SCHEDULE OF AMENDMENTS:

01- A re-design for the piazza levels and planter boxes.
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03- LG 18 & G15: Layout reconfigured. The surface area of this unit has been increased by 23 m2 and it is a 2 bedroom apartment with study.
04- Non trafficable roof added over unit G15.
05- This corner of Level 01 terrace has been extended over the balcony of unit G14 to act as a cover.
06- Unit LG07: The surface area has been increased by 91.3 m2 by shifting the communal room to the left to gain more area within the unit and by reducing retail 03 by 91.3 m2.
07- Unit 1.04: Layout reconfigured. The surface area of this unit has been increased by 24 m2 and it is a 3 bedroom apartment with study. (previously it was a 2 bed apartment).
08- Unit LG10: A coutyard has been added to its balcony and a planter box to act as a privacy screen for this unit since it is just above the natural ground level.
09- Unit LG11: The balustrading on the balcony has been replaced by a glass wall of 3 panel sliding window and fixed glass to 1 m height.
10- Retail 11: Ramp is removed.
11- Retail 06: Ramp is removed.
12- Retail 10: Ramp is removed.
13- Retail 06 has been split into 2 retails: 6 and 6A. And consecutive areas of 120m2 and 188.5m2.
14- Retail 07 has been split into 2 retails: 7 and 7A. With a separate entry ramp to retail 7A. And consecutive areas of 109.8m2 and 156.6m2.
15- The stairs in retail 07 has been deleted.
16- The external RL of retail 08 has been dropped down by 150mm after a review of the survey plan and the ramp in this retail has been adjusted and a stair is proposed.
17- Retail 03 has been split into 3 retails accross the three levels: retail 03 on ground floor, retail 12 on lower ground floor and retail 10 on basement 02 floor.
Retail 05 has also been split into 3 retails accross the three levels: retail 05 on ground floor, retail 13 on lower ground floor and retail 11 on basement 02 floor.
18- The void space which is adjacent to retail 03 on ground floor level has been deleted again as approved by previous S4.55.
19- Retail 09 has been split into 2 retails: 9 and 9A. The ramp has been deleted. With consecutive areas of 109.3m2 and 89.8m2.
20- A mail box room for the whole building has been added beside retail 9A.
21- The loading dock area has been reduced to accomodate for two vehicles instead of three vehicles.
22- The stairs and ramps have been deleted in lobbies 1 and 2 in building A.
23- Amendments to configuration of unit 1.11 due to the lift 01 overrun encroachment.
24- Lift 01 to be a stretcher lift. Size as per manufacturer specifications.
25- The entry pedestrian ramp in retail 04 on ground floor has been shifted from the middle of the shop to one corner of it.
26- Extension of roof over unit 1.12
27- Unit LG01: The surface area has been increased by 71.5 m2 by reducing retail 13.
28- The fire water storage tank in basement 03 is deleted as it is no longer needed.
29- Two retail car spaces have been added on basement 04.
30- The plant equipments to be placed within the approved vertical louvered space on the roof.
31- The entry doors to retail lift 08 lobby have been removed as the lift can act as the security interface and the entry door of building B lobby has been relocated.
32- The entry stairs from Glenrose PL to the piazza are larger now and planter boxes has been added on its both sides.
33- The corner of retail 7A has been cut back to widen up the access for disability from Glenrose PL.
34- Privacy screens has been added to bedroom windows of units LG06 and G06.

Floor level	GFA approved	GFA Proposed
Level 01	1721 m2	1725 m2
Ground floor	2838 m2	2822 m2
Lower Ground	2782 m2	2795 m2
Basement 02	3140 m2	3140 m2
Basement 03	4283 m2	4283 m2
Basement 04	4283 m2	4283 m2
Total GFA	19047 m2	19048 m2

Retail Staff

Commercial car space

Residential visitor

Residential

FRL OF BUILDING ELEMENTS
TYPE A CLASS 2 CONSTRUCTION - UNITS
TYPE A CLASS 7 CONSTRUCTION - CARPARK

DEFINITIONS (as BCA)

STRUCTURAL ADEQUACY, in relation to an FRL, means the ability to maintain stability and adequate load bearing capacity as determined by as 1530.4.

INTEGRITY, in relation to an FRL, means the ability to resist passage of flames and hot gases specified in as 1530.4

INSULATION, in relation to an FRL, means the ability to maintain a temperature on the surface not exposed to the furnace below the limits specified in as 1530.4.

BUILDING ELEMENT	FRL (in minutes) Structural Adequacy/ Integrity/Insulation

REFER TO BCA PART C3 SPEC. C1.1 CLAUSE C 3.1 Table 3

EXTERNAL WALL (including any column and other building element incorporated there in) or other external building element, where the distance from any fire source feature to which it is exposed is -

Building Element – Type A Construction	Class 2	Class 7a	Class 6
Loadbearing External Walls			
– Less than 1.5m from a FSF	90/90/90	120/120/120	180/180/180
1.5 - 3m from a FSF	90/60/60	120/90/90	180/180/120
3m or more from a FSF	90/60/30	120/60/30	180/120/90
Non-Loadbearing External Walls			
– Less than 1.5m from a FSF	-/90/90	-/120/120	-/180/180
1.5 - 3m from a FSF	-/60/60	-/90/90	-/180/120
3m or more from a FSF	-/-/-	-/-/-	-/-/-
External Columns (not incorporated into an external wall)			
– Loadbearing	90/-/-	120/-/-	180/-/-
Non-loadbearing	-/-/-	-/-/-	-/-/-
Common Walls and Fire Walls	90/90/90	120/120/120	180/180/180

Building Element – Type A Construction	Class 2	Class 7a	Class 6
Internal Walls - Fire resisting lift and stair shafts –			
– Loadbearing	90/90/90	120/120/120	180/120/120
Non-loadbearing	-/90/90	-/120/120	-/120/120
Internal Walls – Bounding public corridors, public lobbies and the like –			
– Loadbearing	90/90/90	120/-/-	180/-/-
Non-loadbearing	-/60/60	-/-/-	-/-/-
Internal Walls – Between or bounding sole-occupancy units –			
– Loadbearing	90/90/90	120/-/-	180/-/-
Non-loadbearing	-/60/60	-/-/-	-/-/-
Internal Walls – Ventilating, pipe, garbage and the like shafts not used for the discharge of hot products of combustion –			
– Loadbearing	90/90/90	120/90/90	180/120/120
Non-loadbearing	-/90/90	-/90/90	-/120/120
Other loadbearing internal walls, internal beams, trusses and columns	90/-/-	120/-/-	180/-/-
Floors	90/90/90	120/120/120	180/180/180
Roofs	90/60/30	120/60/30	180/60/30

DOORS

Fire stair doors - self-closing	-/60/30
Entry doors to sole-occupancy units - self closing	-/60/30
Lift landing doors	-/60/-
Doors to Electrical cupboards	Non combustible
Garbage Room hopper doors	-/60/30

ALL CONTRACTOR, MANUFACTURES AND WORKERS TO PROVIDE THE WORKS AS PER CURRENT BCA AND AUSTRALIAN STANDARDS DETAILS AND REQUIREMENTS.

BUILDING CODE OF AUSTRALIA COMPLIANCE PROVISIONS

SECTION B STRUCTURE
- B1.2 – AS1170 Structural loads
- B1.3 – AS3600 AS3700 AS4100 Structural design
- B1.4 – AS 3600 Materials & Forms Constructions

SECTION C FIRE RESISTANCE
- C1.1 – Spec. C1.1 Fire Resisting Construction
- C1.8 – Spec. C1.8 Lightweight construction
- C1.10 – Spec. C1.10 Compliance with fire hazard properties
- C2.6 – Vertical Separation of Openings in External walls
- C2.7 – Separation of fire compartments
- C2.10 – Spec. C1.1 Separation of lift shafts
- C2.12 – Separation of equipment
- C2.13 – Electricity Supply System
- C3.2 – Clause C3.4 Protection of openings
- C3.4 – Acceptable Methods of protection (of openings)
- C3.8 – Opening in Fire Isolated Exits
- C3.10 – AS 1735.11 Fire doorsets to lift shafts
- C3.11 – Spec. C1.1 & Spec. C3.4 Bounding construction of Class 2 & 3
- C3.12 & C3.15 – Fire sealing of penetrations
- Table A spec. C1.1 – AS 1530.4 Fire resistance levels

Rise in storeys 4 or more	Class of building 2, 3, or 9	Class of building 5, 6, 7or 8
	A	A

SECTION D ACCESS AND EGRESS
- D1.10 – Discharge from Exits
- D2.4 – Separation of rising & descending flights
- D2.7 – Installations in exits and paths of travel
- D2.8 – Spec. C1.1 & Spec. C3.4 Enclosures under stairways
- D2.13 – Goings & Risers
- D2.14 – Landings
- D2.15 – Thresholds
- D2.16 – Balustrades
- D2.17 – Handrails
- D2.20 – Swinging Doors
- D2.21 – Operation of latch
- D2.23 – Sign on doors
- D2.24 - Protection OF openable windows
- D3.2 – AS1428.1 General Building access requirements
- D3.3 – Parts of Building to be Accessible
- D3.5 – AS1428.1 Disable carparking
- D3.6 – AS1428.1 & Spec. D3.6 Signage for accessible facilities, Service & Features
- D3.8 – AS/NZS 1428.4.1 Tactile indicators

SECTION E SERVICES AND EQUIPMENT
- E1.3 – As 2419.1 Hydrant system
- E1.4 – As 2441 Hose reel system
- E1.5 – As 2118.1, AS 2118.4, AS2118.9 & Spec. E1.5 Sprinkler system
- E1.6 – As 2444 Portable fire extinguishers
- E2.2 - Table E2.2a – Spec. E2.2a Smoke detection and alarm system
- E3.2 – Stretcher facility in lifts
- E3.3 – Warning Sign
- E3.6 – AS 1735.12 Facilities for disabilities
- E3.7, E3.9 & E3.10 – Fire service controls
- E4.2/E4.4 – AS/NZS 2293.1 Emergency lighting
- E4.6/E4.8 – AS/NZS 2293.1 Exit Signs

SECTION HEALTH AND AMENITY
- F1.1 – AS/3500.3.2 Stormwater drainage
- F1.4 – External waterproofing
- F1.7 – AS 3740 Waterproofing of wet areas
- F1.9/ F1.10 – Damp proofing
- F1.11 – Provision of floor wastes
- F2.5 – Construction of sanitary compartments
- F3.1 – Height of rooms
- F4 – Lighting and Ventilation
- F4.4 – AS/NZS 1680 Artificial lighting
- F4.5 – AS 1668.2 Mechanical ventilation
- F5.4 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of floors
- F5.5 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of walls
- F5.6 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of services
- F5.7 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of pumps

SECTION G ANCILLARY PROVISIONS
- NSW G1.101– Provision of cleaning of windows

LEGENDS

SP	SETOUT POINT
AIC	AIR CONDENSER
AL	ALUMINUM ANGLE
B	BOLLARD TO AS2890.6
BT/FW	BOUNDARY TRAP FLOOR WASTE
DP	DOWNPIPE
DDO	DISH DRAIN OUTLET
E	ELECTRICAL RISER CUPBOARDS
FH	FIRE HYDRANT
FHR	FIRE HOSE REEL
FW	FLOOR WASTE
GTD	GRATED DRAIN
LP	LIGHT POLE
M	MECHANICAL RISER
MSB	MAIN SWITCHBOARD
T	TACTILES
OF	OVERFLOW
RWO	RAINWATER OUTLET
ST	STORAGE
H	HYDRAULIC RISER CUPBOARDS
WS	WHEELSTOP TO AS2890.1

THERMAL PERFORMANCE SPECIFICATIONS

NOTE: REFER TO BASIX CERTIFICATE NUMBER 1061176M_03 FOR DETAILS AND SPECIFICATION

northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

SCALE 1:100 @A1
0 1m 5m

REV	DATE	BY	AMENDMENTS
1			

NOTES
ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF WORK.
DRAWINGS ARE NOT TO BE SCALED.
USE ONLY FIGURED DIMENSIONS.

PREPARED BY

urbanacorp
planning
design
project management

Reg Architect: N.Lycenko Reg. No 3010

CLIENT

PROJECT
28 Lockwood avenue,
BELROSE
NSW 2085

DRAWING
Basement 04 plan

DATE	DEC 2024	NORTH	
DRAWN	JS	CHECK	NL
SCALE	1:200 @A1 Sheet Size		
DWG NO.	DA-101	ISSUE	8
STATUS	ISSUE FOR SECTION 4.55	JOB NO.	

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Basement 04	4283 m2	4283 m2
Total GFA	19047 m2	19048 m2

FRL OF BUILDING ELEMENTS TYPE A CLASS 2 CONSTRUCTION - UNITS TYPE A CLASS 7 CONSTRUCTION - CARPARK	BUILDING ELEMENT	FRL (in minutes) Structural Adequacy/ Integrity/Insulation
DEFINITIONS (as BCA) STRUCTURAL ADEQUACY, in relation to an FRL, means the ability to maintain stability and adequate load bearing capacity as determined by as 1530.4. INTEGRITY, in relation to an FRL, means the ability to resist passage of flames and hot gases specified in as 1530.4 INSULATION, in relation to an FRL, means the ability to maintain a temperature on the surface not exposed to the furnace below the limits specified in as 1530.4.	REFER TO BCA PART C3 SPEC. C1.1 CLAUSE C 3.1 Table 3 EXTERNAL WALL (including any column and other building element incorporated there in) or other external building element, where the distance from any fire source feature to which it is exposed is -	

Building Element – Type A Construction	Class 2	Class 7a	Class 6
Loadbearing External Walls – Less than 1.5m from a FSP – 1.5 - 3m from a FSP – 3m or more from a FSP	90/90/90 90/60/60 90/90/30	120/120/120 120/90/90 120/60/30	180/180/180 180/180/120 180/120/90
Non-Loadbearing External Walls – Less than 1.5m from a FSP – 1.5 - 3m from a FSP – 3m or more from a FSP	-/90/90 -/60/60 -/-/-	-/120/120 -/90/90 -/-/-	-/180/180 -/180/120 -/-/-
External Columns (not incorporated into an external wall) – Loadbearing – Non-loadbearing	90/-/- -/-/-	120/-/- -/-/-	180/-/- -/-/-
Common Walls and Fire Walls	90/90/90	120/120/120	180/180/180

Building Element – Type A Construction	Class 2	Class 7a	Class 6
Internal Walls - Fire resisting lift and stair shafts – – Loadbearing – Non-loadbearing	90/90/90 -/90/90	120/120/120 -/120/120	180/120/120 -/120/120
Internal Walls – Bounding public corridors, public lobbies and the like – – Loadbearing – Non-loadbearing	90/90/90 -/90/90	120/-/- -/-/-	180/-/- -/-/-
Internal Walls – Between or bounding sole-occupancy units – – Loadbearing – Non-loadbearing	90/90/90 -/90/90	120/-/- -/-/-	180/-/- -/-/-
Internal Walls – Ventilating, pipe, garbage and the like shafts not used for the discharge of hot products of combustion – – Loadbearing – Non-loadbearing	90/90/90 -/90/90	120/90/90 -/90/90	180/120/120 -/120/120
Other loadbearing internal walls, internal beams, trusses and columns	90/-/-	120/-/-	180/-/-
Floors	90/90/90	120/120/120	180/180/180
Roofs	90/60/30	120/60/30	180/60/30

DOORS	
Fire stair doors - self-closing	-/60/30
Entry doors to sole-occupancy units - self closing	-/60/30
Lift landing doors	-/60/-
Doors to Electrical cupboards	Non combustible
Garbage Room hopper doors	-/60/30

ALL CONTRACTOR, MANUFACTURES AND WORKERS TO PROVIDE THE WORKS AS PER CURRENT BCA AND AUSTRALIAN STANDARDS DETAILS AND REQUIREMENTS.

BUILDING CODE OF AUSTRALIA COMPLIANCE PROVISIONS

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- B1.3 – AS3600 AS3700 AS4100 Structural design
- B1.4 – AS 3600 Materials & Forms Constructions

SECTION C FIRE RESISTANCE
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- C1.8 – Spec. C1.8 Lightweight construction
- C1.10 – Spec. C1.10 Compliance with fire hazard properties
- C2.6 – Vertical Separation of Openings in External walls
- C2.7 – Separation of fire compartments
- C2.10 – Spec. C1.1 Separation of lift shafts
- C2.12 – Separation of equipment
- C2.13 – Electricity Supply System

- C3.2 – Clause C3.4 Protection of openings
- C3.4 – Acceptable Methods of protection (of openings)
- C3.8 – Opening in Fire Isolated Exits
- C3.10 – AS 1735.11 Fire doorsets to lift shafts
- C3.11 – Spec. C1.1 & Spec. C3.4 Bounding construction of Class 2 & 3
- C3.12 & C3.15 – Fire sealing of penetrations
- Table A spec. C1.1 – AS 1530.4 Fire resistance levels

Rise in storeys	Class of building 2, 3, or 9	Class of building 5, 6, 7or 8
4 or more	A	A

SECTION D ACCESS AND EGRESS
- D1.10 – Discharge from Exits
- D2.4 – Separation of rising & descending flights
- D2.7 – Installations in exits and paths of travel
- D2.8 – Spec. C1.1 & Spec. C3.4 Enclosures under stairways
- D2.13 – Goings & Risers
- D2.14 – Landings
- D2.15 – Thresholds
- D2.16 – Balustrades
- D2.17 – Handrails
- D2.20 – Swinging Doors
- D2.21 – Operation of latch
- D2.23 – Sign on doors
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- D3.2 – AS1428.1 General Building access requirements
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- D3.5 – AS1428.1 Disable carparking
- D3.6 – AS1428.1 & Spec. D3.6 Signage for accessible facilities, Service & Features
- D3.8 – AS/NZS 1428.4.1 Tactile indicators

SECTION E SERVICES AND EQUIPMENT
- E1.3 – AS 2419.1 Hydrant system
- E1.4 – AS 2441 Hose reel system
- E1.5 – AS 2118.1, AS 2118.4, AS2118.9 & Spec. E1.5 Sprinkler system
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- E2.2 - Table E2.2a – Spec. E2.2a Smoke detection and alarm system
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- E3.3 – Warning Sign
- E3.6 – AS 1735.12 Facilities for disabilities
- E3.7, E3.9 & E3.10 – Fire service controls
- E4.2/E4.4 – AS/NZS 2293.1 Emergency lighting
- E4.6/E4.8 – AS/NZS 2293.1 Exit Signs

SECTION HEALTH AND AMENITY
- F1.1 – AS/3500.3.2 Stormwater drainage
- F1.4 – External waterproofing
- F1.7 – AS 3740 Waterproofing of wet areas
- F1.9/ F1.10 – Damp proofing
- F1.11 – Provision of floor wastes
- F2.5 – Construction of sanitary compartments
- F3.1 – Height of rooms
- F4 – Lighting and Ventilation
- F4.4 – AS/NZS 1680 Artificial lighting
- F4.5 – AS 1668.2 Mechanical ventilation
- F5.4 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of floors
- F5.5 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of walls
- F5.6 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of services
- F5.7 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of pumps

SECTION G ANCILLARY PROVISIONS
- NSW G1.101– Provision of cleaning of windows

LEGENDS

	SETOUT POINT
A/C	AIR CONDENSER
AL	ALUMINUM ANGLE
B	BOLLARD TO AS2890.6
BT/FW	BOUNDARY TRAP FLOOR WASTE
DP	DOWNPIPE
DDO	DISH DRAIN OUTLET
E	ELECTRICAL RISER CUPBOARDS
FH	FIRE HYDRANT
FHR	FIRE HOSE REEL
FW	FLOOR WASTE
GTD	GRATED DRAIN
LP	LIGHT POLE
M	MECHANICAL RISER
MSB	MAIN SWITCHBOARD
T	TACTILES
OF	OVERFLOW
RWO	RAINWATER OUTLET
ST	STORAGE
H	HYDRAULIC RISER CUPBOARDS
WS	WHEELSTOP TO AS2890.1

THERMAL PERFORMANCE SPECIFICATIONS

NOTE: REFER TO BASIX CERTIFICATE NUMBER 1061176M_03 FOR DETAILS AND SPECIFICATION

northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

SCALE 1:100 @A1
0 1m 5m

REV	DATE	BY	AMENDMENTS
1			

NOTES
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DRAWINGS ARE NOT TO BE SCALED.
USE ONLY FIGURED DIMENSIONS.

PREPARED BY

urbanacorp
planning
design
project management

Reg Architect: N.Lycenko Reg. No 3010

CLIENT

PROJECT
28 Lockwood avenue,
BELROSE
NSW 2085

DRAWING
Basement 03 plan

DATE	DEC 2024	NORTH	
DRAWN	JS	CHECK	NL
SCALE	1:200 @A1 Sheet Size		
DWG NO.	DA-102	ISSUE	8
STATUS	ISSUE FOR SECTION 4.55	JOB NO.	

SCHEDULE OF AMENDMENTS:

01- A re-design for the piazza levels and planter boxes.
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13- Retail 06 has been split into 2 retails: 6 and 6A. And consecutive areas of 120m2 and 188.5m2.
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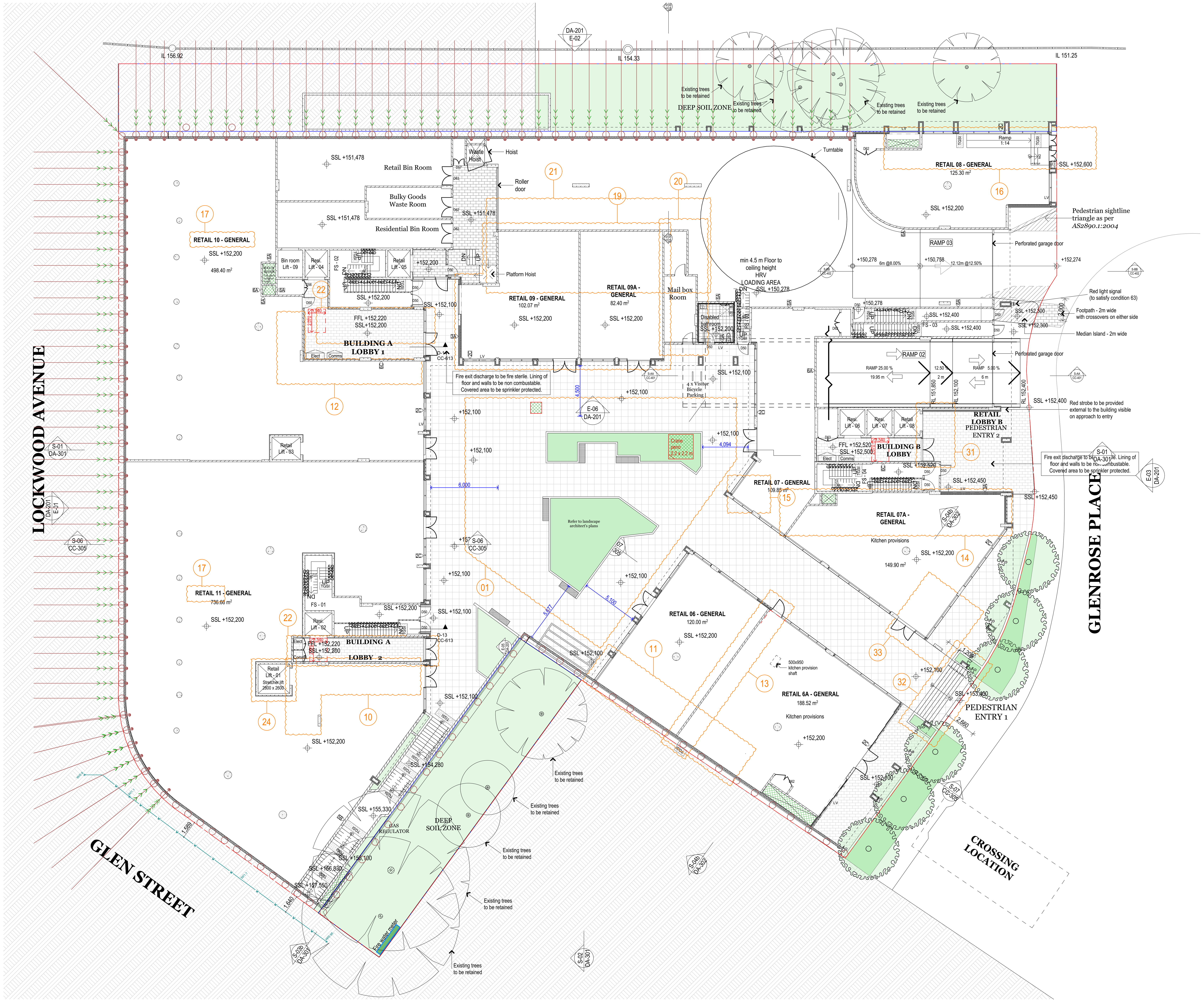
15- The stairs in retail 07 has been deleted.
16- The external RL of retail 08 has been dropped down by 150mm after a review of the survey plan and the ramp in this retail has been adjusted and a stair is proposed.
17- Retail 03 has been split into 3 retails accross the three levels: retail 03 on ground floor, retail 12 on lower ground floor and retail 10 on basement 02 floor.
Retail 05 has also been split into 3 retails accross the three levels: retail 05 on ground floor, retail 13 on lower ground floor and retail 11 on basement 02 floor.
18- The void space which is adjacent to retail 03 on ground floor level has been deleted again as approved by previous S4.55.
19- Retail 09 has been split into 2 retails: 9 and 9A. The ramp has been deleted. With consecutive areas of 109.3m2 and 89.8m2.
20- A mail box room for the whole building has been added beside retail 9A.
21- The loading dock area has been reduced to accomodate for two vehicles instead of three vehicles.
22- The stairs and ramps have been deleted in lobbies 1 and 2 in building A.
23- Amendments to configuration of unit 1.11 due to the lift 01 overrun encroachment.
24- Lift 01 to be a stretcher lift. Size as per manufacturer specifications.
25- The entry pedestrian ramp in retail 04 on ground floor has been shifted from the middle of the shop to one corner of it.
26- Extension of roof over unit 1.12
27- Unit LG01: The surface area has been increased by 71.5 m2 by reducing retail 13.
28- The fire water storage tank in basement 03 is deleted as it is no longer needed.
29- Two retail car spaces have been added on basement 04.
30- The plant equipments to be placed within the approved vertical louvered space on the roof.
31- The entry doors to retail lift 08 lobby have been removed as the lift can act as the security interface and the entry door of building B lobby has been relocated.
32- The entry stairs from Glenrose PL to the piazza are larger now and planter boxes has been added on its both sides.
33- The corner of retail 7A has been cut back to widen up the access for disability from Glenrose PL.
34- Privacy screens has been added to bedroom windows of units LG06 and G06.

Floor level	GFA approved	GFA Proposed
Level 01	1721 m2	1725 m2
Ground floor	2838 m2	2822 m2
Lower Ground	2782 m2	2795 m2
Basement 02	3140 m2	3140 m2
Basement 03	4283 m2	4283 m2
Basement 04	4283 m2	4283 m2
Total GFA	19047 m2	19048 m2



SCALE 1:100 @A1
0 1m 5m

REV	DATE	BY	AMENDMENTS
1			

NOTES
ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF WORK.
DRAWINGS ARE NOT TO BE SCALED.
USE ONLY FIGURED DIMENSIONS.

FRL OF BUILDING ELEMENTS
TYPE A CLASS 2 CONSTRUCTION - UNITS
TYPE A CLASS 7 CONSTRUCTION - CARPARK

DEFINITIONS (as BCA)
STRUCTURAL ADEQUACY, in relation to an FRL, means the ability to maintain stability and adequate load bearing capacity as determined by as 1530.4.

INTEGRITY, in relation to an FRL, means the ability to resist passage of flames and hot gases specified in as 1530.4

INSULATION, in relation to an FRL, means the ability to maintain a temperature on the surface not exposed to the furnace below the limits specified in as 1530.4.

BUILDING ELEMENT — FRL (in minutes) Structural Adequacy/ Integrity/Insulation

REFER TO BCA PART C3 SPEC. C1.1 CLAUSE C 3.1 Table 3

EXTERNAL WALL (including any column and other building element incorporated there in) or other external building element, where the distance from any fire source feature to which it is exposed is -

Building Element – Type A Construction	Class 2	Class 7a	Class 6
Loadbearing External Walls			
- Less than 1.5m from a FSF	90/90/90	120/120/120	180/180/180
- 1.5 - 3m from a FSF	90/60/60	120/90/90	180/180/120
- 3m or more from a FSF	90/60/30	120/60/30	180/120/90
Non-Loadbearing External Walls			
- Less than 1.5m from a FSF	-/90/90	-/120/120	-/180/180
- 1.5 - 3m from a FSF	-/60/60	-/90/90	-/180/120
- 3m or more from a FSF	-/-/-	-/-/-	-/-/-
External Columns (not incorporated into an external wall)			
- Loadbearing	90/-/-	120/-/-	180/-/-
- Non-loadbearing	-/-/-	-/-/-	-/-/-
Common Walls and Fire Walls	90/90/90	120/120/120	180/180/180

Building Element – Type A Construction	Class 2	Class 7a	Class 6
Internal Walls - Fire resisting lift and stair shafts –			
- Loadbearing	90/90/90	120/120/120	180/120/120
- Non-loadbearing	-/90/90	-/120/120	-/120/120
Internal Walls – Bounding public corridors, public lobbies and the like –			
- Loadbearing	90/90/90	120/-/-	180/-/-
- Non-loadbearing	-/60/60	-/-/-	-/-/-
Internal Walls – Between or bounding sole-occupancy units –			
- Loadbearing	90/90/90	120/-/-	180/-/-
- Non-loadbearing	-/60/60	-/-/-	-/-/-
Internal Walls – Ventilating, pipe, garbage and the like shafts not used for the discharge of hot products of combustion –			
- Loadbearing	90/90/90	120/90/90	180/120/120
- Non-loadbearing	-/90/90	-/90/90	-/120/120
Other loadbearing internal walls, internal beams, trusses and columns	90/-/-	120/-/-	180/-/-
Floors	90/90/90	120/120/120	180/180/180
Roofs	90/60/30	120/60/30	180/60/30

DOORS	
Fire stair doors - self-closing	-/60/30
Entry doors to sole-occupancy units - self closing	-/60/30
Lift landing doors	-/60/-
Doors to Electrical cupboards	Non combustible
Garbage Room hopper doors	-/60/30

ALL CONTRACTOR, MANUFACTURES AND WORKERS TO PROVIDE THE WORKS AS PER CURRENT BCA AND AUSTRALIAN STANDARDS DETAILS AND REQUIREMENTS.

BUILDING CODE OF AUSTRALIA COMPLIANCE PROVISIONS

SECTION B STRUCTURE
- B1.2 – AS1170 Structural loads
- B1.3 – AS3600 AS3700 AS4100 Structural design
- B1.4 – AS 3600 Materials & Forms Constructions

SECTION C FIRE RESISTANCE
- C1.1 – Spec. C1.1 Fire Resisting Construction
- C1.8 – Spec. C1.8 Lightweight construction
- C1.10 – Spec. C1.10 Compliance with fire hazard properties
- C2.6 – Vertical Separation of Openings in External walls
- C2.7 – Separation of fire compartments
- C2.10 – Spec. C1.1 Separation of lift shafts
- C2.12 – Separation of equipment
- C2.13 – Electricity Supply System
- C3.2 – Clause C3.4 Protection of openings
- C3.4 – Acceptable Methods of protection (of openings)
- C3.8 – Opening in Fire Isolated Exits
- C3.10 – AS 1735.11 Fire doorsets to lift shafts
- C3.11 – Spec. C1.1 & Spec. C3.4 Bounding construction of Class 2 & 3
- C3.12 & C3.15 – Fire sealing of penetrations
- Table A spec. C1.1 – AS 1530.4 Fire resistance levels

Rise in storeys	Class of building 2, 3, or 9	Class of building 5, 6, 7or 8
4 or more	A	A

SECTION D ACCESS AND EGRESS
- D1.10 – Discharge from Exits
- D2.4 – Separation of rising & descending flights
- D2.7 – Installations in exits and paths of travel
- D2.8 – Spec. C1.1 & Spec. C3.4 Enclosures under stairways
- D2.13 – Goings & Risers
- D2.14 – Landings
- D2.15 – Thresholds
- D2.16 – Balustrades
- D2.17 – Handrails
- D2.20 – Swinging Doors
- D2.21 – Operation of latch
- D2.23 – Sign on doors
- D2.24 - Protection OF openable windows
- D3.2 – AS1428.1 General Building access requirements
- D3.3 – Parts of Building to be Accessible
- D3.5 – AS1428.1 Disable carparking
- D3.6 – AS1428.1 & Spec. D3.6 Signage for accessible facilities, Service & Features
- D3.8 – AS/NZS 1428.4.1 Tactile indicators

SECTION E SERVICES AND EQUIPMENT
- E1.3 – AS 2419.1 Hydrant system
- E1.4 – AS 2441 Hose reel system
- E1.5 – AS 2118.1, AS 2118.4, AS2118.9 & Spec. E1.5 Sprinkler system
- E1.6 – AS 2444 Portable fire extinguishers
- E2.2 - Table E2.2a – Spec. E2.2a Smoke detection and alarm system
- E3.2 – Stretcher facility in lifts
- E3.3 – Warning Sign
- E3.6 – AS 1735.12 Facilities for disabilities
- E3.7, E3.9 & E3.10 – Fire service controls
- E4.2/E4.4 – AS/NZS 2293.1 Emergency lighting
- E4.6/E4.8 – AS/NZS 2293.1 Exit Signs

SECTION HEALTH AND AMENITY
- F1.1 – AS/3500.3.2 Stormwater drainage
- F1.4 – External waterproofing
- F1.7 – AS 3740 Waterproofing of wet areas
- F1.9/ F1.10 – Damp proofing
- F1.11 – Provision of floor wastes
- F2.5 – Construction of sanitary compartments
- F3.1 – Height of rooms
- F4 – Lighting and Ventilation
- F4.4 – AS/NZS 1680 Artificial lighting
- F4.5 – AS 1668.2 Mechanical ventilation
- F5.4 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of floors
- F5.5 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of walls
- F5.6 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of services
- F5.7 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of pumps

SECTION G ANCILLARY PROVISIONS
- NSW G1.101– Provision of cleaning of windows

LEGENDS

(symbol)	SETOUT POINT
A/C	AIR CONDENSER
AL	ALUMINUM ANGLE
B	BOLLARD TO AS2890.6
BT/FW	BOUNDARY TRAP FLOOR WASTE
DP	DOWNPIPE
DDO	DISH DRAIN OUTLET
E	ELECTRICAL RISER CUPBOARDS
FH	FIRE HYDRANT
FHR	FIRE HOSE REEL
FW	FLOOR WASTE
GTD	GRATED DRAIN
LP	LIGHT POLE
M	MECHANICAL RISER
MSB	MAIN SWITCHBOARD
T	TACTILES
OF	OVERFLOW
RWO	RAINWATER OUTLET
ST	STORAGE
H	HYDRAULIC RISER CUPBOARDS
WS	WHEELSTOP TO AS2890.1

THERMAL PERFORMANCE SPECIFICATIONS

NOTE: REFER TO BASIX CERTIFICATE NUMBER 1061176M_03 FOR DETAILS AND SPECIFICATION

PREPARED BY

urbanacorp
planning
design
project management

Reg Architect: N.Lycenko Reg. No 3010

CLIENT

PROJECT
28 Lockwood avenue,
BELROSE
NSW 2085

DRAWING
Basement 02 plan

DATE	DEC 2024	NORTH	
DRAWN	JS	CHECK	NL
SCALE	1:200 @A1 Sheet Size		
DWG NO.	DA-103	ISSUE	8
STATUS	ISSUE FOR SECTION 4.55	JOB NO.	

