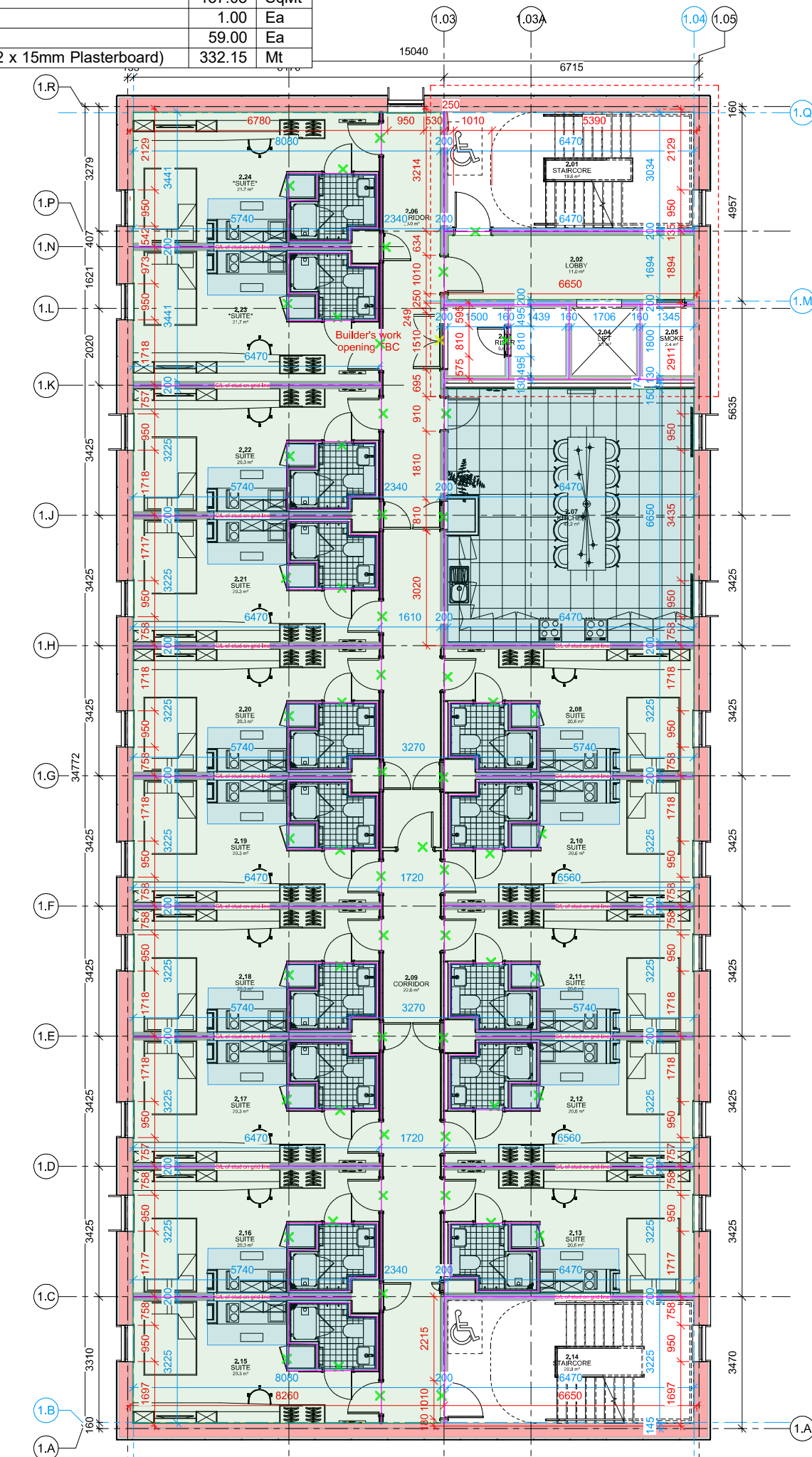


	2nd Floor Area (Exclude the vinyl)	448.76	SqMt
	2nd Floor Area Vinyl	137.08	SqMt
X	Internal Double Doors (Partially Glazed)	1.00	Ea
X	Internal Fire Safety Doors (Including ironmongery)	59.00	Ea
	Wall Type P01 (2 X 15mm Plasterboard, Resilient Bars, 100mm Stud, Resilient Bars, 2 x 15mm Plasterboard)	332.15	Mt



1 Level 02 Metframe Setting Out
1:50

REIK Construction Swanssea St, Kingsway, Swanssea, SA1 4EJ
Telephone: 01792 889442 Website: www.Reikconstruction.co.uk
Drawn: Sean Digby Checked: Sean Digby Approved: Sean Digby
Scale: 1:50@A3 Date: 18/04/20
Project: Project No. Originator Zone Level File Type Role Drawing Revision
SWA - 2886 - REIK - 0 - 02 - DR - A - 2096 - C01

DRAWING STATUS
This drawing is issued as construction status C2 and is issued to allow the Main Contractor to tender for sub-contractor packages and permit the commencement of technical design of construction packages by specialist consultants and contractors. This drawing represents the design for structural elements, building services systems, acoustic and fire safety matters, building regulations compliance checks, specifications, cost information and project strategies in accordance with Contractors Information Required Schedule. This drawing may be updated upon receipt of the technical design documentation from specialist consultants and contractors for specific work packages to ensure ongoing coordination and to inform the as built construction record documentation. This drawing is to be used to inform the sustainability goals, cost plan, maintenance, operation and handover strategies, designers risk assessments, construction methodologies, and health and safety strategies. We request that the Contractor verifies that the information contained within this document meets with their cost plan, programme, and compliance with the Employer's requirements. In the event of any irregularities, the Contractor is to notify the Architect at the earliest opportunity. At the time of publication, the application to discharge planning conditions associated with this scheme has not been concluded. Therefore, the design may be subject to change depending on the details of any conditions, section 106 or 278 works, or other legal agreements negotiated with the local authority. Please note whilst these drawings are being issued for Construction C2 status, we are still awaiting a co-ordinated M&E Stage 4 design. As previously stated, these drawings may be updated once the M&E design is developed.

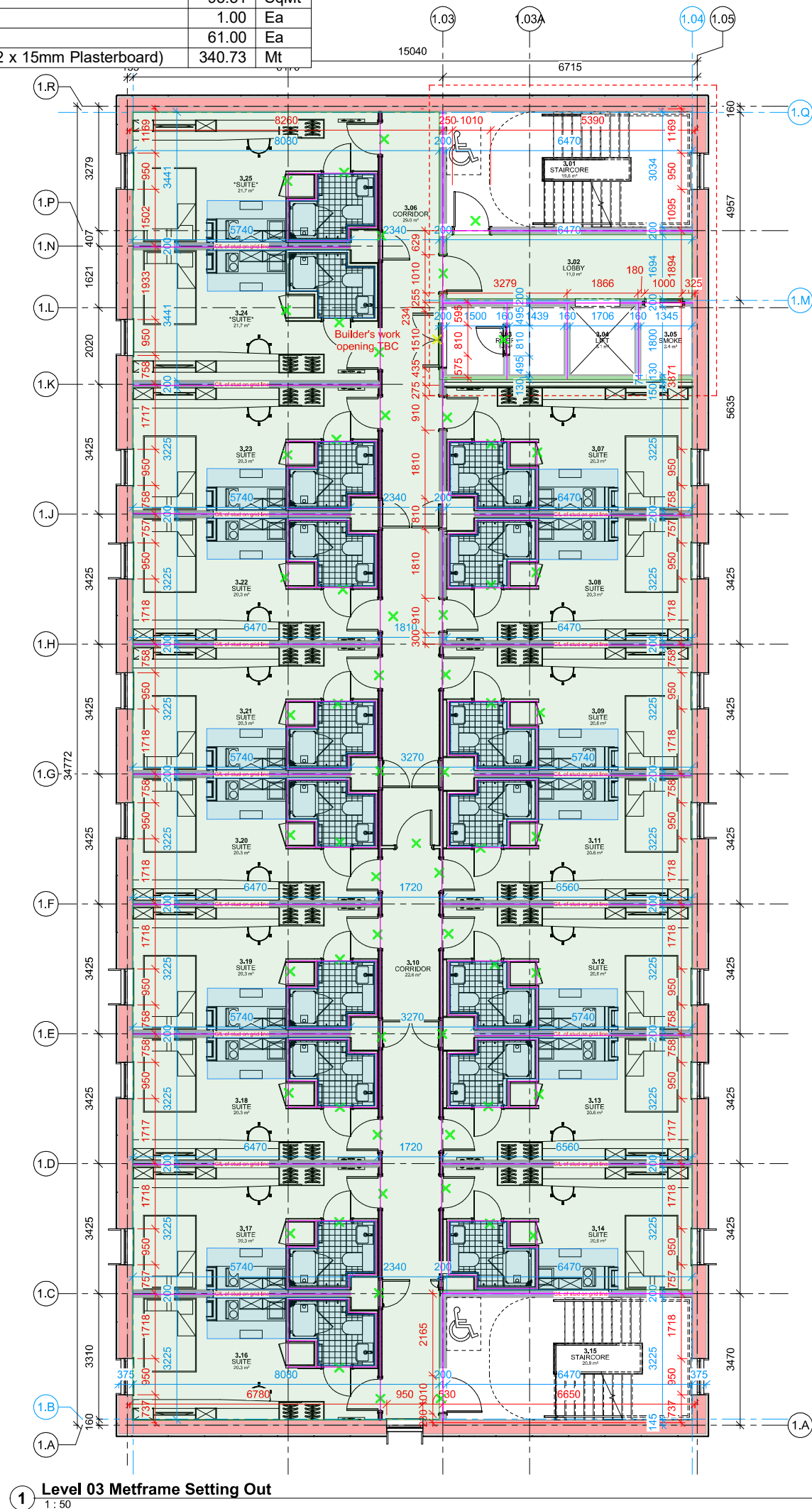
CONSTRUCTION (C2) ISSUE

Contract:
UWTSD SA1 Proposed Student Accommodation

Drawing:
Construction Issue 25.3.20 2ndF

REIK Construction Swanssea St, Kingsway, Swanssea, SA1 4EJ
Telephone: 01792 889442 Website: www.Reikconstruction.co.uk
Drawn: Sean Digby Checked: Sean Digby Approved: Sean Digby
Scale: 1:50@A3 Date: 18/04/20
Project: Project No. Originator Zone Level File Type Role Drawing Revision
SWA - 2886 - REIK - 0 - 02 - DR - A - 2096 - C01

