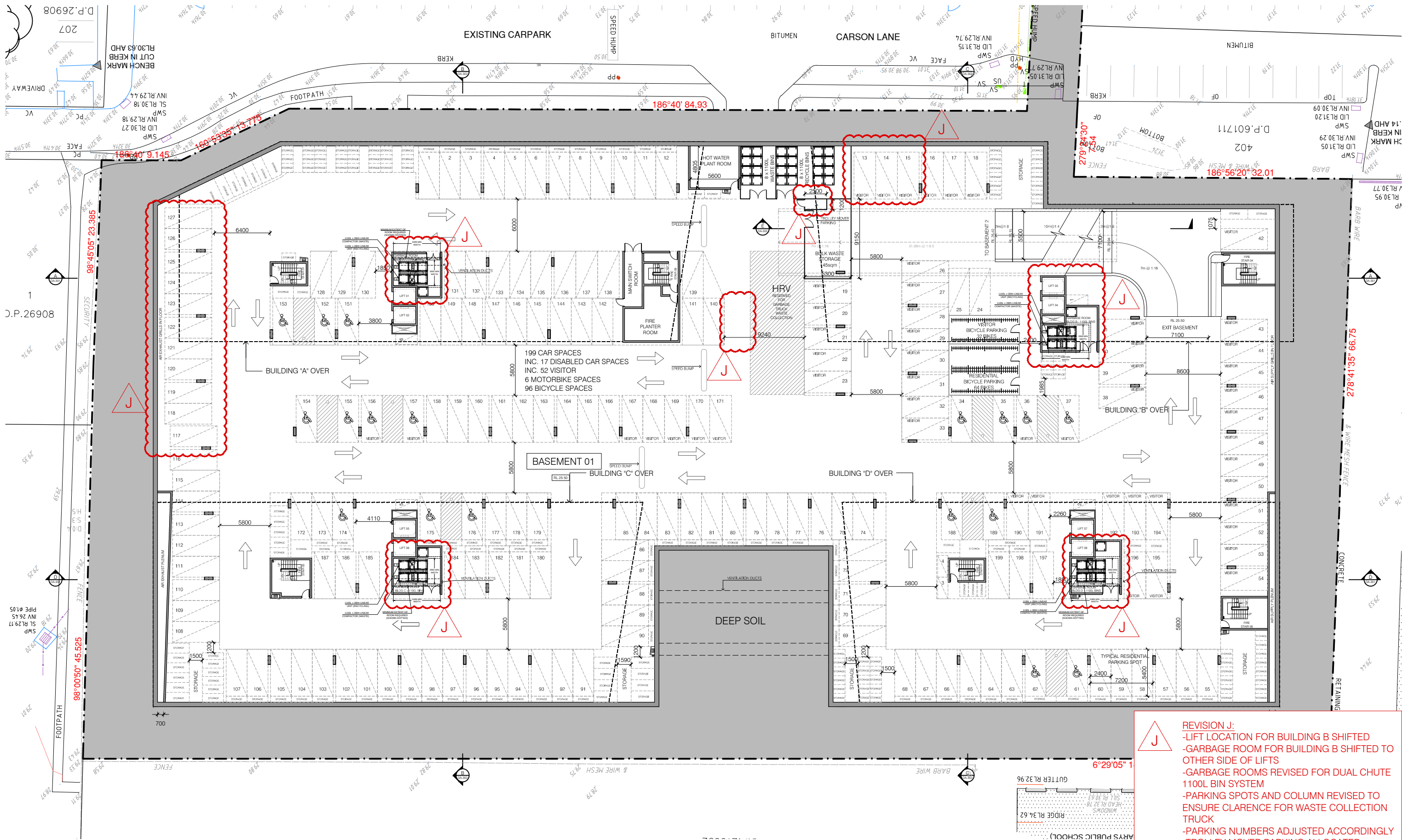
PROJECT
12 CARSONS LANE
ST. MARYS, NSW 2760

CLIENT
SAMWAY GROUP PTY LTD

DRAWING
BASEMENT 2 PLAN

PROJECT NO. 13-079	DRAWING NO. DA-200	REVISION I
SCALE @ A1 1:200	DATE 02-04-14	DRAWN / CHECKED KR/ND





Dickson Rothschild
DR Design(NSW)Pty Ltd
9 Argyle Place,
Millers Point, NSW, 2000
Australia

Phone +61 2 9252 2215
NDickson@DicksonRothschild.com.au
www.dicksonrothschild.com.au
Nominated Architect: Robert Nigel Dickson
Registration No: 5364

Do not scale off this drawing. Use figured dimensions only. Resolve discrepancies with The Architect before proceeding. Copyright of this drawing and designs executed remains vested in Dickson Rothschild.

REV	DATE	DESCRIPTION	DRWN	DR APPD
C	31-03-14	ISSUED FOR UDRP - ELECTRONIC REVIEW	KR	ND
D	16-05-14	ISSUED FOR DEVELOPMENT APPLICATION	KR	ND
E	24-07-14	ISSUED FOR COUNCIL DISCUSSION	KR	ND
F	19-09-14	ISSUED FOR COUNCIL	KR	ND
G	30-01-15	ISSUED FOR COUNCIL	DC	ND
H	02-04-15	ISSUED FOR COUNCIL	DC	ND
I	19-06-15	ISSUED FOR COUNCIL	KR	ND
J	09-07-15	ISSUED FOR COUNCIL	KR	ND

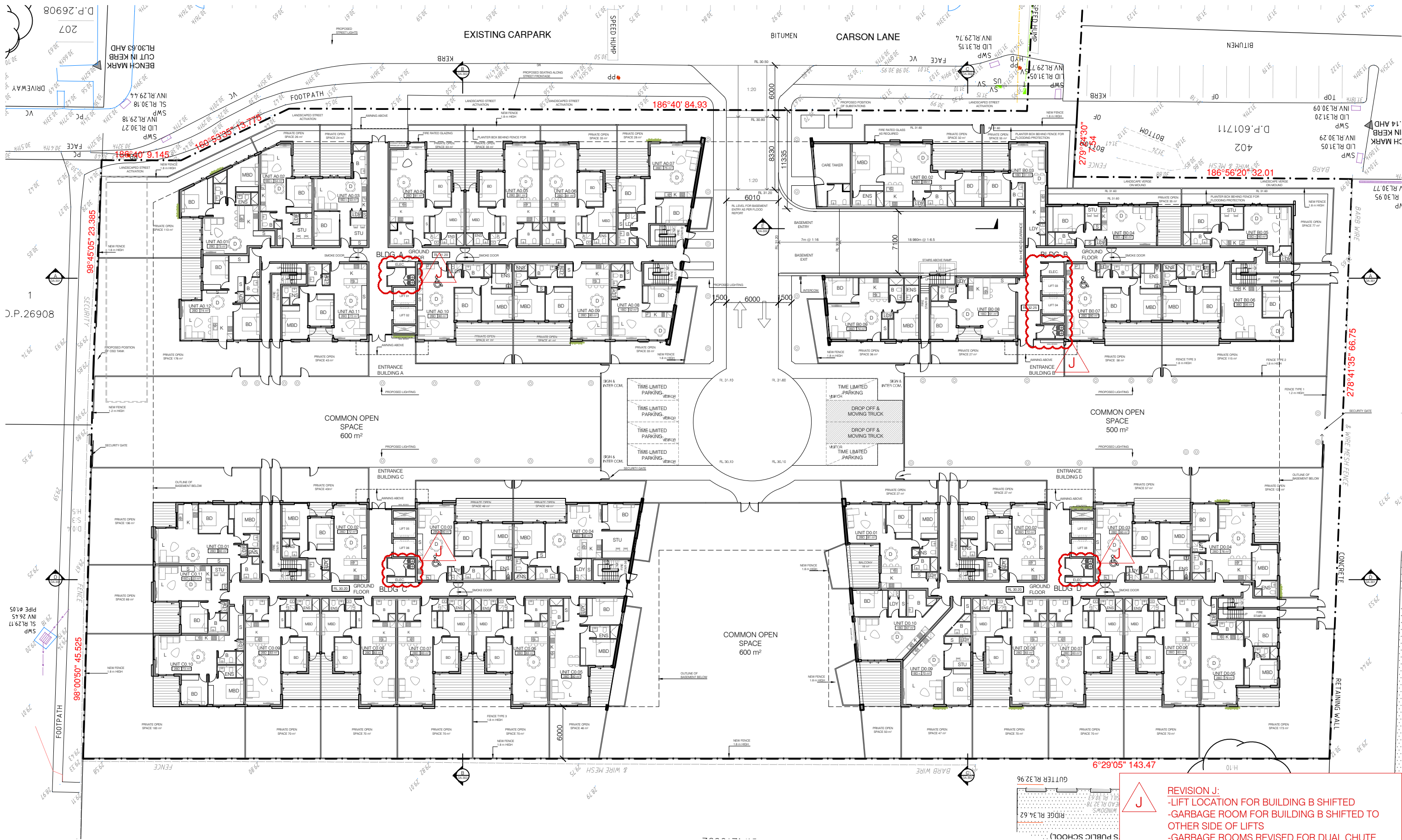
PROJECT
12 CARSONS LANE
ST. MARYS, NSW 2760