SCHEDULE OF AMENDMENTS:

01- A re-design for the piazza levels and planter boxes.
02- Unit LG17 & G14: Layout reconfigured. The surface area has been increased by 60 m2 by combining two units (LG17 & LG18 - G14 & G15) of the previous layout and it is a 3 bedroom apartment with a study. (previously it was a 2 bed apartment & 1 bedroom apartment).
03- LG 18 & G15: Layout reconfigured. The surface area of this unit has been increased by 23 m2 and it is a 2 bedroom apartment with study.
04- Non trafficable roof added over unit G15.
05- This corner of Level 01 terrace has been extended over the balcony of unit G14 to act as a cover.
06- Unit LG07: The surface area has been increased by 91.3 m2 by shifting the communal room to the left to gain more area within the unit and by reducing retail 03 by 91.3 m2.
07- Unit 1.04: Layout reconfigured. The surface area of this unit has been increased by 24 m2 and it is a 3 bedroom apartment with study. (previously it was a 2 bed apartment).
08- Unit LG10: A coutyard has been added to its balcony and a planter box to act as a privacy screen for this unit since it is just above the natural ground level.
09- Unit LG11: The balustrading on the balcony has been replaced by a glass wall of 3 panel sliding window and fixed glass to 1 m height.
10- Retail 11: Ramp is removed.
11- Retail 06: Ramp is removed.
12- Retail 10: Ramp is removed.
13- Retail 06 has been split into 2 retails: 6 and 6A. And consecutive areas of 120m2 and 188.5m2.
14- Retail 07 has been split into 2 retails: 7 and 7A. With a separate entry ramp to retail 7A. And consecutive areas of 109.8m2 and 156.6m2.
15- The stairs in retail 07 has been deleted.
16- The external RL of retail 08 has been dropped down by 150mm after a review of the survey plan and the ramp in this retail has been adjusted and a stair is proposed.
17- Retail 03 has been split into 3 retails accross the three levels: retail 03 on ground floor, retail 12 on lower ground floor and retail 10 on basement 02 floor.
Retail 05 has also been split into 3 retails accross the three levels: retail 05 on ground floor, retail 13 on lower ground floor and retail 11 on basement 02 floor.
18- The void space which is adjacent to retail 03 on ground floor level has been deleted again as approved by previous S4.55.
19- Retail 09 has been split into 2 retails: 9 and 9A. The ramp has been deleted. With consecutive areas of 109.3m2 and 89.8m2.
20- A mail box room for the whole building has been added beside retail 9A.
21- The loading dock area has been reduced to accomodate for two vehicles instead of three vehicles.
22- The stairs and ramps have been deleted in lobbies 1 and 2 in building A.
23- Amendments to configuration of unit 1.11 due to the lift 01 overrun encroachment.
24- Lift 01 to be a stretcher lift. Size as per manufacturer specifications.
25- The entry pedestrian ramp in retail 04 on ground floor has been shifted from the middle of the shop to one corner of it.
26- Extension of roof over unit 1.12
27- Unit LG01: The surface area has been increased by 71.5 m2 by reducing retail 13.
28- The fire water storage tank in basement 03 is deleted as it is no longer needed.
29- Two retail car spaces have been added on basement 04.
30- The plant equipments to be placed within the approved vertical louvered space on the roof.
31- The entry doors to retail lift 08 lobby have been removed as the lift can act as the security interface and the entry door of building B lobby has been relocated.
32- The entry stairs from Glenrose PL to the piazza are larger now and planter boxes has been added on its both sides.
33- The corner of retail 7A has been cut back to widen up the access for disability from Glenrose PL.
34- Privacy screens has been added to bedroom windows of units LG06 and G06.

Floor level	GFA approved	GFA Proposed
Level 01	1721 m2	1725 m2
Ground floor	2838 m2	2822 m2
Lower Ground	2782 m2	2795 m2
Basement 02	3140 m2	3140 m2
Basement 03	4283 m2	4283 m2
Basement 04	4283 m2	4283 m2
Total GFA	19047 m2	19048 m2

northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

SCALE 1:100 @A1
0 1m 5m

REV	DATE	BY	AMENDMENTS
1			

NOTES
ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF WORK.
DRAWINGS ARE NOT TO BE SCALED.
USE ONLY FIGURED DIMENSIONS.

PREPARED BY

urbanacorp
planning
design
project management

Reg Architect: N.Lycenko Reg. No 3010

CLIENT

PROJECT
28 Lockwood avenue,
BELROSE
NSW 2085

DRAWING
Lower ground floor plan

DATE	DEC 2024	NORTH	
DRAWN	JS	CHECK	NL
SCALE	1:200 @A1 Sheet Size		
DWG NO.	DA-104	ISSUE	8
STATUS	ISSUE FOR SECTION 4.55	JOB NO.	

FRL OF BUILDING ELEMENTS
TYPE A CLASS 2 CONSTRUCTION - UNITS
TYPE A CLASS 7 CONSTRUCTION - CARPARK

DEFINITIONS (as BCA)
STRUCTURAL ADEQUACY, in relation to an FRL, means the ability to maintain stability and adequate load bearing capacity as determined by as 1530.4.

INTEGRITY, in relation to an FRL, means the ability to resist passage of flames and hot gases specified in as 1530.4

INSULATION, in relation to an FRL, means the ability to maintain a temperature on the surface not exposed to the furnace below the limits specified in as 1530.4.

BUILDING ELEMENT — FRL (in minutes) Structural Adequacy/ Integrity/Insulation

REFER TO BCA PART C3 SPEC. C1.1 CLAUSE C 3.1 Table 3

EXTERNAL WALL (including any column and other building element incorporated there in) or other external building element, where the distance from any fire source feature to which it is exposed is -

Building Element – Type A Construction	Class 2	Class 7a	Class 6
Loadbearing External Walls			
– Less than 1.5m from a FSF	90/90/90	120/120/120	180/180/180
– 1.5 - 3m from a FSF	90/90/90	120/90/90	180/180/120
– 3m or more from a FSF	90/90/30	120/60/30	180/120/90
Non-Loadbearing External Walls			
– Less than 1.5m from a FSF	-/90/90	-/120/120	-/180/180
– 1.5 - 3m from a FSF	-/60/60	-/90/90	-/180/120
– 3m or more from a FSF	-/-/-	-/-/-	-/-/-
External Columns (not incorporated into an external wall)			
– Loadbearing	90/-/-	120/-/-	180/-/-
– Non-loadbearing	-/-/-	-/-/-	-/-/-
Common Walls and Fire Walls	90/90/90	120/120/120	180/180/180

Building Element – Type A Construction	Class 2	Class 7a	Class 6
Internal Walls - Fire resisting lift and stair shafts –			
– Loadbearing	90/90/90	120/120/120	180/120/120
– Non-loadbearing	90/90/90	120/-/-	180/-/-
Internal Walls – Bounding public corridors, public lobbies and the like –			
– Loadbearing	90/90/90	120/-/-	180/-/-
– Non-loadbearing	-/-/-	-/-/-	-/-/-
Internal Walls – Between or bounding sole-occupancy units –			
– Loadbearing	90/90/90	120/-/-	180/-/-
– Non-loadbearing	-/90/90	-/-/-	-/-/-
Internal Walls – Ventilating, pipe, garbage and the like shafts not used for the discharge of hot products of combustion –			
– Loadbearing	90/90/90	120/90/90	180/120/120
– Non-loadbearing	-/90/90	-/90/90	-/120/120
Other loadbearing internal walls, internal beams, trusses and columns	90/-/-	120/-/-	180/-/-
Floors	90/90/90	120/120/120	180/180/180
Roofs	90/60/30	120/60/30	180/60/30

DOORS	
Fire stair doors - self-closing	-/60/30
Entry doors to sole-occupancy units - self closing	-/60/30
Lift landing doors	-/60/-
Doors to Electrical cupboards	Non combustible
Garbage Room hopper doors	-/60/30

ALL CONTRACTOR, MANUFACTURES AND WORKERS TO PROVIDE THE WORKS AS PER CURRENT BCA AND AUSTRALIAN STANDARDS DETAILS AND REQUIREMENTS.

BUILDING CODE OF AUSTRALIA COMPLIANCE PROVISIONS

SECTION B STRUCTURE
- B1.2 – AS1170 Structural loads
- B1.3 – AS3600 AS3700 AS4100 Structural design
- B1.4 – AS 3600 Materials & Forms Constructions

SECTION C FIRE RESISTANCE
- C1.1 – Spec. C1.1 Fire Resisting Construction
- C1.8 – Spec. C1.8 Lightweight construction
- C1.10 – Spec. C1.10 Compliance with fire hazard properties
- C2.6 – Vertical Separation of Openings in External walls
- C2.7 – Separation of fire compartments
- C2.10 – Spec. C1.1 Separation of lift shafts
- C2.12 – Separation of equipment
- C2.13 – Electricity Supply System
- C3.2 – Clause C3.4 Protection of openings
- C3.4 – Acceptable Methods of protection (of openings)
- C3.8 – Openings in Fire Isolated Exits
- C3.10 – AS 1735.11 Fire doorsets to lift shafts
- C3.11 – Spec. C1.1 & Spec. C3.4 Bounding construction of Class 2 & 3
- C3.12 & C3.15 – Fire sealing of penetrations
- Table A spec. C1.1 – AS 1530.4 Fire resistance levels

Rise in storeys	Class of building 2, 3, or 9	Class of building 5, 6, 7or 8
4 or more	A	A

SECTION D ACCESS AND EGRESS
- D1.10 – Discharge from Exits
- D2.4 – Separation of rising & descending flights
- D2.7 – Installations in exits and paths of travel
- D2.8 – Spec. C1.1 & Spec. C3.4 Enclosures under stairways
- D2.13 – Goings & Risers
- D2.14 – Landings
- D2.15 – Thresholds
- D2.16 – Balustrades
- D2.17 – Handrails
- D2.20 – Swinging Doors
- D2.21 – Operation of latch
- D2.23 – Sign on doors
- D2.24 - Protection OF openable windows
- D3.2 – AS1428.1 General Building access requirements
- D3.3 – Parts of Building to be Accessible
- D3.5 – AS1428.1 Disable carparking
- D3.6 – AS1428.1 & Spec. D3.6 Signage for accessible facilities, Service & Features
- D3.8 – AS/NZS 1428.4.1 Tactile indicators

SECTION E SERVICES AND EQUIPMENT
- E1.3 – AS 2419.1 Hydrant system
- E1.4 – AS 2441 Hose reel system
- E1.5 – AS 2118.1, AS 2118.4, AS2118.9 & Spec. E1.5 Sprinkler system
- E1.6 – AS 2444 Portable fire extinguishers
- E2.2 - Table E2.2a – Spec. E2.2a Smoke detection and alarm system
- E3.2 – Stretcher facility in lifts
- E3.3 – Warning Sign
- E3.6 – AS 1735.12 Facilities for disabilities
- E3.7, E3.9 & E3.10 – Fire service controls
- E4.2/E4.4 – AS/NZS 2293.1 Emergency lighting
- E4.6/E4.8 – AS/NZS 2293.1 Exit Signs

SECTION HEALTH AND AMENITY
- F1.1 – AS/3500.3.2 Stormwater drainage
- F1.4 – External waterproofing
- F1.7 – AS 3740 Waterproofing of wet areas
- F1.9/ F1.10 – Damp proofing
- F1.11 – Provision of floor wastes
- F2.5 – Construction of sanitary compartments
- F3.1 – Height of rooms
- F4 – Lighting and Ventilation
- F4.4 – AS/NZS 1680 Artificial lighting
- F4.5 – AS 1668.2 Mechanical ventilation
- F5.4 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of floors
- F5.5 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of walls
- F5.6 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of services
- F5.7 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of pumps

SECTION G ANCILLARY PROVISIONS
- NSW G1.101– Provision of cleaning of windows

LEGENDS

	SETOUT POINT
AC	AIR CONDENSER
AL	ALUMINUM ANGLE
B	BOLLARD TO AS2890.6
BT/FW	BOUNDARY TRAP FLOOR WASTE
DP	DOWNPIPE
DSD	DISH DRAIN OUTLET
E	ELECTRICAL RISER CUPBOARDS
FH	FIRE HYDRANT
FHR	FIRE HOSE REEL
FW	FLOOR WASTE
GTD	GRATED DRAIN
LP	LIGHT POLE
M	MECHANICAL RISER
MSB	MAIN SWITCHBOARD
T	TACTILES
OF	OVERFLOW
RWO	RAINWATER OUTLET
ST	STORAGE
H	HYDRAULIC RISER CUPBOARDS
WS	WHEELSTOP TO AS2890.1

THERMAL PERFORMANCE SPECIFICATIONS

NOTE: REFER TO BASIX CERTIFICATE NUMBER 1061176M_03 FOR DETAILS AND SPECIFICATION

SCHEDULE OF AMENDMENTS:

01- A re-design for the piazza levels and planter boxes.
02- Unit LG17 & G14: Layout reconfigured. The surface area has been increased by 60 m2 by combining two units (LG17 & LG18 - G14 & G15) of the previous layout and it is a 3 bedroom apartment with a study. (previously it was a 2 bed apartment & 1 bedroom apartment).
03- LG 18 & G15: Layout reconfigured. The surface area of this unit has been increased by 23 m2 and it is a 2 bedroom apartment with study.
04- Non trafficable roof added over unit G15.
05- This corner of Level 01 terrace has been extended over the balcony of unit G14 to act as a cover.
06- Unit LG07: The surface area has been increased by 91.3 m2 by shifting the communal room to the left to gain more area within the unit and by reducing retail 03 by 91.3 m2.
07- Unit 1.04: Layout reconfigured. The surface area of this unit has been increased by 24 m2 and it is a 3 bedroom apartment with study. (previously it was a 2 bed apartment).
08- Unit LG10: A coutyard has been added to its balcony and a planter box to act as a privacy screen for this unit since it is just above the natural ground level.
09- Unit LG11: The balustrading on the balcony has been replaced by a glass wall of 3 panel sliding window and fixed glass to 1 m height.
10- Retail 11: Ramp is removed.
11- Retail 06: Ramp is removed.
12- Retail 10: Ramp is removed.
13- Retail 06 has been split into 2 retails: 6 and 6A. And consecutive areas of 120m2 and 188.5m2.
14- Retail 07 has been split into 2 retails: 7 and 7A. With a separate entry ramp to retail 7A. And consecutive areas of 109.8m2 and 156.6m2.
15- The stairs in retail 07 has been deleted.
16- The external RL of retail 08 has been dropped down by 150mm after a review of the survey plan and the ramp in this retail has been adjusted and a stair is proposed.
17- Retail 03 has been split into 3 retails accross the three levels: retail 03 on ground floor, retail 12 on lower ground floor and retail 10 on basement 02 floor.
Retail 05 has also been split into 3 retails accross the three levels: retail 05 on ground floor, retail 13 on lower ground floor and retail 11 on basement 02 floor.
18- The void space which is adjacent to retail 03 on ground floor level has been deleted again as approved by previous S4.55.
19- Retail 09 has been split into 2 retails: 9 and 9A. The ramp has been deleted. With consecutive areas of 109.3m2 and 89.8m2.
20- A mail box room for the whole building has been added beside retail 9A.
21- The loading dock area has been reduced to accomodate for two vehicles instead of three vehicles.
22- The stairs and ramps have been deleted in lobbies 1 and 2 in building A.
23- Amendments to configuration of unit 1.11 due to the lift 01 overrun encroachment.
24- Lift 01 to be a stretcher lift. Size as per manufacturer specifications.
25- The entry pedestrian ramp in retail 04 on ground floor has been shifted from the middle of the shop to one corner of it.
26- Extension of roof over unit 1.12
27- Unit LG01: The surface area has been increased by 71.5 m2 by reducing retail 13.
28- The fire water storage tank in basement 03 is deleted as it is no longer needed.
29- Two retail car spaces have been added on basement 04.
30- The plant equipments to be placed within the approved vertical louvered space on the roof.
31- The entry doors to retail lift 08 lobby have been removed as the lift can act as the security interface and the entry door of building B lobby has been relocated.
32- The entry stairs from Glenrose PL to the piazza are larger now and planter boxes has been added on its both sides.
33- The corner of retail 7A has been cut back to widen up the access for disability from Glenrose PL.
34- Privacy screens has been added to bedroom windows of units LG06 and G06.

Floor level	GFA approved	GFA Proposed
Level 01	1721 m2	1725 m2
Ground floor	2838 m2	2822 m2
Lower Ground	2782 m2	2795 m2
Basement 02	3140 m2	3140 m2
Basement 03	4283 m2	4283 m2
Basement 04	4283 m2	4283 m2
Total GFA	19047 m2	19048 m2

SCALE 1:100 @A1
0 1m 5m

REV	DATE	BY	AMENDMENTS
1			

NOTES
ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF WORK.
DRAWINGS ARE NOT TO BE SCALED.
USE ONLY FIGURED DIMENSIONS.

PREPARED BY

urbanacorp
planning
design
project management
Reg Architect: N.Lycenko Reg. No 3010

CLIENT

northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

PROJECT
28 Lockwood avenue,
BELROSE
NSW 2085

DRAWING
ground floor plan

DATE	DEC 2024	NORTH
DRAWN	JS	CHECK NL
SCALE	1:200 @A1 Sheet Size	
DWG NO.	DA-105	ISSUE 8
STATUS	ISSUE FOR SECTION 4.55	JOB NO.

FRL OF BUILDING ELEMENTS
TYPE A CLASS 2 CONSTRUCTION - UNITS
TYPE A CLASS 7 CONSTRUCTION - CARPARK

DEFINITIONS (as BCA)

STRUCTURAL ADEQUACY, in relation to an FRL, means the ability to maintain stability and adequate load bearing capacity as determined by as 1530.4.

INTEGRITY, in relation to an FRL, means the ability to resist passage of flames and hot gases specified in as 1530.4

INSULATION, in relation to an FRL, means the ability to maintain a temperature on the surface not exposed to the furnace below the limits specified in as 1530.4.

BUILDING ELEMENT — FRL (in minutes) Structural Adequacy/ Integrity/Insulation

REFER TO BCA PART C3 SPEC. C1.1 CLAUSE C 3.1 Table 3

EXTERNAL WALL (including any column and other building element incorporated there in) or other external building element, where the distance from any fire source feature to which it is exposed is -

Building Element – Type A Construction	Class 2	Class 7a	Class 6
Loadbearing External Walls – Less than 1.5m from a FSF – 1.5 - 3m from a FSF 3m or more from a FSF	90/90/90 90/60/60 90/90/30	120/120/120 120/90/90 120/60/30	180/180/180 180/180/120 180/120/90
Non-Loadbearing External Walls – Less than 1.5m from a FSF – 1.5 - 3m from a FSF 3m or more from a FSF	-/90/90 -/60/60 -/-/-	-/120/120 -/90/90 -/-/-	-/180/180 -/180/120 -/-/-
External Columns (not incorporated into an external wall) – Loadbearing – Non-loadbearing	90/-/- -/-/-	120/-/- -/-/-	180/-/- -/-/-
Common Walls and Fire Walls	90/90/90	120/120/120	180/180/180

Building Element – Type A Construction	Class 2	Class 7a	Class 6
Internal Walls - Fire resisting lift and stair shafts – – Loadbearing – Non-loadbearing	90/90/90 -/90/90	120/120/120 -/120/120	180/120/120 -/120/120
Internal Walls – Bounding public corridors, public lobbies and the like – – Loadbearing – Non-loadbearing	90/90/90 -/90/90	120/-/- -/-/-	180/-/- -/-/-
Internal Walls – Between or bounding sole-occupancy units – – Loadbearing – Non-loadbearing	90/90/90 -/90/90	120/-/- -/-/-	180/-/- -/-/-
Internal Walls – Ventilating, pipe, garbage and the like shafts not used for the discharge of hot products of combustion – – Loadbearing – Non-loadbearing	90/90/90 -/90/90	120/90/90 -/90/90	180/120/120 -/120/120
Other loadbearing internal walls, internal beams, trusses and columns	90/-/-	120/-/-	180/-/-
Floors	90/90/90	120/120/120	180/180/180
Roofs	90/60/30	120/60/30	180/60/30

DOORS	
Fire stair doors - self-closing	-/60/30
Entry doors to sole-occupancy units - self closing	-/60/30
Lift landing doors	-/60/-
Doors to Electrical cupboards	Non combustible
Garbage Room hopper doors	-/60/30

ALL CONTRACTOR, MANUFACTURES AND WORKERS TO PROVIDE THE WORKS AS PER CURRENT BCA AND AUSTRALIAN STANDARDS DETAILS AND REQUIREMENTS.

BUILDING CODE OF AUSTRALIA COMPLIANCE PROVISIONS

SECTION B STRUCTURE
- B1.2 – AS1170 Structural loads
- B1.3 – AS3600 AS3700 AS4100 Structural design
- B1.4 – AS 3600 Materials & Forms Constructions

SECTION C FIRE RESISTANCE
- C1.1 – Spec. C1.1 Fire Resisting Construction
- C1.8 – Spec. C1.8 Lightweight construction
- C1.10 – Spec. C1.10 Compliance with fire hazard properties
- C2.6 – Vertical Separation of Openings in External walls
- C2.7 – Separation of fire compartments
- C2.10 – Spec. C1.1 Separation of lift shafts
- C2.12 – Separation of equipment
- C2.13 – Electricity Supply System

- C3.2 – Clause C3.4 Protection of openings
- C3.4 – Acceptable Methods of protection (of openings)
- C3.8 – Opening in Fire Isolated Exits
- C3.10 – AS 1735.11 Fire doorsets to lift shafts
- C3.11 – Spec. C1.1 & Spec. C3.4 Bounding construction of Class 2 & 3
- C3.12 & C3.15 – Fire sealing of penetrations
- Table A spec. C1.1 – AS 1530.4 Fire resistance levels

Rise in storeys	Class of building 2, 3, or 9	Class of building 5, 6, 7or 8
4 or more	A	A

SECTION D ACCESS AND EGRESS
- D1.10 – Discharge from Exits
- D2.4 – Separation of rising & descending flights
- D2.7 – Installations in exits and paths of travel
- D2.8 – Spec. C1.1 & Spec. C3.4 Enclosures under stairways
- D2.13 – Goings & Risers
- D2.14 – Landings
- D2.15 – Thresholds
- D2.16 – Balustrades
- D2.17 – Handrails
- D2.20 – Swinging Doors
- D2.21 – Operation of latch
- D2.23 – Sign on doors

- D2.24 - Protection OF openable windows
- D3.2 – AS1428.1 General Building access requirements
- D3.3 – Parts of Building to be Accessible
- D3.5 – AS1428.1 Disable carparking
- D3.6 – AS1428.1 & Spec. D3.6 Signage for accessible facilities, Service & Features
- D3.8 – AS/NZS 1428.4.1 Tactile indicators

SECTION E SERVICES AND EQUIPMENT
- E1.3 – AS 2419.1 Hydrant system
- E1.4 – AS 2441 Hose reel system
- E1.5 – AS 2118.1, AS 2118.4, AS2118.9 & Spec. E1.5 Sprinkler system
- E1.6 – AS 2444 Portable fire extinguishers
- E2.2 - Table E2.2a – Spec. E2.2a Smoke detection and alarm system
- E3.2 – Stretcher facility in lifts
- E3.3 – Warning Sign
- E3.6 – AS 1735.12 Facilities for disabilities
- E3.7, E3.9 & E3.10 – Fire service controls
- E4.2/E4.4 – AS/NZS 2293.1 Emergency lighting
- E4.6/E4.8 – AS/NZS 2293.1 Exit Signs

SECTION HEALTH AND AMENITY
- F1.1 – AS/3500.3.2 Stormwater drainage
- F1.4 – External waterproofing
- F1.7 – AS 3740 Waterproofing of wet areas
- F1.9/ F1.10 – Damp proofing
- F1.11 – Provision of floor wastes
- F2.5 – Construction of sanitary compartments
- F3.1 – Height of rooms
- F4 – Lighting and Ventilation
- F4.4 – AS/NZS 1680 Artificial lighting
- F4.5 – AS 1668.2 Mechanical ventilation
- F5.4 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of floors
- F5.5 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of walls
- F5.6 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of services
- F5.7 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of pumps

SECTION G ANCILLARY PROVISIONS
- NSW G1.101– Provision of cleaning of windows

LEGENDS

	SETOUT POINT
A/C	AIR CONDENSER
AL	ALUMINUM ANGLE
B	BOLLARD TO AS2890.6
BT/FW	BOUNDARY TRAP FLOOR WASTE
DP	DOWNPIPE
DDO	DISH DRAIN OUTLET
E	ELECTRICAL RISER CUPBOARDS
FH	FIRE HYDRANT
FHR	FIRE HOSE REEL
FW	FLOOR WASTE
GTD	GRATED DRAIN
LP	LIGHT POLE
M	MECHANICAL RISER
MSB	MAIN SWITCHBOARD
T	TACTILES
OF	OVERFLOW
RWO	RAINWATER OUTLET
ST	STORAGE
H	HYDRAULIC RISER CUPBOARDS
WS	WHEELSTOP TO AS2890.1

THERMAL PERFORMANCE SPECIFICATIONS

NOTE: REFER TO BASIX CERTIFICATE NUMBER 1061176M_03 FOR DETAILS AND SPECIFICATION

SCHEDULE OF AMENDMENTS:

01- A re-design for the piazza levels and planter boxes.
02- Unit LG17 & G14: Layout reconfigured. The surface area has been increased by 60 m2 by combining two units (LG17 & LG18 - G14 & G15) of the previous layout and it is a 3 bedroom apartment with a study. (previously it was a 2 bed apartment & 1 bedroom apartment).
03- LG 18 & G15: Layout reconfigured. The surface area of this unit has been increased by 23 m2 and it is a 2 bedroom apartment with study.
04- Non trafficable roof added over unit G15.
05- This corner of Level 01 terrace has been extended over the balcony of unit G14 to act as a cover.
06- Unit LG07: The surface area has been increased by 91.3 m2 by shifting the communal room to the left to gain more area within the unit and by reducing retail 03 by 91.3 m2.
07- Unit 1.04: Layout reconfigured. The surface area of this unit has been increased by 24 m2 and it is a 3 bedroom apartment with study. (previously it was a 2 bed apartment).
08- Unit LG10: A coutyard has been added to its balcony and a planter box to act as a privacy screen for this unit since it is just above the natural ground level.
09- Unit LG11: The balustrading on the balcony has been replaced by a glass wall of 3 panel sliding window and fixed glass to 1 m height.
10- Retail 11: Ramp is removed.
11- Retail 06: Ramp is removed.
12- Retail 10: Ramp is removed.
13- Retail 06 has been split into 2 retails: 6 and 6A. And consecutive areas of 120m2 and 188.5m2.
14- Retail 07 has been split into 2 retails: 7 and 7A. With a separate entry ramp to retail 7A. And consecutive areas of 109.8m2 and 156.6m2.
15- The stairs in retail 07 has been deleted.
16- The external RL of retail 08 has been dropped down by 150mm after a review of the survey plan and the ramp in this retail has been adjusted and a stair is proposed.
17- Retail 03 has been split into 3 retails accross the three levels: retail 03 on ground floor, retail 12 on lower ground floor and retail 10 on basement 02 floor.
Retail 05 has also been split into 3 retails accross the three levels: retail 05 on ground floor, retail 13 on lower ground floor and retail 11 on basement 02 floor.
18- The void space which is adjacent to retail 03 on ground floor level has been deleted again as approved by previous S4.55.
19- Retail 09 has been split into 2 retails: 9 and 9A. The ramp has been deleted. With consecutive areas of 109.3m2 and 89.8m2.
20- A mail box room for the whole building has been added beside retail 9A.
21- The loading dock area has been reduced to accomodate for two vehicles instead of three vehicles.
22- The stairs and ramps have been deleted in lobbies 1 and 2 in building A.
23- Amendments to configuration of unit 1.11 due to the lift 01 overrun encroachment.
24- Lift 01 to be a stretcher lift. Size as per manufacturer specifications.
25- The entry pedestrian ramp in retail 04 on ground floor has been shifted from the middle of the shop to one corner of it.
26- Extension of roof over unit 1.12
27- Unit LG01: The surface area has been increased by 71.5 m2 by reducing retail 13.
28- The fire water storage tank in basement 03 is deleted as it is no longer needed.
29- Two retail car spaces have been added on basement 04.
30- The plant equipments to be placed within the approved vertical louvered space on the roof.
31- The entry doors to retail lift 08 lobby have been removed as the lift can act as the security interface and the entry door of building B lobby has been relocated.
32- The entry stairs from Glenrose PL to the piazza are larger now and planter boxes has been added on its both sides.
33- The corner of retail 7A has been cut back to widen up the access for disability from Glenrose PL.
34- Privacy screens has been added to bedroom windows of units LG06 and G06.

Floor level	GFA approved	GFA Proposed
Level 01	1721 m2	1725 m2
Ground floor	2838 m2	2822 m2
Lower Ground	2782 m2	2795 m2
Basement 02	3140 m2	3140 m2
Basement 03	4283 m2	4283 m2
Basement 04	4283 m2	4283 m2
Total GFA	19047 m2	19048 m2

SCALE 1:100 @A1
0 1m 5m

REV	DATE	BY	AMENDMENTS
1			

NOTES
ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF WORK.
DRAWINGS ARE NOT TO BE SCALED.
USE ONLY FIGURED DIMENSIONS.

PREPARED BY

urbanacorp
planning
design
project management

Reg Architect: N.Lycenko Reg. No 3010

CLIENT

northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW
PROCEEDINGS NO: 2024/308932
DATED: 13 March 2025

PROJECT
28 Lockwood avenue,
BELROSE
NSW 2085

DRAWING
Level 01 plan

DATE DEC 2024
DRAWN JS
CHECK NL
SCALE 1:200 @A1 Sheet Size
DWG NO. DA-106
ISSUE 8
STATUS ISSUE FOR SECTION 4.55
JOB NO.
NORTH

FRL OF BUILDING ELEMENTS
TYPE A CLASS 2 CONSTRUCTION - UNITS
TYPE A CLASS 7 CONSTRUCTION - CARPARK

DEFINITIONS (as BCA)
STRUCTURAL ADEQUACY, in relation to an FRL, means the ability to maintain stability and adequate load bearing capacity as determined by as 1530.4.

INTEGRITY, in relation to an FRL, means the ability to resist passage of flames and hot gases specified in as 1530.4

INSULATION, in relation to an FRL, means the ability to maintain a temperature on the surface not exposed to the furnace below the limits specified in as 1530.4.

BUILDING ELEMENT	FRL (in minutes) Structural Adequacy/ Integrity/Insulation
REFER TO BCA PART C3 SPEC. C1.1 CLAUSE C 3.1 Table 3	
EXTERNAL WALL (including any column and other building element incorporated there in) or other external building element, where the distance from any fire source feature to which it is exposed is -	

Building Element – Type A Construction	Class 2	Class 7a	Class 6
Loadbearing External Walls			
– Less than 1.5m from a FSF	90/90/90	120/120/120	180/180/180
– 1.5 - 3m from a FSF	90/90/90	120/90/90	180/180/120
– 3m or more from a FSF	90/90/30	120/60/30	180/120/90
Non-Loadbearing External Walls			
– Less than 1.5m from a FSF	-/90/90	-/120/120	-/180/180
– 1.5 - 3m from a FSF	-/60/60	-/90/90	-/180/120
– 3m or more from a FSF	-/-/-	-/-/-	-/-/-
External Columns (not incorporated into an external wall)			
– Loadbearing	90/-/-	120/-/-	180/-/-
– Non-loadbearing	-/-/-	-/-/-	-/-/-
Common Walls and Fire Walls	90/90/90	120/120/120	180/180/180

Building Element – Type A Construction	Class 2	Class 7a	Class 6
Internal Walls - Fire resisting lift and stair shafts –			
– Loadbearing	90/90/90	120/120/120	180/120/120
– Non-loadbearing	-/90/90	-/120/120	-/120/120
Internal Walls – Bounding public corridors, public lobbies and the like –			
– Loadbearing	90/90/90	120/-/-	180/-/-
– Non-loadbearing	-/60/60	-/-/-	-/-/-
Internal Walls – Between or bounding sole-occupancy units -			
– Loadbearing	90/90/90	120/-/-	180/-/-
– Non-loadbearing	-/60/60	-/-/-	-/-/-
Internal Walls – Ventilating, pipe, garbage and the like shafts not used for the discharge of hot products of combustion –			
– Loadbearing	90/90/90	120/90/90	180/120/120
– Non-loadbearing	-/90/90	-/90/90	-/120/120
Other loadbearing internal walls, internal beams, trusses and columns	90/-/-	120/-/-	180/-/-
Floors	90/90/90	120/120/120	180/180/180
Roofs	90/60/30	120/60/30	180/60/30

DOORS

Fire stair doors - self-closing	-/60/30
Entry doors to sole-occupancy units - self closing	-/60/30
Lift landing doors	-/60/-
Doors to Electrical cupboards	Non combustible
Garbage Room hopper doors	-/60/30

ALL CONTRACTOR, MANUFACTURES AND WORKERS TO PROVIDE THE WORKS AS PER CURRENT BCA AND AUSTRALIAN STANDARDS DETAILS AND REQUIREMENTS.

