



'Greenhouse' GBCA Office Tenancy

Level 15, 179 Elizabeth Street, Sydney

Green Star - Office Interiors v1.1
Round 1 Submission

The Green Building Council of Australia's (GBCA) Head Office is a tangible expression of the character and culture of GBCA as an organisation. From the introduction of a raised floor that provides a displacement air system to the light shelves used to manage radiant heat loads, the space embodies the principles of the GBCA: to "develop a sustainable property industry for Australia and drive the adoption of green building practices through market-based solutions". This project offers a range of sustainable initiatives that are not generally included in single floor fitouts. These initiatives offer both environmental benefits and direct user benefits, making this workplace a showcase of environmental design and contemporary workplace practice.

The entire space has focused on the provision of a healthy and productive working environment for staff.

The GBCA head office supports a group of environmental champions and their expectations of what needed to be achieved to maintain their reputation and to support their culture and desire to work in a space that was healthy and vibrant. These factors have allowed the design team to experiment with initiatives that other clients might not be prepared to trial. For example, water saving initiatives included a grey water system – something which is not typically incorporated in a single floor tenancy and which was difficult to implement.

Workshops were conducted to establish staff aspirations and functional requirements for the project. Beyond the environmental aspects, the interior has been designed to:

- Create a dynamic and professional work environment for the staff, members, and visitors'
- Provide opportunities for training to take place within the tenancy'
- Provide flexibility for future expansion and changing team environments'
- Provide a library for members and visitors to educate and enable member products to be showcased in use'
- Take advantage of amazing views over Hyde Park looking towards Sydney Harbour.

When designing the space, Indoor Environmental Quality was of key concern to the occupants. Ample planting of greenery is used to enhance the IEQ as well as general wellbeing of staff. Furniture and fitments like carpet have been selected for their sustainability and because of the take back policies that the suppliers have in place - they resell, recondition or supply the product free of charge for use by others or reuse the raw materials. As a result, vintage furniture from

second-hand stores and mid century design classics merge with new green items providing an eclectic non corporate look that is a good fit with the GBCA culture. A feature has been made of spent florescent light tubes.

Wherever appropriate materials have been reused and revealed honestly. An example of this is the exposed concrete floor and the underside of the overhead soffit.

Only minimal joinery is built in. In the case of benches and the reception counter, the front is made from fixed modules however all of the storage that works with it is mobile and able to be relocated, reused or sold later on for future use. Systems furniture used was developed to utilise only essential materials. Consequently, it is modular, free standing and engineered to be as light as possible, with minimal screening provided through a single layer of material. Powdercoating has been used extensively where a substrate required a finish providing the most minimal finish available.

Staff within GBCA worked closely with the design team and consultants, overseeing Greenstar evidence collection. All consultants and teams had at least one Greenstar Professional who contributed their sustainable knowledge to their area of expertise. The fitout is registered to achieve a Green Star Office Interiors rating, with sustainable features including:

- CO₂ sensors throughout the space mean supplying air into occupied areas only. Consequently, no supplementary air-conditioning is used.
- Equipment kept to a minimum. Use of small laptops linked to a standard size flat screen reduces energy and heat loads.
- Extensive light zoning has been used throughout the space.
- Full advantage was made of the natural light that was available whilst avoiding glare and heat issues. For the majority of working days, a bare minimum of artificial light is needed for staff to work and circulate efficiently. The use of automated blinds and light and motion sensors has ensured lighting efficiency and glare control are maximised.
- A worm farm was created on the balcony allowing staff to reduce their lunch and catering waste.
- Bike parking has been included and bikes provided for staff to get around the city.

As a not for profit organisation, the budget to fitout this space was always going to be tight. Add into that the timeframe that the project team were given and the environmental aspirations of the client and the task looked almost impossible. The GBCA workplace has strived to optimise the environmental outcomes while working with a very limited budget of \$780,000 and a timeframe of four months from briefing to the occupants moving in - with the Christmas shutdown in the middle of construction. The entire project was delivered on time and on budget and was achieved only by some support from GBCA member organisations including the consultants, construction team and contractors. Ingenuity was the true enabler of this project though as the combined team scouted for second hand access floors, furniture and materials to stretch the budget as far as possible.

ESD principals have been utilised throughout the entire fitout ensuring the space can be used as a teaching tool for visiting project teams. Materials used throughout the space have been sourced for their environmental properties. All materials, paints and sealants were selected for their lack of VOCs and formaldehyde. As many items as possible were relocated from the former GBCA office including chairs and workstations which work well alongside new additions. Other furniture was sourced from op shops. The raised floor for displacement air was also second hand.

Materials have also been used in a manner that will allow for future reuse. The carpet tiles have not been glued to the floor. Instead, they are fixed to each other through the use of single sided tape. They are not adhered to the slab allowing tiles to be removed without damage to the backing or the slab. Additionally, all design work was undertaken working with standard sheet sizes and modular design techniques. Thereby minimising layering of materials and making sure that mobile joinery and storage units were designed consistently to allow them to move around the space and meet changing user needs. Partitions have been minimised to avoid future waste if removed. When used, they are modular and demountable to allow for relocation, storage or resale. Curtained areas provide definition to meeting spaces, minimising materials used and avoiding the need for special HVAC work in these areas.

The interior has also been carefully designed in a way to effectively minimise energy consumption. An example of this are the light shelves installed inside the building along the eastern façade. The shelves bounce indirect light onto the soffit lining. This inturn provides indirect natural light deeper into the floor plate and reduces the need for artificial light. The heat load generated by the direct morning light is stopped by blinds at the lower level of the glazed bay windows and then captured in the void above the light shelves and drawn out of the space using mechanical extraction.

INTELLECTUAL PROPERTY
 © COPYRIGHT BLIGH VOLLER NIELD PTY LTD (BVNL). UNLESS OTHERWISE
 ADVISED IN WRITING, ALL RIGHTS TO USE THE DOCUMENT ARE SUBJECT
 TO PAYMENT IN FULL OF ALL BVN CHARGES. THIS DOCUMENT MAY ONLY
 BE USED FOR THE EXPRESS PURPOSE AND PROJECT FOR WHICH IT HAS BEEN
 CREATED AND DELIVERED, AS NOTED IN WRITING BY BVNL, AND THIS
 DOCUMENT MAY NOT BE OTHERWISE USED, OR COPIED, ANY UNLAWFUL
 USE OF THIS DOCUMENT IS AT THE USER'S SOLE RISK AND WITHOUT
 LIMITING BVN'S RIGHTS TO SEEK RELIEF AND INDEMNIFY BVNL FROM
 AND AGAINST ALL LOSS AND DAMAGE.

ISSUE	DATE	FOR
A	28.10.07	CONSTRUCTION
B	28.11.07	CONSTRUCTION

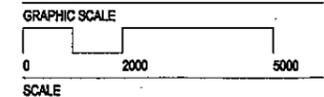
CONSULTANT
DAVIS LANGDON
 tel 02 9956 8822 fax 02 9956 8848
 CONSULTANT
LINCOLNE SCOTT
 tel 02 8907 0900 fax 02 9957 4127
 CLIENT

GBCA
 L15, 179 ELIZABETH STREET
 SYDNEY NSW 2000
 CLIENT PROJECT No.

PROJECT

GREEN BUILDING COUNCIL
 OF AUSTRALIA
 BVN PROJECT NUMBER

M0709010
 TRUE NORTH PROJECT NORTH



1:100 at A2 DO NOT SCALE
 STATUS

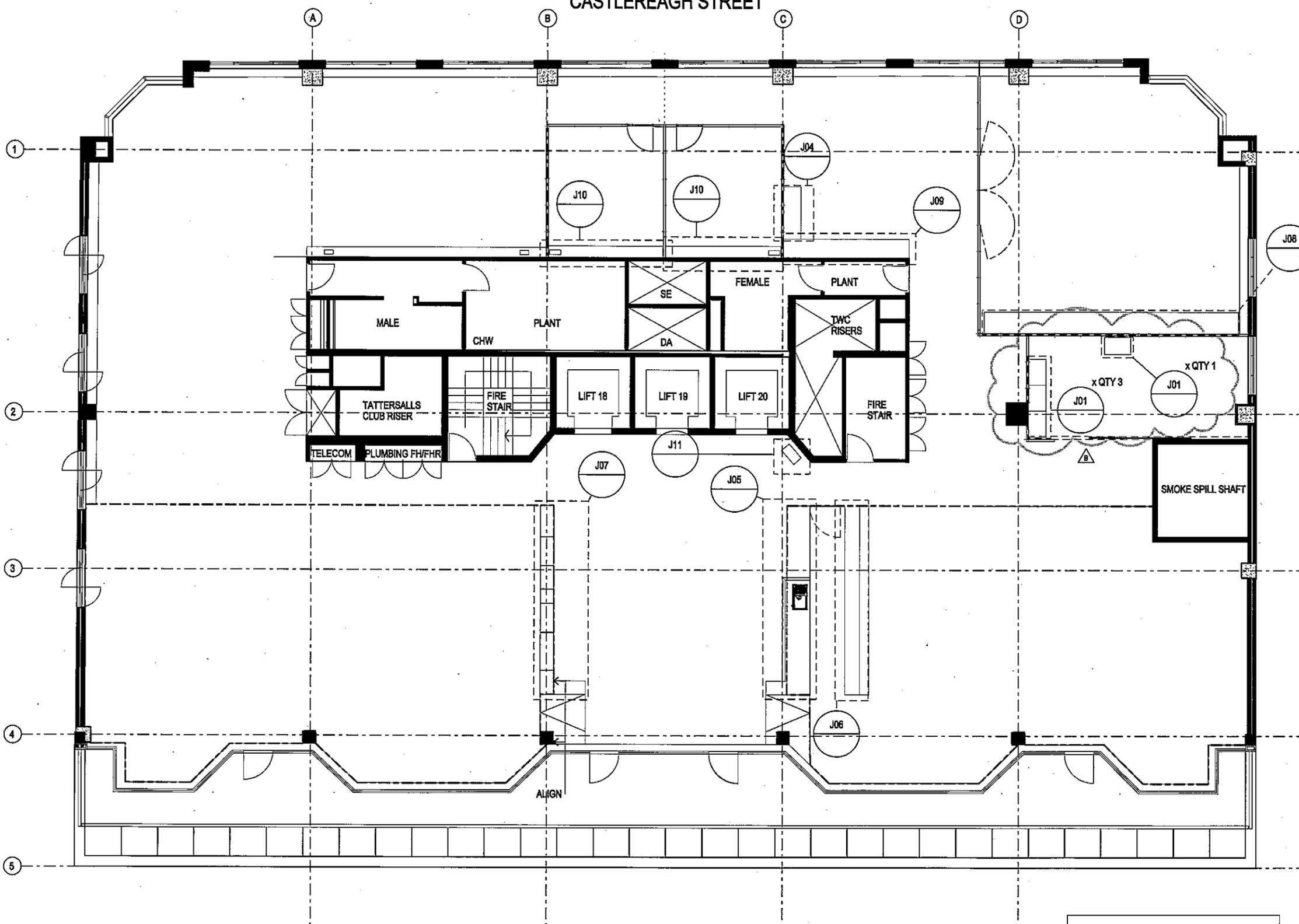
CONSTRUCTION
 DRAWING

JOINERY PLAN
 DRAWING NUMBER ISSUE
 CD-D-02 B

CASTLEREAGH STREET

ELIZABETH STREET

AS BUILT
[Signature]



01 PLAN - JOINERY PLAN
 1:100

CASTLEREAGH STREET



BlighVollerNieldArchitecture

Telephone +61 3 9639 9199
Facsimile +61 3 9639 9188
www.bvn.com.au

INTELLECTUAL PROPERTY
© COPYRIGHT BLIGH VOLLER NIELD PTY LTD (BVN). UNLESS OTHERWISE ADVISED IN WRITING ALL RIGHTS TO USE THIS DOCUMENT ARE SUBJECT TO PAYMENT IN FULL OF ALL BVN CHARGES. THIS DOCUMENT MAY ONLY BE USED FOR THE EXPRESS PURPOSE AND PROJECT FOR WHICH IT HAS BEEN DESIGNED AND DELIVERED. AS NOTED IN WRITING BY BVN, AND THIS DOCUMENT MAY NOT BE OTHERWISE USED, OR COPIED, ANY UNAUTHORIZED USE OF THIS DOCUMENT IS AT THE USER'S SOLE RISK AND WITHOUT LIMITING BVN'S RIGHTS THE USER RELEASES AND INDEMNIFIES BVN FROM AND AGAINST ALL LOSS OR DAMAGE.

ISSUE	DATE	FOR
01	03.10.07	INFORMATION
02	09.10.07	INFORMATION
03	11.10.07	INFORMATION
04	17.10.07	APPROVAL
05	22.10.07	APPROVAL
06	22.10.07	CURTAIN RAILS DELETED
A	09.11.07	FOR CONSTRUCTION

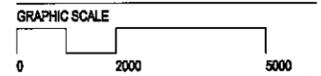
CONSULTANT
DAVIS LANGDON
tel 02 9956 8822 fax 02 9956 8848

CONSULTANT
LINCOLNE SCOTT
tel 02 8907 0900 fax 02 9957 4127

CLIENT
GBCA
L15, 179 ELIZABETH STREET
SYDNEY NSW 2000
CLIENT PROJECT No.

PROJECT
**GREEN BUILDING COUNCIL
OF AUSTRALIA**
BVN PROJECT NUMBER

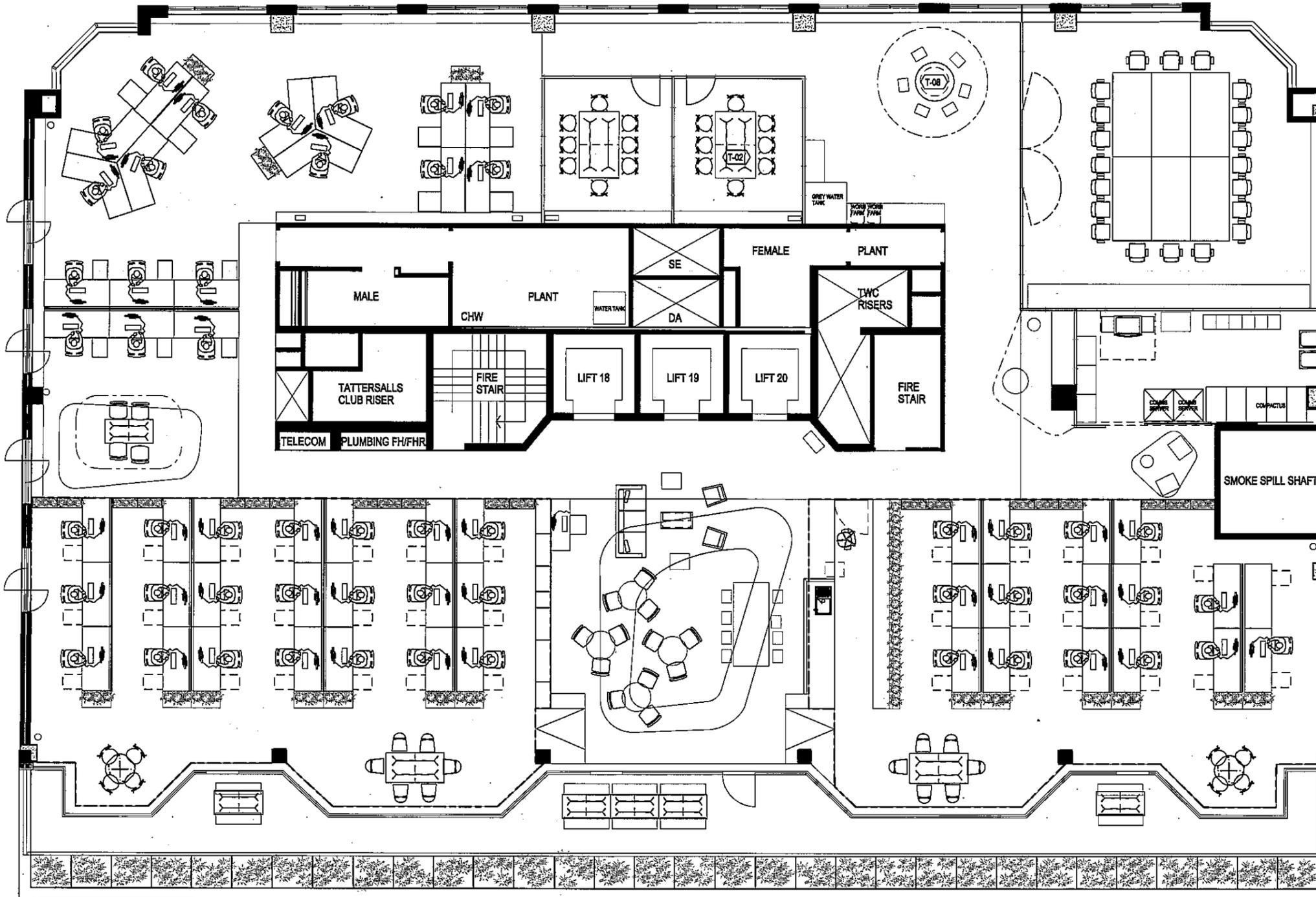
M0709010
TRUE NORTH PROJECT NORTH



1:100 at A2 DO NOT SCALE
STATUS

FOR CONSTRUCTION
DRAWING

**GENERAL ARRANGEMENT
FLOOR PLAN**
DRAWING NUMBER ISSUE
A-D-01 A



ELIZABETH STREET

AS BUILT

01 FLOOR PLAN
1:100



BlighVollerNieldArchitecture

Telephone +61 3 9639 9199
Facsimile +61 3 9639 9188
www.bvn.com.au

INTELLECTUAL PROPERTY
© COPYRIGHT BLIGH VOLLER NIELD PTY LTD (BVN). UNLESS OTHERWISE
AGREED IN WRITING, ALL RIGHTS TO USE THIS DOCUMENT ARE SUBJECT
TO PAYMENT IN FULL OF ALL BVN CHARGES. THIS DOCUMENT MAY ONLY
BE USED FOR THE EXPRESS PURPOSE AND PROJECT FOR WHICH IT HAS BEEN
CREATED AND DELIVERED, AS NOTICED IN WRITING BY BVN AND THIS
DOCUMENT MAY NOT BE OTHERWISE LOANED, COPIED, REPRODUCED OR
USED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF BVN FROM
AND AGAINST ALL LAWS TO APPLY.

ISSUE	DATE	FOR
01	11.10.07	PRICING
02	17.10.07	APPROVAL
03	17.10.07	APPROVAL
04	05.11.07	ADDED P4, UPDATED FINISH TO DRI
A	09.11.07	FOR CONSTRUCTION
B	11.12.07	DOOR HARDWARE ADDED

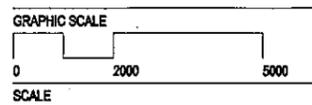
CONSULTANT
DAVIS LANGDON
tel 02 9956 8822 fax 02 9956 8848

CONSULTANT
LINCOLNE SCOTT
tel 02 8907 0900 fax 02 9957 4127

CLIENT
GBCA
L15, 179 ELIZABETH STREET
SYDNEY NSW 2000
CLIENT PROJECT No.

PROJECT
**GREEN BUILDING COUNCIL
OF AUSTRALIA**
BVN PROJECT NUMBER

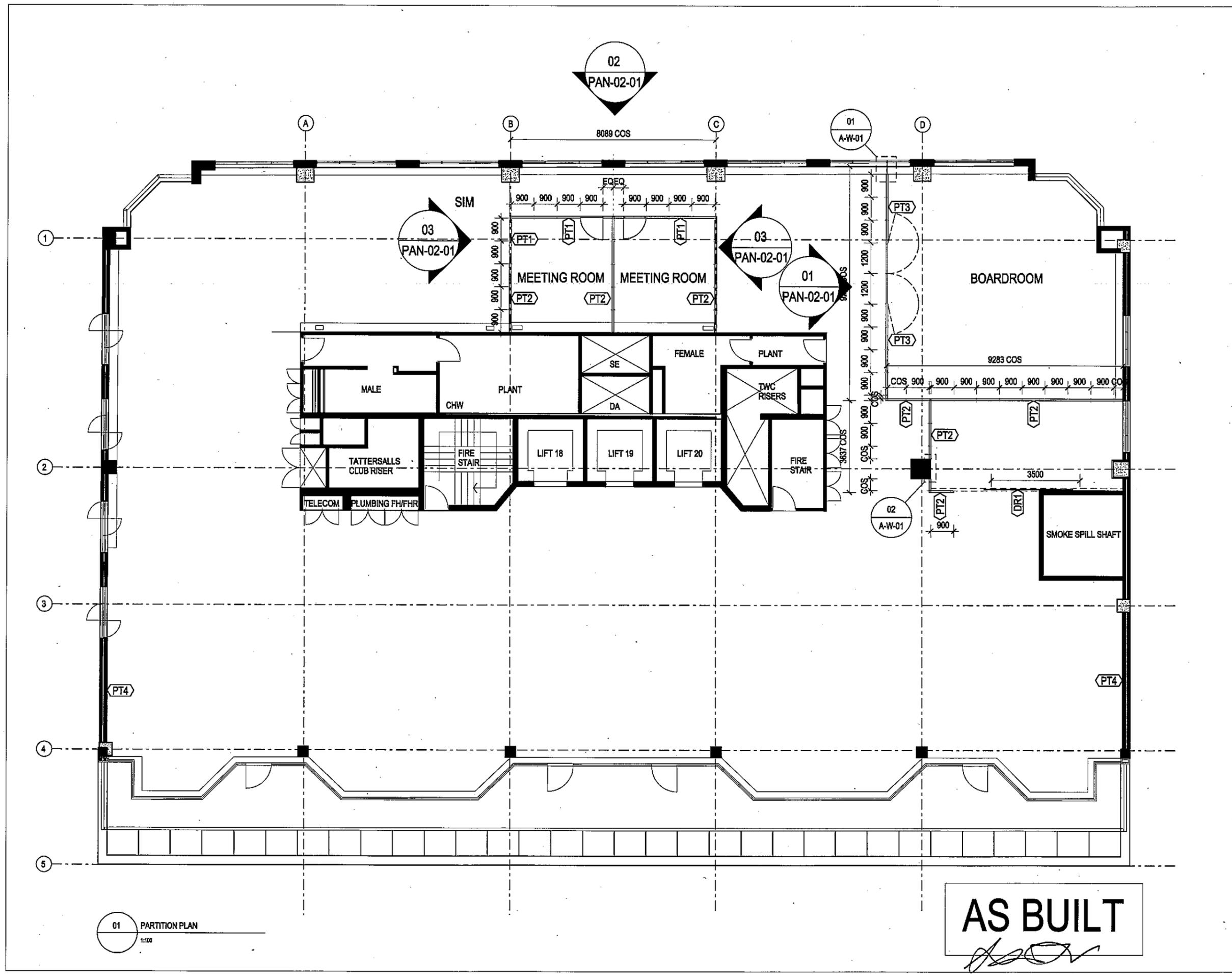
M0709010
TRUE NORTH PROJECT NORTH



1:100 at A2 DO NOT SCALE
STATUS

FOR CONSTRUCTION
DRAWING

PARTITION PLAN
DRAWING NUMBER ISSUE
A-M-01 B



01 PARTITION PLAN
1:100

AS BUILT

INTELLECTUAL PROPERTY
 © COPYRIGHT BLIGH VOLLER NIELD PTY LTD (BVN). UNLESS OTHERWISE
 ADVISED IN WRITING ALL RIGHTS TO USE THIS DOCUMENT ARE SUBJECT
 TO PRINTING IN FULL OF ALL BVN CHARGES. THIS DOCUMENT MAY ONLY
 BE USED FOR THE EXPRESS PURPOSE AND PROJECT FOR WHICH IT HAS BEEN
 CREATED AND DELIVERED. AS NOTED BY BVN, AND THIS
 DOCUMENT MAY NOT BE OTHERWISE USED, OR COPIED, ANY UNAUTHORIZED
 USE OF THIS DOCUMENT IS AT THE USER'S SOLE RISK AND WITHOUT
 LIMITING BVN'S RIGHTS THE USER RELEASES AND INDEMNIFIES BVN FROM
 AND AGAINST ALL LOSS SO ARISING.

