

BASIX[®]Certificate

Building Sustainability Index www.basix.nsw.gov.au

Multi Dwelling

Certificate number: 421821M

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 29/06/2009 published by the Department of Planning. This document is available at www.basix.nsw.gov.au

Director-General

Date of issue: Monday, 16 April 2012

To be valid, this certificate must be lodged within 3 months of the date of issue.



Project summary		
Project name	Block 10	
Street address	Kensington Lane Chippendale 2008	
Local Government Area	Sydney City Council	
Plan type and plan number	strata 33953	
Lot no.	6	
Section no.	-	
No. of unit buildings	1	
No. of units in unit buildings	27	
No. of attached dwelling houses	0	
No. of separate dwelling houses	0	
Project score		
Water	✓ 41	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 22	Target 20

Certificate Prepared by (please complete before submitting to Council or PCA)

Name / Company Name: WSP

ABN (if applicable): 47 005 113 468

Description of project

Project address

Project name	Block 10
Street address	Kensington Lane Chippendale 2008
Local Government Area	Sydney City Council
Plan type and plan number	strata 33953
Lot no.	6
Section no.	-

Project type

No. of unit buildings	1
No. of units in unit buildings	27
No. of attached dwelling houses	0
No. of separate dwelling houses	0

Site details

Site area (m ²)	520.3
Roof area (m ²)	520.3
Non-residential floor area (m ²)	271.6
Residential car spaces	0
Non-residential car spaces	0

Common area landscape

Common area lawn (m ²)	0
Common area garden (m ²)	0
Area of indigenous or low water use species (m ²)	0

Assessor details

Assessor number	20940
Certificate number	48063635
Climate zone	17

Project score

Water	✓ 41	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 22	Target 20

Description of project

The tables below describe the dwellings and common areas within the project

Unit building - Building1, 27 dwellings, 6 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
1.01	4 or more bedrooms	109.23	0.0	0	0
2.04	1	16.34	0.0	0	0
3.03	2	50.6	0.0	0	0
3.07	1	23.64	0.0	0	0
4.04	1	16.34	0.0	0	0
5.01	2	53.64	0.0	0	0
5.05	4 or more bedrooms	133.62	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
2.01	3	68.07	0.0	0	0
2.05	1	23.64	0.0	0	0
3.04	1	16.34	0.0	0	0
4.01	2	53.38	0.0	0	0
4.05	4 or more bedrooms	133.62	0.0	0	0
5.02	2	50.94	0.0	0	0
5.06	1	16.34	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
2.02	1	24.04	0.0	0	0
3.01	2	53.38	0.0	0	0
3.05	4 or more bedrooms	103.05	0.0	0	0
4.02	2	50.94	0.0	0	0
4.06	1	16.34	0.0	0	0
5.03	2	50.6	0.0	0	0
5.07	1	23.64	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
2.03	1	20.48	0.0	0	0
3.02	2	50.94	0.0	0	0
3.06	1	16.34	0.0	0	0
4.03	2	50.6	0.0	0	0
4.07	1	23.64	0.0	0	0
5.04	1	16.34	0.0	0	0

Description of project

The tables below describe the dwellings and common areas within the project

Common areas of unit building - Building1

Common area	Floor area (m²)
Lift car (No. 1)	-
Garbage room -residential	15.8
Bike store	21.23
Entry	29.35

Common area	Floor area (m²)
Switch room (No. 1)	14.41
Study 1	73.47
Level 1 Store	35.85
Hall	12

Common area	Floor area (m²)
Hydraulics room	22.65
Level 2 Common	47.27
Laundry	12.19
Common corridors/circulation	164.04

Schedule of BASIX commitments

1. Commitments for unit building - Building1

(a) Dwellings

- (i) Water
- (ii) Energy
- (iii) Thermal Comfort

(b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

2. Commitments for attached dwelling houses

3. Commitments for separate dwelling houses

4. Commitments for common areas and central systems/facilities for the development (non-building specific)

- (i) Water
- (ii) Energy

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

1. Commitments for unit building - Building1

(a) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✓	✓	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✓	✓
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✓	✓
(e) The applicant must install:			
(aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and		✓	✓
(bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✓	✓
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✓	✓	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✓	
(g) The pool or spa must be located as specified in the table.	✓	✓	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✓	✓	✓

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	3 star (> 6 but <= 7.5 L/min)	4 star	6 star	6 star	no	no washing machine taps	-	-	-	-	-	-	-	-

	Alternative water source							
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
All dwellings	on-site recycled water system (no. 1)	See central systems	See central systems	no	yes	yes	no	no
None	-	-	-	-	-	-	-	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✓	✓	✓
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✓	✓
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✓	✓
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✓	✓

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✓	✓	✓
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✓ ✓	
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below; (bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and (cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✓ ✓ ✓	✓
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✓	

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	central hot water system 1	individual fan, ducted to façade or roof	interlocked to light	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	interlocked to light

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
2.01	3-phase airconditioning EER 3.0 - 3.5	3-phase airconditioning EER 3.0 - 3.5	3-phase airconditioning EER < 2.5	3-phase airconditioning EER < 2.5	3	1	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no
1.01, 3.05, 4.05, 5.05	3-phase airconditioning EER 3.0 - 3.5	3-phase airconditioning EER 3.0 - 3.5	3-phase airconditioning EER < 2.5	3-phase airconditioning EER < 2.5	4	1	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no
3.01, 3.02, 3.03, 4.01, 4.02, 4.03, 5.01, 5.02, 5.03	3-phase airconditioning EER 3.0 - 3.5	3-phase airconditioning EER 3.0 - 3.5	3-phase airconditioning EER < 2.5	3-phase airconditioning EER < 2.5	2	1	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no
2.02, 2.03, 2.04, 2.05, 3.04, 3.06, 3.07, 4.04, 4.06, 4.07, 5.04, 5.06, 5.07	3-phase airconditioning EER 3.0 - 3.5	3-phase airconditioning EER 3.0 - 3.5	3-phase airconditioning EER < 2.5	3-phase airconditioning EER < 2.5	1	0	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no

Dwelling no.	Individual pool		Individual spa		Appliances & other efficiency measures							
	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	electric cooktop & electric oven	-	no	-	-	-	-	-

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.			
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.			
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✓	✓	✓
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✓	✓	✓

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
1.01	0.3	26.5
2.01	48.9	40.6
2.02	1.4	40.3
2.03	37.7	35.9
5.01	2.6	19.8
5.02	1.9	22.2
5.03	5.1	10.7
5.04	0.8	28.4
5.05	6.1	10.4
5.06	0.3	30
5.07	0.1	36.6
3.01, 4.01	0.6	30.2
3.02, 4.02	0.7	37.9
3.03, 4.03	2.2	17.9
3.04, 4.04	0.5	26.8
3.05, 4.05	3	21
2.04, 3.06, 4.06	0.1	28.7
All other dwellings	0.01	39.5

(b) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	4 star	no common facility	not specified

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Lift car (No. 1)	-	-	compact fluorescent	connected to lift call button	No
Switch room (No. 1)	ventilation (supply + exhaust)	none ie. continuous	compact fluorescent	manual on / manual off	No
Hydraulics room	ventilation exhaust only	none ie. continuous	compact fluorescent	manual on / manual off	No
Garbage room -residential	ventilation exhaust only	-	compact fluorescent	motion sensors	No
Study 1	air conditioning system	time clock or BMS controlled	compact fluorescent	motion sensors	No
Level 2 Common	air conditioning system	time clock or BMS controlled	compact fluorescent	motion sensors	No
Bike store	ventilation exhaust only	none ie. continuous	compact fluorescent	motion sensors	No
Level 1 Store	ventilation exhaust only	time clock or BMS controlled	compact fluorescent	manual on / manual off	No
Laundry	ventilation exhaust only	time clock or BMS controlled	compact fluorescent	manual on / timer off	No
Entry	no mechanical ventilation	-	compact fluorescent	motion sensors	No
Hall	no mechanical ventilation	-	compact fluorescent	motion sensors	No
Common corridors/circulation	no mechanical ventilation	-	compact fluorescent	motion sensors	No

Central energy systems	Type	Specification
Lift (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 6

4. Commitments for common areas and central systems/facilities for the development (non-building specific)

(b) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	4 star	no common facility	not specified

Central systems	Size	Configuration	Connection (to allow for...)
Central on-site recycled/alternative water supply (No. 1)	To supply at least 700 litres of recycled water per day to the development (over and above the system's committed capacity, if any)	-	- Irrigation of 0 square metres of common landscape area on the site - car washing in 0 car washing bays on the site

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

Central energy systems	Type	Specification
Central hot water system (No. 1)	gas-fired storage (manifolded)	Piping insulation (ringmain & supply risers): (a) Piping external to building: R0.6 (~25 mm); (b) Piping internal to building: R0.6 (~25 mm)

Notes

1. In these commitments, "applicant" means the person carrying out the development.
2. The applicant must identify each dwelling, building and common area listed in this certificate, on the plans accompanying any development application, and on the plans and specifications accompanying the application for a construction certificate / complying development certificate, for the proposed development, using the same identifying letter or reference as is given to that dwelling, building or common area in this certificate.
3. This note applies if the proposed development involves the erection of a building for both residential and non-residential purposes (or the change of use of a building for both residential and non-residential purposes). Commitments in this certificate which are specified to apply to a "common area" of a building or the development, apply only to that part of the building or development to be used for residential purposes.
4. If this certificate lists a central system as a commitment for a dwelling or building, and that system will also service any other dwelling or building within the development, then that system need only be installed once (even if it is separately listed as a commitment for that other dwelling or building).
5. If a star or other rating is specified in a commitment, this is a minimum rating.
6. All alternative water systems to be installed under these commitments (if any), must be installed in accordance with the requirements of all applicable regulatory authorities. NOTE: NSW Health does not recommend that stormwater, recycled water or private dam water be used to irrigate edible plants which are consumed raw, or that rainwater be used for human consumption in areas with potable water supply.

Legend

1. Commitments identified with a "✓" in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).
2. Commitments identified with a "✓" in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.
3. Commitments identified with a "✓" in the "Certifier check" column must be certified by a certifying authority as having been fulfilled. (Note: a certifying authority must not issue an occupation certificate (either interim or final) for a building listed in this certificate, or for any part of such a building, unless it is satisfied that each of the commitments whose fulfilment it is required to monitor in relation to the building or part, has been fulfilled).

BASIX[®]Certificate

Building Sustainability Index www.basix.nsw.gov.au

Multi Dwelling

Certificate number: 417236M

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 29/06/2009 published by the Department of Planning. This document is available at www.basix.nsw.gov.au

Director-General

Date of issue: Monday, 16 April 2012

To be valid, this certificate must be lodged within 3 months of the date of issue.