BUILDING CODE OF AUSTRALIA COMPLIANCE PROVISIONS

SECTION B STRUCTURE
- B1.2 – AS1170 Structural loads
- B1.3 – AS3600 AS3700 AS4100 Structural design
- B1.4 – AS 3600 Materials & Forms Constructions

SECTION C FIRE RESISTANCE
- C1.1 – Spec. C1.1 Fire Resisting Construction
- C1.8 – Spec. C1.8 Lightweight construction
- C1.10 – Spec. C1.10 Compliance with fire hazard properties
- C2.6 – Vertical Separation of Openings in External walls
- C2.7 – Separation of fire compartments
- C2.10 – Spec. C1.1 Separation of lift shafts
- C2.12 – Separation of equipment
- C2.13 – Electricity Supply System

- C3.2 – Clause C3.4 Protection of openings
- C3.4 – Acceptable Methods of protection (of openings)
- C3.8 – Opening in Fire Isolated Exits
- C3.10 – AS 1735.11 Fire doorsets to lift shafts
- C3.11 – Spec. C1.1 & Spec. C3.4 Bounding construction of Class 2 & 3
- C3.12 & C3.15 – Fire sealing of penetrations
- Table A spec. C1.1 – AS 1530.4 Fire resistance levels

Rise in storeys	Class of building 2, 3, or 9	Class of building 5, 6, 7or 8
4 or more	A	A

SECTION D ACCESS AND EGRESS
- D1.10 – Discharge from Exits
- D2.4 – Separation of rising & descending flights
- D2.7 – Installations in exits and paths of travel
- D2.8 – Spec. C1.1 & Spec. C3.4 Enclosures under stairways
- D2.13 – Goings & Risers
- D2.14 – Landings
- D2.15 – Thresholds
- D2.16 – Balustrades
- D2.17 – Handrails
- D2.20 – Swinging Doors
- D2.21 – Operation of latch
- D2.23 – Sign on doors

- D2.24 - Protection OF openable windows
- D3.2 – AS1428.1 General Building access requirements
- D3.3 – Parts of Building to be Accessible
- D3.5 – AS1428.1 Disable carparking
- D3.6 – AS1428.1 & Spec. D3.6 Signage for accessible facilities, Service & Features
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SECTION E SERVICES AND EQUIPMENT
- E1.3 – AS 2419.1 Hydrant system
- E1.4 – AS 2441 Hose reel system
- E1.5 – AS 2118.1, AS 2118.4, AS2118.9 & Spec. E1.5

Sprinkler system
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- E2.2 - Table E2.2a – Spec. E2.2a Smoke detection and alarm system
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- E3.7, E3.9 & E3.10 – Fire service controls
- E4.2/E4.4 – AS/NZS 2293.1 Emergency lighting
- E4.6/E4.8 – AS/NZS 2293.1 Exit Signs

SECTION HEALTH AND AMENITY
- F1.1 – AS/3500.3.2 Stormwater drainage
- F1.4 – External waterproofing
- F1.7 – AS 3740 Waterproofing of wet areas
- F1.9/ F1.10 – Damp proofing
- F1.11 – Provision of floor wastes
- F2.5 – Construction of sanitary compartments
- F3.1 – Height of rooms
- F4 – Lighting and Ventilation
- F4.4 – AS/NZS 1680 Artificial lighting
- F4.5 – AS 1668.2 Mechanical ventilation
- F5.4 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of floors
- F5.5 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of walls
- F5.6 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of services
- F5.7 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of pumps

SECTION G ANCILLARY PROVISIONS
- NSW G1.101– Provision of cleaning of windows

LEGENDS

	SETOUT POINT
A/C	AIR CONDENSER
AL	ALUMINUM ANGLE
B	BOLLARD TO AS2890.6
BT/FW	BOUNDARY TRAP FLOOR WASTE
DP	DOWNPIPE
DDO	DISH DRAIN OUTLET
E	ELECTRICAL RISER CUPBOARDS
FH	FIRE HYDRANT
FHR	FIRE HOSE REEL
FW	FLOOR WASTE
GTD	GRATED DRAIN
LP	LIGHT POLE
M	MECHANICAL RISER
MSB	MAIN SWITCHBOARD
T	TACTILES
OF	OVERFLOW
RWO	RAINWATER OUTLET
ST	STORAGE
H	HYDRAULIC RISER CUPBOARDS
WS	WHEELSTOP TO AS2890.1

THERMAL PERFORMANCE SPECIFICATIONS

NOTE: REFER TO BASIX CERTIFICATE NUMBER 1061176M_03 FOR DETAILS AND SPECIFICATION

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01- A re-design for the piazza levels and planter boxes.
02- Unit LG17 & G14: Layout reconfigured. The surface area has been increased by 60 m2 by combining two units (LG17 & LG18 - G14 & G15) of the previous layout and it is a 3 bedroom apartment with a study. (previously it was a 2 bed apartment & 1 bedroom apartment).
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Basement 04	4283 m2	4283 m2
Total GFA	19047 m2	19048 m2

FRL OF BUILDING ELEMENTS
TYPE A CLASS 2 CONSTRUCTION - UNITS
TYPE A CLASS 7 CONSTRUCTION - CARPARK

DEFINITIONS (as BCA)

STRUCTURAL ADEQUACY, in relation to an FRL, means the ability to maintain stability and adequate load bearing capacity as determined by as 1530.4.

INTEGRITY, in relation to an FRL, means the ability to resist passage of flames and hot gases specified in as 1530.4

INSULATION, in relation to an FRL, means the ability to maintain a temperature on the surface not exposed to the furnace below the limits specified in as 1530.4.

BUILDING ELEMENT — FRL (in minutes) Structural Adequacy/ Integrity/Insulation

REFER TO BCA PART C3 SPEC. C1.1 CLAUSE C 3.1 Table 3

EXTERNAL WALL (including any column and other building element incorporated there in) or other external building element, where the distance from any fire source feature to which it is exposed is -

Building Element – Type A Construction	Class 2	Class 7a	Class 6
Loadbearing External Walls			
– Less than 1.5m from a FSP	90/90/90	120/120/120	180/180/180
– 1.5 - 3m from a FSP	90/60/60	120/90/90	180/180/120
– 3m or more from a FSP	90/90/30	120/60/30	180/120/90
Non-loadbearing External Walls			
– Less than 1.5m from a FSP	-/90/90	-/120/120	-/180/180
– 1.5 - 3m from a FSP	-/60/60	-/90/90	-/180/120
– 3m or more from a FSP	-/-/-	-/-/-	-/-/-
External Columns (not incorporated into an external wall)			
– Loadbearing	90/-/-	120/-/-	180/-/-
– Non-loadbearing	-/-/-	-/-/-	-/-/-
Common Walls and Fire Walls	90/90/90	120/120/120	180/180/180

Building Element – Type A Construction	Class 2	Class 7a	Class 6
Internal Walls - Fire resisting lift and stair shafts –			
– Loadbearing	90/90/90	120/120/120	180/120/120
– Non-loadbearing	-/90/90	-/120/120	-/120/120
Internal Walls – Bounding public corridors, public lobbies and the like –			
– Loadbearing	90/90/90	120/-/-	180/-/-
– Non-loadbearing	-/60/60	-/-/-	-/-/-
Internal Walls – Between or bounding sole-occupancy units –			
– Loadbearing	90/90/90	120/-/-	180/-/-
– Non-loadbearing	-/60/60	-/-/-	-/-/-
Internal Walls – Ventilating, pipe, garbage and the like shafts not used for the discharge of hot products of combustion –			
– Loadbearing	90/90/90	120/90/90	180/120/120
– Non-loadbearing	-/90/90	-/90/90	-/120/120
Other loadbearing internal walls, internal beams, trusses and columns	90/-/-	120/-/-	180/-/-
Floors	90/90/90	120/120/120	180/180/180
Roofs	90/60/30	120/60/30	180/60/30

DOORS

Fire stair doors - self-closing	-/60/30
Entry doors to sole-occupancy units - self closing	-/60/30
Lift landing doors	-/60/-
Doors to Electrical cupboards	Non combustible
Garbage Room hopper doors	-/60/30

ALL CONTRACTOR, MANUFACTURES AND WORKERS TO PROVIDE THE WORKS AS PER CURRENT BCA AND AUSTRALIAN STANDARDS DETAILS AND REQUIREMENTS.

BUILDING CODE OF AUSTRALIA COMPLIANCE PROVISIONS

SECTION B STRUCTURE
- B1.2 – AS1170 Structural loads
- B1.3 – AS3600 AS3700 AS4100 Structural design
- B1.4 – AS 3600 Materials & Forms Constructions

SECTION C FIRE RESISTANCE
- C1.1 – Spec. C1.1 Fire Resisting Construction
- C1.8 – Spec. C1.8 Lightweight construction
- C1.10 – Spec. C1.10 Compliance with fire hazard properties
- C2.6 – Vertical Separation of Openings in External walls
- C2.7 – Separation of fire compartments
- C2.10 – Spec. C1.1 Separation of lift shafts
- C2.12 – Separation of equipment
- C2.13 – Electricity Supply System
- C3.2 – Clause C3.4 Protection of openings
- C3.4 – Acceptable Methods of protection (of openings)
- C3.8 – Opening in Fire Isolated Exits
- C3.10 – AS 1735.11 Fire doorsets to lift shafts
- C3.11 – Spec. C1.1 & Spec. C3.4 Bounding construction of Class 2 & 3
- C3.12 & C3.15 – Fire sealing of penetrations
- Table A spec. C1.1 – AS 1530.4 Fire resistance levels

Rise in storeys 4 or more	Class of building 2, 3, or 9 A	Class of building 5, 6, 7or 8 A

SECTION D ACCESS AND EGRESS
- D1.10 – Discharge from Exits
- D2.4 – Separation of rising & descending flights
- D2.7 – Installations in exits and paths of travel
- D2.8 – Spec. C1.1 & Spec. C3.4 Enclosures under stairways
- D2.13 – Goings & Risers
- D2.14 – Landings
- D2.15 – Thresholds
- D2.16 – Balustrades
- D2.17 – Handrails
- D2.20 – Swinging Doors
- D2.21 – Operation of latch
- D2.23 – Sign on doors
- D2.24 - Protection OF openable windows
- D3.2 – AS1428.1 General Building access requirements
- D3.3 – Parts of Building to be Accessible
- D3.5 – AS1428.1 Disable carparking
- D3.6 – AS1428.1 & Spec. D3.6 Signage for accessible facilities, Service & Features
- D3.8 – AS/NZS 1428.4.1 Tactile indicators

SECTION E SERVICES AND EQUIPMENT
- E1.3 – AS 2419.1 Hydrant system
- E1.4 – AS 2441 Hose reel system
- E1.5 – AS 2118.1, AS 2118.4, AS2118.9 & Spec. E1.5 Sprinkler system
- E1.6 – AS 2444 Portable fire extinguishers
- E2.2 - Table E2.2a – Spec. E2.2a Smoke detection and alarm system
- E3.2 – Stretcher facility in lifts
- E3.3 – Warning Sign
- E3.6 – AS 1735.12 Facilities for disabilities
- E3.7, E3.9 & E3.10 – Fire service controls
- E4.2/E4.4 – AS/NZS 2293.1 Emergency lighting
- E4.6/E4.8 – AS/NZS 2293.1 Exit Signs

SECTION HEALTH AND AMENITY
- F1.1 – AS/3500.3.2 Stormwater drainage
- F1.4 – External waterproofing
- F1.7 – AS 3740 Waterproofing of wet areas
- F1.9/ F1.10 – Damp proofing
- F1.11 – Provision of floor wastes
- F2.5 – Construction of sanitary compartments
- F3.1 – Height of rooms
- F4 – Lighting and Ventilation
- F4.4 – AS/NZS 1680 Artificial lighting
- F4.5 – AS 1668.2 Mechanical ventilation
- F5.4 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of floors
- F5.5 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of walls
- F5.6 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of services
- F5.7 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of pumps

SECTION G ANCILLARY PROVISIONS
- NSW G1.101– Provision of cleaning of windows

LEGENDS

	SETOUT POINT
A/C	AIR CONDENSER
AL	ALUMINUM ANGLE
B	BOLLARD TO AS2890.6
BT/FW	BOUNDARY TRAP FLOOR WASTE
DP	DOWNPIPE
DDO	DISH DRAIN OUTLET
E	ELECTRICAL RISER CUPBOARDS
FH	FIRE HYDRANT
FHR	FIRE HOSE REEL
FW	FLOOR WASTE
GTD	GRATED DRAIN
LP	LIGHT POLE
M	MECHANICAL RISER
MSB	MAIN SWITCHBOARD
T	TACTILES
OF	OVERFLOW
RWO	RAINWATER OUTLET
ST	STORAGE
H	HYDRAULIC RISER CUPBOARDS
WS	WHEELSTOP TO AS2890.1

THERMAL PERFORMANCE SPECIFICATIONS

NOTE: REFER TO BASIX CERTIFICATE NUMBER 1061176M_03 FOR DETAILS AND SPECIFICATION

SCALE 1:100 @A1
0 1m 5m

REV	DATE	BY	AMENDMENTS
1			

NOTES
ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF WORK.
DRAWINGS ARE NOT TO BE SCALED.
USE ONLY FIGURED DIMENSIONS.

PREPARED BY

urbanacorp
planning
design
project management

Reg Architect: N.Lycenko Reg. No 3010

northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

CLIENT

PROJECT
28 Lockwood avenue,
BELROSE
NSW 2085

DRAWING
Roof plan

DATE DEC 2024
DRAWN JS CHECK NL
SCALE 1:200 @A1 Sheet Size
DWG NO. DA-107
ISSUE 8
STATUS ISSUE FOR SECTION 4.55
JOB NO.
NORTH

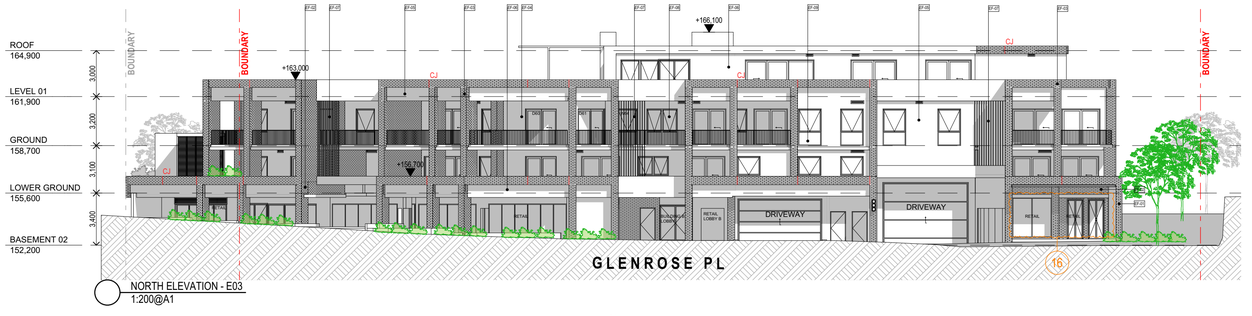
SCHEDULE OF AMENDMENTS:

01- A re-design for the piazza levels and planter boxes.
02- Unit LG17 & G14: Layout reconfigured. The surface area has been increased by 60 m2 by combining two units (LG17 & LG18 - G14 & G15) of the previous layout and it is a 3 bedroom apartment with a study. (previously it was a 2 bed apartment & 1 bedroom apartment).
03- LG 18 & G15: Layout reconfigured. The surface area of this unit has been increased by 23 m2 and it is a 2 bedroom apartment with study.
04- Non trafficable roof added over unit G15.
05- This corner of Level 01 terrace has been extended over the balcony of unit G14 to act as a cover.
06- Unit LG07: The surface area has been increased by 91.3 m2 by shifting the communal room to the left to gain more area within the unit and by reducing retail 03 by 91.3 m2.
07- Unit 1.04: Layout reconfigured. The surface area of this unit has been increased by 24 m2 and it is a 3 bedroom apartment with study. (previously it was a 2 bed apartment).
08- Unit LG10: A coutyard has been added to its balcony and a planter box to act as a privacy screen for this unit since it is just above the natural ground level.
09- Unit LG11: The balustrading on the balcony has been replaced by a glass wall of 3 panel sliding window and fixed glass to 1 m height.
10- Retail 11: Ramp is removed.
11- Retail 06: Ramp is removed.
12- Retail 10: Ramp is removed.
13- Retail 06 has been split into 2 retails: 6 and 6A. And consecutive areas of 120m2 and 188.5m2.
14- Retail 07 has been split into 2 retails: 7 and 7A. With a separate entry ramp to retail 7A. And consecutive areas of 109.8m2 and 156.6m2.
15- The stairs in retail 07 has been deleted.
16- The external RL of retail 08 has been dropped down by 150mm after a review of the survey plan and the ramp in this retail has been adjusted and a stair is proposed.
17- Retail 03 has been split into 3 retails accross the three levels: retail 03 on ground floor, retail 12 on lower ground floor and retail 10 on basement 02 floor.
Retail 05 has also been split into 3 retails accross the three levels: retail 05 on ground floor, retail 13 on lower ground floor and retail 11 on basement 02 floor.
18- The void space which is adjacent to retail 03 on ground floor level has been deleted again as approved by previous S4.55.
19- Retail 09 has been split into 2 retails: 9 and 9A. The ramp has been deleted. With consecutive areas of 109.3m2 and 89.8m2.
20- A mail box room for the whole building has been added beside retail 9A.
21- The loading dock area has been reduced to accomodate for two vehicles instead of three vehicles.
22- The stairs and ramps have been deleted in lobbies 1 and 2 in building A.
23- Amendments to configuration of unit 1.11 due to the lift 01 overrun encroachment.
24- Lift 01 to be a stretcher lift. Size as per manufacturer specifications.
25- The entry pedestrian ramp in retail 04 on ground floor has been shifted from the middle of the shop to one corner of it.
26- Extension of roof over unit 1.12
27- Unit LG01: The surface area has been increased by 71.5 m2 by reducing retail 13.
28- The fire water storage tank in basement 03 is deleted as it is no longer needed.
29- Two retail car spaces have been added on basement 04.
30- The plant equipments to be placed within the approved vertical louvered space on the roof.
31- The entry doors to retail lift 08 lobby have been removed as the lift can act as the security interface and the entry door of building B lobby has been relocated.
32- The entry stairs from Glenrose PL to the piazza are larger now and planter boxes has been added on its both sides.
33- The corner of retail 7A has been cut back to widen up the access for disability from Glenrose PL.
34- Privacy screens has been added to bedroom windows of units LG06 and G06.

Floor level	GFA approved	GFA Proposed
Level 01	1721 m2	1725 m2
Ground floor	2838 m2	2822 m2
Lower Ground	2782 m2	2795 m2
Basement 02	3140 m2	3140 m2
Basement 03	4283 m2	4283 m2
Basement 04	4283 m2	4283 m2
Total GFA	19047 m2	19048 m2

NORTH ELEVATION - E01
1:200@A1

WEST ELEVATION - E02
1:200@A1



NORTH ELEVATION - E03
1:200@A1

NORTH ELEVATION - E04
1:200@A1

northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

LEGEND:

EF-01 Finish: Face Brick Product: Boral Brick Colour: Amber Glow - Light Natural	**EF-04** Finish: Render paint Product: Delux Colour: Delux Guild Grey	**EF-07** Finish: Painted Metal Product: Metal Colour: Delux Black
EF-02 Finish: Face Brick Product: Boral Brick Colour: Copper Pearl - Aged Natural	**EF-05** Finish: Render paint Product: Delux Colour: Delux Ticking - Dark Grey	**EF-08** Finish: Glass Product: Glass Colour: Clear
EF-03 Finish: Face Brick Product: Boral Brick Colour: Contempo Madrid Blanco - White	**EF-06** Finish: Render paint Product: Delux Colour: Delux Leadman - Dark Grey	**EF-09** Finish: Glass Product: Glass Colour: Grey

SCALE 1:100 @A1
0 1m 5m

REV	DATE	BY	AMENDMENTS
1			

NOTES
ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF WORK.
DRAWINGS ARE NOT TO BE SCALED.
USE ONLY FIGURED DIMENSIONS.

PREPARED BY

urbanacorp
planning
design
project management

Reg Architect: N.Lycenko Reg. No 3010

CLIENT

PROJECT
28 Lockwood avenue,
BELROSE
NSW 2085

DRAWING
ELEVATIONS

DATE	DEC 2024
DRAWN	JS
CHECK	NL
SCALE	1:200, 1:160.30 @A1 Sheet Size
DWG NO.	DA-201
ISSUE	8
STATUS	ISSUE FOR SECTION 4.55
JOB NO.	

NORTH

FRL OF BUILDING ELEMENTS
TYPE A CLASS 2 CONSTRUCTION - UNITS
TYPE A CLASS 7 CONSTRUCTION - CARPARK

DEFINITIONS (as BCA)
STRUCTURAL ADEQUACY, in relation to an FRL, means the ability to maintain stability and adequate load bearing capacity as determined by as 1530.4.

INTEGRITY, in relation to an FRL, means the ability to resist passage of flames and hot gases specified in as 1530.4

INSULATION, in relation to an FRL, means the ability to maintain a temperature on the surface not exposed to the furnace below the limits specified in as 1530.4.

BUILDING ELEMENT — FRL (in minutes) Structural Adequacy/ Integrity/Insulation

REFER TO BCA PART C3 SPEC. C1.1 CLAUSE C 3.1 Table 3

EXTERNAL WALL (including any column and other building element incorporated there in) or other external building element, where the distance from any fire source feature to which it is exposed is -

Building Element – Type A Construction	Class 2	Class 7a	Class 6
Loadbearing External Walls			
– Less than 1.5m from a FSF	90/90/90	120/120/120	180/180/180
– 1.5 - 3m from a FSF	90/60/60	120/90/90	180/180/120
– 3m or more from a FSF	90/90/30	120/60/30	180/120/30
Non-loadbearing External Walls			
– Less than 1.5m from a FSF	-/90/90	-/120/120	-/180/180
– 1.5 - 3m from a FSF	-/60/60	-/90/90	-/180/120
– 3m or more from a FSF	-/-/-	-/-/-	-/-/-
External Columns (not incorporated into an external wall)			
– Loadbearing	90/-/-	120/-/-	180/-/-
– Non-loadbearing	-/-/-	-/-/-	-/-/-
Common Walls and Fire Walls	90/90/90	120/120/120	180/180/180

Building Element – Type A Construction	Class 2	Class 7a	Class 6
Internal Walls - Fire resisting lift and stair shafts –			
– Loadbearing	90/90/90	120/120/120	180/120/120
– Non-loadbearing	/90/90	/120/120	/120/120
Internal Walls – Bounding public corridors, public lobbies and the like –			
– Loadbearing	90/90/90	120/-/-	180/-/-
– Non-loadbearing	/90/60	-/-/-	-/-/-
Internal Walls – Between or bounding sole-occupancy units or			
– Loadbearing	90/90/90	120/-/-	180/-/-
– Non-loadbearing	/60/60	-/-/-	-/-/-
Internal Walls – Ventilating, pipe, garbage and the like shafts not used for the discharge of hot products of combustion –			
– Loadbearing	90/90/90	120/90/90	180/120/120
– Non-loadbearing	/90/90	/90/90	/120/120
Other loadbearing internal walls, internal beams, trusses and columns	90/-/-	120/-/-	180/-/-
Floors	90/90/90	120/120/120	180/180/180
Roofs	90/60/30	120/60/30	180/60/30

DOORS

Fire stair doors - self-closing	-/60/30
Entry doors to sole-occupancy units - self closing	-/60/30
Lift landing doors	-/60/-
Doors to Electrical cupboards	Non combustible
Garbage Room hopper doors	-/60/30

ALL CONTRACTOR, MANUFACTURES AND WORKERS TO PROVIDE THE WORKS AS PER CURRENT BCA AND AUSTRALIAN STANDARDS DETAILS AND REQUIREMENTS.

BUILDING CODE OF AUSTRALIA COMPLIANCE PROVISIONS

SECTION B STRUCTURE
- B1.2 – AS1170 Structural loads
- B1.3 – AS3600 AS3700 AS4100 Structural design
- B1.4 – AS 3600 Materials & Forms Constructions

SECTION C FIRE RESISTANCE
- C1.1 – Spec. C1.1 Fire Resisting Construction
- C1.8 – Spec. C1.8 Lightweight construction
- C1.10 – Spec. C1.10 Compliance with fire hazard properties
- C2.6 – Vertical Separation of Openings in External walls
- C2.7 – Separation of fire compartments
- C2.10 – Spec. C1.1 Separation of lift shafts
- C2.12 – Separation of equipment
- C2.13 – Electricity Supply System

- C3.2 – Clause C3.4 Protection of openings
- C3.4 – Acceptable Methods of protection (of openings)
- C3.8 – Opening in Fire Isolated Exits
- C3.10 – AS 1735.11 Fire doorsets to lift shafts
- C3.11 – Spec. C1.1 & Spec. C3.4 Bounding construction of Class 2 & 3
- C3.12 & C3.15 – Fire sealing of penetrations
- Table A spec. C1.1 – AS 1530.4 Fire resistance levels

Rise in storeys	Class of building 2, 3, or 9	Class of building 5, 6, 7or 8
4 or more	A	A

SECTION D ACCESS AND EGRESS
- D1.10 – Discharge from Exits
- D2.4 – Separation of rising & descending flights
- D2.7 – Installations in exits and paths of travel
- D2.8 – Spec. C1.1 & Spec. C3.4 Enclosures under stairways
- D2.13 – Goings & Risers
- D2.14 – Landings
- D2.15 – Thresholds
- D2.16 – Balustrades
- D2.17 – Handrails
- D2.20 – Swinging Doors
- D2.21 – Operation of latch
- D2.23 – Sign on doors

- D2.24 - Protection OF openable windows
- D3.2 – AS1428.1 General Building access requirements
- D3.3 – Parts of Building to be Accessible
- D3.5 – AS1428.1 Disable carparking
- D3.6 – AS1428.1 & Spec. D3.6 Signage for accessible facilities, Service & Features
- D3.8 – AS/NZS 1428.4.1 Tactile indicators

SECTION E SERVICES AND EQUIPMENT
- E1.3 – AS 2419.1 Hydrant system
- E1.4 – AS 2441 Hose reel system
- E1.5 – AS 2118.1, AS 2118.4, AS2118.9 & Spec. E1.5 Sprinkler system
- E1.6 – AS 2444 Portable fire extinguishers
- E2.2 - Table E2.2a – Spec. E2.2a Smoke detection and alarm system
- E3.2 – Stretcher facility in lifts
- E3.3 – Warning Sign
- E3.6 – AS 1735.12 Facilities for disabilities
- E3.7, E3.9 & E3.10 – Fire service controls
- E4.2/E4.4 – AS/NZS 2293.1 Emergency lighting
- E4.6/E4.8 – AS/NZS 2293.1 Exit Signs

SECTION HEALTH AND AMENITY
- F1.1 – AS/3500.3.2 Stormwater drainage
- F1.4 – External waterproofing
- F1.7 – AS 3740 Waterproofing of wet areas
- F1.9/ F1.10 – Damp proofing
- F1.11 – Provision of floor wastes
- F2.5 – Construction of sanitary compartments
- F3.1 – Height of rooms
- F4 – Lighting and Ventilation
- F4.4 – AS/NZS 1680 Artificial lighting
- F4.5 – AS 1668.2 Mechanical ventilation
- F5.4 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of floors
- F5.5 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of walls
- F5.6 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of services
- F5.7 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of pumps

SECTION G ANCILLARY PROVISIONS
- NSW G1.101– Provision of cleaning of windows

LEGENDS

	SETOUT POINT
A/C	AIR CONDENSER
AL	ALUMINUM ANGLE
B	BOLLARD TO AS2890.6
BT/FW	BOUNDARY TRAP FLOOR WASTE
DP	DOWNPIPE
DDO	DISH DRAIN OUTLET
E	ELECTRICAL RISER CUPBOARDS
FH	FIRE HYDRANT
FHR	FIRE HOSE REEL
FW	FLOOR WASTE
GTD	GRATED DRAIN
LP	LIGHT POLE
M	MECHANICAL RISER
MSB	MAIN SWITCHBOARD
T	TACTILES
OF	OVERFLOW
RWO	RAINWATER OUTLET
ST	STORAGE
H	HYDRAULIC RISER CUPBOARDS
WS	WHEELSTOP TO AS2890.1

THERMAL PERFORMANCE SPECIFICATIONS

NOTE: REFER TO BASIX CERTIFICATE NUMBER 1061176M_03 FOR DETAILS AND SPECIFICATION

SCHEDULE OF AMENDMENTS:

01- A re-design for the piazza levels and planter boxes.
02- Unit LG17 & G14: Layout reconfigured. The surface area has been increased by 60 m2 by combining two units (LG17 & LG18 - G14 & G15) of the previous layout and it is a 3 bedroom apartment with a study. (previously it was a 2 bed apartment & 1 bedroom apartment).
03- LG 18 & G15: Layout reconfigured. The surface area of this unit has been increased by 23 m2 and it is a 2 bedroom apartment with study.
04- Non trafficable roof added over unit G15.
05- This corner of Level 01 terrace has been extended over the balcony of unit G14 to act as a cover.
06- Unit LG07: The surface area has been increased by 91.3 m2 by shifting the communal room to the left to gain more area within the unit and by reducing retail 03 by 91.3 m2.
07- Unit 1.04: Layout reconfigured. The surface area of this unit has been increased by 24 m2 and it is a 3 bedroom apartment with study. (previously it was a 2 bed apartment).
08- Unit LG10: A coutyard has been added to its balcony and a planter box to act as a privacy screen for this unit since it is just above the natural ground level.
09- Unit LG11: The balustrading on the balcony has been replaced by a glass wall of 3 panel sliding window and fixed glass to 1 m height.
10- Retail 11: Ramp is removed.
11- Retail 06: Ramp is removed.
12- Retail 10: Ramp is removed.
13- Retail 06 has been split into 2 retails: 6 and 6A. And consecutive areas of 120m2 and 188.5m2.
14- Retail 07 has been split into 2 retails: 7 and 7A. With a separate entry ramp to retail 7A. And consecutive areas of 109.8m2 and 156.6m2.
15- The stairs in retail 07 has been deleted.
16- The external RL of retail 08 has been dropped down by 150mm after a review of the survey plan and the ramp in this retail has been adjusted and a stair is proposed.
17- Retail 03 has been split into 3 retails accross the three levels: retail 03 on ground floor, retail 12 on lower ground floor and retail 10 on basement 02 floor.
Retail 05 has also been split into 3 retails accross the three levels: retail 05 on ground floor, retail 13 on lower ground floor and retail 11 on basement 02 floor.
18- The void space which is adjacent to retail 03 on ground floor level has been deleted again as approved by previous S4.55.
19- Retail 09 has been split into 2 retails: 9 and 9A. The ramp has been deleted. With consecutive areas of 109.3m2 and 89.8m2.
20- A mail box room for the whole building has been added beside retail 9A.
21- The loading dock area has been reduced to accomodate for two vehicles instead of three vehicles.
22- The stairs and ramps have been deleted in lobbies 1 and 2 in building A.
23- Amendments to configuration of unit 1.11 due to the lift 01 overrun encroachment.
24- Lift 01 to be a stretcher lift. Size as per manufacturer specifications.
25- The entry pedestrian ramp in retail 04 on ground floor has been shifted from the middle of the shop to one corner of it.
26- Extension of roof over unit 1.12
27- Unit LG01: The surface area has been increased by 71.5 m2 by reducing retail 13.
28- The fire water storage tank in basement 03 is deleted as it is no longer needed.
29- Two retail car spaces have been added on basement 04.
30- The plant equipments to be placed within the approved vertical louvered space on the roof.
31- The entry doors to retail lift 08 lobby have been removed as the lift can act as the security interface and the entry door of building B lobby has been relocated.
32- The entry stairs from Glenrose PL to the piazza are larger now and planter boxes has been added on its both sides.
33- The corner of retail 7A has been cut back to widen up the access for disability from Glenrose PL.
34- Privacy screens has been added to bedroom windows of units LG06 and G06.

Floor level	GFA approved	GFA Proposed
Level 01	1721 m2	1725 m2
Ground floor	2838 m2	2822 m2
Lower Ground	2782 m2	2795 m2
Basement 02	3140 m2	3140 m2
Basement 03	4283 m2	4283 m2
Basement 04	4283 m2	4283 m2
Total GFA	19047 m2	19048 m2

E05
1:200@A1

E06
1:200@A1

02

LEGEND:

EF-01 Finish: Face Brick Product: Boral Brick Colour: Amber Glow - Light Natural	**EF-04** Finish: Render paint Product: Delux Colour: Delux Guild Grey	**EF-07** Finish: Painted Metal Product: Metal Colour: Delux Black
EF-02 Finish: Face Brick Product: Boral Brick Colour: Copper Pearl - Aged Natural	**EF-05** Finish: Render paint Product: Delux Colour: Delux Ticking - Dark Grey	**EF-08** Finish: Glass Product: Glass Colour: Clear
EF-03 Finish: Face Brick Product: Boral Brick Colour: Contempo Madrid Blanco - White	**EF-06** Finish: Render paint Product: Delux Colour: Delux Leadman - Dark Grey	**EF-09** Finish: Glass Product: Glass Colour: Grey

northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

SCALE 1:100 @A1
0 1m 5m

REV	DATE	BY	AMENDMENTS
1			

NOTES
ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF WORK.
DRAWINGS ARE NOT TO BE SCALED.
USE ONLY FIGURED DIMENSIONS.

PREPARED BY

urbanacorp
planning
design
project management

Reg Architect: N.Lycenko Reg. No 3010

CLIENT

PROJECT
28 Lockwood avenue,
BELROSE
NSW 2085

DRAWING
ELEVATIONS

DATE DEC 2024	NORTH
DRAWN JS / CHECK NL	
SCALE 1:200 @A1 Sheet Size	
DWG NO. DA-202	ISSUE 8
STATUS ISSUE FOR SECTION 4.55	JOB NO.

FRL OF BUILDING ELEMENTS
TYPE A CLASS 2 CONSTRUCTION - UNITS
TYPE A CLASS 7 CONSTRUCTION - CARPARK

DEFINITIONS (as BCA)

STRUCTURAL ADEQUACY, in relation to an FRL, means the ability to maintain stability and adequate load bearing capacity as determined by as 1530.4.

INTEGRITY, in relation to an FRL, means the ability to resist passage of flames and hot gases specified in as 1530.4

INSULATION, in relation to an FRL, means the ability to maintain a temperature on the surface not exposed to the furnace below the limits specified in as 1530.4.

BUILDING ELEMENT — FRL (in minutes) Structural Adequacy/ Integrity/Insulation

REFER TO BCA PART C3 SPEC. C1.1 CLAUSE C 3.1 Table 3

EXTERNAL WALL (including any column and other building element incorporated there in) or other external building element, where the distance from any fire source feature to which it is exposed is -

Building Element – Type A Construction	Class 2	Class 7a	Class 6
Loadbearing External Walls - Less than 1.5m from a FSP - 1.5 - 3m from a FSP - 3m or more from a FSP	90/90/90 90/60/60 90/60/30	120/120/120 120/90/90 120/60/30	180/180/180 180/180/120 180/120/90
Non-Loadbearing External Walls - Less than 1.5m from a FSP - 1.5 - 3m from a FSP - 3m or more from a FSP	-/90/90 -/60/60 -/-/-	-/120/120 -/90/90 -/-/-	-/180/180 -/180/120 -/-/-
External Columns (not incorporated into an external wall) - Loadbearing - Non-loadbearing	90/-/- -/-/-	120/-/- -/-/-	180/-/- -/-/-
Common Walls and Fire Walls	90/90/90	120/120/120	180/180/180

Building Element – Type A Construction	Class 2	Class 7a	Class 6
Internal Walls - Fire resisting lift and stair shafts – - Loadbearing - Non-loadbearing	90/90/90 -/90/90	120/120/120 -/120/120	180/120/120 -/120/120
Internal Walls – Bounding public corridors, public lobbies and the like – - Loadbearing - Non-loadbearing	90/90/90 -/90/90	120/-/- -/-/-	180/-/- -/-/-
Internal Walls – Between or bounding sole-occupancy units – - Loadbearing - Non-loadbearing	90/90/90 -/90/90	120/-/- -/-/-	180/-/- -/-/-
Internal Walls – Ventilating, pipe, garbage and the like shafts not used for the discharge of hot products of combustion – - Loadbearing - Non-loadbearing	90/90/90 -/90/90	120/90/90 -/90/90	180/120/120 -/120/120
Other loadbearing internal walls, internal beams, trusses and columns	90/-/-	120/-/-	180/-/-
Floors	90/90/90	120/120/120	180/180/180
Roofs	90/60/30	120/60/30	180/60/30

DOORS

Fire stair doors - self-closing	-/60/30
Entry doors to sole-occupancy units - self closing	-/60/30
Lift landing doors	-/60/-
Doors to Electrical cupboards	Non combustible
Garbage Room hopper doors	-/60/30

ALL CONTRACTOR, MANUFACTURES AND WORKERS TO PROVIDE THE WORKS AS PER CURRENT BCA AND AUSTRALIAN STANDARDS DETAILS AND REQUIREMENTS.