	3rd Floor Area (Exclude the vinyl)	450.00	SqMt
	3rd Floor Area Vinyl	93.51	SqMt
X	Internal Double Doors (Partially Glazed)	1.00	Ea
X	Internal Fire Safety Doors (Including ironmongery)	61.00	Ea
	Wall Type P01 (2 X 15mm Plasterboard, Resilient Bars, 100mm Stud, Resilient Bars, 2 x 15mm Plasterboard)	340.73	Mt



1 Level 03 Metframe Setting Out
1:50

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Revision Number	Revision Date	Revision Description	Revised By
001	15/04/20	Construction C2 Issue	SD

DRAWING STATUS:
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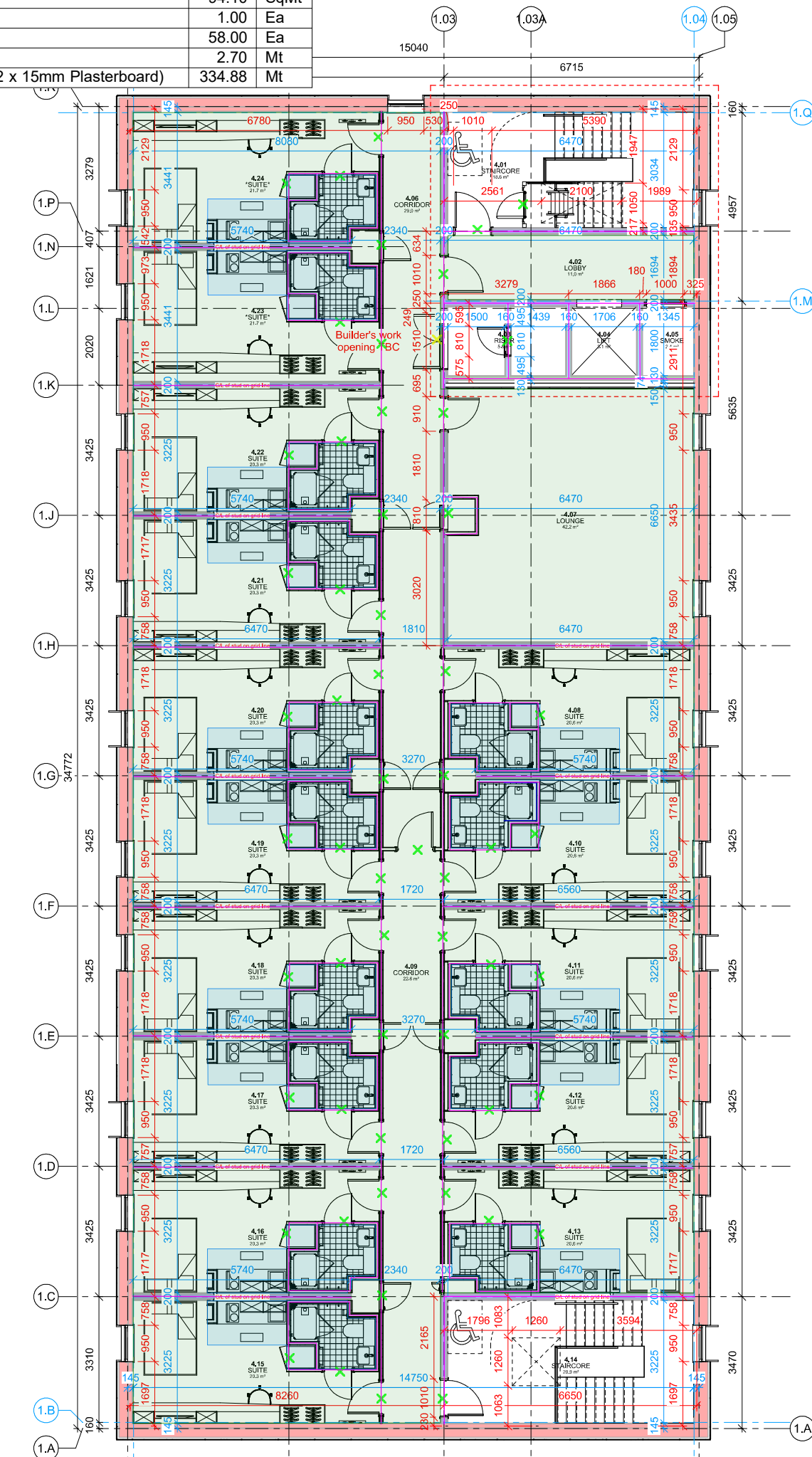
CONSTRUCTION (C2) ISSUE

Contract:
UWTSO SA1 Proposed Student Accommodation

Drawing:
Construction Issue 25.3.20 3rdF

REIK Construction Swansea St. Kingsway, Swansea SA1 4PJ
Telephone: 01792 886442 Website: www.reikconstruction.co.uk
Drawn: Sean Dugan Checked: Sean Dugan Approved: Sean Dugan
Scale: 1:50@A0 Date: 18/04/20
Project: Project No. Originator: Zone: Level: File Type: Role: Drawing: Revision:
SWA - 2506 - REIK - 0 - 03 - DR - A - 2097 - C01

	4th Floor Area (Exclude the vinyl)	448.45	SqMt
	4th Floor Area Vinyl	94.10	SqMt
X	Internal Double Doors (Partially Glazed)	1.00	Ea
X	Internal Fire Safety Doors (Including ironmongery)	58.00	Ea
	Length	2.70	Mt
	Wall Type P01 (2 X 15mm Plasterboard, Resilient Bars, 100mm Stud, Resilient Bars, 2 x 15mm Plasterboard)	334.88	Mt



1 Level 04 Metframe Setting Out
1 : 50

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Revision Number	Revision Date	Revision Description	Revision by
001	18/04/20	Construction C2 Issue	ES

DRAWING STATUS

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Please note whilst these drawings are being issued for Construction C2 status, we are still awaiting a co-ordinated M&E Stage 4 design. As previously stated, these drawings may be updated once the M&E design is developed.

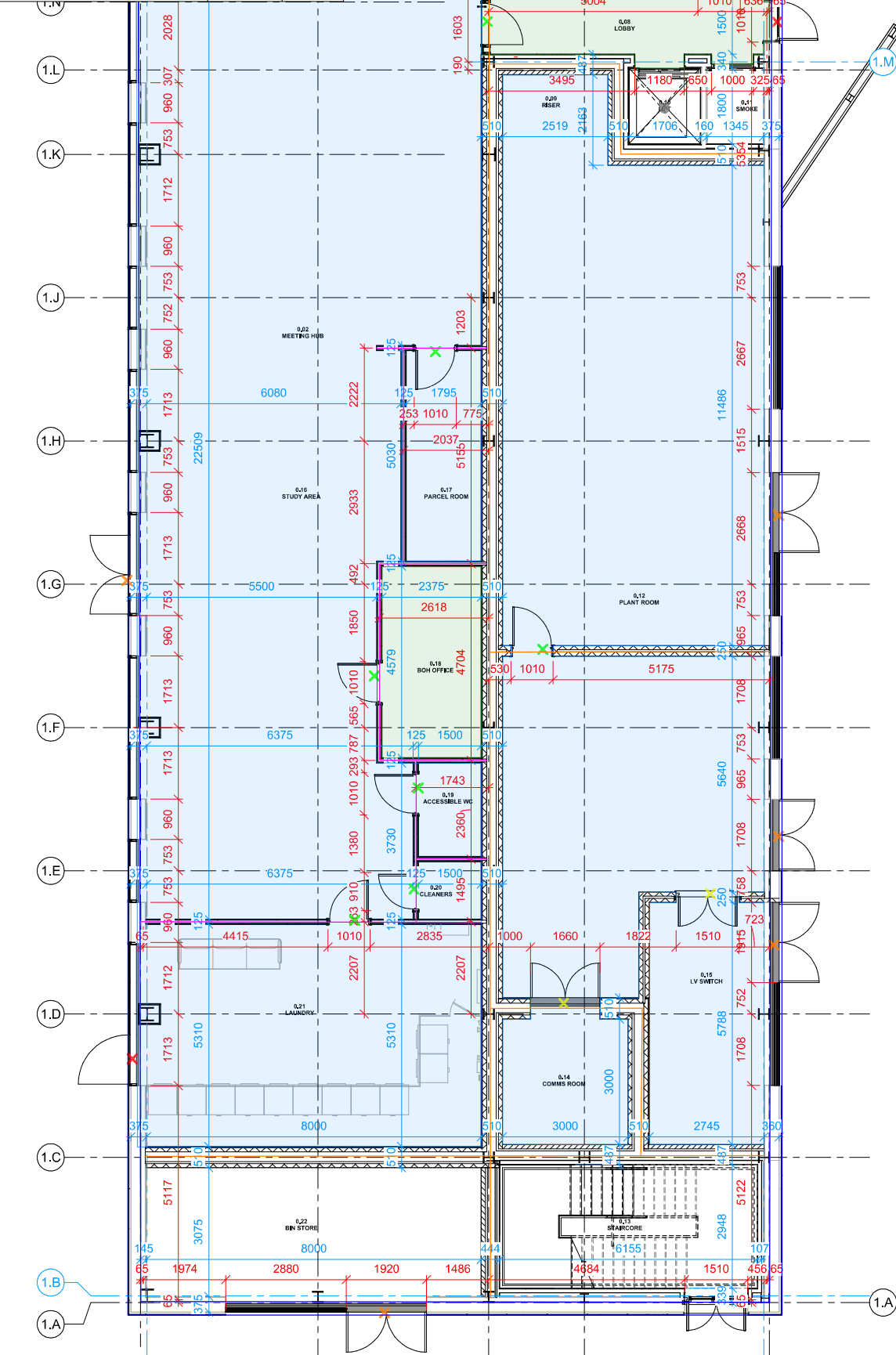
CONSTRUCTION (C2) ISSUE

Contract:
UWTS SD SA1 Proposed Student Accommodation

Drawing:
Construction Issue 25.3.20 4thF

REIK Construction Swansea St, Kingsway, Swansea, SA1 4FJ
Telephone: 01792 869442 Website: www.reikconstruction.co.uk
Drawn: Sean Duggan Checked: Sean Duggan Approved: Sean Duggan
Scale: 1:50 @ A0 Date: 18/04/20
Project: Project No. Originator: Zone: Level: File Type: Role: Drawing: Revision
SWA - 2686 - REIK - 0 - 04 - DR - A - 2098 - C01