Project summary

Project name	Block 3 Part 1
Street address	Kensington Lane Chippendale 2008
Local Government Area	Sydney City Council
Plan type and plan number	deposited 1142053
Lot no.	7-8
Section no.	-
No. of unit buildings	1
No. of units in unit buildings	77
No. of attached dwelling houses	0
No. of separate dwelling houses	0

Project score

Water	✓ 40	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 22	Target 20

Certificate Prepared by (please complete before submitting to Council or PCA)

Name / Company Name: WSP

ABN (if applicable): 47 005 113 468

Description of project

Project address

Project name	Block 3 Part 1
Street address	Kensington Lane Chippendale 2008
Local Government Area	Sydney City Council
Plan type and plan number	deposited 1142053
Lot no.	7-8
Section no.	-

Project type

No. of unit buildings	1
No. of units in unit buildings	77
No. of attached dwelling houses	0
No. of separate dwelling houses	0

Site details

Site area (m ²)	604.4
Roof area (m ²)	604.4
Non-residential floor area (m ²)	167
Residential car spaces	1
Non-residential car spaces	0

Common area landscape

Common area lawn (m ²)	0
Common area garden (m ²)	8.9
Area of indigenous or low water use species (m ²)	0

Assessor details

Assessor number	20940
Certificate number	44164204
Climate zone	17

Project score

Water	✓ 40	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 22	Target 20

Description of project

The tables below describe the dwellings and common areas within the project

Unit building - Building1, 77 dwellings, 8 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
1.01	1	21.38	0.0	0	0
1.05	1	16.07	0.0	0	0
1.09	2	55.22	0.0	0	0
1.13	1	16.07	0.0	0	0
1.17	3	62.95	0.0	0	0
2.03	1	17.12	0.0	0	0
2.07	1	17.12	0.0	0	0
2.11	2	51.62	0.0	0	0
3.04	1	17.12	0.0	0	0
3.08	1	17.12	0.0	0	0
3.12	1	17.12	0.0	0	0
4.03	1	17.12	0.0	0	0
4.07	1	17.12	0.0	0	0
4.11	1	16.69	0.0	0	0
5.02	1	17.12	0.0	0	0
5.06	1	17.12	0.0	0	0
5.10	1	16.69	0.0	0	0
6.02	1	17.12	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
1.02	1	16.07	0.0	0	0
1.06	1	16.07	0.0	0	0
1.10	2	46.18	0.0	0	0
1.14	1	16.07	0.0	0	0
1.18	2	48.37	0.0	0	0
2.04	1	17.12	0.0	0	0
2.08	1	17.12	0.0	0	0
3.01	1	17.12	0.0	0	0
3.05	1	17.12	0.0	0	0
3.09	1	17.12	0.0	0	0
3.13	2	51.62	0.0	0	0
4.04	1	17.12	0.0	0	0
4.08	1	17.12	0.0	0	0
4.12	1	17.12	0.0	0	0
5.03	1	17.12	0.0	0	0
5.07	1	17.12	0.0	0	0
5.11	1	16.69	0.0	0	0
6.03	1	17.12	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
1.03	1	16.07	0.0	0	0
1.07	1	17.47	0.0	0	0
1.11	1	23.58	0.0	0	0
1.15	1	16.07	0.0	0	0
2.01	1	17.12	0.0	0	0
2.05	1	17.12	0.0	0	0
2.09	1	16.69	0.0	0	0
3.02	1	17.12	0.0	0	0
3.06	1	17.12	0.0	0	0
3.10	1	16.69	0.0	0	0
4.01	1	17.12	0.0	0	0
4.05	1	17.12	0.0	0	0
4.09	1	17.12	0.0	0	0
4.13	2	51.62	0.0	0	0
5.04	1	17.12	0.0	0	0
5.08	1	17.12	0.0	0	0
5.12	1	17.12	0.0	0	0
6.04	1	17.12	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
1.04	1	16.07	0.0	0	0
1.08	1	17.96	0.0	0	0
1.12	1	16.07	0.0	0	0
1.16	1	21.02	0.0	0	0
2.02	1	17.12	0.0	0	0
2.06	1	17.12	0.0	0	0
2.10	1	17.12	0.0	0	0
3.03	1	17.12	0.0	0	0
3.07	1	17.12	0.0	0	0
3.11	1	16.69	0.0	0	0
4.02	1	17.12	0.0	0	0
4.06	1	17.12	0.0	0	0
4.10	1	16.69	0.0	0	0
5.01	1	17.12	0.0	0	0
5.05	1	17.12	0.0	0	0
5.09	1	17.12	0.0	0	0
6.01	1	17.12	0.0	0	0
6.05	1	17.12	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
6.06	1	17.12	0.0	0	0
6.10	1	16.69	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
6.07	1	17.12	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
6.08	1	17.12	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
6.09	1	17.12	0.0	0	0

Description of project

The tables below describe the dwellings and common areas within the project

Common areas of unit building - Building1

Common area	Floor area (m²)
Lift car (No. 1)	-
Residential Garbage room	13.8
Storage - bikes	22
laundry	9.8

Common area	Floor area (m²)
MSB	8.4
Common lounges and studies	134.2
Lounge/foyer	34.7
Reception	4.6

Common area	Floor area (m²)
Hydraulic	8.8
Substation	58.9
admin	20
Hallway/lobby type (No. 1)	390.4

Common areas of the development (non-building specific)

Common area	Floor area (m²)
Car park area (No. 1)	14.5

Schedule of BASIX commitments

1. Commitments for unit building - Building1

(a) Dwellings

- (i) Water
- (ii) Energy
- (iii) Thermal Comfort

(b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

2. Commitments for attached dwelling houses

3. Commitments for separate dwelling houses

4. Commitments for common areas and central systems/facilities for the development (non-building specific)

- (i) Water
- (ii) Energy

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

1. Commitments for unit building - Building1

(a) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✓	✓	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✓	✓
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✓	✓
(e) The applicant must install:			
(aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and		✓	✓
(bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✓	✓
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✓	✓	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✓	
(g) The pool or spa must be located as specified in the table.	✓	✓	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✓	✓	✓

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	3 star (> 6 but <= 7.5 L/min)	4 star	6 star	6 star	no	no washing machine taps	-	-	-	-	-	-	-	-

Dwelling no.	Alternative water source							
	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
1.01, 1.02, 1.03, 1.04, 1.05, 1.06, 1.07, 1.08, 1.09, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15, 1.16, 1.17, 1.18, 2.01, 2.02, 2.03, 2.04, 2.05, 2.06, 2.07, 2.08, 2.09, 2.10, 2.11, 3.01, 3.02, 3.03, 3.04, 3.05, 3.06, 3.07, 3.08, 3.09, 3.10, 3.11, 3.13, 4.01, 4.02, 4.03, 4.04, 4.05, 4.06, 4.07, 4.08, 4.09, 4.10, 4.11, 4.12, 4.13, 5.01, 5.02, 5.03, 5.04, 5.05, 5.06, 5.07, 5.08, 5.09, 5.10, 5.12, 6.01, 6.02, 6.03, 6.04, 6.05, 6.06, 6.07, 6.08, 6.09, 6.10	on-site recycled water system (no. 1)	See central systems	See central systems	no	yes	yes	no	no

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✓	✓	✓
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✓	✓
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✓	✓
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✓	✓
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✓	✓	✓
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✓ ✓	
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below; (bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and (cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✓ ✓ ✓	✓
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✓	

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	central hot water system 1	individual fan, ducted to façade or roof	interlocked to light	individual fan, ducted to façade or roof	manual switch on/off	natural ventilation only, or no laundry	-

	Cooling		Heating		Artificial lighting						Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
1.17	3-phase airconditioning EER 3.0 - 3.5	3-phase airconditioning EER 3.0 - 3.5	3-phase airconditioning EER < 2.5	3-phase airconditioning EER < 2.5	3	1	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no
5.11	3-phase airconditioning EER 3.0 - 3.5	3-phase airconditioning EER 3.0 - 3.5	3-phase airconditioning EER < 2.5	3-phase airconditioning EER < 2.5	1	0	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no
1.09, 1.10, 1.18, 2.11, 3.13, 4.13	3-phase airconditioning EER 3.0 - 3.5	3-phase airconditioning EER 3.0 - 3.5	3-phase airconditioning EER < 2.5	3-phase airconditioning EER < 2.5	2	1	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
1.01, 1.02, 1.03, 1.04, 1.05, 1.06, 1.07, 1.08, 1.11, 1.12, 1.13, 1.14, 1.15, 1.16, 2.01, 2.02, 2.03, 2.04, 2.05, 2.06, 2.07, 2.08, 2.09, 2.10, 3.01, 3.02, 3.03, 3.04, 3.05, 3.06, 3.07, 3.08, 3.09, 3.10, 3.11, 3.12, 4.01, 4.02, 4.03,	3-phase airconditioning EER 3.0 - 3.5	3-phase airconditioning EER 3.0 - 3.5	3-phase airconditioning EER < 2.5	3-phase airconditioning EER < 2.5	1	0	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no

	Cooling		Heating		Artificial lighting						Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
4.04, 4.05, 4.06, 4.07, 4.08, 4.09, 4.10, 4.11, 4.12, 5.01, 5.02, 5.03, 5.04, 5.05, 5.06, 5.07, 5.08, 5.09, 5.10, 5.12, 6.01, 6.02, 6.03, 6.04, 6.05, 6.06, 6.07, 6.08, 6.09, 6.10												

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
5.11	-	-	-	-	electric cooktop & electric oven	-	no	-	no washing machine taps	-	-	-

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
1.01, 1.02, 1.03, 1.04, 1.05, 1.06, 1.07, 1.08, 1.09, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15, 1.16, 1.17, 1.18, 2.01, 2.02, 2.03, 2.04, 2.05, 2.06, 2.07, 2.08, 2.09, 2.10, 2.11, 3.01, 3.02, 3.03, 3.04, 3.05, 3.06, 3.07, 3.08, 3.09,	-	-	-	-	electric cooktop & electric oven	-	no	-	no washing machine taps	-	no	no

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
3.10, 3.11, 3.12, 3.13, 4.01, 4.02, 4.03, 4.04, 4.05, 4.06, 4.07, 4.08, 4.09, 4.10, 4.11, 4.12, 4.13, 5.01, 5.02, 5.03, 5.04, 5.05, 5.06, 5.07, 5.08, 5.09, 5.10, 5.12, 6.01, 6.02, 6.03, 6.04, 6.05, 6.06, 6.07, 6.08, 6.09, 6.10												

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.			
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.			
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✓	✓	✓
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✓	✓	✓

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
1.01	14	26
1.07	7	41
1.09	6	24
1.10	27	31
1.11	6.3	21.7

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
1.16	13	26
1.17	7	30
1.18	4	30
5.11	1.8	29.2
2.11, 3.13, 4.13	1	23
1.12, 1.13, 1.14, 1.15	4	35
1.02, 1.03, 1.04, 1.05, 1.06, 1.08	4	38
2.08, 2.09, 3.10, 3.11, 4.10, 4.11, 5.10, 6.10	1	32
All other dwellings	0.01	32

(b) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	4 star	no common facility	not specified