BUILDING CODE OF AUSTRALIA COMPLIANCE PROVISIONS

SECTION B STRUCTURE
- B1.2 – AS1170 Structural loads
- B1.3 – AS3600 AS3700 AS4100 Structural design
- B1.4 – AS 3600 Materials & Forms Constructions

SECTION C FIRE RESISTANCE
- C1.1 – Spec. C1.1 Fire Resisting Construction
- C1.8 – Spec. C1.8 Lightweight construction
- C1.10 – Spec. C1.10 Compliance with fire hazard properties
- C2.6 – Vertical Separation of Openings in External walls
- C2.7 – Separation of fire compartments
- C2.10 – Spec. C1.1 Separation of lift shafts
- C2.12 – Separation of equipment
- C2.13 – Electricity Supply System

- C3.2 – Clause C3.4 Protection of openings
- C3.4 – Acceptable Methods of protection (of openings)
- C3.8 – Opening in Fire Isolated Exits
- C3.10 – AS 1735.11 Fire doorsets to lift shafts
- C3.11 – Spec. C1.1 & Spec. C3.4 Bounding construction of Class 2 & 3
- C3.12 & C3.15 – Fire sealing of penetrations
- Table A spec. C1.1 – AS 1530.4 Fire resistance levels

Rise in storeys	Class of building 2, 3, or 9	Class of building 5, 6, 7or 8
4 or more	A	A

SECTION D ACCESS AND EGRESS
- D1.10 – Discharge from Exits
- D2.4 – Separation of rising & descending flights
- D2.7 – Installations in exits and paths of travel
- D2.8 – Spec. C1.1 & Spec. C3.4 Enclosures under stairways
- D2.13 – Goings & Risers
- D2.14 – Landings
- D2.15 – Thresholds
- D2.16 – Balustrades
- D2.17 – Handrails
- D2.20 – Swinging Doors
- D2.21 – Operation of latch
- D2.23 – Sign on doors
- D2.24 - Protection OF openable windows
- D3.2 – AS1428.1 General Building access requirements
- D3.3 – Parts of Building to be Accessible
- D3.5 – AS1428.1 Disable carparking
- D3.6 – AS1428.1 & Spec. D3.6 Signage for accessible facilities, Service & Features
- D3.8 – AS/NZS 1428.4.1 Tactile indicators

SECTION E SERVICES AND EQUIPMENT
- E1.3 – AS 2419.1 Hydrant system
- E1.4 – AS 2441 Hose reel system
- E1.5 – AS 2118.1, AS 2118.4, AS2118.9 & Spec. E1.5 Sprinkler system
- E1.6 – AS 2444 Portable fire extinguishers
- E2.2 - Table E2.2a – Spec. E2.2a Smoke detection and alarm system
- E3.2 – Stretcher facility in lifts
- E3.3 – Warning Sign
- E3.6 – AS 1735.12 Facilities for disabilities
- E3.7, E3.9 & E3.10 – Fire service controls
- E4.2/E4.4 – AS/NZS 2293.1 Emergency lighting
- E4.6/E4.8 – AS/NZS 2293.1 Exit Signs

SECTION H EALTH AND AMENITY
- F1.1 – AS/3500.3.2 Stormwater drainage
- F1.4 – External waterproofing
- F1.7 – AS 3740 Waterproofing of wet areas
- F1.9/ F1.10 – Damp proofing
- F1.11 – Provision of floor wastes
- F2.5 – Construction of sanitary compartments
- F3.1 – Height of rooms
- F4 – Lighting and Ventilation
- F4.4 – AS/NZS 1680 Artificial lighting
- F4.5 – AS 1668.2 Mechanical ventilation
- F5.4 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of floors
- F5.5 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of walls
- F5.6 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of services
- F5.7 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of pumps

SECTION G ANCILLARY PROVISIONS
- NSW G1.101– Provision of cleaning of windows

LEGENDS

	SETOUT POINT
A/C	AIR CONDENSER
AL	ALUMINUM ANGLE
B	BOLLARD TO AS2890.6
BT/FW	BOUNDARY TRAP FLOOR WASTE
DP	DOWNPIPE
DDO	DISH DRAIN OUTLET
E	ELECTRICAL RISER CUPBOARDS
FH	FIRE HYDRANT
FHR	FIRE HOSE REEL
FW	FLOOR WASTE
GTD	GRATED DRAIN
LP	LIGHT POLE
M	MECHANICAL RISER
MSB	MAIN SWITCHBOARD
T	TACTILES
OF	OVERFLOW
RWO	RAINWATER OUTLET
ST	STORAGE
H	HYDRAULIC RISER CUPBOARDS
WS	WHEELSTOP TO AS2890.1

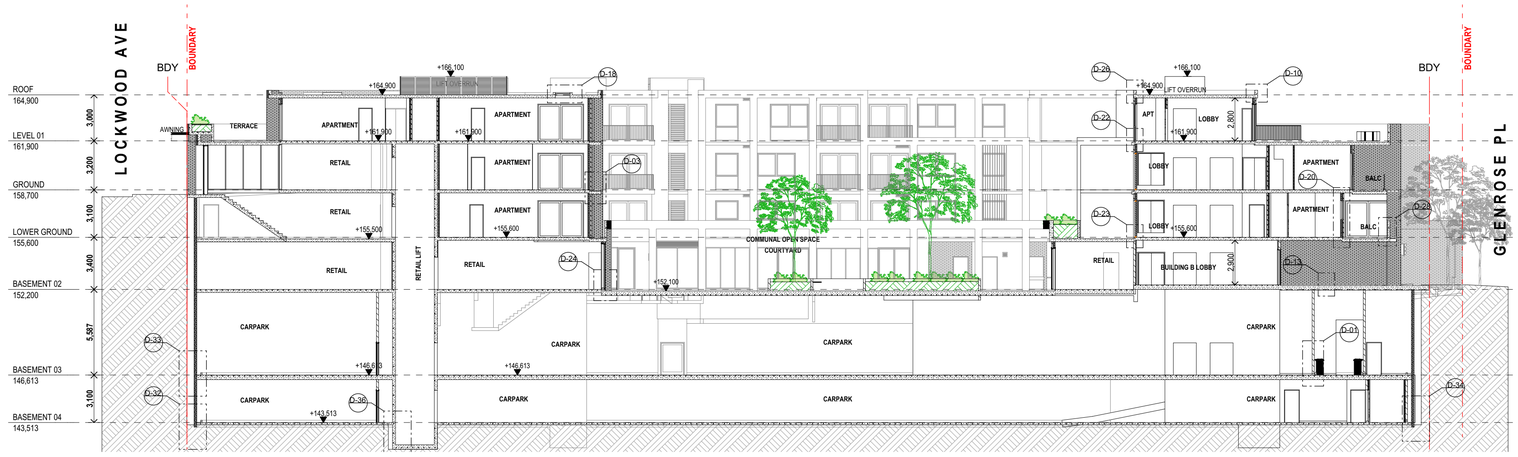
THERMAL PERFORMANCE SPECIFICATIONS

NOTE: REFER TO BASIX CERTIFICATE NUMBER 1061176M_03 FOR DETAILS AND SPECIFICATION

SCHEDULE OF AMENDMENTS:

01- A re-design for the piazza levels and planter boxes.
02- Unit LG17 & G14: Layout reconfigured. The surface area has been increased by 60 m2 by combining two units (LG17 & LG18 - G14 & G15) of the previous layout and it is a 3 bedroom apartment with a study. (previously it was a 2 bed apartment & 1 bedroom apartment).
03- LG 18 & G15: Layout reconfigured. The surface area of this unit has been increased by 23 m2 and it is a 2 bedroom apartment with study.
04- Non trafficable roof added over unit G15.
05- This corner of Level 01 terrace has been extended over the balcony of unit G14 to act as a cover.
06- Unit LG07: The surface area has been increased by 91.3 m2 by shifting the communal room to the left to gain more area within the unit and by reducing retail 03 by 91.3 m2.
07- Unit 1.04: Layout reconfigured. The surface area of this unit has been increased by 24 m2 and it is a 3 bedroom apartment with study. (previously it was a 2 bed apartment).
08- Unit LG10: A coutyard has been added to its balcony and a planter box to act as a privacy screen for this unit since it is just above the natural ground level.
09- Unit LG11: The balustrading on the balcony has been replaced by a glass wall of 3 panel sliding window and fixed glass to 1 m height.
10- Retail 11: Ramp is removed.
11- Retail 06: Ramp is removed.
12- Retail 10: Ramp is removed.
13- Retail 06 has been split into 2 retails: 6 and 6A. And consecutive areas of 120m2 and 188.5m2.
14- Retail 07 has been split into 2 retails: 7 and 7A. With a separate entry ramp to retail 7A. And consecutive areas of 109.8m2 and 156.6m2.
15- The stairs in retail 07 has been deleted.
16- The external RL of retail 08 has been dropped down by 150mm after a review of the survey plan and the ramp in this retail has been adjusted and a stair is proposed.
17- Retail 03 has been split into 3 retails accross the three levels: retail 03 on ground floor, retail 12 on lower ground floor and retail 10 on basement 02 floor.
Retail 05 has also been split into 3 retails accross the three levels: retail 05 on ground floor, retail 13 on lower ground floor and retail 11 on basement 02 floor.
18- The void space which is adjacent to retail 03 on ground floor level has been deleted again as approved by previous S4.55.
19- Retail 09 has been split into 2 retails: 9 and 9A. The ramp has been deleted. With consecutive areas of 109.3m2 and 89.8m2.
20- A mail box room for the whole building has been added beside retail 9A.
21- The loading dock area has been reduced to accomodate for two vehicles instead of three vehicles.
22- The stairs and ramps have been deleted in lobbies 1 and 2 in building A.
23- Amendments to configuration of unit 1.11 due to the lift 01 overrun encroachment.
24- Lift 01 to be a stretcher lift. Size as per manufacturer specifications.
25- The entry pedestrian ramp in retail 04 on ground floor has been shifted from the middle of the shop to one corner of it.
26- Extension of roof over unit 1.12
27- Unit LG01: The surface area has been increased by 71.5 m2 by reducing retail 13.
28- The fire water storage tank in basement 03 is deleted as it is no longer needed.
29- Two retail car spaces have been added on basement 04.
30- The plant equipments to be placed within the approved vertical louvered space on the roof.
31- The entry doors to retail lift 08 lobby have been removed as the lift can act as the security interface and the entry door of building B lobby has been relocated.
32- The entry stairs from Glenrose PL to the piazza are larger now and planter boxes has been added on its both sides.
33- The corner of retail 7A has been cut back to widen up the access for disability from Glenrose PL.
34- Privacy screens has been added to bedroom windows of units LG06 and G06.

Floor level	GFA approved	GFA Proposed
Level 01	1721 m2	1725 m2
Ground floor	2838 m2	2822 m2
Lower Ground	2782 m2	2795 m2
Basement 02	3140 m2	3140 m2
Basement 03	4283 m2	4283 m2
Basement 04	4283 m2	4283 m2
Total GFA	19047 m2	19048 m2



SECTION - S01
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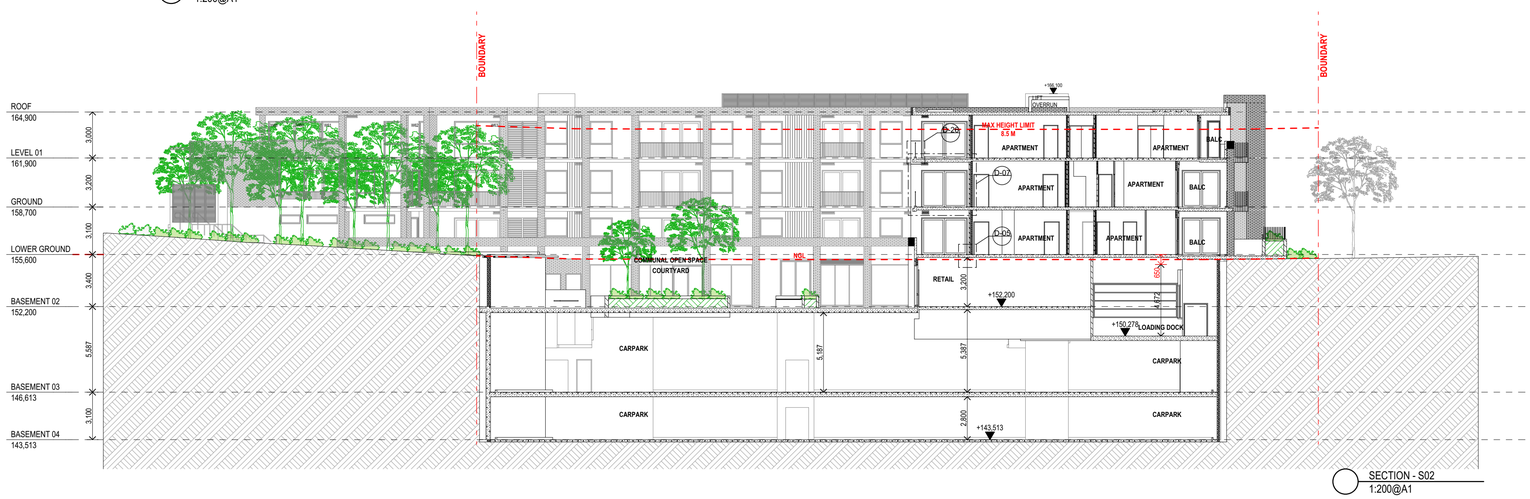

SECTION - S02
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northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

FRL OF BUILDING ELEMENTS
TYPE A CLASS 2 CONSTRUCTION - UNITS
TYPE A CLASS 7 CONSTRUCTION - CARPARK

DEFINITIONS (as BCA)

STRUCTURAL ADEQUACY, in relation to an FRL, means the ability to maintain stability and adequate load bearing capacity as determined by as 1530.4.

INTEGRITY, in relation to an FRL, means the ability to resist passage of flames and hot gases specified in as 1530.4

INSULATION, in relation to an FRL, means the ability to maintain a temperature on the surface not exposed to the furnace below the limits specified in as 1530.4.

BUILDING ELEMENT — FRL (in minutes) Structural Adequacy/ Integrity/Insulation

REFER TO BCA PART C3 SPEC. C1.1 CLAUSE C 3.1 Table 3

EXTERNAL WALL (including any column and other building element incorporated there in) or other external building element, where the distance from any fire source feature to which it is exposed is -

Building Element – Type A Construction	Class 2	Class 7a	Class 6
Loadbearing External Walls – Less than 1.5m from a FSF – 1.5 - 3m from a FSF – 3m or more from a FSF	90/90/90 90/60/60 90/60/30	120/120/120 120/90/90 120/60/30	180/180/180 180/180/120 180/120/90
Non-Loadbearing External Walls – Less than 1.5m from a FSF – 1.5 - 3m from a FSF – 3m or more from a FSF	-/90/90 -/60/60 -/-/-	-/120/120 -/90/90 -/-/-	-/180/180 -/180/120 -/-/-
External Columns (not incorporated into an external wall)			
– Loadbearing	90/-/-	120/-/-	180/-/-
– Non-loadbearing	-/-/-	-/-/-	-/-/-
Common Walls and Fire Walls	90/90/90	120/120/120	180/180/180

Building Element – Type A Construction	Class 2	Class 7a	Class 6
Internal Walls - Fire resisting lift and stair shafts – Loadbearing – Non-loadbearing	90/90/90 -/90/90	120/120/120 -/120/120	180/120/120 -/120/120
Internal Walls – Bounding public corridors, public lobbies and the like – Loadbearing – Non-loadbearing	90/90/90 -/90/90	120/-/- -/-/-	180/-/- -/-/-
Internal Walls – Between or bounding sole-occupancy units - Loadbearing – Non-loadbearing	90/90/90 -/90/90	120/-/- -/-/-	180/-/- -/-/-
Internal Walls – Ventilating, pipe, garbage and the like shafts not used for the discharge of hot products of combustion – Loadbearing – Non-loadbearing	90/90/90 -/90/90	120/90/90 -/90/90	180/120/120 -/120/120
Other loadbearing internal walls, internal beams, trusses and columns	90/-/-	120/-/-	180/-/-
Floors	90/90/90	120/120/120	180/180/180
Roofs	90/60/30	120/60/30	180/60/30

DOORS

Fire stair doors - self-closing	-/60/30
Entry doors to sole-occupancy units - self closing	-/60/30
Lift landing doors	-/60/-
Doors to Electrical cupboards	Non combustible
Garbage Room hopper doors	-/60/30

ALL CONTRACTOR, MANUFACTURES AND WORKERS TO PROVIDE THE WORKS AS PER CURRENT BCA AND AUSTRALIAN STANDARDS DETAILS AND REQUIREMENTS.

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- B1.4 – AS 3600 Materials & Forms Constructions

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- C3.11 – Spec. C1.1 & Spec. C3.4 Bounding construction of Class 2 & 3
- C3.12 & C3.15 – Fire sealing of penetrations
- Table A spec. C1.1 – AS 1530.4 Fire resistance levels

Rise in storeys	Class of building 2, 3, or 9	Class of building 5, 6, 7or 8
4 or more	A	A

SECTION D ACCESS AND EGRESS
- D1.10 – Discharge from Exits
- D2.4 – Separation of rising & descending flights
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- D2.13 – Goings & Risers
- D2.14 – Landings
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- D2.16 – Balustrades
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- D2.20 – Swinging Doors
- D2.21 – Operation of latch
- D2.23 – Sign on doors
- D2.24 - Protection OF openable windows
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- D3.3 – Parts of Building to be Accessible
- D3.5 – AS1428.1 Disable carparking
- D3.6 – AS1428.1 & Spec. D3.6 Signage for accessible facilities, Service & Features
- D3.8 – AS/NZS 1428.4.1 Tactile indicators

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- E1.3 – AS 2419.1 Hydrant system
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- F5.4 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of floors
- F5.5 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of walls
- F5.6 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of services
- F5.7 – AS/NZS 1276.1 or Spec. F5.2 Sound insulation rating of pumps

SECTION G ANCILLARY PROVISIONS
- NSW G1.101– Provision of cleaning of windows

LEGENDS

	SETOUT POINT
A/C	AIR CONDENSER
AL	ALUMINUM ANGLE
B	BOLLARD TO AS2890.6
BT/FW	BOUNDARY TRAP FLOOR WASTE
DP	DOWNPIPE
DDO	DISH DRAIN OUTLET
E	ELECTRICAL RISER CUPBOARDS
FH	FIRE HYDRANT
FHR	FIRE HOSE REEL
FW	FLOOR WASTE
GTD	GRATED DRAIN
LP	LIGHT POLE
M	MECHANICAL RISER
MSB	MAIN SWITCHBOARD
T	TACTILES
OF	OVERFLOW
RWO	RAINWATER OUTLET
ST	STORAGE
H	HYDRAULIC RISER CUPBOARDS
WS	WHEELSTOP TO AS2890.1

THERMAL PERFORMANCE SPECIFICATIONS

NOTE: REFER TO BASIX CERTIFICATE NUMBER 1061176M_03 FOR DETAILS AND SPECIFICATION

SCALE 1:100 @A1
0 1m 5m

REV	DATE	BY	AMENDMENTS
1			

NOTES
ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF WORK.
DRAWINGS ARE NOT TO BE SCALED.
USE ONLY FIGURED DIMENSIONS.

PREPARED BY

urbanacorp
planning
design
project management
Reg Architect: N.Lycenko Reg. No 3010

CLIENT

PROJECT
28 Lockwood avenue,
BELROSE
NSW 2085

DRAWING
SECTIONS

DATE	DEC 2024		NORTH
DRAWN	JS	CHECK	NL
SCALE	1:200 @A1 Sheet Size		
DWG NO.	DA-301	ISSUE	8
STATUS	ISSUE FOR SECTION 4.55	JOB NO.	

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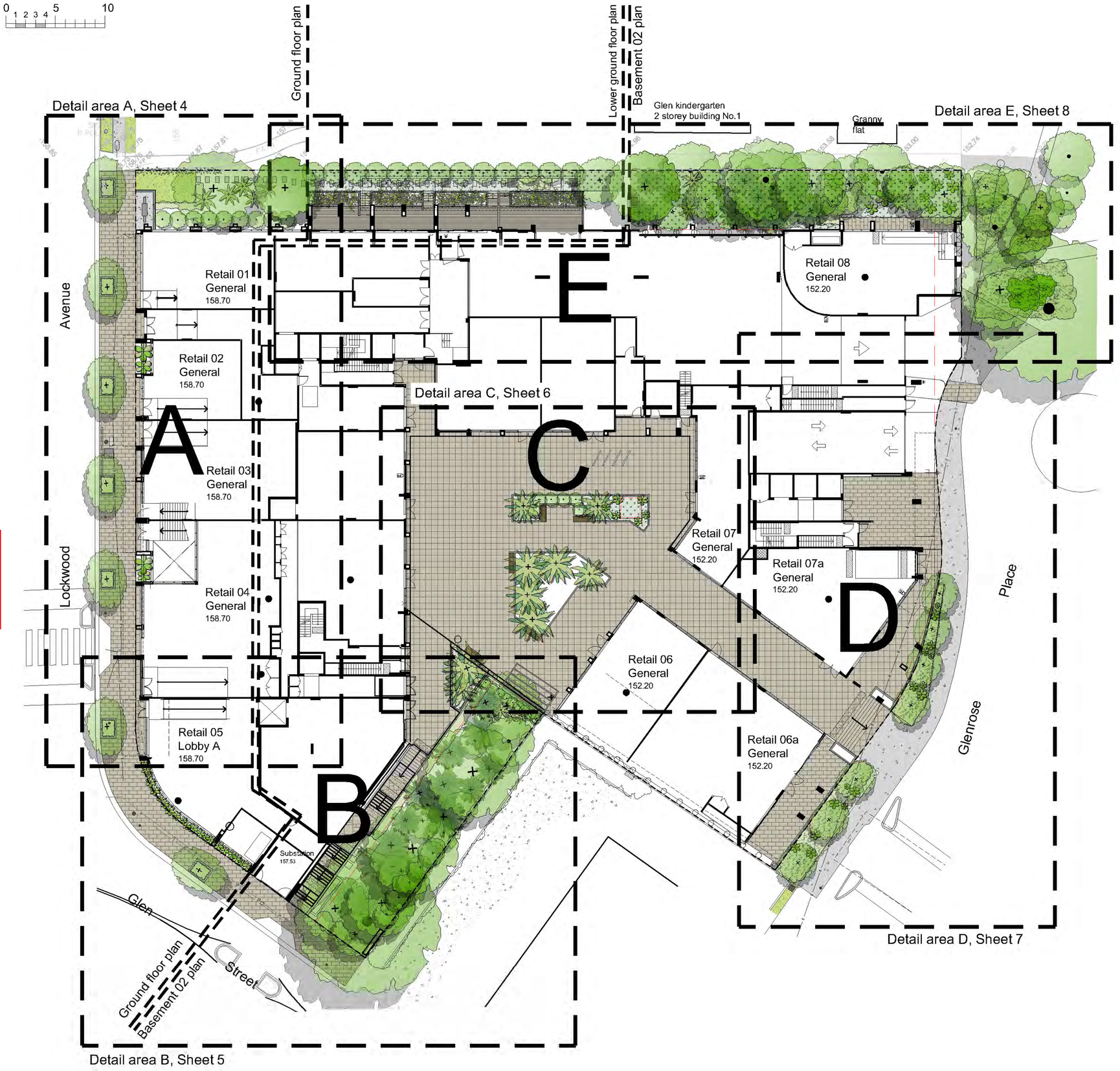

northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

Drawing schedule

S4.55

Amendments

P	Architectural co-ord	25.11.24
O	S4.55	28.10.24

PAUL SCRIVENER
LANDSCAPE
PO Box 4050. ACT 2602
ABN: 16 949 100 279
Phone: 02 9907 8011
www.scrivener-design.com
Email: paul@scrivener-design.com

Project: Retail & Residential development at 28 Lockwood Ave, Belrose, NSW

Dwg: Sheet set out

Date: 25.11.24 Scale: 1:200 @A1

Job Ref: 21/2110 Sheet No: 1 of 21

Builder must verify all dimensions of the site before work commences. Figured dimensions should be used in preference to those scaled off.

North

1 of 21

ISSUE-P

Planting schedule

Symbol	Botanical name	Common name	Cont. size	Staking	Mature height	No req.
Canopy trees						
ANO	Angophora costata	Sydney Red Gum (large native tree. Striking bark colour)	45Lt	3x50x50x1800	16-25.0M	5
ASM	Acmena smithii	Lilly Pilly (Native tree in dep soil. Prune lower branches)	75Lt	3x50x50x1800	8-10.0M	1
BAS	Banksia serrata	Old Man Banksia (Small native. Gnarled trunk & serrated leaves)	75Lt	3x50x50x1800	4-6.0M	1
BIN	Banksia integrifolia	Coast Banksia (medium indigenous tree)	75Lt	3x50x50x1800	12-15.0M	4
CAG	Casuarina glauca	Swamp She-Oak (IMed native tree)	45Lt	3x50x50x1800	18-13.0M	6
CUP	Cupaniopsis anacardoides	Tuckeroo (small to medium native tree. Hardy street tree)	75Lt	3x50x50x1800	5-7.0M	1
ER	Elaeocarpus reticulatus	Blueberry Ash (indigenous small tree)	45Lt	3x50x50x1800	6-8.0M	12
GLO	Glochidion ferdinandii	Cheese Tree (Indigenous medium tree)	75Lt	3x50x50x1800	8-10.0M	1
MLQ	Melalueca quinquenervia	Flax Leaf Paperbark (indigenous medium tree)	75Lt	3x50x50x1800	12-15.0M	3
PLU	Plumeria acutifolia	Frangipani (small flowering deciduous tree)	45Lt	2x50x50x1800	3-4.0M	3
TLL	Tristaniopsis laurina 'Luscious'	Water Gum cultivar (indigenous small-med tree)	75Lt	3x50x50x1800	5-7.0M	7
Shrubs / small feature trees						
BAM	Banksia marginata	Silver Banksia	300mm	nil	2-5.0M	7
CEV	Callistemon citrinus 'Endeavor'	Endeavor Crimson Bottlebrush (Flowering native small tree)	300mm	nil	2-2.5.0M	4
CLJ	Callistemon 'Little jet'	Little Jet Bottlebrush (Flowering native ideal for hedging)	200mm	nil	0.8-1.4M	20
SYR	Syzygium 'Resilience'	Resilience Lilly Pilly (native screen plant. Can be hedged)	300mm	hedged	2.8-3.5M	5
CVS	Callistemon viminalis 'Slim'	Slim Culivar Bottlebrush (Hybrid screen hedging bottlebrush)	300mm	nil	2.5-3.0M	14
WFB	Westringia fruticosa 'Blue Gem'	Dwarf Blue Westringia (hardy low gorwing plant)	150mm	hedged	1.2-1.5M	18
Ferns / Palms / Succulents / ornamental bamboos						
AGV	Agave attenuata	Century plant (striking spiky leaved succulent)	200mm	nil	0.5M	25
ALR	Alacanatarea 'Rubra'	Giant Bromeliade (Large succulent leaved ornamental plant)	300mm	nil	1.0M	10
BGU	Bambusa guangxiensis	Dwarf Chinese Bamboo (ornamental bamboo can be hedged)	200mm	nil	2-3.5M	9
CAA	Cyathea australe	Tree Fern (Native tree ferns)	300mm	nil	2-4.0M	22
CHM	Chamaerops humilis	Europena Fan Palm (Hardy Small – med palm)	300mm	nil	3-5.0M	5
CYR	Cycas revolutum	Sago Palm (striking native low palm like)	300mm	nil	1-1.2M	9
DOE	Doryanthese excelsor	Gymea Lilly (striking palm like). Tall red flower on spike)	300mm	nil	1.5-2.0M	10
DRD	Draceana draco	Dragon Tree (striking feature plant)	semi adv.	nil	2.5-3.5M	6
HOF(A)	Howea forsteriana	Kentia Palm (tall palm)	200litre	wire guys	7-10.0M	1
LAV	Livistona australis	Cabbage Palm (tall indigenous palm)	100lt	wire guys	8-12.0M	4
LAV (A)	Livistona australis	Cabbage Palm (tall indigenous palm)	200lt	wire guys	8-12.0M	5
LAV(B)	Livistona australis	Cabbage Palm (tall indigenous palm)	400Ltadv	wire guys	8-12.0M	5
RHA	Raphis excelsor	Lady Finger Palm	300mm	nil	2-2.5M	18
STR	Strelitzia reginea	Bird of Paradise (Strappy leaved flowering accent plant)	250mm	nil	1-1.2M	59
Groundcovers/Climbers						
GPR	Grevillea 'Poorinda Royal Mantle'	Grevillea Groundcover (native low groundcover)	150mm	nil	0.2M	48
HIS	Hibbertia scandens	Guinea Flower (flowering climber / groundcover)	200mm	nil	0.3M	9
MYP	Myoprum parvifolium	Creeping Boobliala (native cascading groundcover)	150mm	nil	0.2M	68
PJ	Pandorea jasminoides	Bower Plant (native climbing/cascading groundcover)	200mm	wire supports on fence	2.5M	4
PP	Pandorea pandorana	Wonga Wonga Vine (native climbing plant / groundcover)	200mm	wire supports on fence	3.0M	6
TJA	Trachelospermum asiaticum	Flatmat Star Jasmine (FT01 Ozbbreed hyvrid groundcover)	200mm	nil	0.2M	144
TJT	Trachelospermum tricolor	Variegated Star Jasmine (variegated colour groundcover)	200mm	nil	0.5M	98
SCA	Scaevola aemula	Fan Flower (Flowering cascading groundcover)	150mm	nil	0.3M	46
VH	Viola hederacea	Native Violets (native low groundcover)	tubes	nil	0.1M	250
Ornamental grasses/strappy leaved plants						
CM	Clivea miniata	Kaffir Lily (shade tolerant groundcover)	200mm	nil	0.5M	86
CRP	Crinum pedunculatum	Swamp Lily (native mass planted groundcover)	200mm	nil	0.5-0.7	110
DCR	Dianella caerulea 'Tasred'	Tasred Flax Lily (native grass like plant)	100mm	nil	0.4M	60
DIA	Dianella 'Cassa Blue'	Hybrid Flax Lily (native grass like plant)	100mm	nil	0.4M	50
DIC	Dianella caerulea	Blue Flax Lily (native grass like plant)	100mm	nil	0.4M	890
ISN	Isolepsis (Finicia) nodosa	Knobby Club Rush (native ornamental grass)	150mm	nil	0.6M	8
LIM	Liriope Evergreen Giant	Turf Lily (shade tolerant groundcover)	150mm	nil	0.4M	428
LOM	Lomandra longifolia	Spiny Mat Rush (Tall hardy grass like clumping plant)	200mm	nil	1-1.2M	8
LOT	Lomandra 'Tanika'	Dwarf Mat Rush (native mass planted groundcover)	150mm	nil	0.4M	232
PNA	Pennisetum alopecuroides Nafray	NAFRAY® 'PA300' PBR (flowering ornamental grass)	150mm	nil	0.8-1.0M	10

Planting schedule species to be sourced from local nurseries supplying plants of local provenance wherever possible. Landscape contractor is to check plant numbers on plan against the schedule prior to submitting tender price. Contact landscape architect if any number discrepancies are found. Council compliance controls require that any substitution of species variety or container size MUST be confirmed with landscape architect to ensure a compliance certificate can be issued that's meets the specific development consent conditions of the project.

Irrigation notes

1. **Scope**

1.1 Automatic Irrigation System

Design, Document, supply, install, adjust and commission a fully automatic irrigation system to all garden bed areas and planters as indicated on sheet numbers 6, 9 & 13. The work shall include the complete supply, construction and testing of new irrigation pipework, rain sensors, valves, drippers, manifolds, backflow prevention devices, wiring, programming and installation of new control system and cabinet. Work shall be in accordance with Australian Standard AS3500 and NSW Urban Irrigation Code of Practice. All fittings shall be vandal resistant and tamper proof. Work shall be undertaken by a qualified Irrigation Contractor who holds an Urban Irrigation License.

Water is to be delivered via sub surface drippers, drip line and/or pop up sprays to areas as indicated on sheet numbers 6, 9 & 13. The system is to be capable of supplying 32mm of water/week over all irrigated areas. All lines are to be buried below the finished garden bed level.

The Contractor shall allow for conduits to be provided under pavements, through walls and sealed surfaces if they are constructed prior to the installation of the irrigation system.

2. ***Quality (Design of the System)***

2.1 Standards

Comply with the following:

- The current statutory requirement in place;
- AS 1477 Unplasticised PVC (UPVC) pipes and fittings for pressure applications
- AS1074 Steel tubes and tubulars for ordinary service
- AS2544 Grey iron pressure pipes and fittings
- AS1724 Cast Grey iron pressure pipes and fittings with bolted gland joints
- AS1646 Rubber joint rings for water supply, sewerage and drainage purposes
- AS2129 Flanges for pipes, vales and fittings
- AS1718 Water supply- copper alloy screw down pattern taps
- AS1939 Degrees of protection provided by enclosures for electrical equipment
- AS2941 Low voltage switch gear and control gear
- AS2417 Pumps – the international acceptance test codes
- AS1432 Copper tubes for water, gas and sanitation
- AS3688 Capillary and brazing fittings of copper and copper alloy
- AS2032 Code of practice for installation of UPVC pipe
- AS3500.1 Water supply
- AS3000 SAA Wiring rules
- AS2845 Backflow prevention
- Recognised Australian codes of practice and standards where these exist but are not specifically referred to in this Specification

2.2 Inspections

Give not less than 3(three) days notice so that inspection may be made at the following stages:

- Issue of Shop drawings prior to Construction
- Excavated surfaces
- Concealed or underground Services prior to being enclosed.

2.3 Samples and Submissions

The Contractor shall allow for the preparation of design drawings for the system. Drawings shall be submitted to the Superintendent / Landscape Architect for approval prior to ordering of any materials. The drawings shall be prepared by a certified irrigation designer as defined by Irrigation Australia.

The drawings shall give complete information necessary for the installation of the irrigation systems indicating component parts, location, type, size and extent of reticulation.

Co-ordination: It is the responsibility of the Irrigation Contractor to co-ordinate all laying of conduits pipes and wore with other services and works.

Make sure there is no overspray onto buildings walls, widows, paving or roads. Adjust pressure and flow of the zones to provide the performance of each nozzle or sprinkler described.

Programming shall be undertaken by the Contractor who shall indicate seasonal requirements and advise on the operation of the system. It shall be the Contractor's responsibility to ensure and guarantee satisfactory operation of the system. He/she shall advise on the coverage required to provide optimum watering regime.

Provide 'work-as-executed' drawings of the system, including any amendments to the approved design drawings. And an irrigation maintenance manual covering operation of systems, and maintenance information on all products used in the system.

Provide an operation manual including details of all components, plus all warranties and guarantees.

All material and equipment shall be installed in a neat and workman-like manner. Refer to Superintendent for water connection and power connection points

Valve pits are to be set on 200mm deep bed of gravel. Include plumbing connection to main, main valve and backflow prevention are to be located in garden bed, or within service room or as directed by Superintendent.

Provide controller / programmer – location to be confirmed on site. A dedicated GPO is to be provided for the controller to be plugged into.

On completion of the irrigation system, carry out the following:
- Flush system thoroughly. Check heads, sprays and drippers and clean if blocked.
- Clean strainers.
- Adjust for even distribution with no dry areas.

All work is to be approved by the local regulatory authority.

Irrigation system shall be maintained for a period of 52 weeks after Practical Completion. The system shall be intensively maintained, check monitored, including the rectification of all items of equipment.

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DATED: 13 March 2025

The power supply for the automatic controllers and the connections to the water supply is to be located as directed by Superintendent. Connection to the water supplies via backflow prevention devices is to be as detailed in the hydraulic documentation. Connection to power supplies is to be as detailed in the electrical documentation.

2.4 Test

On completion of installation and commissioning, balancing and adjusting the contractor shall test the system in the presence of the Superintendent. Any defects highlighted by this test shall be made good at the Contractor's cost.

1. **Materials and Components**

All irrigation equipment, including reticulation, automatic controller, backflow preventer, filters, drip irrigation, valves and the like shall be of a type approved by the Superintendent.

Location of Irrigation Control boxes, trenches, valve pits etc shall be verified with Superintendent prior to installation. All fittings shall be vandal resistant and tamper proof.

Mainline Pipework shall be in accordance with Sydney Water Board requirements.

All fittings shall be of commercial quality approved by the manufacturer of the pipework as fully compatible and the best of their kind.