CLIENT
SAMWAY GROUP PTY LTD

DRAWING
BASEMENT 1 PLAN

PROJECT NO.	DRAWING NO.	REVISION
13-079	DA-201	J
SCALE @ A1	DATE	DRAWN / CHECKED
1:200	02-04-14	KR/ND





Dickson Rothschild
DR Design(NSW)Pty Ltd
9 Argyle Place,
Millers Point, NSW, 2000
Australia

Phone +61 2 9252 2215
NDickson@DicksonRothschild.com.au
www.dicksonrothschild.com.au
Nominated Architect: Robert Nigel Dickson
Registration No: 5364

Do not scale off this drawing. Use figured dimensions only. Resolve discrepancies with The Architect before proceeding. Copyright of this drawing and designs executed remains vested in Dickson Rothschild.

C	31-03-14	ISSUED FOR UDRP - ELECTRONIC REVIEW	KR	ND
D	16-05-14	ISSUED FOR DEVELOPMENT APPLICATION	KR	ND
E	24-07-14	ISSUED FOR COUNCIL DISCUSSION	KR	ND
F	19-09-14	ISSUED FOR COUNCIL	KR	ND
G	30-01-15	ISSUED FOR COUNCIL	DC	ND
H	02-04-15	ISSUED FOR COUNCIL	DC	ND
I	19-06-15	ISSUED FOR COUNCIL	KR	ND
J	09-07-15	ISSUED FOR COUNCIL	KR	ND
REV	DATE	DESCRIPTION	DRWN	DR APPD

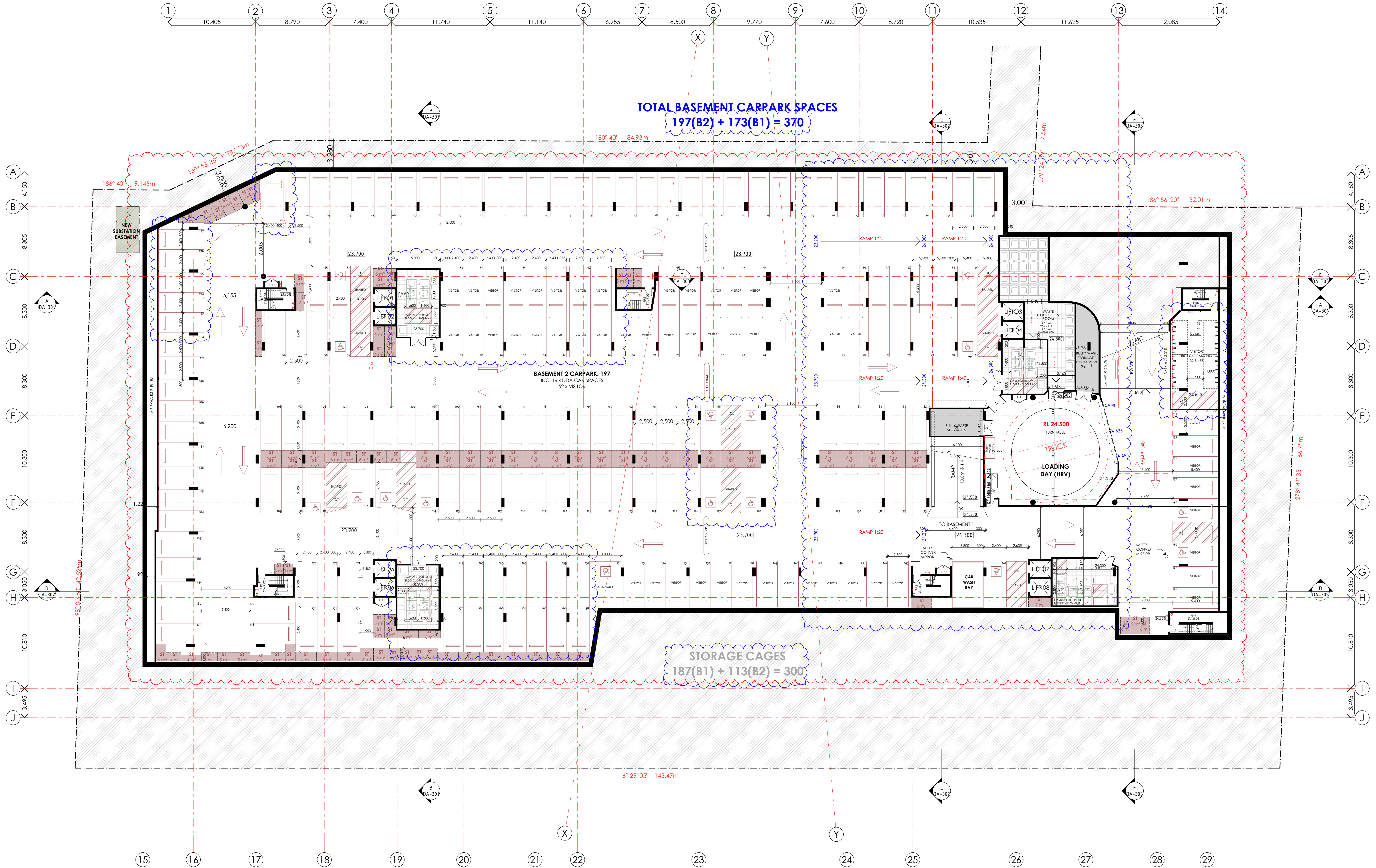
PROJECT
12 CARSONS LANE
ST. MARYS, NSW 2760

CLIENT
SAMWAY GROUP PTY LTD

DRAWING
GROUND FLOOR PLAN

PROJECT NO. 13-079	DRAWING NO. DA-202	REVISION J
SCALE @ A1 1:200	DATE 02-04-14	DRAWN / CHECKED KR/ND





BASEMENT 2
1:200

S4.55 MODIFICATION

rev	description	date
J	Issued for S4.55 modification	12/04/2022
K	Response to council RFI	17/08/2022



client

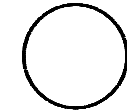


consultants

Private Certifier
Structural Engineer
Stormwater Engineer
Mechanical Engineer
Electrical Engineer
Hydraulic Engineer
East Coast Approvals Group
Mance Army Engineering
Mance Army Engineering
Stantec Australia
Stantec Australia
Stantec Australia

notes

This document is COPYRIGHT and the property of DESIGNCORP ARCHITECTS PTY LTD. It is not to be retained, copied or used without the prior written permission of the author.
All dimensions must be checked on-site prior to the commencement of any works. Any discrepancies are to be brought to the attention of DESIGNCORP ARCHITECTS PTY LTD.