	Building Perimeter	102.00	Mt
	Elevators (13 Person Max.)	1.00	Ea
	Fire Escape Doors	2.00	Ea
	GF Area (Excl. Vinyl)	45.92	SqMt
	GF Double Doors (External)	7.00	Ea
	GF Floor Area Vinyl	365.50	SqMt
	GFIA	527.14	SqMt
	Internal Blockwork (Including Masonry Paint)	68.61	Mt
	Internal Blockwork Around Staircase (Including Masonry Paint)	19.35	Mt
	Internal Double Doors (Partially Glazed)	2.00	Ea
	Internal Fire Safety Doors (Including ironmongery)	8.00	Ea
	Internal Perimeter	99.85	Mt
	Length	0.00	Mt
	Wall Type P01 (2 X 15mm Plasterboard, Resilient Bars, 100mm Stud, Resilient Bars, 2 x 15mm Plasterboard)	39.25	Mt



1 Level 0 Metframe Setting Out
1:50

REIK Construction Swanssea St, Kingsway, Swanssea, SA1 4FJ			
Contract:	UWTSD SA1 Proposed Student Accommodation	Contract:	UWTSD SA1 Proposed Student Accommodation
Drawing:	Construction Issue 25.3.20 GF	Drawing:	Construction Issue 25.3.20 GF
Scale:	1:500	Scale:	1:500
Date:	18/04/20	Date:	18/04/20

DRAWING STATUS
This drawing is issued as construction status C2 and is issued to allow the Main Contractor to tender for sub-contractor packages and permit the commencement of technical design of construction packages by specialist consultants and contractors. This drawing represents the design for structural elements, building services systems, acoustic and fire safety matters, building regulations compliance checks, specifications, cost information and project strategies in accordance with Contractors Information Required Schedule. This drawing may be updated upon receipt of the technical design documentation from specialist consultants and contractors for specific work packages to ensure ongoing coordination and to inform the as built construction record documentation. This drawing is to be used to inform the sustainability goals, cost plan, maintenance, operation and handover strategies, designers risk assessments, construction methodologies, and health and safety strategies. We request that the Contractor verifies that the information contained within this document meets with their cost plan, programme, and compliance with the Employer's requirements. In the event of any irregularities, the Contractor is notified the Architect at the earliest opportunity. At the time of publication, the application to discharge planning conditions associated with this scheme had not been concluded. Therefore, the design may be subject to change depending on the details of any conditions, section 146 or 278 works, or other legal agreements negotiated with the local authority. Please note whilst these drawings are being issued for Construction C2 status, we are still awaiting a co-ordinated M&E Stage 4 design. As previously stated, these drawings may be updated once the M&E design is developed.

CONSTRUCTION (C2) ISSUE

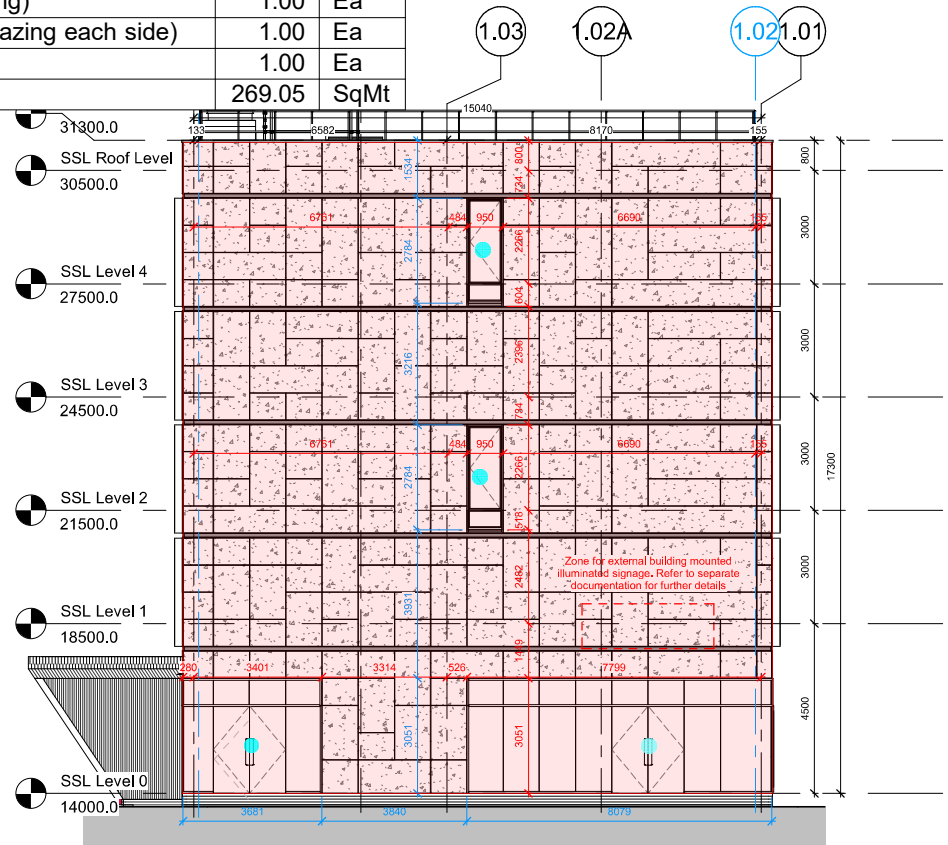
Contract:
UWTSD SA1 Proposed Student Accommodation

Drawing:
Construction Issue 25.3.20 GF

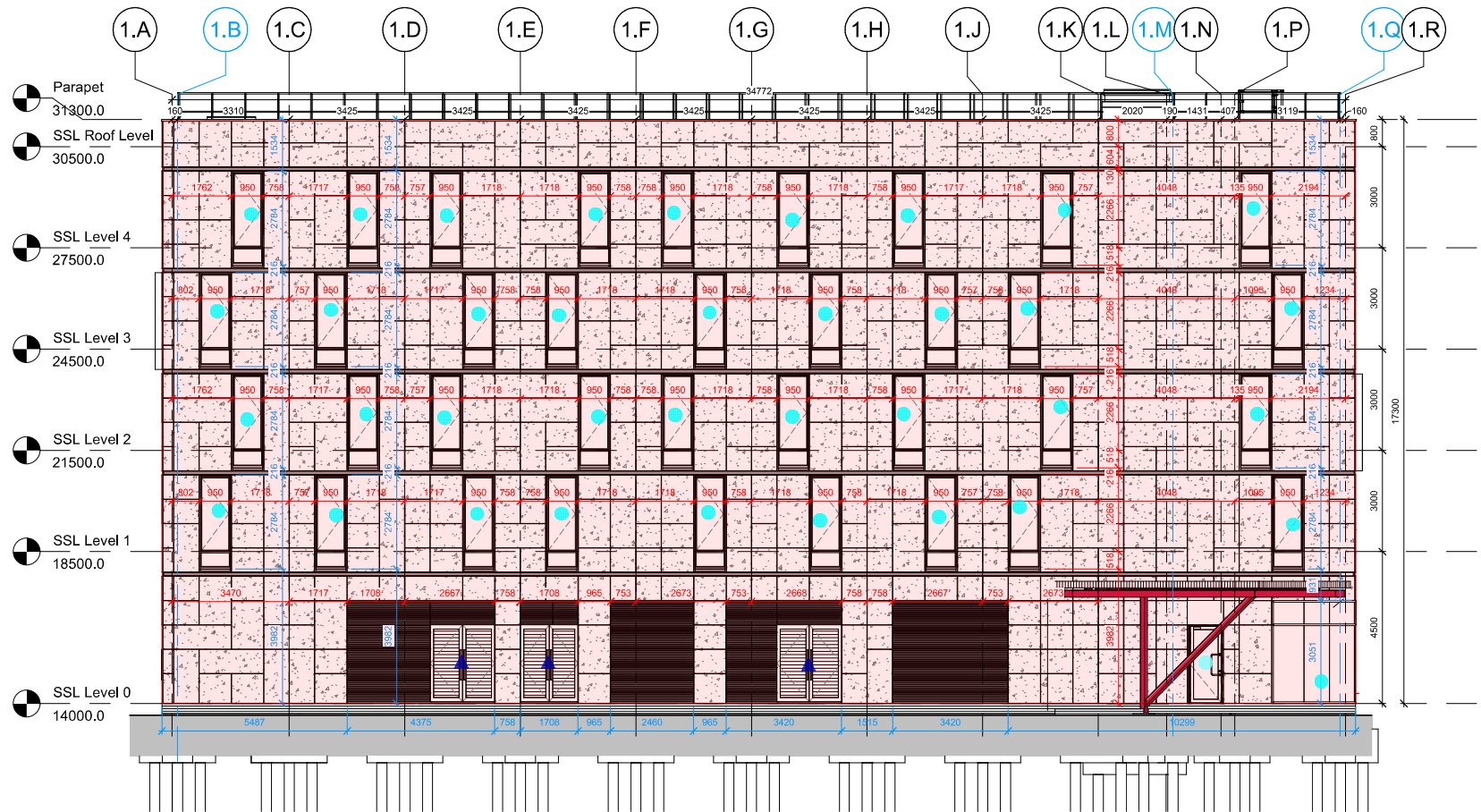


REIK Construction Swanssea St, Kingsway, Swanssea, SA1 4FJ
Telephone: 01792 868442 Website: www.reikconstruction.co.uk
Drawn: Sean Dugay Checked: Sean Dugay Approved: Sean Dugay
Scale: 1:500 Date: 18/04/20
Project Project No.: Originator: Zone: Level: File Type: Role: Drawing: Revision:
SWA - 2685 - REIK - 0 - 00 - DR - A - 2094 - C01

1.9m Double Exterior Door (No Glazing/ Louvre surround)	3.00	Ea
950mm Window	38.00	Ea
East Elevation Blockwork	610.02	SqMt
GF Glazed Door 1000mm Fire Exit	1.00	Ea
GF Glazed Door and windows 3681mm (1900mm double door, 1781mm fixed side glazing)	1.00	Ea
GF Glazed Door and windows 8079mm (1900mm double doors, 3089.5mm fixed side glazing each side)	1.00	Ea
GF Glazed Windows 2400mm	1.00	Ea
North Elevation Blockwork	269.05	SqMt



1 North Elevation Metframe S/O
1 : 100



2 East Elevation Metframe S/O
1 : 100

Revision Number	Revision Date	Revision Description	Issued by
C01	18.04.20	Construction (C2) Issue	SD