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Lift car (No. 1)	-	-	compact fluorescent	connected to lift call button	Yes
MSB	ventilation (supply + exhaust)	none ie. continuous	compact fluorescent	manual on / manual off	Yes
Hydraulic	ventilation exhaust only	none ie. continuous	compact fluorescent	manual on / manual off	Yes
Residential Garbage room	ventilation exhaust only	-	compact fluorescent	motion sensors	Yes
Common lounges and studies	air conditioning system	time clock or BMS controlled	compact fluorescent	motion sensors	Yes
Substation	ventilation (supply + exhaust)	none ie. continuous	compact fluorescent	manual on / manual off	Yes
Storage - bikes	ventilation exhaust only	time clock or BMS controlled	compact fluorescent	motion sensors	Yes
Lounge/foyer	air conditioning system	time clock or BMS controlled	compact fluorescent	time clock and motion sensors	Yes
admin	air conditioning system	time clock or BMS controlled	compact fluorescent	time clock and motion sensors	Yes
laundry	ventilation exhaust only	time clock or BMS controlled	compact fluorescent	manual on / timer off	No
Reception	air conditioning system	time clock or BMS controlled	compact fluorescent	motion sensors	Yes
Hallway/lobby type (No. 1)	no mechanical ventilation	-	compact fluorescent	motion sensors	Yes

Central energy systems	Type	Specification
Lift (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 8

4. Commitments for common areas and central systems/facilities for the development (non-building specific)

(b) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	4 star	no common facility	not specified

Central systems	Size	Configuration	Connection (to allow for...)
Central on-site recycled/alternative water supply (No. 1)	To supply at least 1328 litres of recycled water per day to the development (over and above the system's committed capacity, if any)	-	- Irrigation of 8.9 square metres of common landscape area on the site - car washing in 0 car washing bays on the site

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

Common area	Common area ventilation system		Common area lighting		
	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Car park area (No. 1)	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	compact fluorescent	time clock and motion sensors	Yes

Central energy systems	Type	Specification
Central hot water system (No. 1)	gas-fired storage (manifolded)	Piping insulation (ringmain & supply risers): (a) Piping external to building: R0.6 (~25 mm); (b) Piping internal to building: R0.6 (~25 mm)

Notes

1. In these commitments, "applicant" means the person carrying out the development.
2. The applicant must identify each dwelling, building and common area listed in this certificate, on the plans accompanying any development application, and on the plans and specifications accompanying the application for a construction certificate / complying development certificate, for the proposed development, using the same identifying letter or reference as is given to that dwelling, building or common area in this certificate.
3. This note applies if the proposed development involves the erection of a building for both residential and non-residential purposes (or the change of use of a building for both residential and non-residential purposes). Commitments in this certificate which are specified to apply to a "common area" of a building or the development, apply only to that part of the building or development to be used for residential purposes.
4. If this certificate lists a central system as a commitment for a dwelling or building, and that system will also service any other dwelling or building within the development, then that system need only be installed once (even if it is separately listed as a commitment for that other dwelling or building).
5. If a star or other rating is specified in a commitment, this is a minimum rating.
6. All alternative water systems to be installed under these commitments (if any), must be installed in accordance with the requirements of all applicable regulatory authorities. NOTE: NSW Health does not recommend that stormwater, recycled water or private dam water be used to irrigate edible plants which are consumed raw, or that rainwater be used for human consumption in areas with potable water supply.

Legend

1. Commitments identified with a "✓" in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).
2. Commitments identified with a "✓" in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.
3. Commitments identified with a "✓" in the "Certifier check" column must be certified by a certifying authority as having been fulfilled. (Note: a certifying authority must not issue an occupation certificate (either interim or final) for a building listed in this certificate, or for any part of such a building, unless it is satisfied that each of the commitments whose fulfilment it is required to monitor in relation to the building or part, has been fulfilled).

BASIX[®]Certificate

Building Sustainability Index www.basix.nsw.gov.au

Multi Dwelling

Certificate number: 423535M

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 29/06/2009 published by the Department of Planning. This document is available at www.basix.nsw.gov.au

Director-General

Date of issue: Monday, 16 April 2012

To be valid, this certificate must be lodged within 3 months of the date of issue.



Project summary

Project name	Block 3 Part 2
Street address	Kensington Lane Chippendale 2008
Local Government Area	Sydney City Council
Plan type and plan number	deposited 1142053
Lot no.	7-8
Section no.	-
No. of unit buildings	1
No. of units in unit buildings	97
No. of attached dwelling houses	0
No. of separate dwelling houses	0

Project score

Water	✓ 40	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 23	Target 20

Certificate Prepared by (please complete before submitting to Council or PCA)

Name / Company Name: WSP

ABN (if applicable): 47 005 113 468

Description of project

Project address

Project name	Block 3 Part 2
Street address	Kensington Lane Chippendale 2008
Local Government Area	Sydney City Council
Plan type and plan number	deposited 1142053
Lot no.	7-8
Section no.	-

Project type

No. of unit buildings	1
No. of units in unit buildings	97
No. of attached dwelling houses	0
No. of separate dwelling houses	0

Site details

Site area (m ²)	761.3
Roof area (m ²)	761.3
Non-residential floor area (m ²)	211
Residential car spaces	0
Non-residential car spaces	0

Common area landscape

Common area lawn (m ²)	0
Common area garden (m ²)	11.1
Area of indigenous or low water use species (m ²)	0

Assessor details

Assessor number	20940
Certificate number	49662899
Climate zone	17

Project score

Water	✓ 40	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 23	Target 20

Description of project

The tables below describe the dwellings and common areas within the project

Unit building - Building1, 97 dwellings, 8 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
2.12	4 or more bedrooms	114.31	0.0	0	0
2.16	1	17.1	0.0	0	0
2.20	1	17.12	0.0	0	0
2.24	1	17.12	0.0	0	0
3.14	4 or more bedrooms	114.31	0.0	0	0
3.18	1	17.1	0.0	0	0
3.22	1	17.12	0.0	0	0
3.26	1	17.12	0.0	0	0
4.14	4 or more bedrooms	114.31	0.0	0	0
4.18	3	17.1	0.0	0	0
4.22	1	17.12	0.0	0	0
4.26	1	17.12	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
2.13	1	15.95	0.0	0	0
2.17	1	25.03	0.0	0	0
2.21	1	17.12	0.0	0	0
2.25	2	52.32	0.0	0	0
3.15	1	15.95	0.0	0	0
3.19	1	25.03	0.0	0	0
3.23	1	17.12	0.0	0	0
3.27	2	52.32	0.0	0	0
4.15	1	15.95	0.0	0	0
4.19	1	25.03	0.0	0	0
4.23	1	17.12	0.0	0	0
4.27	2	53.32	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
2.14	1	25.29	0.0	0	0
2.18	1	17.12	0.0	0	0
2.22	1	17.12	0.0	0	0
2.26	1	18.77	0.0	0	0
3.16	1	25.29	0.0	0	0
3.20	1	17.12	0.0	0	0
3.24	1	17.12	0.0	0	0
3.28	1	18.77	0.0	0	0
4.16	1	25.29	0.0	0	0
4.20	1	17.12	0.0	0	0
4.24	1	17.12	0.0	0	0
4.28	1	18.77	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
2.15	1	16.21	0.0	0	0
2.19	1	17.12	0.0	0	0
2.23	1	17.12	0.0	0	0
2.27	2	53.91	0.0	0	0
3.17	1	16.21	0.0	0	0
3.21	1	17.12	0.0	0	0
3.25	1	17.12	0.0	0	0
3.29	2	53.91	0.0	0	0
4.17	1	16.21	0.0	0	0
4.21	1	17.12	0.0	0	0
4.25	1	17.12	0.0	0	0
4.29	2	53.91	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
5.13	2	51.62	0.0	0	0
5.17	1	16.21	0.0	0	0
5.21	1	17.12	0.0	0	0
5.25	1	17.12	0.0	0	0
5.29	2	53.91	0.0	0	0
6.14	1	17.12	0.0	0	0
6.18	1	17.12	0.0	0	0
7.01	1	17.12	0.0	0	0
7.05	1	17.12	0.0	0	0
7.09	1	17.12	0.0	0	0
7.13	1	17.12	0.0	0	0
7.17	1	17.12	0.0	0	0
7.21	2	53.91	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
5.14	4 or more bedrooms	114.15	0.0	0	0
5.18	1	17.1	0.0	0	0
5.22	1	17.12	0.0	0	0
5.26	2	17.12	0.0	0	0
6.11	1	25.03	0.0	0	0
6.15	1	17.12	0.0	0	0
6.19	2	52.32	0.0	0	0
7.02	1	17.12	0.0	0	0
7.06	1	17.12	0.0	0	0
7.10	1	16.69	0.0	0	0
7.14	1	17.12	0.0	0	0
7.18	1	17.12	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
5.15	1	15.95	0.0	0	0
5.19	1	25.03	0.0	0	0
5.23	1	17.12	0.0	0	0
5.27	2	52.32	0.0	0	0
6.12	1	17.12	0.0	0	0
6.16	1	17.12	0.0	0	0
6.20	1	18.77	0.0	0	0
7.03	1	17.12	0.0	0	0
7.07	1	17.12	0.0	0	0
7.11	1	25.03	0.0	0	0
7.15	1	17.12	0.0	0	0
7.19	2	52.32	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
5.16	1	25.29	0.0	0	0
5.20	1	17.12	0.0	0	0
5.24	1	17.12	0.0	0	0
5.28	1	18.77	0.0	0	0
6.13	1	17.12	0.0	0	0
6.17	1	17.12	0.0	0	0
6.21	2	53.91	0.0	0	0
7.04	1	17.12	0.0	0	0
7.08	1	17.12	0.0	0	0
7.12	1	17.12	0.0	0	0
7.16	1	17.12	0.0	0	0
7.20	1	18.77	0.0	0	0

Description of project

The tables below describe the dwellings and common areas within the project

Common areas of unit building - Building1

Common area	Floor area (m²)
Lift car (No. 1)	-
Residential Garbage room	17.4
Storage - bikes	27.7
laundry	12.3

Common area	Floor area (m²)
MSB	10.6
Common lounges and studies	169
Lounge/foyer	43.7
Reception	5.8

Common area	Floor area (m²)
Hydraulic	11.1
Substation	74.3
admin	25.2
Hallway/lobby type (No. 1)	491.8

Schedule of BASIX commitments

1. Commitments for unit building - Building1

(a) Dwellings

- (i) Water
- (ii) Energy
- (iii) Thermal Comfort

(b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

2. Commitments for attached dwelling houses

3. Commitments for separate dwelling houses

4. Commitments for common areas and central systems/facilities for the development (non-building specific)

- (i) Water
- (ii) Energy

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

1. Commitments for unit building - Building1

(a) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✓	✓	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✓	✓
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✓	✓
(e) The applicant must install:			
(aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and		✓	✓
(bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✓	✓
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✓	✓	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✓	
(g) The pool or spa must be located as specified in the table.	✓	✓	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✓	✓	✓

