The Globe Art Wall Concept
St John's District, Manchester

19 April 2024

ver.1.6

ENESS
90 Inkerman, St Kilda
Victoria, Australia, 3182

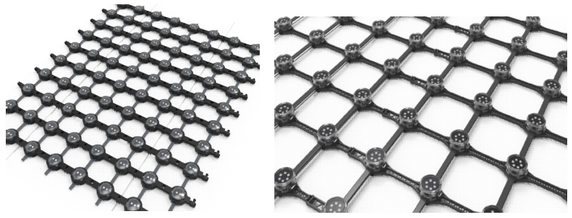
info@eness.com
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Shenzhen SH LED Technology Co., Ltd

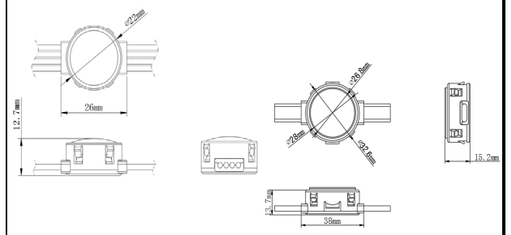
Product specification

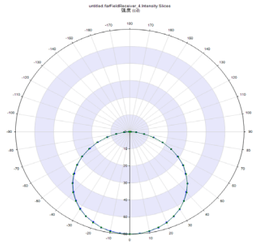
Product name	LED point light source for mesh screen	Model	SH-E22/33

Product picture

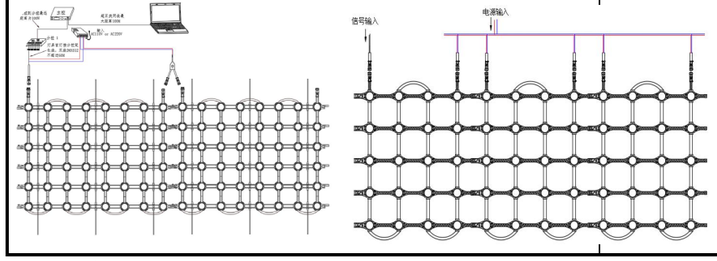


Size picture



Electrical parameters		Light source parameters	
• Rated working voltage	DC12V/24V	• LED Qty	3535RGB*2/3535RGB*3/3535RGB*6
• Rated power	0.7/1.4W	• LED Brand	Epistar/Cree/Osram
•Lead wire specification	2*0.5mm²+2*0.3mm²/1.8mm and 2x0.75mm²+3x0.3mm²/2.9mm*9.7mm	• Light source life	≥30000 Hr
• Line sequence definition	Red: V+/ Green:A /Blue :B/White:PI/PO/Black:GND	**Optical parameters**	
• Optional spacing(mm)	P40、P50、P80、P100/P100 P150 P200	• Gray scale	8/16 Bit = 256/65536
• Lamps per square meter	625,400,156,100/100,44,25	• Brightness	/
• Control mode	RDMX512RGB £DMX512RGBW £DMX512W £ON/OFF £SPIRGB	• Luminous intensity	10.1lm,17.1lm,27.1lm/pixel (change by RGB*2/3/6)
• Control chip	UCS512B3/UCS512C4	• Wavelength	RGB(R:615-630nm G:525-545nm B:460-480n
•Pixel segment	R1 £6 £8 £10 £12 £14	• Color temperature	/
Mechanical parameters		• LED Beam	110°±10%
• Body	94-V0 Flame-Retardant PC	• Color rendering index	CRI 94 minimum with R9 > 85
• Cover	94-V0 Flame-Retardant PC	**Lighting Distribution**	
• Shell color	Black or Light grey		
• Net Weight(single pixel)	10.8gram/29.2gram		
Others			
• Oper Temp	-20℃~+60℃		
• Storage temp	-40℃~+75℃		
• Degree of Protection	IP67		

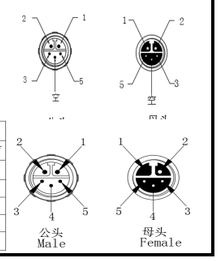
Installation method



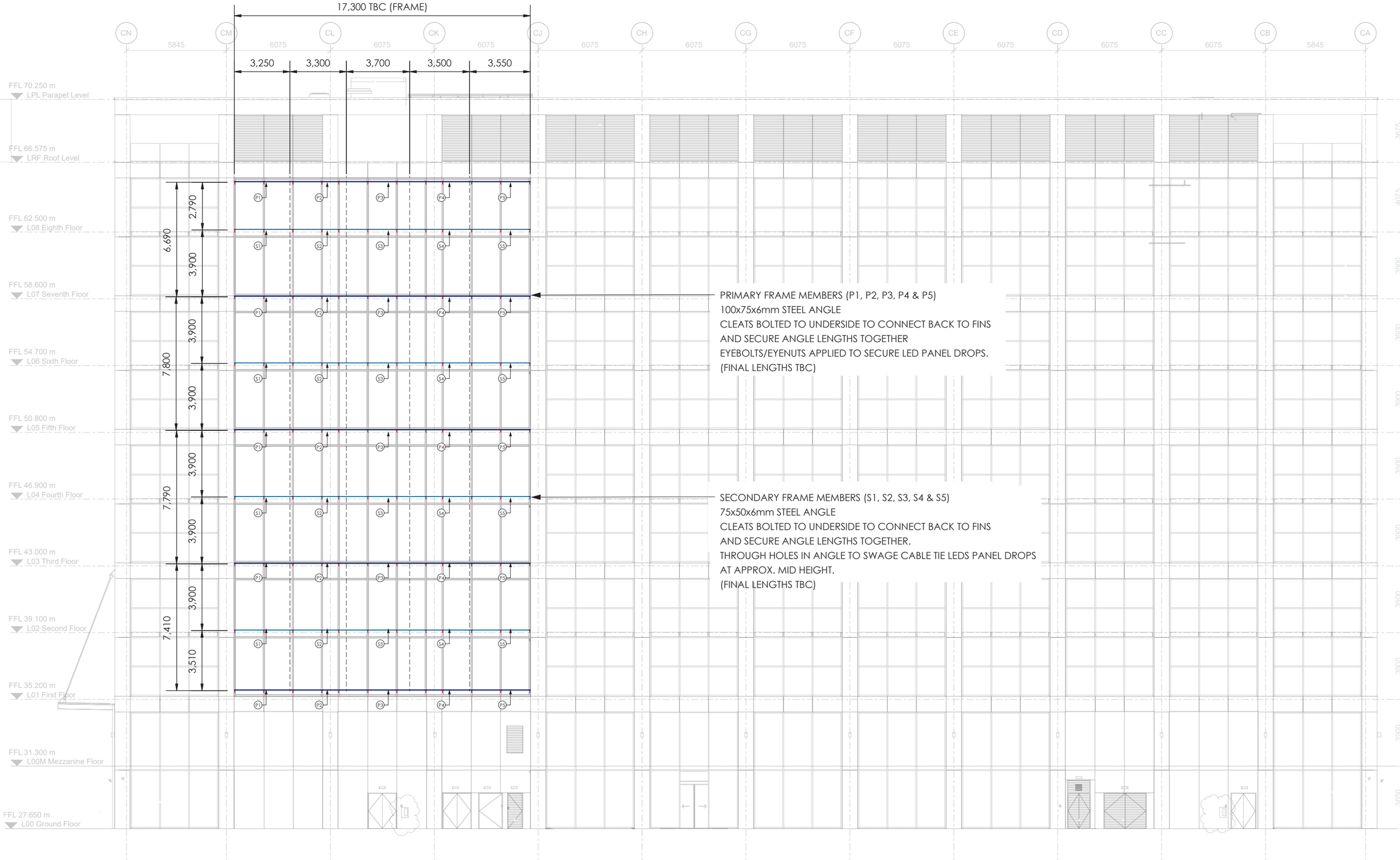
Wiring diagram

电线/脚位接线方式		
电线颜色	功能	序号
虚边	GND	1
印字	V+	2
靠近印字	DAT	3
/	B	空
靠近虚边	PI/PO	5

电线/脚位接线方式 Wire / pin connection mode		
电线颜色 colour	功能 Function	序号 No.
黑色 Black	GND	1
红色 Red	V+	2
绿色 Green	A	3
蓝色 Blue	B	4
白色 White	PI/PO	5