DRAWING STATUS:
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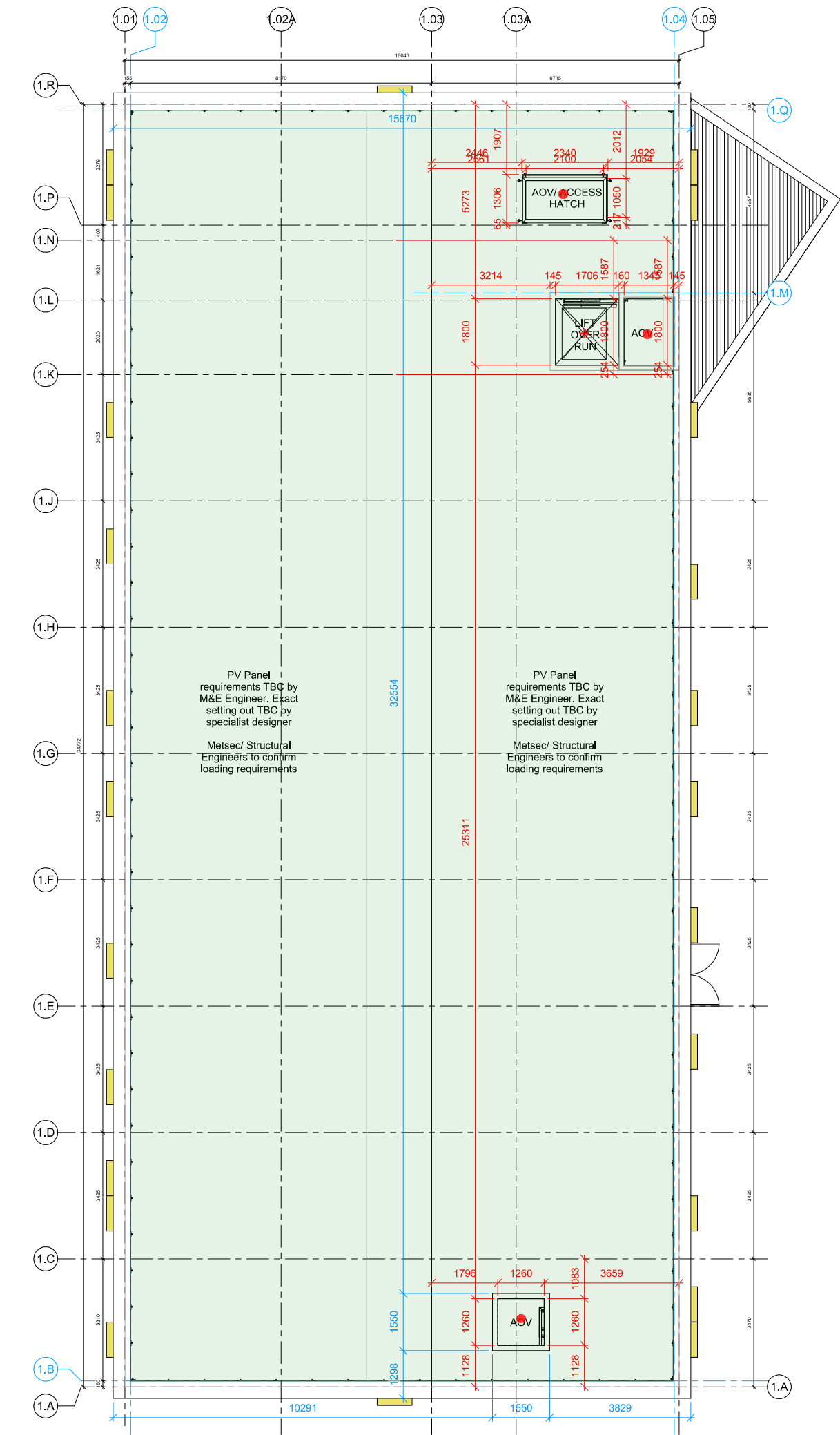
CONSTRUCTION (C2) ISSUE

Contract:
UWTSD SA1 Proposed Student Accommodation

Drawing:
Construction Issue 25.3.20 NE Elev



Automatic Opening Vents	3.00	Ea
Lift Over Run	1.00	Ea
Roof Area	507.03	SqMt
Roof Balustrade	99.62	Mt



1 Roof Plan Metframe Setting Out
1 : 50

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This drawing must be read in conjunction with all architects, consultants, subcontractors and

Revision Number	Revision Date	Revision Description	Issued by
C01	15.04.20	Construction (C2) Issue	10

DRAWING STATUS
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allow the Main Contractor to tender for sub-contractor packages and
permit the commencement of technical design of construction
packages by specialist consultants and contractors. This drawing
represents the design for structural elements, building services
systems, acoustic and fire safety matters, building regulations
compliance checks, specifications, cost information and project
schedules in accordance with Contractors Information Required
Schedule. This drawing may be updated upon receipt of the technical
design documentation from specialist consultants and contractors for
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works, or other legal agreements negotiated with the local authority.
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C2 status, we are still awaiting a co-ordinated M&E Stage 4 design. As
previously stated,
these drawings may be updated once the M&E design is developed.

NOTES

CONSTRUCTION (C2) ISSUE

Contract:
UWTSD SA1 Proposed Student
Accommodation

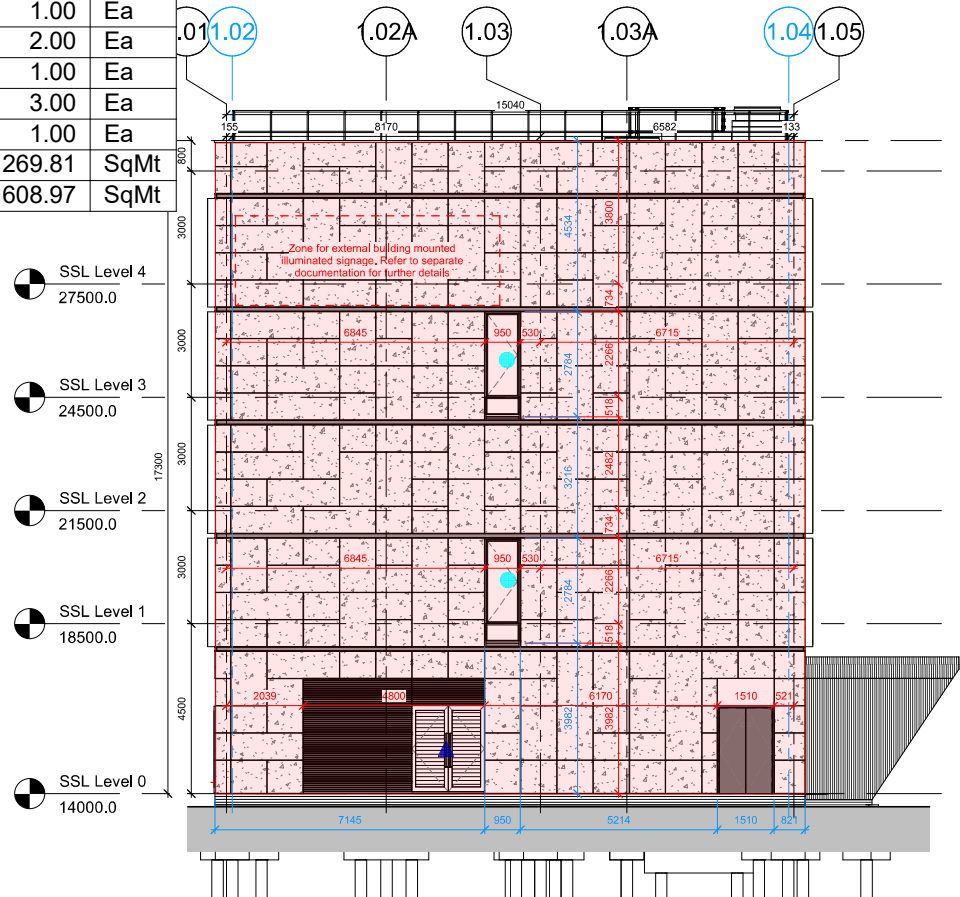
Drawing:
Construction Issue 25.3.20 Roof



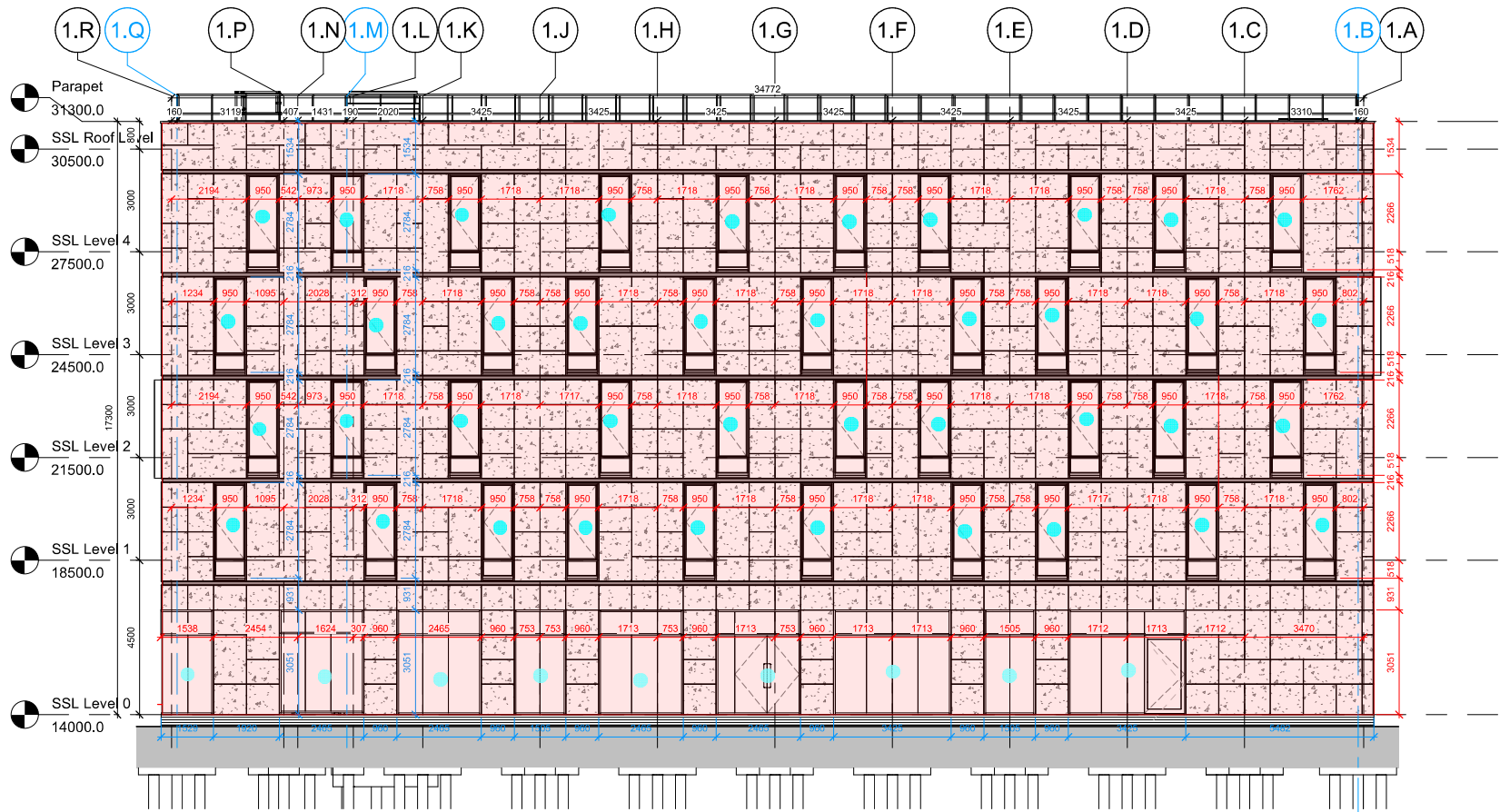
REIK Construction Swansea St. Kingsway, Swansea, SA1 4FJ
Telephone: 01792 869442 Website: www.Reikconstruction.co.uk
Drawn: Sean Dugan Checked: Sean Dugan Approved: Sean Dugan
Scale: 1:50 (BA) Date: 18/04/20