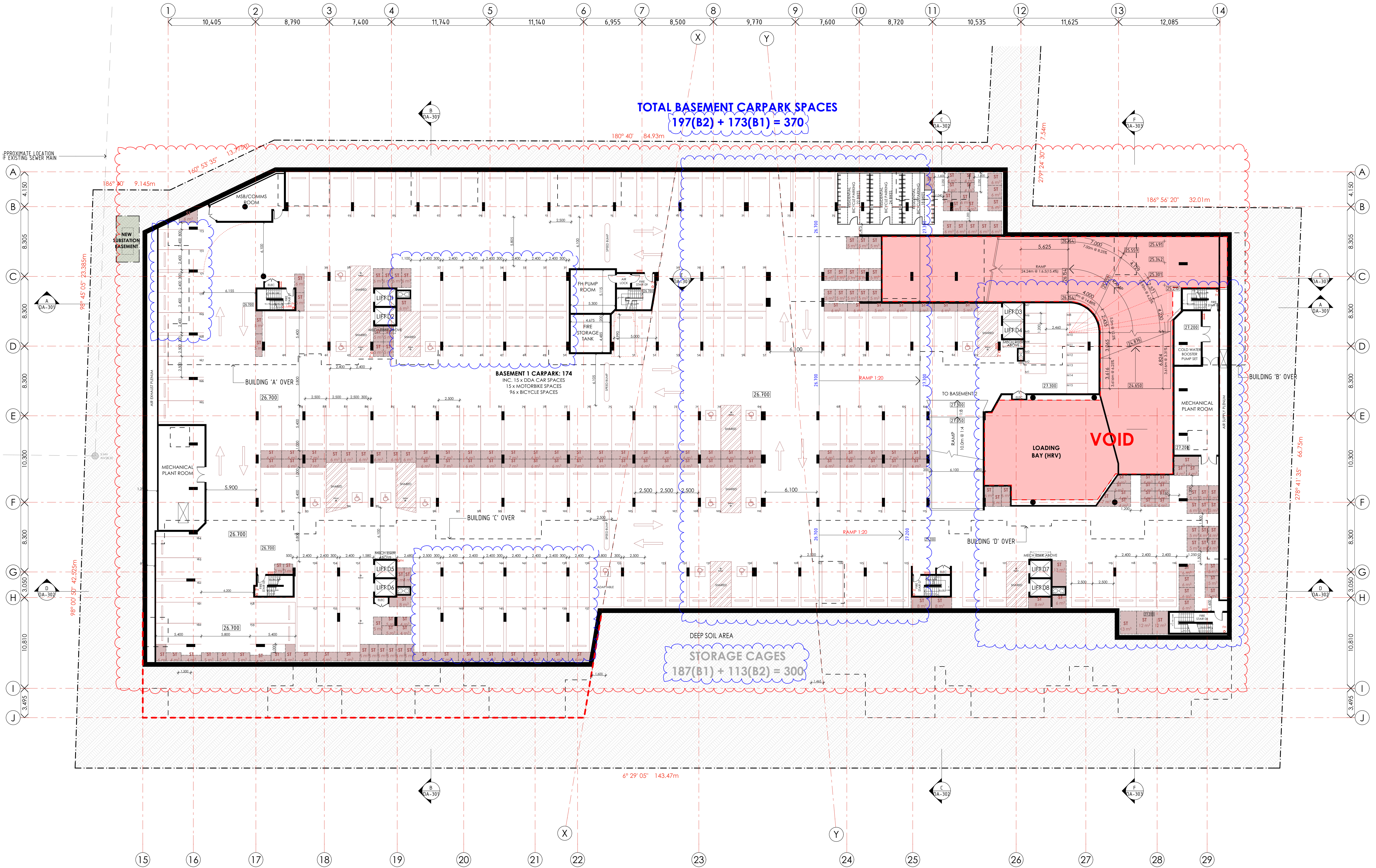


project: Proposed mixed use development
at 12 Carson Lane, St Marys, NSW 2760

drawings: GA PLAN - BASEMENT 2

drawn: J.S. scale: 1:200
checked: J.E. date: 17/08/2022
ref: 2021-229
Council: P.C.C.

DA-200
Revision K



BASEMENT 1
1:200

S4.55 MODIFICATION

rev	description	date
J	Issued for S4.55 modification	12/04/2022
K	Response to council RFI	17/09/2022



client

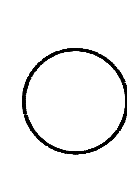


consultants

Private Certifier
Structural Engineer
Stormwater Engineer
Mechanical Engineer
Electrical Engineer
Hydraulic Engineer
East Coast Approvals Group
Mance Army Engineering
Mance Army Engineering
Stantec Australia
Stantec Australia
Stantec Australia

notes

This document is COPYRIGHT and the property of DESIGNCORP ARCHITECTS PTY LTD. It is not to be reprinted, copied or used without the prior written permission of the author.
All dimensions must be checked on-site prior to the commencement of any works. Any discrepancies are to be brought to the attention of DESIGNCORP ARCHITECTS PTY LTD.



DESIGN CORP ARCHITECTS
18 Dunlop Street North Parramatta NSW 2151
ph: +61 2 9639 0011 mob: 0431 111 777 a@designcorp.com.au
www.designcorp.com.au nominated architect - joe@l-sabbagh 8707

project: Proposed mixed use development
at 12 Carson Lane, St Marys, NSW 2760
drawings: GA PLAN - BASEMENT 1
drawn: J.S. scale: 1:200 ref: 2021-229
checked: J.E. date: 17/09/2022 Council: P.C.C.

DA-201
Revision K



GROUND
1:200

rev	description	date
J	Issued for S4.55 modification	12/04/2022
K	Response to council RFI	17/06/2022



client



consultants

Private Certifier
Mance Army Engineering
Stormwater Engineer
Mechanical Engineer
Structural Australia
Electrical Engineer
Hydraulic Engineer

notes

This document is COPYRIGHT and the property of DESIGNCORP ARCHITECTS PTY LTD. It is not to be retained, copied or used without the prior written permission of the author.
All dimensions must be checked on-site prior to the commencement of any works. Any discrepancies are to be brought to the attention of DESIGNCORP ARCHITECTS PTY LTD.