ISSUE	DATE	FOR
01	23.10.07	INFORMATION
02	25.10.07	INFORMATION
03	05.11.07	DANPALON COLOUR CHANGED
A	09.11.07	FOR CONSTRUCTION

CONSULTANT
DAVIS LANGDON
 tel 02 9956 8822 fax 02 9956 8848
 CONSULTANT
LINCOLNE SCOTT
 tel 02 8907 0900 fax 02 9957 4127
 CLIENT

GBCA
 L15, 179 ELIZABETH STREET
 SYDNEY NSW 2000
 CLIENT PROJECT No.

PROJECT

GREEN BUILDING COUNCIL
 OF AUSTRALIA
 BVN PROJECT NUMBER

M0709010

TRUE NORTH PROJECT NORTH

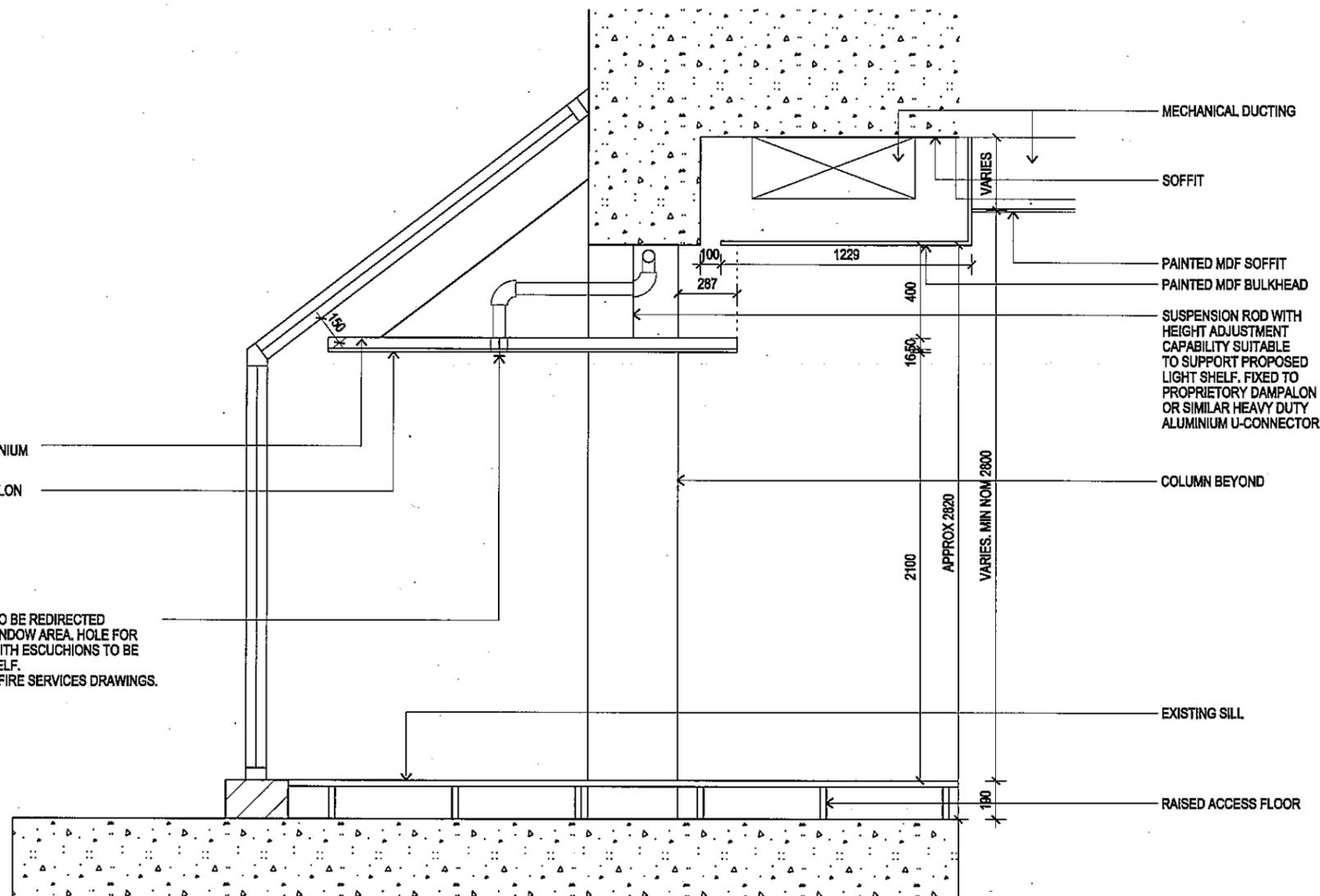
GRAPHIC SCALE
 0 400 1000
 SCALE

1:20 at A2 DO NOT SCALE
 STATUS

FOR CONSTRUCTION
 DRAWING

LIGHT SHELF

DRAWING NUMBER	ISSUE
CD-N-03	A



01 LIGHT SHELF SECTION
 CD-N-03 1:20

AS BUILT

INTELLECTUAL PROPERTY
 © COPYRIGHT BLIGH VOLLER NIELD PTY LTD (BVN). UNLESS OTHERWISE
 AGREED IN WRITING ALL RIGHTS TO THIS DOCUMENT ARE SUBJECT
 TO PAYMENT IN FULL OF ALL BVN CHARGES. THIS DOCUMENT MAY ONLY
 BE USED FOR THE EXPRESS PURPOSE AND PROJECT FOR WHICH IT HAS BEEN
 CREATED AND DELIVERED. ANY REUSE, REPRODUCTION, OR COPIED, ANY UNAUTHORIZED
 USE OF THIS DOCUMENT IS AT THE USER'S SOLE RISK AND WITHOUT
 LIMITING DAMAGES TO THE USER RELEASED AND INCORPORATED FROM
 AND AGAINST ALL LOSS OR DAMAGE.

ISSUE	DATE	FOR
A	09.11.07	FOR CONSTRUCTION
B	26.11.07	FOR CONSTRUCTION - MDF CEILING CHANGED

CONSULTANT
DAVIS LANGDON
 tel 02 9956 8822 fax 02 9956 8848

CONSULTANT
LINCOLNE SCOTT
 tel 02 8907 0900 fax 02 9957 4127

CLIENT

GBCA
 L15, 179 ELIZABETH STREET
 SYDNEY NSW 2000

CLIENT PROJECT No.

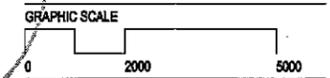
PROJECT

**GREEN BUILDING COUNCIL
 OF AUSTRALIA**

BVN PROJECT NUMBER

M0709010

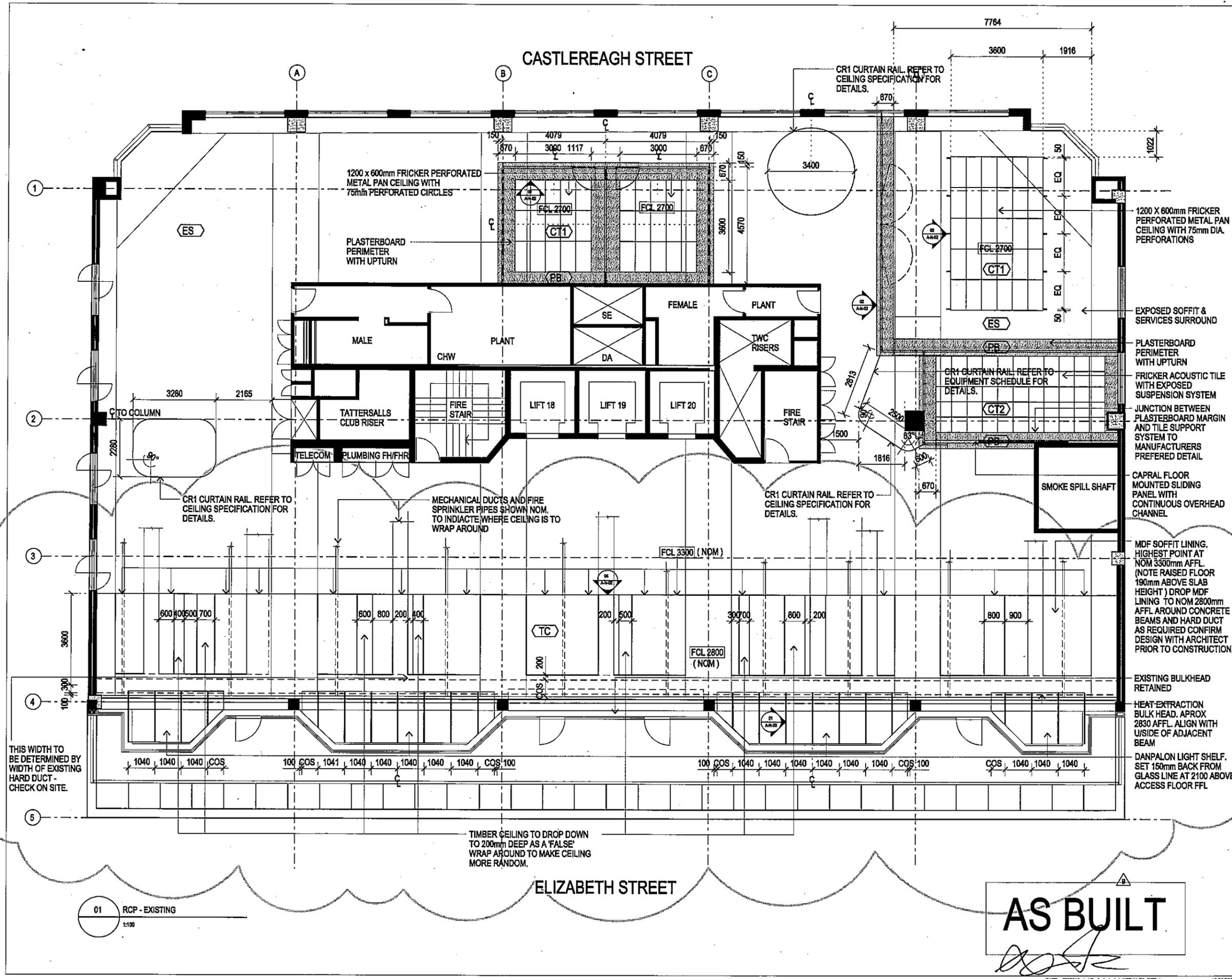
TRUE NORTH PROJECT NORTH



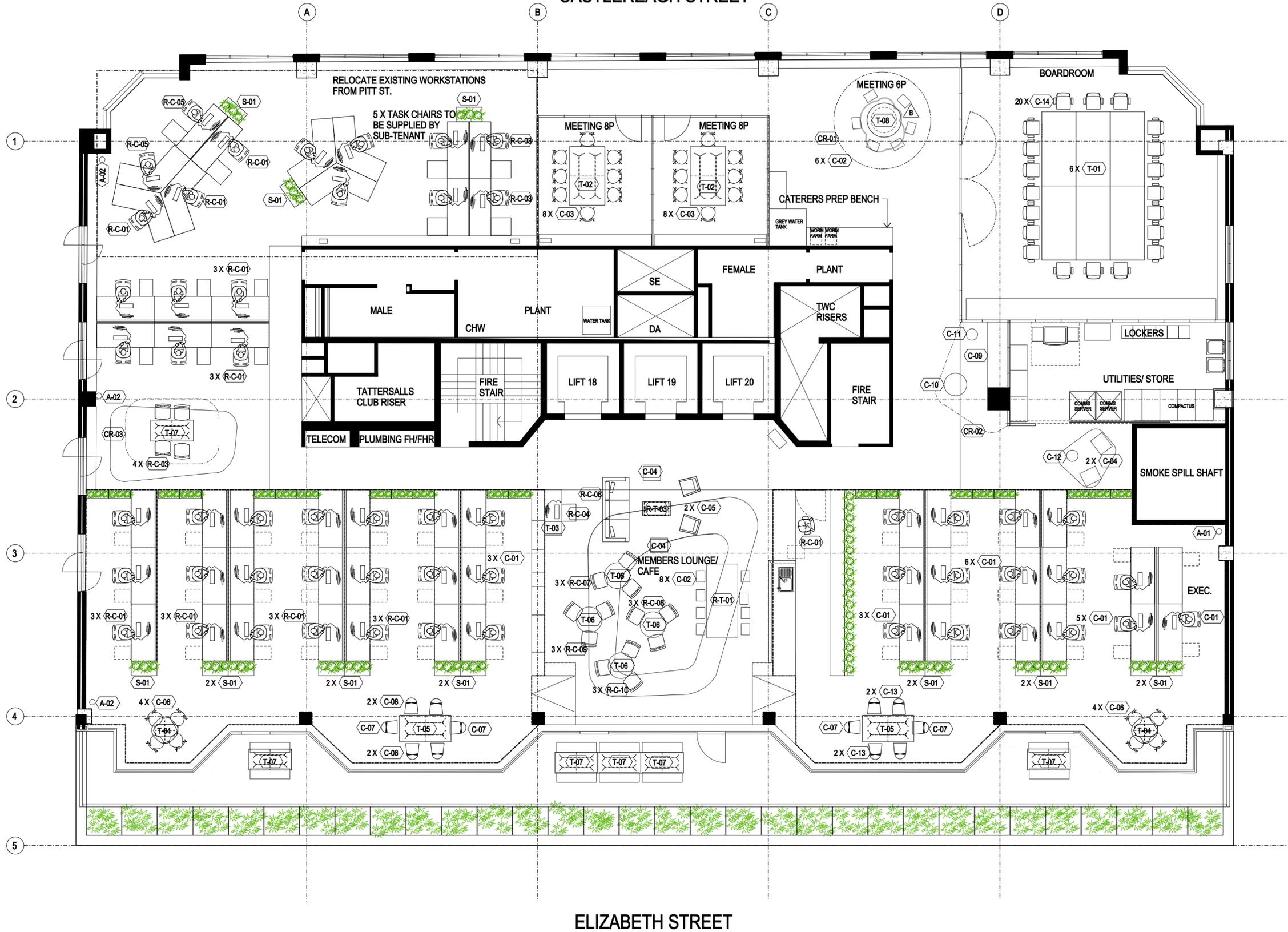
SCALE
 1:100 at A2 DO NOT SCALE
 STATUS

**FOR CONSTRUCTION
 DRAWING**

RCP
 DRAWING NUMBER ISSUE
A-N-01 B



CASTLEREAGH STREET



ELIZABETH STREET

AS BUILT

01 LOOSE FURNITURE FLOOR PLAN
1:100



BlighVollerNieldArchitecture

Telephone +61 3 9639 9199
Facsimile +61 3 9639 9188
www.bvn.com.au

INTELLECTUAL PROPERTY
© COPYRIGHT BLIGH VOLLER NIELD PTY LTD (BVN), UNLESS OTHERWISE AGREED IN WRITING. ALL RIGHTS TO USE THIS DOCUMENT ARE SUBJECT TO PAYMENT IN FULL OF ALL BVN CHARGES. THIS DOCUMENT MAY ONLY BE USED FOR THE EXPRESS PURPOSE AND PROJECT FOR WHICH IT HAS BEEN CREATED AND DELIVERED, AS NOTED IN WRITING BY BVN. ANY UNAUTHORIZED USE OF THIS DOCUMENT IS AT THE USER'S SOLE RISK AND WITHOUT LIMITING BVN'S RIGHTS THE USER RELEASES AND INDEMNIFIES BVN FROM AND AGAINST ALL LOSS SO ARISING.

ISSUE	DATE	FOR
01	05.11.07	PRICING
A	09.11.07	FOR CONSTRUCTION
B	13.11.07	CODE CHANGED

CONSULTANT
DAVIS LANGDON
tel 02 9956 8822 fax 02 9956 8848

CONSULTANT
LINCOLNE SCOTT
tel 02 8907 0900 fax 02 9957 4127

CLIENT
GBCA
L15, 179 ELIZABETH STREET
SYDNEY NSW 2000
CLIENT PROJECT No.

PROJECT
GREEN BUILDING COUNCIL OF AUSTRALIA
BVN PROJECT NUMBER

M0709010
TRUE NORTH PROJECT NORTH
GRAPHIC SCALE
0 2000 5000
SCALE

1:100 at A2 DO NOT SCALE
STATUS

CONSTRUCTION
DRAWING

LOOSE FURNITURE FLOOR PLAN
DRAWING NUMBER ISSUE
CD-S-01 B

FINISHES LEGEND

-  CP01: REFER FINISHES SCHEDULE FOR DETAILS
-  CP02: REFER FINISHES SCHEDULE FOR DETAILS. NOTE: CP02 IS FULL TILES WORKING WITHIN CARPET GRID.
-  CP03: REFER FINISHES SCHEDULE FOR DETAILS
-  CON: REFER FINISHES SCHEDULE FOR DETAILS
-  TASMAN ACCESS FLOOR 190mm HIGH. REFER TO ACCESS FLOOR PLAN & SPECIFICATION

FINISHES NOTES:

JUNCTION OF CONCRETE & CARPET TILE WHERE EXPOSED TO BE FINISHED WITH BLACK DIMINISHING STRIP.

REFER TO SPECIFICATION FOR FINISHES DESCRIPTION AND SPECIFICATION.

REFER TO SPECIFICATION FOR INSTALLATION PROCEDURE TO ALL FINISHES.



BlighVollerNieldArchitecture

Telephone +61 3 9639 9199
Facsimile +61 3 9639 9188
www.bvn.com.au

INTELLECTUAL PROPERTY

© COPYRIGHT BLIGH VOLLER NIELD PTY LTD (BVN), UNLESS OTHERWISE AGREED IN WRITING. ALL RIGHTS TO USE THIS DOCUMENT ARE SUBJECT TO PROTECT IN FULL OF ALL BVN CHANGES. THIS DOCUMENT MAY ONLY BE USED FOR THE EXPRESS PURPOSE AND PROJECT FOR WHICH IT HAS BEEN CREATED AND DELIVERED. AS NOTIFIED IN WRITING BY BVN AND THIS DOCUMENT MAY NOT BE OTHERWISE USED, OR COPIED, ANY UNAUTHORIZED USE OF THIS DOCUMENT IS AT THE USER'S SOLE RISK AND WITHOUT LIMITING BVN'S RIGHTS THE USER RELEASES AND INDEMNIFIES BVN FROM AND AGAINST ALL LOSS AND DAMAGE.

ISSUE	DATE	FOR
01	11.10.07	INFORMATION
02	05.11.07	EXTENT OF CARPET CHANGED
A	09.11.07	FOR CONSTRUCTION

CONSULTANT
DAVIS LANGDON
tel 02 9956 8822 fax 02 9956 8848

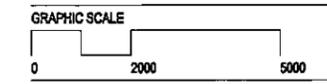
CONSULTANT
LINCOLNE SCOTT
tel 02 8907 0900 fax 02 9957 4127

CLIENT

GBCA
L15, 179 ELIZABETH STREET
SYDNEY NSW 2000
CLIENT PROJECT No.

