Attachment AAB

Yarralumla Brickworks Heritage Core

Specialist Lighting Design

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LIGHTING + AV DESIGN

Yarralumla Brickworks Heritage Core

SPECIALIST LIGHTING DESIGN

DA REPORT

In collaboration with
_SJB
_McGREGOR COXALL
_FORE GROUP
_DOMA

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_INTRODUCTION

Good design is an outstanding tool for placemaking. Excellent lighting enhances the architecture, support human experience within public realm and accent landscape and natural features.

Lighting designers are uniquely positioned to shape how people see the world. Bringing light to the immediate human level activates the public realm and supports better social interaction. Collaboration with clients, designers, and city planners is key to ensure there is balance and an appropriate hierarchy with the urban space. A solid knowledge of wayfinding opportunities, environmental considerations and landscaping ensures that the night-time experience is reflective of the project team's aspirations.

Exterior lighting equipment specified is robust, energy efficient, low glare and low maintenance to ensure the longevity of the design. Lighting is carefully coordinated with other design disciplines to create a fully integrated approach which reduces visual clutter, allows ease of maintenance, and minimises vandalism opportunities. Safety and personal security are important aspects of the public realm - creating considered and context appropriate urban lighting that meets code compliance in a creative manner.

Beyond simply illuminating a building, façade lighting has an important role in enhancing the public realm, providing a sense of wonder and cohesion within the night-time experience.

How people experience a building can change from the immediate street level to a view along a city block, and finally a long view of the building. At each unique perspective the scale, detail, and relationship of the viewer with the building changes – therefore the scale and legibility of façade lighting needs to be reviewed as part of the design process. This is particularly relevant for dynamic or content-based façade lighting.

It is important to consider aiming angles, the rhythm of the architecture, fitting visibility, and intuitive wayfinding – the main entrance to the building may not be on the main thoroughfare – so lighting must draw people intuitively to the right place. The specification of good quality lighting equipment with excellent optical control and glare reduction accessories address light pollution obligations.

The intent of enhancing and support human experience within the landscape is achieved through a sensitive approach to the nocturnal environment. The celebration of darkness is key design principle to our approach to landscape lighting and the application of light and darkness can create a sense of intimacy and scale in spaces which in the day are wide open expanses.

A strong technical understanding of how the human eye adapts to considered ambient light levels ensures that less illumination is required to enhance feature elements, such as trees or natural features, whilst maintaining the appropriate levels of contrast to create a visually engaging experience. This nuanced application of light is critical to ensure a well-balanced environment, creating a visual hierarchy between planting and soft landscaping, integrated lighting, and the larger built environment.

Acknowledging the environmental impact exterior lighting has on both the natural environment and how people experience the world around them, **the** approach to the exterior lighting for the BSLSC is to maintain lighting at the "human-scale" and providing unrestricted views to the night sky. The aim **is** to integrate lighting into the landscape in a discreet and clever manner.

LIGHTING DESIGN CONSIDERATIONS

LIGHT QUALITY

Light Distribution and Beam Control:
Luminaires with suitable optical distribution will be specified to ensure light is directed only to where it is required; minimizing any spill light and maximizing efficiency. Appropriate luminaire accessories such as glare shields, baffles and lenses may be used to further control the light.

Colour Temperature:
The colour temperature of the lighting will be appropriate to the material, in this case 2700K and 3000K warm white.

Colour Rendering:
The colour rendering characteristics of light sources throughout the project will be minimum of CRI 80, in order to accurately represent materials, people and finishes.

CONTROL

Utilisation of Smart Control:
Critical to the ease of daily operation and efficient energy use for the complex is ensuring all external lighting is dimmable and controllable via a central building control system.

SUSTAINABILITY

Lighting technology:
Best practice lighting technology will be used to ensure long life, fit-for purpose and low energy (e.g. LED technology)

Lumen depreciation:
Luminaires specified will have LED sources with a minimum lumen maintenance value of L70 B10 at 50,000hrs. This means that at 50,000hrs of operation, 90% of the luminaires will achieve at least 70% of their original lumen output.

DURABILTY

IP rating:
The IP rating denotes the ability of a luminaire enclosure to protect internal parts from the outside environment. All exterior uplighting luminaires will be protected to IP67, and downlighting luminaires will be protected to IP65 or greater.

IK Rating:
The IK rating denotes the degree of a protection for electrical equipment against external mechanical impacts in accordance with IEC 62262:2002 and IEC 60068-2-75:1997. All luminaires are to be certified to an appropriate degree of protection. The mounting height of luminaires is to be considered for public access to minimize the opportunity for vandalism.

SAFETY

The lighting must facilitate safe use of the precinct at night. This includes vertical illumination as well as horizontal light levels. The lighting must achieve the required light levels for the relevant categories as noted in Australian Standards 1158

GUIDELINES & REGULATIONS

The following regulations & guidelines will inform the lighting design scheme:

_AS/NZS 1158:2020 - Lighting for roads and public spaces

_AS/NZS 4282:2019 - Control of the obtrusive effects of outdoor lighting

LIGHTING DESIGN OBJECTIVES

ENHANCE PUBLIC SPACE

The lighting shall enrich the experience of public space by inviting visitors to engage with the nighttime environment and encourage people to pause and dwell at the activation nodes.

ENHANCE UNIQUE CHARACTER

The lighting shall serve to enhance the architectural characteristics, evoking the unique character and narrative of the site. The intent is to highlight architectural features of the façade as well as landscape features.

CREATE VISUAL INTEREST

Light and shadow, shall be used to create atmosphere and enhance visual interest and excitement in the area at nighttime, rather than focusing solely on illumination levels.

REINFORCE HUMAN SCALE

Lighting shall enhance the heritage buildings at the brickworks core as well as the landscape elements, without imposing upon it. Lighting equipment shall be carefully selected to ensure an appropriate scale, distribution and placement.

PROMOTE INTUITIVE WAYFINDING

The lighting shall encourage intuitive wayfinding and promote exploration of various areas within the precinct.

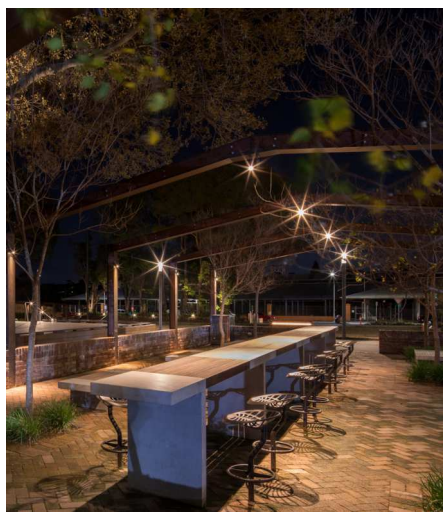
MINIMIZE GLARE AND VISUAL DISTRACTION

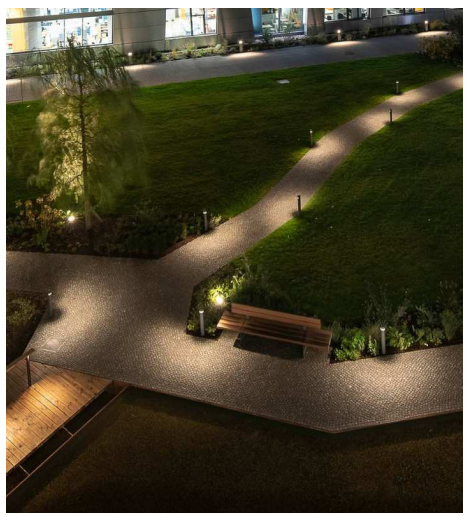
Glare from lighting shall be minimised in all applications through effective aiming and appropriate luminaire selection and design.
The lighting shall be integrated into the architecture and structures where possible, minimising visual clutter and obstructions during both day and night.

ENCOURAGE SUSTAINABILITY THROUGH DESIGN

Lighting shall aim to preserve and protect the night environment by minimizing upward light pollution, contributing to the sky glow.
Control of lighting, such as dimming and switching lighting control, and targeted application of light, rather than a blanket lighting approach, shall contribute to the sustainable use of energy.

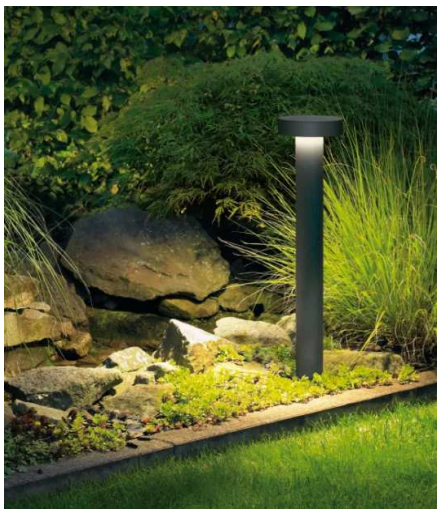
LIGHTING DESIGN PRINCIPLES





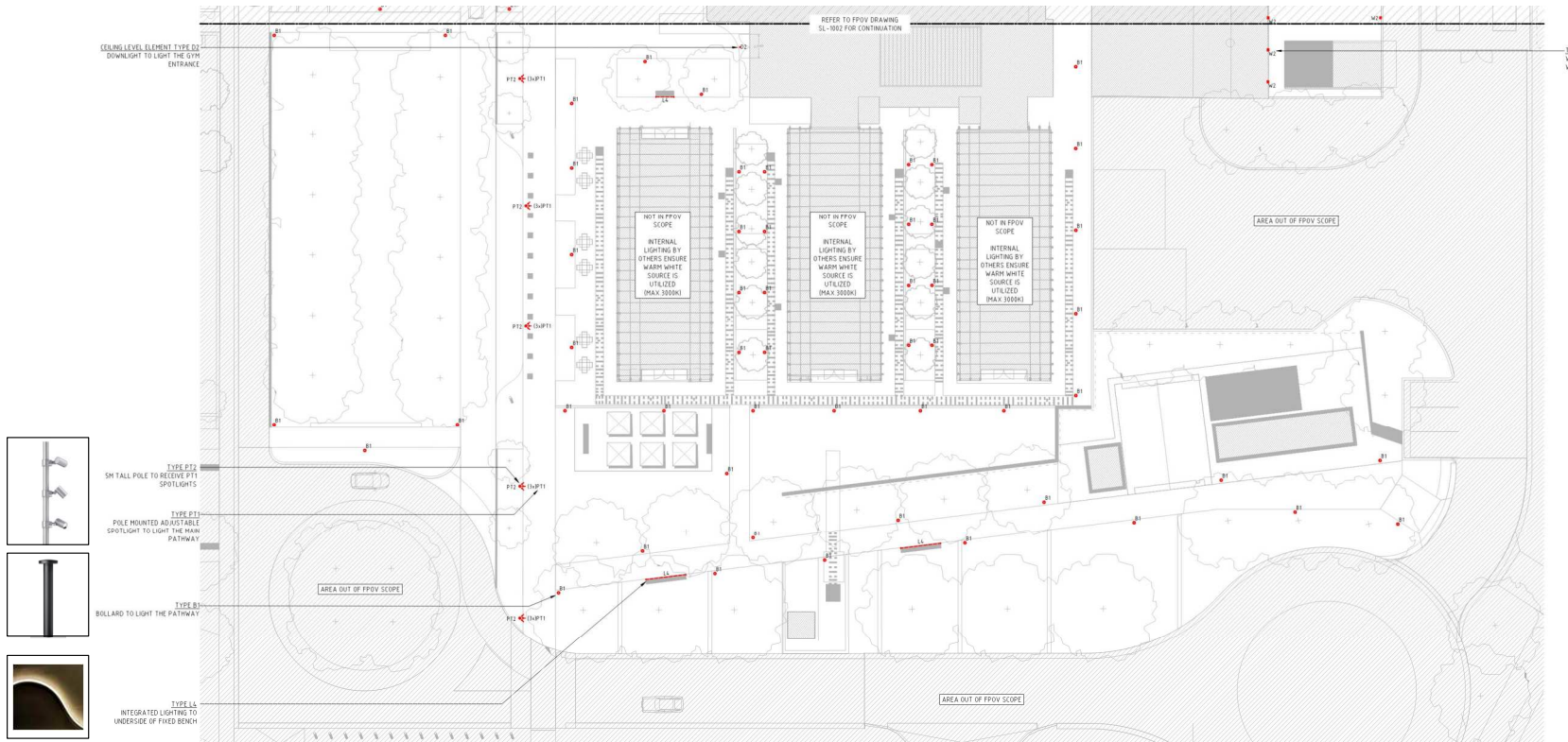
- Public pathways shall be lit to the appropriate P-categories as stated in AS1158 and assist safe orientation throughout the precinct. The selection and mounting arrangements of luminaires shall consider the size and scale of the area to ensure they are harmonious within the development.
- Support in creating a distinctive visual representation for the Brickworks heritage core, emphasizing architectural form and finish to elevate the charm of its historic structures. Implement a thoughtful arrangement of functional and accent lighting, fostering a warm and inviting ambience. Additionally, aids in facilitating easy navigation and wayfinding across the precinct.
- Low-level lighting shall be used to provide a human scale and more inviting experience, encouraging night-time activation of the area.
- Consideration to be given to light fitting installation and maintenance.
- Contain use of uplighting to select areas as well as careful luminaire placement, aiming and beam control shall minimize light spill toward the sky.