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	3 star (> 6 but <= 7.5 L/min)	4 star	6 star	6 star	no	no washing machine taps	-	-	-	-	-	-	-	-

	Alternative water source							
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
All dwellings	on-site recycled water system (no. 1)	See central systems	See central systems	no	yes	yes	no	no
None	-	-	-	-	-	-	-	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✓	✓	✓
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✓	✓
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✓	✓
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✓	✓

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✓	✓	✓
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✓ ✓	
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below; (bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and (cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✓ ✓ ✓	✓
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✓	

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	central hot water system 1	individual fan, ducted to façade or roof	interlocked to light	individual fan, ducted to façade or roof	manual switch on/off	natural ventilation only, or no laundry	-

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
2.12, 3.14, 5.14	3-phase airconditioning EER 3.0 - 3.5	3-phase airconditioning EER 3.0 - 3.5	3-phase airconditioning EER < 2.5	3-phase airconditioning EER < 2.5	5	1	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no
2.25, 2.27, 3.27, 3.29, 4.27, 4.29, 5.26, 5.27, 5.29, 6.19, 6.21, 7.19, 7.21	3-phase airconditioning EER 3.0 - 3.5	3-phase airconditioning EER 3.0 - 3.5	3-phase airconditioning EER < 2.5	3-phase airconditioning EER < 2.5	2	1	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
2.13, 2.14, 2.15, 2.16, 2.17, 2.18, 2.19, 2.20, 2.21, 2.22, 2.23, 2.24, 2.26, 3.15, 3.16, 3.17, 3.18, 3.19, 3.20, 3.21, 3.22, 3.23, 3.24, 3.25, 3.26, 3.28, 4.14, 4.15, 4.16, 4.17, 4.18, 4.19, 4.20, 4.21, 4.22, 4.23, 4.24, 4.25, 4.26,	3-phase airconditioning EER 3.0 - 3.5	3-phase airconditioning EER 3.0 - 3.5	3-phase airconditioning EER < 2.5	3-phase airconditioning EER < 2.5	1	0	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no

	Cooling		Heating		Artificial lighting						Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
4.28, 5.13, 5.15, 5.16, 5.17, 5.18, 5.19, 5.20, 5.21, 5.22, 5.23, 5.24, 5.25, 5.28, 6.11, 6.12, 6.13, 6.14, 6.15, 6.16, 6.17, 6.18, 6.20, 7.01, 7.02, 7.03, 7.04, 7.05, 7.06, 7.07, 7.08, 7.09, 7.10, 7.11, 7.12, 7.13, 7.14, 7.15, 7.16,												

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
7.17, 7.18, 7.20												

Dwelling no.	Individual pool		Individual spa		Appliances & other efficiency measures							
	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	electric cooktop & electric oven	-	no	-	no washing machine taps	-	no	no

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.			
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.			

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✓	✓	✓
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✓	✓	✓

Dwelling no.	Thermal loads	
	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
5.13	5	11
5.14	20	10
5.15	6	22
5.16	0.8	18.1
5.17	1.3	29
5.18	1.4	25.9
7.10	2	28
7.11	5.3	16.7
7.19	9.2	9.1
7.20	0.1	27.6
7.21	3.7	12.8
2.12, 3.14, 4.14	10	17
2.13, 3.15, 4.15	4	24
2.14, 3.16, 4.16	0.01	36
2.15, 3.17, 4.17	0.01	31

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
2.16, 3.18, 4.18	1	29
2.17, 3.19, 4.19, 5.19, 6.11	3.2	16
2.25, 3.27, 4.27, 5.27, 6.19	3	18
2.26, 3.28, 4.28, 5.28, 6.20	0.01	29
2.27, 3.29, 4.29, 5.29, 6.21	1	26
7.12, 7.13, 7.14, 7.15, 7.16, 7.17, 7.18	4.5	26
7.01, 7.02, 7.03, 7.04, 7.05, 7.06, 7.07, 7.08, 7.09	1.1	28.8
All other dwellings	4	31

(b) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	no common facility	no common facility	not specified

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Lift car (No. 1)	-	-	compact fluorescent	connected to lift call button	Yes
MSB	ventilation (supply + exhaust)	none ie. continuous	compact fluorescent	manual on / manual off	Yes
Hydraulic	ventilation exhaust only	none ie. continuous	compact fluorescent	manual on / manual off	Yes
Residential Garbage room	ventilation exhaust only	-	compact fluorescent	motion sensors	Yes
Common lounges and studies	air conditioning system	time clock or BMS controlled	compact fluorescent	motion sensors	Yes
Substation	ventilation (supply + exhaust)	none ie. continuous	compact fluorescent	manual on / manual off	Yes
Storage - bikes	ventilation exhaust only	time clock or BMS controlled	compact fluorescent	motion sensors	Yes
Lounge/foyer	air conditioning system	time clock or BMS controlled	compact fluorescent	time clock and motion sensors	Yes
admin	air conditioning system	time clock or BMS controlled	compact fluorescent	time clock and motion sensors	Yes
laundry	ventilation exhaust only	time clock or BMS controlled	compact fluorescent	manual on / timer off	No
Reception	air conditioning system	time clock or BMS controlled	compact fluorescent	motion sensors	Yes
Hallway/lobby type (No. 1)	no mechanical ventilation	-	compact fluorescent	motion sensors	Yes

Central energy systems	Type	Specification
Lift (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 8

4. Commitments for common areas and central systems/facilities for the development (non-building specific)

(b) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	no common facility	no common facility	not specified

Central systems	Size	Configuration	Connection (to allow for...)
Central on-site recycled/alternative water supply (No. 1)	To supply at least 1750 litres of recycled water per day to the development (over and above the system's committed capacity, if any)	-	- Irrigation of 11.1 square metres of common landscape area on the site - car washing in 0 car washing bays on the site

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

Central energy systems	Type	Specification
Central hot water system (No. 1)	gas-fired storage (manifolded)	Piping insulation (ringmain & supply risers): (a) Piping external to building: R0.6 (~25 mm); (b) Piping internal to building: R0.6 (~25 mm)

Notes

1. In these commitments, "applicant" means the person carrying out the development.
2. The applicant must identify each dwelling, building and common area listed in this certificate, on the plans accompanying any development application, and on the plans and specifications accompanying the application for a construction certificate / complying development certificate, for the proposed development, using the same identifying letter or reference as is given to that dwelling, building or common area in this certificate.
3. This note applies if the proposed development involves the erection of a building for both residential and non-residential purposes (or the change of use of a building for both residential and non-residential purposes). Commitments in this certificate which are specified to apply to a "common area" of a building or the development, apply only to that part of the building or development to be used for residential purposes.
4. If this certificate lists a central system as a commitment for a dwelling or building, and that system will also service any other dwelling or building within the development, then that system need only be installed once (even if it is separately listed as a commitment for that other dwelling or building).
5. If a star or other rating is specified in a commitment, this is a minimum rating.
6. All alternative water systems to be installed under these commitments (if any), must be installed in accordance with the requirements of all applicable regulatory authorities. NOTE: NSW Health does not recommend that stormwater, recycled water or private dam water be used to irrigate edible plants which are consumed raw, or that rainwater be used for human consumption in areas with potable water supply.

Legend

1. Commitments identified with a "✓" in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).
2. Commitments identified with a "✓" in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.
3. Commitments identified with a "✓" in the "Certifier check" column must be certified by a certifying authority as having been fulfilled. (Note: a certifying authority must not issue an occupation certificate (either interim or final) for a building listed in this certificate, or for any part of such a building, unless it is satisfied that each of the commitments whose fulfilment it is required to monitor in relation to the building or part, has been fulfilled).

Assessor Certificate

Multiple Dwellings

Certificate Version 6.1. Prior versions not valid after 1 March 2006

Issued in accordance with the requirements of
BASIX Thermal Comfort Simulation Method



12/04/2012 Block 3 Part 1

Assessor					
Name:	Katie Fallowfield	Company:	Built Ecology	ABSA #:	20940
Address:	Level 1, 41 McLaren St North Sydney, NSW 2060	Phone:	0429197079	Fax:	
		Email:	katie.fallowfield@wspgroup.com.au		
Declaration of interest:		The Assessor has provided design advice to the Applicant			

Client			
Name:	Anthony Green	Company:	Fraser's Property
Address:	Suite 11, Lumiere Commercial Level 12, 101 Bathurst Street SYDNEY NSW 2000	Phone:	(02) 8823 8819
		Fax:	
		Email:	Anthony.Green@frasersproperty.com.au

Project		
Address:	Kensington Lane	CHIPPENDALE NSW 2008
Applicant:	Fraser's Broadway Pty Ltd	LGA: Sydney City Council

Assessment:			
Date:	File Ref: KSP 1.01	Software: BERS	Version: 4.2

Documentation:	
-----------------------	--

All details, upon which this assessment has been based, are included in the project documentation that has been stamped and signed by the Assessor issuing this certificate, as identified below:

Thermal Performance Spec:

Attached, Affixed to drawings Page#: A-201

Drawings: (Title, Ref.#, Revision, Issue date, etc)

A-201 to A-210, A-301 to A-303, A-401 to A-407, A-501, A-502, A-601

Building Specifications: (Title, Ref.#, Revision, Issue date, etc)



ABSA Assessor Certificate		Assessor # 20940		Certificate # 44164204		Issued:11-Apr-2012	
Thermal performance specifications						Page 1	
Unit number(s)	Certificate number	Floor area (m2)		Predict.loads(area adjusted J/m2/y)		Concessions	Qualify for ventilation bonus
		Cond.	Uncond.	Heat	Cool (Sens & Lat)		
1.01	44164204	22	0	14	26		
1.02 (+5)	96245702	17	0	4	38		
1.07	20186131	17	0	7	41		
1.09	18285369	56	0	6	24		
1.10	69522667	47	0	27	31		
1.11	80768174	23	0	6	22		
1.12 (+3)	24101381	17	0	4	35		
1.16	96381830	22	0	13	26		
1.17	24794826	63	0	7	30		
1.18	97871060	51	0	4	30		
2.01 (+45)	18819389	17	0	0	32		
2.08 (+4)	52934743	17	0	1	32		
2.09 (+2)	69625553	17	0	1	32		
2.11 (+2)	78313345	52	0	1	23		
5.11	34988203	17	0	2	29		

Assessor Certificate

Multiple Dwellings

Certificate Version 6.1. Prior versions not valid after 1 March 2006

Issued in accordance with the requirements of
BASIX Thermal Comfort Simulation Method



12/04/2012 Block 3 Part 2

Assessor					
Name:	Katie Fallowfield	Company:	Built Ecology	ABSA #:	20940
Address:	Level 1, 41 McLaren St North Sydney, NSW 2060	Phone:	0429197079	Fax:	
		Email:	katie.fallowfield@wspgroup.com.au		
Declaration of interest:		The Assessor has provided design advice to the Applicant			