PROJECT
GREEN BUILDING COUNCIL OF AUSTRALIA
BVN PROJECT NUMBER

M0709010
TRUE NORTH PROJECT NORTH



1:100 at A2 DO NOT SCALE

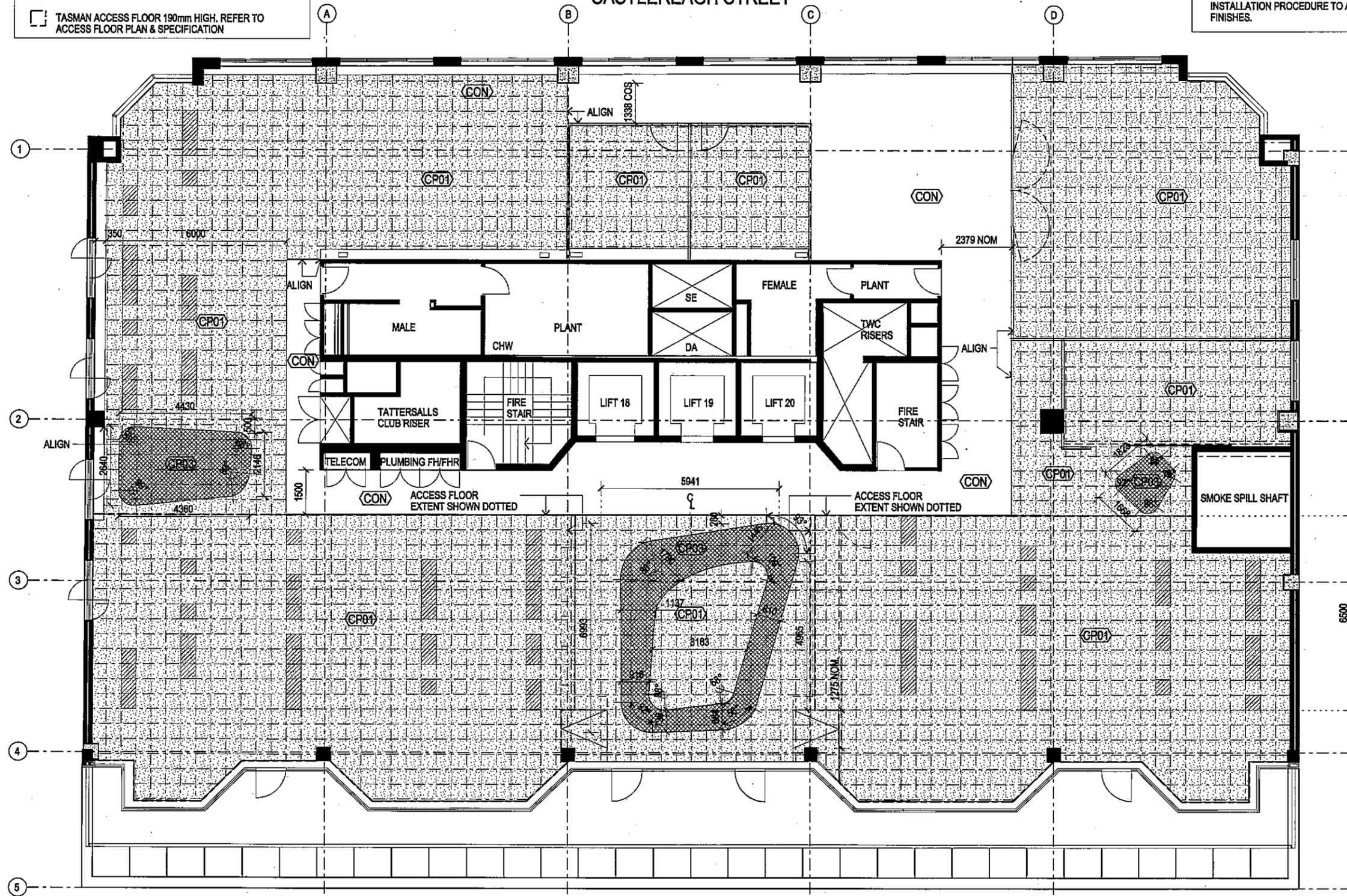
STATUS
FOR CONSTRUCTION
DRAWING

FLOOR FINISHES PLAN
DRAWING NUMBER ISSUE
A-U-01 A

CASTLEREAGH STREET

ELIZABETH STREET

AS BUILT



01 FLOOR FINISHES PLAN
1:100

INTELLECTUAL PROPERTY
 © COPYRIGHT BLIGH-VOLLER-NIELD PTY LTD (BVN), UNLESS OTHERWISE
 ADVISED IN WRITING ALL RIGHTS TO USE THIS DOCUMENT ARE SUBJECT
 TO PROTECT IN FULL OF ALL BVN CHARGES. THIS DOCUMENT MAY ONLY
 BE USED FOR THE EXPRESS PURPOSE AND PROJECT FOR WHICH IT HAS BEEN
 CREATED AND DELIVERED, AS NOTICED IN WRITING BY BVN, AND THIS
 DOCUMENT MAY NOT BE OTHERWISE USED, COPIED, ANY UNAUTHORIZED
 USE OF THIS DOCUMENT IS AT THE USER'S SOLE RISK AND WITHOUT
 LIMITING BVN'S RIGHTS THE USER RELEASES AND INDEMNIFIES BVN FROM
 AND AGAINST ALL LOSS OR DAMAGE.

ISSUE	DATE	FOR
01	17.10.07	CONSTRUCTION
02	17.10.07	APPROVAL
03	22.10.07	APPROVAL
04	05.11.07	RAMP SIZE CHANGED
A	09.11.07	FOR CONSTRUCTION

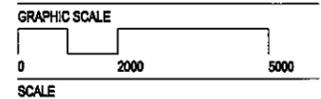
CONSULTANT
DAVIS LANGDON
 tel 02 9956 8822 fax 02 9956 8848
 CONSULTANT
LINCOLNE SCOTT
 tel 02 8907 0900 fax 02 9957 4127
 CLIENT

GBCA
 L15, 179 ELIZABETH STREET
 SYDNEY NSW 2000
 CLIENT PROJECT No.

PROJECT

GREEN BUILDING COUNCIL
 OF AUSTRALIA
 BVN PROJECT NUMBER

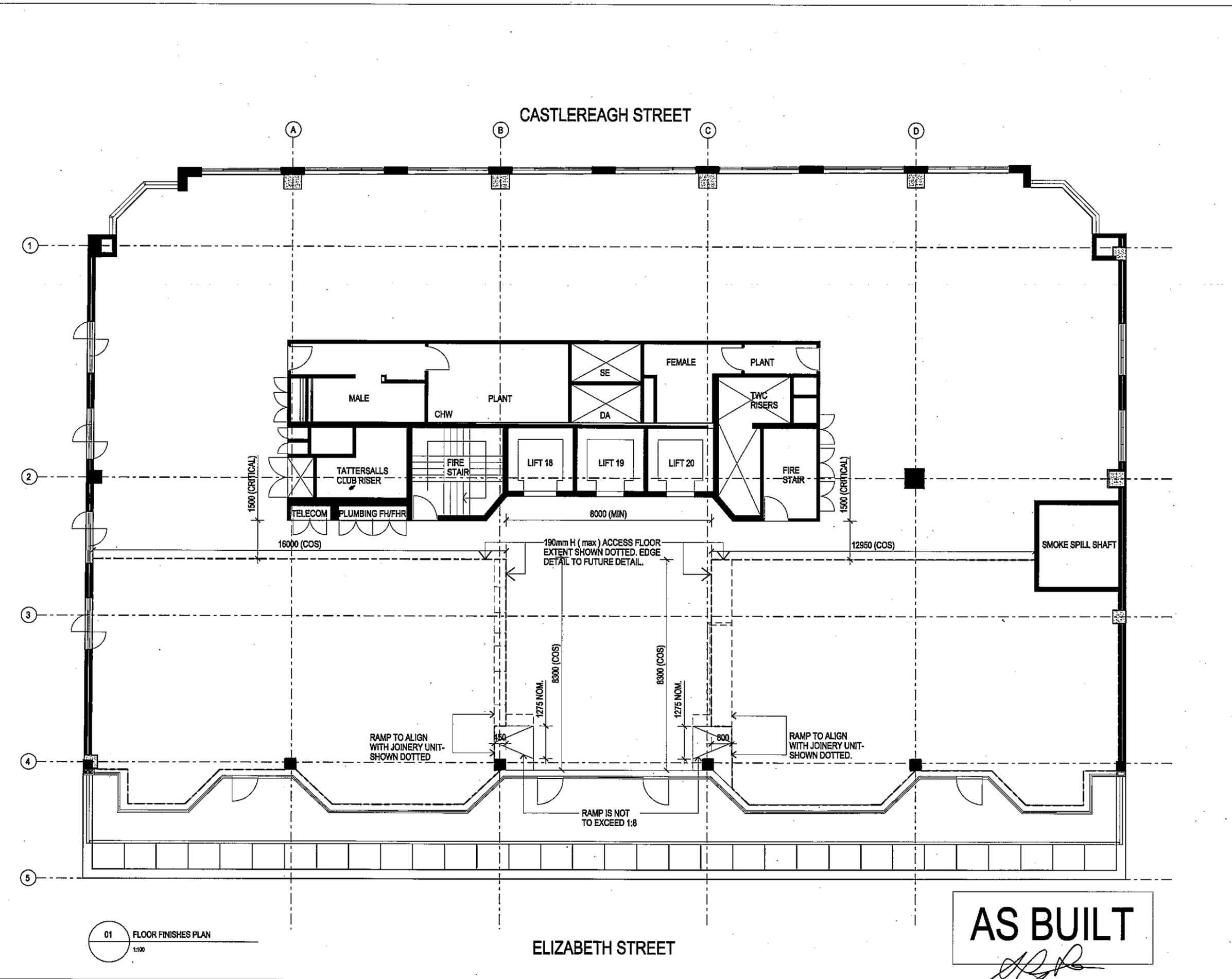
M0709010
 TRUE NORTH PROJECT NORTH



1:100 at A2 DO NOT SCALE
 STATUS

FOR CONSTRUCTION
 DRAWING

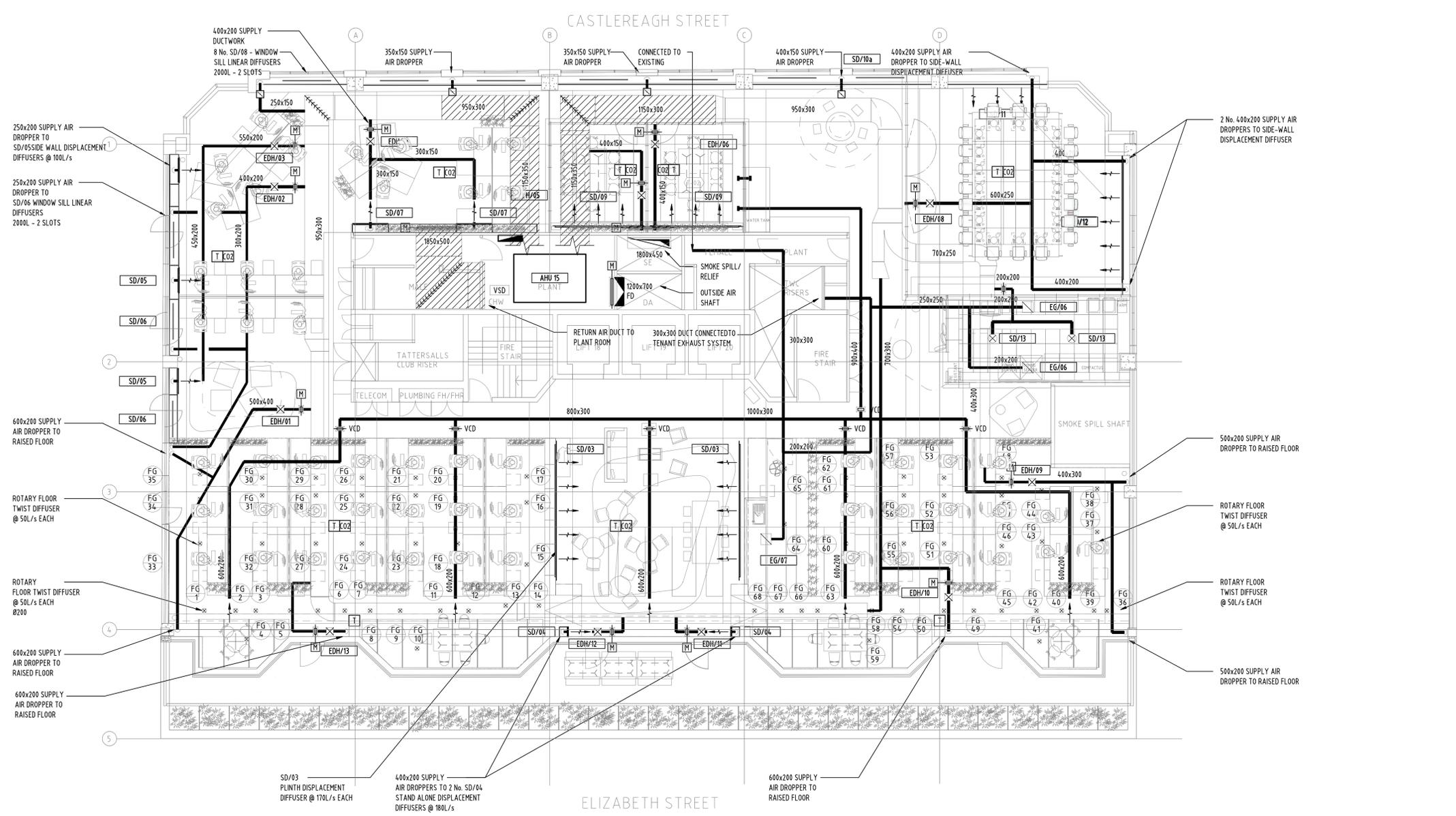
ACCESS FLOOR PLAN
 DRAWING NUMBER ISSUE
 A-V-02 A



01 FLOOR FINISHES PLAN
 1:100

ELIZABETH STREET

AS BUILT
[Signature]



LEGEND

- AxB RECTANGULAR DUCTWORK
- SUPPLY AIR DUCTWORK
- RETURN AIR DUCTWORK
- EXHAUST AIR DUCTWORK
- DROPPER
- SD/xx STAND ALONE DISPLACEMENT DIFFUSER
- SD/xx SIDE WALL DISPLACEMENT DIFFUSER
- SD/xx SWIRL DIFFUSER
- ROTARY FLOOR DIFFUSER
- EG/xx RETURN/EXHAUST AIR GRILLE
- FD FIRE DAMPER
- VCD VOLUME CONTROL DAMPER
- M MOTORISED DAMPER
- EDH/xx ELECTRICAL DUCT HEATER
- T TEMPERATURE SENSOR
- CO2 CO2 SENSOR
- DB DISTRIBUTION BOARD
- FG 48 FLOOR DIFFUSER NO.

Rev	Description	By	Date
A	AS BUILT	ENRAWEL	11.03.2009

CONSULTANT

Lincolne Scott

Consulting Engineers
 Adelaide Auckland Bangkok
 Brisbane Cairns Honolulu
 Melbourne Perth Shanghai
 Singapore Sydney

Level 4 at Midway Street
 PO Box 666 North Sydney
 New South Wales 1585 Australia
 Telephone 61 655 955 955
 Fax 61 655 955 955
 email@lincolnescott.com

JLW

ESTABLISHED 1875

JAMES L. WILLIAMS PTY. LTD.

ACN 004 122 650

AIR CONDITIONING & MECHANICAL CONTRACTORS

SYDNEY
 UNIT 10 CENTURY ESTATE
 476 GARDENERS ROAD
 ALEXANDRIA NSW 2015
 P.O. BOX 636
 ROSEBERY NSW 1445
 TELEPHONE (02) 9313 5911
 FACSIMILE (02) 9313 5613

BRISBANE
 MOUNT ISA
 MELBOURNE
 HEAD OFFICE

CLIENT

GBCA

Project

**LEVEL 15
 179 ELIZABETH STREET
 SYDNEY NSW 2000**

Drawing Title

**DUCTWORK LAYOUT
 L15**

CAD File	Drawn
Coordinated	Scale 1:100 @A1
Project Architect	Date 11-03-09
Project Director	
PTW Project No.	Drawing Number
JLW Project No.	Rev
ST 236	A

AS BUILT

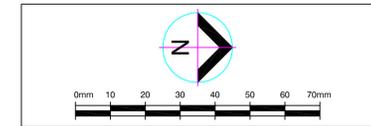
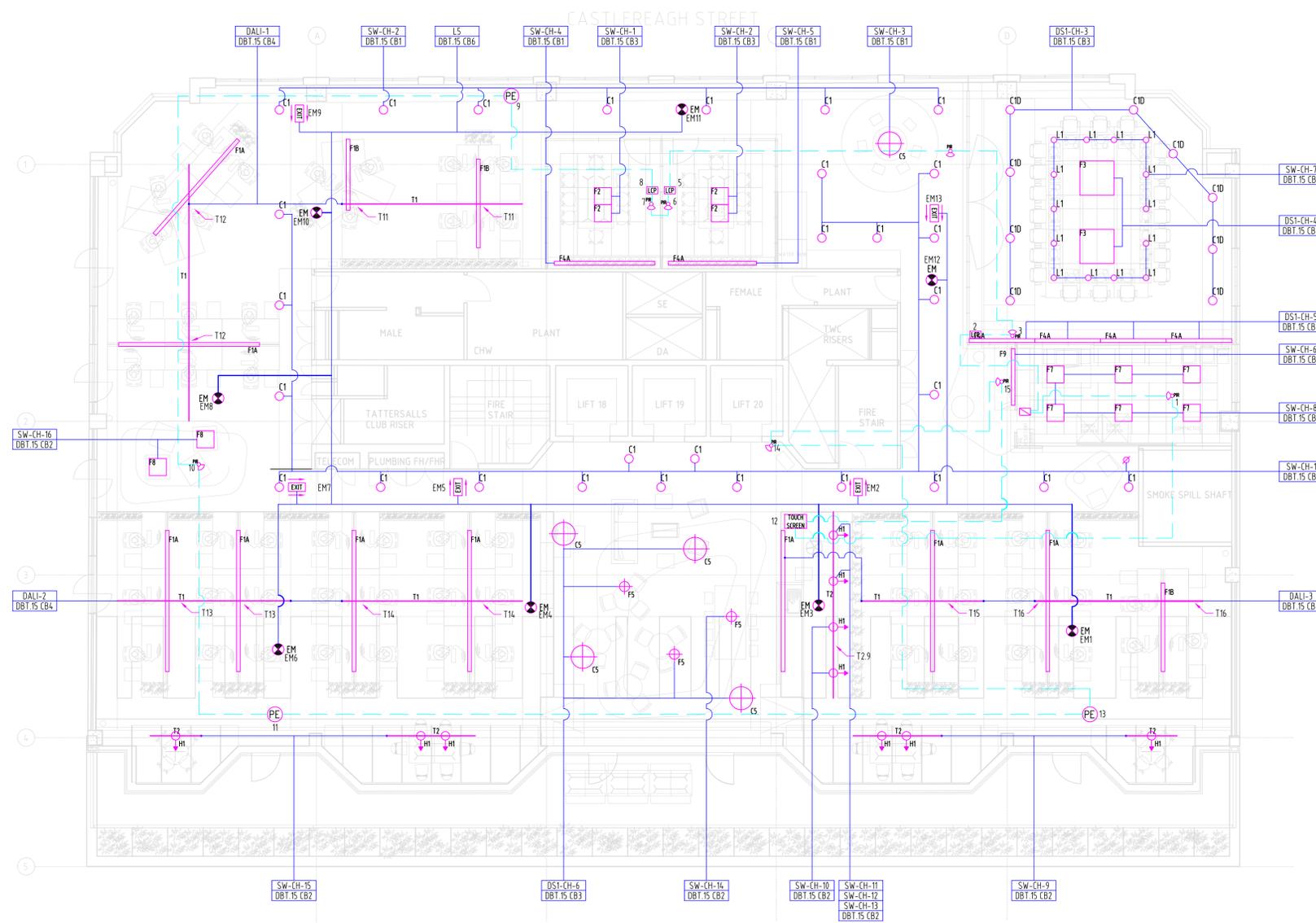
DATE	REV	AMENDMENT	BY	CHKD
19.10.07	A	TENDER	MPB	ASD
12.11.07	B	CONSTRUCTION ISSUE	MPB	ASD
27.02.08	C	AS INSTALLED ISSUE	TC	

NOTES

1. --- DYNALITE CONTROL 'LOOP' CCT

COMPONENT	SERIAL NO.
1	430746
2	426490
3	424664
4	430678
5	426489
6	424663
7	419157
8	426488
9	428148
10	430745
11	430745
12	
13	428147
14	430679
15	424665

CIRCUIT	CHANNEL	...
DBT.15 CB1	L1	8.8A	SW-CH-1	4.76A
			SW-CH-2	15A
			SW-CH-3	0.3A
			SW-CH-4	0.35A
			SW-CH-5	0.35A
			SW-CH-6	0.3A
			SW-CH-7	0.175A
			SW-CH-8	1.05A
DBT.15 CB2	L2	2.08A	SW-CH-9	0.43A
			SW-CH-10	0.3A
			SW-CH-11	0.10A
			SW-CH-12	0.10A
			SW-CH-13	0.10A
			SW-CH-14	0.15A
			SW-CH-15	0.43A
			SW-CH-16	0.46A
DBT.15 CB3	L3	9.8A	DS1-CH-1	1A
			DS1-CH-2	1A
			DS1-CH-3	3A
			DS1-CH-4	2A
			DS1-CH-5	1A
DBT.15 CB4	L4	12A	DS1-CH-6	1.6A
			DALL-1	4A
			DALL-2	4A
DBT.15 CB6	L5		DALL-3	4A



KLM GROUP
ELECTRICAL DATA COMMUNICATIONS

Unit 1, 9-11 Chaplin Drive
Lane Cove NSW 2066

Phone: + 61 2 9422 4444
Fax: + 61 2 9422 4400

Lincolne Scott
Consulting Engineers

Adelaide Auckland Bangkok
Brisbane Cairns Hongkulu
Melbourne Perth Shanghai
Singapore Sydney

Level 1 41 McLaren Street
PO Box 6245 North Sydney
New South Wales 2060 Australia
Telephone 61 2 8907 0900
Facsimile 61 2 8907 4127
sydney@lincolnescott.com