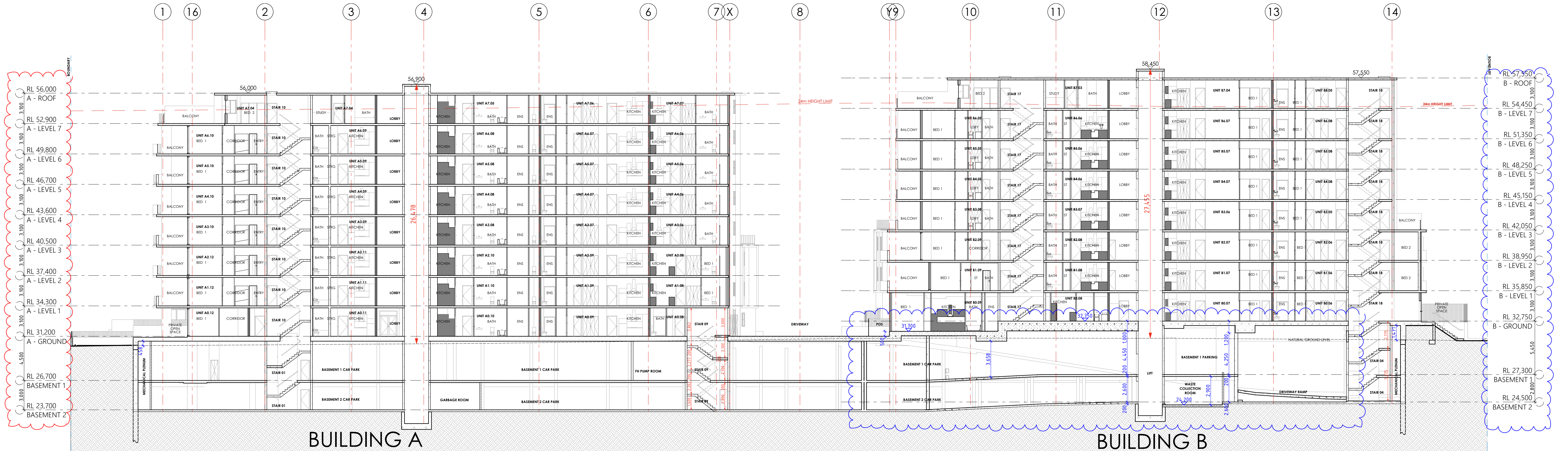
DESIGNCORP ARCHITECTS



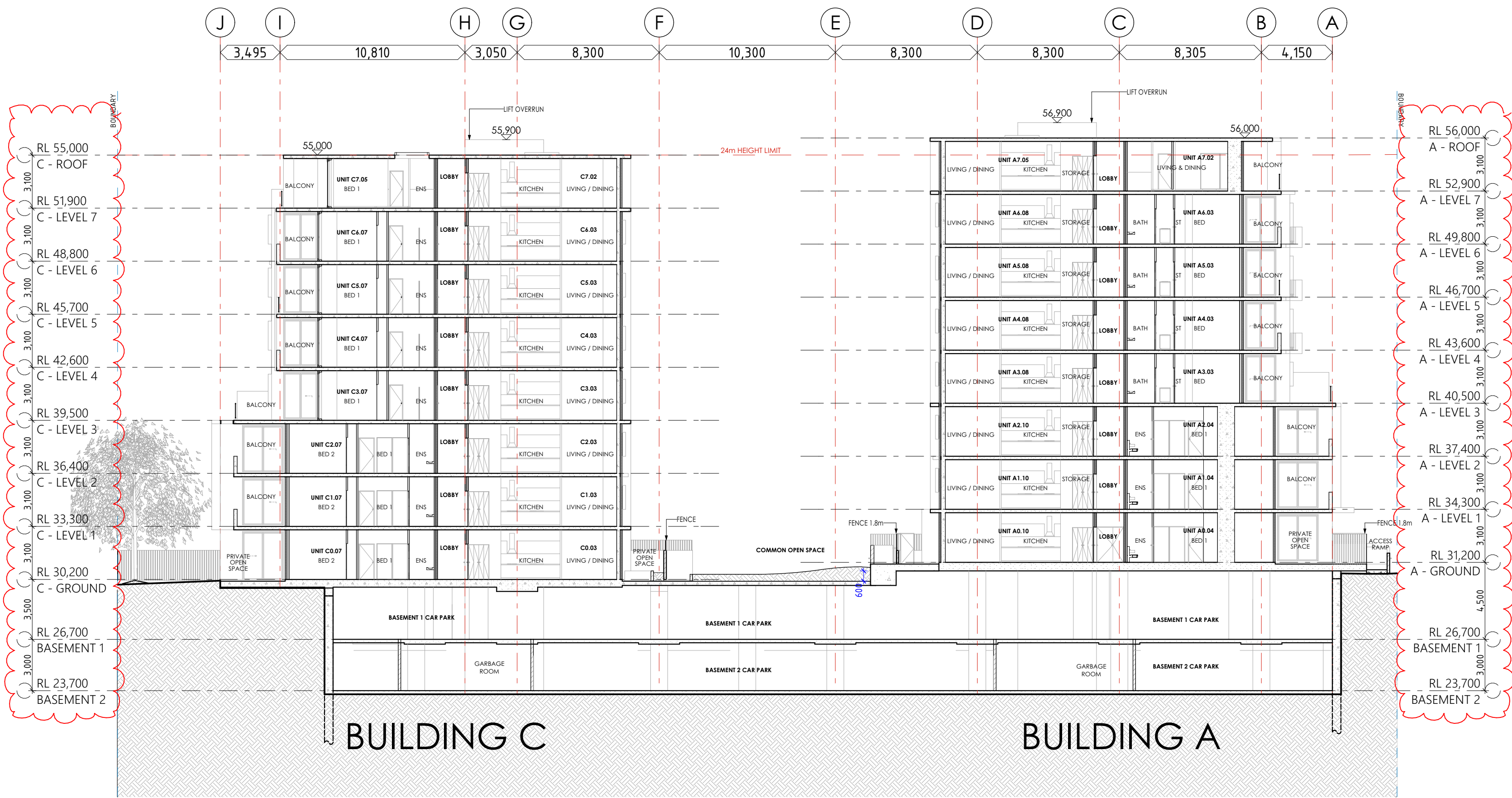
project:	Proposed mixed use development at 12 Carson Lane, St Marys, NSW 2760
drawings:	GA PLAN - GROUND
drawn:	J.S.
checked:	J.E.
scale:	1:200
date:	17/06/2022
ref:	2021-229
council:	P.C.C.