批准： 审核： 制表：王丝



NORTH EAST ELEVATION - FRAME
SCALE 1:200

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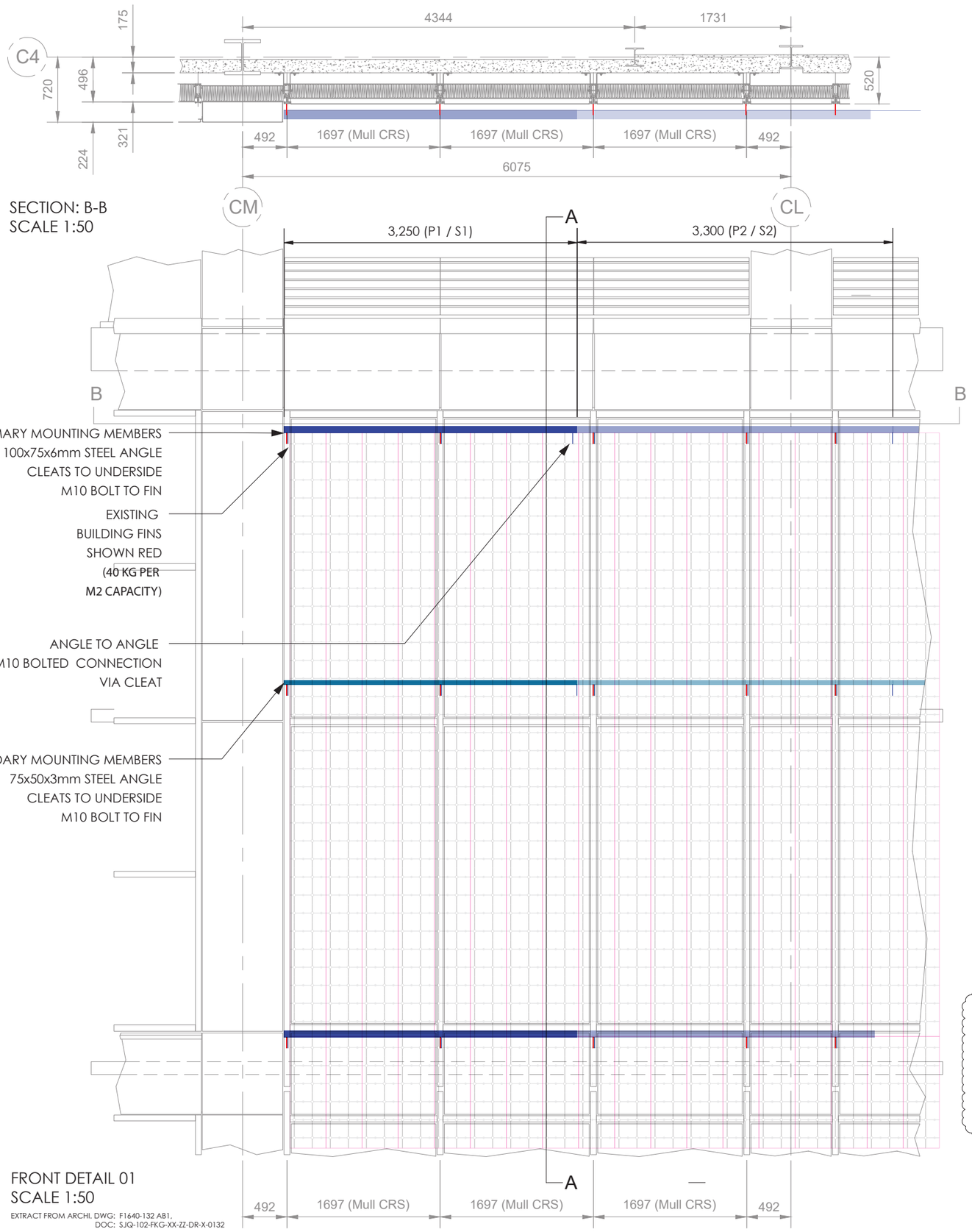
THIRD ANGLE PROJECTION
UNITS: DIMENSIONS IN MM

Project : Manchester LED Mesh Wall
Status : Concept Design - For Costing

Sheet : 4 of 15
Page : A3

Drawing title : BUILDING ELEVATION - FRAMES
Scale : SHOWN @ A3 Date : 19/04/24

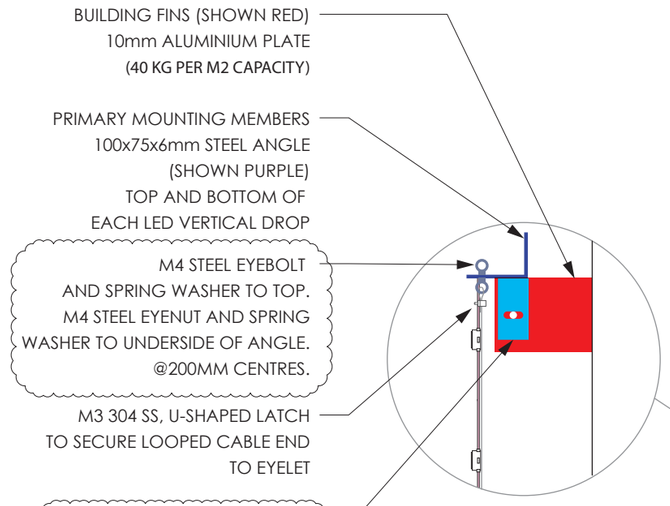
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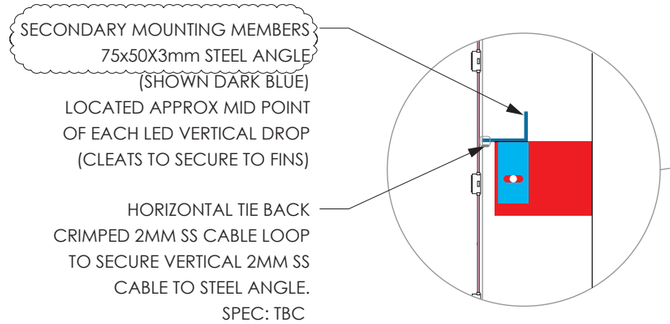
SECTION: B-B
SCALE 1:50

FRONT DETAIL 01
SCALE 1:50

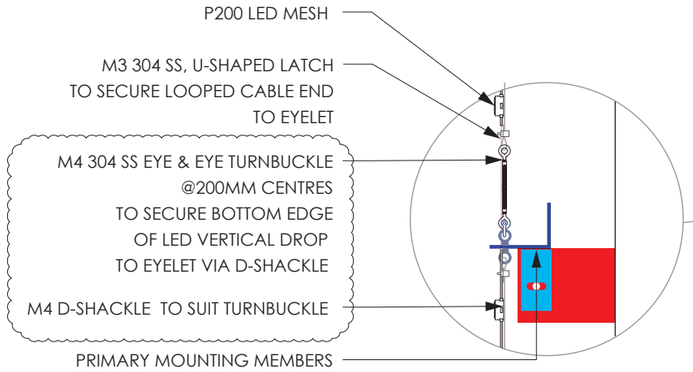
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DOC: SJQ-102-FKG-XX-ZZ-DR-X-0132