PROJECT
LEVEL 15
179 ELIZABETH STREET
SYDNEY NSW 2000

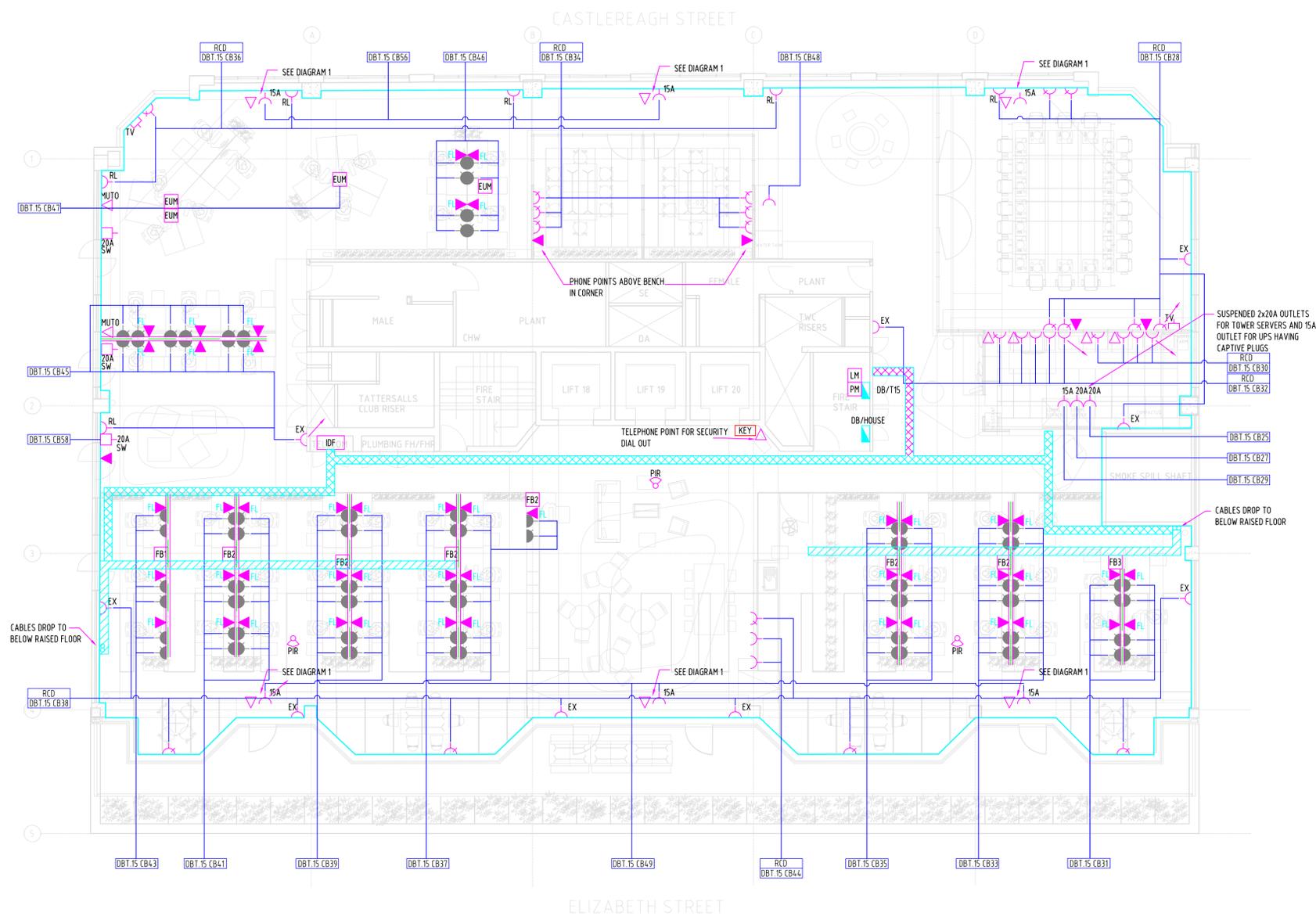
CLIENT
GBCA

DATE	04.10.07	DRAWN	EWM
SCALE	1:100	CHECKED	
SHEET SIZE	A1	APPROVED	
CAD FILE			

TITLE
ELECTRICAL SERVICES
LIGHTING LAYOUT

PROJECT NO. **SYD 0703900** DRAWING NO. **E001** REVISION **C**

DATE	REV	AMENDMENT	BY	CHKD
19.10.07	A	TENDER	MPB	ASD
12.11.07	B	CONSTRUCTION ISSUE	MPB	ASD
21.11.07	C	REVISED CONSTRUCTION ISSUE	MPB	ASD
28.11.07	D	REVISED CONSTRUCTION ISSUE	MPB	ASD
27.02.08	E	AS INSTALLED	TC	



- FB1 FLOOR BOX CONTAINS - 1 X 20A
3 X DOUBLE RJ45
- FB2 FLOOR BOX CONTAINS - 1 X 20A
6 X DOUBLE RJ45
- FB3 FLOOR BOX CONTAINS - 1 X 20A
4 X DOUBLE RJ45
- EUM UMBILICAL - OUTLETS MOUNTED AT HL WITH DROPPERS TO FLOOR LEVEL
1 X 20A
6 X DOUBLE RJ45
- 10A DGPO
EX - EXISTING TO BE RETAINED
RL - EXISTING TO BE RELOCATED TO FRONT OF PLENUM WHERE NEEDED
- SOFT WIRED 10A DGPO
- STARTER SOCKET
- SINGLE RJ45
FL - DENOTES FLY LEAD
- DOUBLE RJ45
FL - DENOTES FLY LEAD
- MUTO MULTI USER COMMUNICATIONS OUTLET
12X RJ45 OUTLETS
- CABLE TRAY AT HIGH LEVEL 300mm POWER AND 300mm COMMS
- CABLE TRAY BELOW RAISED FLOOR 300mm POWER AND 300mm COMMS
- CABLE DROPPERS
- 2 X 50mm BASKET STACKED 1 FOR SOFT WIRE POWER AND 1 FOR COMMS FLY LEADS
- PIR PIR INTRUDER DETECTOR
- KEY INTRUDER ALARM KEY PAD
- LM 100amp Three Phase meter for Lighting Circuits Located in DB/T15
- PM 100amp Three Phase meter for power circuits Located in DB/T15

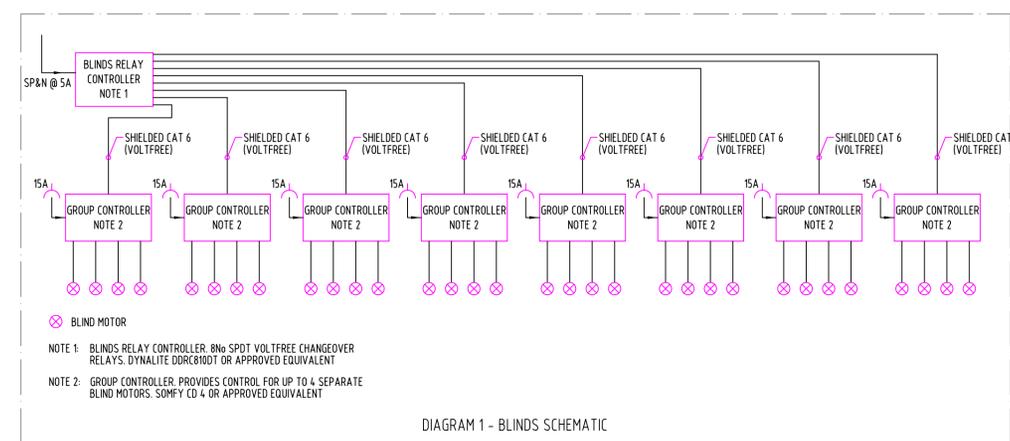
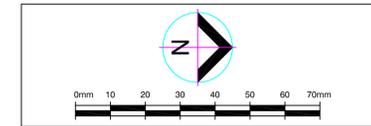


DIAGRAM 1 - BLINDS SCHEMATIC



KLM GROUP
ELECTRICAL DATA COMMUNICATIONS

Unit 1, 9-11 Chaplin Drive
Lane Cove NSW 2066

Phone: + 61 2 9422 4444
Fax: + 61 2 9422 4400

Lincolne Scott
Consulting Engineers

Adelaide Auckland Bangkok
Brisbane Cairns Hongkulu
Melbourne Perth Shanghai
Singapore Sydney

Level 1 41 McLaren Street
PO Box 6245 North Sydney
New South Wales 2060 Australia
Telephone 61 2 8907 0900
Facsimile 61 2 8907 4127
sydney@lincolnescott.com

PROJECT
LEVEL 15
179 ELIZABETH STREET
SYDNEY NSW 2000

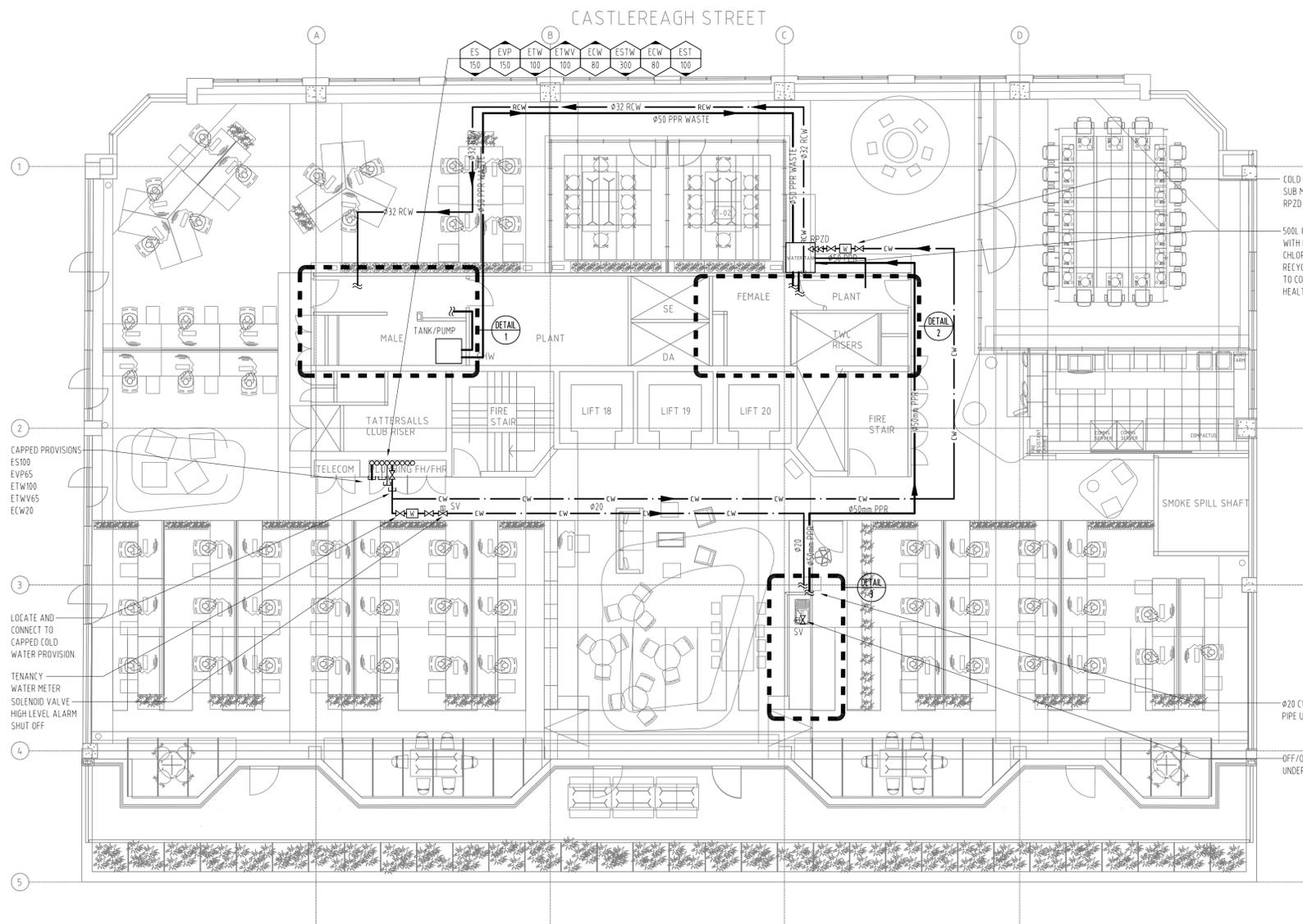
CLIENT
GBCA

DATE	15.10.07	DRAWN	MPB
SCALE	1:100	CHECKED	ASD
SHEET SIZE	A1	APPROVED	ASD
CAD FILE			

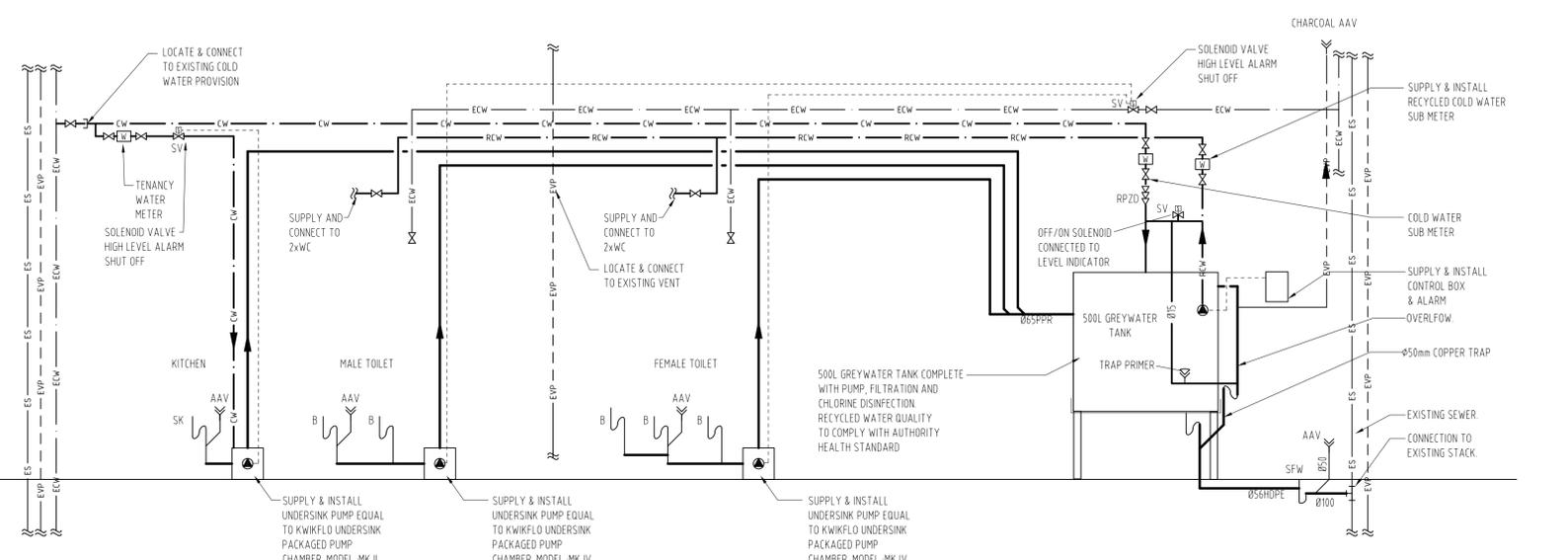
TITLE	PROJECT NO.	DRAWING NO.	REVISION
ELECTRICAL SERVICES POWER LAYOUT	SYD 0703900	E002	E

AS INSTALLED

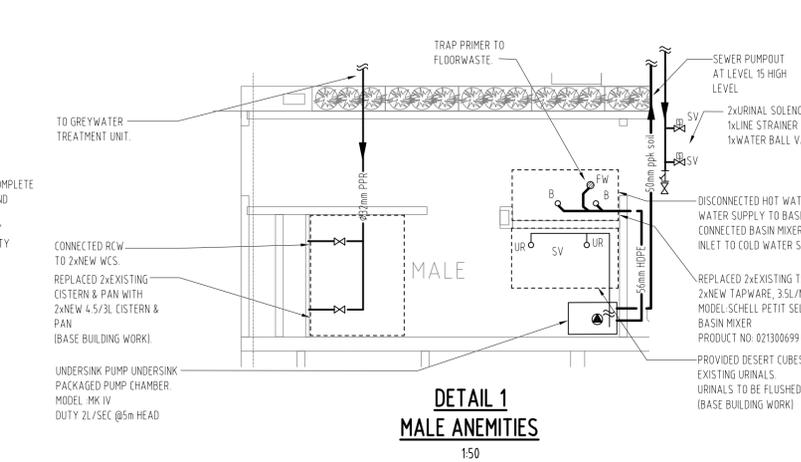
DATE	REV	AMENDMENT	BY	CHKD
13.06.08	AB	ISSUED FOR AS BUILTS	JT	VM



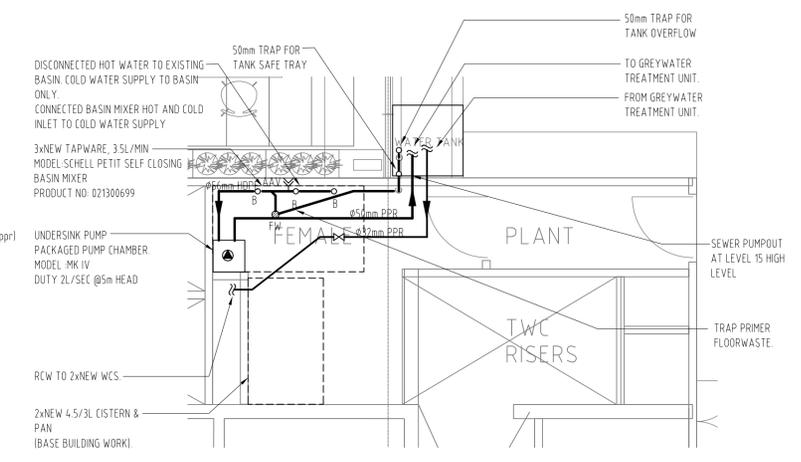
ELIZABETH STREET
PLAN
1:100



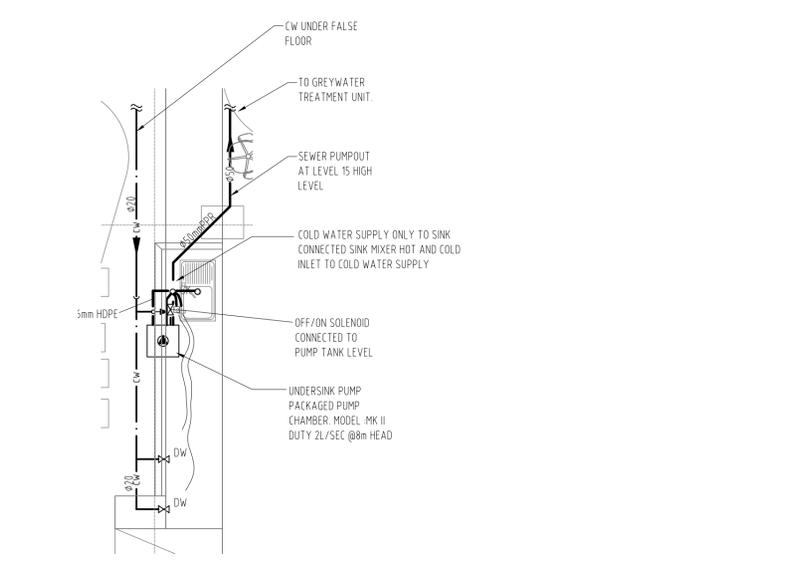
SCHEMATIC
N.T.S.