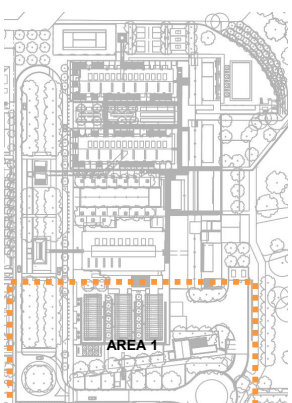
LIGHTING SPECIFICATION PRINCIPLES



- Lighting equipment shall be 'minimal' in its appearance unless intentionally used as a feature. It's form and finish shall be in harmony with the surrounding urban context.
- Pole mounted adjustable spotlights for high activity zone
- Medium height luminaires for circulation such as bollard and wall-fixed downlight
- Integrated luminaires such as linear LED to have no visible chip dotting
- Best practice lighting technology will be used to ensure fit-for purpose, long life, and low energy use. Specification of low wattage LED luminaires will require less power and lower running costs.
- Luminaires selected shall be in accordance with AS/NZS 60598, AS1158, and AS4783. Luminaires shall be from reputable manufacturers and practice quality management systems in accordance with ISO standards (ISO 9001-2000). Dimmable lighting will be used to allow for reduced, energy saving light levels late at night.
- Ingress protection of fittings from dust and water shall be selected as required.
- Glare control accessory such as honeycomb louver, concentric anti-glare ring or glare shield to low level luminaire
- Robust locking mechanisms to ensure aiming of lighting retained.

1_LIGHTING PLAN

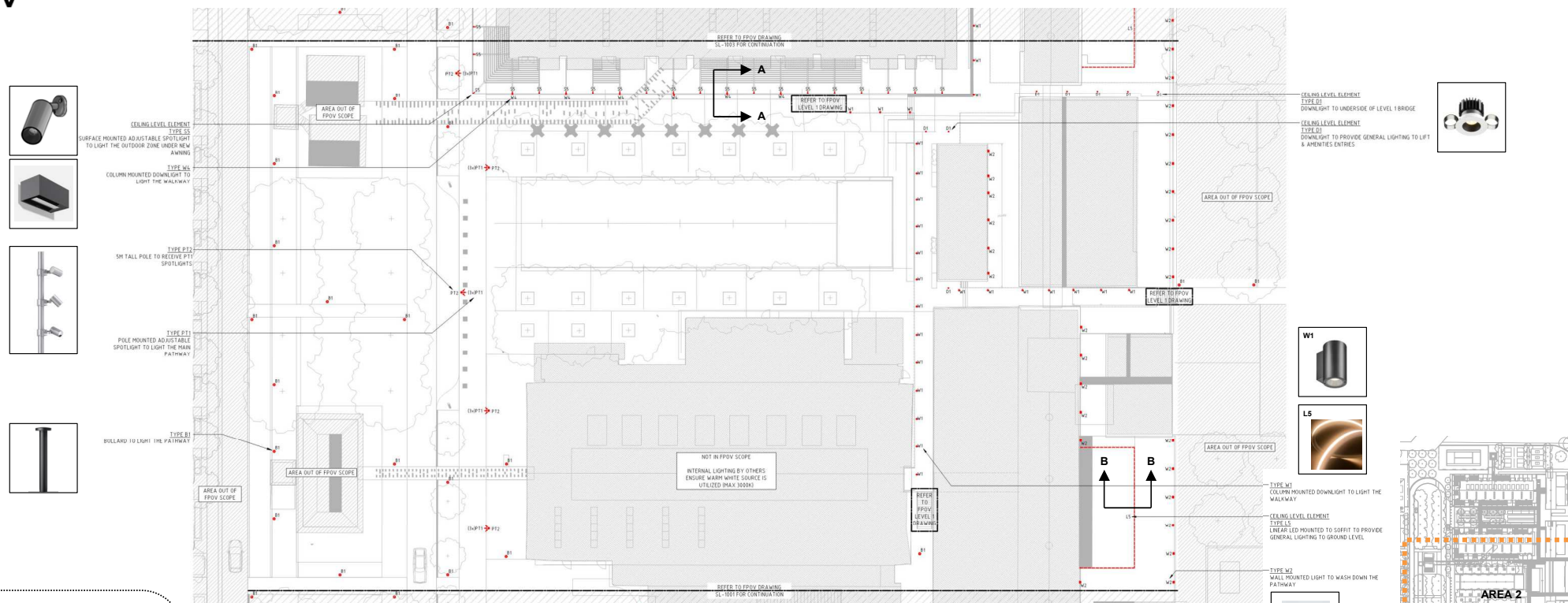


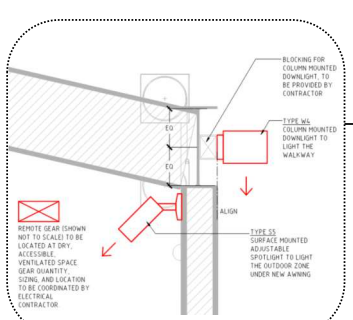


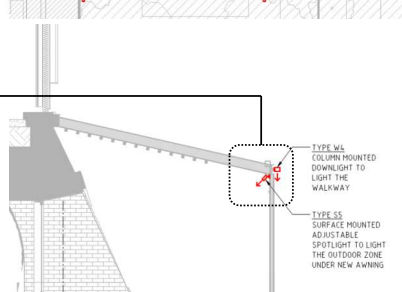
AREA 1_GROUND LEVEL

Note : Only lighting required for public realm compliance is shown

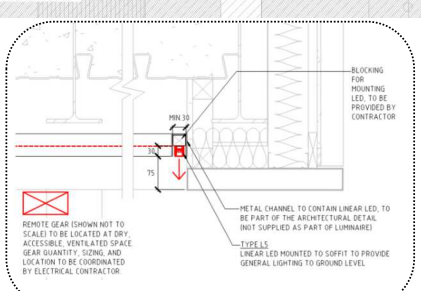
1_LIGHTING PLAN







SECTION A-A



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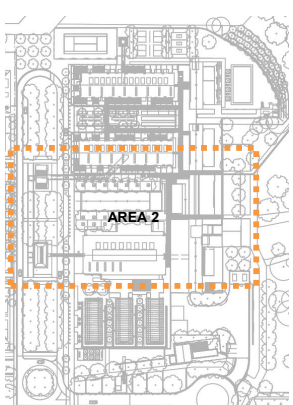
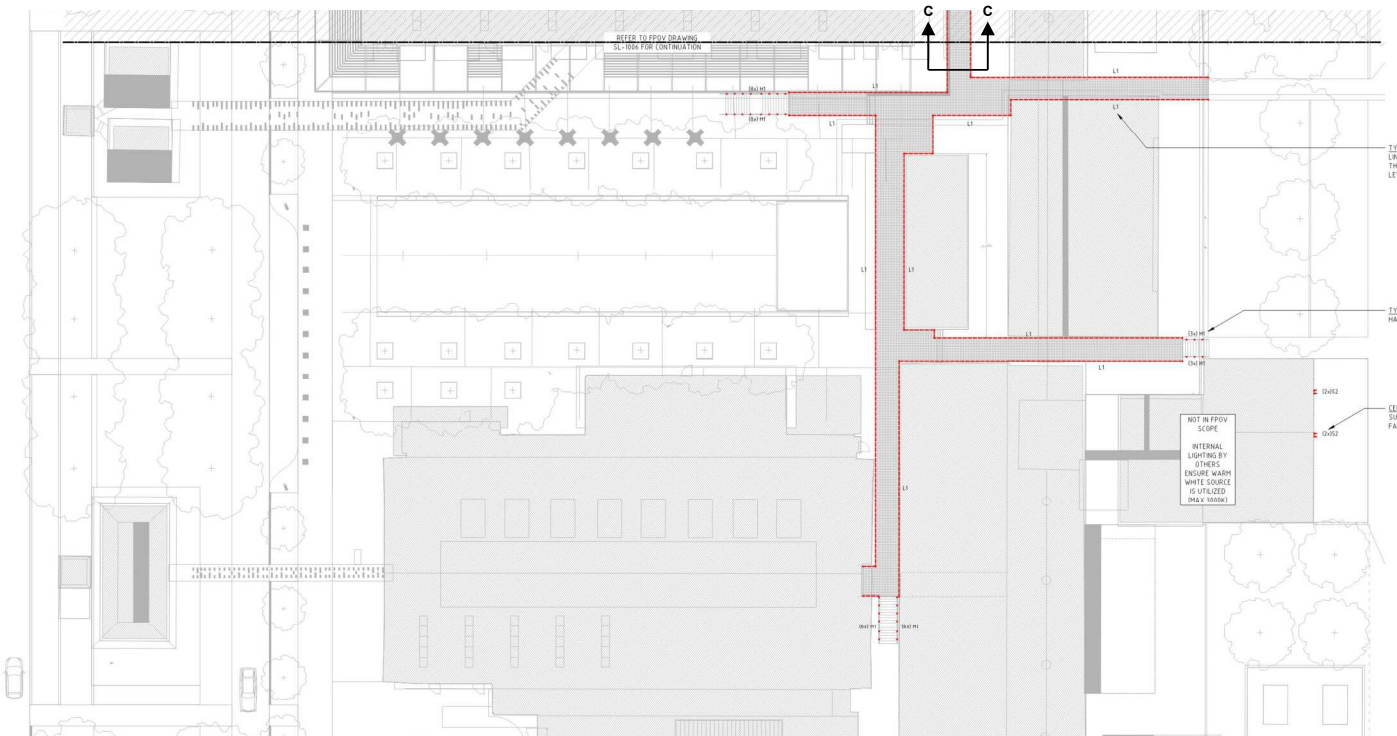
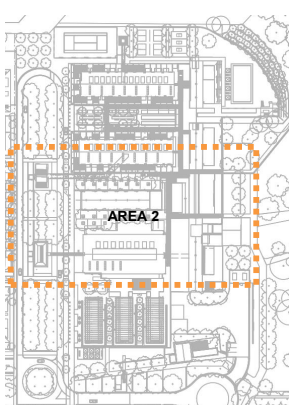


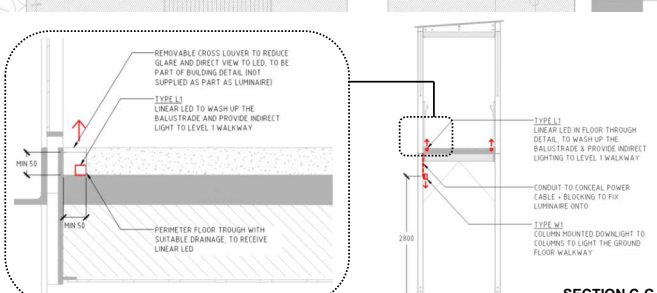
AREA 2_GROUND LEVEL

Note : Only lighting required for public realm compliance is shown

1_LIGHTING PLAN







SECTION C-C

AREA 2_LEVEL 1

Note : Only lighting required for public realm compliance is shown

1_LIGHTING PLAN

CEILING LEVEL ELEMENT
TYPE S5
SURFACE MOUNTED ADJUSTABLE SPOTLIGHT TO LIGHT THE OUTDOOR ZONE UNDER NEW AWNING

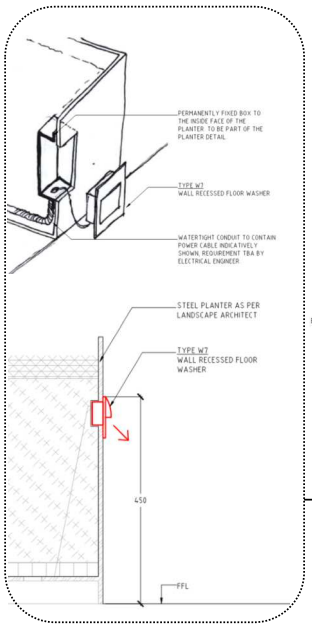
TYPE PT2
5M TALL POLE TO RECEIVE PT1 SPOTLIGHTS