Project Project No. Originator Zone Level File Type Role Drawing Revision
SWA - 2686 - REIK - 0 - RF - DR - A - 2099 - CO

1.9m Double Exterior Door (No Glazing/ Louvre surround)	1.00	Ea
950mm Window	42.00	Ea
GF Glazed Door and windows (1200mm door, 2252mm fixed side glazing)	1.00	Ea
GF Glazed Double Door 2465mm (fixed 500mm side window)	1.00	Ea
GF Glazed Window 1505mm	2.00	Ea
GF Glazed Window 1529mm	1.00	Ea
GF Glazed Window 2465mm	3.00	Ea
GF Glazed Window 3425mm	1.00	Ea
South Elevation Blockwork	269.81	SqMt
West Elevation Blockwork	608.97	SqMt



1 South Elevation Metframe S/O
1 : 100



2 West Elevation Metframe S/O
1 : 100

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Revision Number	Revision Date	Revision Description	Issued by
C01	18.04.20	Construction (C2) Issue	SD

DRAWING STATUS:
This drawing is issued as construction status C2 and is issued to allow the Main Contractor to tender of sub-contractor packages and permit the commencement of technical design of construction packages by specialist consultants and contractors. This drawing represents the design for structural elements, building services systems, acoustic and fire safety matters, building regulations compliance checks, specifications, cost information and project strategies in accordance with Contractors Information Required Schedule. This drawing may be updated upon receipt of the technical design documentation from specialist consultants and contractors for specific work packages to ensure ongoing coordination and to inform the as built construction record documentation. This drawing is to be used to inform the sustainability goals, cost plan, maintenance, operation and handover strategies, designers risk assessments, construction methodologies, and health and safety strategies.

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CONSTRUCTION (C2) ISSUE

Contract:
UWTSD SA1 Proposed Student Accommodation

Drawing:
Construction Issue 25.3.20 SW Elev



REIK Construction Swansea St, Kingsway, Swansea, SA1 4FJ

Telephone: 01792 869442 Website: www.Reikconstruction.co.uk

Drawn: Sean Dugay Checked: Sean Dugay Approved: Sean Dugay

Scale: As indicated @ A1 Date: 18/04/20

Project Project No. Originator Zone Level File Type Role Drawing Revision

SWA - 2686 - REIK - 0 - XX - DR - A - 2100 - C01

BILL OF QUANTITIES



UWTSD SA1 Proposed Student Accommodation

Address: Kings Dock
Port Tennant
Swansea
SA1 8QV
51.618294, -3.918861

28 April 2020

Total Build Cost: £ 21,886,499.78

Prepared By: Sean Dugay

28/04/2020





Information Used & Assumptions

1 Information Used

Information as provided by REIK Design Team;

Construction Issue 25.3.20 GF
Construction Issue 25.3.20 1stF
Construction Issue 25.3.20 2ndF
Construction Issue 25.3.20 3rdF
Construction Issue 25.3.20 4thF
Construction Issue 25.3.20 Roof
Construction Issue 25.3.20 NE Elev
Construction Issue 25.3.20 SW Elev

2 General assumptions;

FF&E is excluded unless specifically identified within the cost plan.

Costs are based upon the information as provided.

We have assumed a project bank account will not be required for this scheme.

We have assumed that the area of works will be decanted for the project. No allowance is made for throughways or dealing with building occupants.

The exact nature of specification for internal doors, screens, folding partitions and finishes is assumed.

All costs are provisional awaiting design development.

3 General notes and exclusions;

All included costs are subject to variation following design development.

Risks associated with BREXIT are not considered.

A risk allowance of 10% is included for this estimate.

VAT is excluded from the estimate.

Works will be undertaken in a single phase.

Project details

NRM1 elemental cost plan template



Description

New Apartment Block

Works cost estimate

		Cost
Building works estimate		
Group element 0	FACILITATING WORKS	£2,482,180
Group element 1	SUBSTRUCTURE	£1,574,720
Group element 2	SUPERSTRUCTURE	£11,169,517
Group element 3	INTERNAL FINISHES	£432,850
Group element 4	FITTINGS AND FURNISHINGS	£624,160
Group element 5	SERVICES	£1,804,590
Group element 8	EXTERNAL WORKS	£0
Group element 9	MAIN CONTRACTOR'S PRELIMINARIES	£1,808,802
Works cost estimate (sub total A)		£19,896,818
Project design team fees and other development costs (sub total B)		TBA
Base cost estimate A + B (sub total C)		£19,896,818
Group element 13	Risk allowance @ 10%	
Total Risk allowances (sub total D)		£1,989,682
Total Construction Cost (C + D)		£21,886,500

Elemental Cost Plan



Ref.	Element	Quantity / unit		Rate	Sub-Total	Group-Total	Notes
				£	£	£	ALL QUANTITY CALCULATIONS HAVE BEEN ROUNDED UP TO THE NEAREST WHOLE FIGURE
0	FACILITATING WORKS					£ 2,482,179.65	
0.1	Toxic/hazardous material <i>This is under the assumption that the site is clear of toxic/hazardous materials.</i> Contaminated land <i>Allow for 15% contaminated soil</i>		item	£ -	£ -		This is under the assumption that the site is clear of toxic/hazardous materials. Priced from SPONS 2020 pg.153 (15% Of Total works excluding main contractors preliminaries and access scaffolding)
		0.15	%	£ 15,611,622.70	£ 2,341,743.40		
0.2	Major demolition works <i>The is under the assumption that the site is clear and requires no demolition.</i>						
0.3	Temporary Works <i>Access scaffolding</i>	0.0075	%	£ 17,953,366.10		134,650	Priced from SPONS 2020 pg.178 - Based on 0.75% of the tender (excluding preliminaries)
	<i>Works to existing site; site clearance and removal of existing vegetation, etc.</i>	526	m2	£ 11.00	5,786		Priced from SPONS 2020 pg.153
1	SUBSTRUCTURE					£ 1,574,720.00	
1.1	Foundations <i>Allowance for mobilization and demobilization of piling rig; include for setting up piling rig at pile positions</i>	1	item	£ 85,000.00		85,000	Priced from SPONS 2020 pg.135
	<i>CFA piling; approx. 600mm dia. piling 35m deep; cut off top of pile; allow for pile cap; disposal of spoil; etc.</i>	7,742	m	£ 170.00		1,316,140	As Above (Foundation Drawings are unavailable at this time, assumed 2.5m spacing between piles @ 35m depth)
	<i>Allowance for 500mm thick reinforced concrete slab; excavation and disposal; 350mm thick hardcore bed, 50mm sand blinding, dpm, in situ concrete slab, reinforcement (150 kg/m³), etc.</i>	526.00	m2	£ 290.00		152,540	As Above
	<i>Allowance for under slab drainage</i>	526.00	m2	£ 40.00	21,040		As Above
2	SUPERSTRUCTURE					£ 11,169,516.88	
2.1	Frame <i>This is under the assumption that no specialist works are required.</i> <i>Structural steel frame including fittings based on 80 kg/m2 overall GIFA including fittings</i>	2,636	m2	£ 2,400.00	£ 6,326,400.00		Priced from SPONS 2020 pg.91
2.2	Upper Floors <i>Precast concrete suspended floors; 1200mm wide suspended slab; 75mm thick</i> <i>12.00m span; 350mm thick planks; 5.00 kN/m2 loading</i> <i>Screeded beds; protection to compressible formwork exceeding 600mm wide 75mm thick</i>	2,112	m2	£ 105.00	£ 221,760.00		Priced from SPONS 2020 pg.189
		2,112	m2	£ 9.81	£ 20,718.72		Priced from SPONS 2020 pg.273
2.3	Roof <i>precast concrete suspended slab with sand: cement screed over m2 82.00 to 99.00</i> <i>reinforced concrete slabs; on steel permanent steel shuttering; 150mm</i> <i>reinforced concrete topping</i> <i>Allowance for rainwatergood intergration</i> <i>Rainwater drainage, aluminium gutters and downpipes 102m perimeter for guttering</i> <i>17.3m height x 4 downpipes</i> <i>Allowance for lift overruns, AOVs, etc.</i> <i>balustrade and handrail with glass infill panels</i>	528	m2	£ 99.00	£ 52,272.00		Priced from SPONS 2020 pg.190 added
		5	%	£ 522.72	£ 2,613.60		Additional Allowance for fixings
		171	m2	£ 70.00	£ 11,984.00		SPONS 2020 pg.89
		4	no	£ 17,000.00	£ 68,000.00		SPONS 2020 pg.154
		102	m	£ 520.00	£ 53,040.00		SPONS 2020 pg.195
2.4	Stairs & Ramps <i>Precast concrete staircase with half landing</i> <i>2 half flights of stairs per floor x 4 floors x 2 sets of stairs</i> <i>Nylon coated steel handrail (20m allowance per half flight)</i>	16	no	£ 6,490.00	£ 103,840.00		SPONS 2020 pg.142 added 10% markup due to no design drawings
		320	m	£ 104.50	£ 33,440.00		SPONS 2020 pg.142 added 10% markup due to no design drawings
2.5	External Walls Blockwork <i>Blockwork walls 140mm thick</i> <i>North Elevation</i> <i>East Elevation</i> <i>South Elevation</i> <i>West Elevation</i> <i>Allowance for wall ties</i> <i>Blockwork walls 100mm thick</i> <i>Kingspan Thermawall TW50 (Thermal conductivity 0.022 W/mK) zero ODP rigid</i> <i>urethane insulation board or other equal and approved; as partial cavity fill;</i> <i>including cutting and fitting around wall ties and retaining discs</i> <i>batt or other equal; as full or partial cavity fill; including cutting and fitting around</i> <i>wall ties and retaining discs</i> <i>75mm thick</i> Aluminium rainscreen cladding (See Colour Scheme) <i>Metal rainscreen cladding system, two finishes. (Dark grey PPC - RAL 7016 - L10/330)</i> <i>including Metsec, concealed fixings, flashings</i> <i>trims</i>	270 611 270 610	1761	m2	£ 65.00	£ 114,465.00	SPONS 2020 pg.167
		1761	m2	£ 1.63	£ 2,861.63		Calculated at 2.5% of 140mm blockwork rate
		1761	m2	£ 60.00	£ 105,660.00		
		1761	m2	£ 24.00	£ 42,264.00		SPONS 2020 pg.199
		1761	m2	£ 569.03	£ 1,002,061.83		SPONS 2020 pg.146 added 10% markup