DETAIL 1
MALE AMENITIES
1:50



DETAIL 2
FEMALE AMENITIES
1:50



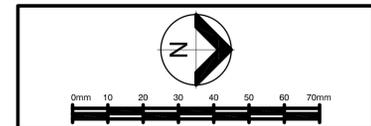
DETAIL 3
KITCHEN
1:50

LEGEND

	SANITARY DRAINAGE
	VENT PIPE
	COLD WATER
	HOT WATER
	RECYCLED/RECLAIMED COLD WATER
	REDUNDANT SERVICE
	RISER
	DROPPER
	FLOOR WASTE
	WATER METER
	AIR ADMITTANCE VALVE
	THERMOSTATIC MIXING VALVE
	CAPPED OFF
	STOP VALVE
	SOLENOID VALVE
	BASIN
	SINK
	URINAL
	WATER CLOSET
	DISHWASHER
	SEALED FLOOR WASTE

PLUMBING CONTRACTORS

6292-254 WEST STREET
CARLTON NSW 2218
Telephone: 61 2 9747 0003
Fax: 61 2 9547 0044
Email: nsw@skaneplumbing.com.au



REFERENCE COORDINATION DRAWINGS

DESCRIPTION	DRAWING NO.	REV	CHKD

Lincolne Scott

Consulting Engineers
Adelaide Auckland Bangkok
Brisbane Cairns Honolulu
New South Wales 2000 Australia
Perth Singapore Sydney
Level 141 McLaren Street
PO Box 6245 North Sydney
New South Wales 2060 Australia
Telephone 61 2 9801 9900
Facsimile 61 2 9557 4127
sydney@lincolnescott.com

PROJECT
LEVEL 15
179 ELIZABETH STREET
SYDNEY NSW 2000
CLIENT
GBCA

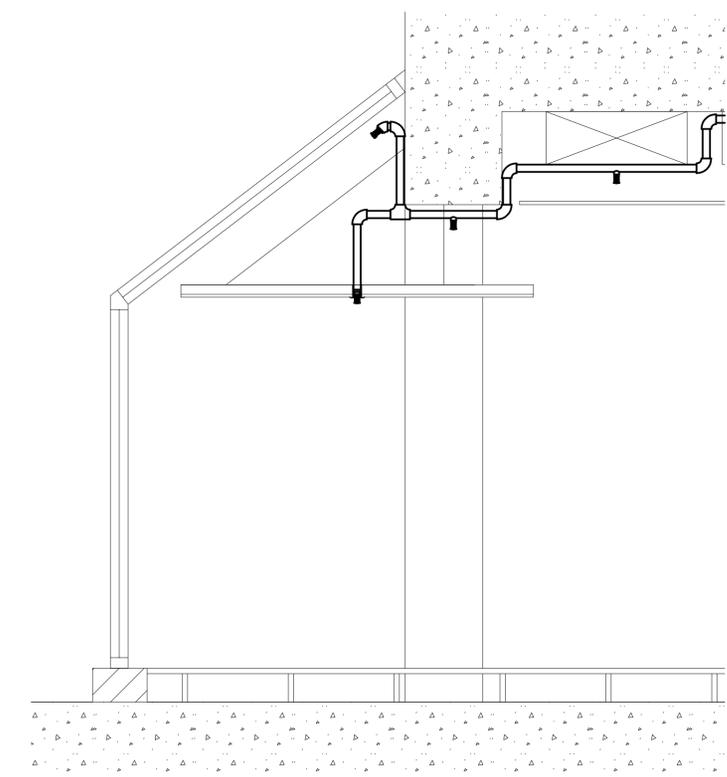
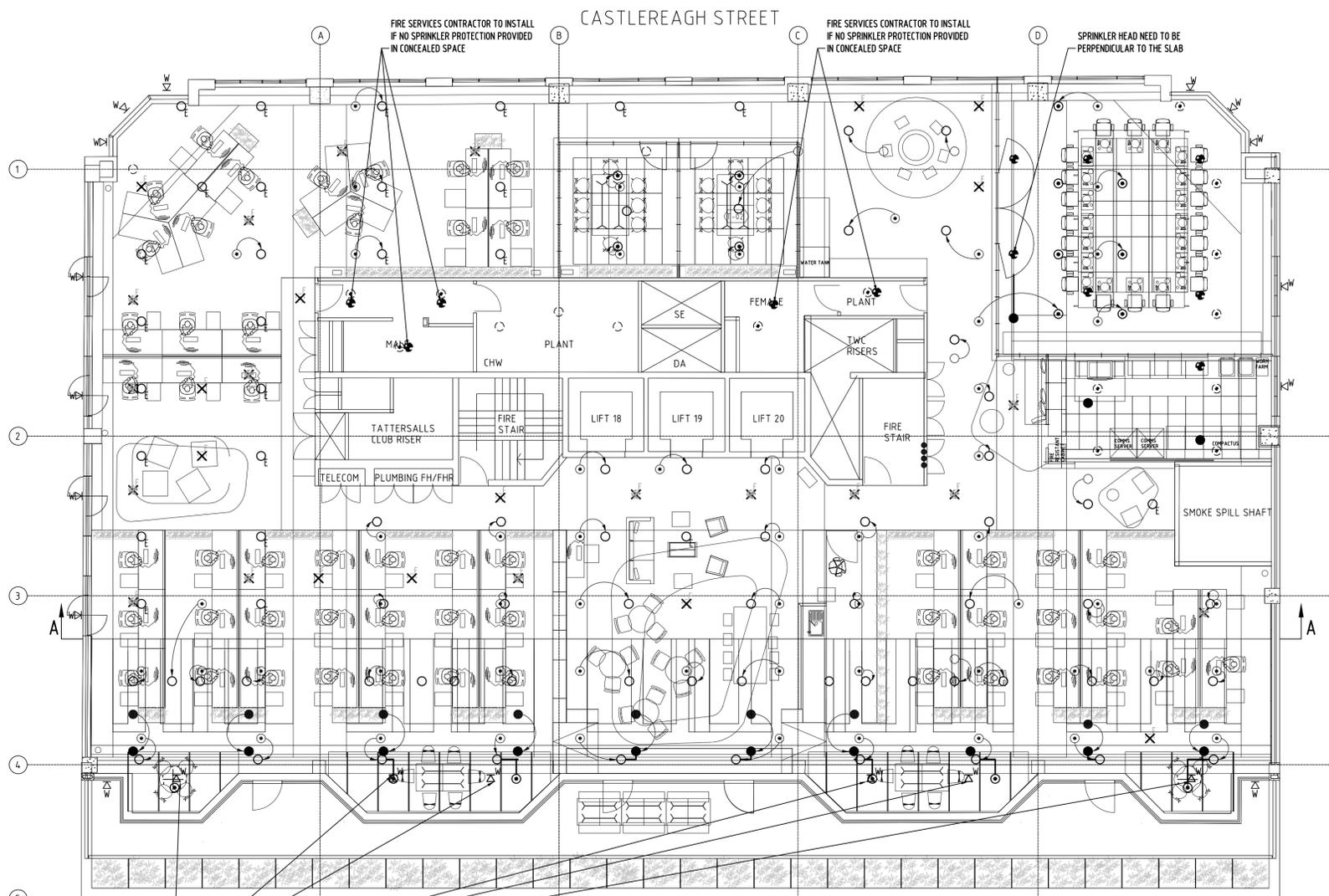
DATE	13.06.08	DRAWN	JT
SCALE	AS NOTED	CHECKED	VM
SHEET SIZE	A1	APPROVED	AJC
CAD FILE	C:\L15-ELEZABETH\H410.dwg		

TITLE
HYDRAULIC SERVICIES
179 ELIZABETH STREET

PROJECT NO.	DRAWING NO.	REVISION
SYD 0703900	H410	AB

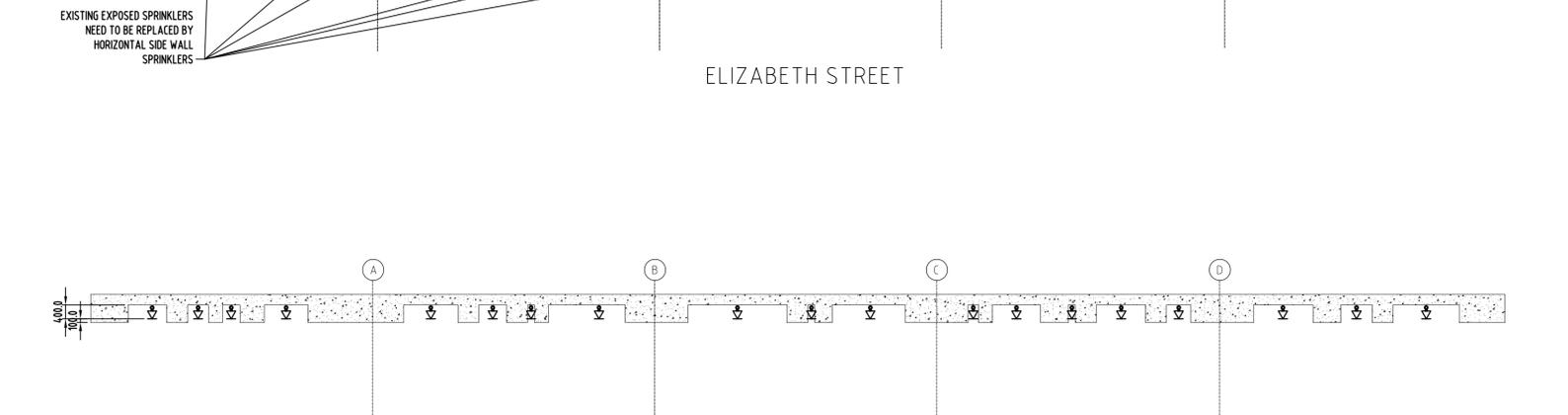
AS BUILTS

DATE	REV	AMENDMENT	BY	CHKD
09.11.07	A	CONSTRUCTION ISSUE	GM	WZA
20.11.07	B	REVISED CONSTRUCTION ISSUE	GM	WZA
04.11.07	C	REVISED CONSTRUCTION ISSUE	GM	WAZA



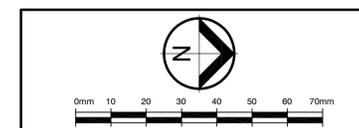
LEGEND

- NEW BELOW CEILING SPRINKLER
- EXISTING BELOW CEILING SPRINKLER TO REMAIN
- EXISTING BELOW CEILING SPRINKLER TO BE RELOCATED
- EXISTING BELOW CEILING SPRINKLER TO BE REMOVED
- NEW EXPOSED SPRINKLER
- EXISTING BELOW CEILING SPRINKLER CONVERTED TO EXPOSED SPRINKLER
- EXISTING BELOW CEILING SPRINKLER TO BE RELOCATED AND CONVERTED TO EXPOSED SPRINKLER
- EXISTING EXPOSED SPRINKLER TO REMAIN
- NEW CONCEALED SPACE SPRINKLER
- EXISTING CONCEALED SPACE SPRINKLER TO REMAIN
- EXISTING CONCEALED SPACE SPRINKLER TO BE RELOCATED
- EXISTING CONCEALED SPACE SPRINKLER TO BE REMOVED
- ⊥ NEW SIDE WALL SPRINKLER
- ⊥ EXISTING SIDE WALL SPRINKLER
- ⊥ PENDANT SPRINKLER ELEVATION



SCOPE OF WORKS

- The scope of the fire services works shall be for the complete works associated with the refurbishment and upgrade works and shall include and not be limited to the following:
- The provision of the required upgrade for the sprinklers system shall be carried out in accordance with AS2118.1-1995. In addition, during sprinklers upgrade works, fire services contractor shall provide temporary fire protection services to protect OH1 areas to BCA and Fire Authority requirements.
 - Where the existing sprinkler installation requires isolation during the works, fire service contractor shall seek the approval from the building management. Fire Service contractor shall provide a adequate fire protection to BCA and fire authority during the disengagement of the sprinkler system.
 - New sprinkler heads to be pendant spray type standard response rated at 68 C° (match existing).
 - Sprinklers' pipework supports associated with the new pipework shall be carried out in accordance with AS2118.9
 - Connect all relocated and new sprinkler heads to the existing sprinkler system and make good.
 - New sprinklers pipework shall be tested before connection to existing in accordance with AS2118.9. Test certificates to be issued by fire service contractor demonstrating test results to the superintendent.
 - All Works to be carried out in a professional manner and finished to Architectural requirements.
 - Coordinate fire services with other building services trades.
 - All cabling shall be new and run in PVC conduits where ever exposed.
 - Carbon Dioxide Portable Fire Extinguishers must be provided as listed in Table E1.6 of the BCA and must be selected, coated and distributed in accordance with sections 1, 2,3, and 4 of AS2444.
 - Install new EMS cone speakers in accordance with AS2220.1&2-1999 and connect to the existing EMS system, taking into account upgrading the amplifiers if required to accommodate the new installed speakers and adjust the dB level.
 - Modify Zion AS2 FIP located at Fire Control Room in ground floor level as required.
 - Modify and upgrade Zion EMS (amplifiers) panel located at Fire Control Room in ground floor level as required.
 - Provide labels to associated equipment within this scope of works.
 - Certification of the installed work for compliance with BCA, AS1668.1-1999, AS2220.1&2-1999 (Admt 2), and AS 2118.1-1995 provided in format fire safety certificate (form 15).



REFERENCE COORDINATION DRAWINGS			
DESCRIPTION	DRAWING NO.	REV	CHKD

Lincolne Scott
 Consulting Engineers
 Adelaide Auckland Bangkok
 Brisbane Cairns Honolulu
 Melbourne Perth Shanghai
 Singapore Sydney
 Level 141 McLaren Street
 PO Box 6245 North Sydney
 New South Wales 2060 Australia
 Telephone 61 2 9807 1000
 Facsimile 61 2 9857 4127
 sydney@lincolnescott.com

PROJECT
LEVEL 15
179 ELIZABETH STREET
SYDNEY NSW 2000
 CLIENT
GBCA

DATE	04.10.07	DRAWN	GM
SCALE	1:100	CHECKED	WZA
SHEET SIZE	A1	APPROVED	AAS
CAD FILE	P:\SYD0703900\5\F510.dwg		

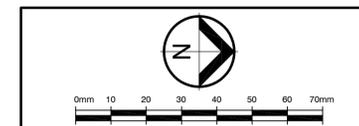
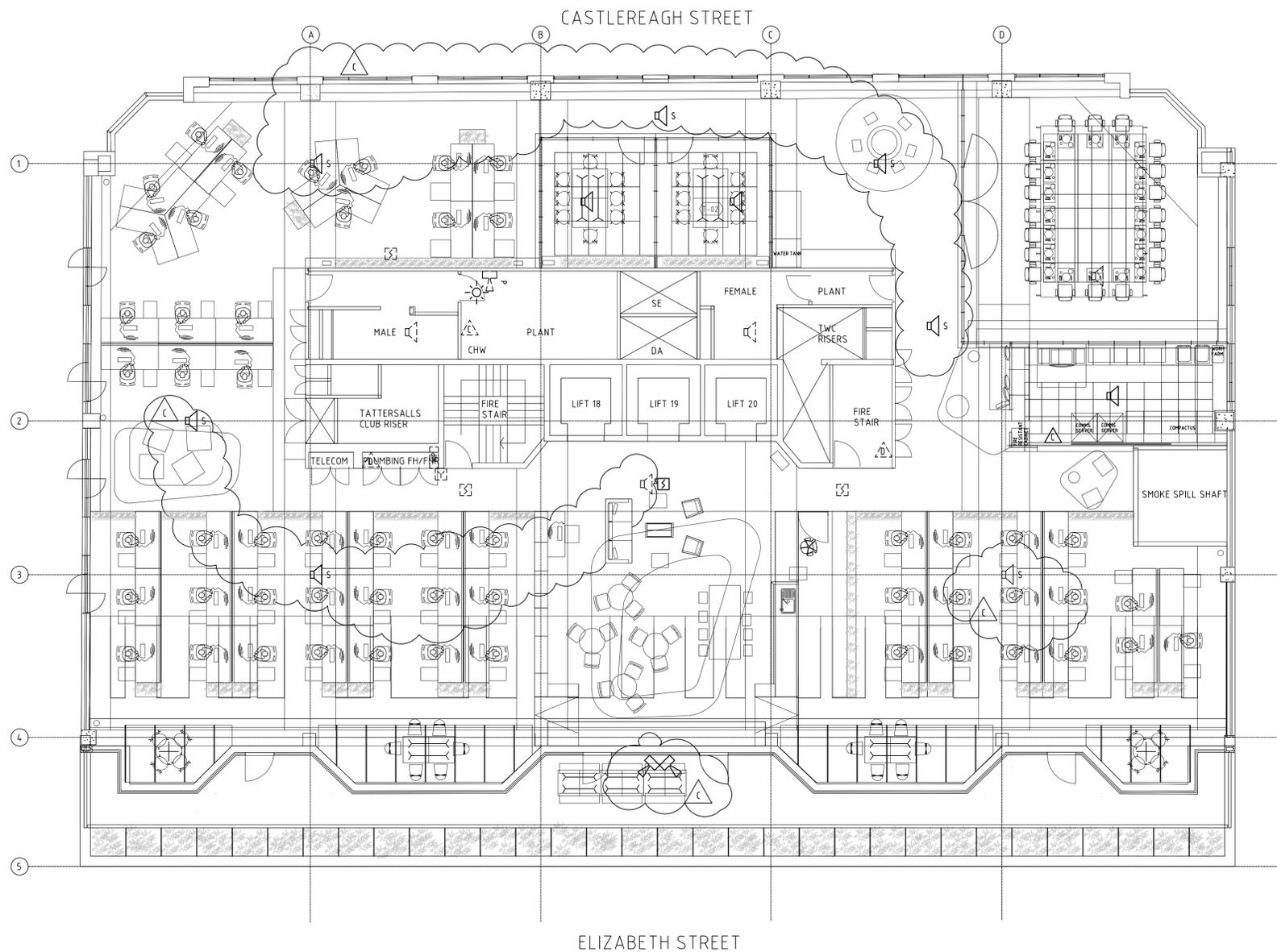
TITLE
FIRE SERVICES
179 ELIZABETH STREET
WET FIRE SYSTEM LAYOUT
 PROJECT NO. DRAWING NO. REVISION
SYD 0703900 F510 C

CONSTRUCTION

DATE	REV	AMENDMENT	BY	CHKD
09.11.07	A	CONSTRUCTION ISSUE	GM	WZA
20.11.07	B	REVISED CONSTRUCTION ISSUE	GM	WZA
04.11.07	C	REVISED CONSTRUCTION ISSUE	GM	WAZA

LEGEND

-  FIRE EXTINGUISHER NEW
C - CARBON DIOXIDE
-  FIRE EXTINGUISHER EXISTING
C - CARBON DIOXIDE
D - DRY CHEMICAL
-  WARDEN INTERCOM EXISTING
-  FLASHING STROBE LIGHT NEW
-  HORN SPEAKER NEW
-  HORN SPEAKER EXISTING
-  CONE SPEAKER NEW
-  SPEAKER NEW SURFACE MOUNTED
-  CONE SPEAKER EXISTING
REPLACE EXISTING CONE SPEAKERS WITH CEILING
RECESSED SPEAKER IN OPEN AREAS.
-  SMOKE DETECTOR EXPOSED NEW
-  SMOKE DETECTOR EXPOSED EXISTING
-  MANUAL CALL POINT EXISTING



REFERENCE COORDINATION DRAWINGS			
DESCRIPTION	DRAWING NO.	REV	CHKD

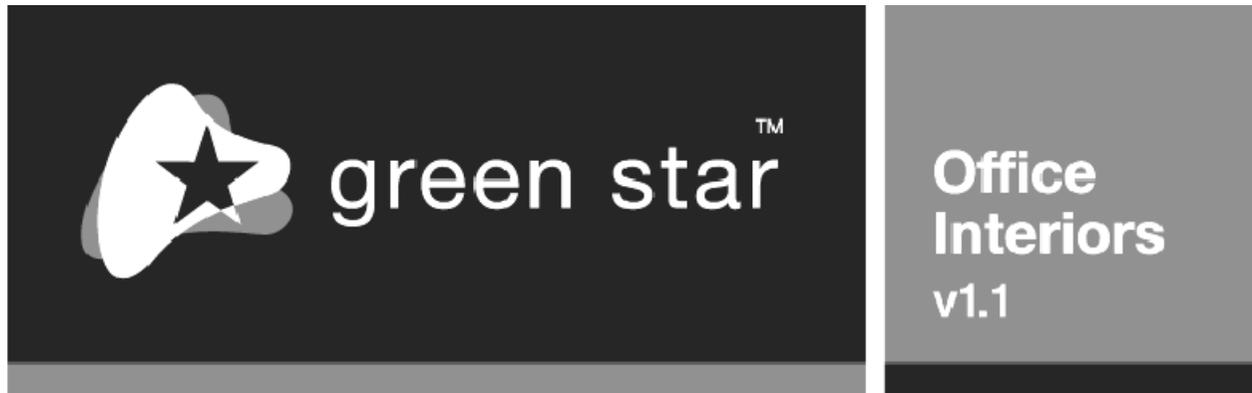
Lincolne Scott
 Consulting Engineers
 Adelaide Auckland Bangkok
 Brisbane Cairns Honolulu
 Melbourne Perth Shanghai
 Singapore Sydney
 Level 141 McLaren Street
 PO Box 6245 North Sydney
 New South Wales 2060 Australia
 Telephone 61 2 9807 1000
 Facsimile 61 2 9857 4127
 sydney@lincolnescott.com

PROJECT
LEVEL 15
179 ELIZABETH STREET
SYDNEY NSW 2000
 CLIENT
 GBCA

DATE	04.10.07	DRAWN	GM
SCALE	1:100	CHECKED	WZA
SHEET SIZE	A1	APPROVED	AAS
CAD FILE	P:\SYD0703900\5\F520.dwg		

TITLE		
FIRE SERVICES		
179 ELIZABETH STREET		
DRY FIRE SYSTEM LAYOUT		
PROJECT NO.	DRAWING NO.	REVISION
SYD 0703900	F520	C

CONSTRUCTION



The Green Building Council of Australia (GBCA) recommends that you use this rating tool in conjunction with the Green Star - Office Interiors v1.1 Technical Manual. To obtain a copy, please see www.gbcaus.org.

Green Star - Office Interiors evaluates the environmental initiatives and/or the potential environmental impact of a Class 5 office tenancy fitout. It was developed primarily to assess an office tenancy fitout once construction is completed, however it should also be used during the fitout design phase to ensure green initiatives are incorporated at the earliest possible stage.

You are invited to use Green Star - Office Interiors to predict a Green Star rating. The GBCA does not endorse any self-assessed rating and you are forbidden from presenting self-assessment results in the public domain. The GBCA offers a formal certification process for ratings of Four Stars and above; this service provides for independent third party review of points claimed to ensure all points can be demonstrated to be achieved by the provision of the necessary documentary evidence. The use of Green Star - Office Interiors without formal certification by the GBCA does not entitle the user or any other party to promote a Green Star rating publicly.

Use the tabs at the bottom of the pages to navigate.

© Green Building Council of Australia

Introduction to Green Star

What is Green Star?

What does Green Star - Office Interiors do?

Who can use Green Star - Office Interiors?

What do Green Star ratings mean?

Acknowledgements



What is Green Star?

The Green Star environmental rating system for buildings was developed by the Green Building Council of Australia (GBCA). Green Star is Australia's first comprehensive rating system for evaluating the environmental design and performance of Australian buildings based on a number of criteria, including energy and water efficiency, indoor environment quality and resource conservation.

Green Star has built on existing systems and tools in overseas markets, including the British BREEAM (Building Research Establishment Environmental Assessment Method) system and the North American LEED (Leadership in Energy and Environmental Design) system, by establishing individual environmental measurement criteria relevant to the Australian marketplace and environmental context.

The Green Star rating system was created to:

- define green building by establishing a common language and standard of measurement;
- promote integrated, whole-building design;
- identify building life-cycle impacts;
- raise awareness of green building benefits;
- recognise and reward environmental leadership; and
- transform the built environment to reduce the environmental impact of development.

What does Green Star - Office Interiors do?

Green Star - Office Interiors evaluates the environmental initiatives and/or the potential environmental impact of a Class 5 office tenancy fitout. It was developed primarily to assess an office tenancy fitout once construction is completed, however it should also be used during the fitout design phase to ensure green initiatives are incorporated at the earliest possible stage.

Who can use Green Star - Office Interiors?

Green Star - Office Interiors should be used by Class 5 office tenancy fitout project stakeholders as a guide for green and sustainable design and resource use. The rating tool can assess a tenancy fitout post-construction, however it can also be used during the fitout design phase to ensure green initiatives are incorporated at the earliest possible stage. The use of Green Star - Office Interiors is encouraged on all such projects to assess and improve their environmental design attributes.

