Design Study Submission | Arncliffe & Banksia Precincts, Rezoning Proposal

ARCHER OFFICE

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1

DEPARTMENT OF PLANNING PROPOSED CONTROLS

1.0 DEPARTMENT OF PLANNING PROPOSED CONTROLS SITE ANALYSIS

This study prepared on behalf of Podia explores the development potential of 96 - 102 Princes Highway based on the current rezoning proposal.

The subject site is a 2,693 m² parcel of land currently occupied by an industrial building. The existing zoning is B6 Enterprise and is proposed to be rezoned Mixed Use with an increased LEP height limit of 31m.

Key notes on the site:

- Positioned on a corner block with views to Sydney CBD, Botany Bay and the broader district.
- 200 metres walk to Arncliffe Train Station (6 Stops to CBD).
- 200 metres walk to Arncliffe Town Centre & shops
- 1km to Wolli Creek Town Centre & Shopping District
- A large parcel compared with surrounding fragmented properties
- Planned intersection upgrade at Kyle Street & Princes Highway will facilitate better cross links to station and surrounding precinct.
- The adjoining site to the south 108 Princes Highway is being developed into 7 storey mixed use project.



1.1 DEPARTMENT OF PLANNING PROPOSED CONTROLS PROPOSED LEP HEIGHT LIMITS



Proposed LEP Height Map around Arncliffe Station

- Density concentrated to east of Arncliffe Station

Indicative precinct massing based on proposed LEP & DCP controls



1.2 DEPARTMENT OF PLANNING PROPOSED CONTROLS CONTROLS SUMMARY

Summary of controls applied to the Site:

- LEP height limit of 31m
- 6 storey street wall along Princes Highway & Kyle Street (Rockdale Draft DCP)
- 6 m setback on Princes Highway with deep soil planting (Rockdale Draft DCP)
- 3 m setback on Kyle Street (Rockdale DCP 2011)
- 3 m setback to Kyle St & Princes Highway above street wall (Rockdale Draft DCP)
- 6m side setback to east above street wall assuming non-habitable building separation condition (NSW Apartment Design Guide 2015)
- Active frontage along Princes Highway with 7m floor to ceiling for ground floor showrooms (Rockdale Draft DCP)



1.3DEPARTMENT OF PLANNING PROPOSED CONTROLSMASSING DIAGRAMFSR 2.5:1HEIGHT 31M

FLOOR HEIGHT

3.5

3.1

3.1

3.1

3.1

3.1

3.7

3.7

3.7

RL

50.1

46.6

43.5

40.4

37.3

34.2

31.1

27.4

23.7

20

GFA

75% of GEA

m2

450

450

963.75

963.75

963.75

963.75

963.75

963.75

2.48

6683 m2

0

KEY CONTROLS

- 2.5 site FSR
- 31m LEP height limit
- 6m Princes Highway setback for deep soil planting (Rockdale Draft DCP)
- Kyle street setback 3m (Rockdale DCP 2011)
- 6 story street wall control (Rockdale Draft DCP)
- 3m front setbacks above street wall (Rockdale Draft DCP)
- 6m side setbacks above street wall assuming non-habitable building separation condition (*NSW Apartment Design Guide 2015*)

KEY POINTS

Level

Roof

Level 8

Level 7

Level 6

Level 5

Level 4

Level 3

Level 2

Level 1

TOTAL

Ground Floor

Proposed FSR

- Massing proposes 2.48 FSR
- 16m building depth
- 31m total height

GEA = Gross Envelope Area

Complete planning envelope and allows for articulation and services. Otherwise defined as maximum permissible envelope.

GFA = Gross Floor Area Measured in accordance with the standard instrument definition

GEA

m2

600

600

1285

1285

1285

1285

1285

1285

8910 m2

0

		FACTORY BUILDING
Image: State	PRINCES HIGHWAY	E LVL 6 LVL 7/8 16m TYP. FLOOR GEA = 1285 M ² SITE AREA = 2693 M ² 6 3
NS STREET		KYL NO. 108 MIXED USE DEVELOPM

20 James P.

NO 84 - 86

Please note massing is calculated without articulation as planning envelopes only. The GEA / GFA ratio is then applied at a rate of 75% to allow for services, structure, facade articulation, voids etc.

This massing study has been prepared with basic site information.