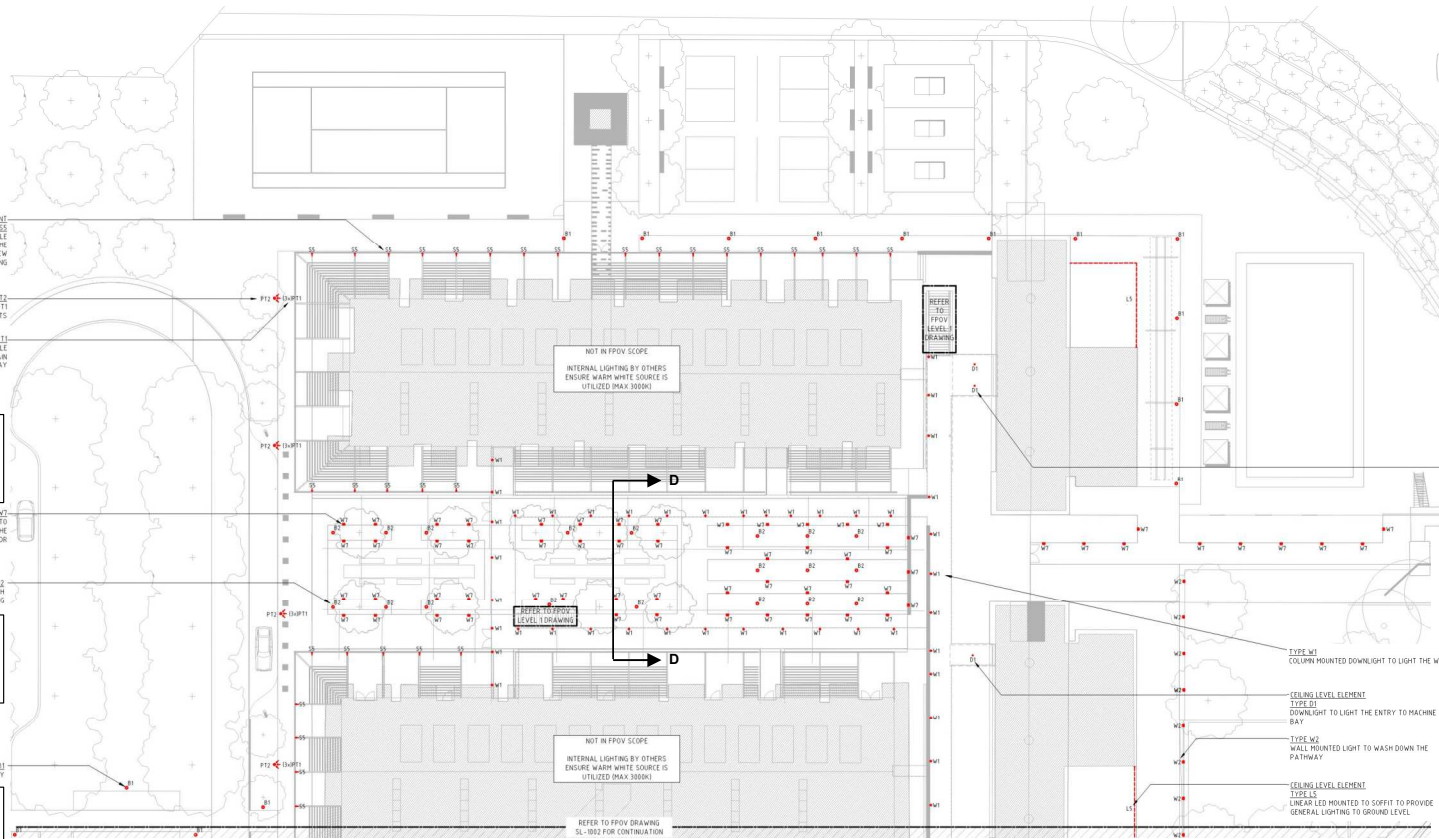
TYPE PT1
POLE MOUNTED ADJUSTABLE SPOTLIGHT TO LIGHT THE MAIN PATHWAY

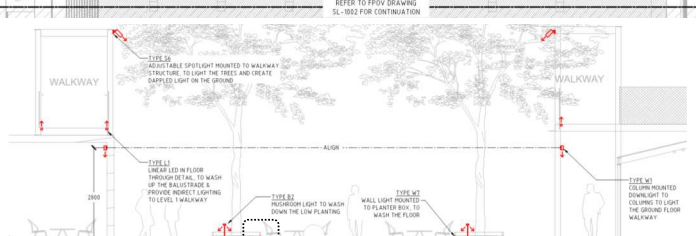
TYPE W7
WALL LIGHT MOUNTED TO PLANTER BOX, TO WASH THE FLOOR

TYPE B2
MUSHROOM LIGHT TO WASH DOWN THE LOW PLANTING

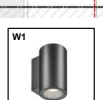
TYPE B1
BOLLARD TO LIGHT THE PATHWAY

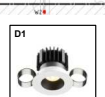


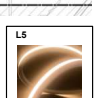


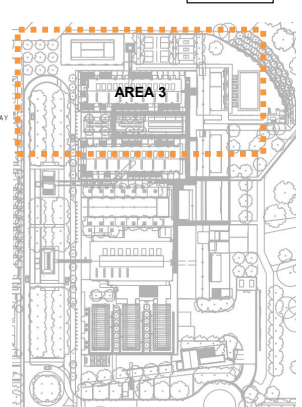


SECTION D-D





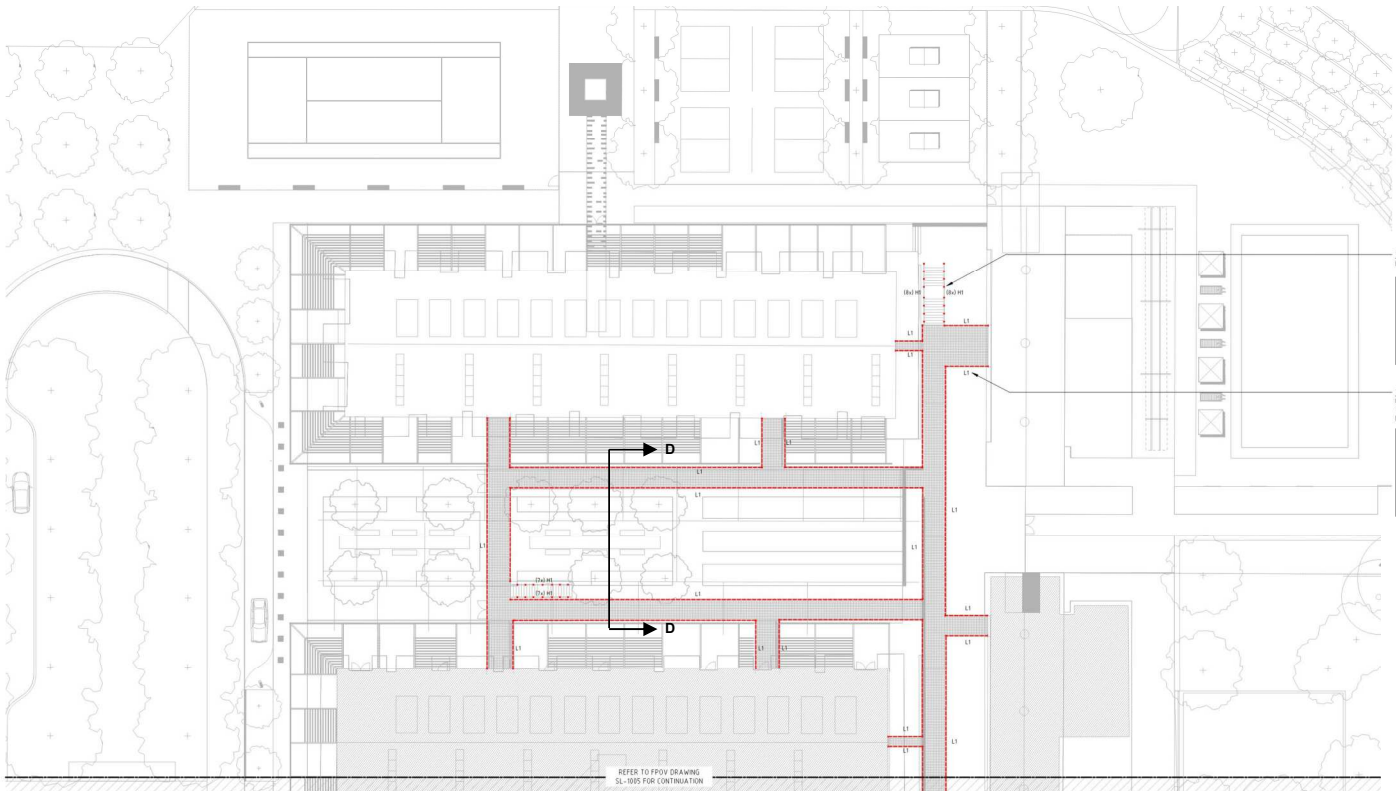


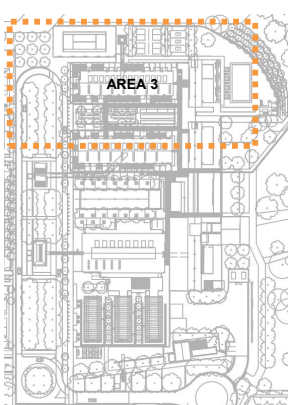


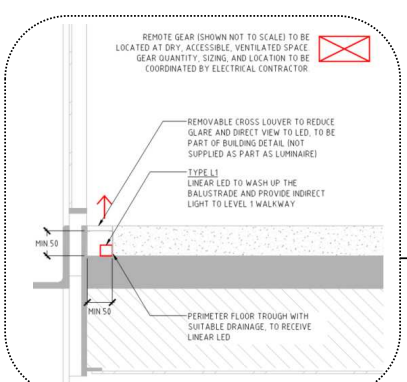
AREA 3_GROUND LEVEL

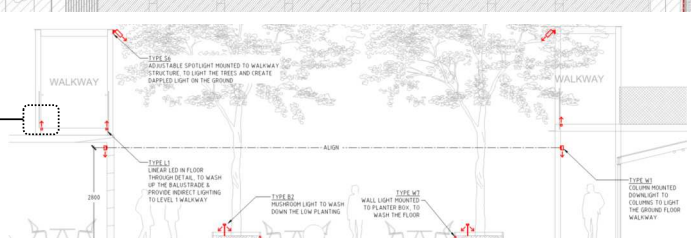
Note : Only lighting required for public realm compliance is shown

1_LIGHTING PLAN







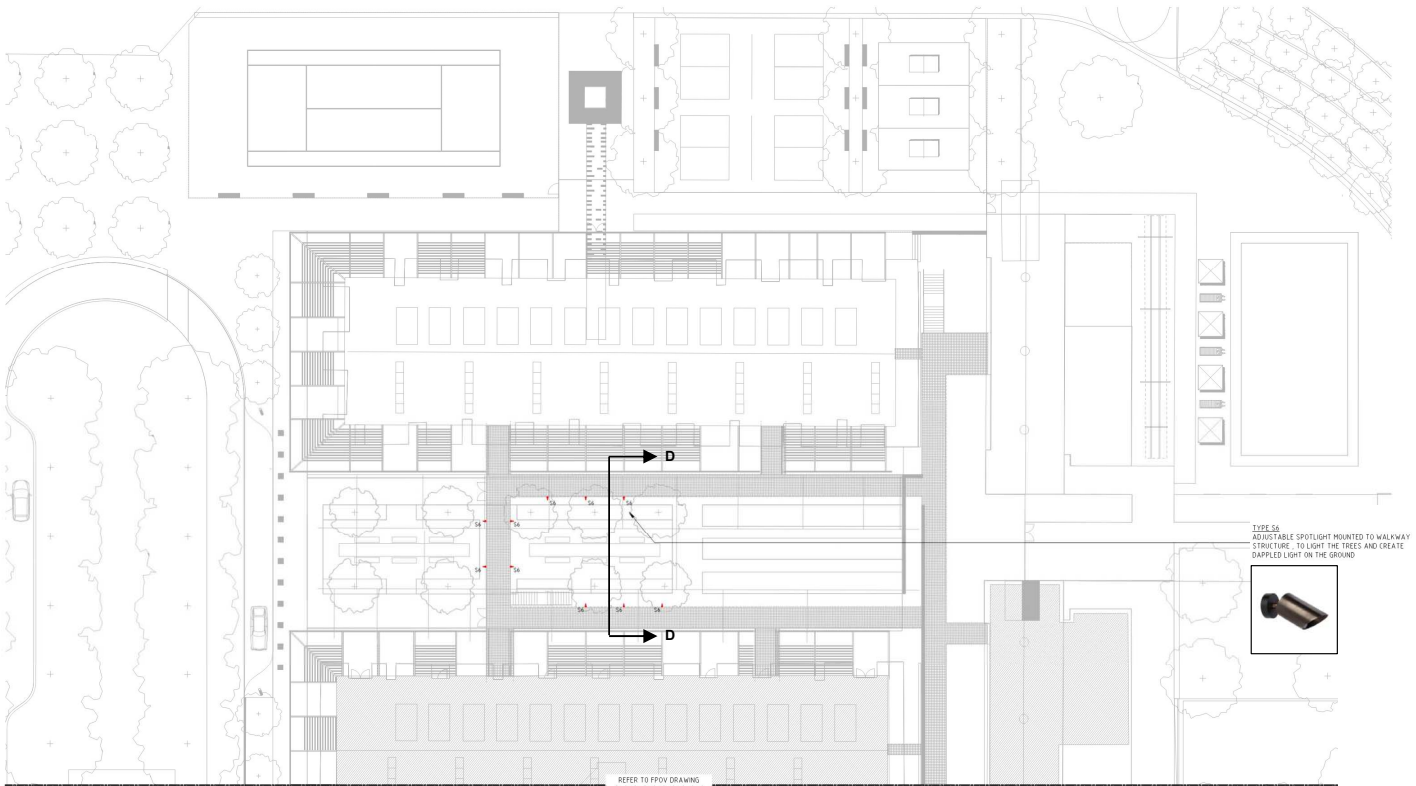


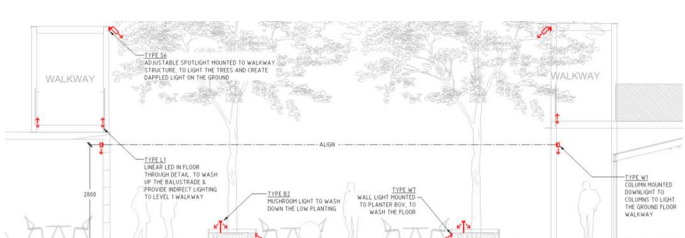
SECTION D-D

AREA 3_LEVEL 1

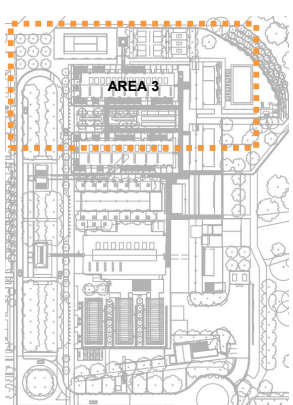
Note : Only lighting required for public realm compliance is shown