The GBCA recommends that you use this rating tool in conjunction with the Green Star - Office Interiors v1.1 Technical Manual. To obtain a copy, see www.gbcaus.org.

The use of Green Star – Office Interiors without formal certification by the GBCA does not entitle the user or any other party to promote the Green Star rating achieved. No fee is payable to the GBCA for such use, however formal recognition of the Green Star rating - and the right to promote same - requires undertaking the formal certification process offered by the GBCA.

All Green Star rating tools are reviewed annually; please forward any feedback to greenstar@gbcaus.org by 30 November each year.

What do Green Star ratings mean?

Green Star rating tools use six stars to measure performance. Projects that obtain a predicted rating of one, two or three stars are not eligible for formal certification. Projects that obtain a predicted 4 Star rating (or above) or above are eligible to apply for formal certification, whereby a:

- 4 Star Green Star Certified Rating recognises and rewards "Best Practice";
- 5 Star Green Star Certified Rating recognises and rewards "Australian Excellence"; and
- 6 Star Green Star Certified Rating recognises and rewards "World Leadership".

The first step in registering a project for formal certification is to contact the GBCA's Technical Manager via e-mail at greenstar@gbcaus.org.

Again, the use of Green Star - Office Interiors without formal certification by the GBCA does not entitle the user or any other party to promote a Green Star rating publicly.

Acknowledgements

The GBCA is very grateful to all parties who contributed monies, content, time and effort in the development of the Green Star rating system and its rating tools.

Green Star – Office Interiors was very generously sponsored by the following GBCA members: the Sustainable Energy Authority Victoria, the office furniture designer and manufacturer Wilkhahn Asia Pacific and the US-based philanthropic organisation the Flora Family Foundation.

Green Star – Office Interiors was based on national and international guidelines, including the US LEED Green Building Rating System for Commercial Interiors, the Queensland Government's Sustainable Development Office Fitout Design Guidelines, Melbourne Docklands ESD Guide, and the Sydney Olympic Park Authority's Environmental Guidelines 1993. The support of the UK's Building Research Establishment is also acknowledged.



How to use this tool

1. Complete the Building Input worksheet as the building's type and location may affect the predicted rating.
2. Complete the remaining worksheets by reviewing each credit in each category and entering the number of points you predict the building will achieve in the 'No. of Points Achieved' column. Calculators are provided for a number of the tool's credits.
3. Enter any points that may be achieved but need to be confirmed in the 'Points to be Confirmed' column.
4. Enter any comments required in the 'Comments' column.
5. The predicted rating is shown in the Summary worksheet. More detail on point scores (both achieved and those to be confirmed) are shown in the Credit Summary and Graphical Summary worksheets at the end of the tool.

Limitations

The GBCA does not endorse any self-assessed rating achieved by the use of Green Star - Office Interiors. The GBCA offers a formal certification process for ratings of Four Stars and above; this service provides for independent third party review of points claimed to ensure all points can be demonstrated to be achieved by the provision of the necessary documentary evidence. The use of Green Star Office Interiors without formal certification does not entitle the user or any other party to promote the Green Star rating achieved.

The application of Green Star – Office Interiors to all Class 5 office tenancy fitout projects is encouraged to assess and improve their environmental design attributes. No fee is payable to the GBCA for such use, however again formal recognition of the Green Star rating - and the right to promote same - requires undertaking the formal certification process offered by the GBCA.



Authorisation, Acknowledgement and Disclaimer

The Green Star environmental rating system for buildings ("Green Star") and the Green Star – Office Interiors rating tool ("Green Star – Office Interiors") have been developed by the Green Building Council of Australia ("GBCA"). Green Star – Office Interiors evaluates the environmental initiatives and/or the potential environmental impact of a Class 5 office tenancy fitout. It is intended for use by stakeholders including fitout project team members as a guide for green and sustainable design, procurement and construction. As with all Green Star rating tools, Green Star – Office Interiors may be subject to further development in the future.

Green Star and Green Star - Office Interiors have been developed with the assistance and participation of representatives from many organisations. The views and opinions expressed have been determined upon by the GBCA and its Committees.

Together, Green Star, Green Star - Office Interiors and all accompanying documentation represent the GBCA's approved standard to improve the environmental impact of buildings using established and/or advanced industry principles, practices, materials and standards.

The GBCA authorises you to view and use Green Star - Office Interiors for your individual use only. In exchange for this authorisation, you agree that the GBCA retains all copyright and other proprietary notices rights contained in and in relation to Green Star - Office Interiors and agree not to sell, modify, or use for another purpose the original tool or to reproduce, display or distribute the tool in any way for any public or commercial purpose, including display on a website or in a networked environment. Unauthorised use of Green Star and/or Green Star - Office Interiors will violate copyright and other laws, and is prohibited. All text, graphics, layout and other elements of content contained in Green Star and its rating tools are owned by the GBCA and are protected by copyright, trade mark and other laws.

The GBCA does not accept responsibility, including for negligence, for any inaccuracy within Green Star and/or its rating tools and makes no warranty, expressed or implied, including the warranties of merchantability and fitness for a particular purpose, nor assumes any legal liability or responsibility to you or any third parties for the accuracy, completeness, or use of, or reliance on, any information contained in Green Star and/or Green Star – Office Interiors, or for any injuries, losses or damages (including, without limitation, equitable relief and economic loss) arising out of such use or reliance.

To the maximum extent permitted by law, the GBCA does not accept responsibility, including without limitation for negligence, for any inaccuracy within Green Star and/or its rating tools and makes no warranty, expressed or implied, including the warranties of merchantability and fitness for a particular purpose, nor assumes any legal liability or responsibility to you or any third parties for the accuracy, completeness, or use of, or reliance on, any information contained in Green Star and/or Green Star – Office Interiors, or for any injuries, losses or damages (including, without limitation, equitable relief and economic loss) arising out of such use or reliance.

Green Star and Green Star - Office Interiors are no substitute for professional advice. You should seek your own professional and other appropriate advice on the matters addressed by them.

As a condition of use, you covenant not to sue, and agree to waive and release the GBCA, its officers, agents, employees and its members from any and all claims, demands and causes of action for any injury, loss, destruction or damage (including, without limitation, equitable relief and economic loss) that you may now or hereafter have a right to assert against such parties as a result of your use of, or reliance on, Green Star and/or Green Star – Office Interiors.

The GBCA does not endorse any self-assessed Green Star rating achieved by the use of Green Star – Office Interiors. The GBCA offers a formal certification process for 4 Star ratings and above; this service provides for independent third party review of points claimed to ensure all points can be demonstrated to be achieved by the provision of the necessary documentary evidence. The use of Green Star - Office Interiors without formal certification by the GBCA does not entitle the user or any other party to promote the Green Star rating achieved.

The application of Green Star - Office Interiors to all Class 5 office tenancy fitouts projects is encouraged to assess and improve their environmental design attributes. No fee is payable to the GBCA for such use, however again formal recognition of the Green Star rating - and the right to promote same - requires undertaking the formal certification process offered by the GBCA.

You are only authorised to proceed to use Green Star and Green Star – Office Interiors on this basis.

All rights reserved.

Green Star - Office Interiors

Building Input WorkSheet

New or Refurbished Building:	Refurbished Building ▼
Name of Building:	Level 15, 179 Elizabeth Street
Address of Building:	179 Elizabeth Street
	Sydney
Postcode:	2000
State:	NSW ▼
Applicant:	GBCA
Contact Person:	Joe Karten
Green Star Accredited Professional:	Joe Karten
Project Manager:	Davis Langdon
Architect:	BVN
Structural/Civil Engineer:	Lincolne Scott
Building Services Engineer:	Lincolne Scott
Quantity Surveyor:	Davis langdon
Acoustic Consultant:	
Landscaping Consultant:	
Building Surveyor:	
Main Contractor:	Schiavello
Local Planning Authority:	
Net Lettable Area (NLA) in m ² :	804
No. of Levels:	1
Please note, eligibilty criteria apply to projects that wish to undergo certification under this rating tool. Please refer to www.gbcaus.org for further detials.	
Building Description: (Orientation, Form, Structure, Façade, etc.)	
Building Services: (Heating, Cooling, Ventilation, Lighting, Lifts, Domestic Hot Water)	
Date:	14-Nov-07
Current Project Phase:	
NB Use of Green Star - Office Interiors may predict a rating that differs from that achieved via formal Green Star certification. Detailed guidance on credit compliance criteria is contained in the Green Star - Office Interiors Manual.	

Green Star - Office Interiors

Credit Summary for: Level 15, 179 Elizabeth Street

Management

Ref No.	Title	Aim of Credit	Credit Criteria Summary	No. of Points Available	No. of Points Achieved	Points to be Confirmed	Comments
Man-1	Green Star Accredited Professional	To encourage and recognise the adoption of sustainable development principles from the earliest project stages throughout design and construction.	Two points are awarded where it is demonstrated that at least one principal participant of the tenancy fitout design team is a Green Star Accredited Professional and is engaged to provide sustainability advice throughout the design and delivery period.	2	2		
Man-2	Tenancy Fitout Commissioning	To encourage and recognise improved building services performance and energy efficiency through adequate commissioning.	One point is awarded where it is demonstrated that comprehensive pre-commissioning, commissioning and quality monitoring were performed by the appropriate contractors and trades on-site (developed in accordance with relevant ASHRAE Guidelines and CIBSE Commissioning Codes) and were communicated to the tenant. This credit is limited to items installed as part of the tenancy fitout and does not include base building services unless altered by the tenant. If no alterations to base building services are undertaken or no supplementary systems are installed this credit is 'Not Applicable' - type "na" in the 'No. of Points Achieved' column.	1	0		
			An additional point is awarded where it is demonstrated that the tenancy fitout project team transferred commissioning information to the base building owner, including: <ul style="list-style-type: none"> • Tenancy fitout buildings services design intent; • Tenancy fitout as-installed information including commissioning data which impacts on any base building services; and • Supplementary building services details and the commissioning report. 	1	0		
Man-3	Commissioning - Tenancy Fitout Tuning	To encourage and recognise improved energy efficiency and comfort within the tenancy in all seasons due to adequate commissioning.	One point is awarded for tenancy fitouts greater than 1000m2 where it is demonstrated that a tenant is committed to 12 months' commissioning and tuning and reporting the commissioning outcomes to the building owner. Tuning is required at least quarterly and final recommissioning is required after 12 months. If the fitout is less than 1000m2 or if only minor or no alterations to base building services are undertaken, or no supplementary building services are installed, then this credit is 'Not Applicable' - type "na" in the 'No. of Points Achieved' column.	0	na		
Man-4	Tenant Guide	To encourage and recognise the provision of guidance to enable tenants to achieve the environmental performance envisaged by the tenancy fitout design team.	Three points are awarded where it is demonstrated that there is a Tenant Guide.	3	3		

Man-5	Environmental Management	To encourage and recognise the adoption of an Environmental Management Plan in line with established government and industry guidelines during tenancy fitout works.	Up to four points are awarded as follows: <ul style="list-style-type: none"> • 2 points are awarded where it is demonstrated that the contractor implemented a comprehensive Environmental Management Plan for the works in accordance with Section 4 and Appendix C of the NSW Environmental Management System Guidelines (1998); • 2 points are awarded where it is demonstrated that the contractor had ISO 14001:2004 Environmental Management System certification for the tenancy fitout. 	4	4		
Man-6	Waste Management During Tenancy Fitout	To encourage and recognise initiatives that avoid construction and deconstruction waste going to landfill.	Up to three points are awarded where it is demonstrated that the contractor has implemented a Waste Management Plan and achieved the following targets: <ul style="list-style-type: none"> • 1 point where 40% of waste by weight was re-used or recycled; • 2 points where 60% of waste by weight was re-used or recycled; • 3 points where 80% of waste by weight was re-used or recycled. 	3	2		
Total Points =				14	11	0	



Green Star - Office Interiors

Credit Summary Level 15, 179 Elizabeth Street

Indoor Environment Quality

Ref No.	Title	Aim of Credit	Credit Criteria Summary	No. of Points Available	No. of Points Achieved	Points to be Confirmed	Comments
IEQ-1	Ventilation Rates	To encourage and recognise the provision of increased outside air rates in order to promote a healthy indoor environment.	<p>Up to three points are awarded where it is demonstrated that outside air is provided at rates that exceed the requirements of AS 1668.2-1991 OR if natural ventilation is provided.</p> <p>Mechanically Ventilated Tenancy:</p> <ul style="list-style-type: none"> • 1 point for a 50% increase on AS 1668.2-1991; • 2 points for a 100% increase on AS 1668.2-1991; • 3 points for a 150% increase on AS 1668.2-1991. <p>Naturally Ventilated Tenancy:</p> <ul style="list-style-type: none"> • 3 points where 90% of the NLA is naturally ventilated in accordance with AS 1668.2-2002. <p>Mixed Mode Tenancy:</p> <p>Both modes of operation must satisfy the relevant mechanical and natural ventilation criteria. The number of points awarded is limited to the maximum number of points available under the 'Mechanically Ventilated Tenancy' criteria.</p>	3	1		
			<p>If the ventilation points are achieved due to alterations to the base building as part of the tenancy fitout works, then an additional point is awarded. This additional point is only awarded if the base building would not have achieved the ventilation criteria above without the tenancy fitout works. If this improvement was not achieved the additional point is considered 'Not Applicable' - type "na" in the 'No. of Points Achieved' column.</p>	1	0		
IEQ-2	Carbon Dioxide Monitoring and Control	To encourage and recognise the provision of improved indoor air quality by ensuring that the fresh air supply can be measured against the level of pollutants in the tenancy fitout space.	<p>One point is awarded where it is demonstrated that ONE of the following conditions is met in the tenancy fitout:</p> <ul style="list-style-type: none"> • A carbon dioxide (CO₂) monitoring system with a minimum of one CO₂ sensor per return duct in the tenancy fitout that facilitates continuous monitoring and adjustment of outside air ventilation rates for all enclosed spaces less than 100m² in area; OR • The HVAC systems used by the tenancy provide 100% outside air with no re-circulated component; OR • The floor area occupied by the tenancy fitout is entirely naturally ventilated. <p>The Credit Criteria may be satisfied through existing base building features and provisions OR through additional work undertaken as part of the tenancy fitout for the supplementary air systems being delivered to the tenancy's meeting rooms.</p>	1	1		
IEQ-3	Daylight	To encourage and recognise tenancy fitouts that provide good levels of natural light at the work setting and are located in buildings designed to optimise the provision of natural light.	<p>Up to three points are awarded where it is demonstrated that a percentage of work settings are located on an area of the floor plate that has a Daylight Factor of >2.5% as measured at the finished floor level, as follows:</p> <ul style="list-style-type: none"> • 1 point = 30% of work settings; • 2 points = 60% of work settings; • 3 points = 90% of work settings. 	3	0		

IEQ-4	Daylight Glare Control	To encourage and recognise tenancy fitouts that are designed to reduce the discomfort of glare from natural light.	Up to two points are awarded where it is demonstrated that glare is reduced, as follows: <ul style="list-style-type: none"> • 1 point is awarded where automated blinds/screens with a Visual Light Transmittance (VLT) of less than 10% and a manual override function are installed by either the tenant or the base building owner to reduce glare associated with natural lighting and eliminate all direct sun penetration; • 1 point is awarded where all workstation monitors provided as part of the tenancy fitout are flat-screen and are mounted on an adjustable arm that enables the monitor to be pivoted and adjusted horizontally and vertically. 	2	1		
IEQ-5	High Frequency Ballasts	To encourage and recognise the increase in workplace amenity by avoiding low frequency flicker that may be associated with fluorescent lighting.	One point is awarded where it is demonstrated that high frequency ballasts are installed in fluorescent luminaries over a minimum of 95% of the tenancy fitout's NLA.	1	1		
IEQ-6	Electric Lighting Levels	To encourage and recognise tenancy fitout office lighting that provides maximum opportunity for visual comfort.	One point is awarded where it is demonstrated that the tenancy lighting achieves a maintained illuminance level of no more than 400 Lux for 95% of the NLA as measured at the working plane. An additional point is awarded if a Two Component Lighting System (base lighting plus supplementary task lighting) is installed and the general lighting level has an average maintained illuminance of no more than 220 Lux for 80% of the NLA.	2	2		
IEQ-7	External Views	To encourage and recognise tenancy fitouts that allow long distance views and visual connection to the outdoors.	Up to two points are awarded where it is demonstrated that a percentage of work settings have a direct line of sight through vision glazing, either externally or to an adequately sized and naturally lit internal atrium, as follows: <ul style="list-style-type: none"> • 1 point = 60% of work settings; • 2 points = 90% of work settings. The distance to the nearest vision glazing is to be no more than eight metres.	2	2		
IEQ-8	Individual Comfort Control	To encourage and recognise the provision of individual occupant thermal comfort controls.	Up to two points are awarded where it is demonstrated that workstations enable individual control of the air supply rates, air temperature or radiant temperature to each workstation, as follows: <ul style="list-style-type: none"> • 1 point where 60% of workstations enable individual control; • 2 points where 90% of workstations enable individual control. 	2	1		
			An additional point is awarded where the tenancy fitout works alter the existing base building's HVAC system to achieve at least one point above. Where the Credit Criteria is not achieved as a result of the tenancy fitout works this credit is 'Not Applicable' - type "na" in the 'No. of Points Achieved' column.	1	1		
IEQ-9	Asbestos	To encourage and recognise actions taken to reduce health risks to occupants from the presence of hazardous materials.	One point is awarded where it is demonstrated that an asbestos survey has been carried out on the existing tenancy and all identified asbestos has been appropriately removed and disposed of as defined by the relevant environmental and Occupational Health and Safety (OH&S) legislation. This credit is 'Not Applicable' for new tenancy fitouts - type "na" in the 'No. of Points Achieved' column.	1	1		

IEQ-10	Internal Noise Levels	To encourage and recognise tenancy fitouts that control internal noise levels to ensure occupant comfort.	One point is awarded where it is demonstrated that ambient internal noise levels are 40-45 dBLAeq in general offices and 35-40 dBLAeq in private offices, with the tenancy ready for occupancy but unoccupied as per AS/NZS 2107:2000; AND Where a reverberation time (RT60) of 0.4-0.6 seconds for general offices and a RT60 of 0.6 - 0.8 seconds for private offices is achieved.	1	0		
IEQ-11	Volatile Organic Compounds	To encourage and recognise tenancy fitouts that reduce the detrimental impact on occupant health from products that emit pollutants.	Up to eight points are awarded where it is demonstrated that benchmarks for low Volatile Organic Compound (VOC) content are met, as follows: • 2 points where 95% of all painted surfaces are low-VOC paints (AELA 23-2005) or no paint is used; • 2 points where all carpets are low-VOC (US Carpet and Rug Institute Green Label) or no carpet is installed; • 2 points where all adhesives and sealants are low-VOC (South Coast Air Quality Management District (California, U.S.) Rule 1168) or no adhesives/sealants are used; • 2 points where all tenancy fitout items (workstations, walls/partitions, chairs, tables and storage units) are low-VOC (US EPA's Environmental Technology Verification test method). Refer to the Technical Manual for emissions standards).	8	6		
IEQ-12	Formaldehyde Minimisation	To encourage and recognise tenancy fitouts that reduce the use of high formaldehyde emission composite wood products.	Up to two points are awarded where it is demonstrated that all composite wood products meet the following benchmarks: • 1 point where low formaldehyde emission (E1 limit under EN 13986:2004 OR no greater than 0.05ppm after 28 days under EN 717-1:2004) composite wood products are used; • 2 points where low formaldehyde emission (F4Star under JIS A 5905:2003) OR no composite wood products are used.	2	1		
IEQ-13	Air Supply Ductwork	To encourage and recognise tenancy fitouts that reduce the detrimental impact on occupant health from residual materials within the existing air supply ductwork.	One point is awarded where it is demonstrated that all accessible supply air ductwork has been cleaned to remove dust, dirt and mould prior to occupancy. If the ductwork is new or the fitout does not include ductwork this credit is 'Not Applicable' - type "na" in the 'No. of Points Achieved' column.	1	1		
IEQ-14	Tenant Exhaust	To encourage and recognise tenancy fitouts that reduce the detrimental impact on occupant health from equipment related sources of internal air pollutants.	One point is awarded where it is demonstrated that all print/photocopy rooms are enclosed and have a dedicated and separate exhaust facility. The exhaust from the room(s) must not be connected to the return air duct and must comply with the requirements in AS 1668.2-2002.	1	1		
IEQ-15	Indoor Plants	To encourage and recognise the installation of indoor plants that improve indoor environment quality.	Up to two points are awarded, as follows: 1 point is awarded where it is demonstrated that indoor plants are incorporated in the tenancy fitout and comply with the following requirements: • The plant species are selected on the basis of their suitability to indoor environments; • A 'Horticultural Maintenance Plan' is in place (minimum two years) to ensure that the health of the plants is maintained; and • There is a minimum density of one large plant (300mm pot) or two small plants (200mm pot) per two work settings, distributed over the NLA. 2 points are awarded where the above is demonstrated, but the plant density is increased to a minimum of one large plant or two small plants per work setting.	2	2		
Total Points =				34	22	0	