Controller- Automatic controllers shall be an approved type suitable for the purpose equal to Hunter or Toro providing manual cycle and individual station operation. Locate local controller in associated building plant room where practicable. Mount all controllers in lockable vandal proof galvanised box.

Rain Sensor – Supply and Install a Toro rain sensor to each system. Locate sensor so that it is not sheltered from wind-blown rainfall from any direction.

Soil Moisture Monitoring - Supply and install moisture monitoring to all garden areas.

Solenoid Valves - 25mm to be Toro '250 Series' with union both sides of valve. 40mm – 50mm to be Toro 'P220 Series' plastic valves installed with a union either side of the valve.
80mm solenoid valves to be RAINBIRD 'BPES Series' (brass base with plastic bonnet) installed with a flange either side of valve. A 'slip-fix repair coupling' to be installed on the downstream side of the valve flange or union for all solenoid valves.

Isolation valves - Provide isolation ball valves on each branch at tee and upstream of each solenoid valve. Valves to be Philmac (Black base with blue handle)

Valve Boxes – Provide valve boxes with lilac lid for bore water supply as required. Valve boxes to be buried with lid approx. 10-20mm above soil level (for garden areas). Use large boxes to house isolating ball and solenoid valve installations. Where necessary, use two boxes for ease of access.

Sprinklers - Sprinklers shall be of the Toro types spaced on a head to head basis wherever possible and of the models as follows:

1. Small lawns & gardens up to 4m radius: Toro Model 570 series sprinklers
2. Medium lawn & gardens up to 9m radius: Toro Model 300 series stream sprinklers
3. Large lawn & gardens up to 15m radius: Toro Model S700 commercial series sprinklers
4. Playing fields over 15m radius for cricket, soccer & rugby: Toro Model 640 series sprinklers
5. Synthetic hockey fields: Toro Model 690 series sprinklers

Automatic Control Valves - Automatic control valves to be an approved type equal to Hunter or Toro suited to the system housed in purpose made high impact plastic valve boxes. Minimum number of 10 stations with the ability to be upgraded.

Reticulation - Reticulation shall be a sub-surface drip irrigation line to an approved type suitable for the purpose equal to The KISSS System. Drip lines to be at maximum 600mm centres. Reticulation system shall be polyethylene micro-irrigation pipe to AS 2698.1. Lay polyethylene pipe on finished ground surface under planting bed mulch and anchor at 1500mm maximum intervals with u-shaped stakes. All reticulation to be of appropriate grade and sizes to suit design flow rates or as required for efficient operation of the system.

Control Wires - Connect the automatic control valves to the controller with double insulated underground cables laid alongside piping. Lay intertwined for their full length without joints except at valves and branches off common wires. Provide waterproof connections. Provide expansion loops at changes of direction and all joints.

Balance, adjust and schedule the various components of the system so the overall operation of the system is the most efficient including but not limited to synchronization of the controllers, adjustment of the solenoid valves, sprinkler heads, and individual station adjustments on the controllers.

S4.55

Amendments

P	Architectural co-ord	25.11.24
O	S4.55	28.10.24

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Project: Retail & Residential development at 28 Lockwood Ave, Belrose, NSW

Dwg: Notes

Date: 25.11.24 Scale:

Job Ref: 21/2110 Sheet No: 2 of 21

Builder must verify all dimensions of the site before work commences. Figured dimensions should be used in preference to those scaled off.

North

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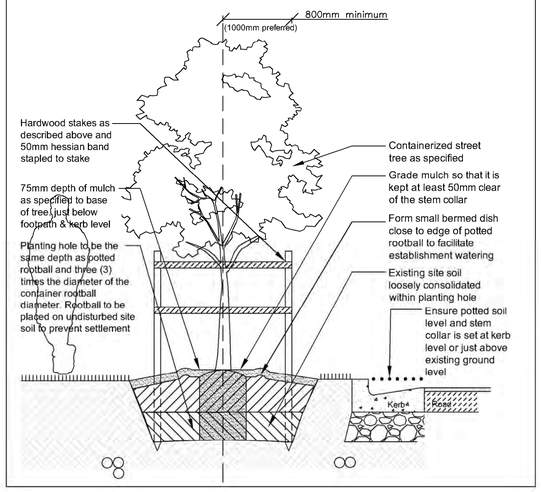
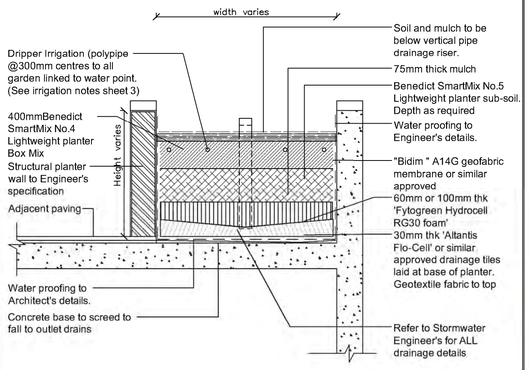
ISSUE-P

Detail 1.
Tree planting details



Detail 2.
On structure planter typical soil installation detail n.t.s

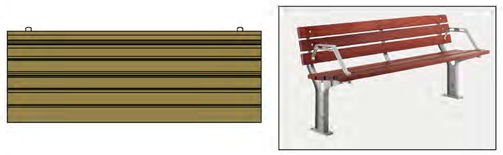
For soil & irrigation methodology only Structural & drainage to relevant Engineers details



Detail 8
Street Furniture Australia.

Park Seat DDA (Code PS7)
- **Surface Fixed- cast aluminium frame.**
- **Aluminium Woodgrain & end cops(Bush cherry).**
- **With arms**
- **Fixed to paving to manufactures specifications**

Type B: 1800(L) X 560(W) (X 1)



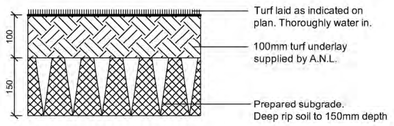
Detail 9
Street Furniture Australia.

Mall slim bench wall fixed (Code CMM8)
- **Wall fixed- with cast base Aluminium anodlsed.**
- **Aluminium Woodgrain & end cops(Bush cherry).**

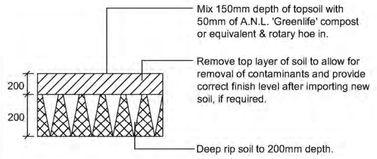
Type A: 2100 X 445x425(H) (X 6).
Fixed to wall to manufactures specifications

Coordinate with Structural Engineer's wall details

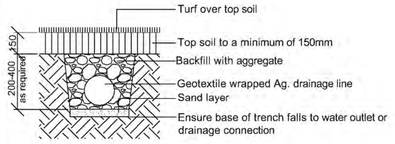
Detail 3.
Turf over soil n.t.s



Detail 04
Soil preparation detail n.t.s.

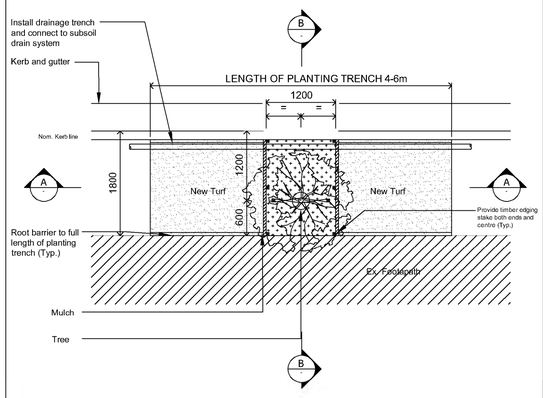


Detail 11
Ag. drainage line n.t.s.

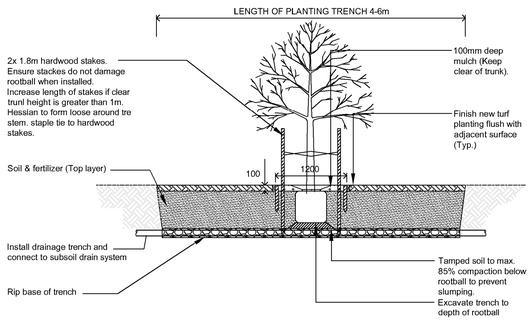


Detail 12.
Eco-Outdoor Baw Baw Stone cladding

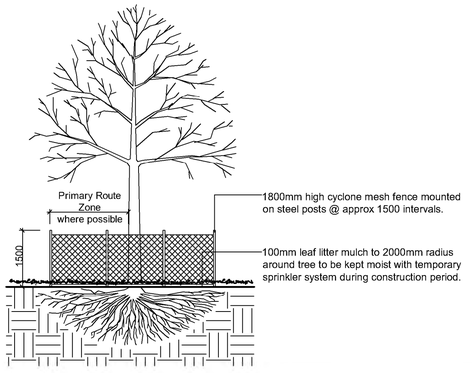
Detail 05
Tree pit in turf- With footpath-(Plan)



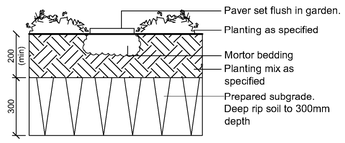
Tree pit in turf- With footpath-(Section)



Detail 05(C)
Tree protection measure Type 2 n.t.s.



Detail 13
Stepping stones in garden n.t.s

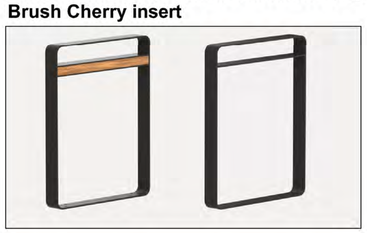


Detail 14
Street Furniture Australia

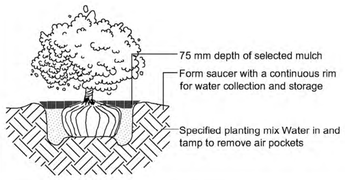
Simple bin. 80 litre. Battened finish (Code: LB4-BAT)
Aluminum woodgrain (Brush Cherry) (X 5)

Detail 15
Street Furniture Australia

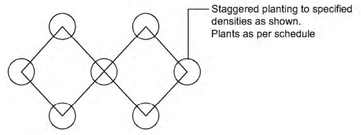
Linea bicycle stand (BST07) (X 4)
Monument colour with aluminum woodgrain
Brush Cherry insert



Detail 6
Shrub planting detail n.t.s (200mm pots size & larger) — PSLA 4



Detail 7
Planting set out n.t.s(150mm pot size & less) — PSLA 52



See also notes on sheets 18-21

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PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

S4.55

Amendments

P	Architectural co-ord	25.11.24
O	S4.55	28.10.24

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Dwg: Details

Date: 25.11.24 Scale:

Job Ref: 21/2110 Sheet No: 3 of 21

Builder must verify all dimensions of the site before work commences. Figured dimensions should be used in preference to those scaled off.

North

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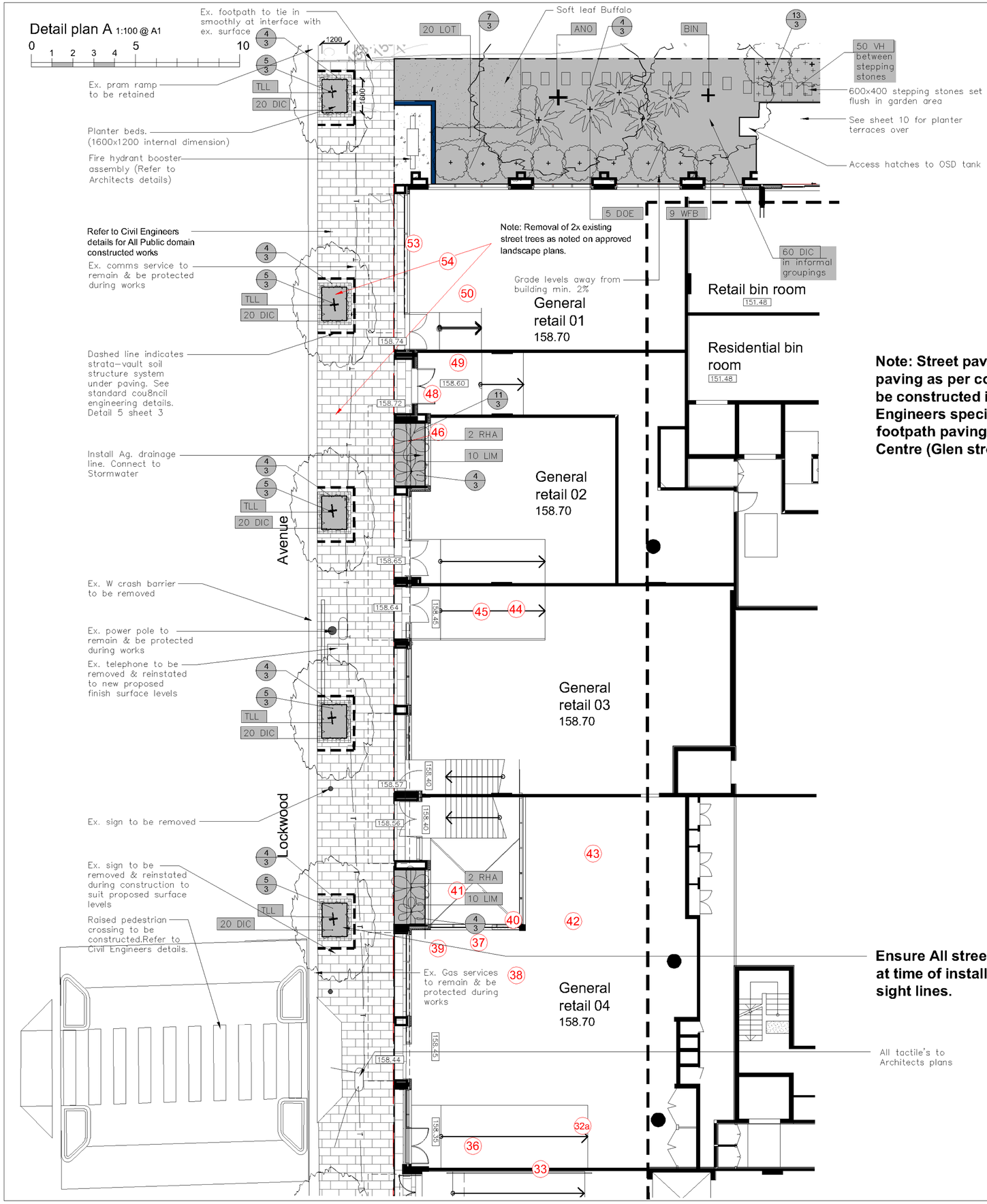
ISSUE-P



Note: Street pavers & paving pattern to match installed paving as per condition #49(a) "All footpath works are to be constructed in accordance with Councils standards Engineers specifications and the same pattern/type of footpath paving in the adjoining Glenrose shopping Centre (Glen street frontage)".

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PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

Legend

- Detail # (Sheet 3)
- Planting symbol (See schedule, sheet 2)
- Natural soil area (Detail 4, sheet 3)
- Turfed area (Detail 3, sheet 3)
- Walls. To Architects details
- Trees to be retained
- Trees to be removed

See also garden lighting plan, sheet 11

S4.55

Amendments

P	Architectural co-ord	25.11.24
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Dwg: Detail A plan

Date: 25.11.24 Scale: 1:100 @A1

Job Ref: 21/2110 Sheet No: 4 of 21

North

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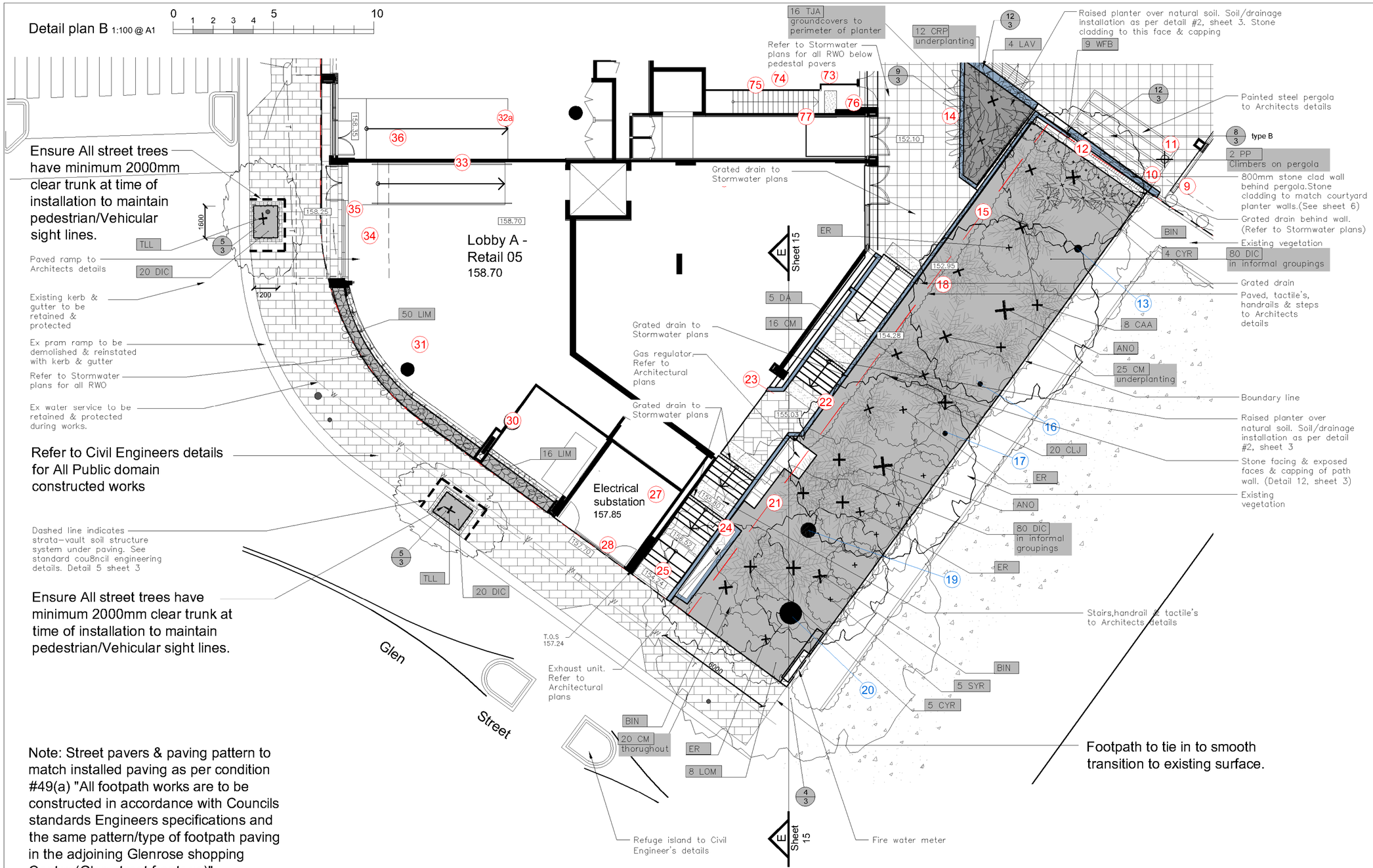
ISSUE-P

Detail plan B 1:100 @ A1

0 1 2 3 4 5 10



Note: Street pavers & paving pattern to match installed paving as per condition #49(a) "All footpath works are to be constructed in accordance with Councils standards Engineers specifications and the same pattern/type of footpath paving in the adjoining Glenrose shopping Centre (Glen street frontage)".

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PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

Legend

- Detail # (Sheet 3)
- ER — Planting symbol (See schedule, sheet 2)
- Natural soil area (Detail 4, sheet 3)
- Soil over slab / raised planter (Detail 2, sheet 3)
- Walls. To Architects details
- 16 — Trees to be retained
- 50 — Trees to be removed

See also garden lighting plan, sheet 11

S4.55

Amendments

P	Architectural co-ord	25.11.24
O	S4.55	28.10.24

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Dwg: Detail B plan

Date: 25.11.24 Scale: 1:100 @A1

Job Ref: 21/2110 Sheet No: 5 of 21

Builder must verify all dimensions of the site before work commences. Figured dimensions should be used in preference to those scaled off.

North

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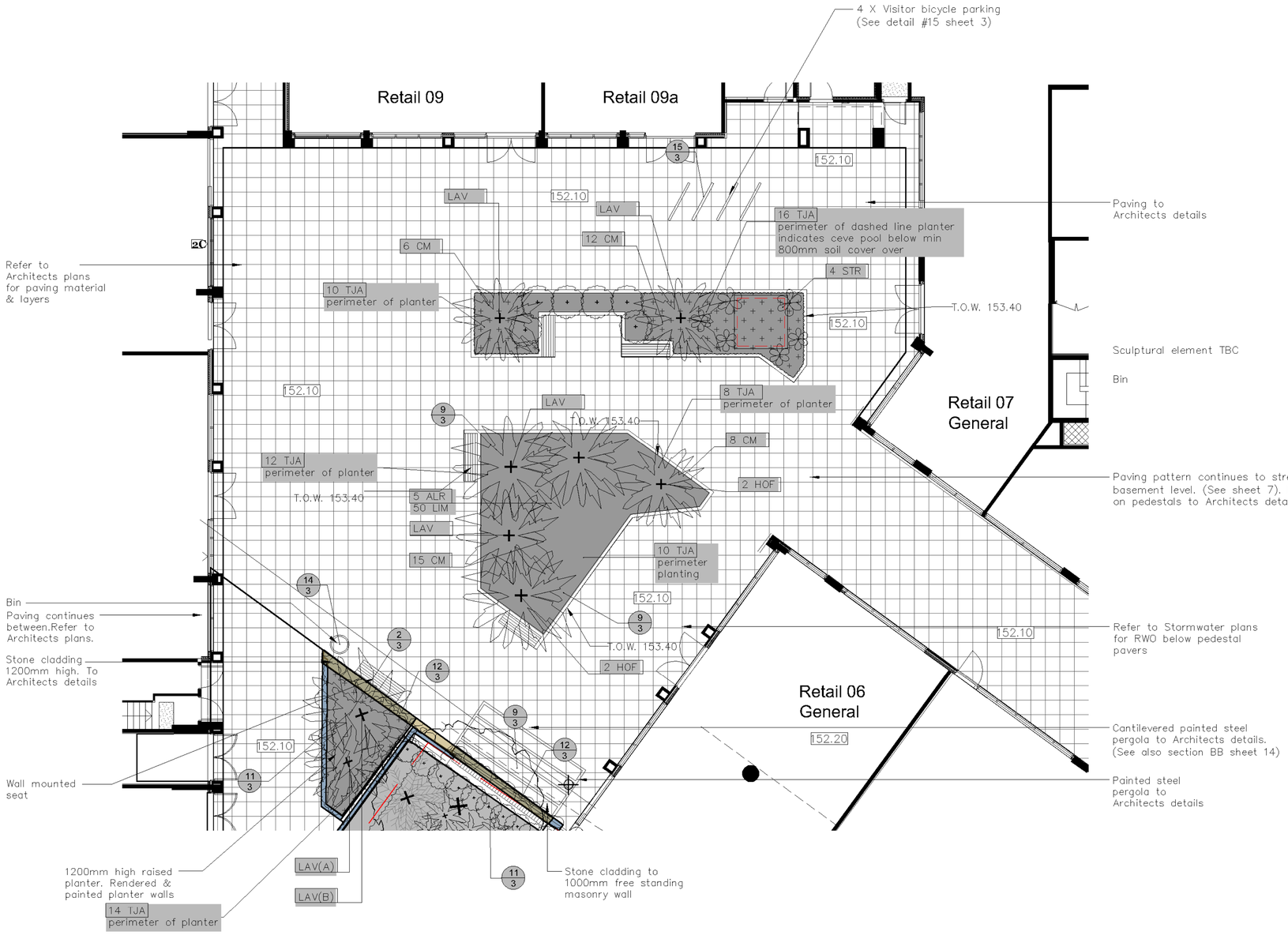
ISSUE-P

Detail plan C 1:100 @ A1

0 1 2 3 4 5 10



Note: Stone cladding to nominated walls as per detail #12 sheet 3.
To all exposed faces & capping.
For soil facing walls to minimum 200mm below planter soil height

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PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

Legend

- Detail # (Sheet 3)
- ER — Planting symbol (See schedule, sheet 2)
- Natural soil area (Detail 4, sheet 3)
- Soil over slab / raised planter (Detail 2, sheet 3)
- Walls. To Architects details
- Stone cladding on masonry walls. Detail 12, sheet 3
- 16 — Trees to be retained
- 50 — Trees to be removed

See also garden lighting plan, sheet 11

S4.55

Amendments

P	Architectural co-ord	25.11.24
O	S4.55	28.10.24

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Project: Retail & Residential development at 28 Lockwood Ave, Belrose, NSW

Dwg: Detail C plan

Date: 25.11.24 Scale: 1:100 @A1

Job Ref: 21/2110 Sheet No: 6 of 21

North

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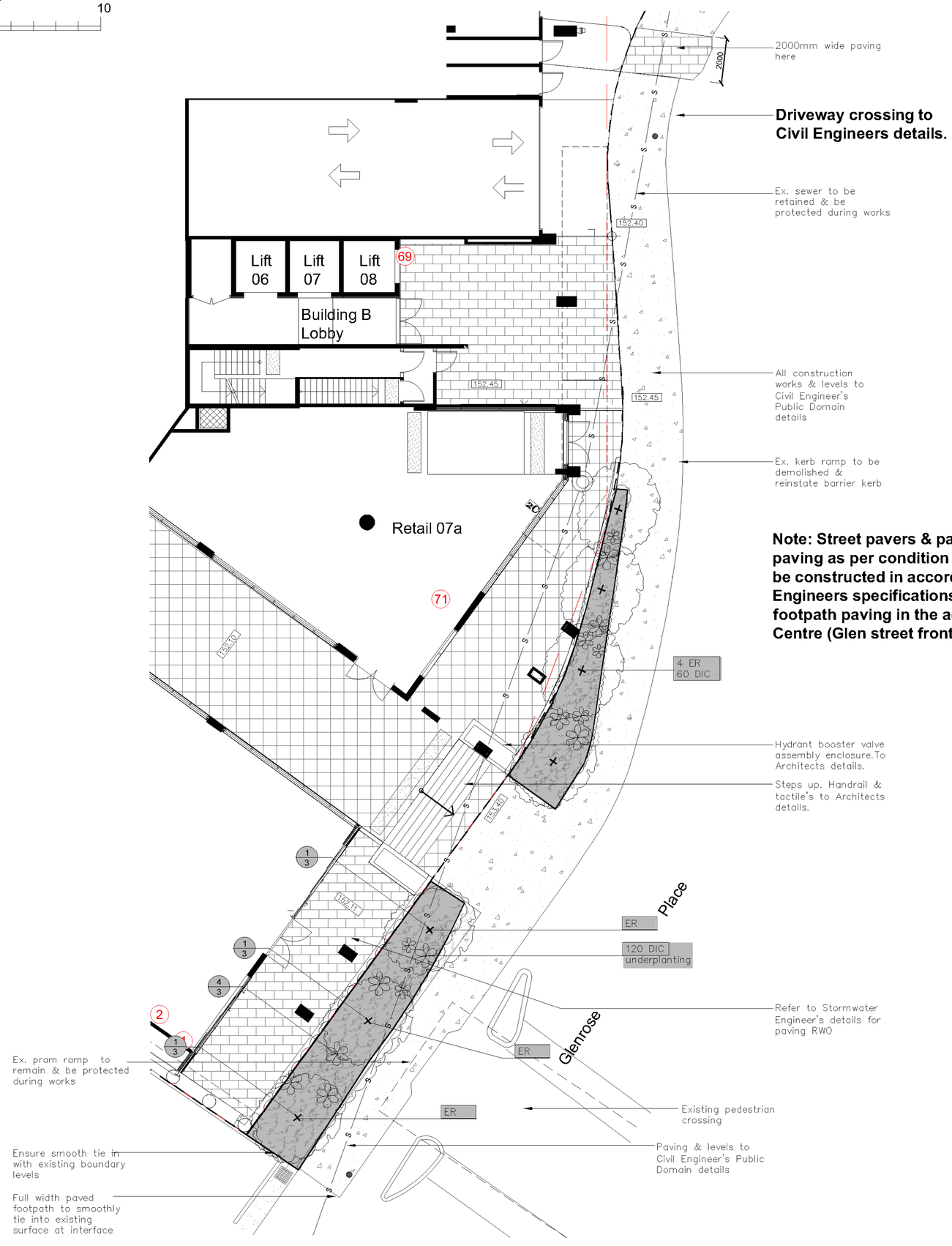
ISSUE-P

Detail plan D 1:100 @ A1

0 1 2 3 4 5 10



Note: Street pavers & paving pattern to match installed paving as per condition #49(a) "All footpath works are to be constructed in accordance with Councils standards Engineers specifications and the same pattern/type of footpath paving in the adjoining Glenrose shopping Centre (Glen street frontage)".

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PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

Legend

- Detail # (Sheet 3)
- ER — Planting symbol (See schedule, sheet 2)
- Natural soil area (Detail 4, sheet 3)
- Walls. To Architects details
- 16 — Trees to be retained
- 50 — Trees to be removed

See also garden lighting plan, sheet 11

S4.55

Amendments

P	Architectural co-ord	25.11.24
O	S4.55	28.10.24

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Project: Retail & Residential development at 28 Lockwood Ave, Belrose, NSW

Dwg: Detail D plan

Date: 25.11.24 Scale: 1:200 @A1

Job Ref: 21/2110 Sheet No: 7 of 21

Builder must verify all dimensions of the site before work commences. Figured dimensions should be used in preference to those scaled off.

North

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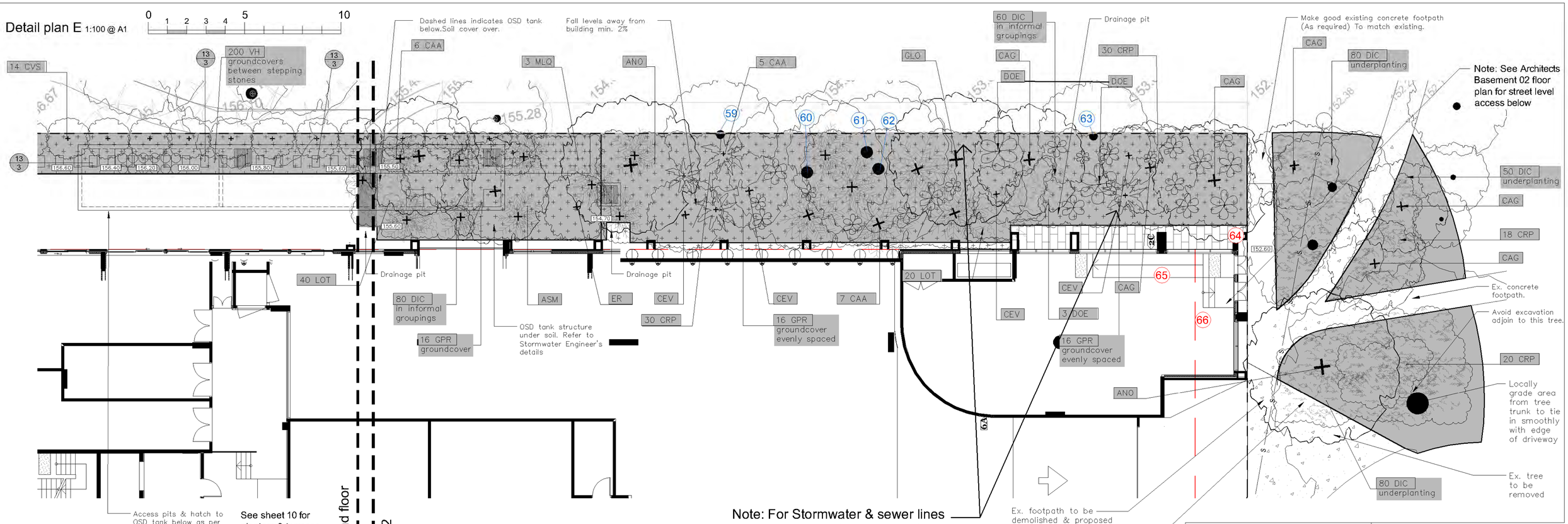
ISSUE-P

Detail plan E 1:100 @ A1

0 1 2 3 4 5 10



Note: For Stormwater & sewer lines horizontal drilling (thrust boring) is to be underneath wherever with PRZ of existing trees. (No exceptions within site or in Public Domain).
As coordinated with Stormwater Engineer. To be supervised by project Arborist & to be certified as being compliant at conclusion of services installation

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PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

Legend

- Detail # (Sheet 3)
- Planting symbol (See schedule, sheet 2)
- Natural soil area (Detail 4, sheet 3)
- Soil over slab / raised planter (Detail 2, sheet 3)
- Walls. To Architects details
- Trees to be retained
- Trees to be removed

See also garden lighting plan, sheet 11

S4.55

Amendments

P	Architectural co-ord	25.11.24
O	S4.55	28.10.24

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Project: Retail & Residential development at 28 Lockwood Ave, Belrose, NSW

Dwg: Detail E plan

Date: 25.11.24 Scale: 1:100 @A1

Job Ref: 21/2110 Sheet No: 8 of 21

North

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ISSUE-P

Level 1 plan 1:150 @ A1

0 1 2 3 4 5 10

RHA
3 AGV
5 TJA
8 LIM
All balcony planters to Architects details
LG.07
LG.08
LG.09
14 LOT
10 MYP
1.06
1.13
2/3 1.07
Building A
R.L 161.90
1.05
1.14
RHA
6 TJA
12 LIM
3 AGV
2/3 1.08
1.04
RHA
3 AGV
12 LIM
5 TJA
2/3 1.09
1.03
RHA
3 AGV
12 LIM
5 TJA
2/3 1.10
1.02
2/3 1.11
Building A Lobby 2
R.L 161.90
1.01
6 TJA
30 LIM
4 TJA
20 LIM

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PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

Bin
14/3
DRD
3 MYP
All paving / tiles on pedestall to Architects details
1000
1500mm diameter planters
10 LIM
PLU in planter
6 TJT
2 PP climbers on pergola
Skylight
6 TJT
PT1
10 LIM
2000x2000mm free standing planter 1000mm high
PLU in planter
PLU in planter
10 LIM
Skylight
6 TJT
ALR
AGV
161.80
CUP
PJ climber
20 MYP perimeter planter groundcovers
2/3
14/3
PT1
CHM
PT2
CHM
10 PNA underplanting
PT2
CHM
PT2
CHM
PT2
CHM
20 TJT in planters
1000
PT3
TJT
8/3
TJT
PJ climber
2 AGV
TJT
PJ climber
TJT
PJ climber
3 DRD in planters
3 X PT3
2 PP climbers on pergola
DRD
3 MYP
3 X PT3
Outdoor lounge
800mm raised planter & integrated bench seat
3 X PT3
9 MYP in planters
Light weight sail shade structure to Engineer's details. Post fixing to Architects details
Refer to Stormwater plans for RWO below pedestal pavers
1500x1500x1000mm high free standing planters
ALR
2 X PT4
ALR
PT3
DRD
3 MYP
ALR
2 X PT4
8/3
ALR

Indicative outdoor BBQ

Verandah pergola to Architects details

Raised planter

Furniture by owner

Light weight sail shade structure to Engineer's details. Post fixing to Architects details

Typical plant images

Liriope

Trachelospermum Jasminoides cascading groundcover

Rhapis excelsor Palm

Agave

Legend

- 4/3 — Detail # (Sheet 3)
- ER — Planting symbol (See schedule, sheet 2)
- Natural soil area (Detail 4, sheet 3)
- Soil over slab / raised planter (Detail 2, sheet 3)
- Walls. To Architects details
- 16 — Trees to be retained
- 50 — Trees to be removed
- PT2 — Pot type (See schedule of types sheet 16)

See also garden lighting plan, sheet 12

S4.55

Amendments

P	Architectural co-ord	25.11.24
O	S4.55	28.10.24

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Project: Retail & Residential development at 28 Lockwood Ave, Belrose, NSW

Dwg: Level 1

Date: 25.11.24 Scale: 1:150 @A1

Job Ref: 21/2110 Sheet No: 9 of 21

Builder must verify all dimensions of the site before work commences. Figured dimensions should be used in preference to those scaled off.