1_LIGHTING PLAN





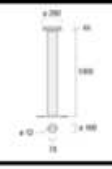
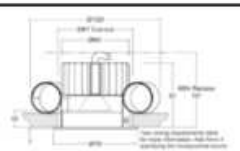
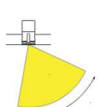
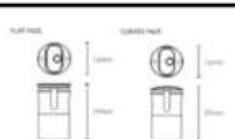
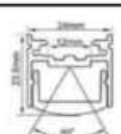
SECTION D-D



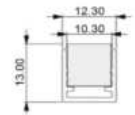
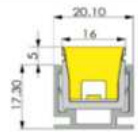
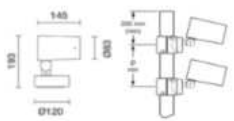
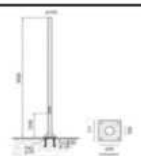
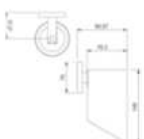
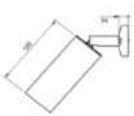
AREA 3_ROOF LEVEL

Note : Only lighting required for public realm compliance is shown

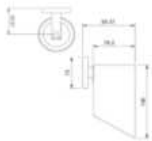
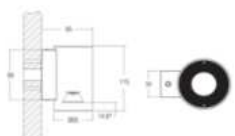
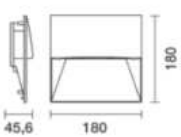
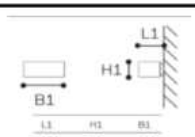
2_LUMINAIRE TYPOLOGY

CODE	IMAGE	LUMINAIRE TYPE	MOUNTING	ACCESSORIES	WATTAGE	CCT	CRI	OPTICS	DIMENSIONS	IP RATING
B1		Bollard	Ground Surface	N/A	18	3000	>80	Symmetric		66
B2		Bollard	Ground Surface	N/A	3	3000	>80	Symmetric		65
D1		Fixed Downlight	Ceiling Recessed	Honeycomb louver	10	3000	>90	Medium		65
D2		Fixed Downlight	Ceiling Recessed	Honeycomb louver	10	3000	>90	Medium		65
H1	 	Fixed Downlight	Handrail Integrated	N/A	1.4	3000	>80	Asymmetric		65
L1		Linear	Ground Surface	N/A	14.5	3000	>90	Wide		67

2_LUMINAIRE TYPOLOGY

CODE	IMAGE	LUMINAIRE TYPE	MOUNTING	ACCESSORIES	WATTAGE	CCT	CRI	OPTICS	DIMENSIONS	IP RATING
L4		Linear	Integrated	N/A	5	3000	>80	Frosted Diffuser		67
L5		Linear	Integrated	N/A	12	3000	>90	Frosted Diffuser		67
PT1		Spotlight	Pole mounted (onto type PT2)	Antiglare snoot & Honeycomb louver	9.1	3000	>80	Wide Flood		66
PT2		Pole	Ground Surface	N/A	N/A	N/A	N/A	N/A		54
S2		Spotlight	Wall Surface	Antiglare snoot & Honeycomb louver	18	3000	>80	Medium		65
S5		Spotlight	Wall Surface	Antiglare snoot & Honeycomb louver	9	2700	>80	Wide		65

2_LUMINAIRE TYPOLOGY

CODE	IMAGE	LUMINAIRE TYPE	MOUNTING	ACCESSORIES	WATTAGE	CCT	CRI	OPTICS	DIMENSIONS	IP RATING
S6		Spotlight	Wall Surface	Antiglare snoot & Honeycomb louver	18	3000	>80	Medium		65
W1		Fixed Downlight	Wall Surface	N/A	10	3000	>90	Wide Flood		67
W2		Wall Recessed	Floor Washer	N/A	10	3000	>80	Asymmetric		66
W4		Wall Surface	Fixed Downlight	N/A	9.7	3000	>80	Asymmetric (forward throw)		66
W7		Wall Recessed	Floor Washer	N/A	6	3000	>80	Asymmetric		66

3_LIGHTING CODE COMPLIANCE

PRIMARY PATHWAY (PP4)

SECONDARY PATHWAY (PP5)

COVERED WALKWAY & STAIRCASE (PP3)

AS/NZS 1158.3 Lighting for roads and public spaces
Pedestrian area (Category P) lighting – performance and design requirements

TABLE 2.2

LIGHTING SUBCATEGORIES FOR PEDESTRIAN AND CYCLIST PATHS

1	2	3	4	5
Type of pathway		Selection criteria[a,b,c]		Applicable lighting subcategory
General description	Basic operating characteristics	Pedestrian/ cycle activity	Fear of crime	
Pedestrian or cycle orientated pathway, e.g. footpaths, including those along local roads[d] and arterial roads[e], walkways, lanes, park paths, cyclist paths	Pedestrian and or cycle traffic only	N/A	High	PP1[c]
		High	Medium	PP2[c]
		Medium	Medium	PP3
		Medium	Low	PP4
		Low	Low	PP5

TABLE 2.4

LIGHTING SUBCATEGORIES FOR CONNECTING ELEMENTS

Type of area	Applicable lighting subcategory
Subways, including associated ramps or stairways	PE1
Steps and stairways, ramps, footbridges, pedestrian ways	PE2
Ramps and footbridges associated with low use pathways (e.g. in parks and reserves)	PE3

NOTE: Subways are listed as a separate subcategory because of a fear of crime.

TABLE 3.6

VALUES OF LIGHT TECHNICAL PARAMETERS FOR CONNECTING ELEMENTS

1	2	3	4	5
Lighting subcategory	Light technical parameters (LTP)			
	Average horizontal illuminance[a,b,d] ($\bar{E}_h$) lx	Point horizontal illuminance[a,b] (E_{Ph}) lx	Illuminance (horizontal) uniformity[c] Cat. P (U_{E2})	Point vertical illuminance[a,b] (E_{Pv}) lx
PE1	35	17.5	8	17.5
PE2	Same as for highest lighting subcategory applying to areas that abut the connecting element but, where forming part of a road or pathway, to be not less than subcategory PA3 in Table 3.5.			
PE3	Same as for highest lighting subcategory applying to areas that abut the connecting element but, where forming part of a road or pathway, to be not less than subcategory PP3 in Table 3.4.			

3_LIGHTING CODE COMPLIANCE

PRIMARY PATHWAY (PP4)

SECONDARY PATHWAY (PP5)

COVERED WALKWAY & STAIRCASE (PP3)

AS/NZS 1158.3 Lighting for roads and public spaces
Pedestrian area (Category P) lighting – performance and design requirements

TABLE 3.4

VALUES OF LIGHT TECHNICAL PARAMETERS FOR PATHWAYS AND CYCLIST PATHS

1	2	3	4	5
Lighting subcategory	Light technical parameters (LTP)			
	Average horizontal illuminance[a,b] $(\bar{E}_h)$ lx	Point horizontal illuminance[a,b,d] (E_{Ph}) lx	Illuminance (horizontal) uniformity[c] Cat. P (U_{E2})	Point vertical illuminance[a,b] (E_{Pv}) lx
PP1	10	2	5	1
PP2	7	1	5	0.3
PP3	3	0.5	5	0.1
PP4	1.5	0.25	5	0.05[e]
PP5	0.85	0.14	5	0.02[e]

TABLE 3.6

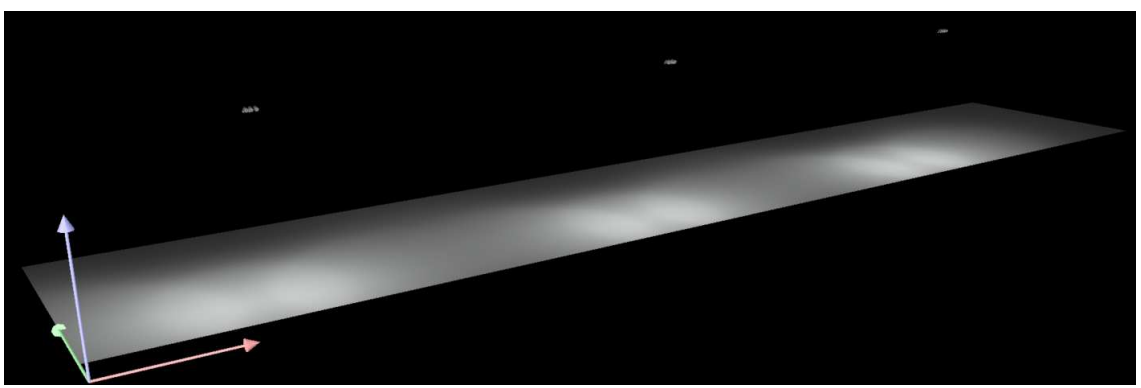
VALUES OF LIGHT TECHNICAL PARAMETERS FOR CONNECTING ELEMENTS

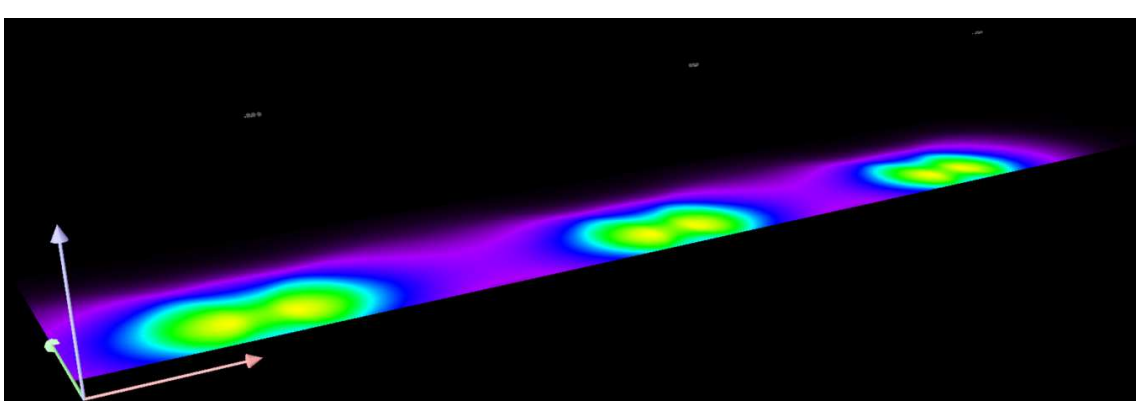
1	2	3	4	5
Lighting subcategory	Light technical parameters (LTP)			
	Average horizontal illuminance[a,b,d] $(\bar{E}_h)$ lx	Point horizontal illuminance[a,b] (E_{Ph}) lx	Illuminance (horizontal) uniformity[c] Cat. P (U_{E2})	Point vertical illuminance[a,b] (E_{Pv}) lx
PE1	35	17.5	8	17.5
PE2	Same as for highest lighting subcategory applying to areas that abut the connecting element but, where forming part of a road or pathway, to be not less than subcategory PA3 in Table 3.5.			
PE3	Same as for highest lighting subcategory applying to areas that abut the connecting element but, where forming part of a road or pathway, to be not less than subcategory PP3 in Table 3.4.			

3_LIGHTING CODE COMPLIANCE

PRIMARY PATHWAY (PP4)

Requirement	Result	Target	Pass / Fail
Average horizontal illuminance	15 lux	>1.5 lux	Pass
Point horizontal illuminance	6.36 lux	>0.25 lux	Pass
Point vertical illuminance	1.15 lux	>0.05 lux	Pass
Uniformity	2.1	<5	Pass



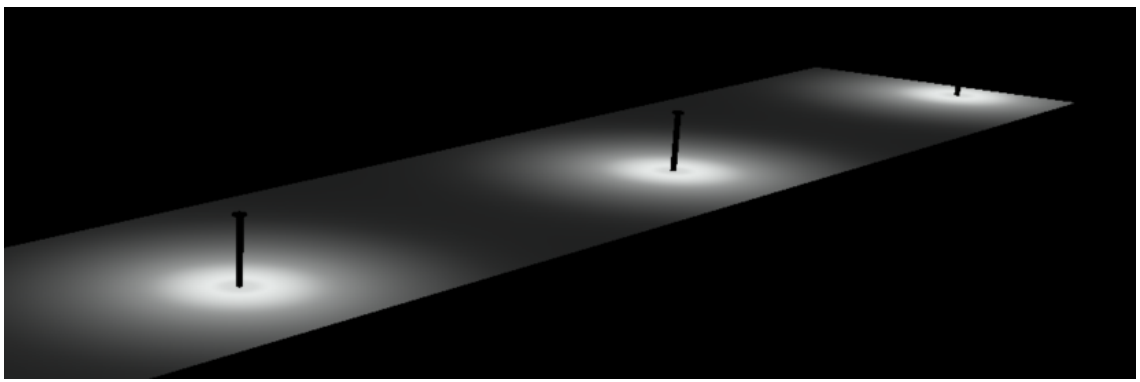


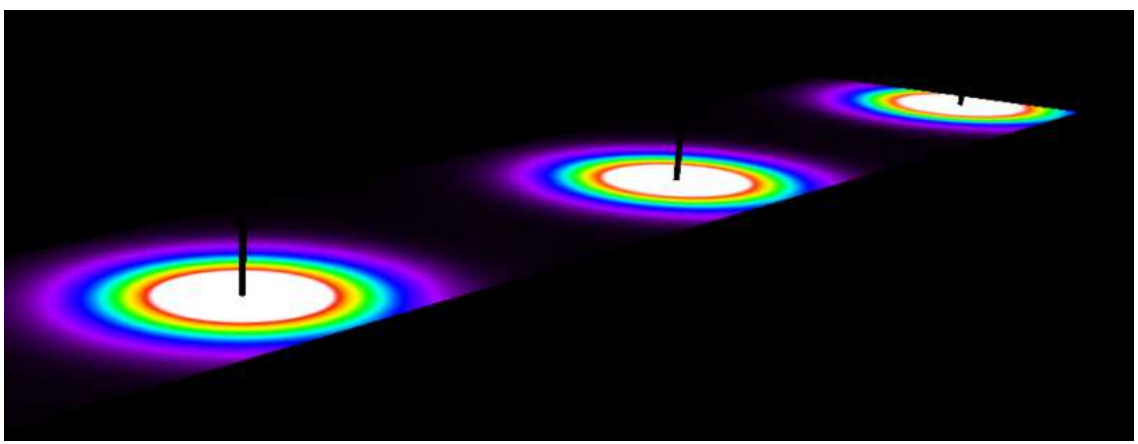
3_LIGHTING CODE COMPLIANCE

SECONDARY PATHWAY (PP5)