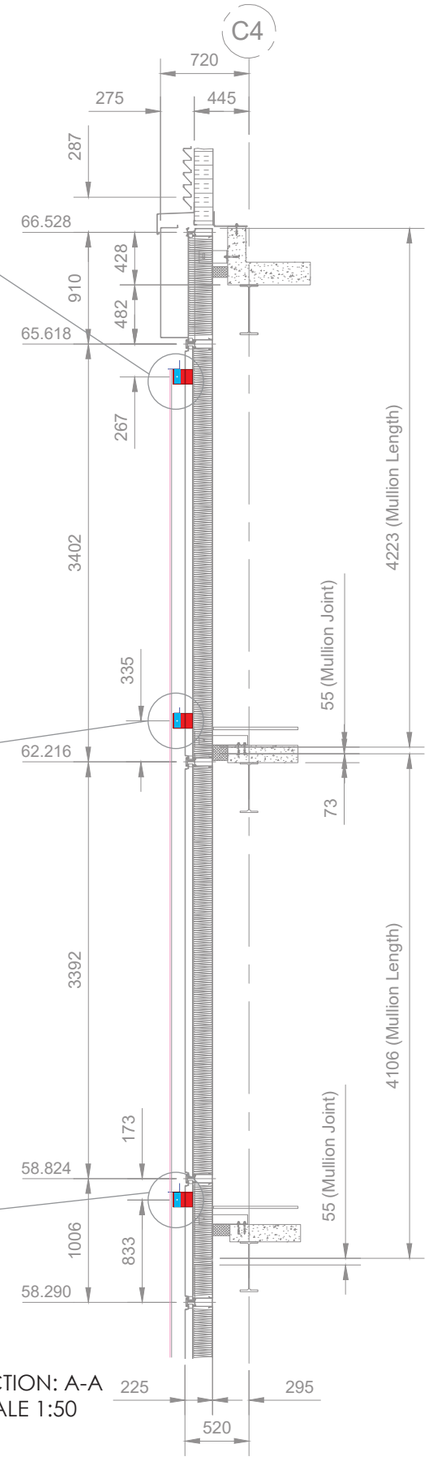
DETAIL: A3
SCALE 1:10



DETAIL: A2
SCALE 1:10



DETAIL: A1
SCALE 1:10



SECTION: A-A
SCALE 1:50

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THIRD ANGLE PROJECTION
UNITS: DIMENSIONS IN MM

Project : Manchester LED Mesh Wall

Status : Concept Design - For Costing

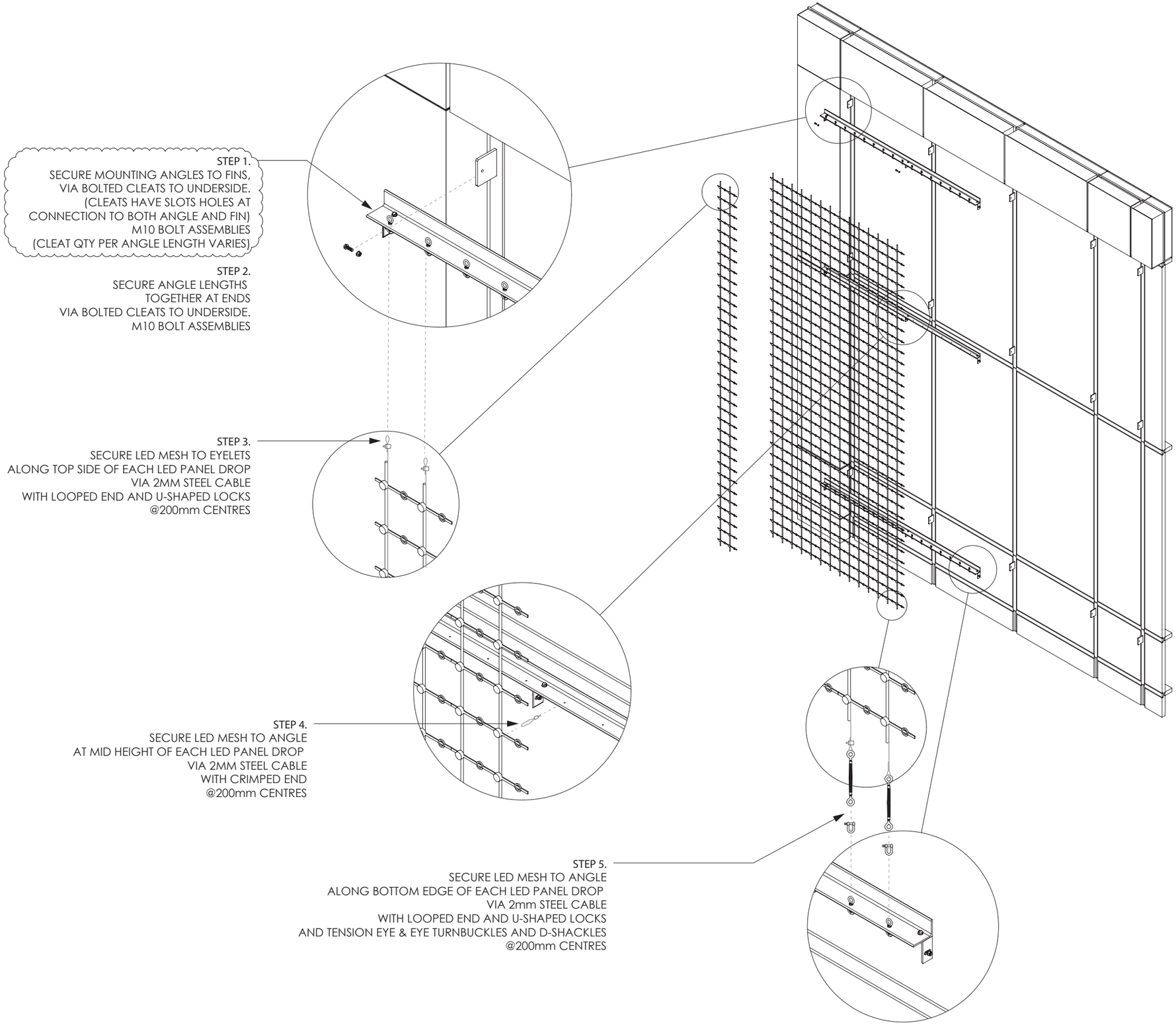
Sheet : 5 of 15

Page : A3

Drawing title : BUILDING FRAME - DETAILS

Scale : SHOWN @ A3 Date : 19/04/24

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BILL OF MATERIAL

ITEM	DESCRIPTION	QTY
	2MM STAINLESS STEEL WIRE ROPE	3000M
	100x75x6mm ANGLE (VARYING L)	25
	75x50x3mm ANGLE (VARYING L)	20
	100x75x6mm STEEL CLEATS	180
	M10 BOLT ASSEMBLIES	360
	M4 STEEL EYEBOLTS	1584
	M4 STEEL EYENUTS	1584
	M4 D-SHACKLES	344
	CAMERAS	2
	PC	1
	42RU SERVER CABINETS	2
	RU CABINET SHELVES	80

ALL QUANTITIES APPROXIMATES ONLY.

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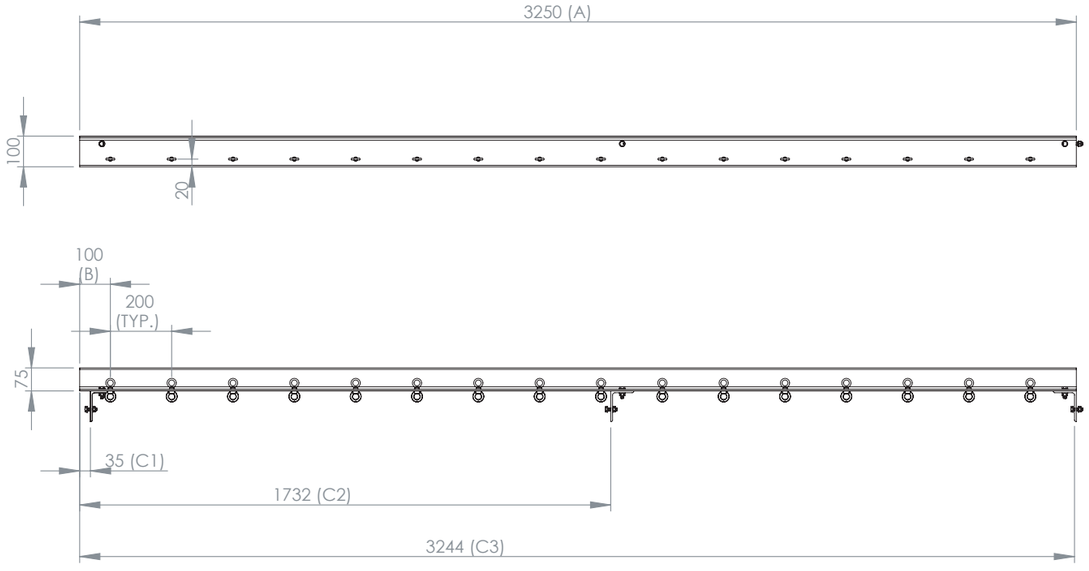
THIRD ANGLE PROJECTION
UNITS: DIMENSIONS IN MM

Project : Manchester LED Mesh Wall
Status : Concept Design - For Costing

Sheet : 6 of 15
Page : A3

Drawing title : INSTALLATION OVERVIEW
Scale : SHOWN @ A3 Date : 19/04/24

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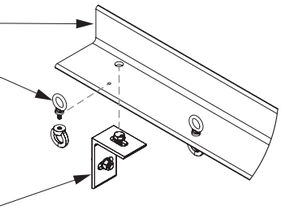


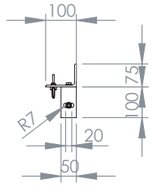
GENERAL ARRANGEMENT - PRIMARY MOUNTING ANGLE (PARTS: P1, P2, P3, P4, P5)
SCALE 1:20