DA-202
Revision K

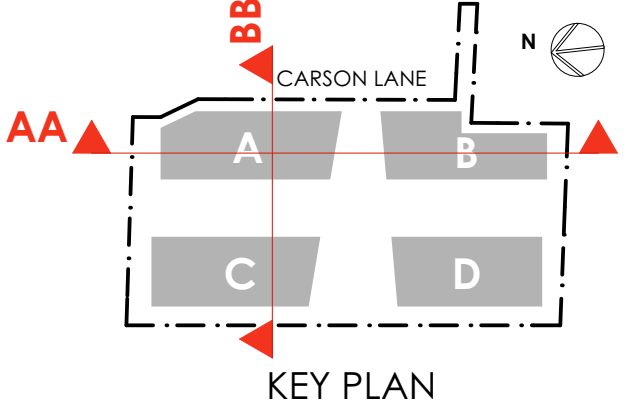
S4.55 MODIFICATION



SECTION AA
1:200



SECTION BB
1:200



S4.55 MODIFICATION

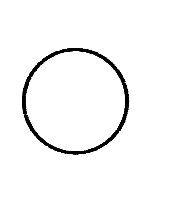
rev	description	date
J	Issued for S4.55 modification	12/04/2022
K	Response to council RFI	17/08/2022

www.dialbeforeyoudig.com.au
DIAL1100
BEFORE YOU DIG



consultants
Private Certifier
Structural Engineer
Stormwater Engineer
Mechanical Engineer
Electrical Engineer
Hydraulic Engineer
East Coast Approvals Group
Mance Army Engineering
Stantec Australia
Stantec Australia
Stantec Australia

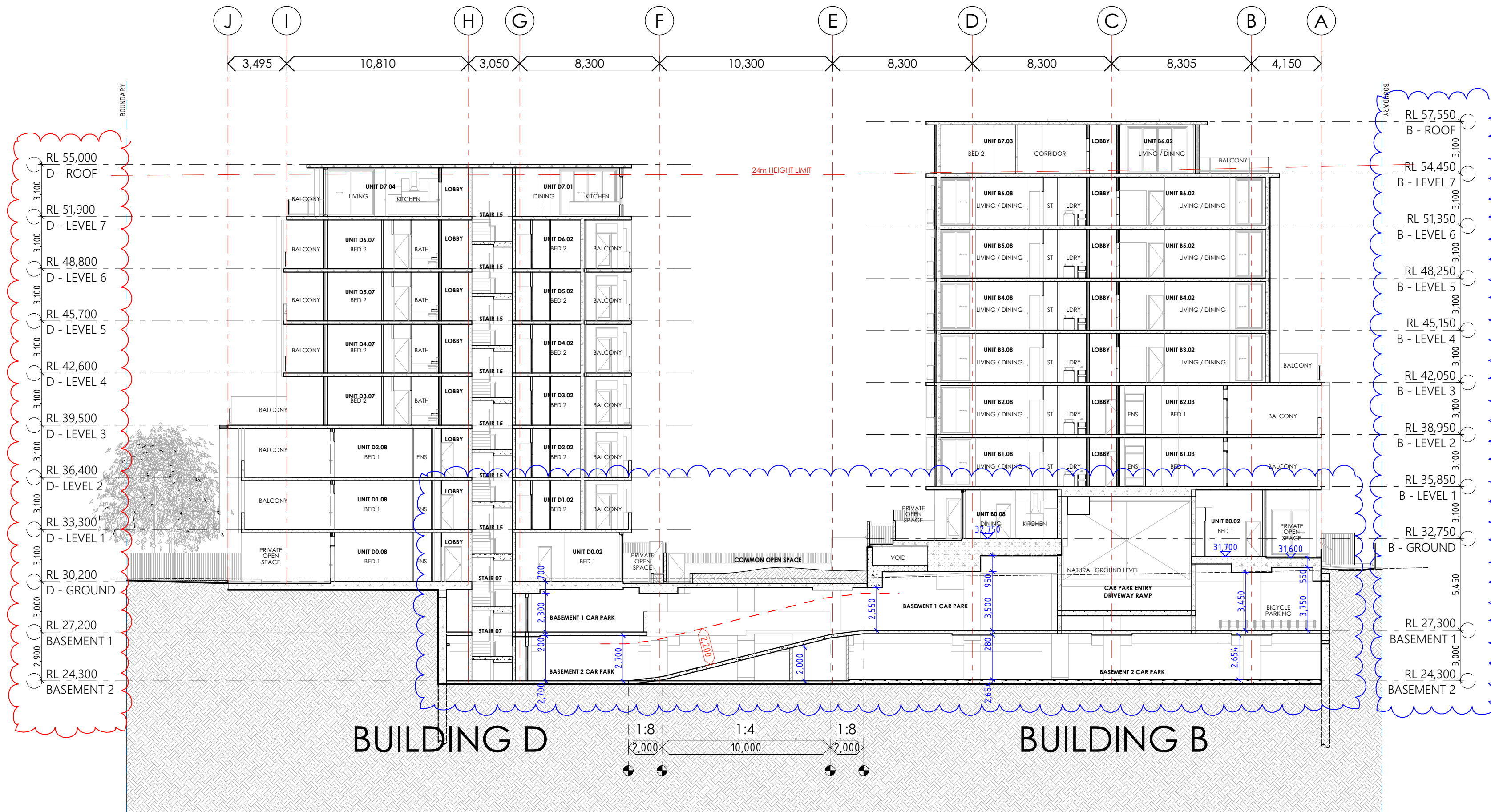
notes
This document is COPYRIGHT and the property of DESIGNCORP ARCHITECTS PTY LTD. It is not to be retained, copied or used without the prior written permission of the author.
All dimensions must be checked on-site prior to the commencement of any works. Any discrepancies are to be brought to the attention of DESIGNCORP ARCHITECTS PTY LTD



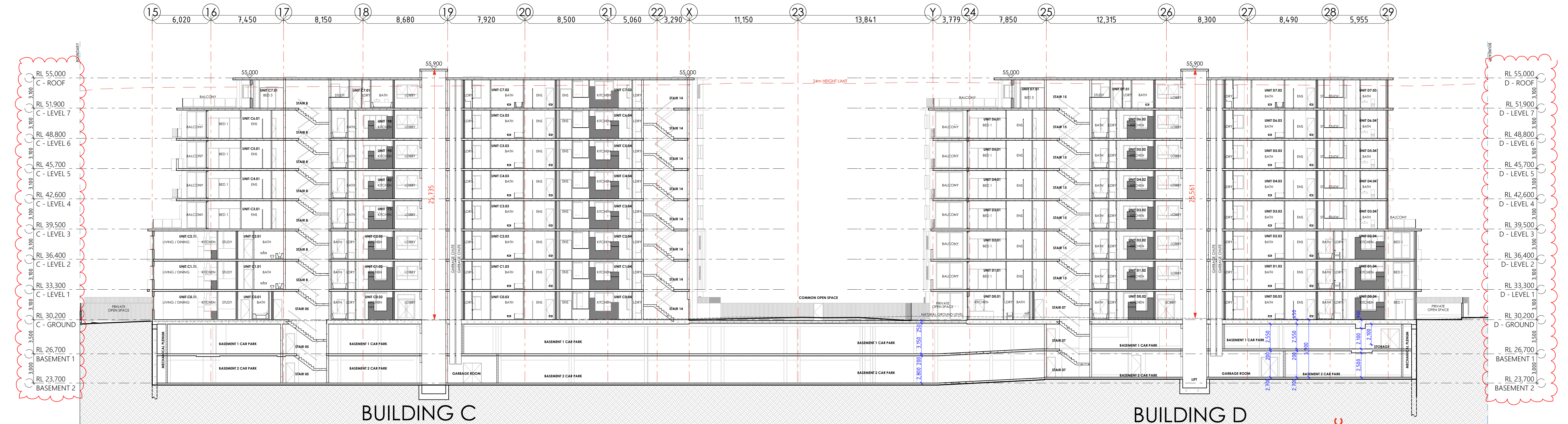
DESIGN CORP ARCHITECTS
18 Dunlop Street North Parramatta NSW 2151
ph: +61 2 9630 0911 mob: 0431 111 777 a@designcorp.com.au
www.designcorp.com.au nominated architect - joe el-sabbagh 8707

project:	Proposed mixed use development at 12 Carson Lane, St Marys, NSW 2760
drawings:	SECTIONS - AA & BB
drawn:	J.S.
checked:	J.E.
scale:	1:200
date:	17/08/2022
ref:	2021-229
council:	P.C.C.
Revision	K