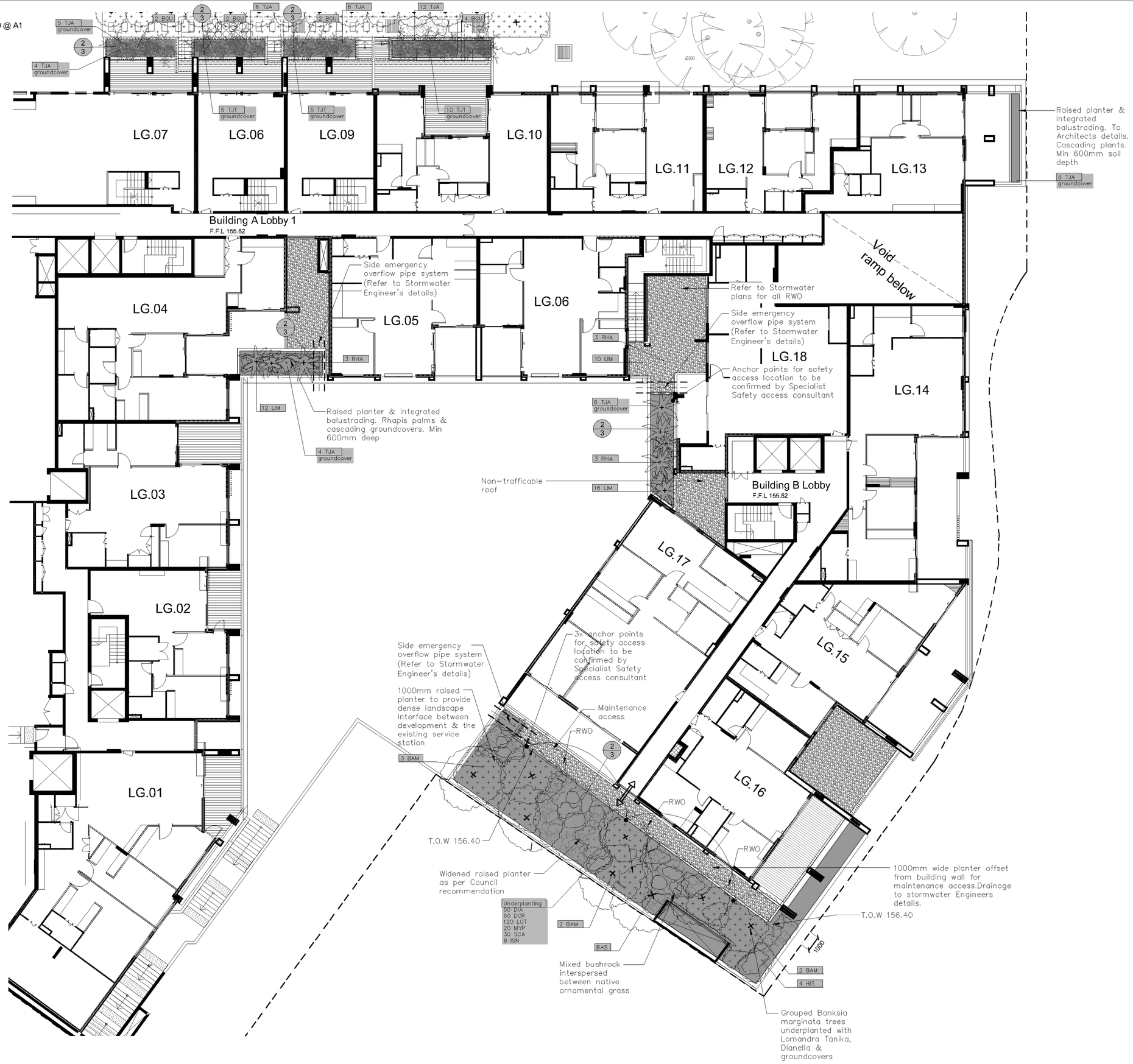
North

9of21

ISSUE-P

Detail plan - Lower GF plan 1:150 @ A1

0 1 2 3 4 5 10



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PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

Legend

- Detail # (Sheet 3)
- ER — Planting symbol (See schedule, sheet 2)
- Natural soil area (Detail 4, sheet 3)
- Soil over slab / raised planter (Detail 2, sheet 3)
- Walls. To Architects details
- 16 — Trees to be retained
- 50 — Trees to be removed

S4.55

See also garden lighting plan, sheet 12

Amendments

P	Architectural co-ord	25.11.24
O	S4.55	28.10.24

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Project: Retail & Residential development at 28 Lockwood Ave, Belrose, NSW

Dwg: Lower Ground floor

Date: 25.11.24 Scale: 1:150 @A1

Job Ref: 21/2110 Sheet No: 10 of 21

Builder must verify all dimensions of the site before work commences. Figured dimensions should be used in preference to those scaled off.

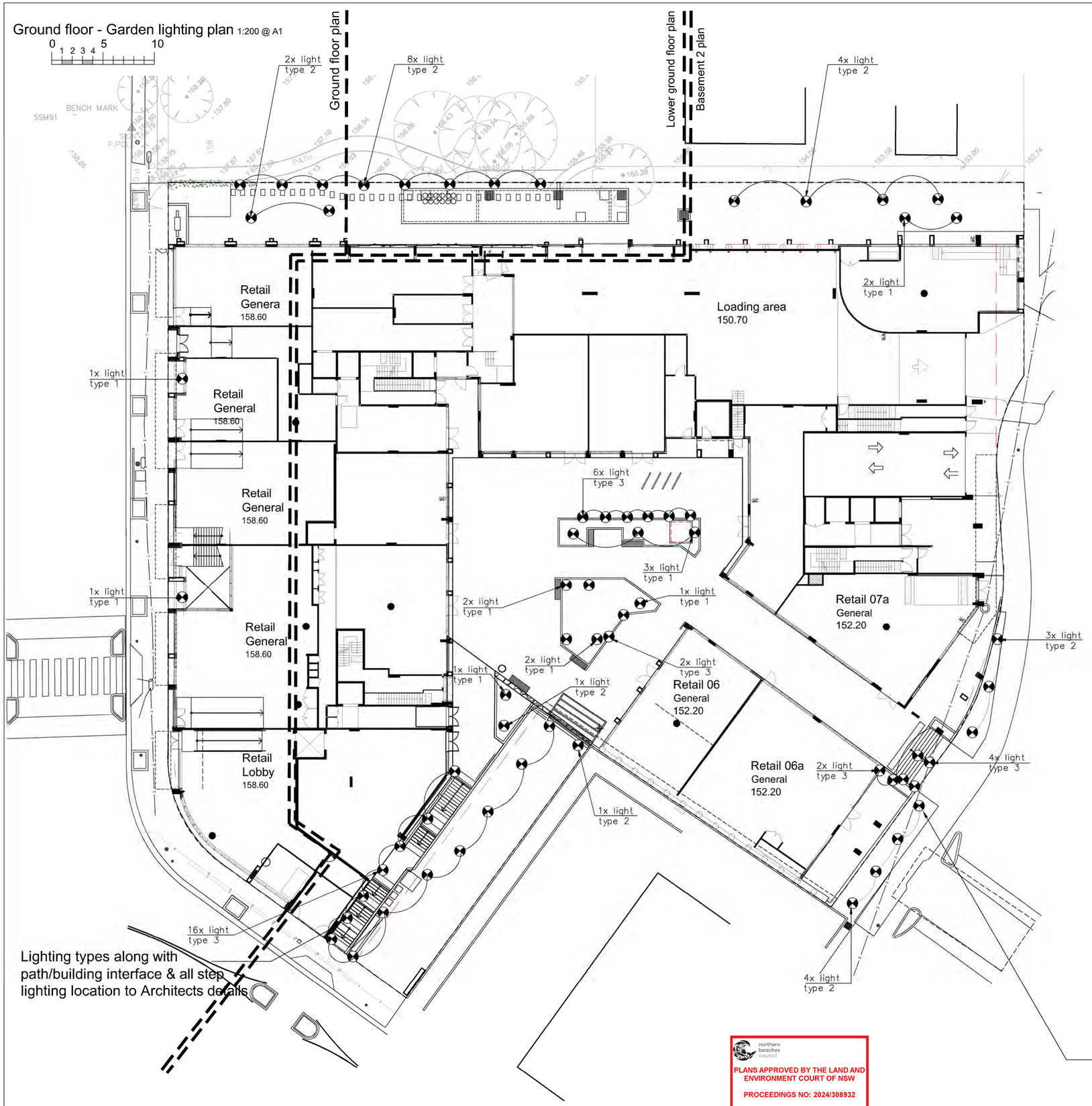
North

10 of 21

ISSUE-P

Ground floor - Garden lighting plan 1:200 @ A1

0 1 2 3 4 5 10



Lighting types along with path/building interface & all step lighting location to Architects details

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PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

Lighting type 1

Tovo lighting

Airlie

Mini Adjustable Garden Spike

Integrated LED
Honeycomb louvre minimises glare
Complements the Hamilton wall light
Finishes --

copper, stainless steel satin

CODE ... 459
WATTAGE ... 4 W
LUMEN OUTPUT ... 280 lm
CRI ... 80
CCT ... 2700 K
IP RATING ... IP65
DIMMABLE ... No
ACCESSORIES ... Custom spike lengths on request
VOLTAGE ... 24 V dc
DRIVER ... remote driver required

Mini adjustable garden spike made of copper or 316 stainless steel with integrated and replaceable LED. Supplied complete with honey comb Louvre for glare control and with 300 mm spike. (custom length available on request)
Requires 24 V DC driver

Lighting type 2

Tovo lighting

Newport 2 Light

Adjustable Garden Spike Twin Lamp

316 Stainless Steel or Copper
1 or 2 light versions
Finishes --

copper, stainless steel satin

CODE ... *379*
WATTAGE ... *10 W*
LUMEN OUTPUT ... *840 lm*
CRI ... *80*
CCT ... *2700 K*
IP RATING ... *IP66*
DIMMABLE ... *No*
ACCESSORIES ... *Custom spike lengths available*
VOLTAGE ... *24 V dc*
DRIVER ... *remote driver required*

Large adjustable garden spike head. Twin head version. 600mm and 300mm spike available. Order separately. Requires remote 24 V DC drive

Lighting type 3

Tovo lighting

Byron

Flush mounted wall light / floor light

Machined stainless steel body
Honeycomb low glare louvre fitted as standard
38 degree or 20 degree beam
Finishes --

black, brass, copper, stainless steel satin

CODE ... *4624*
WATTAGE ... *4 W*
CCT & LUMEN OUTPUT *2700K-254Lm 3000L-257Lm*
CRI ... *80*
IP RATING ... *IP66*
DIMMABLE ... *Yes, 0 – 10 V, DALI*
ACCESSORIES ... *Stainless Steel Sleeve (54mmx 100mm) Code: 1764*
VOLTAGE ... *24vDC*
DRIVER ... *remote driver required*

Lighting types along with path/building interface & all step lighting location to Architects details

Lighting type, see details this sheet

Note: Alternative light fittings to same specifications can be considered

S4.55

Amendments

P	Architectural co-ord	25.11.24
O	S4.55	28.10.24

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Project: Retail & Residential development at 28 Lockwood Ave, Belrose, NSW

Dwg: Ground floor garden lighting plan
Date: 25.11.24
Scale: 1:200 @A1
Job Ref: 21/2110
Sheet No: 11 of 21

North

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ISSUE-P

Planting schedule

Symbol	Botanical name	Common name	Cont. size	Staking	Mature height	No req.
Canopy trees						
ANO	Angophora costata	Sydney Red Gum (large native tree. Striking bark colour)	45Lt	3x50x50x1800	16-25.0M	5
ASM	Acmena smithii	Lilly Pilly (Native tree in dep soil. Prune lower branches)	75Lt	3x50x50x1800	8-10.0M	1
BAS	Banksia serrata	Old Man Banksia (Small native. Gnarled trunk & serrated leaves)	75Lt	3x50x50x1800	4-6.0M	1
BIN	Banksia integrifolia	Coast Banksia (medium indigenous tree)	75Lt	3x50x50x1800	12-15.0M	4
CAG	Casuarina glauca	Swamp She-Oak (IMed native tree)	45Lt	3x50x50x1800	18-13.0M	6
CUP	Cupaniopsis anacardoides	Tuckeroo (small to medium native tree. Hardy street tree)	75Lt	3x50x50x1800	5-7.0M	1
ER	Elaeocarpus reticulatus	Blueberry Ash (indigenous small tree)	45Lt	3x50x50x1800	6-8.0M	12
GLO	Glochidion ferdinandii	Cheese Tree (Indigenous medium tree)	75Lt	3x50x50x1800	8-10.0M	1
MLQ	Melalueca quinquenervia	Flax Leaf Paperbark (indigenous medium tree)	75Lt	3x50x50x1800	12-15.0M	3
PLU	Plumeria acutifolia	Frangipani (small flowering deciduous tree)	45Lt	2x50x50x1800	3-4.0M	3
TLL	Tristaniopsis laurina 'Luscious'	Water Gum cultivar (indigenous small-med tree)	75Lt	3x50x50x1800	5-7.0M	7
Shrubs / small feature trees						
BAM	Banksia marginata	Silver Banksia	300mm	nil	2-5.0M	7
CEV	Callistemon citrinus 'Endeavor'	Endeavor Crimson Bottlebrush (Flowering native small tree)	300mm	nil	2-2.5.0M	4
CLJ	Callistemon 'Little jet'	Little Jet Bottlebrush (Flowering native ideal for hedging)	200mm	nil	0.8-1.4M	20
SYR	Syzygium 'Resilience'	Resilience Lilly Pilly (native screen plant. Can be hedged)	300mm	hedged	2.8-3.5M	5
CVS	Callistemon viminalis 'Slim'	Slim Culivar Bottlebrush (Hybrid screen hedging bottlebrush)	300mm	nil	2.5-3.0M	14
WFB	Westringia fruticosa 'Blue Gem'	Dwarf Blue Westringia (hardy low gorwing plant)	150mm	hedged	1.2-1.5M	18
Ferns / Palms / Succulents / ornamental bamboos						
AGV	Agave attenuata	Century plant (striking spiky leaved succulent)	200mm	nil	0.5M	25
ALR	Alacanatarea 'Rubra'	Giant Bromeliade (Large succulent leaved ornamental plant)	300mm	nil	1.0M	10
BGU	Bambusa guangxiensis	Dwarf Chinese Bamboo (ornamental bamboo can be hedged)	200mm	nil	2-3.5M	9
CAA	Cyathea australe	Tree Fern (Native tree ferns)	300mm	nil	2-4.0M	22
CHM	Chamaerops humilis	Europena Fan Palm (Hardy Small – med palm)	300mm	nil	3-5.0M	5
CYR	Cycas revolutum	Sago Palm (striking native low palm like)	300mm	nil	1-1.2M	9
DOE	Doryanthese excelsor	Gymea Lilly (striking palm like). Tall red flower on spike)	300mm	nil	1.5-2.0M	10
DRD	Draceana draco	Dragon Tree (striking feature plant)	semi adv.	nil	2.5-3.5M	6
HOF(A)	Howea forsteriana	Kentia Palm (tall palm)	200litre	wire guys	7-10.0M	1
LAV	Livistona australis	Cabbage Palm (tall indigenous palm)	100lt	wire guys	8-12.0M	4
LAV (A)	Livistona australis	Cabbage Palm (tall indigenous palm)	200lt	wire guys	8-12.0M	5
LAV(B)	Livistona australis	Cabbage Palm (tall indigenous palm)	400Ltadv	wire guys	8-12.0M	5
RHA	Raphis excelsor	Lady Finger Palm	300mm	nil	2-2.5M	18
STR	Strelitzia reginea	Bird of Paradise (Strappy leaved flowering accent plant)	250mm	nil	1-1.2M	59
Groundcovers/Climbers						
GPR	Grevillea 'Poorinda Royal Mantle'	Grevillea Groundcover (native low groundcover)	150mm	nil	0.2M	48
HIS	Hibbertia scandens	Guinea Flower (flowering climber / groundcover)	200mm	nil	0.3M	9
MYP	Myoprum parvifolium	Creeping Boobliala (native cascading groundcover)	150mm	nil	0.2M	68
PJ	Pandorea jasminoides	Bower Plant (native climbing/cascading groundcover)	200mm	wire supports on fence	2.5M	4
PP	Pandorea pandorana	Wonga Wonga Vine (native climbing plant / groundcover)	200mm	wire supports on fence	3.0M	6
TJA	Trachelospermum asiaticum	Flatmat Star Jasmine (FT01 Ozbbreed hyvrid groundcover)	200mm	nil	0.2M	144
TJT	Trachelospermum tricolor	Variegated Star Jasmine (variegated colour groundcover)	200mm	nil	0.5M	98
SCA	Scaevola aemula	Fan Flower (Flowering cascading groundcover)	150mm	nil	0.3M	46
VH	Viola hederacea	Native Violets (native low groundcover)	tubes	nil	0.1M	250
Ornamental grasses/strappy leaved plants						
CM	Clivea miniata	Kaffir Lily (shade tolerant groundcover)	200mm	nil	0.5M	86
CRP	Crinum pedunculatum	Swamp Lily (native mass planted groundcover)	200mm	nil	0.5-0.7	110
DCR	Dianella caerulea 'Tasred'	Tasred Flax Lily (native grass like plant)	100mm	nil	0.4M	60
DIA	Dianella 'Cassa Blue'	Hybrid Flax Lily (native grass like plant)	100mm	nil	0.4M	50
DIC	Dianella caerulea	Blue Flax Lily (native grass like plant)	100mm	nil	0.4M	890
ISN	Isolepsis (Finicia) nodosa	Knobby Club Rush (native ornamental grass)	150mm	nil	0.6M	8
LIM	Liriope Evergreen Giant	Turf Lily (shade tolerant groundcover)	150mm	nil	0.4M	428
LOM	Lomandra longifolia	Spiny Mat Rush (Tall hardy grass like clumping plant)	200mm	nil	1-1.2M	8
LOT	Lomandra 'Tanika'	Dwarf Mat Rush (native mass planted groundcover)	150mm	nil	0.4M	232
PNA	Pennisetum alopecuroides Nafray	NAFRAY® 'PA300' PBR (flowering ornamental grass)	150mm	nil	0.8-1.0M	10

Planting schedule species to be sourced from local nurseries supplying plants of local provenance wherever possible. Landscape contractor is to check plant numbers on plan against the schedule prior to submitting tender price. Contact landscape architect if any number discrepancies are found. Council compliance controls require that any substitution of species variety or container size MUST be confirmed with landscape architect to ensure a compliance certificate can be issued that's meets the specific development consent conditions of the project.

Irrigation notes

1. **Scope**

1.1 Automatic Irrigation System

Design, Document, supply, install, adjust and commission a fully automatic irrigation system to all garden bed areas and planters as indicated on sheet numbers 6, 9 & 13. The work shall include the complete supply, construction and testing of new irrigation pipework, rain sensors, valves, drippers, manifolds, backflow prevention devices, wiring, programming and installation of new control system and cabinet. Work shall be in accordance with Australian Standard AS3500 and NSW Urban Irrigation Code of Practice. All fittings shall be vandal resistant and tamper proof. Work shall be undertaken by a qualified Irrigation Contractor who holds an Urban Irrigation License.

Water is to be delivered via sub surface drippers, drip line and/or pop up sprays to areas as indicated on sheet numbers 6, 9 & 13. The system is to be capable of supplying 32mm of water/week over all irrigated areas. All lines are to be buried below the finished garden bed level.

The Contractor shall allow for conduits to be provided under pavements, through walls and sealed surfaces if they are constructed prior to the installation of the irrigation system.

2. ***Quality (Design of the System)***

2.1 Standards

Comply with the following:

- The current statutory requirement in place;
- AS 1477 Unplasticised PVC (UPVC) pipes and fittings for pressure applications
- AS1074 Steel tubes and tubulars for ordinary service
- AS2544 Grey iron pressure pipes and fittings
- AS1724 Cast Grey iron pressure pipes and fittings with bolted gland joints
- AS1646 Rubber joint rings for water supply, sewerage and drainage purposes
- AS2129 Flanges for pipes, vales and fittings
- AS1718 Water supply- copper alloy screw down pattern taps
- AS1939 Degrees of protection provided by enclosures for electrical equipment
- AS2941 Low voltage switch gear and control gear
- AS2417 Pumps – the international acceptance test codes
- AS1432 Copper tubes for water, gas and sanitation
- AS3688 Capillary and brazing fittings of copper and copper alloy
- AS2032 Code of practice for installation of UPVC pipe
- AS3500.1 Water supply
- AS3000 SAA Wiring rules
- AS2845 Backflow prevention
- Recognised Australian codes of practice and standards where these exist but are not specifically referred to in this Specification

2.2 Inspections

Give not less than 3(three) days notice so that inspection may be made at the following stages:

- Issue of Shop drawings prior to Construction
- Excavated surfaces
- Concealed or underground Services prior to being enclosed.

2.3 Samples and Submissions

The Contractor shall allow for the preparation of design drawings for the system. Drawings shall be submitted to the Superintendent / Landscape Architect for approval prior to ordering of any materials. The drawings shall be prepared by a certified irrigation designer as defined by Irrigation Australia.

The drawings shall give complete information necessary for the installation of the irrigation systems indicating component parts, location, type, size and extent of reticulation.

Co-ordination: It is the responsibility of the Irrigation Contractor to co-ordinate all laying of conduits pipes and wore with other services and works.

Make sure there is no overspray onto buildings walls, widows, paving or roads. Adjust pressure and flow of the zones to provide the performance of each nozzle or sprinkler described.

Programming shall be undertaken by the Contractor who shall indicate seasonal requirements and advise on the operation of the system. It shall be the Contractor's responsibility to ensure and guarantee satisfactory operation of the system. He/she shall advise on the coverage required to provide optimum watering regime.

Provide 'work-as-executed' drawings of the system, including any amendments to the approved design drawings. And an irrigation maintenance manual covering operation of systems, and maintenance information on all products used in the system.

Provide an operation manual including details of all components, plus all warranties and guarantees.

All material and equipment shall be installed in a neat and workman-like manner. Refer to Superintendent for water connection and power connection points

Valve pits are to be set on 200mm deep bed of gravel. Include plumbing connection to main, main valve and backflow prevention are to be located in garden bed, or within service room or as directed by Superintendent.

Provide controller / programmer – location to be confirmed on site. A dedicated GPO is to be provided for the controller to be plugged into.

On completion of the irrigation system, carry out the following:
- Flush system thoroughly. Check heads, sprays and drippers and clean if blocked.
- Clean strainers.
- Adjust for even distribution with no dry areas.

All work is to be approved by the local regulatory authority.

Irrigation system shall be maintained for a period of 52 weeks after Practical Completion. The system shall be intensively maintained, check monitored, including the rectification of all items of equipment.

northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

The power supply for the automatic controllers and the connections to the water supply is to be located as directed by Superintendent. Connection to the water supplies via backflow prevention devices is to be as detailed in the hydraulic documentation. Connection to power supplies is to be as detailed in the electrical documentation.

2.4 Test

On completion of installation and commissioning, balancing and adjusting the contractor shall test the system in the presence of the Superintendent. Any defects highlighted by this test shall be made good at the Contractor's cost.

1. **Materials and Components**

All irrigation equipment, including reticulation, automatic controller, backflow preventer, filters, drip irrigation, valves and the like shall be of a type approved by the Superintendent.

Location of Irrigation Control boxes, trenches, valve pits etc shall be verified with Superintendent prior to installation. All fittings shall be vandal resistant and tamper proof.

Mainline Pipework shall be in accordance with Sydney Water Board requirements.

All fittings shall be of commercial quality approved by the manufacturer of the pipework as fully compatible and the best of their kind.

Controller- Automatic controllers shall be an approved type suitable for the purpose equal to Hunter or Toro providing manual cycle and individual station operation. Locate local controller in associated building plant room where practicable. Mount all controllers in lockable vandal proof galvanised box.

Rain Sensor – Supply and Install a Toro rain sensor to each system. Locate sensor so that it is not sheltered from wind-blown rainfall from any direction.

Soil Moisture Monitoring - Supply and install moisture monitoring to all garden areas.

Solenoid Valves - 25mm to be Toro '250 Series' with union both sides of valve. 40mm – 50mm to be Toro 'P220 Series' plastic valves installed with a union either side of the valve.
80mm solenoid valves to be RAINBIRD 'BPES Series' (brass base with plastic bonnet) installed with a flange either side of valve. A 'slip-fix repair coupling' to be installed on the downstream side of the valve flange or union for all solenoid valves.

Isolation valves - Provide isolation ball valves on each branch at tee and upstream of each solenoid valve. Valves to be Philmac (Black base with blue handle)

Valve Boxes – Provide valve boxes with lilac lid for bore water supply as required. Valve boxes to be buried with lid approx. 10-20mm above soil level (for garden areas). Use large boxes to house isolating ball and solenoid valve installations. Where necessary, use two boxes for ease of access.

Sprinklers - Sprinklers shall be of the Toro types spaced on a head to head basis wherever possible and of the models as follows:

1. Small lawns & gardens up to 4m radius: Toro Model 570 series sprinklers
2. Medium lawn & gardens up to 9m radius: Toro Model 300 series stream sprinklers
3. Large lawn & gardens up to 15m radius: Toro Model S700 commercial series sprinklers
4. Playing fields over 15m radius for cricket, soccer & rugby: Toro Model 640 series sprinklers
5. Synthetic hockey fields: Toro Model 690 series sprinklers

Automatic Control Valves - Automatic control valves to be an approved type equal to Hunter or Toro suited to the system housed in purpose made high impact plastic valve boxes. Minimum number of 10 stations with the ability to be upgraded.

Reticulation - Reticulation shall be a sub-surface drip irrigation line to an approved type suitable for the purpose equal to The KISSS System. Drip lines to be at maximum 600mm centres. Reticulation system shall be polyethylene micro-irrigation pipe to AS 2698.1. Lay polyethylene pipe on finished ground surface under planting bed mulch and anchor at 1500mm maximum intervals with u-shaped stakes. All reticulation to be of appropriate grade and sizes to suit design flow rates or as required for efficient operation of the system.

Control Wires - Connect the automatic control valves to the controller with double insulated underground cables laid alongside piping. Lay intertwined for their full length without joints except at valves and branches off common wires. Provide waterproof connections. Provide expansion loops at changes of direction and all joints.

Balance, adjust and schedule the various components of the system so the overall operation of the system is the most efficient including but not limited to synchronization of the controllers, adjustment of the solenoid valves, sprinkler heads, and individual station adjustments on the controllers.

S4.55

Amendments

P	Architectural co-ord	25.11.24
O	S4.55	28.10.24

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Project: Retail & Residential development at 28 Lockwood Ave, Belrose, NSW

Dwg: Notes

Date: 25.11.24 Scale:

Job Ref: 21/2110 Sheet No: 2 of 21

Builder must verify all dimensions of the site before work commences. Figured dimensions should be used in preference to those scaled off.

North

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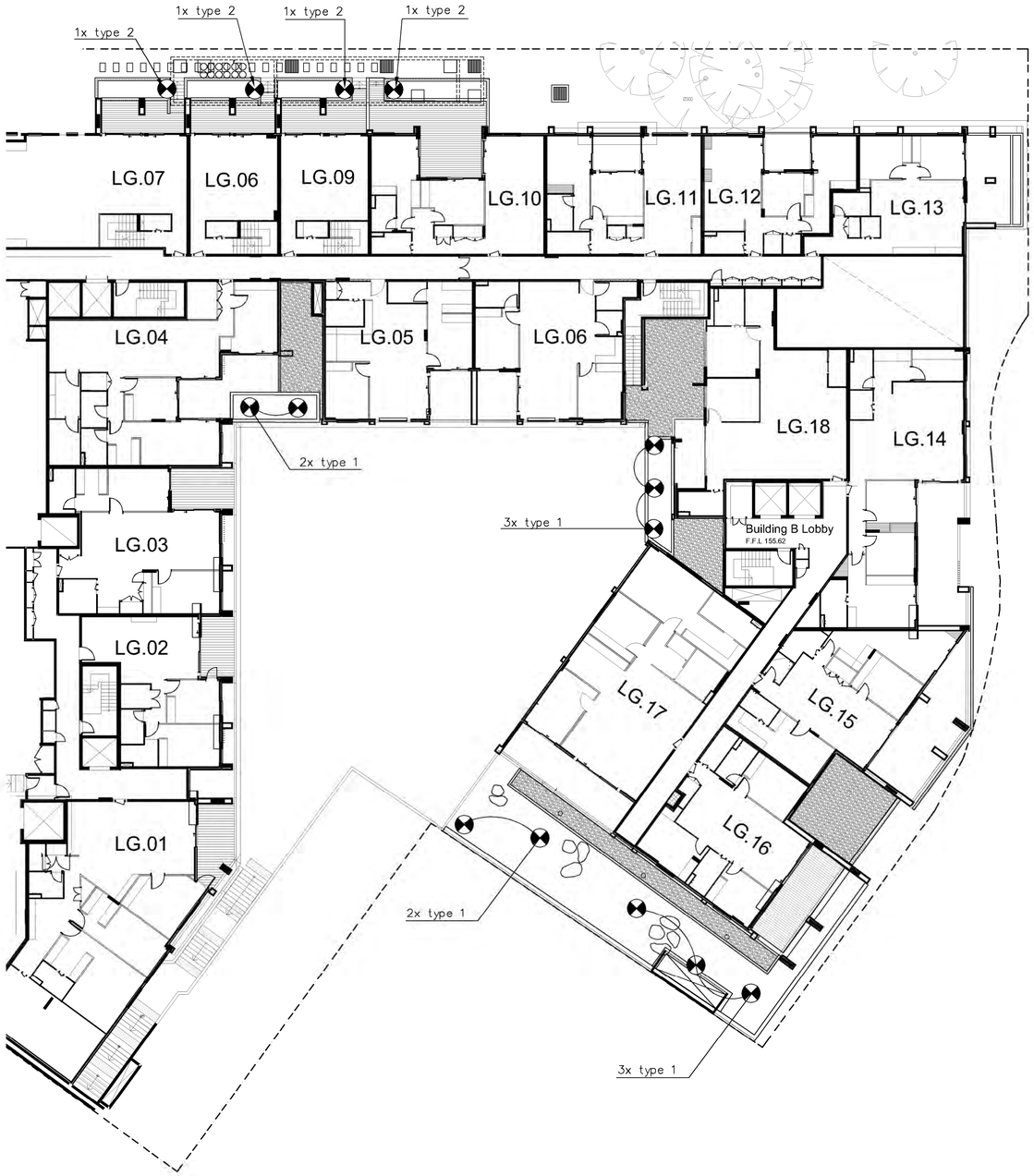
ISSUE-P

Lower GF - Garden lighting plan 1:200 @ A1

0 1 2 3 4 5 10



northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

Lighting type 1

Tovo lighting

Airlie

Mini Adjustable Garden Spike

Integrated LED
Honeycomb louvre minimises glare
Complements the Hamilton wall light
Finishes --

copper, stainless steel satin

CODE ... 459
WATTAGE ... 4 W
LUMEN OUTPUT ... 280 lm
CRI ... 80
CCT ... 2700 K
IP RATING ... IP65
DIMMABLE ... No
ACCESSORIES ... Custom spike lengths on request
VOLTAGE ... 24 V dc
DRIVER ... remote driver required

Mini adjustable garden spike made of copper or 316 stainless steel with integrated and replaceable LED. Supplied complete with honey comb Louvre for glare control and with 300 mm spike. (custom length available on request)
Requires 24 V DC driver

Lighting type 2

Tovo lighting

Newport 2 Light

Adjustable Garden Spike Twin Lamp

316 Stainless Steel or Copper
1 or 2 light versions
Finishes --

copper, stainless steel satin

CODE ... *379*
WATTAGE ... *10 W*
LUMEN OUTPUT ... *840 lm*
CRI ... *80*
CCT ... *2700 K*
IP RATING ... *IP66*
DIMMABLE ... *No*
ACCESSORIES ... *Custom spike lengths available*
VOLTAGE ... *24 V dc*
DRIVER ... *remote driver required*

Large adjustable garden spike head. Twin head version. 600mm and 300mm spike available. Order separately. Requires remote 24 V DC drive

Lighting type 3

Tovo lighting

Byron

Flush mounted wall light / floor light

Machined stainless steel body
Honeycomb low glare louvre fitted as standard
38 degree or 20 degree beam
Finishes --

black, brass, copper, stainless steel satin

CODE ... *4624*
WATTAGE ... *4 W*
CCT & LUMEN OUTPUT *2700K-254Lm 3000L-257Lm*
CRI ... *80*
IP RATING ... *IP66*
DIMMABLE ... *Yes, 0 – 10 V, DALI*
ACCESSORIES ... *Stainless Steel Sleeve (54mmx 100mm) Code: 1764*
VOLTAGE ... *24vDC*
DRIVER ... *remote driver required*

Lighting type, see details this sheet

Note: Alternative light fittings to same specifications can be considered

S4.55

Amendments

P	Architectural co-ord	25.11.24
O	S4.55	28.10.24

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Project: Retail & Residential development at 28 Lockwood Ave, Belrose, NSW

Dwg: Lower GF - Garden lighting plan
Date: 25.11.24 Scale: 1:200 @A1
Job Ref: 21/2110 Sheet No: 12 of 21

North

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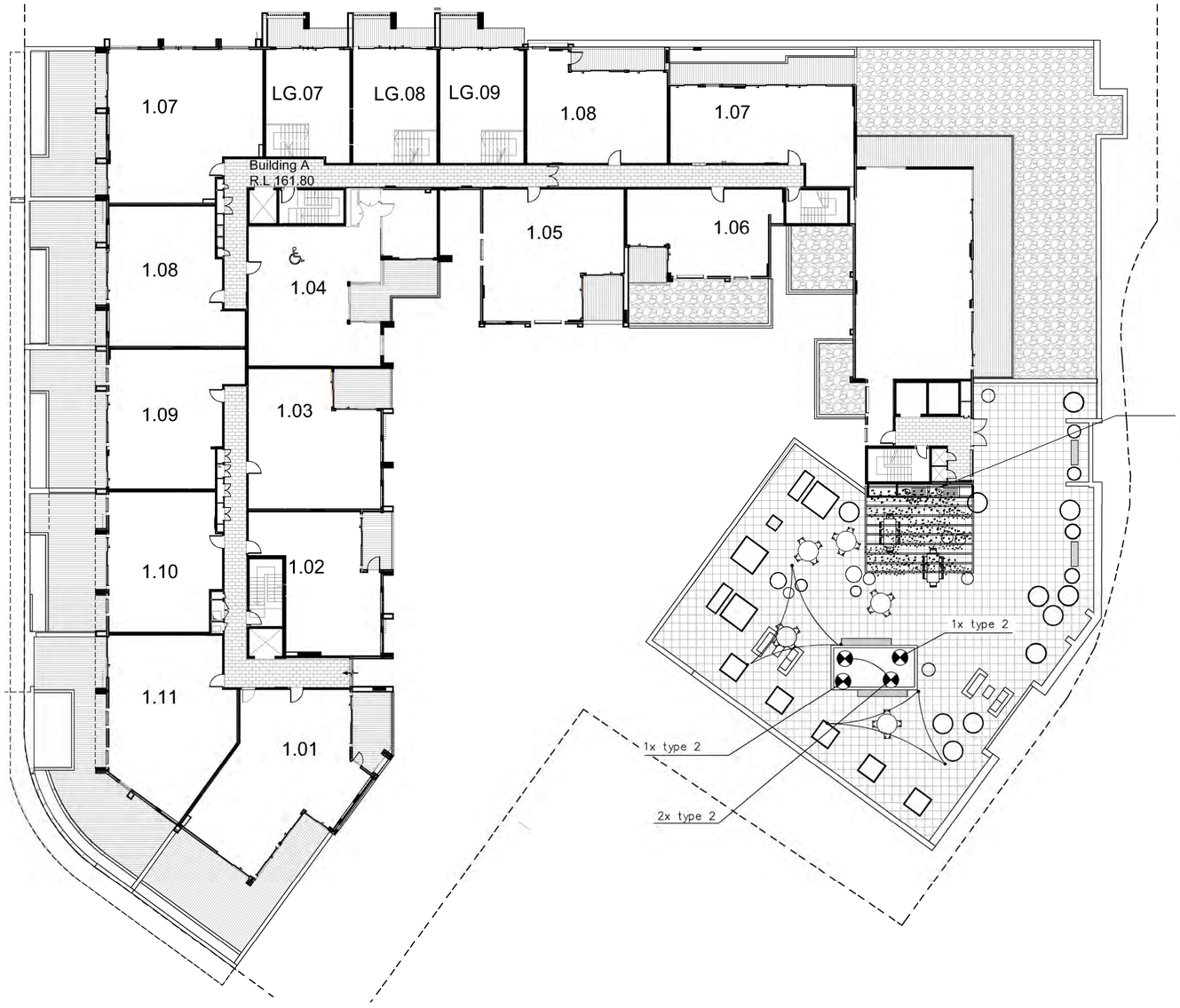
ISSUE-P

Level 1 - Garden lighting plan 1:200 @ A1

0 1 2 3 4 5 10



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PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

Lighting type 1

Tovo lighting

Airlie

Mini Adjustable Garden Spike

Integrated LED
Honeycomb louvre minimises glare
Complements the Hamilton wall light
Finishes --
copper, stainless steel satin
CODE ... 459
WATTAGE ... 4 W
LUMEN OUTPUT ... 280 lm
CRI ... 80
CCT ... 2700 K
IP RATING ... IP65
DIMMABLE ... No
ACCESSORIES ... Custom spike lengths on request
VOLTAGE ... 24 V dc
DRIVER ... remote driver required

Mini adjustable garden spike made of copper or 316 stainless steel with integrated and replaceable LED. Supplied complete with honey comb Louvre for glare control and with 300 mm spike. (custom length available on request)
Requires 24 V DC driver

Lighting type 2

Tovo lighting

Newport 2 Light

Adjustable Garden Spike Twin Lamp

316 Stainless Steel or Copper
1 or 2 light versions
Finishes --
copper, stainless steel satin
CODE ... *379*
WATTAGE ... *10 W*
LUMEN OUTPUT ... *840 lm*
CRI ... *80*
CCT ... *2700 K*
IP RATING ... *IP66*
DIMMABLE ... *No*
ACCESSORIES ... *Custom spike lengths available*
VOLTAGE ... *24 V dc*
DRIVER ... *remote driver required*

Large adjustable garden spike head. Twin head version. 600mm and 300mm spike available.
Order separately. Requires remote 24 V DC drive

Lighting type 3

Tovo lighting

Byron

Flush mounted wall light / floor light

Machined stainless steel body
Honeycomb low glare louvre fitted as standard
38 degree or 20 degree beam
Finishes --
black, brass, copper, stainless steel satin
CODE ... *4624*
WATTAGE ... *4 W*
CCT & LUMEN OUTPUT *2700K-254Lm 3000L-257Lm*
CRI ... *80*
IP RATING ... *IP66*
DIMMABLE ... *Yes, 0 – 10 V, DALI*
ACCESSORIES ... *Stainless Steel Sleeve (54mmx 100mm) Code: 1764*
VOLTAGE ... *24vDC*
DRIVER ... *remote driver required*

Lighting type, see details this sheet

Note: Alternative light fittings to same specifications can be considered

S4.55

Amendments

P	Architectural co-ord	25.11.24
O	S4.55	28.10.24

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Project: Retail & Residential development at 28 Lockwood Ave, Belrose, NSW

Dwg: Level 1 - Garden lighting plan

Date: 25.11.24 Scale: 1:200 @A1

Job Ref: 21/2110 Sheet No: 13 of 21

Builder must verify all dimensions of the site before work commences. Figured dimensions should be used in preference to those scaled off.