100x75x6mm STEEL ANGLE

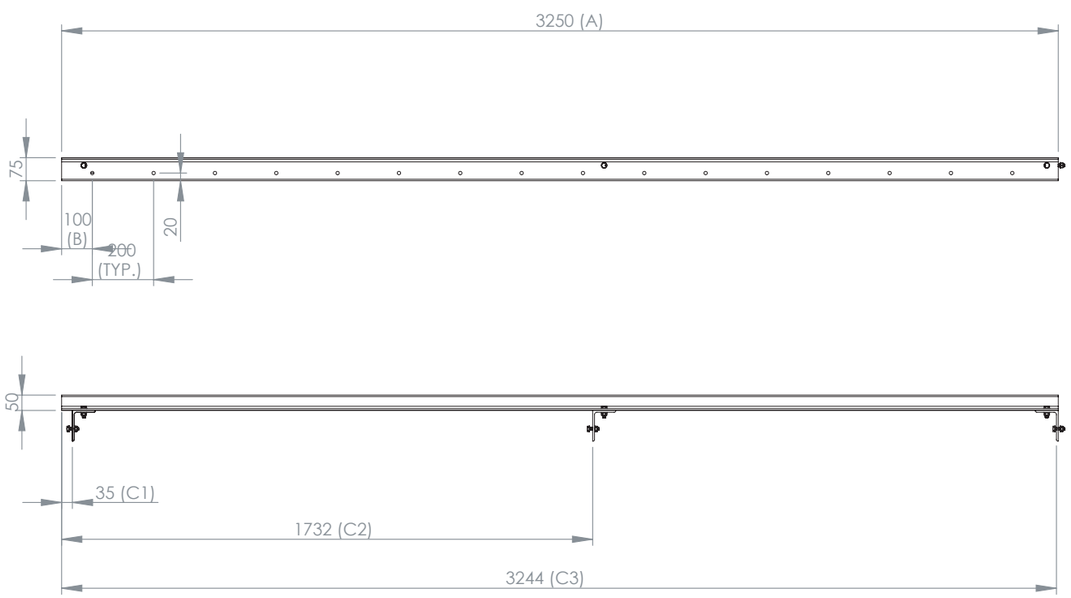
M4 STEEL EYEBOLT
AND SPRING WASHER TO TOP.
M4 STEEL EYENUT AND SPRING
WASHER TO UNDERSIDE OF ANGLE.
@200MM CENTRES.

CLEATS
100x75x6mm STEEL ANGLE (50MM STUBS)
M10 BOLTS TO UNDERSIDE OF ANGLE
M10 BOLTS TO SECURE TO FINS.
20mm L SLOT HOLES





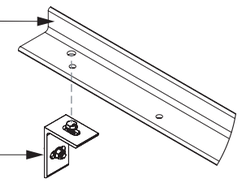
ALL SIZES APPROXIMATES ONLY.				CLEAT SETOUT					
ANGLE PART	ANGLE QTY	A	B	CLEAT QTY	C1	C2	C3	C4	C5
P1	5	3250	100	3	35	1732	3244	-	-
P2	5	3300	TBC	5	TBC	TBC	TBC	TBC	TBC
P3	5	3700	TBC	4	TBC	TBC	TBC	TBC	-
P4	5	3500	TBC	4	TBC	TBC	TBC	TBC	-
P5	5	3550	TBC	4	TBC	TBC	TBC	TBC	-

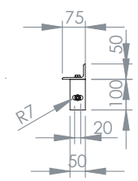


GENERAL ARRANGEMENT - SECONDARY MOUNTING ANGLE (PARTS: S1, S2, S3, S4, S5)
SCALE 1:20

75x50x6mm STEEL ANGLE

CLEATS
100x75x6mm STEEL ANGLE (50MM STUBS)
M10 BOLTS TO UNDERSIDE OF ANGLE
M10 BOLTS TO SECURE TO FINS
20mm L SLOT HOLES





ALL SIZES APPROXIMATES ONLY.				CLEAT SETOUT					
ANGLE PART	ANGLE QTY	A	B	CLEAT QTY	C1	C2	C3	C4	C5
S1	4	3250	100	3	35	1732	3244	-	-
S2	4	3300	TBC	5	TBC	TBC	TBC	TBC	TBC
S3	4	3700	TBC	4	TBC	TBC	TBC	TBC	-
S4	4	3500	TBC	4	TBC	TBC	TBC	TBC	-
S5	4	3550	TBC	4	TBC	TBC	TBC	TBC	-

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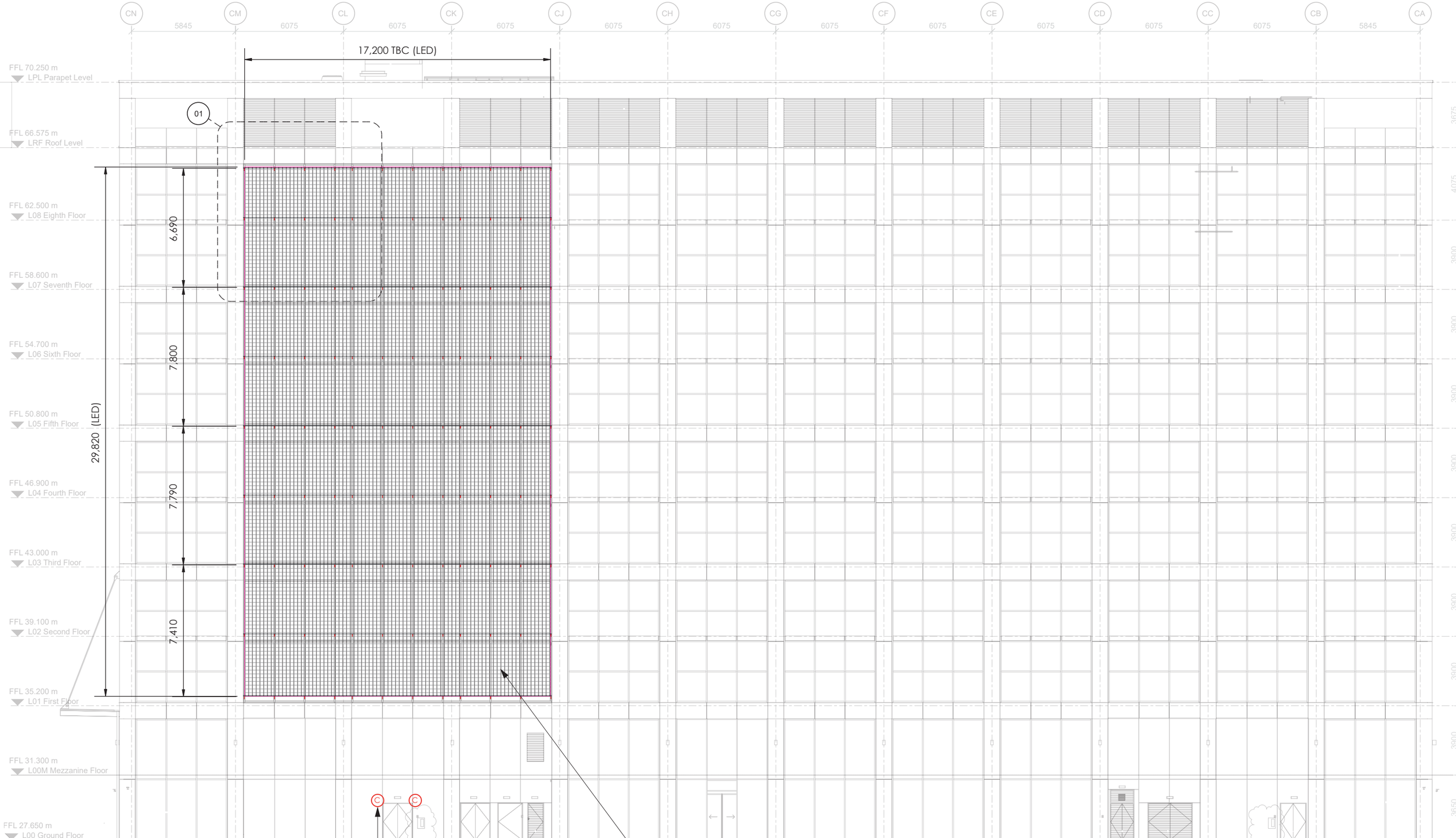
THIRD ANGLE PROJECTION
UNITS: DIMENSIONS IN MM

Project : Manchester LED Mesh Wall
Status : Concept Design - For Costing

Sheet : 7 of 15
Page : A3

Drawing title : TYPICAL ANGLE DETAILS
Scale : SHOWN @ A3 Date : 19/04/24

1.6



CAMERAS
2 OFF.
SPEC: TBC
MOUNTED ABOVE ENTRY DOORS

LED P200 PIXEL MESH SCREEN.
SPEC: SH LED E33 P220
MADE IN PANELS, TENSIONED BETWEEN HORIZONTAL FRAMES
FIXED BACK TO EXISTING BUILDING FINS.