Requirement	Result	Target	Pass / Fail
Average horizontal illuminance	9.34 lux	>0.85 lux	Pass
Point horizontal illuminance	0.15 lux	>0.14 lux	Pass
Point vertical illuminance	n/a	n/a*	n/a
Uniformity	4.28	<5	Pass

*not applicable for luminaires with mounting height of 1.5m or less

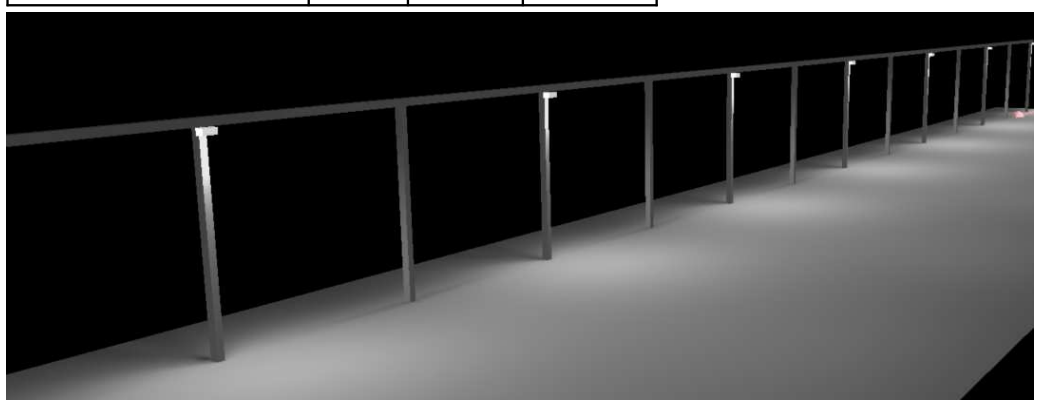


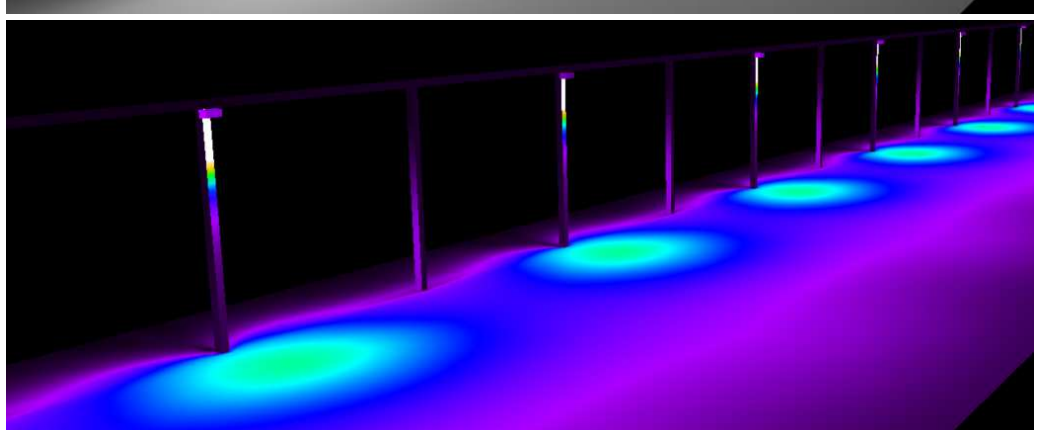


3_LIGHTING CODE COMPLIANCE

SECONDARY PATHWAY (PP5)

Requirement	Result	Target	Pass / Fail
Average horizontal illuminance	12 lux	>0.85 lux	Pass
Point horizontal illuminance	7.74 lux	>0.14 lux	Pass
Point vertical illuminance	1.07 lux	0.02 lux	Pass
Uniformity	1.75	<5	Pass





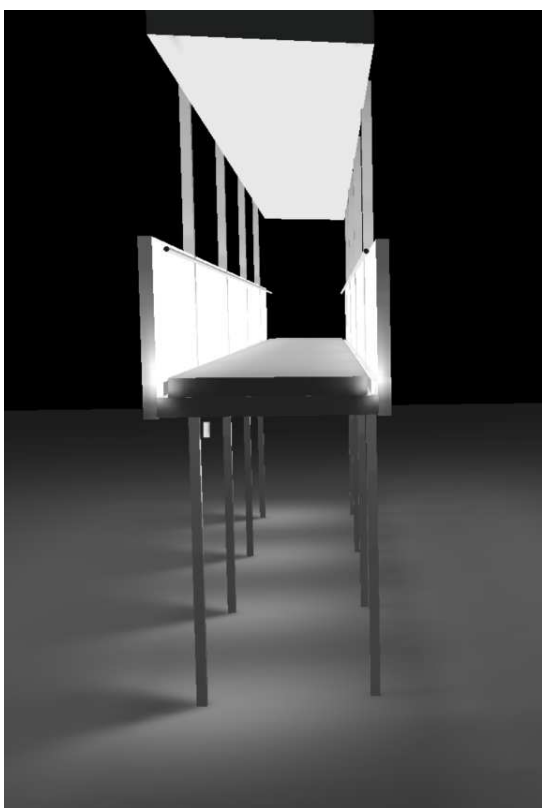
3_LIGHTING CODE COMPLIANCE

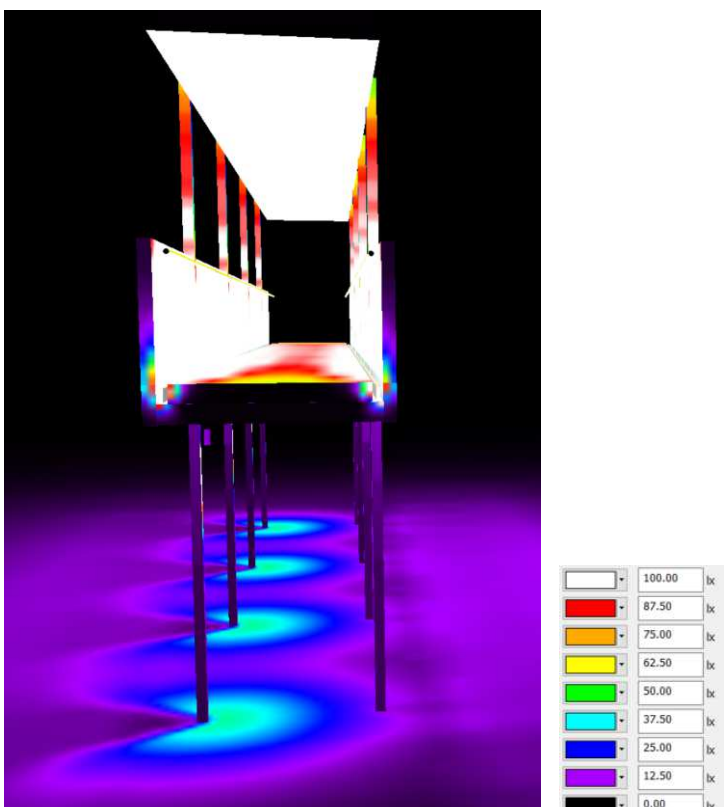
COVERED WALKWAY GROUND LEVEL (PP3)

Requirement	Result	Target	Pass / Fail
Average horizontal illuminance	21 lux	>3 lux	Pass
Point horizontal illuminance	12 lux	>0.5 lux	Pass
Point vertical illuminance	3.54 lux	0.1	n/a
Uniformity	1.48	<5	Pass

COVERED WALKWAY LEVEL 1 (PP3)

Requirement	Result	Target	Pass / Fail
Average horizontal illuminance	89 lux	>3 lux	Pass
Point horizontal illuminance	88 lux	>0.5 lux	Pass
Point vertical illuminance	55 lux	0.1	n/a
Uniformity	1.01	<5	Pass

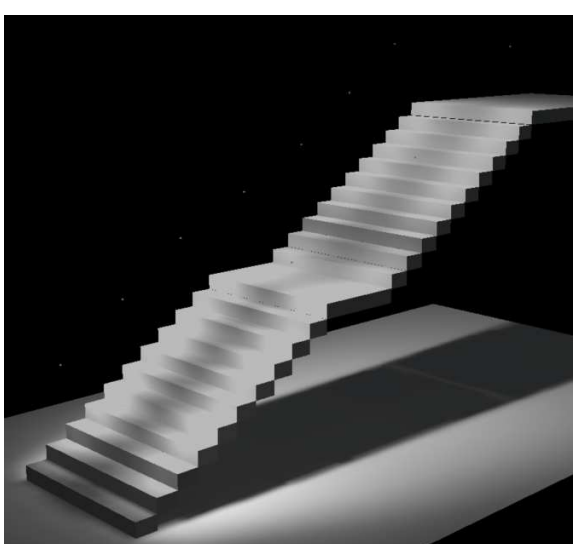


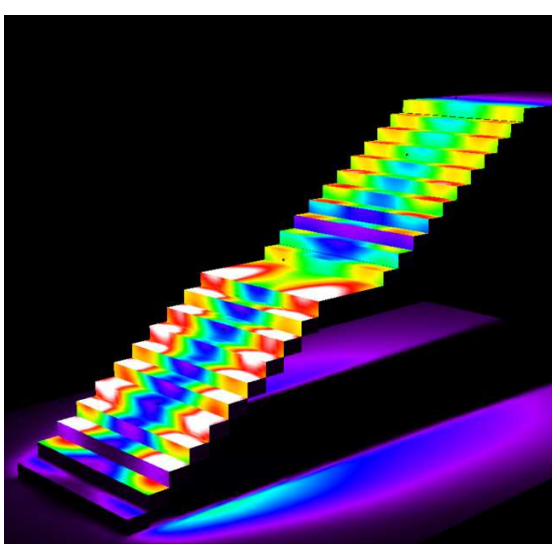


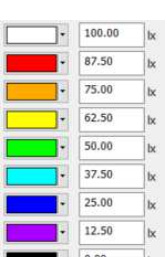
3_LIGHTING CODE COMPLIANCE

STAIRS (PP3)

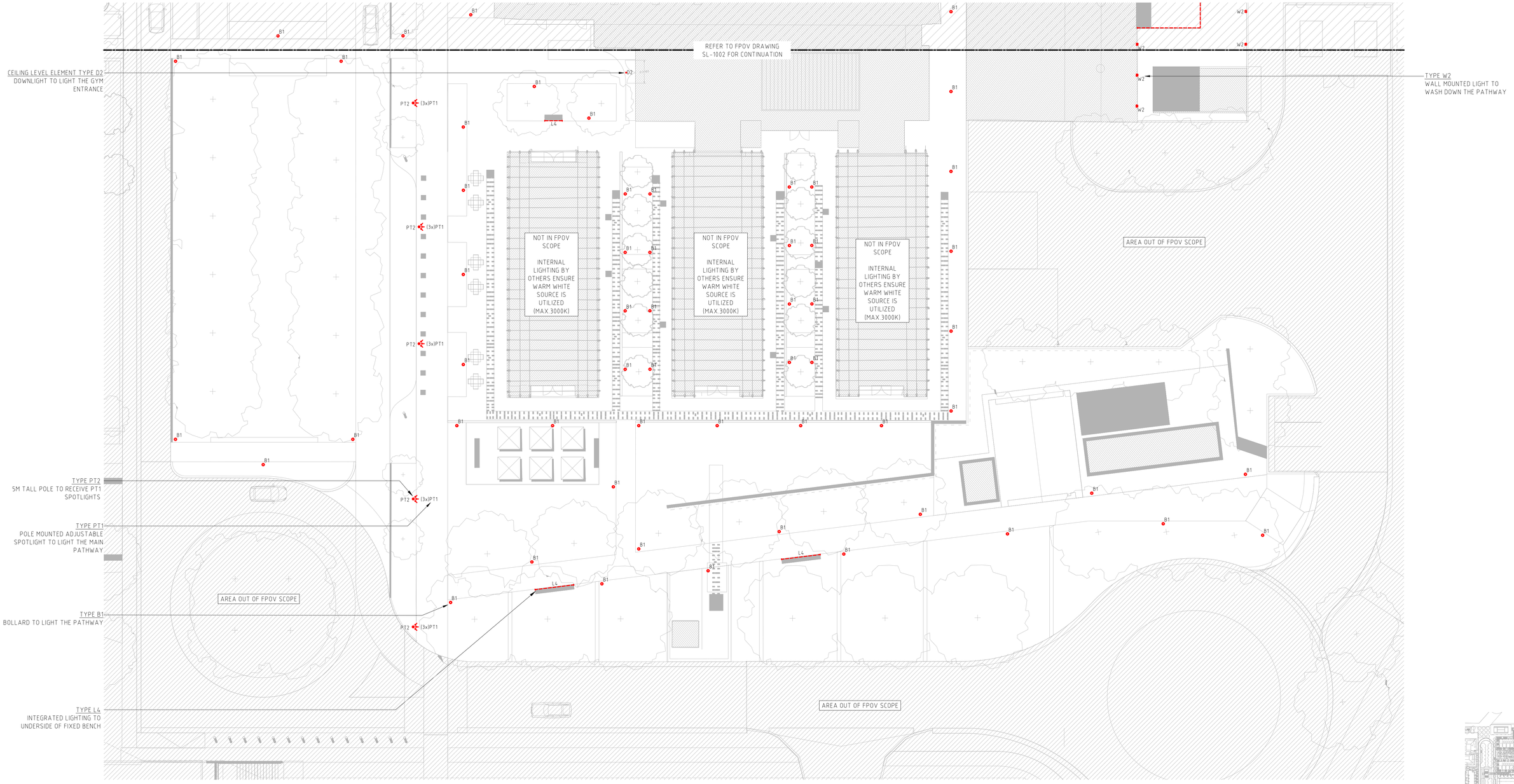
Requirement	Result	Target	Pass / Fail
Average horizontal illuminance	65.3 lux	>3 lux	Pass
Point horizontal illuminance	6.76 lux	>0.5 lux	Pass
Point vertical illuminance	0.39 lux	0.1 lux	Pass
Uniformity	1.73	<5	Pass