North

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ISSUE-P

Maintenance notes

1. Scope

1.1 General
The objective of this maintenance plan is to outline the maintenance requirements of the development and enable a defined scope of maintenance activities to be regularly undertaken.

The specification is a description of the major components and requirements of the maintenance contract. It is not intended to be a completely exhaustive list of all minor and incidental materials and tasks required to successfully complete the maintenance contract works.

Report to the Superintendent any discrepancies or shortfalls in information. Failure to report will imply unqualified acceptance and understanding of the documents issued as being adequate to accurately price and maintain the required trees and landscaping.

It is expected that the Contractor shall take a proactive and diligent approach to all maintenance activities and encourage all staff and sub-contractors to pickup any obvious litter found throughout the maintained areas as a matter-of-course, regardless of the activity or position within the site. Similarly be vigilant in looking for and reporting any noted incidence of vandalism, breakages, signage damage and graffiti etc. on their way to different duties and areas.

1.2 Period
Commencement: The planting establishment period commences at the date of practical completion.
Required period: 52 weeks

1.3 Recurrent works
Throughout the maintenance and planting establishment period, carry out maintenance work including, watering, weeding, mowing, edging, rubbish removal, fertilising, pest and disease control, replanting, staking and tying, replanting, cultivating, pruning, hedge clipping, aerating, reinstatement of mulch, renovating and keeping the site neat and tidy.

1.4 Program
At least two weeks prior to Practical Completion submit a program outlining proposed maintenance regime during the Plant Establishment Period, including anticipated frequency and duration of individual tasks. Revise progressively to ensure the optimal maintenance regime is implemented and submit on a monthly basis.

1.5 Log book
Keep a logbook recording when and what maintenance work has been done and what materials, including toxic materials, have been used. Make the logbook available for inspection on request.

1.6 Variations
If the Contractor intends to claim additional time and/or cost arising out of latent conditions, requests to carry out additional works, instructions or any other circumstance then they must notify the Superintendent in writing. The Principal/Client is not obliged to make any additional payment unless agreed prior to the Contractor undertaking the work.

1.7 Services
Underground services locations have not been included in the maintenance documentation. Before commencing work, that may disturb services the Contract shall obtain measurements and other necessary information from relevant authorities and sources. The Contractor will take every precaution necessary to secure from damage all existing gas and water service pipes, stormwater drainage lines, sewers, electrical conduits, telephone/ communications installations, and other existing works or services in the area of maintenance work.

All damage caused to any services during the course of the work is to be repaired immediately, at the Contractor's expense and the Contractor, will notify the Superintendent and relevant Authority immediately upon detection of the breakage.

1.8 Site Conditions
The Contractor is deemed to have visited the site to determine the nature of the work and to have verified and made due allowance for the following conditions:
- Existing site and structural conditions;
- Site access and storage requirements.

1.9 Replacement Plant Supply and Ordering
The Contractor is to order and co-ordinate delivery of plants. All plants shall comply with specified requirements of NATSPEC Guide – Specifying Trees: a guide to assessment of tree quality – 2003 and AS 2303 -2015 : tree stock for landscape use. The Contractor is to notify the Superintendent and Landscape Architect immediately of any problems with plant quality or supply.

Once the Contractor has received the plant stock it will be assumed that the quality of the stock was accepted by the Contractor as suitable for installation. The plants will then be the responsibility of the Contractor. Plant root-balls are to be kept moist at all times. Plants that are allowed to wilt or dry-out while in their pots or after planting will be rejected and replacements will be at the cost of the Contractor.

Replace any failed, damaged or stolen plants on a monthly basis.

1.2 Recording Incoming Plant Stock
The Contractor shall keep an organised register or other suitable on-site record of all incoming plant stock along with delivery dockets. These are to be presented to the Superintendent as requested from time to time throughout the period of the contract.

1.3 Work Site Safety
The Contractor is responsible for carrying out the Contract in a safe manner. Taking due care to prevent injuries to the public or to people involved in the work.

The Contractor is responsible for coordinating and facilitating pedestrian and vehicular traffic flow safely and unhindered around and through the works/site during all maintenance activities.

The Contractor will immediately notify and furnish a written report to the Superintendent if any of the following occurs in connection with the works:
- Accidents involving death or personal injury;
- Accidents involving loss of time;
- Incidents with injury potential such as equipment failure, collapses and the like.

1.4 Environmental & Existing Tree Protection
The Contractor will ensure that all materials and the execution of the work are ecologically sound, environmentally benign and consistent with the principles of sustainable development.

The Contractor is responsible to ensure that no damage occurs to any existing trees or other plants which:
- Are specified to be retained;
- Are beyond the extent of works;
- Need not be removed or damaged during the course of the works.

All work within the root zone of existing trees shall be undertaken with the utmost care. If roots are exposed they shall be backfilled as soon as possible by hand, watered and well consolidated. If by necessity a tree requires removal of branches, pruning shall be done in accordance with accepted arboriculture techniques and AS 4373-2007. No rubbish, spoil or new materials shall be placed on the root zone of any existing tree or against the trunk. If the extent of the root zone of existing trees is not clear, please refer to the Superintendent or Landscape Architect for clarification.

The Contractor shall take all practical precautions to ensure that dust and noise caused by the works are kept to a minimum. The Contractor shall take all practical precautions to prevent the spread of dirt and mud along roads and paths. The Contractor shall be responsible for all localised sediment and erosion control of work and stockpiles under their control and use.

1.5 Access, Traffic & Resident Management
Pedestrian access must be provided to all the adjacent properties during the course of maintenance work. The Contractor shall liaise with owners and operators of properties that are adjacent to the works to minimise the effect of the works on the normal access to the properties and minimise the disruption to the normal residential or commercial activities of those properties. The Contractor must comply with all directions, in this regard, provided by the Superintendent.

Not withstanding the above, the Contractor must provide and maintain signage, barricading and lighting as required to safely direct vehicles and pedestrians around the work site, where associated directly with their contracted work.

1.6 Regulations
Perform work in accordance with all applicable laws, rules and regulations required by authorities having jurisdiction over such work. Provide for all inspections, fees, escorts and permits required by Federal, State and local authorities in supply, transport and handling of the specified materials.

1.7 Documentation by the Contractor
Provide all required work method statements, programs and quality assurance manuals to the Superintendent for approval prior to works commencing.

Documents, which are to be prepared and updated as required by the Contractor, include but are not limited to the following:

northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

For Construction

Amendments

P	Architectural co-ord	25.11.24
O	S4.55	28.10.24

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Project: Retail & Residential development at 28 Lockwood Ave, Belrose, NSW

Dwg: Maintenance notes

Date: 25.11.24 Scale:

Job Ref: 21/2110 Sheet No: 14 of 21

North

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ISSUE-P

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S4.55

Amendments

P	Architectural co-ord	25.11.24
O	S4.55	28.10.24

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Project: Retail & Residential development at 28 Lockwood Ave, Belrose, NSW

Dwg: Blank

Date: 25.11.24

Scale:

Job Ref: 21/2110

Sheet No: 15 of 21

North

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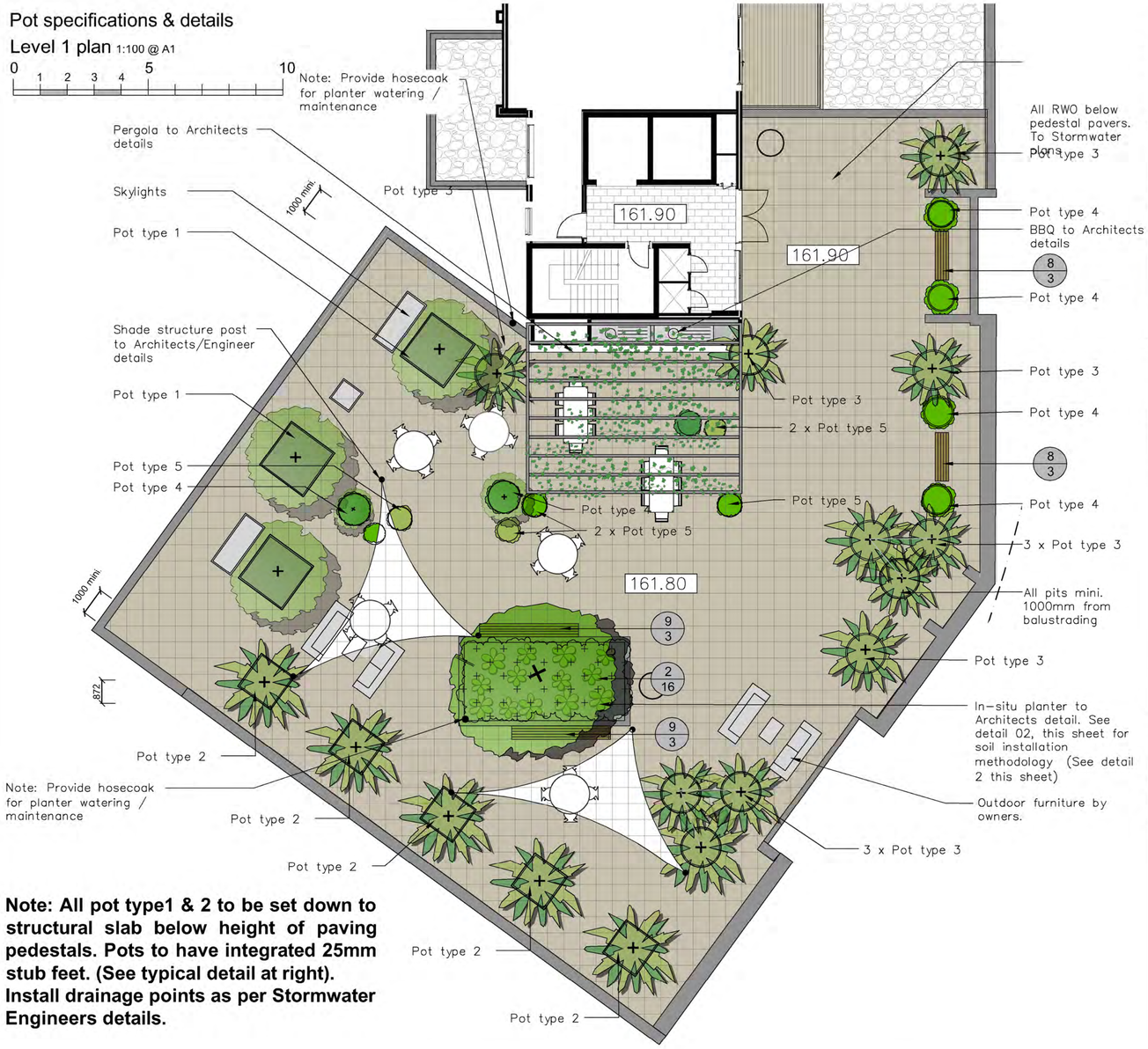
ISSUE-P

Pot specifications & details

Level 1 plan 1:100 @ A1

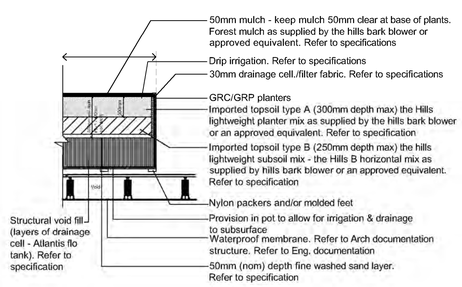
0 1 2 3 4 5 10



Note: All pot type1 & 2 to be set down to structural slab below height of paving pedestals. Pots to have integrated 25mm stub feet. (See typical detail at right). Install drainage points as per Stormwater Engineers details.

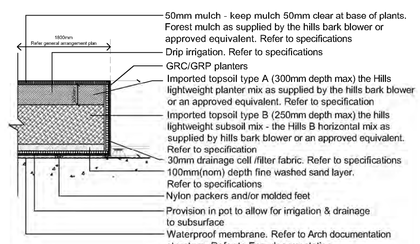
Detail 15

Planter type 3 & 4



Detail 16

Planter type 1 & 2

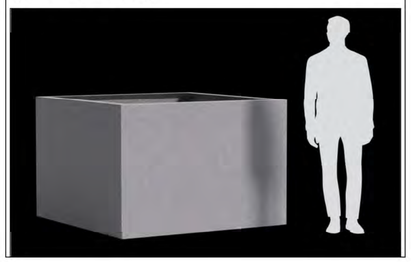


Pot type 1

Quatro GRC 2000 X 2000 X 600(h)
(With cast in 25mm feet blocks)
(Colour-White)

Pot type 2

Quatro GRC 1500 X 1500 X 1000(h)
(With cast in 25mm feet blocks)
(Colour-White)

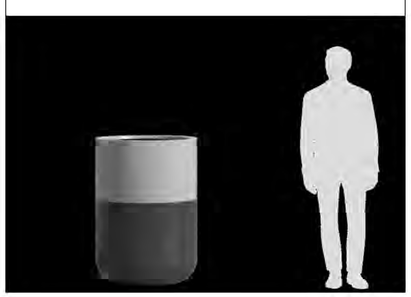


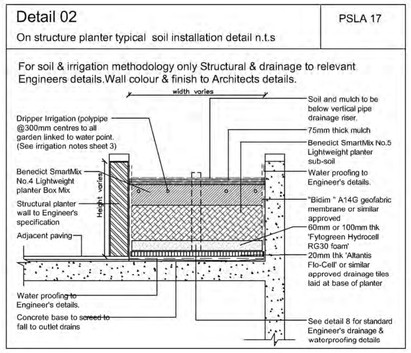
Pot type 3

Quatro Cylinder 1000 X 750(h)
(Colour-White)

Pot type 4

Quatro Cylinder 800 X 500(h)
(Colour-White)





25mm cast in feet blocks
to all types 1 & 2

(Colour-White)

Note: Alternative pots to same colour,size as specification considered upon assessment & approval of Project Manager & Landscape Architect.

8/3 See Detail Sheet 3

S4.55

Amendments

P	Architectural co-ord	25.11.24
O	S4.55	28.10.24

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Project: Retail & Residential development at 28 Lockwood Ave, Belrose, NSW

Dwg: Pot specifications

Date: 25.11.24 Scale:

Job Ref: 21/2110 Sheet No: 16of 21

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PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

North

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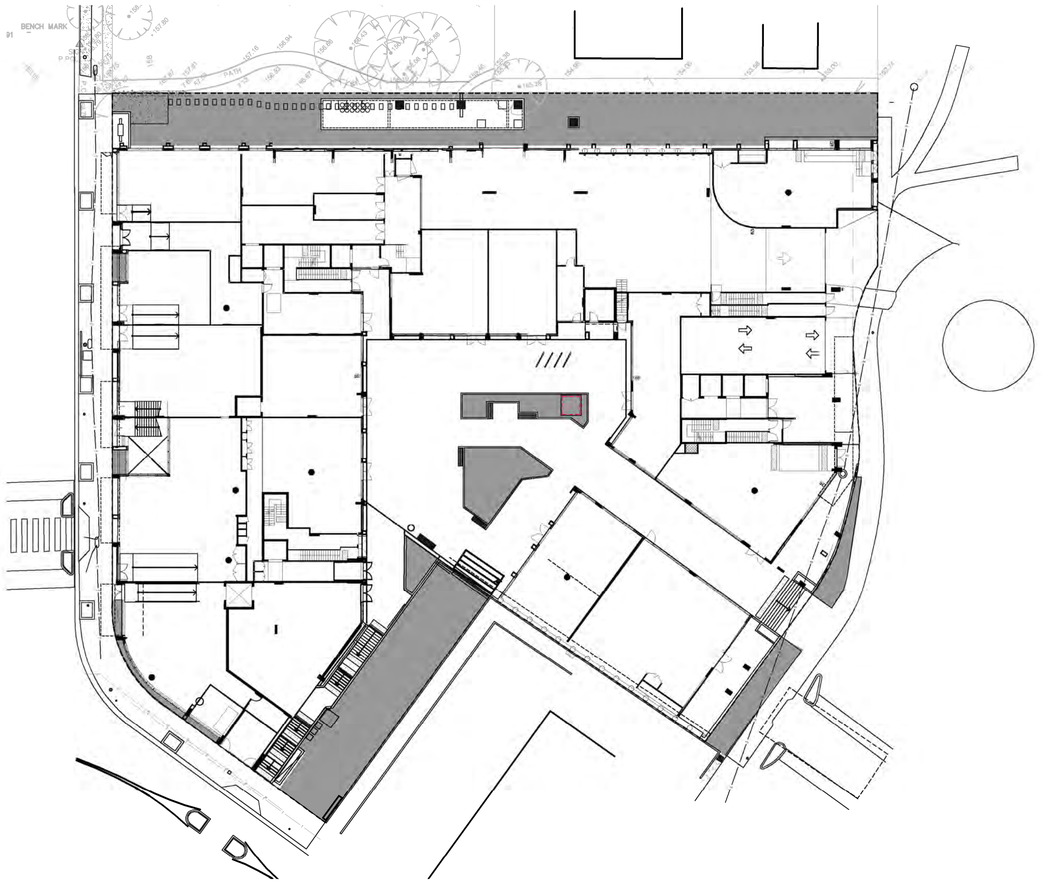
ISSUE-P

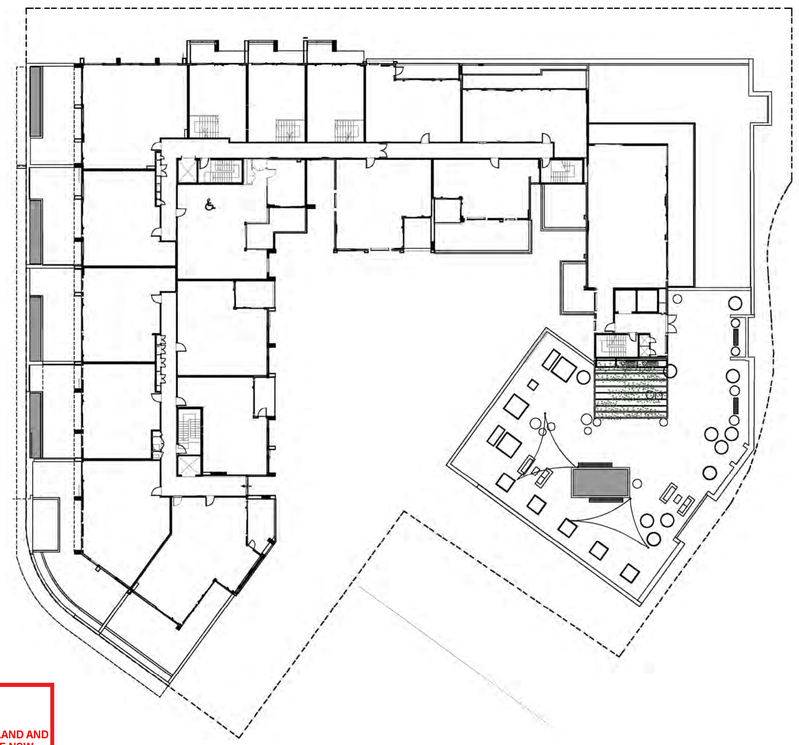
Ground floor - Irrigation 1:300 @ A1

0 1 2 3 4 5 10



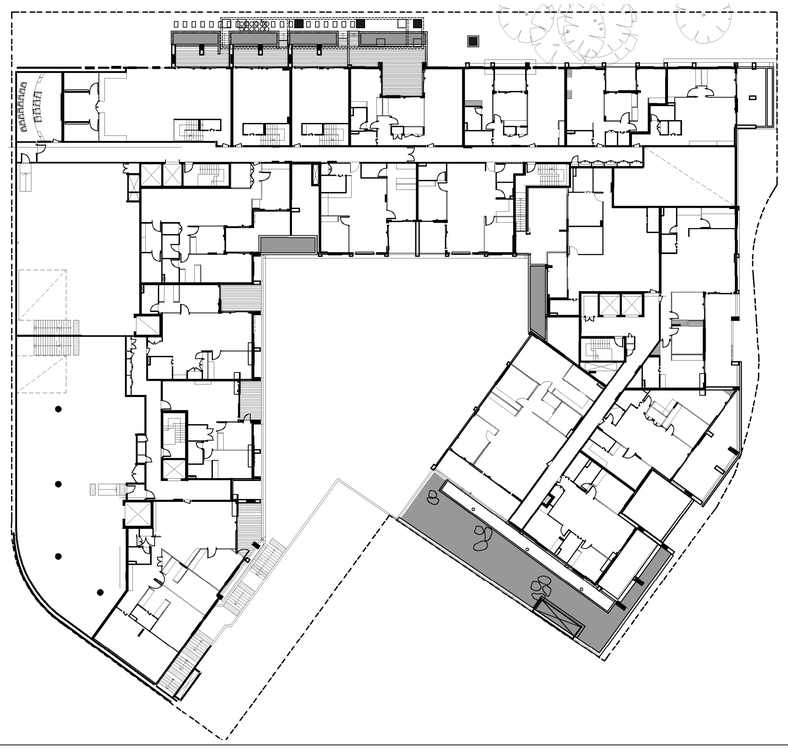
Level 1 - Irrigation 1:300 @ A1

0 1 2 3 4 5 10



Lower ground floor - Irrigation 1:300 @ A1

0 1 2 3 4 5 10



All C.O.S areas

See irrigation notes, sheet 2

S4.55

Amendments

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O	S4.55	28.10.24

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Project: Retail & Residential development at 28 Lockwood Ave, Belrose, NSW

Dwg: Irrigation zones - All levels

Date: 25.11.24 Scale: 1:300 @A1

Job Ref: 21/2110 Sheet No: 17 of 21

North

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ISSUE-P

Specification and notes

1. General

It is important that each tenderer makes a detailed site inspection to fully establish the scope of the work required. The successful tenderer will be required to undertake a services search and conduct a "Dial before you dig" survey of the site to ascertain the underground services that may affect the performance of the work

Diagrammatic layouts
Layouts of service lines, plant and equipment shown on the drawing are diagrammatic only, except where figured dimensions are provided or calculable. Before commencing work, obtain measurements and other necessary information

Works defined in this specification;
Site works, including preliminaries and site preparation; hard works and works associated with planting, plant establishment, and maintenance.

1.1 **Dilapidation Report**
Provide a photographic and written record before demolition work of the condition of the existing building, adjacent buildings, and other relevant structures or facilities. Use the dilapidation record amongst other things as a means of assessing responsibility for damage and/or making good arising out of the work under the contract. Keep a record at the site office. Provide one copy to the Principal.

1.2 **Location of existing service**
The contractor will be held responsible for bearing the cost of making good any damage to existing services and mains, whether or not these are shown on the drawings.

Services in close proximity to proposed works shall be exposed by hand before work is to commence. The contractor is responsible to cap and seal any abandoned services, which he/she may find on site to the satisfaction of the Superintendent.

It is the sole responsibility of the contractor to fully inform themselves of the location of services and to make the necessary provisions.

1.3 **Setting out of works**
The contractor shall allow for in their tender and be responsible for accurately setting out the works and for checking the works in progress.

The Contractor shall ensure the correct set out of all plant, equipment, pipes, ducts, brackets, bolts and like attachments to be provided and fixed under sub-contracts and of the terminating points for services provided by others in connection therewith.

It shall be the Contractor's responsibility to ensure that the required work is executed in accordance with the Drawings. Where no tolerances are given, it is expected that the Contractor will follow normal building accuracy and in any dispute arising from, the decision of the superintendent / client representative shall be final and binding.

Should the Contractor discover any error or discrepancy in the lines or levels, or the plans, or the site, he shall immediately notify the Project Manager before proceeding with the work.

The Contractor shall be responsible for checking all levels and dimensions before commencing work. Verify dimensions, bearings, levels, existing services, and lodge any objections to the information supplied before commencing work.

1.4 **Standards**
Australian Standards: Unless otherwise specified in the Contract, and where applicable, materials and workmanship shall be in accordance with the relevant standard of the Standards Association of Australia.

Current Edition: A standard applicable to the Works shall be the edition last published prior to the closing date for tenders unless otherwise specified.

Other Standards: Overseas standards and other standard documents named in the Specification shall be applicable in the same manner as Australian Standards to relevant materials and workmanship.

1.5 **Samples**
Approved Samples: Items in respect of which samples are specified shall be in accordance with an approved sample, or within a range defined by approved samples, as determined by the Superintendent, otherwise such items shall be liable to rejection. Keep approved samples in good condition on the site until Practical Completion.

Delay: Where the Specification requires samples to be submitted by the Contractor, the Contractor shall be solely responsible for the consequences of delay resulting from failure to allow adequate time for the assessment and approval of samples, or from the rejection of samples which do not comply with the Specification, or the like.

and/or unilateral decision from the Contractor to select one particular option may render the work unacceptable to the superintendent, in which case the Contractor shall rectify the work at its own expense upon superintendents notification.

1.1 **Substitutions**
Substitutions of any material or workmanship for that specified or shown on the drawings shall not be made without the written approval of the superintendent.

1.2 **Material and Workmanship**
Materials, unless otherwise specified, shall be new and of best quality of the respective kinds specified, and all subject to approval.

Remove condemned materials from site at once. Treat materials damaged on site as condemned. Use proprietary materials and products strictly in accordance with maker's instructions and deliver to the site in their original unbroken containers. Supply evidence if required of the quality of materials.

Workmanship shall be first quality standard and to the approval of superintendent who shall decide how far trade customs shall prevail.

1.3 **Protection of Finishes / Surfaces and Materials**
The Contractor shall provide and fix adequate timber sheathing, building paper and other protective material to protect the works, finishes, materials and fixtures from mechanical damage, staining, scuffing or any deterioration due to any cause.

1.4 **Shop Drawings**
Shop drawing shall be prepared and submitted for superintendent for all work involving fabrication, installation and / or assembly of work components.

Submit one (1) copy to the superintendent for examination, if so required correct and re-submit, at least three (3) weeks before the information on the Drawings is required for fabrication and / or installation to commence. When circulation of Shop Drawings is required to include Design Consultant(s) submit one
(1) print copy to all relevant parties.

Shop Drawings shall be examined for compliance with Design Intent only. This examination shall not diminish the Contractors responsibility for co-coordinating and approving shop drawings and for ensuring that they are in Agreement with Contract Documents and correct as to all relevant information.

Shop Drawings, if appropriate, will be endorsed to indicate design intent approval; amendments, correction and the like, but no such endorsement shall constitute an instruction to carry out Variation work under the Contract unless expressly stated to the contrary.

The Contactor will convene co-ordination meetings and administer and be responsible for the co- ordination process.

1.1 **Inspection**
Hold points: If notice of inspection is to be given in respect of parts of the works, do not conceal those parts without approval.

Minimum notice for inspections to be made: 3 days for on-site inspectors, otherwise 2 working days.

Witness points: If notice of inspection is required in respect of parts of the works, advise if and when those parts are to be concealed.

1.2 **Testing**
Testing authority: Unless otherwise specified, any testing required by the Contractor to be carried out by authorities accredited by NATA or approved by the Superintendent in the relevant field.
- Reports: Submit copies of test reports, including certificates for type tests, showing the observations and results of tests and conformance or non-conformance with requirement

If notice of testing is to be given in respect of parts of the works,
- do not test those parts without approval.
- Advise if and when those parts are to be tested

Minimum notice for inspections to be made: 3 working days for on-site inspections.

1.3 **Submissions**

Authorities
Authorities' approvals: If required, submit documents showing approval by the authorities whose requirements apply to the work.

Correspondence: Submit copies of correspondence and notes of meetings with authorities or project superintendent as appropriate.

Design
General: If part or all of an installation is to be designed by the contractor, submit documents showing the layout and details of the installation.

Variation documents: If it is proposed to change the installation from that shown on the contract documents, or if changes are required by statutory authorities, submit variation documents showing any proposed changes.

Errors
If a submission contains errors, make a new or amended submission as appropriate, indicating changes made since the previous submission.

Identification
Identify the project, contractor, subcontractor or supplier, manufacturer, applicable product, model number and options, as appropriate and include pertinent contract document references. Include service connection requirements and product certification. Identify proposals for non-compliance with project requirements, and characteristics which may be detrimental to successful performance of the completed work.

Notice
Minimum notice: 5 working days for offsite submissions, otherwise 10 working days.
Submission points: If a submission is required for a part of the works, do not commence work on the part until the submission is endorsed that the work may proceed. Coordinate related submissions and do not cause delays by making late or inadequate submissions.

1.4 **Materials, Labour and Plant**
Manufacturers' Recommendations: Unless otherwise specified, use manufactured items in the work under the Contract in accordance with current published recommendations of the manufacturer relevant to such use.

If products must conform to product certification schemes, submit evidence of conformance. Product data: For proprietary equipment, submit the manufacturer's product data as follows:
- Technical specifications and drawings.
- Type-test reports.
- Performance and rating tables.
- Recommendations for installation and maintenance.

1.5 **Proprietary item**
Implication: Identification of a proprietary item does not necessarily imply exclusive preference for the item so identified, but indicated the necessary properties of the item.

Alternatives: if alternatives are proposed, submit proposed alternatives and include samples, available technical information, reasons for proposed substitution and cost. State if provision of proposed alternatives will necessitate alteration to other parts of the works and advise consequent costs.

1.1 **Site Inspection**
Contractors are expected to visit and familiarise themselves with the site and the nature and extent of the works required.

1.2 **Underground Services**
Layouts of service lines, plant and equipment shown on the drawings are diagrammatic only. The Contractor is responsible for investigating and locating underground services before any site works. Do not excavate by machine within 1m of existing underground services.

1.3 **Storage of Materials**
The Contractor is responsible for the safe and proper storage of all materials, equipment, plants and tools. Storage of materials beneath the canopy of any existing tree, either located on the site or on Council's nature-strip or adjacent lands is not permitted. The Contractor is to coordinate with the site manager prior to commencement to determine appropriate storage areas on-site.

1.4 **Damage**
Protect finished surfaces and the immediate environment from dust and debris for the duration of the works.

The Contractor is responsible for making good any damage to trees, piping, fencing, utility services, footpaths, kerbs, roads, paint, render, tiles and surfaces in general.

1.5 **Variation**
No variations shall be made without prior written approval from the superintendent.

1.6 **Program**
The Contractor's quote is to state the time for completion of the landscape construction work. Before starting, submit an itemised program of work to the superintendent including the time involved for the various sections of work.

1.1 **Guarantees / Warranties**
Generally: The Contractor shall obtain, and shall ensure that the Principal will have the benefit of, warranties or guarantees as specified in the Contract, including warranties or guarantees that are obtained by the sub-contractors of the Contractor.

Name the Principal: Unless otherwise specified or agreed, warranties or guarantees specified in the Contract shall name the Principal as warrantee and shall be furnished by the warrantor direct to the Principal.

Warranty Schedule
Register with manufacturers as necessary. Retain copies delivered with components and equipment.

Commencement: Commence warranty periods at practical completion or at acceptance of installation, if acceptance is not concurrent with practical completion.

Approval of installer: If installation is not by manufacturer, and product warranty is conditional on the manufacturer's approval of the installer, submit the manufacturers written approval of the installing firm.

1.2 **Existing Services**
Marking
Before commencing earthworks, locate and mark existing underground services in the areas which will be affected by the earthworks operations including clearing, excavating and trenching.