Client			
Name:	Anthony Green	Company:	Fraser's Property
Address:	Suite 11, Lumiere Commercial Level 12, 101 Bathurst Street SYDNEY NSW 2000	Phone:	(02) 8823 8819
		Fax:	
		Email:	Anthony.Green@frasersproperty.com.au

Project		
Address:	Kensington Lane	CHIPPENDALE NSW 2008
Applicant:	Fraser's Broadway Pty Ltd	LGA: Sydney City Council

Assessment:			
Date:	File Ref: KSP 2.12	Software: BERS	Version: 4.2

Documentation:	
-----------------------	--

All details, upon which this assessment has been based, are included in the project documentation that has been stamped and signed by the Assessor issuing this certificate, as identified below:

Thermal Performance Spec:

Attached, Affixed to drawings Page#: A-201

Drawings: (Title, Ref.#, Revision, Issue date, etc)

A-201 to A-210, A-301 to A-303, A-401 to A-407, A-501, A-502, A-601

Building Specifications: (Title, Ref.#, Revision, Issue date, etc)



or stamp

ABSA Assessor Certificate		Assessor # 20940		Certificate # 49662899		Issued:11-Apr-2012	
Thermal performance specifications						Page 1	
Unit number(s)	Certificate number	Floor area (m2)		Predict.loads(area adjusted J/m2/y)		Consessions	Qualify for ventilation bonus
		Cond.	Uncond.	Heat	Cool (Sens & Lat)		
2.12 (+2)	49662899	112	0	10	17		
2.13 (+2)	16164755	17	0	4	24		
2.14 (+2)	20053356	25	0	0	36		
2.15 (+2)	25502455	16	0	0	31		
2.16 (+2)	91020353	18	0	1	29		
2.17 (+4)	55463102	25	0	3	16		
2.18 (+34)	20284686	17	0	4	31		
2.25 (+4)	51736189	52	0	3	18		
2.26 (+4)	45938157	20	0	0	29		
2.27 (+4)	21077221	53	0	1	26		
5.13	18061187	52	0	5	11		
5.14	86053518	112	0	20	10		
5.15	74535314	17	0	6	22		
5.16	58136806	25	0	1	18		
5.17	22270365	25	0	1	29		
5.18	57869528	25	0	1	26		

ABSA Pty Ltd. Level 9 Elizabeth Towers 418a Elizabeth St Surry Hills NSW 2010

phone: 1300 889 438 fax: (02) 9281 9514 email: support@absa.net.au www.absa.net.au

ABSA Assessor Certificate		Assessor # 20940		Certificate # 32594346		Issued:11-Apr-2012	
Thermal performance specifications						Page 2	
Unit number(s)	Certificate number	Floor area (m2)		Predict.loads(area adjusted J/m2/y		Consessions	Quality for ventilation bonus
		Cond.	Uncond.	Heat	Cool (Sens & Lat)		
7.01 (+8)	32594346	25	0	1	29		
7.10	95976902	25	0	2	28		
7.11	40319790	25	0	5	17		
7.12 (+6)	44505568	25	0	5	26		
7.19	32176190	52	0	9	9		
7.20	69402997	25	0	0	28		
7.21	78198550	25	0	4	13		

Assessor Certificate

Multiple Dwellings

Certificate Version 6.1. Prior versions not valid after 1 March 2006

Issued in accordance with the requirements of
BASIX Thermal Comfort Simulation Method



12/04/2012 Block 10

Assessor					
Name:	Katie Fallowfield	Company:	Built Ecology	ABSA #:	20940
Address:	Level 1, 41 McLaren St North Sydney, NSW 2060	Phone:	0429197079	Fax:	
		Email:	katie.fallowfield@wspgroup.com.au		
Declaration of interest:		The Assessor has provided design advice to the Applicant			

Client				
Name:	Anthony Green	Company:	Fraser's Property	
Address:	Suite 11, Lumiere Commercial Level 12, 101 Bathurst Street SYDNEY NSW 2000	Phone:	(02) 8823 8819	
		Fax:		
		Email:	Anthony.Green@frasersproperty.com.au	

Project		
Address:	Kensington Lane	CHIPPENDALE NSW 2008
Applicant:	Fraser's Broadway Pty Ltd	LGA: Sydney City Council

Assessment:			
Date:	File Ref: KSP101.01	Software: BERS	Version: 4.2

Documentation:	
-----------------------	--

All details, upon which this assessment has been based, are included in the project documentation that has been stamped and signed by the Assessor issuing this certificate, as identified below:

Thermal Performance Spec:

Attached, Affixed to drawings Page#: A-211

Drawings: (Title, Ref.#, Revision, Issue date, etc)

A-211 to A-214, A-304, A-401 to A-404, A-408 to A-410

Building Specifications: (Title, Ref.#, Revision, Issue date, etc)



ssessor stamp

ABSA Assessor Certificate		Assessor #	20940	Certificate #	48063635	Issued:11-Apr-2012	
Thermal performance specifications						Page 1	
Unit number(s)	Certificate number	Floor area (m2)		Predict.loads(area adjusted J/m2/y)		Consessions	Qualify for ventilation bonus
		Cond.	Uncond.	Heat	Cool (Sens & Lat)		
101.01	48063635	113	0	0	27		
102.01	64606941	68	0	49	41		
102.02	41450758	26	0	1	40		
102.03	21573010	21	0	40	38		
103.01	93108258	53	0	1	30		
103.02	61478816	51	0	1	38		
103.03	23755686	50	0	2	18		
103.04	43146839	17	0	1	33		
103.05	97714783	137	0	3	21		
103.06	77354237	17	0	0	33		
103.07	19608571	24	0	0	40		
105.01	53819220	53	0	3	20		
105.02	28756854	51	0	2	22		
105.03	21193642	50	0	5	11		
105.04	91029013	17	0	1	28		
105.05	44756389	137	0	6	10		

ABSA Pty Ltd. Level 9 Elizabeth Towers 418a Elizabeth St Surry Hills NSW 2010

phone: 1300 889 438 fax: (02) 9281 9514 email: support@absa.net.au www.absa.net.au

ABSA Assessor Certificate		Assessor # 20940		Certificate # 75196586		Issued:11-Apr-2012	
Thermal performance specifications						Page 2	
Unit number(s)	Certificate number	Floor area (m2)		Predict.loads(area adjusted J/m2/y		Consessions	Qualify for ventilation bonus
		Cond.	Uncond.	Heat	Cool (Sens & Lat)		
105.06	75196586	17	0	0	30		
105.07	44021576	24	0	0	37		

Thermal Performance Specifications - BASIX THERMAL COMFORT - Simulation Method

These are the Specifications upon which the Certified Assessment is based. If details included in these Specifications vary from other drawings or written specifications, these Specifications shall take precedence. If only one specification option is detailed for a building element, that specification must apply to all instances of that element for the project. If alternate specifications are detailed for a building element, the location and extent of alternate specifications must be detailed below and / or clearly indicated on referenced documents.

Windows	Product ID	Glass	Frame	U value	SHGC	Area M2	Detail
Generic		Single clear	Aluminium	7.37	0.74		As per detail on plans

Skylights	Product ID	Glass	Frame	U value	SHGC	Area M2	Detail
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Any U and SHGC values specified on Certificates Issued after 1 May 2007 are according to NFRC. All values prior to this date are ANAC.
Alternate products may be used if their U value is lower, and the SHGC value is less than 10% higher or lower

External Walls	Construction	Insulation	Colour - Solar absorptancy	Detail
Concrete 100mm int. ins		R2.5	Medium - SA 0.475 - 0.7	

Internal walls	Construction	Insulation	Detail
hebel power panel		R1.0	Party walls
Plasterboard on Studs		None	Interior to dwelling

Floors	Construction	Insulation	Covering	Detail
Concrete		None	Carpet	bedrooms and living areas
Concrete		None	Ceramic Tile	bathrooms and kitchens

Ceilings	Construction	Insulation	Detail
Concrete		None	

Roof	Construction	Insulation	Colour - Solar absorptancy	Detail
Tiled Concrete 100mm		R3	Medium - SA 0.475 - 0.7	

Window cover	Internal (curtains)	External (awnings, shutters, etc)
Holland blinds		None

Fixed Shading	Eaves (width - inc gutters, height above windows)	Verandahs, Pergolas (type, description)
	0	0 As per detail on plans

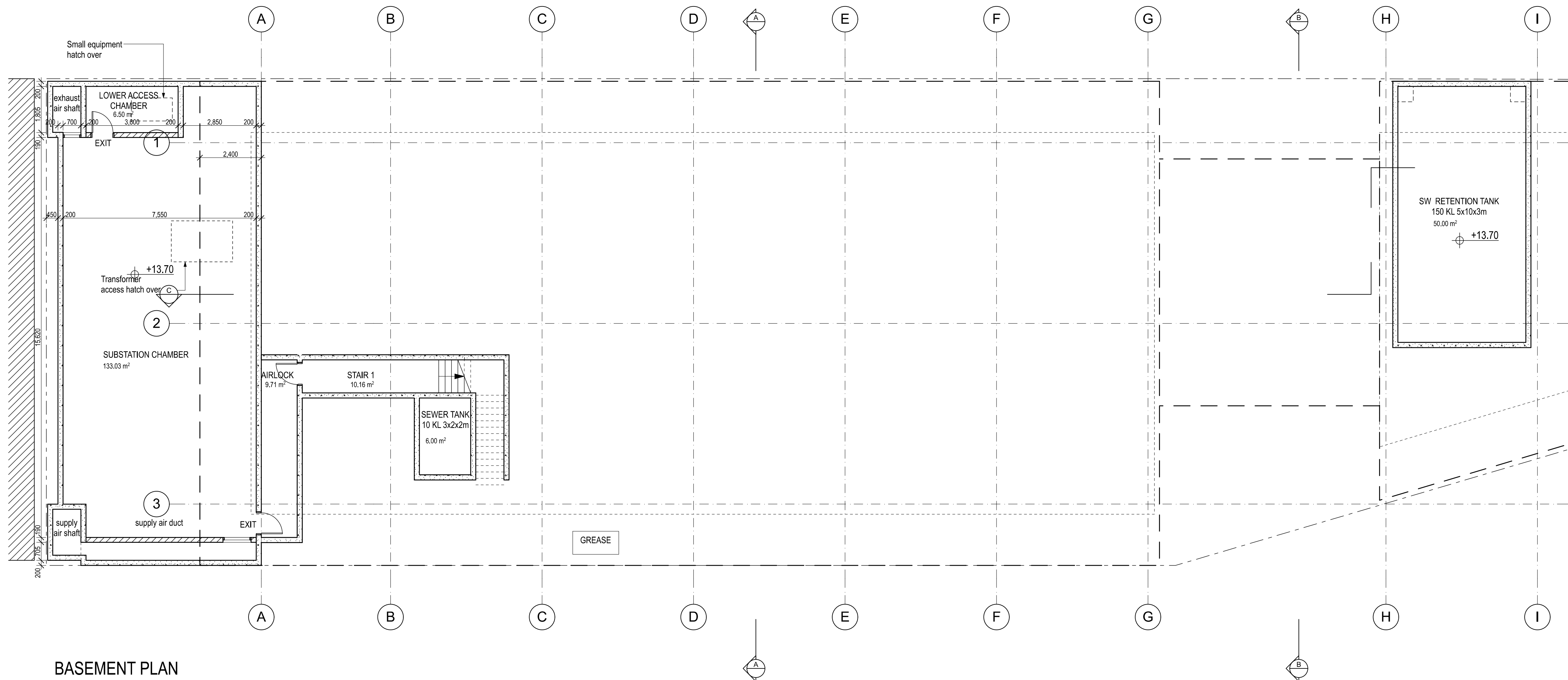
Overshadowing	Overshadowing structures	Overshadowing trees
	as per context plans	