NORTH EAST ELEVATION - MESH LED
SCALE 1:200

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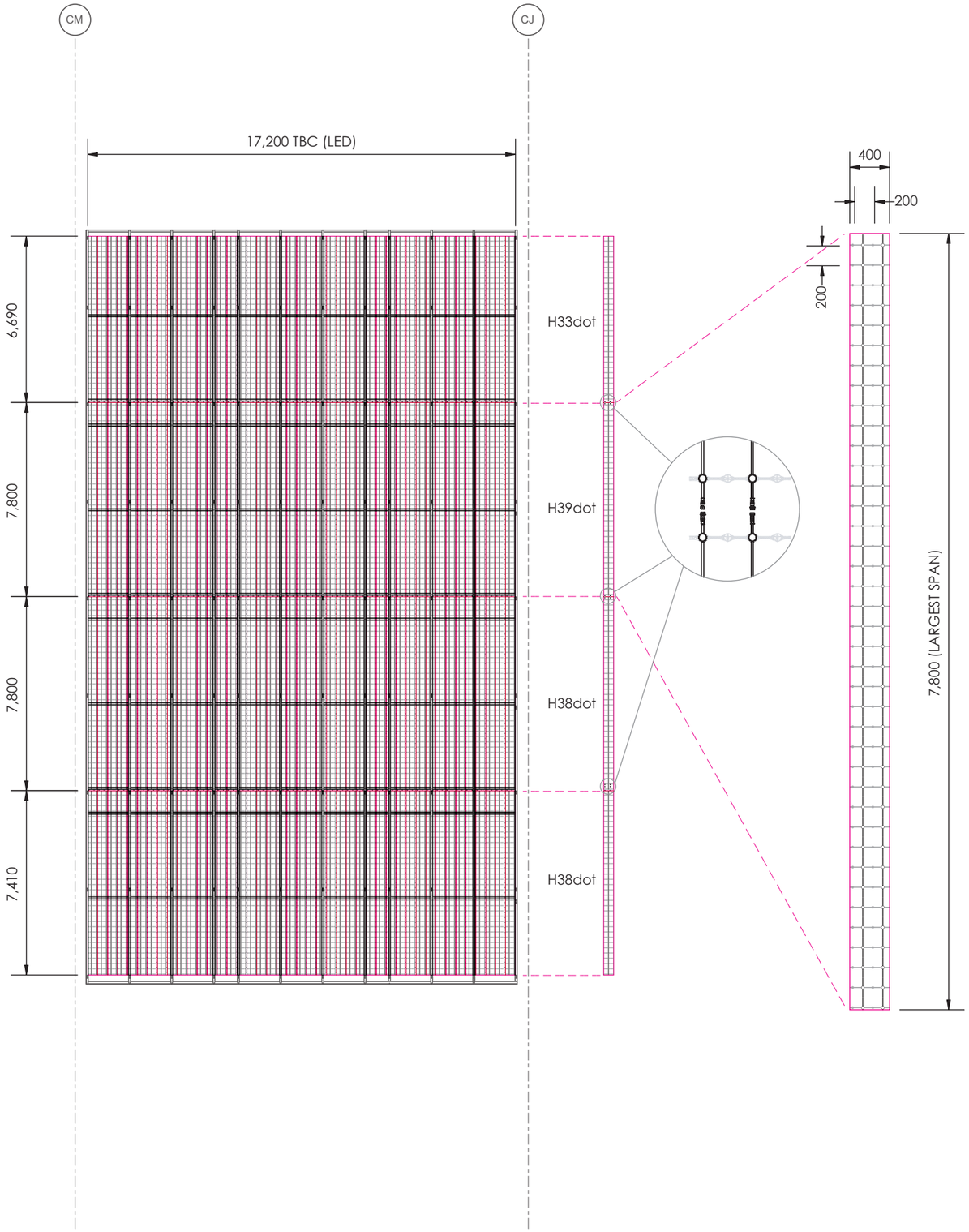
THIRD ANGLE PROJECTION
UNITS: DIMENSIONS IN MM

Project : Manchester LED Mesh Wall
Status : Concept Design - For Costing

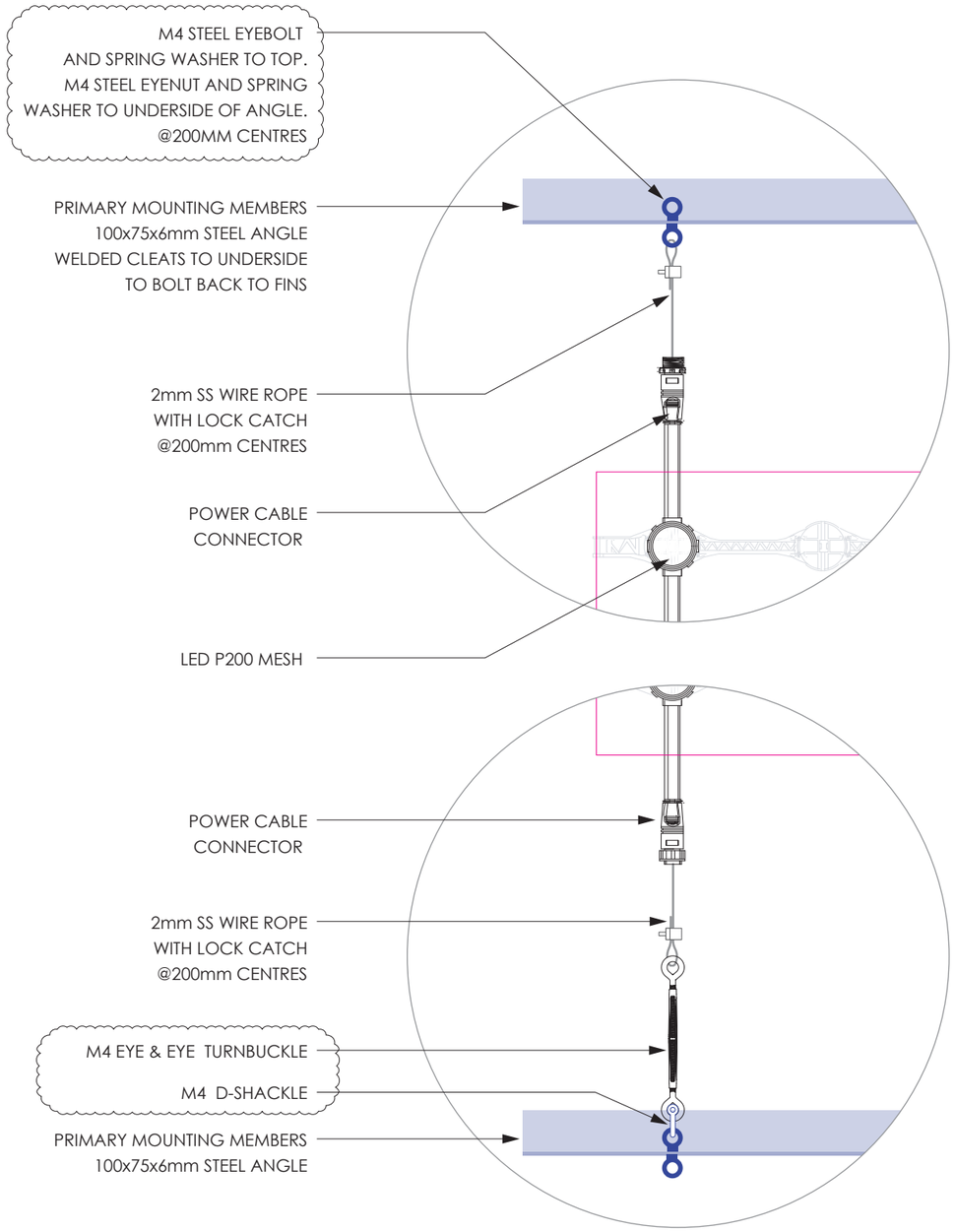
Sheet : 8 of 15
Page : A3

Drawing title : BUILDING ELEVATION - LED
Scale : SHOWN @ A3 Date : 19/04/24

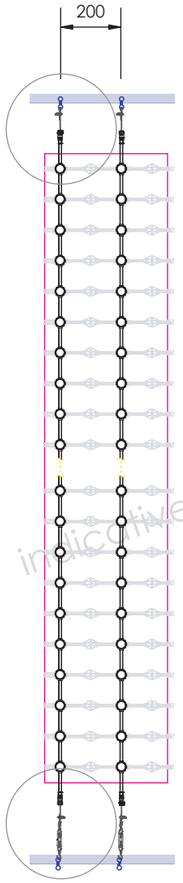
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FRONT ELEVATION - LED MEDIA MESH
SCALE 1:200