ARNCLIFFE



1.4 **DEPARTMENT OF PLANNING PROPOSED CONTROLS** URBAN DESIGN ANALYSIS FSR 2.5:1 HEIGHT 31M

6 ST STREET WALL S TSTREET WALL & ST 6 ST 8 ST SITE T STREET WALL 70m 8 ST 8 ST 6 ST STREET WALL 5 **AERIAL VIEW FROM SOUTH WEST**



STREET VIEW FROM KYLE STREET - LOOKING FROM EAST





STREET VIEW FROM PRINCES HIGHWAY - LOOKING FROM NORTH

STREET VIEW FROM PRINCES HIGHWAY - LOOKING FROM SOUTH

1.5 DEPARTMENT OF PLANNING PROPOSED CONTROL **INDICATIVE LAYOUT - SOLAR ACCESS & CROSS VENTILATION**

KEY

This diagram illustrates how solar access and cross ventilation can be achieved on a typical level for an indicative apartment layout.

Control: Minimum 2 hours direct sun between 9 & 3 for at least 85% of units

11 / 13 apartments achieve this (85%)

Control: Minimum 60% apartments achieve cross ventilation

8 / 13 apartments achieve this (61%)



2

APPLICANT PREFERRED CONTROLS FSR 3:1 HEIGHT 37M

2.1 APPLICANT PREFERRED CONTROLS MASSING DIAGRAM FSR 3:1 HEIGHT 37M

KEY CONTROLS

- 6m Princes Highway setback for deep soil planting (Rockdale Draft DCP)
- Kyle street setback 3m (Rockdale DCP 2011)
- 6 storey street wall control (Rockdale Draft DCP)
- 3m front setbacks above street wall (Rockdale Draft DCP)
- 6m side setback to east above street wall assuming non-habitable building separation condition (*NSW Apartment Design Guide 2015*)
- 12m side setback to north above street wall assuming habitable building separation condition (*NSW Apartment Design Guide 2015*)

KEY POINTS

- Massing proposes 3.00 FSR
- North setback above street wall allows for habitable rooms
- 18m building depth (max. depth control, NSW Apartment Design Guide 2015)
- 37m total height
- Stepped building form to reduce overshadowing & define corner

GEA = Gross Envelope Area

Complete planning envelope and allows for articulation and services. Otherwise defined as maximum permissible envelope.

GFA = Gross Floor Area

Measured in accordance with the standard instrument definition

Level	GEA	GFA	FLOOR HEIGHT	RL
	m2	m2		
		75% of GEA		
Roof				56.3
Level 10	320	240	3.5	52.8
Level 9	500	375	3.1	49.7
Level 8	670	502.5	3.1	46.6
Level 7	860	645	3.1	43.5
Level 6	1400	1050	3.1	40.4
Level 5	1400	1050	3.1	37.3
Level 4	1400	1050	3.1	34.2
Level 3	1400	1050	3.1	31.1
Level 2	1400	1050	3.7	27.4
Level 1	0	0	3.7	23.7
Ground Floor	1400	1050	3.7	20
TOTAL	10750 m2	8063 m2		
Proposed FSR		2.99		



Please note massing is calculated without articulation as planning envelopes only. The GEA / GFA ratio is then applied at a rate of 75% to allow for services, structure, facade articulation, voids etc.

This massing study has been prepared with basic site information.



2.2 **APPLICANT PREFERRED CONTROLS**

URBAN DESIGN ANALYSIS FSR 3:1 HEIGHT 37M





STREET VIEW FROM KYLE STREET - LOOKING FROM EAST







STREET VIEW FROM PRINCES HIGHWAY - LOOKING FROM SOUTH

2.3 APPLICANT PREFERRED CONTROLS VIEW FROM SUN DIAGRAMS - WINTER 21 JUNE

DEPARTMENT OF PLANNING PROPOSED CONTROLS - FSR 2.5:1





















additional shadow

COMPARISON





3

DESIGN STUDIES

3.1.1DESIGN STUDY 1MASSING DIAGRAMFSR 3:1

HEIGHT 31M

KEY CONTROLS

- 31m LEP height limit
- 6m Princes Highway setback for deep soil planting (Rockdale Draft DCP)
- Kyle street setback 3m (Rockdale DCP 2011)
- 6 story street wall control (*Rockdale Draft DCP*)
- 3m front setbacks above street wall (Rockdale Draft DCP)
- 6m side setbacks above street wall assuming non-habitable building separation condition (*NSW Apartment Design Guide 2015*)

KEY POINTS

Level

- Massing proposes 2.99 FSR
- 18m building depth max depth Apartment Design Guide 2015
- 31m total height

GEA = Gross Envelope Area

Complete planning envelope and allows for articulation and services. Otherwise defined as maximum permissible envelope.