Orientation, Exposure, Ventilation and Infiltration

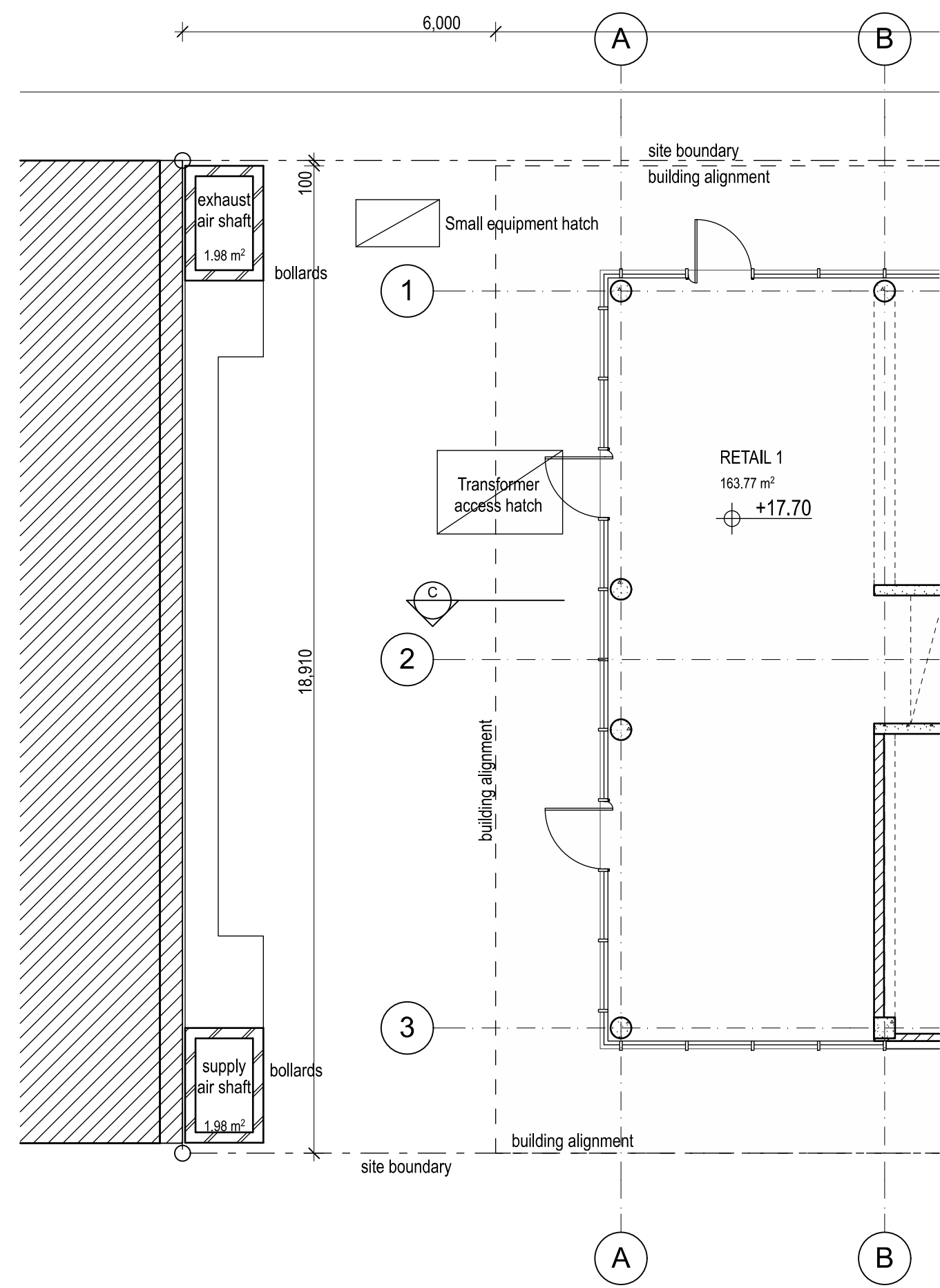
ABSA Assessor Stamp

Orientation of nominal north elevation	78
Terrain category	Suburban
Roof Ventilation	Unventilated
Cross Ventilation	None
Subfloor Ventilation	Not Applicable
Living area open to entry:	Yes
Living areas separated by doors:	Yes
Stair open to heated areas:	No
Seals to windows and doors:	Yes
Exhaust fans without dampers:	No
Ventilated skylights:	No
Open fire or unflued gas heater:	No
Vented downlights:	No
Wall and ceiling vents:	No