TYPICAL LED MEDIA PANEL
SCALE 1:50



TYPICAL CONNECTION DETAILS
SCALE 1:10

indicative

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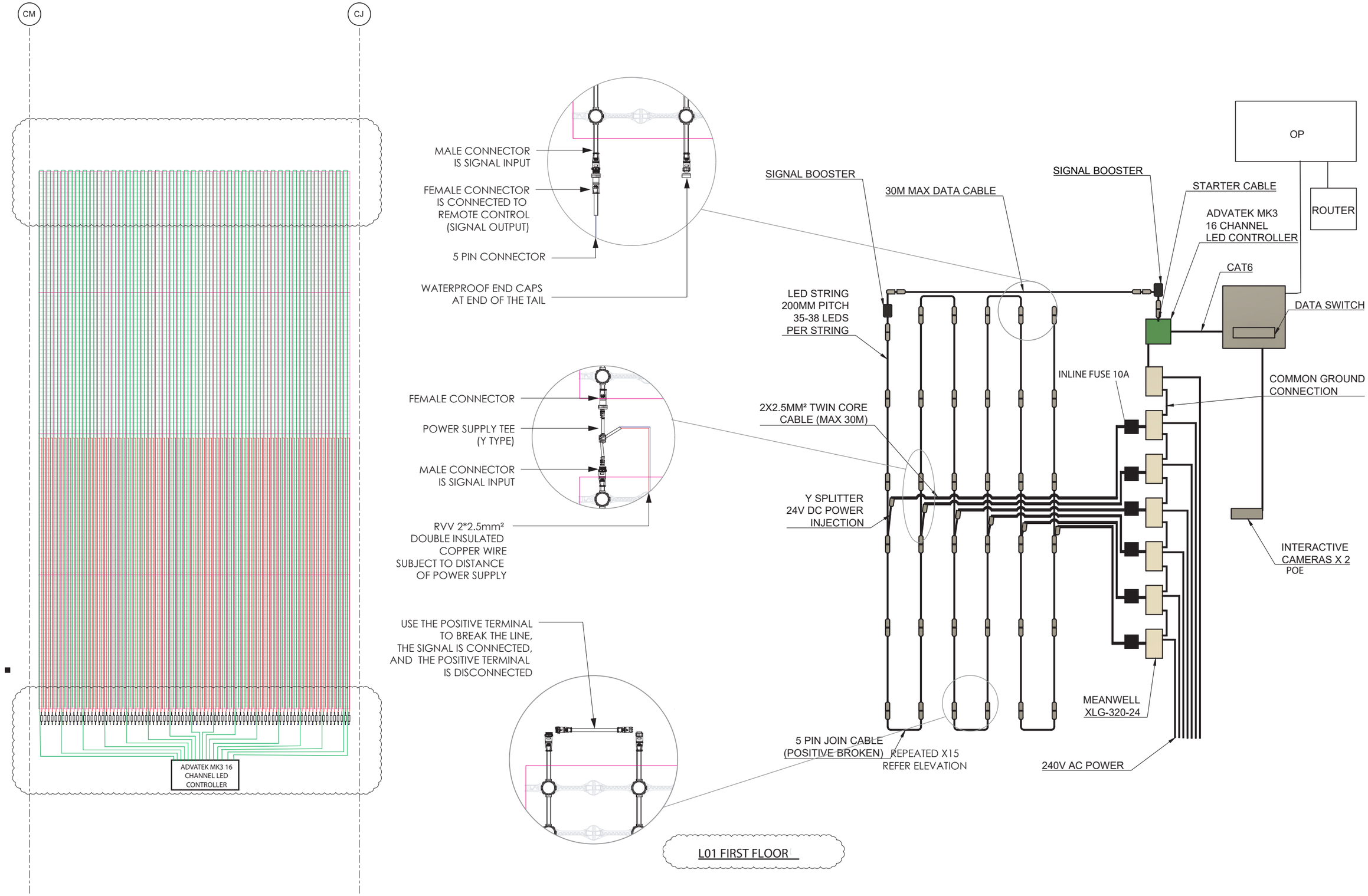
THIRD ANGLE PROJECTION
UNITS: DIMENSIONS IN MM

Project : Manchester LED Mesh Wall
Status : Concept Design - For Costing

Sheet : 9 of 15
Page : A3

Drawing title : LED MESH DETAILS
Scale : SHOWN @ A3 Date : 19/04/24

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FRONT ELEVATION - WIRING
SCALE 1:200

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THIRD ANGLE PROJECTION
UNITS: DIMENSIONS IN MM

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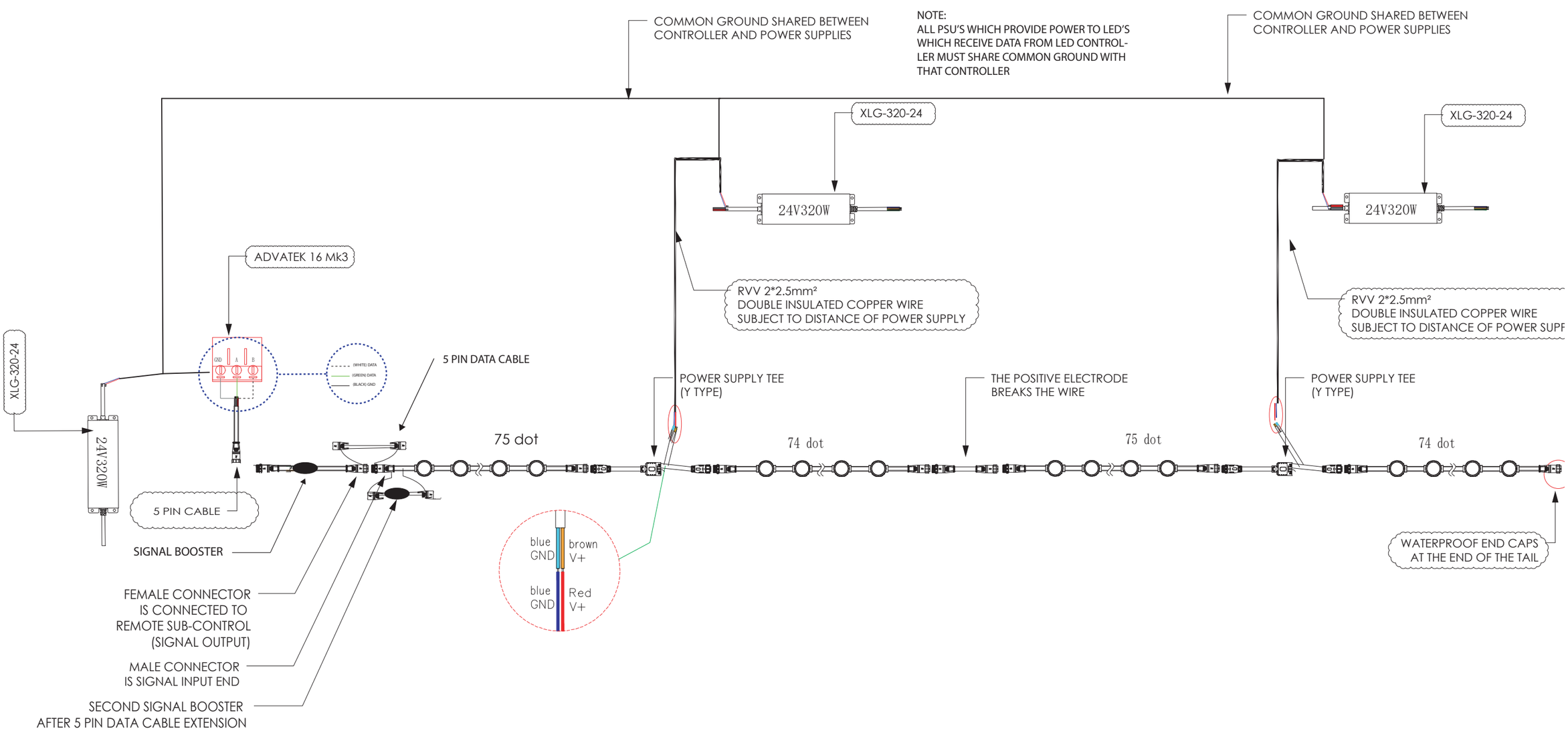
Sheet : 10 of 15