Green Star - Office Interiors

Credit Summary for: Level 15, 179 Elizabeth Street

Energy

Ref No.	Title	Aim of Credit	Credit Criteria Summary	No. of Points Available	No. of Points Achieved	Points to be Confirmed	Comments
Ene-1	Energy Efficiency	To reduce tenancy operational energy and greenhouse gas emissions.	It is a Conditional Requirement for obtaining a Green Star - Office Interiors Certified Rating that the tenancy fitout achieves a minimum predicted rating of Four Stars using the Australian Building Greenhouse Rating (ABGR) scheme's 'Validation Protocol for Tenancy Energy Estimation Version 2005-02'. This credit does not require the signing of an ABGR 'Commitment Agreement'. Any renewable energy generated by the tenant on-site can be included in the ABGR calculation.	Conditional Requirement	Yes		
Ene-2	Energy Improvements	To encourage and recognise tenancy fitouts that reduce operational energy consumption and greenhouse gas emissions over and above the Ene-1 Conditional Requirement.	Up to twelve points are awarded where there is an improvement in energy efficiency and greenhouse gas emissions above the conditional Four Star ABGR (refer to Ene-1). Points are awarded as follows: <ul style="list-style-type: none"> • 3 points = 4.5 Star ABGR • 6 points = 5 Star ABGR • 9 points = 5 Star ABGR + 20% CO₂ reduction on 5 Star • 12 points = 5 Star ABGR + 40% CO₂ reduction on 5 Star 	12	6		
Ene-3	Electrical Sub-metering	To encourage and recognise the provision of energy sub-metering to facilitate tenant energy monitoring.	One point is awarded where it is demonstrated that separate sub-metering is provided for tenancy lighting and small power consumption. Where the tenancy is greater than one floor this must be provided separately for each floor.	1	1		
			An additional point is awarded where sub-metering is provided for substantive energy use greater than 25kVA within the tenancy, such as supplementary air conditioning for computer server rooms, meeting rooms or loads associated with server rooms. If there are no substantive energy uses above 25kVA then the additional point is considered to be 'Not Applicable' - type "na" in the 'No. of Points Achieved' column.	0	na		
Ene-4	Office Lighting Zoning	To encourage and recognise lighting initiatives that offer greater flexibility for light switching, making it easier to light occupied areas only.	One point is awarded where it is demonstrated that: <ul style="list-style-type: none"> • All individual or enclosed spaces have separate switches; • The size of individually switched lighting zones does not exceed 100sqm for 95% of tenancy; and • Switches are clearly labelled, conveniently located and easily accessed by tenants. 	1	1		
			An additional point is awarded where the above is achieved and where an individually addressable lighting system is provided for 95% of the NLA.	1	0	0	
Total Points =				15	8	0	

Green Star - Office Interiors

Credit Summary Level 15, 179 Elizabeth Street

Transport

Ref No.	Title	Aim of Credit	Credit Criteria Summary	No. of Points Available	No. of Points Achieved	Points to be Confirmed	Comments
Tra-1	Public Transport	To encourage and recognise tenancies with proximity and good access to public transport networks that have frequent servicing.	Up to five points are awarded based on the proximity of the tenancy to public transport, the number of routes served, and the average frequency of service during the weekday two-hour morning peak commuting period and the two-hour afternoon peak commuting period. The points are determined using the Public Transport Calculator.	5	5		
Tra-2	Car Parking	To encourage and recognise tenancies that promote the utilisation of alternative modes of transport by limiting available parking spaces.	Two points are awarded where the parking spaces allocated to the tenant are less than the maximum current local planning allowances (as at Development Approval), as follows: • 1 point = at least 25% less than the maximum local planning allowances, or within 10% of the minimum local planning allowances if only a minimum is stipulated; • 2 points = at least 50% less than the maximum local planning allowances, or no more than the minimum local planning allowances if only a minimum is stipulated. Where car parking is not permitted in the local planning scheme this credit is 'Not Applicable' - type "na" in the 'No. of Points Achieved' column.	2	2		
Tra-3	Cyclist Facilities	To encourage and recognise tenancies that promote the use of bicycles by occupants by ensuring adequate cyclist facilities are provided in the base building.	Up to two points are awarded where it is demonstrated that the building includes cyclist facilities, as shown below. 1 point is awarded where there is adequate provision of cyclist facilities, as follows: • secure bicycle storage for 5% of tenancy occupants (based on one person per 15m ² of the NLA); PLUS • accessible showers (1 per 10 bicycle spaces provided or part thereof); PLUS • changing facilities (with secure lockers – one for each bicycle space). 2 points are awarded where there is good provision of cyclist facilities, as follows: • secure bicycle storage for 10% of all building occupants (based on one person per 15m ² of the NLA); PLUS • accessible showers (1 per 10 bicycle spaces provided or part thereof); PLUS • changing facilities (with secure lockers – one for each bicycle space).	2	0		
			An additional point is awarded where the cyclist facilities were installed specifically for the tenancy fitout and were not pre-existing in the base building. Where the Credit Criteria are achieved due to pre-existing base building facilities this additional point is considered 'Not Applicable' - type "na" in the 'No. of Points Achieved' column.	1	0		
Total Points =				10	7	0	

Green Star - Office Interiors

Credit Summary for: Level 15, 179 Elizabeth Street

Public Transport Calculator

No. of Bus, Tram or Ferry Services		
Walking Distance from Building Entrance to Public Transport	Frequency of Service During Peak Periods	
	15 min	30 min
0-250m		
250-500m	18	
500-750m		
750m-1km		

No. of Train Services		
Walking Distance from Building Entrance to Public Transport	Frequency of Service During Peak Periods	
	15 min	30 min
0-250m		
250-500m		
500-750m		
750m-1km		

Points Achieved	5
------------------------	----------

How to use the Calculator

1. Determine the number and type of public transport options within 1km of the building and the walking distance to each.
2. Determine the frequency of each service between 7.30am and 9.30am and between 4.30pm and 6.30pm from Monday to Friday (excluding public holidays) from current timetables.
3. Enter the number of services in each category in the tables above, based on type, distance and frequency.

Notes

1. If the site is within 15 minutes travel time (via a public transport connecting service with a frequency of no more than 30 minutes) of a public transport interchange then the services available from the interchange can be included in the Calculator with the following modifications:
 - the number of interchange services for each type and frequency to be entered in the tables above should be halved; and
 - the distance to the interchange services is equal to the distance from the site to the connecting service plus 250m.
2. If a public transport service terminates within 1km of the site then that service only counts as half of one service (i.e. enter 0.5 instead of 1 for that service).

Green Star - Office Interiors

Credit Summary Level 15, 179 Elizabeth Street

Water

Ref No.	Title	Aim of Credit	Credit Criteria Summary	No. of Points Available	No. of Points Achieved	Points to be Confirmed	Comments
Wat-1	Potable Water Efficiency	To encourage and recognise the use of water efficient fittings and appliances that result in reduced potable water consumption.	Up to twelve points are awarded where it is demonstrated that the predicted potable water consumption for sanitary use by the tenant has been reduced. This is determined using the Potable Water Calculator, with points being awarded based on the type and rating of fixtures/fittings.	12	12		
			One point is awarded where all dishwashers are 5A rated. If no dishwashers are installed as part of the tenancy fitout then this credit is 'Not Applicable' - type "na" in the 'No. of Points Achieved' column.	1	0		
			An additional point is awarded for fitouts where base building water fixtures associated with the tenancy required replacement to gain more than six points using the Potable Water Calculator. If six points or less were achieved using the Potable Water Calculator, or no alteration to the base building water fittings and/or fixtures were made, then this point is considered 'Not Applicable' (type "na" in the 'No. of Points Achieved' column).	1	1		
Total Points =				14	13	0	

Green Star - Office Interiors v1.1

Tenancy Fitout:

Level 15, 179 Elizabeth Street

Potable Water Calculator

Number of Occupants	60
----------------------------	-----------

Hours of Operation	Standard ▼
---------------------------	------------

WATER CONSUMPTION DUE TO FITTINGS:

	Water Efficiency	Percentage of Each Type
Toilets		
	L/flush	
Caroma Leda Invisi Suite 4.5/3	3.4	100%
<enter description here>		
<enter description here>		
<enter description here>		
Urinal Flush Controls		
	L/flush	
Caroma Cube3 0.8 Electronic Flush	0.8	100%
<enter description here>		
<enter description here>		
<enter description here>		
Urinal flush on auto timer *		
Taps		
	L/min	
Schell Petit Self-closing mixer	4.5	100%
<enter description here>		
<enter description here>		
<enter description here>		

% of occupants served

Shower Demand:	No showers installed ▼
-----------------------	------------------------

Showerheads	L/min	
Pre-existing	0	0%
<enter description here>		
<enter description here>		
<enter description here>		

Total Water Consumption From Fittings (L/day/person)	6.91
---	-------------

Points Achieved	12
------------------------	-----------

Green Star - Office Interiors

Credit Summary Level 15, 179 Elizabeth Street

Materials

Ref No.	Title	Aim of Credit	Credit Criteria Summary	No. of Points Available	No. of Points Achieved	Points to be Confirmed	Comments
Mat-1	Workstations	To encourage and recognise the selection of workstations that have a reduced environmental impact relative to available alternatives.	Up to seven points are awarded where it is demonstrated that the workstations used in the tenancy fitout have a reduced environmental impact as determined by the Mat-1 Workstations Calculator. Maximum points can only be obtained if information about <u>all</u> the workstations in the tenancy fitout is provided.	7	6		
Mat-2	Flooring	To encourage and recognise the selection of flooring that has a reduced environmental impact relative to available alternatives.	Up to five points are awarded where it is demonstrated that the flooring used in the tenancy fitout has a reduced environmental impact as determined by the Mat-2 Flooring Calculator. Maximum points can only be obtained if information about <u>all</u> the flooring in the tenancy fitout is provided.	5	5		
Mat-3	Walls and Partitions	To encourage and recognise the selection of walls and partitions that have a reduced environmental impact relative to available alternatives.	Up to two points are awarded where it is demonstrated that the area of built zones meets the following requirements: <ul style="list-style-type: none"> • 1 point where built zones represent < 15% of the NLA; • 2 points where built zones represent < 5% of the NLA. 	2	0		
			Up to three points are awarded where it is demonstrated that the walls and partitions used in the tenancy fitout have a reduced environmental impact as determined by the Mat-3 Walls and Partitions Calculator. Maximum points can only be obtained if information about <u>all</u> the walls and partitions in the tenancy fitout is provided.	3	3		
Mat-4	Chairs	To encourage and recognise the selection of chairs that have a reduced environmental impact relative to available alternatives.	Up to three points are awarded where it is demonstrated that the chairs used in the tenancy fitout have a reduced environmental impact as determined by the Mat-4 Chairs Calculator. Maximum points can only be obtained if information about <u>all</u> the chairs in the tenancy fitout is provided.	3	3		

Mat-5	Tables	To encourage and recognise the selection of tables table have a reduced environmental impact relative to available alternatives.	One point is awarded where it is demonstrated that the tables used in the tenancy fitout have a reduced environmental impact as determined by the Mat-5 Tables Calculator. Maximum points can only be obtained if information about <u>all</u> the tables in the tenancy fitout is provided.	1	1		
Mat-6	Storage	To encourage and recognise the selection of storage units that have a reduced environmental impact relative to available alternatives.	One point is awarded where it is demonstrated that the storage units used in the tenancy fitout have a reduced environmental impact as determined by the Mat-6 Storage Calculator. Maximum points can only be obtained if information about <u>all</u> the storage units in the tenancy fitout is provided.	1	1		
Mat-7	Joinery	To encourage and recognise the use of joinery that has a reduced environmental impact relative to available alternatives.	One point is awarded where it is demonstrated that the joinery used in the tenancy fitout has a reduced environmental impact as determined by the Mat-7 Joinery Calculator. Maximum points can only be obtained if information about <u>all</u> the joinery in the tenancy fitout is provided.	1	1		
Mat-8	Ceilings	To encourage and recognise the reduction of waste during tenancy fitout works.	One point is awarded where it is demonstrated that: <ul style="list-style-type: none"> • The base building ceiling tiles are left intact with the exception of areas requiring removal due to the installation of tenant services; OR • Work undertaken to ceiling tiles does not adversely impact on the base building ceiling grid, with tiles being retained for re-installation during 'make good' at the end of the tenancy; OR • Where the tenancy fitout is in a building where there are no ceiling tiles. 	1	0		
Mat-9	Waste Management for Tenancy Operation	To encourage and recognise the inclusion of storage space that facilitates the recycling of resources used within the tenancy to reduce waste going to landfill.	Two points are awarded where it is demonstrated that waste management and recycling systems for typical office waste are included in the tenancy fitout, as follows: <ul style="list-style-type: none"> • 1m² of designated recycling storage space per six work settings with monthly collections; or • 1m² of designated recycling storage space per 24 work settings with weekly collections. 	2	2		
Mat-10	PVC Minimisation	To encourage and recognise the reduction of Poly Vinyl Chloride (PVC) products in Australian buildings.	Up to two points are awarded where it is demonstrated that the total PVC content cost for major services elements (conduits & cables etc) is reduced by replacement with alternative materials, as follows: <ul style="list-style-type: none"> • 1 point = 30% reduction by cost; • 2 points = 60% reduction by cost. PVC that exists in the base building that is not being replaced should be excluded from the cost calculations.	2	0		
Mat-11	Timber	To encourage and recognise the specification of re-used timber products or timber from certified environmentally responsible forest management practices.	Two points are awarded where it is demonstrated that all timber and composite timber products used in the tenancy fitout are sourced from either or a combination of the following: <ul style="list-style-type: none"> • Post-consumer re-used timber; or • Forest Stewardship Council (FSC) Certified Timber. If the material cost of timber represents less than 0.1% of the tenancy fitout's total contract value then this credit is 'Not Applicable' (type "na" in the 'No. of Points Achieved' column).	2	0		

Total Points =	30	22	0
----------------	----	----	---



Green Star - Office Interiors v1.1

Tenancy Fitout:

Materials Calculators Output Sheet

Points Allocation Summary

	Workstations	Floor Coverings	Walls and Partitions	Chairs	Tables	Storage Units	Joinery	Total
Maximum No. Points Available	7	5	3	3	1	1	1	21
Available Points*	7	5	3	3	1	1	1	21
Points Awarded**	6	5	3	3	1	1	1	20

*(based on fraction of items specified in the data input sheet compared to total specified within the fitout).

Workstations

Amount	
Total within Fitout	55
Total from Data Input Sheet	55
Reused	12
Fixed	0
Loose	43
Environmentally Innovative	0

Floor Coverings

Amount	
Total within Fitout	804 m ²
Total from Data Input Sheet	804 m ²
Reused	0 m ²
Exposed Concrete	140 m ²
Carpet	0 m ²
Timber	0 m ²
Resilient	0 m ²
Ceramic/Stone	0 m ²
Other	0 m ²
Environmentally Innovative	664 m ²

Walls and Partitions

Amount	
Total within Fitout	45 m
Total from Data Input Sheet	45 m
Reused	0 m
New	45 m
Environmentally Innovative	0

Chairs

Amount	
Total within Fitout	148
Total from Data Input Sheet	148
Reused	44
Task	0
Meeting Room	0
Breakout Space	0
Other	0
Environmentally Innovative	104

Tables

Amount	
Total within Fitout	21
Total from Data Input Sheet	21
Composite Wood	18
Environmentally Innovative	0
Glass	0
Metal	0
Plastic	0
Reused	3
Timber	0

Storage Units

Amount	
Total within Fitout	17
Total from Data Input Sheet	17
Reused	0
Compactus	0
Composite Wood	0
Timber	0
Metal	0
Other	0
Environmentally Innovative	17

Joinery

Amount	
Total within Fitout	35.4 m
Total from Data Input Sheet	35 m
New	35 m
Reused	0 m
Environmentally Innovative	0 m

Notes:

* Points Available = number of items specified in the data input sheet x total items specified within the fitout

** Points Awarded = Sum of the Weighted Score x Points Available.

** Weighted Score = product score x (no of items/total items specified in the data input sheet).

Green Star - Office Interiors v1.1

Tenancy Fitout:

Mat-1 Workstations Calculator

Total Number of Workstations within the Fitout:

55 units

Points Awarded for this Credit

6

	Type of Workstation	Name of Workstation Supplier	Brief Description of Workstation	Number of Workstations (Units)	Resource Utilisation				Management				Reusability		Product Score (%)	
					Eco Preferred Content	Durability	EMS?	EMS ISO 14001 Certified?	EMS Includes?				Product Stewardship	Modular		Designed for Disassembly
									Waste Minimisation	Energy	Emissions	Materials Minimisation				
1	Loose	Schiavello	Marina Workstation	43	<5%	≥10yrs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	≥90%	83
2	Reused	GBCA	Re-use of client's existing wksn	12												100
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																

Notes:

Workstations are assessed across three environmental impact categories, as follows:

- 'Resource Utilisation' which assesses the workstation's:
 - Eco Preferred Content (EC); and
 - Durability (DU).
- 'Management' which assesses:
 - the workstation manufacturer's Environmental Management System (EMS); and
 - Product Stewardship (PS).
- 'Reusability' which assesses whether the workstation is:
 - Modular (MO); and/or
 - Designed for Disassembly (DD).

Each of the environmental impact categories are weighted equally:

Total Score = EC + DU + EMS + PS + MO + DD.

Total Score therefore = 10 + 10 + 10 + 10 + 10 + 10

The number of points determined by the Mat-1 Workstations Calculator is based on the Total Score out of 60 for each workstation which is weighted according to the number of that workstation type as a fraction of total number of workstations.

The number of points is automatically calculated and appears in the Materials Calculators Output Sheet.

Green Star - Office Interiors v1.1

Tenancy Fitout:

Mat-2 Flooring Calculator

Total Floor Area within the Fitout:

804 m²

Points Awarded for this Credit

5

	Type of Flooring	Name of Flooring Supplier	Brief Description of Flooring	Area of Flooring (m ²)	Resource Utilisation		Management						Reusability		Product Score (%)	
					Eco Preferred Content	Durability	EMS?	EMS ISO 14001 Certified?	EMS Includes?				Product Stewardship	Modular		Designed for Disassembly
									Waste Minimisation	Energy	Emissions	Materials Minimisation				
1	Environmentally Innovative	InterfaceFLOOR	Carpet Tile	664												100
2	Exposed Concrete	Agar Cleaning	Sealed Existing Concrete Floor	140												100
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																

Notes:

Flooring is assessed across three environmental impact categories, as follows:

- 'Resource Utilisation' which assesses the flooring's:
 - Eco Preferred Content (EC); and
 - Durability (DU).
- 'Management' which assesses:
 - the flooring manufacturer's Environmental Management System (EMS); and
 - Product Stewardship (PS).
- 'Reusability' which assesses whether the flooring is:
 - Modular (MO); and/or
 - Designed for Disassembly (DD).

Each of the environmental impact categories are weighted equally:

Total Score = EC + DU + EMS + PS + MO + DD.

Maximum Score = 10 + 10 + 10 + 10 + 10 + 10

The number of points determined by the Mat-2 Flooring Calculator is based on a total score out of 60 for each flooring type and then weighted according to the area of that flooring type as a fraction of total floor space.

The final score is provided in the Materials Calculators Output Sheet.

Green Star - Office Interiors v1.1

Tenancy Fitout:

Mat-3 Walls and Partitions Calculator

Total Length of Walls and Partitions within the Fitout

43.6 m

Points Awarded for this Credit

3

No.	Type of Walls and Partitions	Name of Walls/Partitions Supplier	Brief Description of Walls and Partitions	Length of Wall or Partition (m)	Resource Utilisation		Management						Reusability		Product Score (%)	
					Eco Preferred Content	Durability	EMS?	EMS ISO 14001 Certified?	EMS Includes?				Product Stewardship	Modular		Designed for Disassembly
									Waste Minimisation	Energy	Emissions	Materials Minimisation				
1	New	Schiavello	PT1 - MK10 System	13.4	<5%	≥10yrs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	≥90%	83
2	New	Schiavello	PT2 - MK10 System	21	<5%	≥10yrs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	≥90%	83
3	New	Schiavello	PT3 - MK10 System	9.2	<5%	≥10yrs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	≥90%	83
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																

Notes:

Walls and partitions are assessed across three environmental impact categories, as follows:

- 'Resource Utilisation' which assesses the walls/partitions:
 - Eco Preferred Content (EC); and
 - Durability (DU).
- 'Management' which assesses:
 - the walls/partitions manufacturer's Environmental Management System (EMS); and
 - Product Stewardship (PS).
- 'Reusability' which assesses whether the walls/partitions are:
 - Modular (MO); and/or
 - Designed for Disassembly (DD).

Each of the environmental impact categories are weighted equally:

Total Score = EC + DU + EMS + PS + MO + DD.

Maximum Score = 10 + 10 + 10 + 10 + 10 + 10

The number of points determined by the Mat-3 Walls and Partitions Calculator is based on a total score out of 60 for each wall/partition and then weighted according to the length of wall/partition as a fraction of total walls/partitions.

The final score is provided in the Materials Calculators Output Sheet.

Green Star - Office Interiors v1.1

Tenancy Fitout:

Mat-4 Chairs Calculator

Total Number of Chairs within the Fitout:

148 units

Points Awarded for this Credit

3

	Type of Chair	Name of Chair Supplier	Brief Description of Chair	Number of Chairs	Resource Utilisation		Management						Reusability		Product Score (%)
					Eco Preferred Content	Durability	EMS?	EMS ISO 14001 Certified?	EMS includes?				Product Stewardship	Designed for Disassembly	
									Waste Minimisation	Energy	Emissions	Materials Minimisation			
1	Reused	GBCA	R-C - 01 Task Chair	22											100
2	Environmentally Innovative	Wilkhahn	C-01 FS Line Chair	24											100
3	Environmentally Innovative	Interstudio	C-02 Zaishu Stool	14											100
4	Environmentally Innovative	ESO/Style craft	C-03 Spark Chair	16											100
5	Environmentally Innovative	ESO/Style craft	C-04 Plop Ottoman	4											100
6	Environmentally Innovative	ESO/Style craft	C-05 True Armchair	2											100
7	Environmentally Innovative	ESO/Style craft	C-06 Grow Chair	8											100
8	Environmentally Innovative	ESO/Style craft	C-07 Spark Chair	4											100
9	Environmentally Innovative	ESO/Style craft	C-08 Spark Chair	4											100
10	Environmentally Innovative	ESO/Style craft	C-09 Plop Ottoman	1											100
11	Environmentally Innovative	ESO/Style craft	C-10 Plop Ottoman	1											100
12	Environmentally Innovative	ESO/Style craft	C-11 Plop Ottoman	1											100
13	Environmentally Innovative	ESO/Style craft	C-12 Plop Ottoman	1											100
14	Environmentally Innovative	ESO/Style craft	C-13 Spark Chair	4											100
14	Environmentally Innovative	Herman Miller	C-14 Mirra Chair	20											100
15	Reused	GBCA	R-C - 03 Meeting Chair	7											100
16	Reused	GBCA	R-C - 05 Task Chair	2											100
	Reused	Mitchell Rd	R-C - 06 Lounge	1											100
17	Reused	Vampt	R-C - 07 Cafe Chair	3											100
18	Reused	Vampt	R-C - 08 Cafe Chair	3											100
19	Reused	Vampt	R-C - 09 Cafe Chair	3											100
20	Reused	Mitchell Rd	R-C - 10 Cafe Chair	3											100

Notes:

Chairs are assessed across three environmental impact categories, as follows:

- 'Resource Utilisation' which assesses the chairs':

- Eco Preferred Content (EC); and

- Durability (DU).