FLOOR HEIGHT

RL

GFA

GFA = Gross Floor Area Measured in accordance with the standard instrument definition

GEA

		NO. 84 - 86 FACTORY BUILDING
EDEN STREET	PRINCES HIGHWAY	Image: Constraint of the second sec
BURROWS STREET		KYL NO. 108 MIXED USE DEVELOPM

Please note massing is calculated without articulation as planning envelopes only. The GEA / GFA ratio is then applied at a rate of 75% to allow for services, structure, facade articulation, voids etc.

This massing study has been prepared with basic site information.



	m2	m2		
		75% of GEA		
Roof				50.1
Level 8	950	712.5	3.5	46.6
Level 7	950	712.5	3.1	43.5
Level 6	1400	1050	3.1	40.4
Level 5	1400	1050	3.1	37.3
Level 4	1400	1050	3.1	34.2
Level 3	1400	1050	3.1	31.1
Level 2	1400	1050	3.7	27.4
Level 1	422	316.5	3.7	23.7
Ground Floor	1400	1050	3.7	20
TOTAL	10722 m2	8042 m2		
Proposed FSR		2.99		



3.1.2 **DESIGN STUDY 1**

URBAN DESIGN ANALYSIS FSR 3:1 HEIGHT 31M





STREET VIEW FROM KYLE STREET - LOOKING FROM EAST





STREET VIEW FROM PRINCES HIGHWAY - LOOKING FROM NORTH

STREET VIEW FROM PRINCES HIGHWAY - LOOKING FROM SOUTH

3.1.3 DESIGN STUDY 1 VIEW FROM SUN DIAGRAMS - WINTER 21 JUNE

DEPARTMENT OF PLANNING PROPOSED CONTROLS - FSR 2.5:1



DESIGN STUDY 1 - 3:1 FSR 31M HEIGHT CONTROL

















additional shadow

COMPARISON



reduced shadow	
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3.2.1DESIGN STUDY 2MASSING DIAGRAMFSR 3:1

3:1 HEIGHT 34M

KEY CONTROLS

- 6m Princes Highway setback for deep soil planting (Rockdale Draft DCP)
- Kyle street setback 3m (Rockdale DCP 2011)
- 6 story street wall control (Rockdale Draft DCP)
- 3m front setbacks above street wall (Rockdale Draft DCP)
- 6m side setback to east above street wall assuming non-habitable building separation condition (*NSW Apartment Design Guide 2015*)
- 12m side setback to north above street wall assuming habitable building separation condition (*NSW Apartment Design Guide 2015*)

KEY POINTS

- Massing proposes 3.00 FSR
- North setback above street wall allows for habitable rooms
- 18m building depth max depth Apartment Design Guide 2015
- 34m total height

GEA = Gross Envelope Area

Complete planning envelope and allows for articulation and services. Otherwise defined as maximum permissible envelope.

GFA = Gross Floor Area Measured in accordance with the standard instrument definition

Level	GEA	GFA	FLOOR HEIGHT	RL
	m2	m2		
		75% of GEA		
Roof				53.2
Level 9	850	637.5	3.5	49.7
Level 8	850	637.5	3.1	46.6
Level 7	850	637.5	3.1	43.5
Level 6	1400	1050	3.1	40.4
Level 5	1400	1050	3.1	37.3
Level 4	1400	1050	3.1	34.2
Level 3	1400	1050	3.1	31.1
Level 2	1400	1050	3.7	27.4
Level 1	0	0	3.7	23.7
Ground Floor	1400	1050	3.7	20
TOTAL	10950 m2	8213 m2		
Proposed FSR		3.05		



Please note massing is calculated without articulation as planning envelopes only. The GEA / GFA ratio is then applied at a rate of 75% to allow for services, structure, facade articulation, voids etc.

This massing study has been prepared with basic site information.



3.2.2 **DESIGN STUDY 2**

URBAN DESIGN ANALYSIS FSR 3:1 HEIGHT 34M





STREET VIEW FROM KYLE STREET - LOOKING FROM EAST





STREET VIEW FROM PRINCES HIGHWAY - LOOKING FROM NORTH

STREET VIEW FROM PRINCES HIGHWAY - LOOKING FROM SOUTH

3.2.3 **DESIGN STUDY 2** VIEW FROM SUN DIAGRAMS - WINTER 21 JUNE

DEPARTMENT OF PLANNING PROPOSED CONTROLS - FSR 2.5:1

DESIGN STUDY 2 - FSR 3:1

9 AM

HEIGHT 34M













additional shadow

COMPARISON

9 A M