Page : A3

Drawing title : ELECTRICAL LAYOUT

Scale : SHOWN @ A3 Date : 19/04/24

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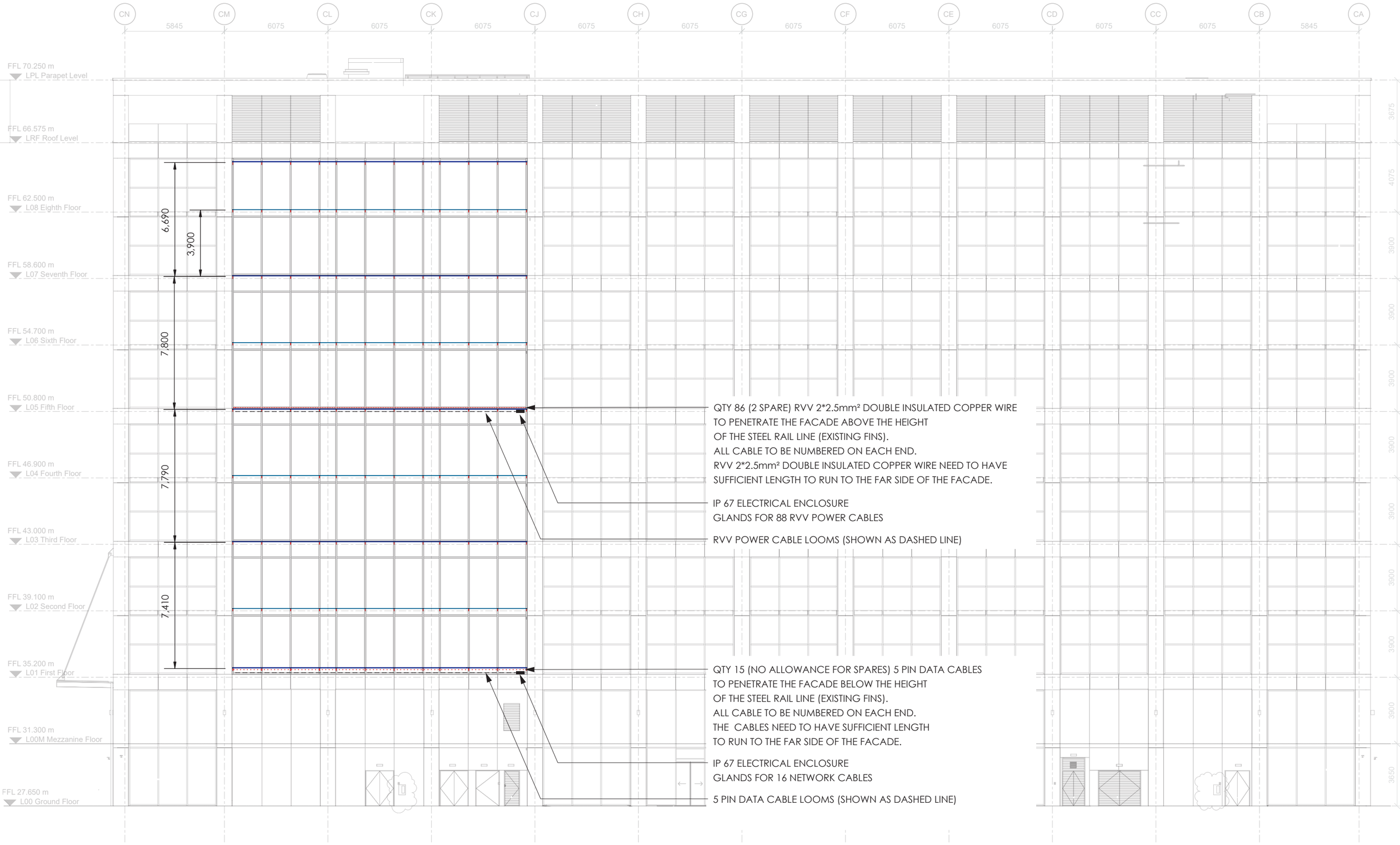
THIRD ANGLE PROJECTION
UNITS: DIMENSIONS IN MM

Project : Manchester LED Mesh Wall
Status : Concept Design - For Costing

Sheet : 11 of 15
Page : A3

Drawing title : ELECTRICAL LAYOUT
Scale : SHOWN @ A3 Date : 19/04/24

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NORTH EAST ELEVATION - WIRING
SCALE 1:200

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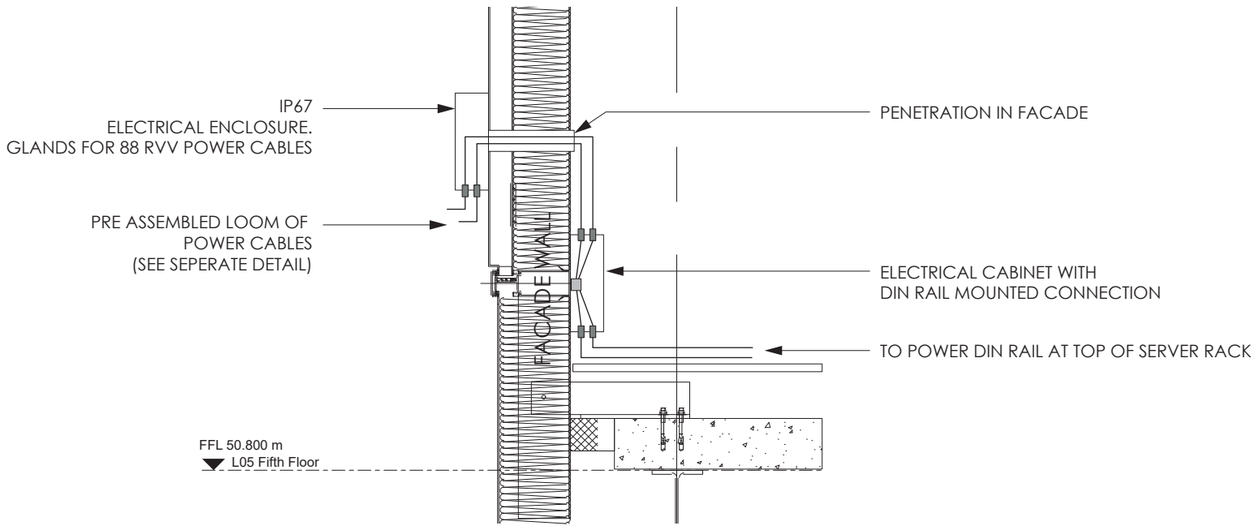
THIRD ANGLE PROJECTION
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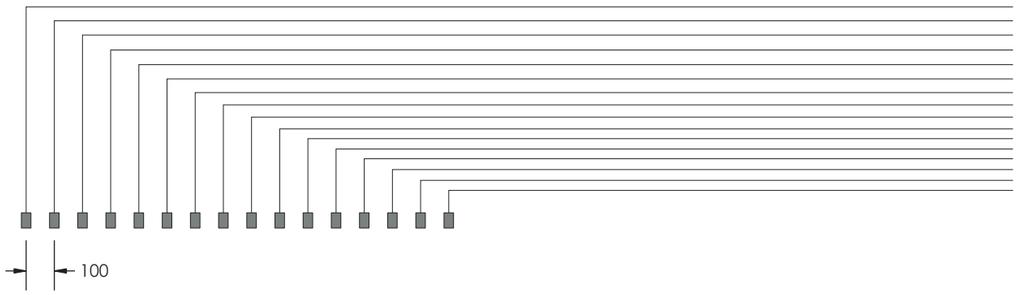
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Page : A3