1.3 **Environmental Protection**
General
The Contractor shall plan and take all steps necessary to protect the environment and in particular shall provide erosion, sediment control measures of the site, surrounding areas and drainage systems and any other measures required by the Environmental Protection Agency (EPA) or the Council and other relevant Authorities

Protection
Encroachment
Prevent the encroachment of demolished materials onto adjoining property, including public places.

Weather protection
If the surfaces of adjoin building are exposed, provide temporary covers to prevent water penetration. Provide covers to protect existing plant and equipment and material intended for re-use.

Dust protection
Provide dust-proof screens, bulkheads and covers to protect existing finishes and the immediate environment from dust and debris. Ensure that areas used by the general public adjacent to the works are protected from dust during demolition works. Where dust is considered excessive by the Superintendent, wet down areas to the satisfaction of the Superintendent.

Exposed surface
Where necessary protect and weatherproof the surface of adjacent structures exposed by demolition.

1.4 **Sealed Containers**
Requirement: Materials and products supplied by the manufacturer in closed or sealed containers or packages shall be brought to the point of use in the Works in the original unbroken container or package, otherwise they shall be liable to rejection.

1.5 **Sources policy**
Generally: Preferentially source materials from Australian or New Zealand manufacturers.

1.6 **Joining Up**
Generally: Carry out the joining of new work to existing work, and any consequent cutting away, in a manner approved by the Superintendent / Landscape Architect and make good to match existing adjacent work in all respects.

1.7 **Restoration of Damaged Surfaces**
All areas which may have been damaged by construction traffic or otherwise are to be restored by the Contractor to the approval of the superintendent.

1.8 **Removal of rubbish and Final Cleaning Up**
The Contractor shall remove from the site all rubbish, debris, surplus materials, containers and the like. On completion, the Contractor shall ensure that the site is cleaned, and that the whole is left fit for immediate use.

1.9 **Specification and Drawings**
Where any item of work is not wholly indicated on the Drawings, carry out and complete the items so as to correspond entirely with work of a similar nature drawn in detail elsewhere on the Drawings, and in full accordance with the Specification.
Should there be any discrepancy between Drawings and/or Specifications, the Contract shall be deemed to cover the alternative which includes the greater cost.

The Contractor shall notify the superintendent promptly on discovery of any such discrepancy. Failure to do so

northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

S4.55

Amendments

P	Architectural co-ord	25.11.24
O	S4.55	28.10.24

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Project: Retail & Residential development at 28 Lockwood Ave, Belrose, NSW

Dwg: Notes A
Date: 25.11.24 Scale:
Job Ref: 21/2110 Sheet No: 18 of 21

North

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ISSUE-P

1.1 **Insurance**
Before the contract commences, The Contractor is to present details of relevant insurance policies to the superintendent.

1.2 **Foreman**
While work is being conducted on-site, ensure that a competent Foreman is on-site. On commencement of works, provide the name, position and contact details for the designated Foreman to the superintendent /client's representative. Any instruction given to the Foreman by the superintendent will be deemed to have been given to the Contractor.

1.3 **Defects Liability Period**
The contractor shall be held responsible for replacement of any work and/or materials that fail during the first 52 weeks following the date of practical completion.

1.4 **Practical Completion**
The site will be jointly inspected by the client and the superintendent. If the completed works meet the approval of both parties, then the works shall be handed over to the client. Practical completion will be confirmed in writing to the Client.

On Practical Completion the Contractor shall have carried out the following work in relation to that stage but not limited to:

- Removed all rubbish, plant and surplus material, including from garden and path areas, lawns, storage areas and other obscure places.
- Replaced damaged, marked or otherwise disfigured parts, fittings and equipment.
- Checked and left the work and equipment of all trades, services and installations in proper condition
- Washed and thoroughly cleaned all works areas
- Checked all light power points for operation
- Provision is made to furnish the Owner with operating instructions, maintenance schedules and the like for equipment and services, and 'as-built' Drawings of installations.
- Lodged with the superintendent / clients representative certificates and / or letters of satisfactory completion of the various Authorities requirements.
-

1.5 **Operation and Maintenance Manuals**

General
General: Submit operation and maintenance manuals for irrigation system (refer to sheet 4 - Irrigation Notes)

Referenced documents: If referenced documents or technical work sections require that manuals be submitted, include corresponding material in the operation and maintenance manuals.

Subdivision: By installation or system, depending on project size

Contents
Include the following but not limited to: Certificates:
- Certificates from authorities.
- Copies of manufacturers' warranties.
- Product certification.
- Directory: Names, addresses, and telephone and facsimile numbers of principal consultant, subconsultants, contractor, subcontractors and names of responsible parties

Drawings:
- Record drawings, full size.
- Drawings and technical data: As necessary for the efficient operation and maintenance of the installation.
- Equipment descriptions:
- Name, address and telephone and facsimile numbers of the manufacturer and supplier of items of equipment installed, together with catalogue list numbers.
- Schedules (system by system) of equipment, stating locations, duties, performance figures and dates of manufacture. Provide a unique code number cross-referenced to the record and diagrammatic drawings and schedules, including spare parts schedule, for each item of equipment installed.

Maintenance procedures:
- Detailed recommendations for preventative maintenance frequency and procedures.
- Manufacturer's technical literature as appropriate. Register with manufacturer as necessary. Retain copies delivered with equipment.
- Safe trouble-shooting, disassembly, repair and reassembly, cleaning, alignment and adjustment, balancing and checking procedures. Provide logical step-by-step sequence of instructions for each procedure.
- Schedule of spares recommended to be held on site, being those items subject to wear or deterioration and which may involve the principal in extended deliveries when replacements are required. Include complete nomenclature and model numbers, and local sources of supply.

Operation procedures:
- Manufacturers' technical literature as appropriate.
- Table of contents: For each volume. Title to match cover

1. Landscape works

2.1 Scope
Supply, install and prepare for tree and groundcover planting, including subgrade establishment, supply and installation of soil mixes, sub soil drains, watering pipes, protection board, drainage cell, root barrier filter fabric. Coordination of installation of advanced trees, supply and installation of groundcovers, shrubs, aftercare and planting establishment.

2.2 Quality

Standards
Composts, Soil Conditioners and Mulches – AS 4454- 2012 Soils for Landscaping & Garden Use – AS 4419-2018

Inspections
Witness Points:
Give not less than (3) three days notice so that inspection may be made of the following.

- Garden beds excavated, subsoil drainage installed and prior to back filling with imported soilmix
- Drainage layer to base of pits
- Setting out completed
- Drainage cell with geotextile fabric and membrane protection board installed prior to laying sand blinding layer or topsoil.
- Sand blinding layer laid prior to topsoil placement.
- Soil mixes installed
- Completed soil mix profiles before planting
- At time of tree planting
- On completion of tree planting
- At time of planting
- On completion of planting
- During and on completion of landscape maintenance period
- Completion of planting establishment work.
- Topsoil spread before planting.

Hold Points:
Give not less than (3) three days notice so that inspection may be made of the following.
- Tree pit excavated and prior to backfilling with soil
- Completed soil mix profile, shaped to levels and falls, and consolidated with protection layers in place prior to placing concrete base slab for paving.
- Garden beds excavated, subsoil drainage installed and prior to backfilling with imported soil mix.
- Drainage cell with geotextile fabric, root barrier and membrane protection board installed prior to laying sand blinding layer or topsoil.
- Setout of Plant Material

Tests
Soil test:
Provide a complete chemical test certifying that the topsoil mixes meet the required specification allow for any subsequent retesting.

Samples
General: Submit representative samples of each material, packed to prevent contamination and labeled to indicate source and content.
Provide samples as follows:
- Imported soil mixes – 3kg bag
- Mulch to garden beds – 3kg bag
- Gravel – 3kg bag
- Drainage cell – 1 module
- Plants – as specified below

Submit one plant sample for each 100 of each species or variety, in the condition in which it is proposed to be supply that plant to the site.

Submission
Suppliers:
Submit statement from suppliers of plants and other materials, giving the following, where applicable.
- Particulars of the suppliers experience in the required type of work
- Production capacity for material of the required type, sizes and quantity.
- Lead times for delivery of the material to the site.

Materials:
Suppliers data: Supplier's data: Submit supplier's data including
- Certificate identifying seed species, purity, age and germination viability; and
- Material source of supply
- Evidence of hardening off programme for plant stock Compost: Submit a certificate of proof of compost

pH value.

Execution:
Program: Submit a work program for the landscape works.
Maintenance program: Submit a proposed planting maintenance program.

2.1 Materials & Components

Garden profile – Garden on grade

Excavation for planter beds
Excavate site soil completely to bedrock for construction of hard works elements. Return or replace as clean fill where determined appropriate by structural and geo-technical engineers. Not to be reused as planting or turf soil.

Removal of planter bed debris
Remove all building rubble, waste oil, cement and other material harmful to plant growth from planting beds prior to placement of topsoil.

Garden beds on grade
Spread the topsoil on prepared subsoil and grade evenly, making the necessary allowances to permit the following:

- Required finished levels may be achieved after light compaction

Contamination: Where diesel oil, cement or other phytotoxic material has been spilt on the subsoil or topsoil, excavate the contaminated soil, dispose of it off the site and replace with site soil or imported topsoil to restore design levels.

Finishing: Feather edges into adjoining undisturbed ground.

Garden beds on grade B Horizon
Inorganic Matter – T/S2 as supplied by supplied by Benedicts Sand and Gravel or approved equivalent. Refer to 01/LACD301 for required depth

Clean Fill:
Imported Fill Soil No.2 – as supplied by Benedicts Sand and Gravel or approved equivalent.

Drainage cell:
To the vertical faces and overhangs if applicable: 30mm drainage cell.
Lay according to manufacturer's instructions. Drainage cell to be fully wrapped in geotextile fabric as specified.

Geotextile Fabric:
Geotextile as recommended appropriate by Atlantis Water Management or similar and approved. Wrapped and taped to manufacturer's instructions.
Sources/ contacts:
Atlantis Water Management Phone: 9419 6000

Root Barrier

Root barrier shall be: HDPE (High Density Polyethylene) root barrier. Joints are to be taped. Generally lay and join material to manufacturers recommendation.

Membrane protection board
Provide 9mm CFC vertical or approved equivalent (screed to Architect's detail)

2.2 Tree pits
Excavation for tree pits
Excavation depths are as follows (800mm) unless detailed otherwise on the drawings. Remove all excavated material from site. Do not disturb services, excavate by hand around services.

Subgrade preparation
Excavate holes from subgrade to depths shown on the drawings and leave all finished surfaces clean and straight. Fall sub grade rock to facilitate positive drainage to air cell and sub soil drainage.

Test subgrade soils for suitability to support plant growth, incorporate any additives that may be required. Manually cultivate subgrade to base of tree pit and link channel excavations to a depth of 150mm. During cultivation, thoroughly mix in any materials to be incorporated in the subsoil.

Sub soil drainage
Ensure positive drainage to all tree pits prior to backfilling. If not install sub-soil drainage lines and connect to available stormwater system. Notify Superintendent with two days notice for inspection of drainage operation

Location
All on structure planted areas: Refer to Landscape - General. Note that all waterproofing of slabs and location of drainage outlets is to the project architects / engineers specification.

Drainage cell:
To the base of planters as detailed

To the vertical faces and overhangs if applicable: 20mm or 30mm drainage cell.
Lay according to manufacturer's instructions. Drainage cell to be fully wrapped in geotextile fabric as specified.

Geotextile Fabric:
Geotextile as recommended appropriate by Atlantis Water Management or similar and approved. Wrapped and taped to manufacturer's instructions.
Sources/ contacts:
Atlantis Water Management Phone: 9419 6000

Sand Blinding layer:
50 -100mm nominal coarse washed river sand.

Root Barrier
Root barrier shall be: HDPE (High Density Polyethylene) root barrier. Joints are to be taped. Generally lay and join material to manufacturers recommendation.

Membrane protection board
Provide 9mm CFC vertical or approved equivalent (screed to Architect's detail)

Structural Void Fill
Provide layers of drainage cell – Atlantis Flo Cell or an approved equivalent Sources/ contacts:
Atlantis Water Management Phone: 9419 6000

2.1 Soil mix

Garden profile 01 and 02– Garden on grade (G1 & G2)
Source/ Type:
Imported Topsoil Type A: The Hills Bark Blower Premium Garden Mix, As supplied by The Hills Bark Blower or approved equivalent.
Depth: Spread to a full depth as nominated on drawings.

Sources/ contacts The Hills Bark Blower Phone: 02 9654 2288

Imported B Horizon (Inorganic matter) : Benedict T/S2 , – as supplied by Benedicts Sand and Gravel or approved equivalent Depth: Spread to a full depth as nominated on drawings.

Clean Fill:
Imported Fill Soil No.2 – as supplied by Benedicts Sand and Gravel or approved equivalent.

Source/ Type:
Imported Topsoil Type A: The Hills Lightweight Planter Mix, As supplied by Hills Bark Blower or approved equivalent.
Depth: Spread to a full depth as nominated on drawings.

Imported Topsoil Type B: B Horizon Mix, as supplied by Hills Bark Blower or approved equivalent. Depth: As required. Sources/ contacts The Hills Bark Blower Phone: 02 9654 2288

2.2 Fertiliser
Provide proprietary fertilisers, delivered to the site in sealed bags marked to show manufacturer or vendor, weight, fertiliser type, N:P:K ratio, recommended uses and application rates.

Fertiliser schedule

Location	N:P:K ratio	Application rate
All trees and shrubs in areas of organic mulch at time of planting	Pelletised poultry manure Equivalent to "Dynamic Lifter"	250g on top of root ball
All trees and shrubs three weeks after planting	10:6:4 equivalent to "multi grow"	60g per tree and shrub applied to top of soil around root ball

northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

S4.55

Amendments

P	Architectural co-ord	25.11.24
O	S4.55	28.10.24

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Project: Retail & Residential development at 28 Lockwood Ave, Belrose, NSW

Dwg: Notes B
Date: 25.11.24 Scale: 1:200 @A1
Job Ref: 21/2110 Sheet No: 19 of 21

Builder must verify all dimensions of the site before work commences. Figured dimensions should be used in preference to those scaled off.

North

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ISSUE-P

2.1 Execution

Planting beds on Structure
Refer to drawing LACD101-LACD106 for location and extent. Refer to Detail 03/ LACD402.
Clean out any loose cement and other material likely to be harmful to plant growth. Install Drainage cell as specified and to manufacturers instructions. Seal edge of geotextile fabric to planter box wall. Provide membrane protection board to sides of planter to Architects details that will not damage the waterproof membrane. Note hold point requirement. Provide sand blinding layer as specified in clause 3.2. Install topsoil in 150mm layers and consolidate as specified below.

Planting beds – Ground floor at grade
Excavated: Excavate subsoil to design levels as detailed. Shape the subsoil to fall to subsoil drains where applicable. Break up the subsoil to a further depth of 100mm.

Settlement period
Allow the topsoil in planter boxes and garden beds to settle for one week prior to planting. Top up any settlement as required to meet design levels.

Topsoil depth
Typically spread topsoil to the depths as indicated on drawings.

Surplus topsoil
General: Spread surplus topsoil on designated areas on site, if any; otherwise, dispose off site.

Existing services
Do not disturb services during backfilling and compaction operations. Ensure that all protective measures have been installed prior to backfilling with soil mix.

Turf profile – on structure

See Level 4 'On-structure' turf area: Note that all waterproofing of slabs and location of drainage outlets is to the project architects / engineers specification.

Drainage cell:
To the base Vertical faces of planters as detailed. Refer to detail #5 sheet 4 (30mm drainage cell).

To the vertical faces and overhangs if applicable: 30mm drainage cell.
Lay according to manufacturer's instructions. Drainage cell to be fully wrapped in geotextile fabric as specified.

Geotextile Fabric:
Geotextile as recommended appropriate by Atlantis Water Management or similar and approved. Wrapped and taped to manufacturer's instructions.
Sources/ contacts: Atlantis Water Management Phone: (02) 9419 6000

Sand Blinding layer:
50 -100mm nominal coarse washed river sand.

Membrane protection board
Provide 9mm CFC vertical (screed to Architect's detail)

Supply
Deliver the turf within 24 hours of cutting, and lay it within 36 hours of cutting. Prevent it from drying out between cutting and laying.

Fertilising
Type: IFCO slow release fertiliser with pre emergents or approved equivalent Application: Method and rate as recommended by Supplier

Laying
General: Lay the turf in the following manner:
In stretcher pattern with the joints staggered and close butted.
Parallel with the long sides of level areas, and with contours on slopes.
To finish flush, after tamping, with adjacent finished surfaces of ground, paving edging, or grassed areas.

Tamping
Lightly tamp to an even surface immediately after laying. Do not use a roller.

Watering
Moisten the ground prior to laying with a fine spray of water. Water immediately after laying until the topsoil is moistened to its full depth. Continue watering to maintain moisture to this depth. Keep the grass in a healthy condition.

Mowing
Mow to maintain the grass height within the required range. Do not remove more than one third of the grass height at any one time. Carry out the last mowing within 7 days before the end of the planting establishment period. Remove grass clippings from the site after each mowing.

Top dressing
When the turf is established mow, remove cuttings and lightly top dress to a depth of 10 mm. Rub the dressing well into the joints and correct any unevenness in the turf surface. Top dressing: Benedict's Imported Turf Underlay as specified above.

2.1 Plants

Pre Ordering
The contractor shall be responsible for ensuring that all plant material is available to sizes and species type nominated in the plant schedule (See sheet 3) for mature size specimens and plants required in large quantities this may require the preordering and growing on of species by a selected nursery for an extensive period of time prior to their installation. No substitution of species or sizes will accepted unless evidence can be furnished to the Landscape Architect of all reasonable attempts being made to acquire the nominated species between the time of the contract being awarded and the landscape construction date.

The contractor shall satisfy themselves of the health and vigour of the selected specimens and provide written agreement as such.

It is the responsibility of the Contractor to supply the scheduled number of plants to the quality, size and health in accordance with this Specification and Plant Schedule. The Project Manager must be informed immediately if any difficulty is encountered in procuring the plants at the appropriate times. The secured plants shall be set aside from any other plants on the nursery site at which they are to be stored, and clearly labeled as being for this project. The allocated plants must also be made available to the Project Manager to be inspected at all times.

Plants
General: Provide plants with the following characteristics:
- Large healthy root systems, with no evidence of root curl, restriction or damage.
- Vigorous, well established, free from disease and pests, of good form consistent with the species or variety.
- Hardened off, not soft or forced, and suitable for planting in the natural climatic conditions prevailing at the site.

Trees: Provide trees which, unless required to be multi-stemmed, have a single leading shoot.

Plant containers
General: Supply plants in weed-free containers of the required size.
Open rooted stock: If trees are to be supplied as open rooted stock, ensure this is appropriate to the species, variety, size, and time of year for planting.
Potting-on: Do not carry out potting-on.

Defective Samples
If samples so inspected are found to be defective, the entire line represented by the defective samples may be rejected. All plants rendered unsuitable as a result of this inspection will be considered as samples on which payment cannot be claimed.

Size and Form Requirements
At the time of delivery all plants shall conform with the specified minimum size and nominated container size, confirmed in the Plant Schedule.

Plants shall be grown, maintained, pruned and fertilised to produce a specimen at delivery conforming with the detail and description contained in the Plant Schedule (sheet 3). This shall include root pruning to advanced stock for a minimum 12 week period prior to delivery to site. Rootball dimensions should be appropriate to the planter into which they will be installed.

Production and Maintenance Generally
The plants shall be watered, fertilised, and treated for pests and diseases all as necessary to maintain continuing healthy growth. An approved pruning programme shall be carried out regularly during the Establishment Period to promote trunk and foliage canopy formation in trees all as directed by the Project Manager.

All plants must have been inspected by the Project Manager before delivery to site. Inspection by the Project Manager does not constitute approval and all plant material is to perform to the requirements of this specification or be replaced at the Sub-contractor's expense.

2.1 Installation

General
Acceptance of delivered stock, including installation to approved set out

The Sub-contractor shall allow for the delivery of the scheduled plants to the site. The Project Manager / Landscape Architect will inspect all plant stock on arrival at site prior to unloading. The Project Manager's inspection does not constitute approval and all plant material is to perform in accordance with this specification.

Labeling
Label at least one plant of each species or variety in a batch with a durable, readable tag.

Storage
Whenever possible plants shall be planted immediately after delivery to site. Maintain plants on site in perfect condition. Prevent theft, drying out or damage from any cause including frost, wind, sun, vermin, animals and the like. The Contractor shall be responsible for replacement at his own cost of any losses resulting.

Locations
Refer to hold points
Do not vary the plant location from those required. If it appears necessary to vary plant locations and spacings to avoid service lines, or to cover the area uniformly, or for other reasons, apply for directions.

Planting conditions
Do not plant in unsuitable weather conditions such as extreme heat, cold, wind or rain. In other than sandy soils, suspend excavation when the soil is wet, or during frost periods.

Watering
Thoroughly water plants immediately after installation and continue adequate watering to keep them healthy and growing vigorously. Vary watering regime as necessary to account for climatic conditions
e.g. increased frequency of watering during periods of dry or windy weather/ decreased frequency during periods of rain.

The contractor is to provide the water supply as required to maintain all newly vegetated areas in optimum condition for the duration of the construction period and maintenance period. Submit details of water supply proposals for approval at least six weeks prior to undertaking any revegetation operations.

The contractors watering program shall have regard to current and likely compulsory restrictions on the use of a mains water supply.

The contractor is to bear all costs associated with the provision of any water supply, and all materials and labour, including 'out of hours' work, associated with watering operations that may be required to maintain plant material and revegetated areas in healthy condition for the duration of the contract.

The contractor is to provide all suitable means for transporting the water across the site

Placing
Ascertain location of all underground services prior to commencing excavation and co-ordinate with other relevant works. Remove the plant from the container with minimum disturbance to the root ball, ensure that the root ball is moist and place it in its final position, in the centre of the hole and plumb, and with the top soil level of the plant root ball level with the finished surface of the surrounding soil.

Notify in writing of all soil or other drainage conditions which are considered detrimental to the growth of plant materials. State condition and submit proposal for correcting condition if feasible including change in cost, if any.

Plants are to be pre-watered prior to removal from containers. Ensure that all plant root systems are kept moist at the time of removal from container, and that minimal disturbance of the root system occurs during planting.

Excavate planting holes one and half times the container depth, and twice the container width. Cultivate subgrade within each hole and loosen compacted sections on the base and sides of the hole if they occur. Pre-water holes prior to planting.

Position plants so that the soil level of the plant rootball is level with the finished surface of the soil surrounding the hole.

Carry out all backfilling using backfill soil mixes, ensuring complete filling and consolidation of voids in and around the root system.

Fertilising
Pellets: In planting beds and individual plantings, place fertiliser pellets around the plants at the time of planting.
Application rate (kg/ha): Refer to Fertiliser schedule

Backfilling
Backfill with topsoil mixture. Lightly tamp and water to eliminate air pockets. Ensure that topsoil is not placed over the top of the root ball, so that the plant stem remains the same height above ground as it was in the container.

Thoroughly incorporate fertilizer into the backfill soil mix at the following rates, unless otherwise recommended by manufacturer:
1. Tube 5 grams
2. 150mm dia. container 5 grams
3. 200 mm capacity container 15 grams
4. 35 litre capacity container 20 grams
5. 100 litre capacity container 50 grams
6. 200 litre capacity container 60 grams

Mulching

General: Provide mulch which is free of deleterious and extraneous matter such as soil, weeds and sticks.

Standard: To AS 4454- 2012 Composts, Soil Conditioners and Mulches
Organic mulches: Free of stones.

Organic mulch types
Forest Mulch
Supplier: The Hills Bark Blower Phone: 02 9654 2288

Placing mulch
General: Place mulch to the required depth, clear of plant stems, and rake to an even surface flush with the surrounding finished levels. Spread and roll mulch so that after settling, or after rolling, it is smooth and evenly graded between design surface levels sloped towards the base of plant stems in plantation beds.

Application: Place mulch clear of plant stems, and rake to an even surface flush with the surrounding finished levels.

Depths: Spread organic mulch to a depth of 75 mm as nominated on planting details.

1. Plant supply

3.1 Scope

Supply, install trees, shrubs and groundcover planting to a standard that allows them to establish rapidly and grow to maturity.

Maintenance: Encourage and maintain healthy growth for the duration of the contract.

Program: Provide a suitable irrigation, pruning, fertiliser and monitoring program for all plant materials held by the supplier. Take any other precautions required to safeguard the health and well being of all plant materials before and including their delivery to site.

Standards
Follow the guidance given in *NATSPEC Guide: Specifying Trees – a guide to assessment of tree quality.* AS2303-2015 : Tree stock for landscape use

Definitions
Calliper: The stem or trunk diameter at a nominated point. Generally measured at 300 mm above ground. Size

Index: Product of height (m) x calliper (mm).

Tubes or plant cells: Trees grown in small containers or cells in trays with a height: diameter ratio > 3:2, typically < 0.75 L.

Small trees: Trees grown in containers < 20 L (other than tubes or plant cells), and ex-ground trees of Size Index < 35.

Large trees: Trees grown in containers > 20 L, and ex-ground trees of Size Index > 35.

3.2 Quality

Inspections
Witness Points
Give sufficient notice so that trees may be inspected before shipment

Hold Points
- Trees/plants available for inspection at the nursery
- Trees/plants delivered to site prior to setout

northern beaches council

PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW

PROCEEDINGS NO: 2024/308932

DATED: 13 March 2025

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Amendments

P	Architectural co-ord	25.11.24
O	S4.55	28.10.24

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Project: Retail & Residential development at 28 Lockwood Ave, Belrose, NSW

Dwg: Notes C
Date: 25.11.24 Scale:
Job Ref: 21/2110 Sheet No: 20 of 21

Builder must verify all dimensions of the site before work commences. Figured dimensions should be used in preference to those scaled off.

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- Trees/plants delivered to site prior to setout

Partial Sampling
Method: Expose a small section of the rootball by washing sufficient to permit inspection of root development from the stem to the outer extremity. After inspection carefully replace soil.
Rates: Inspect root systems using partial sampling at the following rates:
- < 20 trees: 1 tree sampled

Test
Rootball occupancy test
Shake or handle unsupported rootball
Acceptance criterion:> 90% of soil volume remains intact

Small trees rootball: shoot ratio test
Procedure: Hold stem at 80% of height above ground, deflect 30º from vertical, side to side. Acceptance criterion: Container or rootball remains flat on the ground.

Contractors Submission
Plant provenance
Locality: Provide written certification that all plant material has been grown from locally provenanced stock. If this is not achievable give notice.

Species: Provide written certification that all plant material is true to the required species and type.

Reports
Forward order contracts: Submit regular reports in writing to the contract administrator. Include checks against specification requirements and current photographs.
- Inspection frequency: 3 months
- Report frequency: 3 months

Materials
Substitution: If non-complying trees are proposed, submit proposal. Submit a copy of the approval of substitution with the non-complying trees for approval by project Landscape Architect.

Execution
Holding methods. Submit proposed methods for holding trees beyond specified dates so that trees will continue to comply

Photographic examples
Requirement: Submit photographic examples as follows:
- 100, 200, 400L plant species.
- Specimen / exground plant species.

Program: Within fourteen (14) days of the date of contract.
Clarity: Sufficient to be able to ascertain the species, size and quality of a single specimen of the subject plant.
Identification: Provide photographs as follows:
- In colour.
- With a clearly identifiable scale reference located in the same plane as the plant stem or trunk.
- Labelled with plant species name.

Progress reports
Content: A detailed resume of the quantities, growth, general health and geographic location of the complete inventory of plant material for the works.
Purpose: To evaluate progress payments under the general conditions of contract. Program: Monthly.

Accreditation
Submit evidence of accreditation as follows:

3.1 Trees/Plants

General
Labelling
General: Clearly label individual plants and batches.
Label type: To withstand transit without erasure or misplacement.

Health and vigour
Health: Supply plants with foliage size, texture and colour at time of delivery consistent with the size, texture and colour shown in healthy specimens of the nominated species.

Vigour: Supply plants with extension growth consistent with that exhibited in vigorous specimens of the species nominated.

Inspections
Give not less than 48 hours notice for the Superintendent to attend inspections at the points noted. Work is not to proceed beyond these points without written approval from the Superintendent or the Landscape Architect.

The Superintendent or Landscape Architect may inspect the site without notice at any time.

Testing
Any testing required must be carried out by an authority registered with the National Association of Testing Authorities (NATA) to perform the specified testing. Undertake soil testing to ensure soil conditions are maintained in a state conducive to healthy plant, growth, identify and issues associated with over or under fertilization, nutrient imbalances, pH and water logging.

3.1 Quality and Execution

Quality
Any work or materials, which, in the opinion of the Superintendent or Landscape Architect, do not meet appropriate industry standards of workmanship or quality, shall be rejected. It shall be the Contractor's responsibility to remove rejected work and reinstall it to an acceptable standard at no additional cost to the Principal/Client.

Materials and workmanship are to conform to the current edition of applicable Australian Standard Specifications and Codes.

References & Standards
AS 4373-2007 – Pruning of Amenity Trees

NSW WorkCover – Code of Practice: Amenity Tree Industry 1998

NATSPEC Guide – Specifying Trees: a guide to assessment of tree quality – 2003 AS2303-2015 : Tree stock for

landscape use

AS 4454-2012 Composts, soil conditioners and mulches AS 4419-2018 Soils for Landscaping and Garden Use

AS 3743-2003 Potting Mixes

Standard Specifications and Codes.

Samples, product details and technical information for all materials and proprietary items are to be submitted to the Superintendent for written approval prior to inclusion into the works. Obtain and submit reports on relevant tests by an independent testing authority as requested by the Superintendent.

Damage: Supply plants free from damage and from restricted habit due to growth in nursery rows.

Stress: Supply plants free from stress resulting from inadequate watering, excessive shade or excessive sunlight experienced at any time during their development.

Site environment: Supply plants that have been grown and hardened off to suit the conditions that could reasonably be anticipated to exist on site at the time of delivery.

Root development
Containers: Grow plants in their final containers for the following periods:
Plants < 25 l size: > 6 weeks. Plants > 25 l size: > 12 weeks.

Freedom from pests and disease
Pests and disease: Supply plants with foliage free from attack by pests or disease.
Native species with a history of attack by native pests: Restrict plant supply to those with evidence of previous attack to < 15% of the foliage and ensure absence of actively feeding insects.

Below Ground - Plants

Requirement: Supply plant material with the root system:
- Well proportioned in relation to the size of the plant material.
- Conducive to successful transplantation.
- Free of any indication of having been restricted or damaged. Root inspection: If inspection is by the removal of soil test as follows:
- For > 100 samples: Inspect 1%.
- For < 100 samples: Inspect 1 sample. Sample plants: Replace.

Alternatives:
Reject the entire line represented by the defective sample. Treat to correct the defects before planting.
Rejection: Root bound stock.

Above Ground - Trees
Labelling
Clearly label individual trees and batches.
Label type: To withstand transit without erasure or misplacement

Health and vigour
Health: Supply trees with foliage size, texture and colour at time of delivery consistent with the size, texture and colour shown in healthy specimens of the nominated species.
Vigour: Supply trees with extension growth consistent with that exhibited in vigorous specimens of the species nominated.

Freedom from pests and disease
Pests and disease: Supply trees with foliage free from attack by pests or disease.
Native species with a history of attack by native pests: Restrict evidence of previous attack to < 15% of the foliage and ensure absence of actively feeding insects.

Freedom from injury
Supply only trees free from injury.

Self-supporting
Supply only trees that are self-supporting.

Stem taper
Supply trees where the calliper at any given point on the stem is greater than the calliper at any higher point on the stem.

Pruning
General: Comply with the recommendations of AS 4373 Clean stem height: < 40% of total tree height.
Pruning wounds: Restrict fresh (i.e. recent, non-calloused) to < 20% of total tree height. Type: Ensure a clean-cut at the branch collar.
Diameter of wound: < 50% of the calliper immediately above the point of pruning.

Apical dominance
Species with an excurrent form: Supply trees with a defined central leader and the apical bud intact.

Crown symmetry
Crown distribution: Difference on opposite sides of the stem axis < 20%.

Stem structure
Species with excurrent form: Supply trees with a single stem roughly in the centre of the tree with any deviation from vertical < 15º.

Species with decurrent form: Supply trees where the central stem is not divided at any point lower than the clean stem height nominated, and that the stem junction at the point of division is sound.

Require Product Sample / Product Information Hold Points
The Contractor shall provide samples, supplier and complete product information / details about the following materials:
1. Fertilisers / Soil Amelioration Chemicals,
2. Herbicides,
3. Pesticides,
4. Imported soil / soil conditioners,
5. Organic Mulch

And any other horticultural products or alternative products to those specified proposed to be used.

These are to be submitted to the Superintendent for approval no later than two (2) weeks before they are proposed to be used.

Additional specifications.
- Irrigation notes (see sheet 4)
- Maintenance notes (see sheet 5)

All species: Ensure that branch diameter is less than or equal to one-half of the caliper immediately above the branch junction.

Included bark
Supply trees where the branch/stem bark ridges at junctions between stems and branches and between

co-dominant stems are convex, except for species prone to include bark that are known to remain strong.

Trunk position
Supply trees with the distance from the centre of the trunk to the extremity of the root ball not varying by > 10%.

Indication of north
Trees in containers > 100 L or of Size Index > 140: Indicate the northerly aspect during growth in the nursery to withstand transit without erasure or misplacement.

Below Ground
Root division
Trees in containers < 45 L or ex-ground trees with a Size Index < 70: Primary division of roots at < 100 mm intervals.
Trees in containers > 45 L or ex-ground trees with a Size Index > 70: Primary division of roots within the outer 50% of the rootball at < 100 mm intervals.

Root direction
General: Ensure that roots, from the point of initiation, generally grow in an outwards (radial) or downwards direction, and that any deviation from the established direction < 45º.

Trees with a calliper at ground level < 40 mm: Ensure that the diameter of any nonconforming roots at the extremity of the rootball < 25% of the calliper.
Trees with a calliper at ground level > 40 mm: Ensure that the diameter of any nonconforming roots at the extremity of the rootball < 10 mm.

Rootball occupancy
Soil retention: On shaking or handling the unsupported rootball at least 90% of the soil volume to remain intact.

Rootball depth
Rootball depth assessment for containers/rootballs > 45 L or larger:
Depth: < maximum depth specified and no rootball (regardless of size) > 550 mm in depth.
- Diameter: > depth.

Height of root crown
Ensure that root crown is at the surface of the rootball.

Non-suckering rootstock
Grafted cultivars/varieties: Supply trees grafted onto non-suckering rootstock.

Acclimatisation
To cause physiological changes within the plant that will enable it to withstand the transition to the project site without loss of foliage or variance from a healthy and attractive state for five years or more.

Warranties
True-to-species
Parties: Supplier(s) to the principal.
Form: All the plants supplied under these works are true-to-species and type, and free of disease, fungal infection and/or any other impediment to their future growth and that they have been fully acclimatised for the conditions of the site.
Submission of warranty: At the time of each delivery.

Documentation by the Contractor
Provide all required work method statements, programs and quality assurance manuals to the Superintendent for approval prior to works commencing. Documents, which are to be prepared and updated as required by the Contractor, include but are not limited to the following:

- Maintenance Program
- Environmental Management Plan which will include, noise, dust, vibration, sedimentation and water management controls;
- Safety and Incident Management Plan which will include safe-work methodology, incident management protocols and risk management initiatives proposed by the Contractor;
- Safe Work Method Statements as noted in the specification

These and any other documents, which may be required, are to be submitted to the Superintendent for review prior to starting work.

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Project: Retail & Residential development at 28 Lockwood Ave, Belrose, NSW

Dwg: Notes D
Date: 25.11.24 Scale:
Job Ref: 21/2110 Sheet No: 21 of 21

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