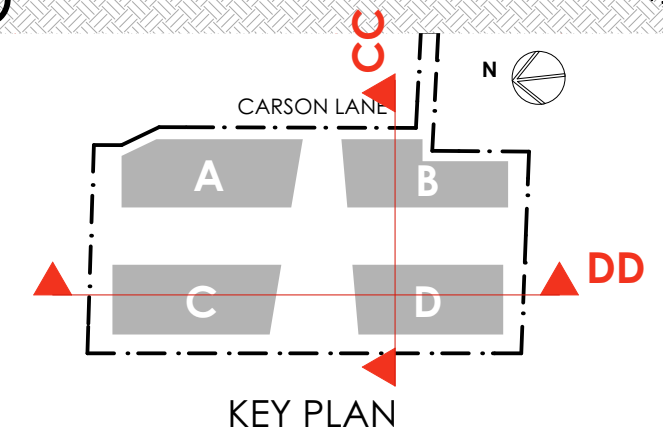
DA-301



SECTION CC
1:200



SECTION DD
1:200



S4.55 MODIFICATION

rev	description	date
J	Issued for S4.55 modification	12/04/2022
K	Response to council RFI	17/05/2022



client

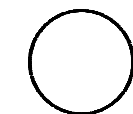


consultants

Private Certifier
Mance Amey Engineering
Stormwater Engineer
Mechanical Engineer
Starlec Australia
Electrical Engineer
Hydraulic Engineer

notes

This document is COPYRIGHT and the property of DESIGNCOP ARCHITECTS PTY LTD. It is not to be retained, copied or used without the prior written permission of the author.
All dimensions must be checked on-site prior to the commencement of any works. Any discrepancies are to be brought to the attention of DESIGNCOP ARCHITECTS PTY LTD.



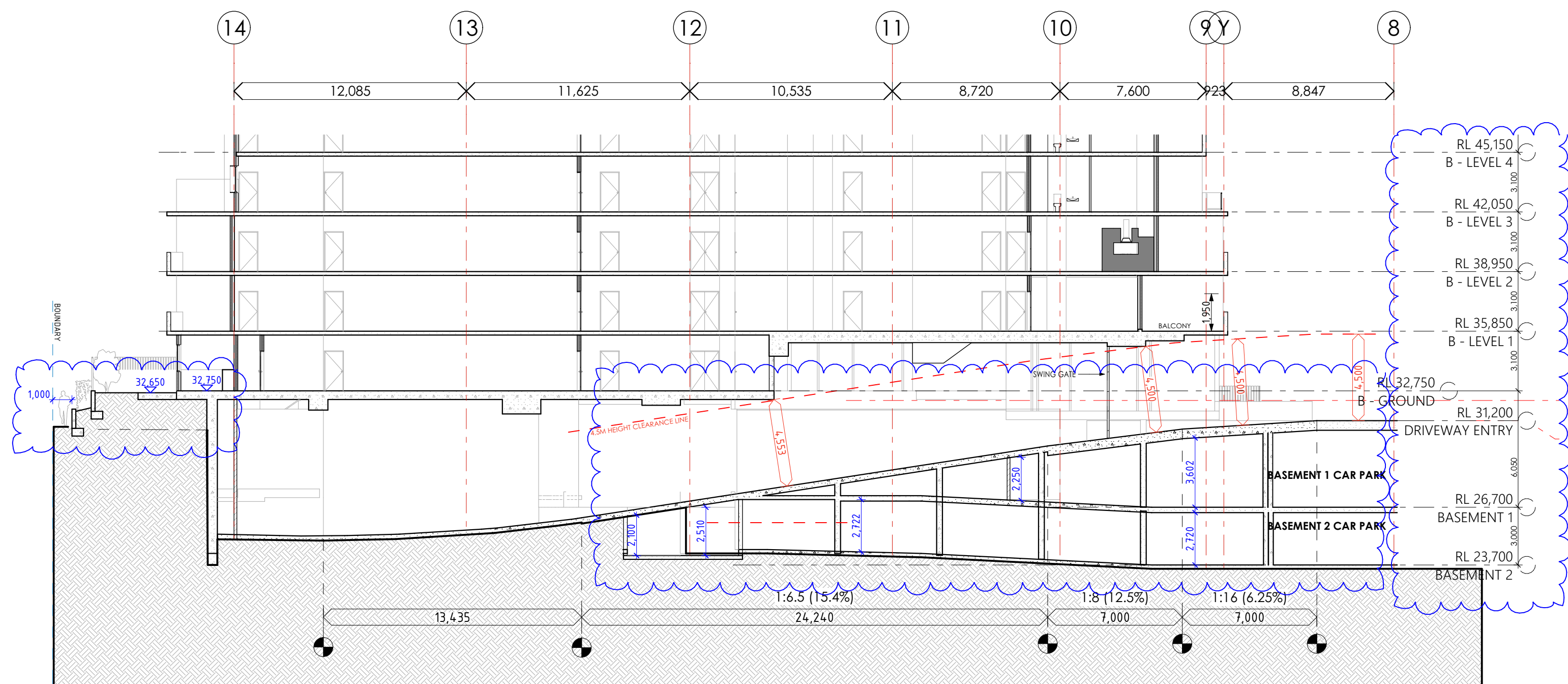
**DESIGN
CORP
ARCHITECTS**
16 Dunlop Street North Parramatta NSW 2151
ph: +61 2 9630 0011 mob: 0431 111 777 a@designcorp.com.au
www.designcorp.com.au nominated architect - joe el-sabbagh 8707

project: **Proposed mixed use development
at 12 Carson Lane, St Marys, NSW 2760**