Drawing title : BUILDING ELEVATION - WIRING
Scale : SHOWN @ A3 Date : 19/04/24

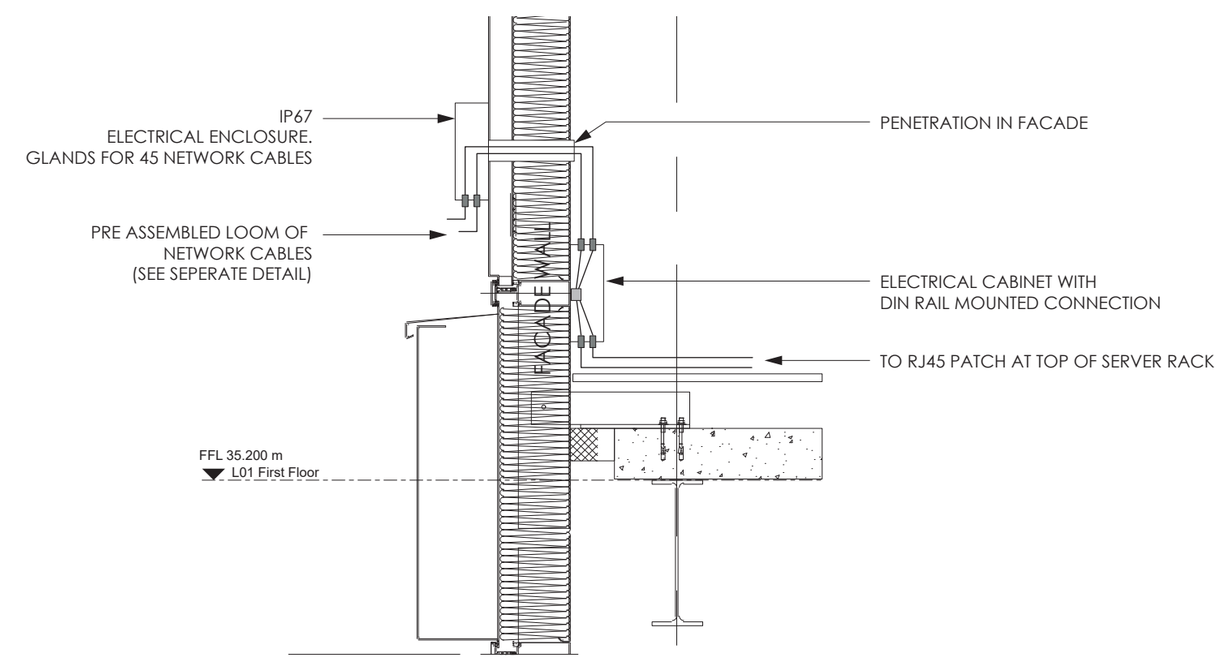
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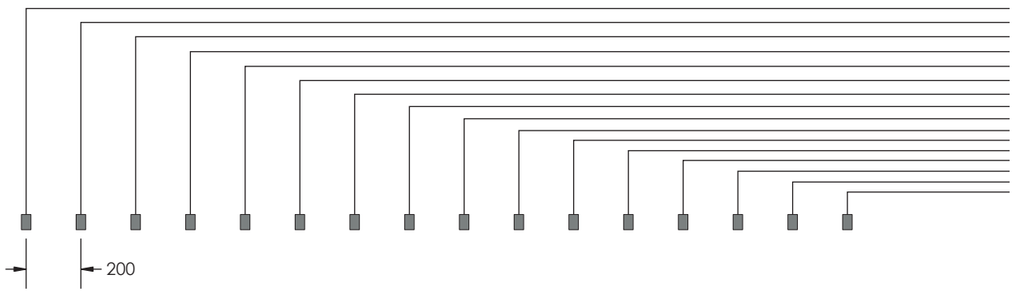
TYPICAL SECTION - LEVEL 5 FACADE CABLE PENETRATION
SCALE 1:10



RVV 2*2.5mm² DOUBLE INSULATED COPPER WIRE
16 CABLES @ 100MM SPACING
PRE ASSEMBLED FITTINGS



TYPICAL SECTION - LEVEL 1 FACADE CABLE PENETRATION
SCALE 1:10



5 PIN DATA LOOM WITH SIGNAL BOOSTERS
16 CABLES @ 200MM SPACING
PRE ASSEMBLED FITTINGS

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THIRD ANGLE PROJECTION
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Sheet : 13 of 15
Page : A3

Drawing title : FACADE PENETRATION DETAL
Scale : SHOWN @ A3 Date : 19/04/24

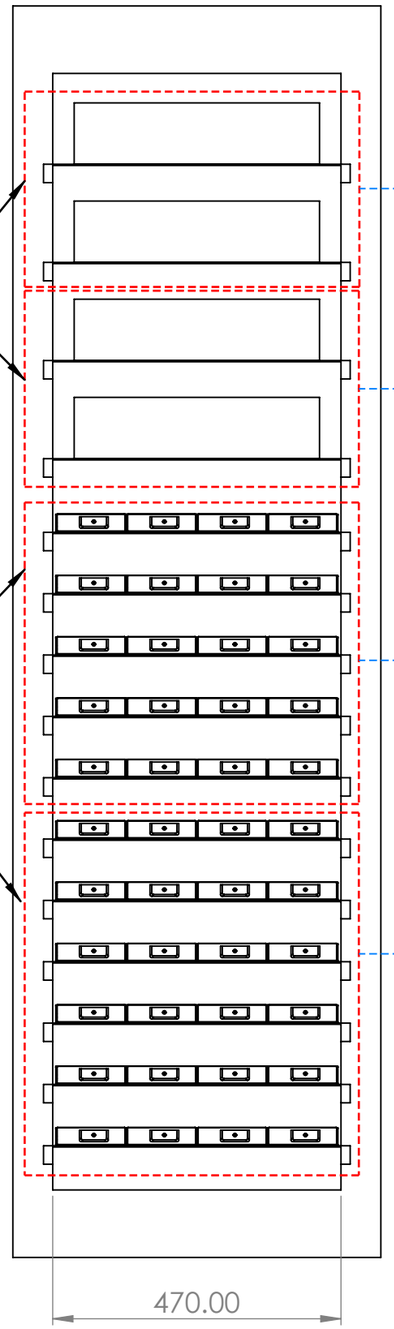
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SERVER RACK LEVEL 5 RISER

2 X GROUPS OF DIN RAIL POWER CONNECTORS FOR DC POWER TO TO PATCH. EACH LINE FUSED AND SHARE COMMON GROUND WITH POWER SUPPLY BANK.
(TBD BY ELECTRONIC CONTRACTOR)

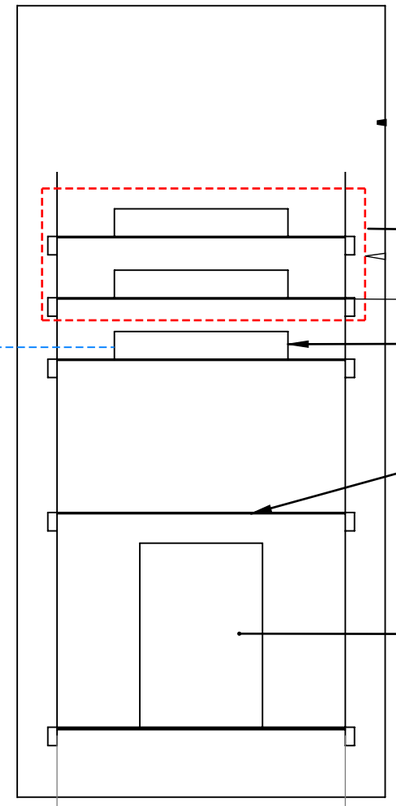
86 X MEANWELL XLG-320-24
(2X BANKS OF 43)

COMMON GROUND



470.00

SERVER RACK LEVEL 1 RISER



4 PORT DATA SWITCH

1X ADVATEK PIXLITE 16 MK3 CONTROLLERS (4RU TOTAL)

ADVATEK POWER SUPPLY

SCREEN STORAGE (RU SIZE DEPENDANT ON MONITOR)

COMPUTER (8RU APPROX)

470.00

NOTE: - SERVER RACK DEPTH SHOULD ACCOMMODATE 550MM DEEP RACK SHELVING.

-30,000 WATTS MAX DRAW (RUNNING CONTENT WILL DRAW CLOSER TO 10,000 WATTS)

- SUBSTANTIAL ACTIVE COOLING IS REQUIRED.

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THIRD ANGLE PROJECTION
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Drawing title : SERVER RACK LAYOUT
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