	Additional Allowance for exterior canopy		1	nr	£	15,000.00			Allowance subject to change pending drawings
2.6	Windows and external doors								
	External doors; powder coated aluminium glazed doorsets including ironmongery								
	<i>External doors; powder coated aluminium glazed doorsets including ironmongery</i>		6	no	£	115,000.00	£	690,000.00	SPONS 2020 pg.146
	Steel fire escape doors - Manual opening fire escape double glazed aluminium doors								
	GF 1900mm Double Exterior Door (No Glazing/Louvre Surround)	4.0		no					As Above (window and door units split 50/50 between door and windows)
	GF Glazed Double Door 2465mm (Fixed 500mm Side Wind	0.5		no					As Above (window and door units split 50/50 between door and windows)
	GF Glazed Door and Windows 8079mm (1900mm Double Door, 3089.5mm fixed glazing each side)	0.5		no					As Above (window and door units split 50/50 between door and windows)
	GF Glazed Door and Windows 3681mm (1900mm Double Door, 1781mm fixed side glazing)	0.5		no					As Above (window and door units split 50/50 between door and windows)
	GF Glazed Door and Windows 3452mm (1200mm Double Door, 2252mm fixed side glazing)	0.5		no					As Above (window and door units split 50/50 between door and windows)
	Extra for louvres		1	no	£	1,292.50	£	1,292.50	SPONS 2020 pg.163 added 10% markup
			4	no	£	90,000.00	£	360,000.00	SPONS 2020 pg.92
	<i>Windows, powder-coated aluminium double glazed units, including all necessary ironmongery and integral cills,</i>								
	GF Glazed Windows 2400mm	1	10	no	£	95,000.00	£	950,000.00	SPONS 2020 pg.118
	GF Glazed Window 1505mm	2		no					
	GF Glazed Window 1529mm	1		no					
	GF Glazed Window 2465mm	3		no					
	GF Glazed Window 3425mm	1		no					
	GF Glazed Double Door 2465mm (Fixed 500mm Side Wind	0.5		no					
	Coated aluminium double-glazed window system (Dark grey PPC - RAL 7016 - L10/330)								As Above (window and door units split 50/50 between door and windows)
	1st Floor 950mm x 2764mm Windows		20	m2	£	1,287.11	£	25,742.15	SPONS 2020 pg.89 (Rate amended to size per window)
	2nd Floor 950mm x 2764mm Windows		20	m2	£	1,287.11	£	25,742.15	As Above
	3rd Floor 950mm x 2764mm Windows		20	m2	£	1,287.11	£	25,742.15	As Above
	4th Floor 950mm x 2764mm Windows		20	m2	£	1,287.11	£	25,742.15	As Above
	GF Glazed Door and Windows 8079mm (1900mm Double Door, 3089.5mm fixed glazing each side)	0.5		no					As Above (window and door units split 50/50 between door and windows)
	GF Glazed Door and Windows 3681mm (1900mm Double Door, 1781mm fixed side glazing)	0.5		no					As Above (window and door units split 50/50 between door and windows)
	GF Glazed Door and Windows 3452mm (1200mm Double Door, 2252mm fixed side glazing)	0.5		no					As Above (window and door units split 50/50 between door and windows)
2.7	Internal walls								
	<i>Non load-bearing timber stud partition, faced with plasterboard, skim finish</i>								SPONS 2020 pg.151 (added 75% markup to inc correct thickness of plasterboard/ resilient bars and isowool quilt insulation)
	<i>Ground Floor 100mm stud partition walls (Inc resilient bars and 2 sided 15mm pasterboard and skim)</i>		95	m2	£	131.25	£	12,468.75	As Above
	<i>1st Floor stud partition walls (Inc resilient bars and 2 sided 15mm pasterboard and skim)</i>		865	m2	£	131.25	£	113,531.25	As Above
	<i>2nd Floor stud partition walls (Inc resilient bars and 2 sided 15mm pasterboard and skim)</i>		798	m2	£	131.25	£	104,737.50	As Above
	<i>3rd Floor stud partition walls (Inc resilient bars and 2 sided 15mm pasterboard and skim)</i>		818	m2	£	131.25	£	107,362.50	As Above
	<i>4th Floor stud partition walls (Inc resilient bars and 2 sided 15mm pasterboard and skim)</i>		804	m2	£	131.25	£	105,525.00	As Above
	<i>Plasterboard and skim finish to all internal walls and the internal face of the external wall face</i>								SPONS 2020 pg.122
	<i>Ground Floor internal face of building blockwork</i>		346	m2	£	23.00	£	7,958.00	As Above
	<i>1st Floor internal face of buildin blockwork</i>		346	m2	£	23.00	£	7,958.00	As Above
	<i>2nd Floor internal face of buildin blockwork</i>		346	m2	£	23.00	£	7,958.00	As Above
	<i>3rd Floor internal face of buildin blockwork</i>		346	m2	£	23.00	£	7,958.00	As Above
	<i>4th Floor internal face of buildin blockwork</i>		346	m2	£	23.00	£	7,958.00	As Above
2.8	Internal doors & screens								
	Standard fire doors; cellular core; softwood lining; softwood architrave; aluminium ironmongery (lockable, self-closure); painting or polishing;								
	Ground Floor double leaf; Oak veneered; 30 min fire resistance; polished		8	nr	£	1,400.00	£	11,200.00	SPONS 2020 pg.206
	1st Floor double leaf; Oak veneered; 30 min fire resistance; polished		62	nr	£	1,400.00	£	86,800.00	SPONS 2020 pg.206
	2nd Floor double leaf; Oak veneered; 30 min fire resistance; polished		59	nr	£	1,400.00	£	82,600.00	SPONS 2020 pg.206
	3rd Floor double leaf; Oak veneered; 30 min fire resistance; polished		61	nr	£	1,400.00	£	85,400.00	SPONS 2020 pg.206
	4th Floor double leaf; Oak veneered; 30 min fire resistance; polished		58	nr	£	1,400.00	£	81,200.00	SPONS 2020 pg.206
	Double glazed double door inc ironmongery		6	nr	£	12,210.00	£	73,260.00	SPONS 2020 pg.107 (Rate doubled for double door ammendment + 10% for ironmongery)
	Ground Floor Internal Double Door	2							
	1st Floor Internal Double Door	1							
	2nd Floor Internal Double Door	1							
	3rd Floor Internal Double Door	1							
	4th Floor Internal Double Door	1							
3	INTERNAL FINISHES							£	432,849.90
3.1	Wall finishes								
	<i>One mist and two coats emulsion paint</i>								SPONS 2020 pg.207
	Ground floor 100mm timber stud partition wall plasterboard		189	m2	£	5.10	£	963.90	
	Ground floor blockwork walls		1,196	m2	£	5.10	£	6,099.60	As Above
	1st floor 100mm timber stud partition wall		1,730	m2	£	5.10	£	8,823.00	As Above
	1st floor blockwork walls		352	m2	£	5.10	£	1,795.20	As Above
	2nd floor 100mm timber stud partition wall		1,595	m2	£	5.10	£	8,134.50	As Above