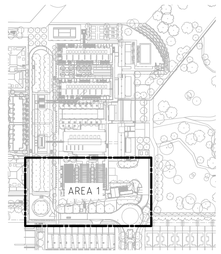






4_APPENDIX





1/1001 GROUND FLOOR AREA 1 – LIGHTING PLAN
1:200

NOTE: THIS DRAWING ONLY SHOWS LIGHTING REQUIRED FOR PUBLIC REALM COMPLIANCE

ISSUE:

REV	DATE	DESCRIPTION	DRAWN	CHECKED
00	25-07-2023	DA REPORT	TN	FL

APPLICATION:

BOLLARD	- B
CEILING MOUNTED	- C
DOWNLIGHT	- D
FLOOR LAMP	- F
HANDRAIL	- H
SPIKE LIGHT	- K
LINEAR	- L
FIBRE OPTIC	- FO
PENDANT	- P
POLE TOP	- PT
SPOT/TRACK MOUNTED	- S
TABLE LAMP	- T
TRACK	- TR
UPLIGHT	- U
WALL LIGHT	- W
CUSTOM FITTING	- Z

LIGHT SOURCE:

FLUORESCENT	- F
METAL HALIDE	- M
LED GLS	- G
LIGHT EMITTING DIODE (LED)	- L
TUNGSTEN HALOGEN	- H
NEON / COLD CATHODE	- N

OTHER:

Specification supplied by others FF&E	- AE
EFFECT / GOBO PROJECTORS, ETC.	- FX
RE-USE EXISTING PRODUCTS	- R
DIMMERS	- DM
LIGHTING CONTROL PANEL	- LCP
LIGHTING / PROGRAMMABLE SOCKET	- LPS
DIMMED GPO	- DLS
DIMMER SENSOR	- DS
SWITCH	- SW
GENERAL POWER OUTLET	- GPO
SPECIAL POWER OUTLET	- SPO
CLOCK POINT	- CP

NOTES:

1. THIS IS NOT A CONSTRUCTION DRAWING
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH FPOV SPECIFICATIONS AND SCHEDULES
3. THIS DRAWING DOES NOT INCLUDE EMERGENCY LIGHT OR EXIT SIGNAGE INFORMATION
4. CIRCUITING SHOWN IS INDICATIVE OF CONTROL GROUPS AND SHALL BE READ IN CONJUNCTION WITH ELECTRICAL ENGINEERING DRAWINGS SHOWING ELECTRICAL CIRCUITING
5. ALL REMOTE GEAR TO BE LOCATED AT DRY, ACCESSIBLE, VENTILATED LOCATION. CONTRACTOR TO NOMINATE GEAR LOCATIONS, FPOV TO REVIEW AND COMMENT
6. ANNOTATED LINEAR LIGHT DIMENSIONS ARE ACCURATE IN RELATION TO ID/ARCHITECTURAL DRAWING. IF CONSTRUCTED ACCURATE TO THIS DRAWING, DIMENSIONS CAN BE USED TO INFORM INITIAL ORDERING ONLY. FINAL ORDERS MUST BE MADE VIA MEASUREMENTS TAKEN FROM CONTRACTORS DRAWINGS.
   6.1 FOR STRAIGHT APPLICATION: LONGEST AVAILABLE MODULES TO BE USED, COMPLETED BY SHORTER MODULE AS REQUIRED
   6.2 FOR CURVE APPLICATION: LINEAR LED TO BE PROVIDED IN SHORTER MODULES AS NOTED IN THE DRAWING

FPOV DRAWINGS BASED ON MCGREGOR COXALL DRAWING:
0619SYD_ACT_BRICKWORKS_LA_SK_Base File_230719

ISSUED TO FPOV ON 20/07/2023

ARCHITECT:

CONSULTANT:

FP OV

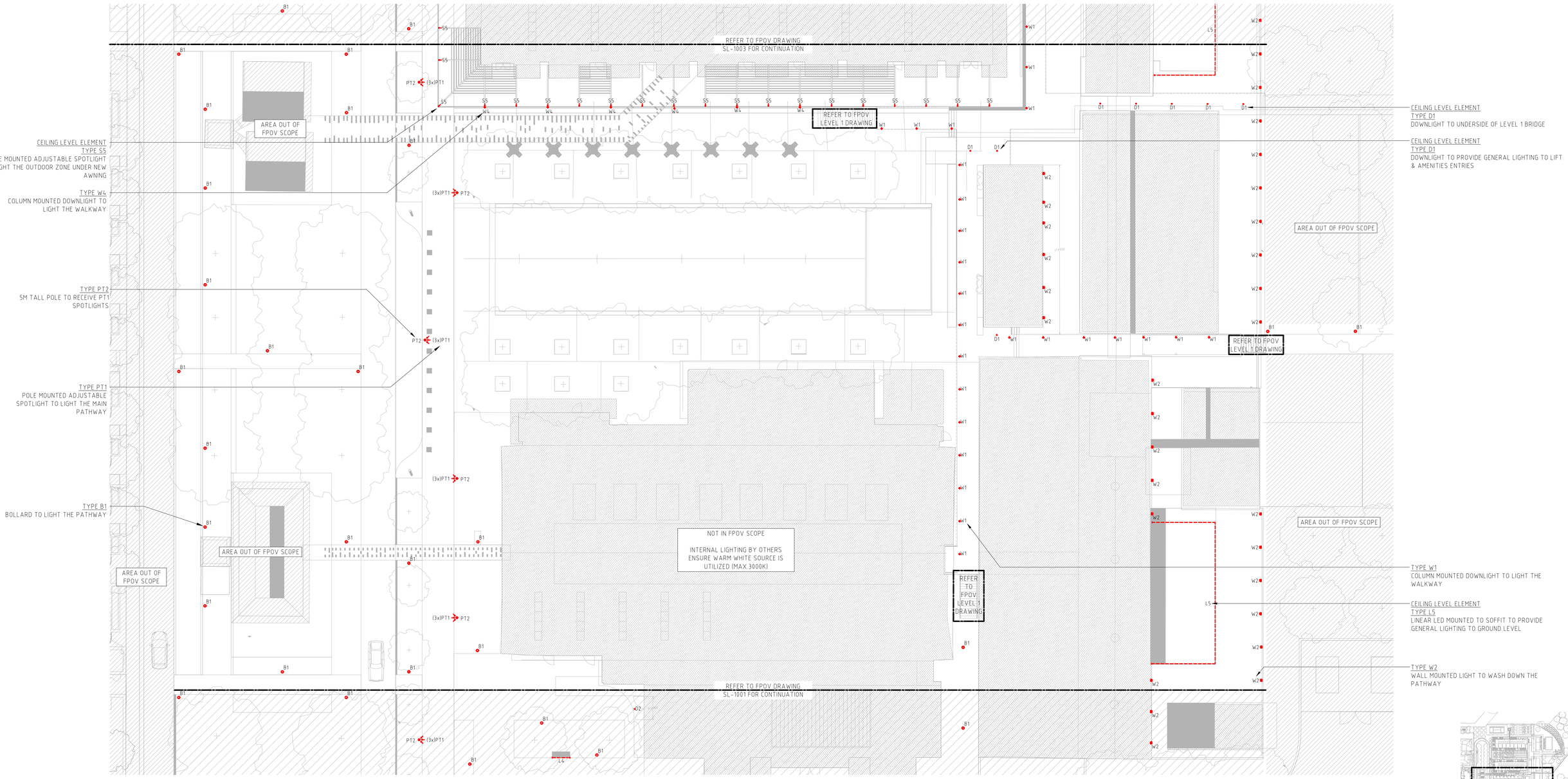
LONDON
BATH
SYDNEY
MELBOURNE
GOLD COAST
PERTH
DUBAI
SINGAPORE
INDONESIA
HONG KONG

DRAWING:

FIREFLY POINT OF VIEW

YARRALUMLA BRICKWORKS HERITAGE CORE
DOMA GROUP
LIGHTING DESIGN
GROUND FLOOR AREA 1 – LIGHTING PLAN

SCALE @ A1	PROJ. No.	DWG No.	REV
1:200	J3867	SL-1001	00



1/1002 GROUND FLOOR AREA 2 – LIGHTING PLAN
1:200

NOTE: THIS DRAWING ONLY SHOWS LIGHTING REQUIRED FOR PUBLIC REALM COMPLIANCE

ISSUE:

REV	DATE	DESCRIPTION	DRAWN	CHECKED
00	25-07-23	DA REPORT	TN	FL

APPLICATION:
- BOLLARD - B
- CEILING MOUNTED - C
- DOWNLIGHT - D
- FLOOR LAMP - F
- HANDRAIL - H
- SPIKE LIGHT - K
- LINEAR - L
- FIBRE OPTIC - FO
- PENDANT - P
- POLE TOP - PT
- SPOT/TRACK MOUNTED - S
- TABLE LAMP - T
- TRACK - TR
- UPLIGHT - U
- WALL LIGHT - W
- CUSTOM FITTING - Z

LIGHT SOURCE:
- FLUORESCENT - F
- METAL HALIDE - M
- LED (CLS - G
- LIGHT EMITTING DIODE (LED) - L
- TUNGSTEN HALOGEN - H
- NEON / COLD CATHODE - N

OTHER:
- Specification supplied by others FF&E - AE
- EFFECT / GOBO PROJECTORS, ETC - FX
- RE-USE EXISTING PRODUCTS - R
- DIMMERS - DM
- LIGHTING CONTROL PANEL - LCP
- LIGHTING / PROGRAMMABLE SOCKET - LPS
- DIMMED GPO - DLS
- DIMMER SENSOR - DS
- SWITCH - SW
- GENERAL POWER OUTLET - GPO
- SPECIAL POWER OUTLET - SPO
- CLOCK POINT - CP

NOTES:
1. THIS IS NOT A CONSTRUCTION DRAWING.
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH FPOV SPECIFICATIONS AND SCHEDULES.
3. THIS DRAWING DOES NOT INCLUDE EMERGENCY LIGHT OR EXIT SIGNAGE INFORMATION.
4. CIRCUITING SHOWN IS INDICATIVE OF CONTROL GROUPS AND SHALL BE READ IN CONJUNCTION WITH ELECTRICAL ENGINEERING DRAWINGS SHOWING ELECTRICAL CIRCUITING.
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FPOV DRAWINGS BASED ON MCGREGOR COXALL DRAWING:
0619SYD_ACT_BRICKWORKS_LA_SK_Base File_230719