- 'Management' which assesses:

- the chair manufacturer's Environmental Management System (EMS); and

- Product Stewardship (PS).

- 'Reusability' which assesses whether the chairs are:

- Designed for Disassembly (DD).

Each of the environmental impact categories are weighted equally:

Total Score = EC + DU + EMS + PS + DD.

Maximum Score = 10 + 10 + 10 + 10 + 10

The number of points determined by the Mat-4 Chairs Calculator are based on a total score out of 50 for each chair type and then weighted according to the number of that chair type as a fraction of total chairs.

The final score is provided in the Materials Calculators Output Sheet.

Green Star - Office Interiors v1.1

Tenancy Fitout:

Mat-5 Tables Calculator

Total Number of Tables within the Fitout:

21 units

Points Awarded for this Credit

1

	Type of Table	Name of Table Supplier	Brief Description of Table	Number of Tables	Resource Utilisation		Management						Reusability		Product Score (%)
					Eco Preferred Content	Durability	EMS	EMS ISO 14001 Certified?	EMS Includes				Product Stewardship	Designed for Disassembly	
									Waste Minimisation	Energy	Emissions	Materials Minimisation			
1	Composite Wood	Schiavello	T - 01 Marina Boardroom w/ castors 2600x1200	6	≥25%	≥7yrs and <10yrs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	≥90%	92
2	Composite Wood	Schiavello	T - 02 Marina meeting 2000x1200	2	≥25%	≥7yrs and <10yrs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	≥90%	92
3	Composite Wood	Schiavello	T - 03 Marina Computer Table 1600x600	1	≥25%	≥7yrs and <10yrs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	≥90%	92
4	Composite Wood	Schiavello	T - 04 Marina Meeting 900 dia.	2	≥25%	≥7yrs and <10yrs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	≥90%	92
5	Composite Wood	Schiavello	T - 05 Marina Meeting 1800x900	2	≥25%	≥7yrs and <10yrs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	≥90%	92
6	Composite Wood	Schiavello	T - 06 QED Cafe 900 dia.	4	≥25%	≥7yrs and <10yrs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	≥90%	92
7	Reused	GBCA	T - 07 Reused	1											100
8	Composite Wood	Schiavello	T - 08 Marina Meeting 1200 dia.	1	≥25%	≥7yrs and <10yrs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	≥90%	92
9	Reused	GBCA	R - T - 01 Reused Café	1											100
10	Reused	Vampt	R - T - 03 Reused Coffee	1											100
11															
12															
13															
14															
15															

Notes:

Tables are assessed across three environmental impact categories, as follows:

- 'Resource Utilisation' which assesses the tables':
 - Eco Preferred Content (EC); and
 - Durability (DU).
- 'Management' which assesses:
 - the table manufacturer's Environmental Management System (EMS); and
 - Product Stewardship (PS).
- 'Reusability' which assesses whether the tables are:
 - Designed for Disassembly (DD).

Each of the environmental impact categories are weighted equally:

Total Score = EC + DU + EMS + PS + DD.

Maximum Score = 10 + 10 + 10 + 10 + 10

The number of points determined by the Mat-5 Tables Calculator are based on a total score out of 50 for each table type and then weighted according to the number of that table type as a fraction of total tables.

The final score is provided in the Materials Calculators Output Sheet.

Green Star - Office Interiors v1.1

Tenancy Fitout:

Mat-6 Storage Calculator

Total Number of Storage Units within the Fitout:

17

Points Awarded for this Credit

1

	Type of Storage Unit	Name of Storage Unit Supplier	Brief Description of Storage Unit	Number of Storage Units	Resource Utilisation		Management				Reusability		Product Score (%)		
					Eco Preferred Content	Durability	EMS?	EMS ISO 14001 Certified?	EMS Includes?					Product Stewardship	Designed for Disassembly
									Waste Minimisation	Energy	Emissions	Materials Minimisation			
1	Environmentally Innovative	CSM	S-01 Tambour Storage Unit	16									100		
2	Environmentally Innovative	CSM	Compactus unit	1									100		
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															

Notes:

Storage units are assessed across three environmental impact categories, as follows:

- 'Resource Utilisation' which assesses the storage unit's:
 - Eco Preferred Content (EC); and
 - Durability (DU).
- 'Management' which assesses:
 - the storage unit manufacturer's Environmental Management System (EMS); and
 - Product Stewardship (PS).
- 'Reusability' which assesses whether the storage unit is:
 - Designed for Disassembly (DD).

Each of the environmental impact categories are weighted equally:

Total Score = EC + DU + EMS + PS + DD.

Maximum Score = 10 + 10 + 10 + 10 + 10

The number of points determined by the Mat-6 Storage Calculator are based on a total score out of 50 for each storage unit type and

then weighted according to the number of that storage unit type as a fraction of total tables.

The final score is provided in the Materials Calculators Output Sheet.

Green Star - Office Interiors v1.1

145 Elizabeth Street
Melbourne VIC 3000

Mat-7 Joinery Calculator

Total Joinery within the Fitout

35.4 m

Points Awarded

1

	Type of Joinery	Name of Joinery Supplier	Brief Description of Joinery Type	Amount of Joinery Type (m ²)	Resource Utilisation		Reusability		Product Score (%)
					Eco Preferred Content	Modularity	Designed for Disassembly		
1	New	Easy Rest	J01 - Mobile unit	4.3	<5%	Yes	≥90%	67	
2	New	Easy Rest	J02 - Mobile Unit	1.1	<5%	Yes	≥90%	67	
3	New	Easy Rest	J03 - Mobile Unit	1.6	<5%	Yes	≥90%	67	
4	New	Easy Rest	J04 - Mobile caterer's unit	0.8	<5%	Yes	≥90%	67	
5	New	Easy Rest	J05 - Reception/ café front	6	<5%	Yes	≥90%	67	
6	New	Easy Rest	J06 - Reception/ café back bench	5.4	<5%	Yes	≥90%	67	
7	New	Easy Rest	J07 - Shelving unit	3.5	<5%	Yes	≥90%	67	
8	New	Easy Rest	J08 - Boardroom Bench unit	6.5	<5%	Yes	≥90%	67	
9	New	Easy Rest	J09 - Caterer's bench	3.9	<5%	Yes	≥90%	67	
10	New	Easy Rest	J10 - Meeting Room Unit	1.6	<5%	Yes	≥90%	67	
11	New	Easy Rest	J11 - Services switch panel	0.2	<5%	Yes	≥90%	67	
12	New	Easy Rest	J12 - Mobile unit	0.5	<5%	Yes	≥90%	67	
13									
14									
15									

Notes:

Joinery is assessed across two environmental impact categories, as follows:

- 'Resource Utilisation' which assesses the joinery's:

- Eco Preferred Content (EC); and

- 'Reusability' which assesses whether the joinery is:

- Modular (MO); and/or

- Designed for Disassembly (DD).

Each of the environmental impact categories are weighted equally:

Total Score = EC + MO + DD.

Maximum Score = 10 + 10 + 10

The number of points determined by the Mat-7 Joinery Calculator is calculated based on a total score out of 30 for joinery and then weighted according to the amount of that type as a fraction of total joinery.

Green Star - Office Interiors

Credit Summary Level 15, 179 Elizabeth Street

Land Use & Ecology

Ref No.	Title	Aim of Credit	Credit Criteria Summary	No. of Points Available	No. of Points Achieved	Points to be Confirmed	Comments
Eco-1	Green Star - Office As Built Certified Building	To encourage and recognise the selection of buildings for tenancy that have a 4 Star Green Star – Office As Built Certified Rating or higher.	Up to six points are awarded where the base building has a Green Star - Office As Built Certified Rating, as follows: <ul style="list-style-type: none"> • 2 points for a 4 Star Green Star Certified Rating; • 4 points for a 5 Star Green Star Certified Rating; • 6 points for a 6 Star Green Star Certified Rating. 	6	0		
Eco-2	Building Layout Efficiency	To encourage and recognise the selection of buildings for tenancy that have an efficient and flexible layout.	Two points are awarded where it is demonstrated that Building Layout Efficiency is at least 85%.	2	0		
Eco-3	Building Environmental Management	To encourage and recognise the selection of buildings for tenancy that incorporate environmental impact management.	Up to three points are awarded where the building manager is contractually required to implement the following: <ul style="list-style-type: none"> • Energy monitoring (quarterly minimum) and consumption reduction targets; • Waste reduction/recycling monitoring (quarterly minimum) and landfill disposal reduction targets; • Water monitoring (quarterly minimum) and consumption reduction targets; • Regular maintenance in accordance with the AIRAH Guideline DA19 HVAC&R Maintenance; • The use of low environmental impact cleaning products; • The procurement of low environmental impact consumables (paints, light fittings, ceiling tiles, flooring etc). One point is awarded for each two of the above requirements that are incorporated in the building management performance contract.	3	2		
Eco-4	Commitment to Building Performance	To encourage and recognise the inclusion of lease clauses that align the interests of the building owner/manager and tenants and improve the environmental performance of the base building and occupied space.	Up to three points are awarded where the tenancy lease agreement requires the tenant to participate in the following environmental initiatives: <ul style="list-style-type: none"> • Energy monitoring (minimum quarterly) and energy consumption reduction targets; • Waste reduction/recycling monitoring (minimum quarterly) and landfill disposal reduction targets; • Water monitoring (minimum quarterly) and water consumption reduction targets; • The use of cleaning products that have a low environmental impact; and/or • The procurement of consumables (i.e. paints, light fittings, ceiling tiles, flooring etc) that have a low environmental impact. One point is awarded for two, two points are awarded for four, and three points are awarded for five of the above initiatives that are incorporated in the tenancy lease agreement.	3	3		

Eco-5	Shell and Core or Integrated Fitout	To encourage and recognise the reduction of material waste during tenancy fitouts.	<p>Up to three points are awarded where it is demonstrated that a percentage of the tenancy fitout's NLA was fully integrated with the base building works or the base building works were shell and core only, as follows:</p> <ul style="list-style-type: none"> • 1 point where 30% of the NLA meets the criteria; • 2 points where 60% of the NLA meets the criteria; • 3 points where 90% of the NLA meets the criteria. <p>This credit applies to tenancy fitouts that are within a new base building construction or are part of an existing building refurbishment. All other building scenarios are considered 'Not Applicable' - type "na" in the 'No. of Points Achieved' column.</p>	0	na		
Eco-6	Building Conservation	To encourage and recognise tenancy fitouts undertaken in existing buildings in preference to new buildings.	Two points are awarded where at least 75% of the tenancy fitout had previously been tenanted. If the fitout is integrated with the base building refurbishment at least 90% of the existing structure must be retained.	2	2		
Total Points =				16	7	0	

Green Star - Office Interiors

Credit Summary Level 15, 179 Elizabeth Street

Emissions

Ref No.	Title	Aim of Credit	Credit Criteria Summary	No. of Points Available	No. of Points Achieved	Points to be Confirmed	Comments
Emi-1	Refrigerant Ozone Depleting Potential	To encourage and recognise the use of refrigerants that do not contribute to ozone depletion.	Up to two points are awarded where it is demonstrated that HVAC refrigerants in use have an Ozone Depletion Potential (ODP) of zero OR where no refrigerants are used, as follows: <ul style="list-style-type: none"> • 1 point = 95% of all refrigerants by volume have an ODP of zero; • 2 points = 100% of all refrigerants by volume have an ODP of zero OR no refrigerants used. This credit only applies if refrigeration equipment has been installed by the tenant, otherwise the credit is 'Not Applicable' (type "na" in the 'No. of Points Achieved' column).	0	na		
Emi-2	Insulation Ozone Depleting Potential	To encourage and recognise the use of thermal insulation that avoids the use of ozone-depleting substances.	One point is awarded where it is demonstrated that the thermal insulation avoids the use of ozone-depleting substances in both its manufacture and composition. If no insulation has been installed by the tenant this credit is 'Not Applicable' (type "na" in the 'Points Achieved' column).	1	1		
Total Points =				1	1	0	

Green Star - Office Interiors

Credit Summary for: **The Greenhouse**

Innovation

Ref No.	Title	Aim of Credit	Credit Criteria Summary	No. of Points Available	No. of Points Achieved	Points to be Confirmed	Comments
Inn-1	Innovative Strategies & Technologies	To encourage and recognise the spread of innovative initiatives for building applications that improve a development's environmental impact	Up to five Innovation points are awarded at the discretion of the Green Building Council of Australia (GBCA) where it is demonstrated that an innovative strategy or technology is eligible for AusIndustry Research and Development tax concessions and has a significant environmental benefit. The application will be assessed by the GBCA against the following criteria: * Does the application comply with AusIndustry Research and Development tax concessions requirements? * What is the environmental benefit of the innovation? More than one innovation can be submitted, however, the maximum points available for any one building assessment under Inn-1, Inn-2 and Inn-3 is five (total).	5			
Inn-2	Exceeding Green Star Benchmarks	To encourage and recognise design initiatives that demonstrate additional environmental benefit by exceeding the current benchmarks in Green Star - Office Interiors.	Up to five Innovation points are awarded at the discretion of the Green Building Council of Australia (GBCA) where it is demonstrated that the building exceeds, by a measurable margin, one or more existing Green Star – Office Interiors credit category criteria. The application will be assessed by the GBCA against the following criteria: * How has the building initiative exceeded the benchmarks in the Green Star – Office Interiors rating tool? * What is the measurable environmental benefit of the innovation? More than one innovation can be submitted, however, the maximum points available for any one building assessment under Inn-1, Inn-2 and Inn-3 is five (total).				
Inn-3	Environmental Design Initiatives	To encourage and recognise design initiatives that have a significant measurable environmental benefit and that are not awarded points by Green Star – Office Interiors.	Up to five Innovation points are awarded at the discretion of the Green Building Council of Australia (GBCA) where it is demonstrated that a design feature provides a significant environmental benefit but is not awarded points under the Green Star – Office Interiors rating tool criteria. The application will be assessed by the GBCA against the following criteria: * What is the measurable environmental benefit of the innovation? * Which significant environmental benefits of the innovation have been addressed by Green Star – Office Interiors credits? More than one innovation can be submitted but the maximum points available for any one building assessment under Inn-1, Inn-2 and Inn-3 is five (total).			3	1. Air change effectiveness from displacement ventilation. 2. TacTiles reduced environmental impact. 3. Tenant installed grey water system.
Total Points =				5	0	3	

Green Star - Office Interiors

Credit Summary for:

The Greenhouse

Category	Title	Credit No.	Points Available	Points Achieved	Points to be Confirmed
Management					
	Green Star Accredited Professional	Man-1	2	2	0
	Tenancy Fitout Commissioning	Man-2	1	0	0
	Commissioning - Tenancy Fitout Tuning	Man-3	0	na	0
	Tenant Guide	Man-4	3	3	0
	Environmental Management	Man-5	4	4	0
	Waste Management During Tenancy Fitout	Man-6	3	2	0
	TOTAL		14	11	0
Indoor Environment Quality					
	Ventilation Rates	IEQ-1	3	1	0
	Carbon Dioxide Monitoring and Control	IEQ-2	1	0	0
	Daylight	IEQ-3	3	0	0
	Daylight Glare Control	IEQ-4	2	1	0
	High Frequency Ballasts	IEQ-5	1	1	0
	Electric Lighting Levels	IEQ-6	2	2	0
	External Views	IEQ-7	2	2	0
	Individual Comfort Control	IEQ-8	2	1	0
	Asbestos	IEQ-9	1	1	0
	Internal Noise Levels	IEQ-10	1	0	0
	Volatile Organic Compounds	IEQ-11	8	6	0
	Formaldehyde Minimisation	IEQ-12	2	1	0
	Air Supply Ductwork	IEQ-13	1	1	0
	Tenant Exhaust	IEQ-14	1	1	0
	Indoor Plants	IEQ-15	2	2	0
	TOTAL		34	22	0
Energy					
	Energy Efficiency	Ene-1	Conditional Requirement	Yes	#VALUE!
	Energy Improvements	Ene-2	12	6	0
	Electrical Sub-metering	Ene-3	1	1	0
	Office Lighting Zoning	Ene-4	0	na	0
	TOTAL		15	8	0
Transport					
	Public Transport	Tra-1	5	5	0
	Car Parking	Tra-2	2	2	0
	Cyclist Facilities	Tra-3	2	0	0
	TOTAL		10	7	0
Water					
	Potable Water Efficiency	Wat-1	12	12	0
			1	0	0
			1	1	0
	TOTAL		14	13	0
Materials					
	Workstations	Mat-1	7	6	0
	Flooring	Mat-2	5	5	0
	Walls and Partitions	Mat-3	5	3	0
	Chairs	Mat-4	3	3	0
	Tables	Mat-5	1	1	0
	Storage	Mat-6	1	1	0
	Joinery	Mat-7	1	1	0
	Ceilings	Mat-8	1	0	0
	Waste Management for Tenancy Operation	Mat-9	2	2	0
	PVC Minimisation	Mat-10	2	0	0
	Timber	Mat-11	2	0	0
	TOTAL		30	22	0
Land Use & Ecology					
	Green Star - Office As Built Certified Building	Eco-1	6	0	0
	Building Layout Efficiency	Eco-2	2	0	0
	Building Environmental Management	Eco-3	3	2	0
	Commitment to Building Performance	Eco-4	3	3	0
	Shell and Core or Integrated Fitout	Eco-5	0	na	0
	Building Conservation	Eco-6	2	2	0
	TOTAL		16	7	0
Emissions					
	Refrigerant Ozone Depleting Potential	Emi-1	0	na	0
	Insulation Ozone Depleting Potential	Emi-2	1	1	0
	TOTAL		1	1	0
Sub-total weighted points:			65		0
Innovation					
	Innovative Strategies & Technologies	Inn-1	5	0	0

Exceeding Green Star Benchmarks	Inn-2	0	0	0
Environmental Design Initiatives	Inn-3	0	0	3
	TOTAL	5	0	3

Total weighted points: 65 3

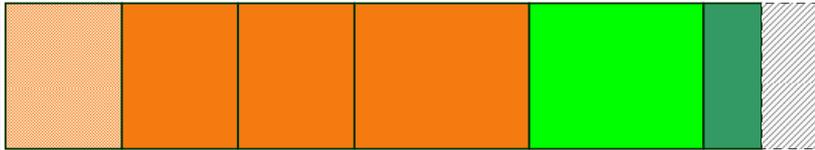
Once certified this would equate to a Five Star rating.

The GBCA does not endorse any self-assessed rating achieved by the use of Green Star - Office Interiors. The GBCA offers a formal certification process for ratings of Four Stars and above; this service provides for independent third party review of points claimed to ensure all points can be demonstrated to be achieved by the provision of the necessary documentary evidence. The use of Green Star - Office Interiors without formal certification by the GBCA does not entitle the user or any other party to promote the Green Star rating achieved.

Green Star - Office Interiors

Summary for Elizabeth Street

Green Star Rating

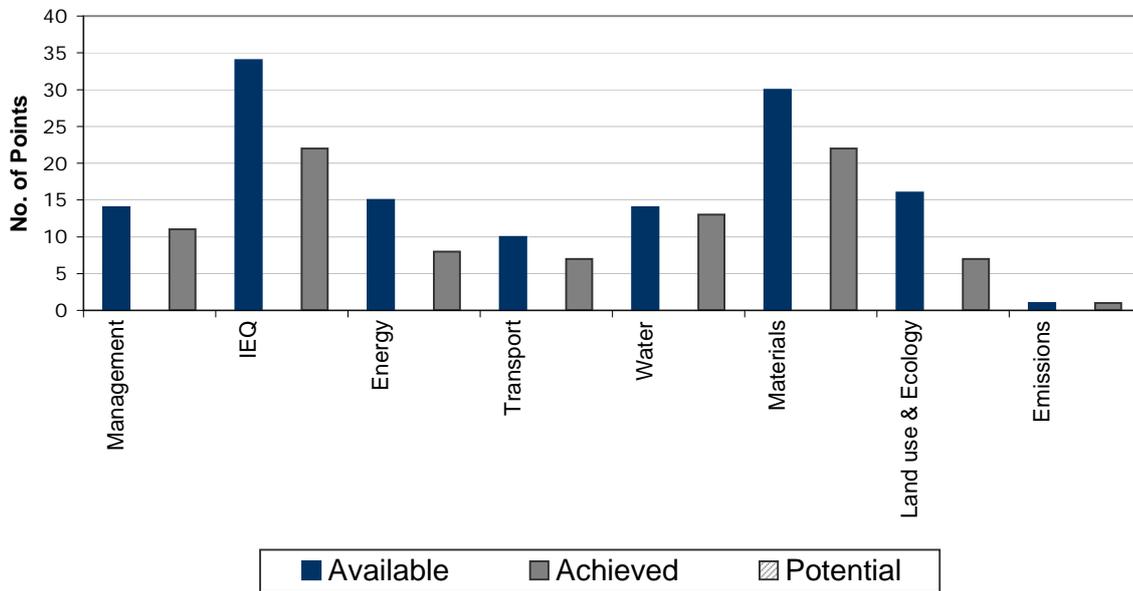


4 Star

5 Star

6 Star

Points Achieved



Category Scores