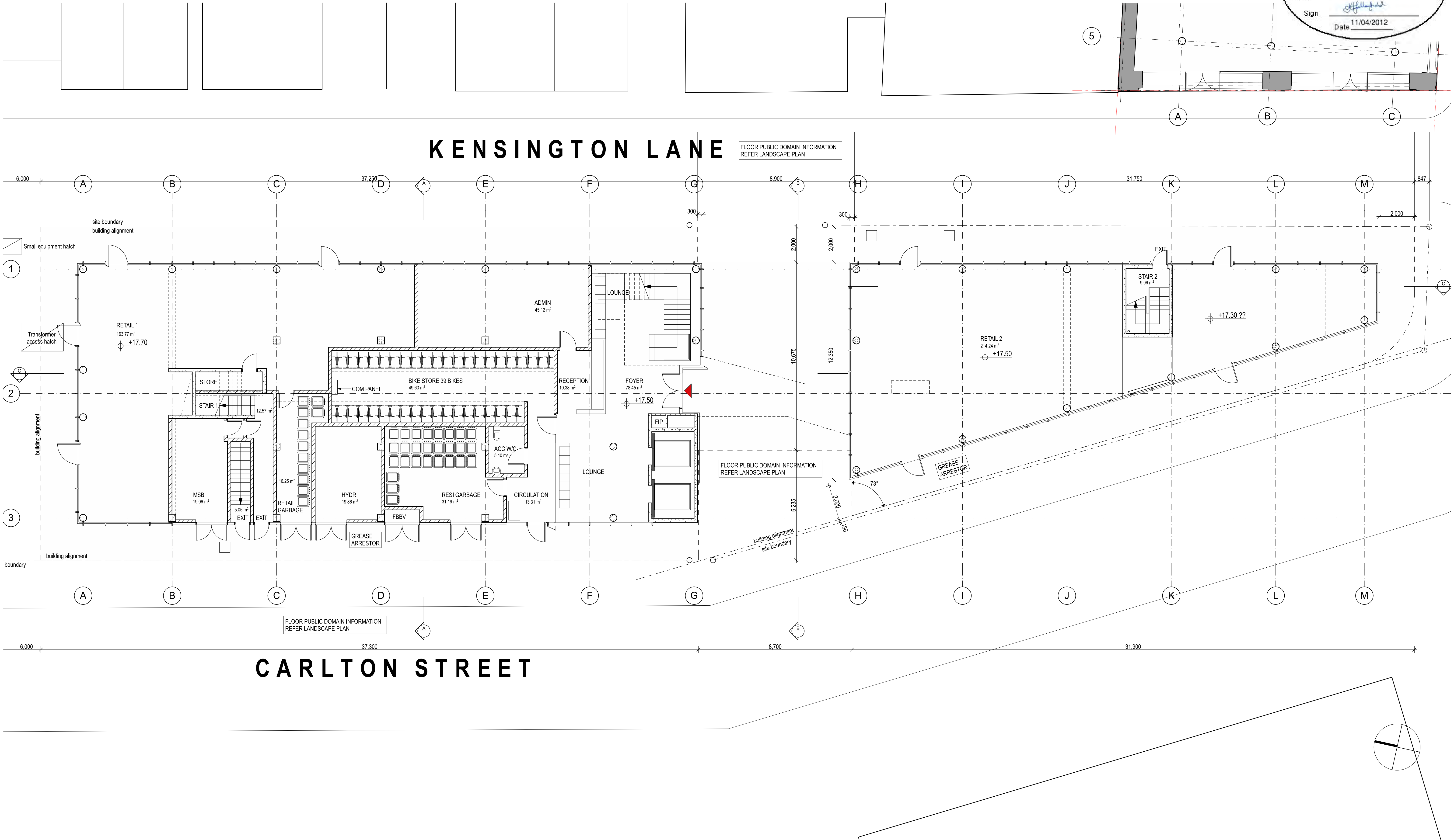


BASEMENT PLAN

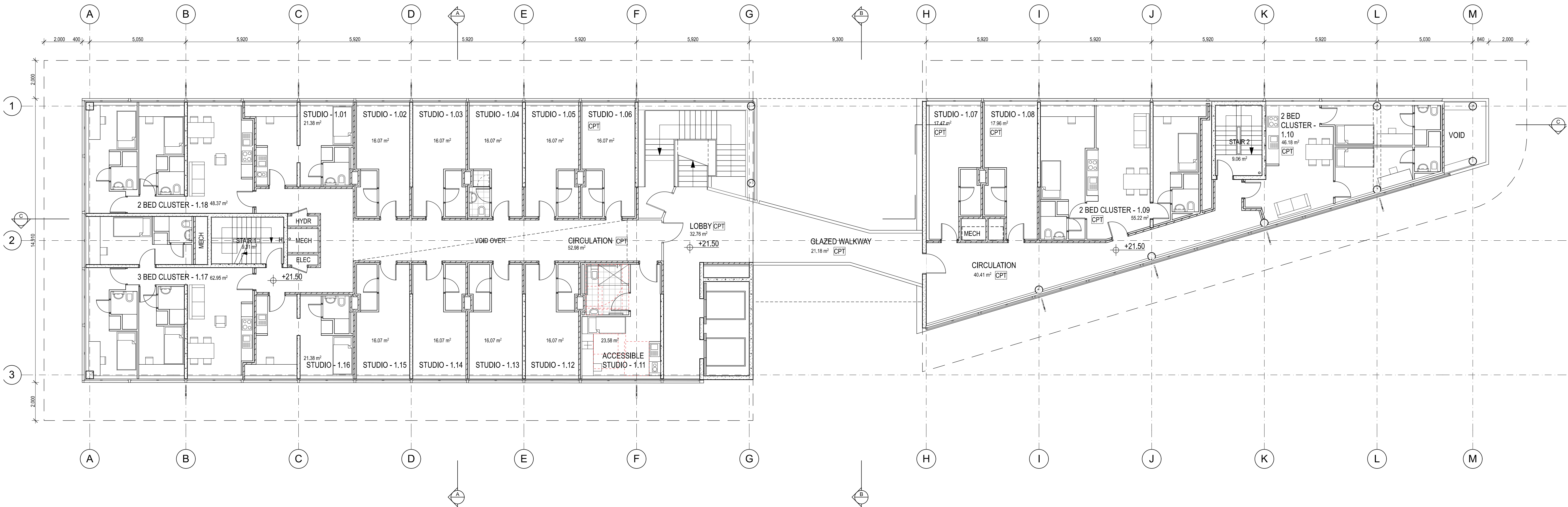


GROUND LEVEL PLAN

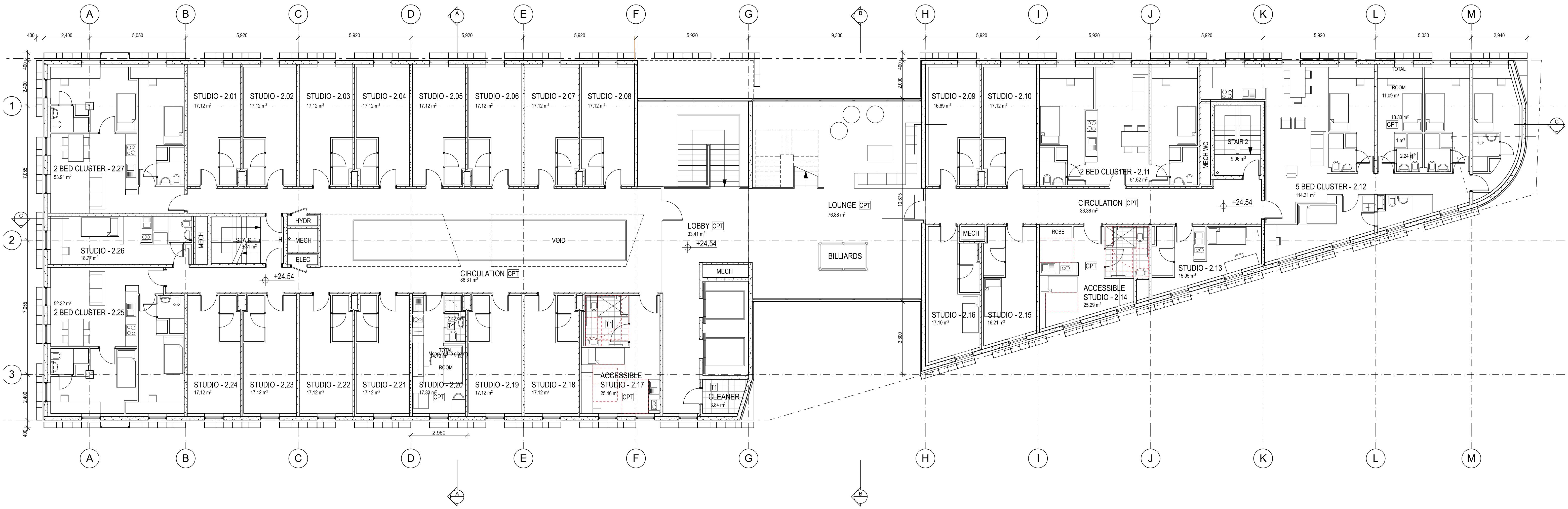
DATE	REV	NOTES :	NOTES:	CONTRACTOR	CIVIL ENGINEER	ELECTRICAL ENGINEER	MECHANICAL ENGINEER	PCA	CLIENT:	PROJECT :	ARCHITECT	DRAWING TITLE	DRAWN BY
			Do not scale off drawings. Use figured dimensions only. Report any discrepancies to the architect. These designs, plans, specifications and the copyright therein are the property of Tonkin Zulaikha Greer Architects Pty Ltd, and must not be reproduced or copied wholly or in part without written permission of Tonkin Zulaikha Greer Architects Pty Ltd.	ESD WSP BUILT ECOLOGY T: 02 8907 0900 E: alan.davis@wspgroup.com.au	MOTT MACDONALD T: 02 9439 2633 E: swillshier@hugestrueman.com.au	WSP BUILDINGS T: 02 8907 0900 E: rob.beck@wspgroup.com.au	WSP BUILDINGS T: 02 8907 0900 E: tim.dward@wspgroup.com.au	CITY PLAN SERVICES T: 02 8270 3500 E: darren@cityplan.com.au	FRASERS BROADWAY PTY. LTD.	KENSINGTON ST PRECINCT BLOCKS 3B & 3C STUDENT HOUSING & RETAIL PROJECT NO : 11021	TONKIN ZULAIKHA GREER ARCHITECTS 117 Reservoir Street Surry Hills, NSW 2010 ABN: 46002722349 P: (02) 9215 4900 F: (02) 9215 4901 EMAIL: john@tazg.com.au	BLOCK 3B/C L-B1 SUBSTATION SCALES 1:100@A1 1:200@A3 PHASE FOR PLANNING APPROVAL DRAWING NO A-201	JC TG DATE MARCH 2012 REVISION



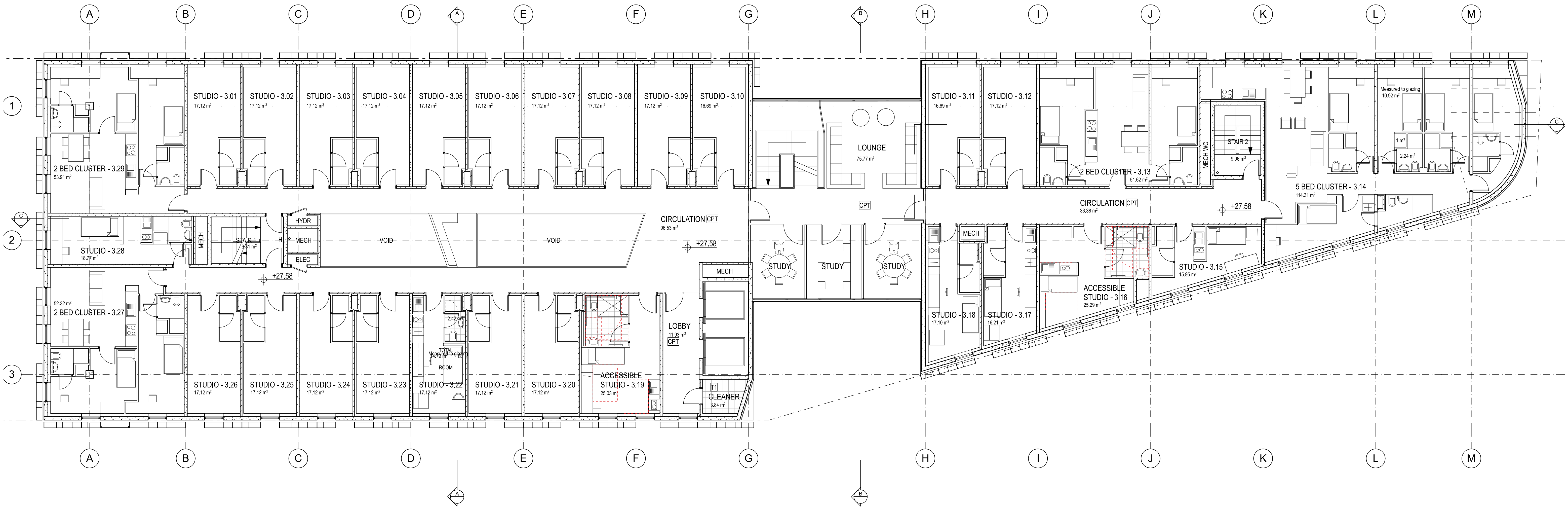
DATE	REV	NOTES :	NOTES:	CONTRACTOR	CIVIL ENGINEER	ELECTRICAL ENGINEER	MECHANICAL ENGINEER	PCA	CLIENT:	PROJECT :	ARCHITECT	DRAWING TITLE	DRAWN BY
			Do not scale off drawings. Use figured dimensions only. Report any discrepancies to the architect. These designs, plans, specifications and the copyright therein are the property of Tonkin Zulaikha Greer Architects Pty Ltd, and must not be reproduced or copied wholly or in part without written permission of Tonkin Zulaikha Greer Architects Pty Ltd.	- T:	MOTT MACDONALD T: 02 9439 2633 E: swillshier@hugestrueman.com.au	WSP BUILDINGS T: 02 8907 0900 E: rob.beck@wspgroup.com.au	WSP BUILDINGS T: 02 8907 0900 E: tim.hard@wspgroup.com.au	CITY PLAN SERVICES T: 02 8270 3500 E: darren@cityplan.com.au	T: (02) 8823 8800	KENSINGTON ST PRECINCT BLOCKS 3B & 3C STUDENT HOUSING & RETAIL	TONKIN ZULAIKHA GREER ARCHITECTS 117 Reservoir Street Surry Hills, NSW 2010 ABN: 46002722349 P: (02) 9215 4900 F: (02) 9215 4901 EMAIL: john@tjg.com.au	BLOCK 3B/C: GROUND LEVEL	JC
				ESD WSP BUILT ECOLOGY T: 02 8907 0900 E: alan.davis@wspgroup.com.au	STRUCTURAL ENGINEER MOTT MACDONALD T: 02 9439 2633 E: swillshier@hugestrueman.com.au	HYDRAULIC ENGINEER WSP BUILDINGS T: 02 8907 0900	FIRE ENGINEERING WSP BUILDINGS T: 02 8907 0900 E: carl.voss@wspgroup.com.au	TOWN PLANNER JBA PLANNING T: 02 9556 6962 E: j.buchanan@jbauplanning.com.au				1:100@A1 1:200@A3	TG
										PROJECT NO : 11021		PHASE FOR PLANNING APPROVAL	DATE MARCH 2012
												DRAWING NO A-202	REVISION