3.2	2nd floor blockwork walls	352	m2	£	5.10	£	1,795.20	As Above
	3rd floor 100mm timber stud partition wall	1,636	m2	£	5.10	£	8,343.60	As Above
	3rd floor blockwork walls	354	m2	£	5.10	£	1,805.40	As Above
	4th floor 100mm timber stud partition wall	1,608	m2	£	5.10	£	8,200.80	As Above
	4th floor blockwork walls	352	m2	£	5.10	£	1,795.20	As Above
	Staircase blockwork walls	335	m2	£	5.10	£	1,708.50	As Above
	Ceramic wall tiles splashbacks above kitchen counter	115.2	m2	£	70.00	£	8,064.00	SPONS 2020 pg.164
	Ceramic wall tiles to bathroom walls	1,229	m2	£	70.00	£	86,016.00	SPONS 2020 pg.164
	Floor finishes							
	Vinyl safety flooring; 3.5mm thick heavy duty (Adhesive fixing)							
	Ground Floor							
	Vinyl to floors (Circulation areas/bathrooms)	366	m2	£	68.00	£	24,888.00	SPONS 2020 pg.209
	1st Floor							
	Vinyl to floors (Circulation areas/bathrooms)	107	m2	£	68.00	£	7,276.00	As Above
	2nd Floor							
	Vinyl to floors (Circulation areas/bathrooms)	138	m2	£	68.00	£	21,216.00	As Above
	3rd Floor							
	Vinyl to floors (Circulation areas/bathrooms)	94	m2	£	68.00	£	24,276.00	As Above
	4th Floor							
	Vinyl to floors (Circulation areas/bathrooms)	95	m2	£	68.00	£	24,140.00	As Above
3.3	Carpet tiles; including underlay, edge grippers heavy domestic duty; to floors							
	Ground Floor							
	Carpet to floors	46	m2	£	75.00	£	3,450.00	As Above
	1st Floor							
	Carpet to floors	353	m2	£	75.00	£	26,475.00	As Above
	2nd Floor							
	Carpet to floors	312	m2	£	75.00	£	23,400.00	As Above
	3rd Floor							
	Carpet to floors	357	m2	£	75.00	£	26,775.00	As Above
	4th Floor							
	Carpet to floors	355	m2	£	75.00	£	26,625.00	As Above
	Ceiling finishes							
	Plasterboard, skim and apply white emulsion							
	Ground Floor plasterboard ceiling, plaster skim and emulsion paint finish	475	m2	£	34.00	£	16,156.80	SPONS 2020 pg.151 (90% of GIFA)
	1st Floor plasterboard ceiling, plaster skim and emulsion paint finish	475	m2	£	34.00	£	16,156.80	As Above
	2nd Floor plasterboard ceiling, plaster skim and emulsion paint finish	475	m2	£	34.00	£	16,156.80	As Above
	3rd Floor plasterboard ceiling, plaster skim and emulsion paint finish	475	m2	£	34.00	£	16,156.80	As Above
	4th Floor plasterboard ceiling, plaster skim and emulsion paint finish	475	m2	£	34.00	£	16,156.80	As Above
4	FITTINGS AND FURNISHINGS					£	624,160.00	
4.1	General fittings, furnishings and equipment							
	Standard Bedroom FF&E Allowance;	64	nr	£	2,300.00	£	147,200.00	SPONS 2020 pg.156 (Amended to include desk chair, wardrobe, chest of draws and tv stand)
	3/4 Bed							
	Desk 2.7lm							
	Desk Chair							
	Wardrobe 1.2lm							
	Chest of Draws 0.6lm x 2							
	Tv Stand inc. 2 draws 1.1lm							
	Standard Room Kitchen FF&E;	64	nr	£	2,550.00	£	163,200.00	SPONS 2020 pg.151
	General fittings – kitchen units, worktops, sink			£	2,550.00			As Above
	Kitchen Worktop 1.8lm							As Above
	Intergrated worktop sink with draining area							As Above
	Double door kitchen cupboard (Under sink)							As Above
	Single door shelved kitchen cupboard							As Above
	Single door kitchen cupboard (Above sink)							As Above
	Standard Bathroom FF&E;	64	nr	£	2,250.00	£	144,000.00	SPONS 2020 pg.164 (Amended for inclusion of shower base and screen)
	Electric thermostatic shower, shower base and shower screen	64	nr	£	500.00	£	32,000.00	
	Shower Worktop 1.3m allowance	64	nr	£	480.00	£	30,720.00	SPONS 2020 pg.119 (Added 20% for intergration)
	Intergrated Worktop WHB	64	nr	£	460.00	£	29,440.00	SPONS 2020 pg.120
	WC							
	Main Kitchen Area Provisional Allowance;	1	nr	£	20,000.00	£	20,000.00	
	Dining Table							
	Seating							
	Tv							
	Cookers							
	Worktops							
	Fridge Freezers							
	Storage Cupboards							
	Lounge Provisional Allowance;	1	nr	£	15,000.00		15000	
	Seating							
	Pool Table							
	Vending Machines							
5	Tv	64	nr	£	150.00	£	9,600.00	SPONS 2020 pg.156
	Mail boxes	5	nr	£	6,600.00	£	33,000.00	SPONS 2020 pg.119
	Client and statutory signage							
	SERVICES					£	1,804,589.92	
5.1	Sanitary installations							
	INCLUDED IN 4.4.1 FF&E							

5.3	Disposal Installations Provisional sum to cover all drainage and waste management.		1	£	200,000.00	£	200,000.00		No workable drawings have been ascertained to date.
5.4	Water Insallations Cold water installation incoming main, storage tank. Cold water distribution to sanitary ware. CAT 5 water points & plant to wash down points and to roof BMU. Hot water installation to sanitary ware water treatment, multi-booster pump set, distribution to apartments including tenant sets complete with water meter		2636	m2	£	26.23	£	69,142.28	SPONS 2020 pg.157 (Calculated by GIFA)
5.5	Heat source Gas fired boiler installation Flue to atmosphere Plant room pipework, pumps sets, controls etc. Distribution to apartments, valves, etc.; terminating in HIUs (HIUs part of fit-out) Allowance for heat sources in each accomodation room and en-suite		5	nr	£	30,000.00	£	150,000.00	SPONS 2020 pg.158
			5	nr	£	90,000.00	£	450,000.00	
			5	nr	£	44,000.00	£	220,000.00	
			2,636	m2	£	18.00	£	47,448.00	Calculated by GIFA
			128	nr	£	500.00	£	64,000.00	
5.8	Electrical installations <i>Allowance to cover lighting (per floor)</i> <i>Emergency lighting</i> <i>Mains and sub-mains connection, small power distribution, cooker point, lighting distribution</i> <i>Allowance to cover, earthing and bonding, 'Smoke detectors; telephone points and TV aerial, including additional data and power sockets and wiring</i>		5	nr	£	21,600.00	£	108,000.00	SPONS 2020 pg.128
			1	nr	£	110,000.00	£	110,000.00	SPONS 2020 pg.151 Calculated by GIFA
			2,636	m2	£	43.00	£	113,348.00	
			2,636	m2	£	10.49	£	27,651.64	SPONS 2020 pg.152 Calculated by GIFA
5.10	Lift and Conveyor installations <i>13-person passenger/firefighting lifts 1.0 m/s</i>		1	nr	£	135,000.00	£	135,000.00	SPONS 2020 pg.129
5.11	Fire and lightning protection INCLUDED IN 2.2.8 & 5.5.8								
5.12	Communication, security and control systems INCLUDED IN 5.58 <i>Internal CCTV installation allowance</i>		1	nr	£	110,000.00	£	110,000.00	SPONS 2020 pg.129
8.00	EXTERNAL WORKS NO EXTERNAL DRAWINGS HAVE BEEN PROVIDED						£	-	
9	MAIN CONTRACTOR'S PRELIMINARIES Main contractors preliminaries & OHP		10	%	£	18,088,016.34	£	1,808,801.63	
	SECTION SUB-TOTAL							£ 19,896,817.98	

[illegible]

Works to begin on the 4th of May 2020

Weeks.

Num	Activity	Duration (wks.)	Budget	1	2
1	General conditions	6	£ 248,217.96	£ 41,369.66	£ 41,369.66
2	Site layout	3.5	£ 248,217.96		
3	Foundations	10	£ 1,698,828.98		
4	Superstructure	5.5	£ 6,946,944.91		
5	Building envelope	20	£ 5,463,661.79		
6	Services	12	£ 2,177,639.88		
7	Exterior finishes	8	£ 372,326.95		
8	Interior finishes	5	£ 620,097.90		
9	Final acceptance	2	£ 312,080.00		
		TOTAL	£ 18,088,016.34	£ 41,369.66	£ 41,369.66

NRM PG TOTAL £ 18,088,016.34 exc contractors prelims

10% profit

TOTAL

5% retention

TOTAL

3	4	5	6	7	8
£ 41,369.66	£ 41,369.66	£ 41,369.66	£ 41,369.66		
				£ 70,919.42	£ 70,919.42
£ 41,369.66	£ 41,369.66	£ 41,369.66	£ 41,369.66	£ 70,919.42	£ 70,919.42

£ 165,478.64

£ 224,578.16

£ 16,547.86

£ 22,457.82

£ 182,026.51

£ 247,035.97

£ 9,101.33

£ 12,351.80

£ 172,925.18

£ 234,684.18

9	10	11	12	13	14
£ 70,919.42	£ 35,459.71				
	£ 84,941.45	£ 169,882.90	£ 169,882.90	£ 169,882.90	£ 169,882.90
£ 70,919.42	£ 120,401.16	£ 169,882.90	£ 169,882.90	£ 169,882.90	£ 169,882.90

£ 531,086.37

£ 53,108.64

£ 584,195.01

£ 29,209.75

£ 554,985.26

15	16	17	18	19	20
£ 169,882.90	£ 169,882.90	£ 169,882.90	£ 169,882.90	£ 169,882.90	£ 84,941.45
					£ 631,540.45
£ 169,882.90	£ 169,882.90	£ 169,882.90	£ 169,882.90	£ 169,882.90	£ 716,481.90

£ 679,531.59	#####
£ 67,953.16	£ 122,613.06
£ 747,484.75	#####
£ 37,374.24	£ 67,437.18
£ 710,110.51	#####

21	22	23	24	25	26
£ 1,263,080.89	£ 1,263,080.89	£ 1,263,080.89	£ 1,263,080.89	£ 1,263,080.89	
					£ 273,183.09
£ 1,263,080.89	£ 1,263,080.89	£ 1,263,080.89	£ 1,263,080.89	£ 1,263,080.89	£ 273,183.09

#####

£ 505,232.36

#####

£ 277,877.80

#####

27	28	29	30	31	32
£ 273,183.09	£ 273,183.09	£ 273,183.09	£ 273,183.09	£ 273,183.09	£ 273,183.09
£ 273,183.09	£ 273,183.09	£ 273,183.09	£ 273,183.09	£ 273,183.09	£ 273,183.09

#####

#####

£ 208,263.02

£ 109,273.24

#####

#####

£ 114,544.66

£ 60,100.28

#####

#####

33	34	35	36	37	38
£ 273,183.09	£ 273,183.09	£ 273,183.09	£ 273,183.09	£ 273,183.09	£ 273,183.09
£ 273,183.09	£ 273,183.09	£ 273,183.09	£ 273,183.09	£ 273,183.09	£ 273,183.09

#####

£ 109,273.24

#####

£ 60,100.28

#####

39	40	41	42	43	44
£ 273,183.09	£ 273,183.09	£ 273,183.09	£ 273,183.09	£ 273,183.09	£ 273,183.09
£ 273,183.09	£ 273,183.09	£ 273,183.09	£ 273,183.09	£ 273,183.09	£ 273,183.09

#####

#####

£ 109,273.24

£ 109,273.24

#####

#####

£ 60,100.28

£ 60,100.28

#####

#####

45	46	47	48	49	50
£ 273,183.09					
£ 181,469.99	£ 181,469.99	£ 181,469.99	£ 181,469.99	£ 181,469.99	£ 181,469.99
£ 454,653.08	£ 181,469.99	£ 181,469.99	£ 181,469.99	£ 181,469.99	£ 181,469.99

£ 999,063.05

£ 99,906.31

#####

£ 54,948.47

#####

51	52	53	54	55	56
£ 181,469.99	£ 181,469.99	£ 181,469.99	£ 181,469.99	£ 181,469.99	£ 181,469.99
£ 46,540.87	£ 46,540.87	£ 46,540.87	£ 46,540.87	£ 46,540.87	£ 46,540.87
£ 228,010.86	£ 228,010.86	£ 228,010.86	£ 228,010.86	£ 228,010.86	£ 228,010.86