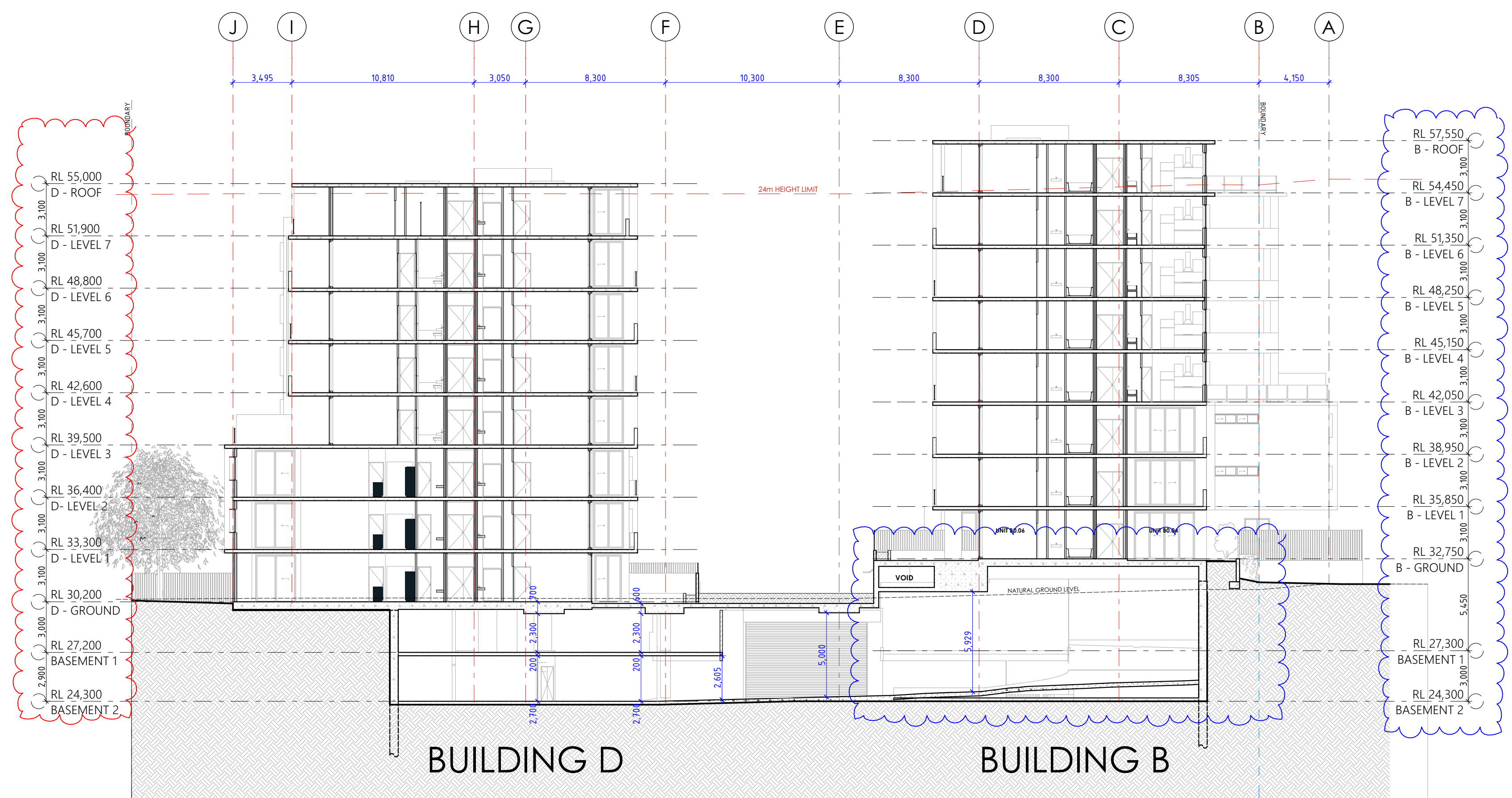
drawings: **SECTIONS - CC & DD**

drawn: J.S. scale: 1:200 ref: 2021-229
checked: J.E. date: 17/09/2022 Council: P.C.C.

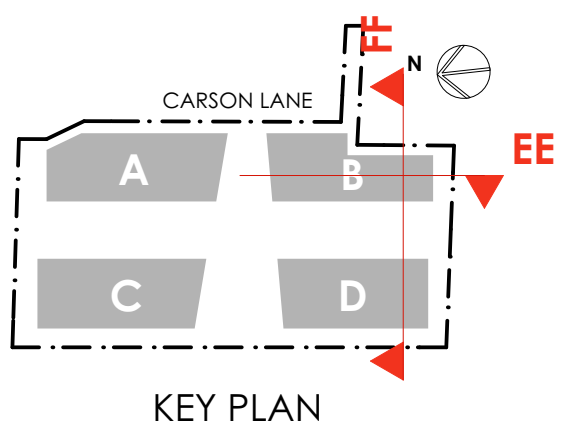
DA-302
Revision K



SECTION EE - DRIVEWAY RAMP
1:200



SECTION FF
1:200



S4.55 MODIFICATION

rev	description	date
J	Issued for S4.55 modification	12/04/2022
K	Response to council RFI	17/08/2022