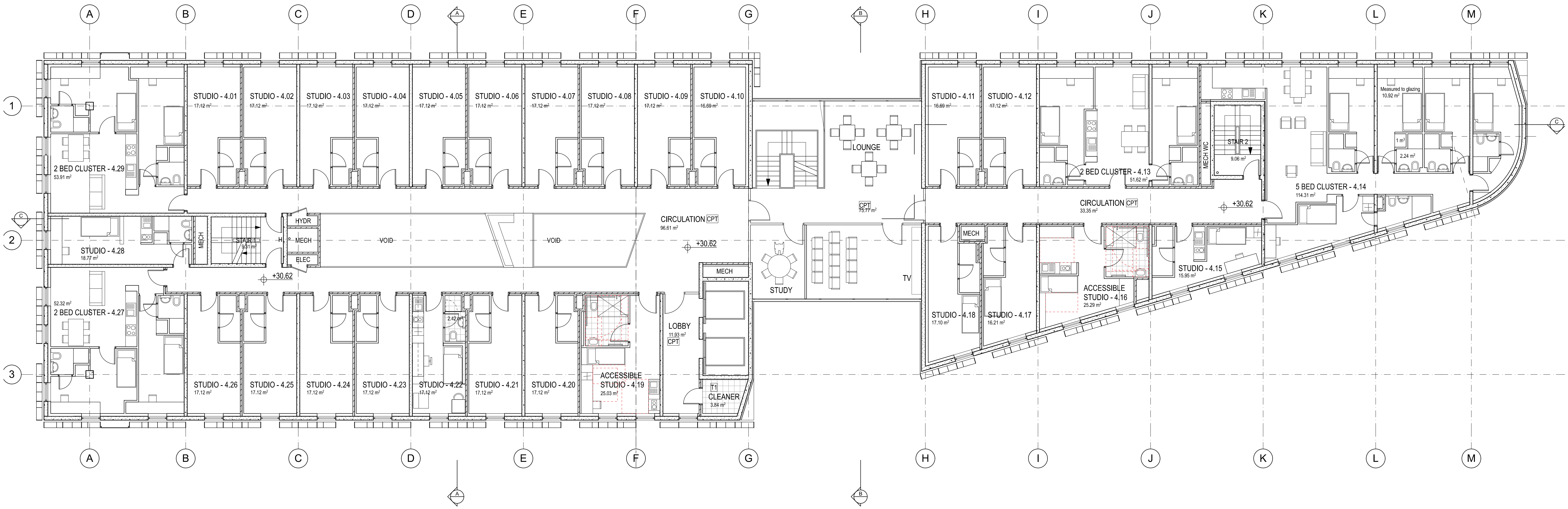
DATE	REV	NOTES :	NOTES:	CONTRACTOR	CIVIL ENGINEER	ELECTRICAL ENGINEER	MECHANICAL ENGINEER	PCA	CLIENT:	PROJECT :	ARCHITECT	DRAWING TITLE	DRAWN BY
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				ESD WSP BUILT ECOLOGY T: 02 8907 0900 E: alan.davis@wspgroup.com.au	STRUCTURAL ENGINEER MOTT MACDONALD T: 02 9439 2633 E: swillshier@hugestrueman.com.au	HYDRAULIC ENGINEER WSP BUILDINGS T: 02 8907 0900	FIRE ENGINEERING WSP BUILDINGS T: 02 8907 0900 E: carl.voss@wspgroup.com.au	TOWN PLANNER JBA PLANNING T: 02 9556 6962 E: j.buchanan@jbaPlanning.com.au				SCALES 1:100@A1 1:200@A3	CHECKED TG
												PHASE FOR PLANNING APPROVAL	DATE MARCH 2012
												DRAWING NO A-203	REVISION





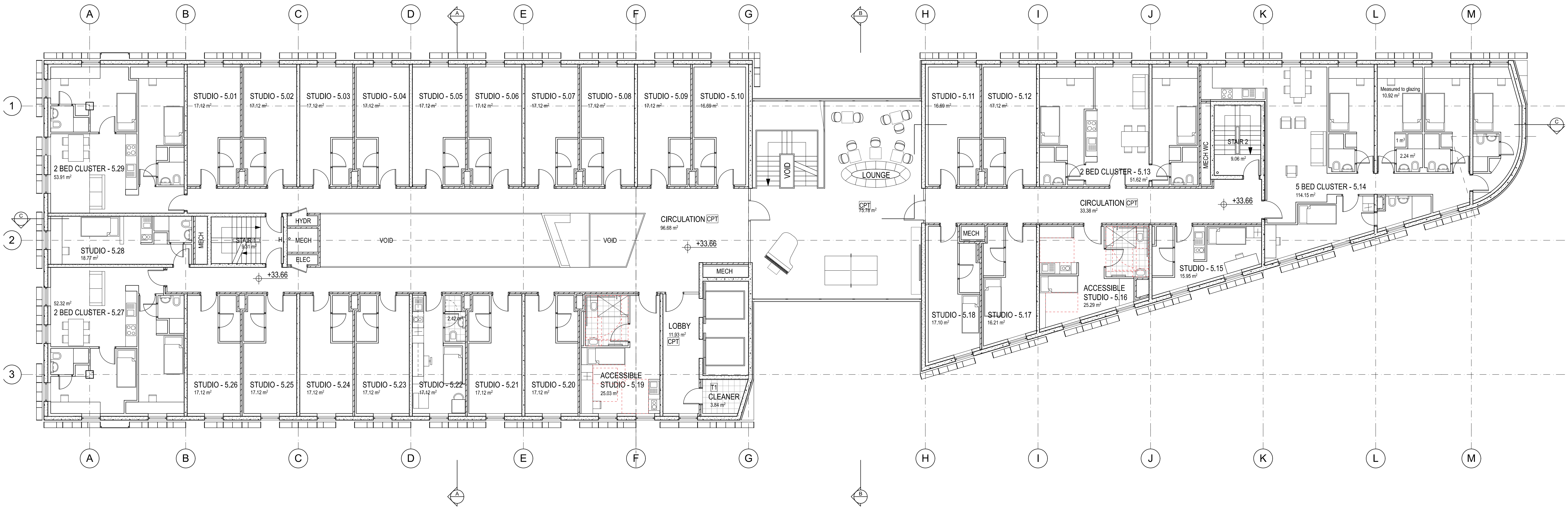
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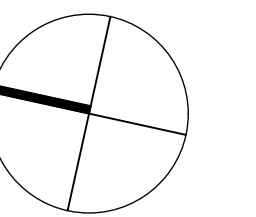
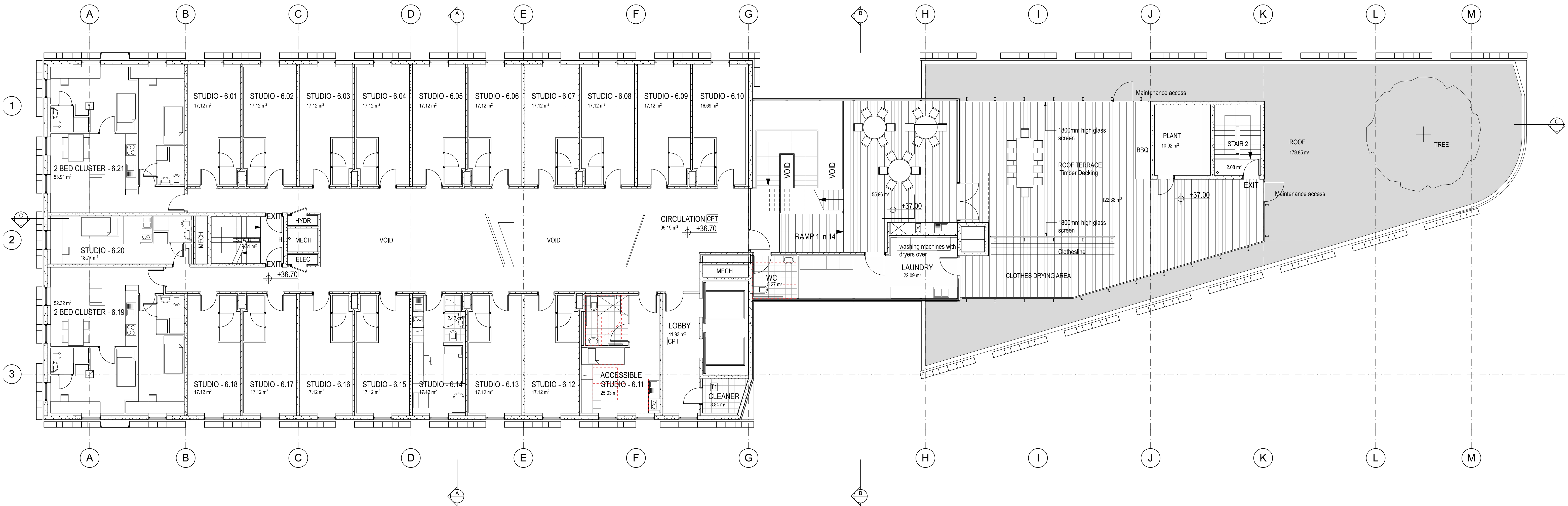
DATE	REV	NOTES :	NOTES:	CONTRACTOR	CIVIL ENGINEER	ELECTRICAL ENGINEER	MECHANICAL ENGINEER	PCA	CLIENT:	PROJECT :	ARCHITECT	DRAWING TITLE	DRAWN BY
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				ESD WSP BUILT ECOLOGY T: 02 8907 0900 E: alan.davis@wspgroup.com.au	STRUCTURAL ENGINEER MOTT MACDONALD T: 02 9439 2633 E: swillshier@hugestrueman.com.au	HYDRAULIC ENGINEER WSP BUILDINGS T: 02 8907 0900	FIRE ENGINEERING WSP BUILDINGS T: 02 8907 0900 E: carl.voss@wspgroup.com.au	TOWN PLANNER JBA PLANNING T: 02 9956 6962 E: j.buchanan@jbaPlanning.com.au		PROJECT NO : 11021		SCALES 1:100@A1 1:200@A3	TG
												PHASE FOR PLANNING APPROVAL	DATE MARCH 2012
												DRAWING NO A-205	REVISION



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				ESD WSP BUILT ECOLOGY T: 02 8907 0900 E: alan.davis@wspgroup.com.au	STRUCTURAL ENGINEER MOTT MACDONALD T: 02 9439 2633 E: swillshier@hugestrueman.com.au	HYDRAULIC ENGINEER WSP BUILDINGS T: 02 8907 0900	FIRE ENGINEERING WSP BUILDINGS T: 02 8907 0900 E: carl.voss@wspgroup.com.au	TOWN PLANNER JBA PLANNING T: 02 9556 6962 E: j.buchanan@jbaPlanning.com.au		PROJECT NO : 11021		SCALES 1:100@A1 1:200@A3	CHECKED TG
												PHASE FOR PLANNING APPROVAL	DATE MARCH 2012
												DRAWING NO A-207	REVISION



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			T:	MOTT MACDONALD T: 02 9439 2633 E: swillshier@hugestrueman.com.au	WSP BUILDINGS T: 02 8907 0900 E: rob.beck@wspgroup.com.au	WSP BUILDINGS T: 02 8907 0900 E: tim.dward@wspgroup.com.au	CITY PLAN SERVICES T: 02 8270 3500 E: darren@cityplan.com.au	(02) 8823 8800	KENSINGTON ST PRECINCT BLOCKS 3B & 3C STUDENT HOUSING & RETAIL PROJECT NO : 11021	TONKIN ZULAIKHA GREER ARCHITECTS 117 Reservoir Street Surry Hills, NSW 2010 ABN: 46002722349 P: (02) 9215 4900 F: (02) 9215 4901 EMAIL: john@tzg.com.au	BLOCK 3B/C: LEVEL 6 SCALES 1:100@A1 1:200@A3 PHASE FOR PLANNING APPROVAL DRAWING NO A-208	JC TG DATE MARCH 2012 REVISION