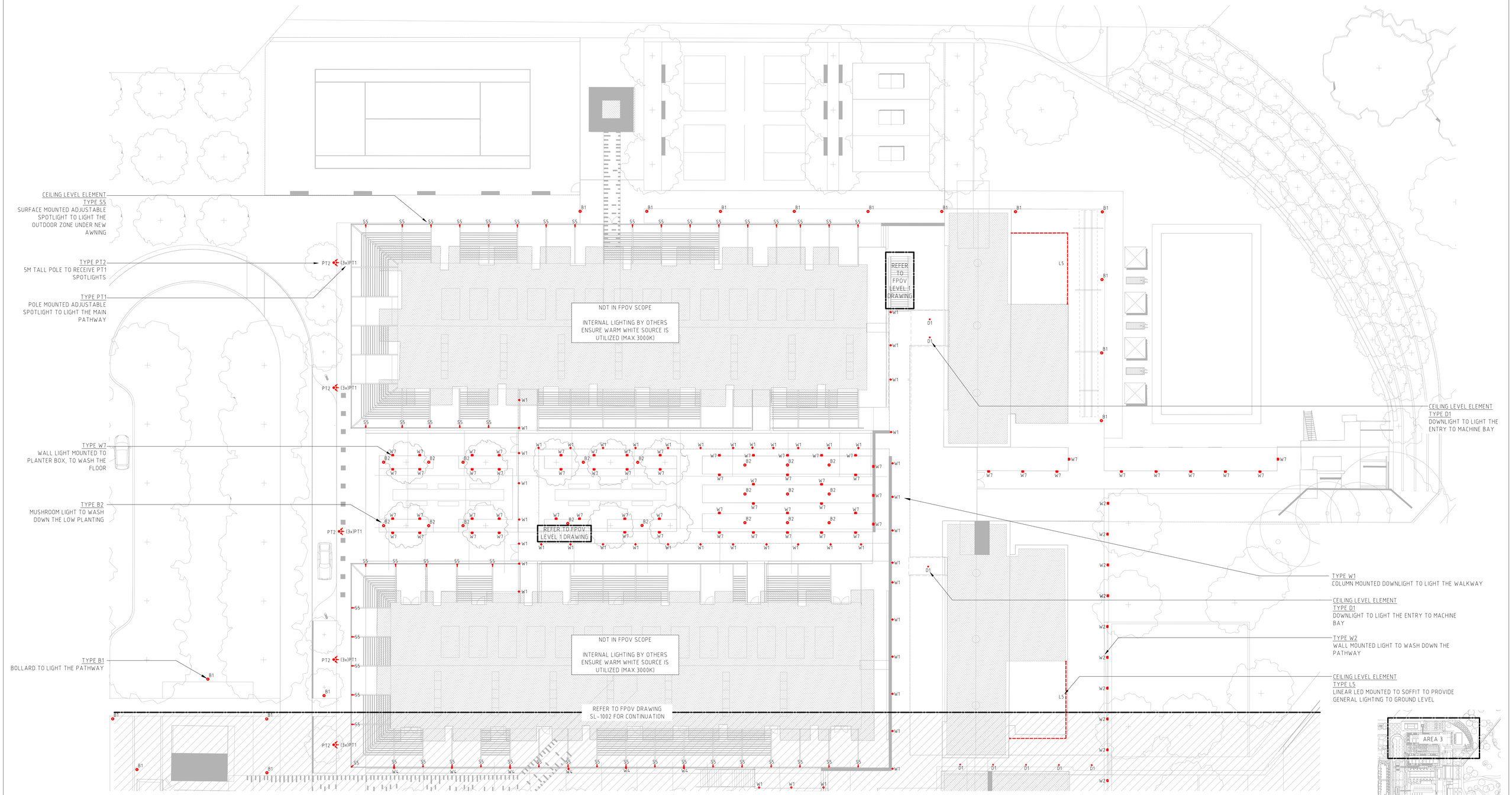
ISSUED TO FPOV ON 20/07/2023

ARCHITECT:

CONSULTANT:
FPOV
LONDON BATH SYDNEY MELBOURNE GOLD COAST PERTH DUBAI SINGAPORE INDONESIA HONG KONG

DRAWING:
FIREFLY POINT OF VIEW
YARRALUMLA BRICKWORKS HERITAGE CORE
DOMA GROUP
LIGHTING DESIGN
GROUND FLOOR AREA 2 – LIGHTING PLAN

SCALE @ A1	PROJ. No.	DWG No.	REV
1:200	J3867	SL-1002	00



1/1003 GROUND FLOOR AREA 3 – LIGHTING PLAN
1: 200

NOTE: THIS DRAWING ONLY SHOWS LIGHTING REQUIRED FOR PUBLIC REALM COMPLIANCE

ISSUE:

REV	DATE	DESCRIPTION	DRAWN	CHECKED
00	25-07-23	DA REPORT	TN	FL

APPLICATION:

BOLLARD	- B
CEILING MOUNTED	- C
DOWNLIGHT	- D
FLOOR LAMP	- F
HANDRAIL	- H
SPIKE LIGHT	- K
LINEAR	- L
FIBRE OPTIC	- FO
PENDANT	- P
POLE TOP	- PT
SPOT/TRACK MOUNTED	- S
TABLE LAMP	- T
TRACK	- TR
UPLIGHT	- U
WALL LIGHT	- W
CUSTOM FITTING	- Z

LIGHT SOURCE:

FLUORESCENT	- F
METAL HALIDE	- M
LED GLS	- G
LIGHT EMITTING DIODE (LED)	- L
TUNGSTEN HALOGEN	- H
NEON / COLD CATHODE	- N

OTHER:

Specification supplied by others FF&E	- AE
EFFECT / GOBO PROJECTORS, ETC.	- FX
RE-USE EXISTING PRODUCTS	- R
DIMMERS	- DM
LIGHTING CONTROL PANEL	- LCP
LIGHTING / PROGRAMMABLE SOCKET	- LPS
DIMMED GPO	- DLS
DIMMER SENSOR	- DS
SWITCH	- SW
GENERAL POWER OUTLET	- GPO
SPECIAL POWER OUTLET	- SPO
CLOCK POINT	- CP

NOTES:

1. THIS IS NOT A CONSTRUCTION DRAWING
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH FPOV SPECIFICATIONS AND SCHEDULES
3. THIS DRAWING DOES NOT INCLUDE EMERGENCY LIGHT OR EXIT SIGNAGE INFORMATION
4. CIRCUITING SHOWN IS INDICATIVE OF CONTROL GROUPS AND SHALL BE READ IN CONJUNCTION WITH ELECTRICAL ENGINEERING DRAWINGS SHOWING ELECTRICAL CIRCUITING
5. ALL REMOTE GEAR TO BE LOCATED AT DRY, ACCESSIBLE, VENTILATED LOCATION. CONTRACTOR TO NOMINATE GEAR LOCATIONS, FPOV TO REVIEW AND COMMENT
6. ANNOTATED LINEAR LIGHT DIMENSIONS ARE ACCURATE IN RELATION TO ID/ARCHITECTURAL DRAWING. IF CONSTRUCTED ACCURATE TO THIS DRAWING, DIMENSIONS CAN BE USED TO INFORM INITIAL ORDERING ONLY. FINAL ORDERS MUST BE MADE VIA MEASUREMENTS TAKEN FROM CONTRACTORS DRAWINGS.
   6.1 FOR STRAIGHT APPLICATION: LONGEST AVAILABLE MODULES TO BE USED, COMPLETED BY SHORTER MODULE AS REQUIRED
   6.2 FOR CURVE APPLICATION: LINEAR LED TO BE PROVIDED IN SHORTER MODULES AS NOTED IN THE DRAWING

FPOV DRAWINGS BASED ON MCGREGOR COXALL DRAWING:
0619SYD_ACT_BRICKWORKS_LA_SK_Base File_230719

ISSUED TO FPOV ON 20/07/2023

ARCHITECT:

CONSULTANT:

FP OV

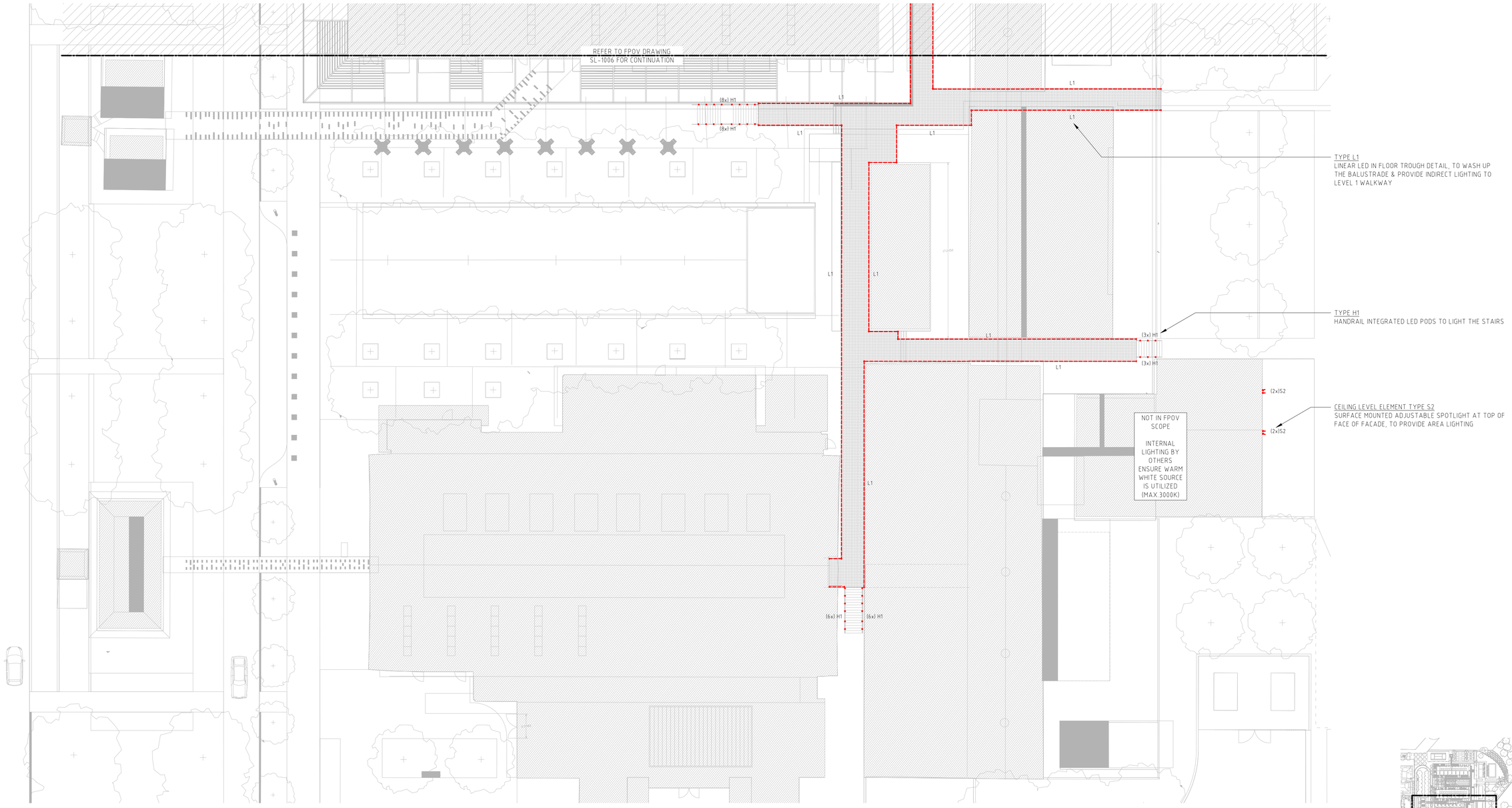
LONDON
BATH
SYDNEY
MELBOURNE
GOLD COAST
PERTH
DUBAI
SINGAPORE
INDONESIA
HONG KONG

DRAWING:

FIREFLY POINT OF VIEW

YARRALUMLA BRICKWORKS HERITAGE CORE
DOMA GROUP
LIGHTING DESIGN
GROUND FLOOR AREA 3 – LIGHTING PLAN

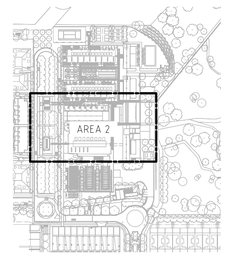
SCALE @ A1	PROJ. No.	DWG No.	REV
1:200	J3867	SL-1003	00



TYPE L1
LINEAR LED IN FLOOR TROUGH DETAIL, TO WASH UP THE BALUSTRADE & PROVIDE INDIRECT LIGHTING TO LEVEL 1 WALKWAY

TYPE H1
HANDRAIL INTEGRATED LED PODS TO LIGHT THE STAIRS

CEILING LEVEL ELEMENT TYPE S2
SURFACE MOUNTED ADJUSTABLE SPOTLIGHT AT TOP OF FACE OF FACADE, TO PROVIDE AREA LIGHTING



1
1005
LEVEL 1 AREA 2 – LIGHTING PLAN
1: 200

NOTE: THIS DRAWING ONLY SHOWS LIGHTING REQUIRED FOR PUBLIC REALM COMPLIANCE

ISSUE:

REV	DATE	DESCRIPTION	DRAWN	CHECKED
00	25-07-23	DA REPORT	TN	FL

APPLICATION:

BOLLARD	- B
CEILING MOUNTED	- C
DOWNLIGHT	- D
FLOOR LAMP	- F
HANDRAIL	- H
SPIKE LIGHT	- K
LINEAR	- L
FIBRE OPTIC	- FO
PENDANT	- P
POLE TOP	- PT
SPOT/TRACK MOUNTED	- S
TABLE LAMP	- T
TRACK	- TR
UPLIGHT	- U
WALL LIGHT	- W
CUSTOM FITTING	- Z

LIGHT SOURCE:

FLUORESCENT	- F
METAL HALIDE	- M
LED GLS	- G
LIGHT EMITTING DIODE (LED)	- L
TUNGSTEN HALOGEN	- H
NEON / COLD CATHODE	- N

OTHER:

Specification supplied by others FF&E	- AE
EFFECT / GOBO PROJECTORS, ETC.	- FX
RE-USE EXISTING PRODUCTS	- R
DIMMERS	- DM
LIGHTING CONTROL PANEL	- LCP
LIGHTING / PROGRAMMABLE SOCKET	- LPS
DIMMED GPO	- DLS
DIMMER SENSOR	- DS
SWITCH	- SW
GENERAL POWER OUTLET	- GPO
SPECIAL POWER OUTLET	- SPO
CLOCK POINT	- CP

NOTES:

1. THIS IS NOT A CONSTRUCTION DRAWING
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH FPOV SPECIFICATIONS AND SCHEDULES
3. THIS DRAWING DOES NOT INCLUDE EMERGENCY LIGHT OR EXIT SIGNAGE INFORMATION
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5. ALL REMOTE GEAR TO BE LOCATED AT DRY, ACCESSIBLE, VENTILATED LOCATION. CONTRACTOR TO NOMINATE GEAR LOCATIONS, FPOV TO REVIEW AND COMMENT
6. ANNOTATED LINEAR LIGHT DIMENSIONS ARE ACCURATE IN RELATION TO ID/ARCHITECTURAL DRAWING. IF CONSTRUCTED ACCURATE TO THIS DRAWING, DIMENSIONS CAN BE USED TO INFORM INITIAL ORDERING ONLY. FINAL ORDERS MUST BE MADE VIA MEASUREMENTS TAKEN FROM CONTRACTORS DRAWINGS
   6.1 FOR STRAIGHT APPLICATION, LONGEST AVAILABLE MODULES TO BE USED, COMPLETED BY SHORTER MODULE AS REQUIRED
   6.2 FOR CURVE APPLICATION: LINEAR LED TO BE PROVIDED IN SHORTER MODULES AS NOTED IN THE DRAWING

FPOV DRAWINGS BASED ON MCGREGOR COXALL DRAWING:
0619SYD_ACT_BRICKWORKS_LA_SK_Base File_230719

ISSUED TO FPOV ON 20/07/2023

ARCHITECT:

CONSULTANT:

FP OV

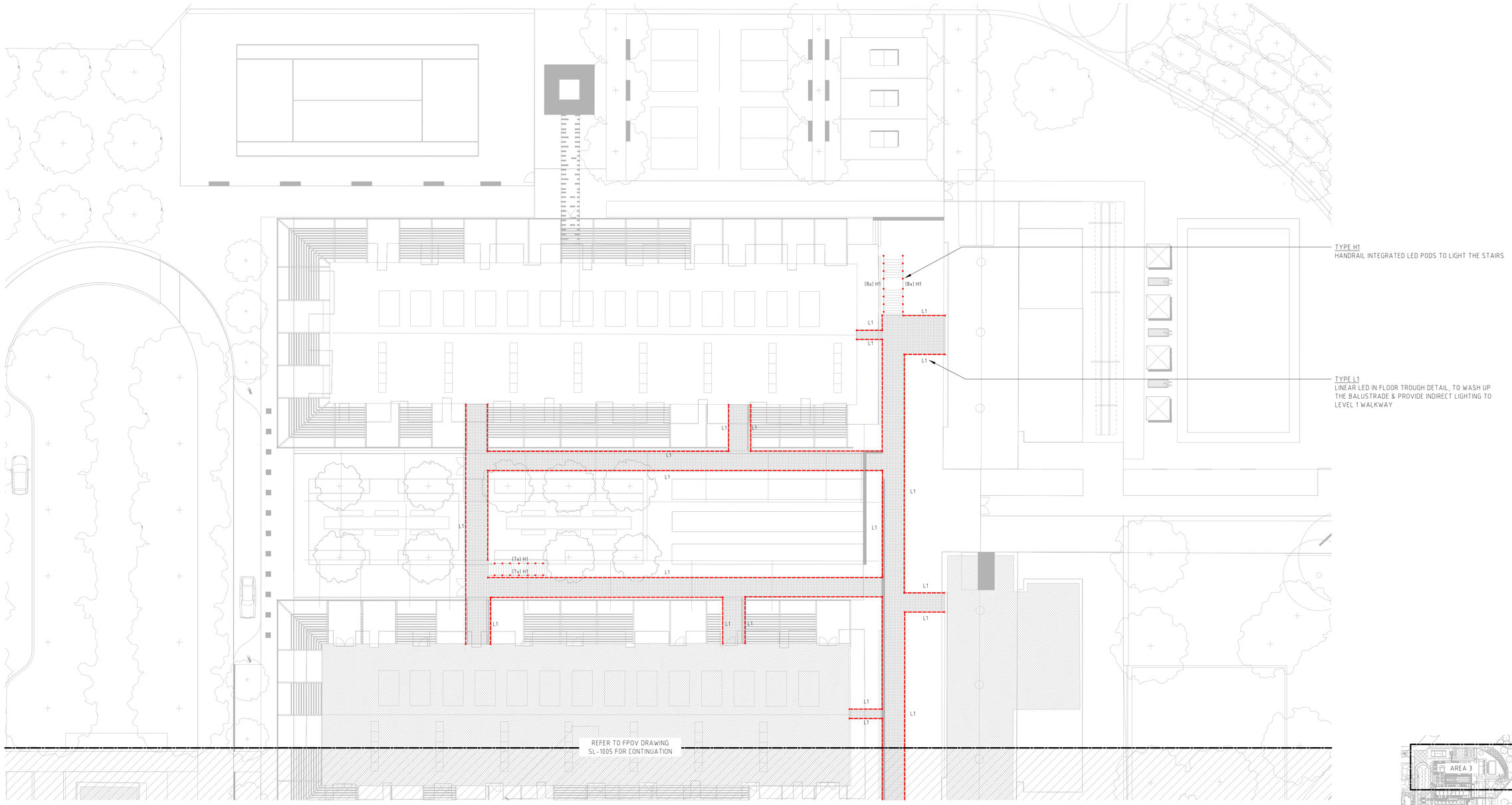
LONDON
BATH
SYDNEY
MELBOURNE
GOLD COAST
PERTH
DUBAI
SINGAPORE
INDONESIA
HONG KONG

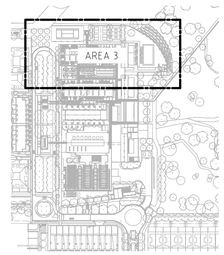
DRAWING:

FIREFLY POINT OF VIEW

YARRALUMLA BRICKWORKS HERITAGE CORE
DOMA GROUP
LIGHTING DESIGN
LEVEL 1 AREA 2 – LIGHTING PLAN

SCALE @ A1	PROJ. No.	DWG No.	REV
1:200	J3867	SL-1005	00





1/1006 LEVEL 1 AREA 3 – LIGHTING PLAN
1:200

NOTE: THIS DRAWING ONLY SHOWS LIGHTING REQUIRED FOR PUBLIC REALM COMPLIANCE

ISSUE:

REV	DATE	DESCRIPTION	DRAWN	CHECKED
00	25-07-23	DA REPORT	TN	FL

APPLICATION:

BOLLARD	- B
CEILING MOUNTED	- C
DOWNLIGHT	- D
FLOOR LAMP	- F
HANDRAIL	- H
SPIKE LIGHT	- K
LINEAR	- L
FIBRE OPTIC	- FO
PENDANT	- P
POLE TOP	- PT
SPOT/TRACK MOUNTED	- S
TABLE LAMP	- T
TRACK	- TR
UPLIGHT	- U
WALL LIGHT	- W
CUSTOM FITTING	- Z

LIGHT SOURCE:

FLUORESCENT	- F
METAL HALIDE	- M
LED GLS	- G
LIGHT EMITTING DIODE (LED)	- L
TUNGSTEN HALOGEN	- H
NEON / COLD CATHODE	- N

OTHER:

Specification supplied by others FF&E	- AE
EFFECT / GOBO PROJECTORS, ETC.	- FX
RE-USE EXISTING PRODUCTS	- R
DIMMERS	- DIM
LIGHTING CONTROL PANEL	- LCP
LIGHTING / PROGRAMMABLE SOCKET	- LPS
DIMMED GPO	- DLS
DIMMER SENSOR	- DS
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FPOV DRAWINGS BASED ON MCGREGOR COXALL DRAWING:
0619SYD_ACT_BRICKWORKS_LA_SK_Base File_230719

ISSUED TO FPOV ON 20/07/2023

ARCHITECT:

CONSULTANT:

FP OV

LONDON
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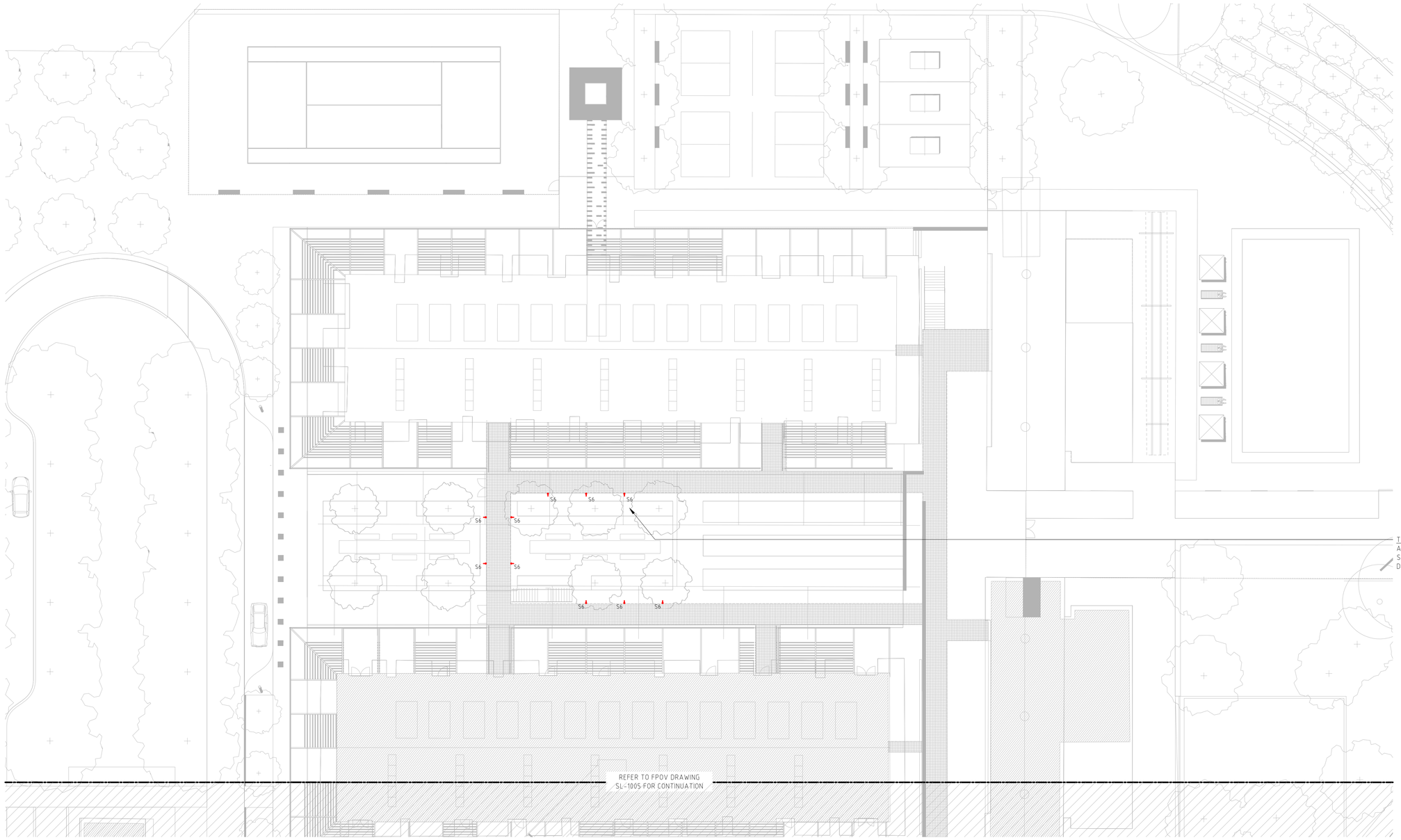
MELBOURNE
GOLD COAST
PERTH
DUBAI
SINGAPORE
INDONESIA
HONG KONG

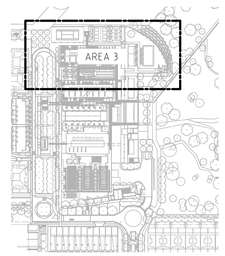
DRAWING:

FIREFLY POINT OF VIEW

YARRALUMLA BRICKWORKS HERITAGE CORE
DOMA GROUP
LIGHTING DESIGN
LEVEL 1 AREA 3 – LIGHTING PLAN

SCALE @ A1	PROJ. No.	DWG No.	REV
1:200	J3867	SL-1006	00





1 / 1009 ROOF AREA 3 – LIGHTING PLAN
1:200

NOTE: THIS DRAWING ONLY SHOWS LIGHTING REQUIRED FOR PUBLIC REALM COMPLIANCE

ISSUE:

REV	DATE	DESCRIPTION	DRAWN	CHECKED
00	25-07-23	DA REPORT	TN	FL

APPLICATION:

BOLLARD	- B
CEILING MOUNTED	- C
DOWNLIGHT	- D
FLOOR LAMP	- F
HANDRAIL	- H
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PENDANT	- P
POLE TOP	- PT
SPOT/TRACK MOUNTED	- S
TABLE LAMP	- T
TRACK	- TR
UPLIGHT	- U
WALL LIGHT	- W
CUSTOM FITTING	- Z

LIGHT SOURCE:

FLUORESCENT	- F
METAL HALIDE	- H
LED GLS	- G
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0619SYD_ACT_BRICKWORKS_LA_SK_Base File_230719

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ARCHITECT:

CONSULTANT:

FP OV

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GOLD COAST
PERTH
DUBAI
SINGAPORE
INDONESIA
HONG KONG

DRAWING:

FIREFLY POINT OF VIEW

YARRALUMLA BRICKWORKS HERITAGE CORE
DOMA GROUP
LIGHTING DESIGN
ROOF AREA 3 – LIGHTING PLAN

SCALE @ A1	PROJ. No.	DWG No.	REV
1:200	J3867	SL-1009	00

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