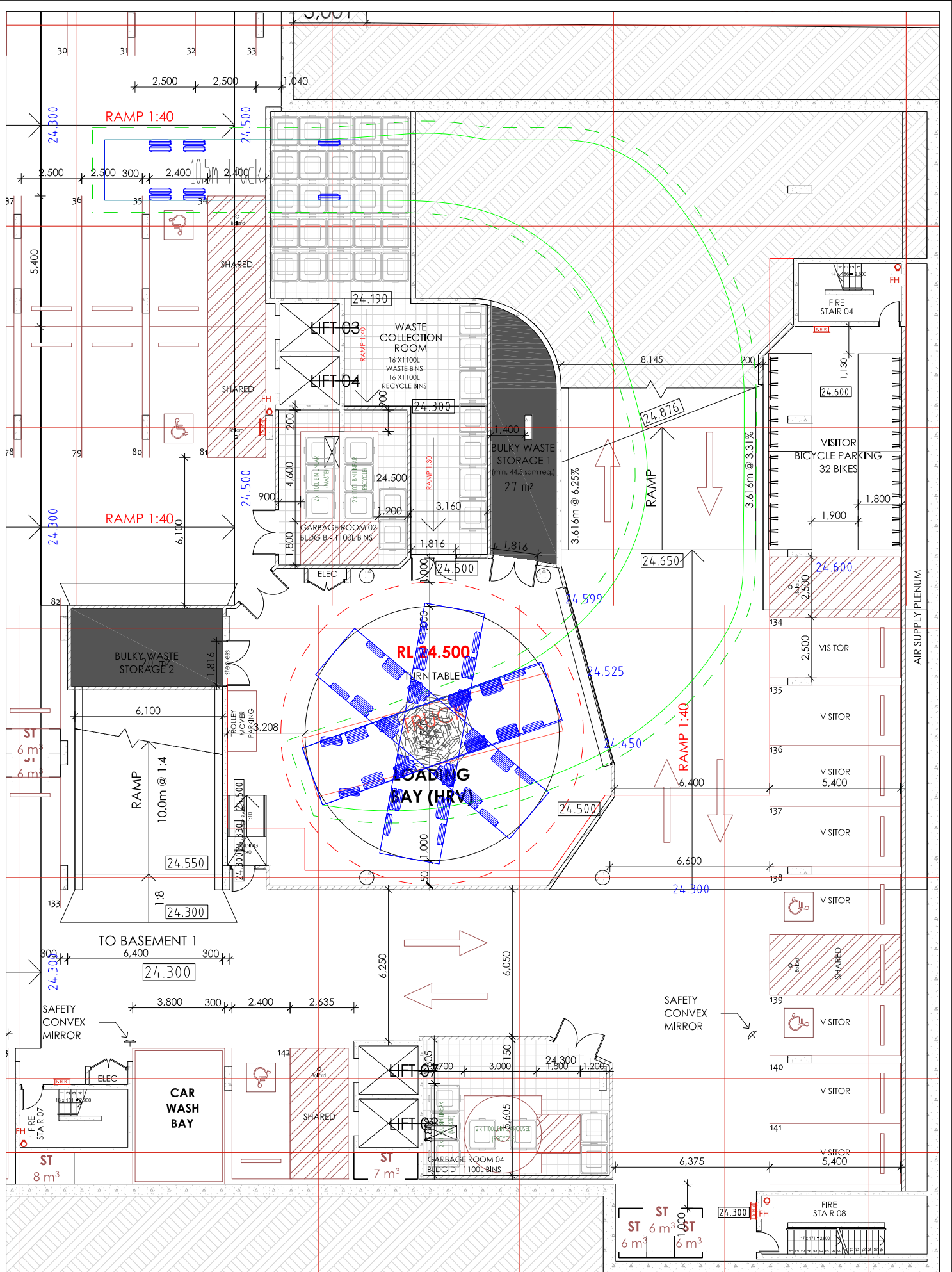


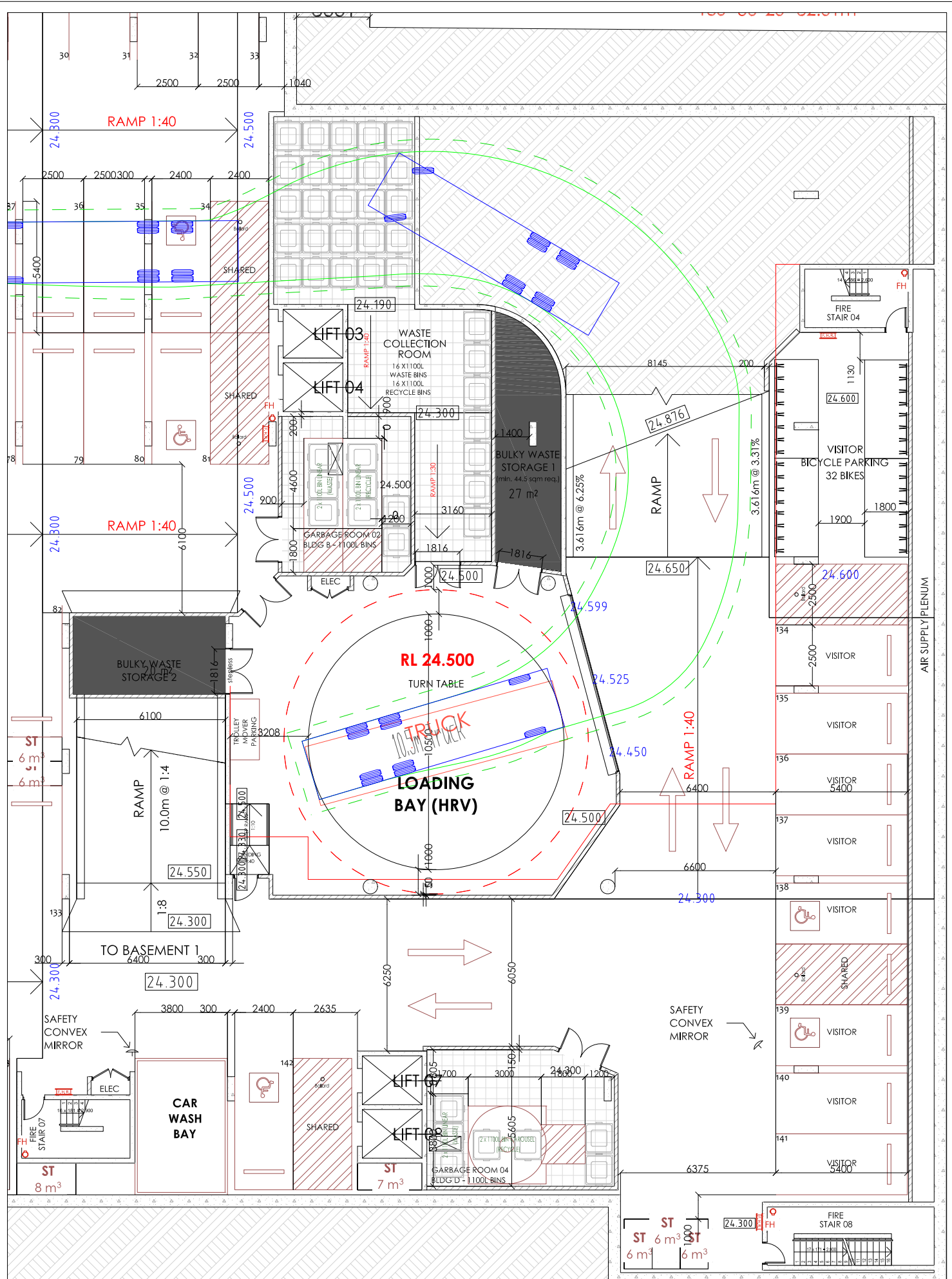
consultants
Private Certifier
Structural Engineer
Stormwater Engineer
Mechanical Engineer
Electrical Engineer
Hydraulic Engineer
East Coast Approvals Group
Mance Army Engineering
Stantec Australia
Stantec Australia
Stantec Australia

notes
This document is COPYRIGHT and the property of DESIGNCORP ARCHITECTS PTY LTD. It is not to be retained, copied or used without the prior written permission of the author.
All dimensions must be checked on-site prior to the commencement of any works. Any discrepancies are to be brought to the attention of DESIGNCORP ARCHITECTS PTY LTD.

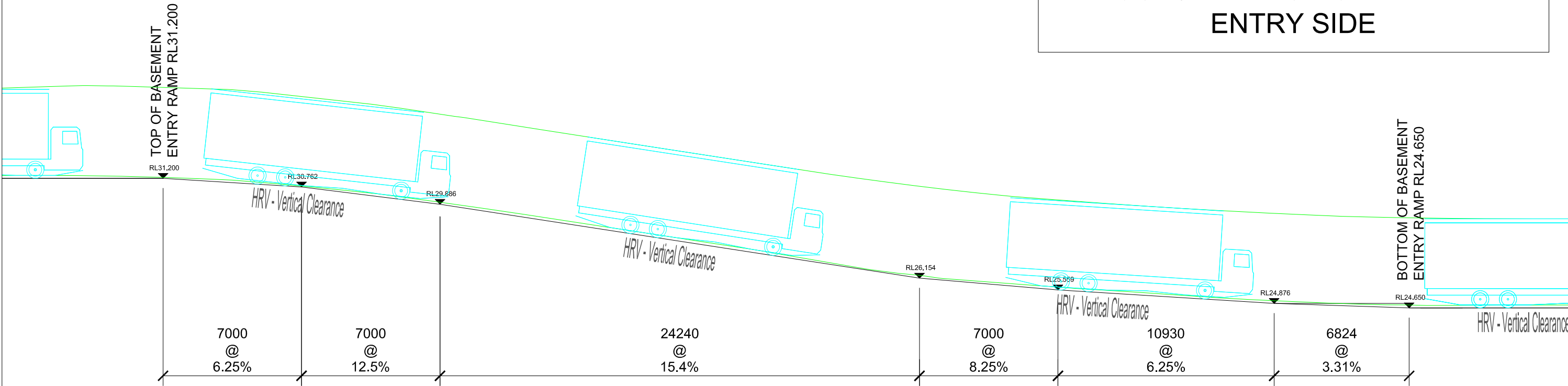
DESIGN CORP ARCHITECTS
18 Dunlop Street North Parramatta NSW 2151
ph: +61 2 9630 0011 mob: 0431 111 777 admin@designcorp.com.au
www.designcorp.com.au nominated architect - joe el-sabbagh 8707

project:	Proposed mixed use development at 12 Carson Lane, St Marys, NSW 2760
drawings:	SECTIONS - EE & FF
drawn:	J.S.
checked:	J.E.
scale:	1:200
date:	17/08/2022
ref:	2021-229
Council:	P.C.C.
DA-303	Revision K





LONGITUDINAL SECTION ALONG
OUTSIDE EDGE OF RAMP -
ENTRY SIDE



LONGITUDINAL SECTION ALONG
INSIDE EDGE OF RAMP -
EXIT SIDE