£ 818,961.70

£ 912,043.44

£ 81,896.17

£ 91,204.34

£ 900,857.87

#####

£ 45,042.89

£ 50,162.39

£ 855,814.97

£ 953,085.39

57	58	59	60	61	62
£ 46,540.87	£ 46,540.87				
	£ 124,019.58	£ 124,019.58	£ 124,019.58	£ 124,019.58	£ 124,019.58
£ 46,540.87	£ 170,560.45	£ 124,019.58	£ 124,019.58	£ 124,019.58	£ 124,019.58

£ 465,140.48

£ 46,514.05

£ 511,654.52

£ 25,582.73

£ 486,071.80

63	64
£ 156,040.00	£ 156,040.00
£ 156,040.00	£ 156,040.00

£ 560,119.16

£ 56,011.92

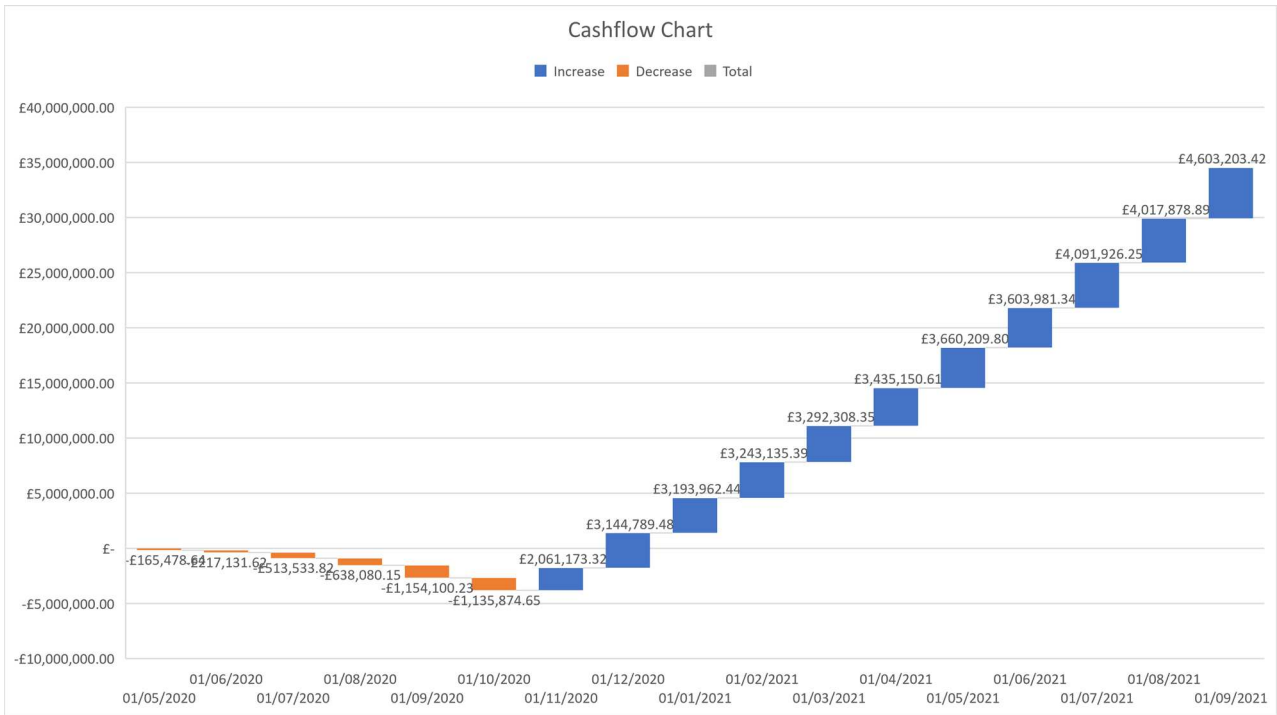
£ 616,131.08

£ 30,806.55

£ 585,324.52

Month/C	Cash in	Cash out	Cumulative	Cash flow
01/05/2020		£ 165,478.64	-£ 165,478.64	-£ 165,478.64
01/06/2020	£ 172,925.18	£ 224,578.16	£ 390,056.80	-£ 217,131.62
01/07/2020	£ 234,684.18	£ 531,086.37	£ 748,217.99	-£ 513,533.82
01/08/2020	£ 554,985.26	£ 679,531.59	£ 1,193,065.41	-£ 638,080.15
01/09/2020	£ 710,110.51	£ 1,226,130.59	£ 1,864,210.74	-£ 1,154,100.23
01/10/2020	£ 1,281,306.47	£ 1,263,080.89	£ 2,417,181.12	-£ 1,135,874.65
01/11/2020	£ 5,279,678.13	£ 2,082,630.16	£ 3,218,504.81	£ 2,061,173.32
01/12/2020	£ 2,176,348.52	£ 1,092,732.36	-£ 968,440.96	£ 3,144,789.48
01/01/2021	£ 1,141,905.31	£ 1,092,732.36	-£ 2,052,057.12	£ 3,193,962.44
01/02/2021	£ 1,141,905.31	£ 1,092,732.36	-£ 2,101,230.08	£ 3,243,135.39
01/03/2021	£ 1,141,905.31	£ 1,092,732.36	-£ 2,150,403.04	£ 3,292,308.35
01/04/2021	£ 1,141,905.31	£ 999,063.05	-£ 2,293,245.30	£ 3,435,150.61
01/05/2021	£ 1,044,020.89	£ 818,961.70	-£ 2,616,188.91	£ 3,660,209.80
01/06/2021	£ 855,814.97	£ 912,043.44	-£ 2,748,166.37	£ 3,603,981.34
01/07/2021	£ 953,085.39	£ 465,140.48	-£ 3,138,840.86	£ 4,091,926.25
01/08/2021	£ 486,071.80	£ 560,119.16	-£ 3,531,807.09	£ 4,017,878.89
01/09/2021	£ 585,324.52			£ 4,603,203.42

TOTAL £ 18,901,977.08 £ 14,298,773.67



LEVEL 6 ASSESSMENT SPECIFICATION

Student name:	Sean Dugay	Student ID number:	P149833
Programme:	Built Environmental Portfolio		
Module:	Integrated Group Project		
Module code:	ACBA6003	Contribution to Overall Module Assessment (%):	100%
Lecturer:	Allan Nantel	Internal Verifier:	Juan Ferriz-Papi / Keerthi Ranasinghe
Assignment Title:	Project	Word count (or equivalent):	Compilation Lever Arch File
Submission deadline:	22 nd April 2020	Return date of provisional marks & written feedback:	25 th May 2020
Submission method:	All written assessments, where practical and possible, must be submitted via Turnitin unless otherwise instructed by the Lecturer. (Please DO NOT put this assessment specification into Turnitin or it will match many similarities with other students' submissions.) Alternative submission method (if applicable): Late submission of the assessment will result in a late penalty mark. Penalties for late submission: Up to one week late, maximum mark of 40%. Over one week late, 0%. Only the Extenuating Circumstances Panel may approve a change to submission dates.		
Academic honesty / referencing:	Academic honesty is required. In the main body of your submission you must give credit to authors on whose research and ideas your work is based. Append to your submission a reference list that indicates the books, articles, etc. that you have used, cited or quoted in order to complete this assessment.		

Module Learning Outcomes (from module syllabus)
1. Work as a cohesive team to produce an effective project. 2. Produce all necessary evidence, specifications, records, documentation to demonstrate understanding of process and procedure in the production of a Project. 3. Appraise the environmental impact of design and produce sustainable solutions in design and construction method and material choice.

TASK DESCRIPTION

The SA1 Development is central to UWTSD's future plans. In consideration of this, the University has established some priorities, with the intention of considering different proposals from companies, evaluating these according to the University's immediate necessities.

Your objective in this module is to establish, develop and present a full and competent proposal for the University to **ONE** of the options listed below. You must work as a project team of a maximum of 5 persons to facilitate successful compilation of all necessary documentation to this end, in designing, programming, costing and presenting your proposal.

Some initial conditions are as follows: - These projects should be completed and operational in August of 2021, so you have a 22 month window from inception to completion. - One consideration of the University is sustainability and innovation. You have to include these criteria within your project proposal. –

A plan of the site will be distributed to each group allocating a plot position (where necessary).

Your document, as a guidance and not limited to, should consider the following;

1. Introduction

- a. The need
- b. Location –
- c. Constraints –
- d. Ground Investigation
- e. EIA
- f. Feasibility study

2. Design aspects with sustainable solutions

- a. Environmental factors
- b. Energy
- c. Social aspects
- d. Economic aspects
- e. Aesthetics
- f. Method Statement
- g. H+S risk assessment
- h. Full schedule of Works
- i. Distribution of labour and resources (materials and equipment) along time, with specific milestones
- j. Cash-flow forecast analysis
- k. Site layout at different stages of works
- l. Technical and Non-Technical specifications
- m. Material costings with comparisons
- n. Summary Project Costings
- o. Foundations with calculation

3. A schematic to highlight your solutions in draft and final drawings

- a. Plan
- b. Elevations
- c. Cross sections

4. Construction materials and methods
 - a. Identify the different materials and/or components used
 - b. Identify the construction methods and machinery used
 - c. Justify their selection

PROJECTS – CONSTRUCTION COHORTS

CHOOSE ONE OF THE FOLLOWING PROJECTS:

PROJECT A:

Choices – Select ONE of the following:

PROJECT A:

To meet the growing number of overseas students wishing to attend the University, additional Halls of Residence are required. Your company have been approached by the Universities Estates Team to carry out a feasibility study in to the possibility of building a new three-storey Student Residence Hall in the SA1 development (seafront): the top two floors will be for accommodation, and the ground floor will be multi-function (shops). The University would prefer the rooms to be 'en-suite'. Consideration should be given to maximising rental income generation from these units, to access, and to diversity in provision. Therefore maximising the monetary possibility of space is essential. Consideration must be given to proper access for users and delivery.

PROJECT B:

The scope of the University covers sport as one of the priorities for the new development. The vision is to build an enclosed Olympic sized swimming-pool and leisure complex, with all the required facilities for it to practice swimming and other related water sports. Additionally, the final design will include all necessary sanitary and changing facilities for the pool and other open air sports (rugby / football ground and 5 tennis courts) that will be provided adjacent. Consideration must be given to an energy efficient delivery for heating, lighting, drainage and ventilation to this building.

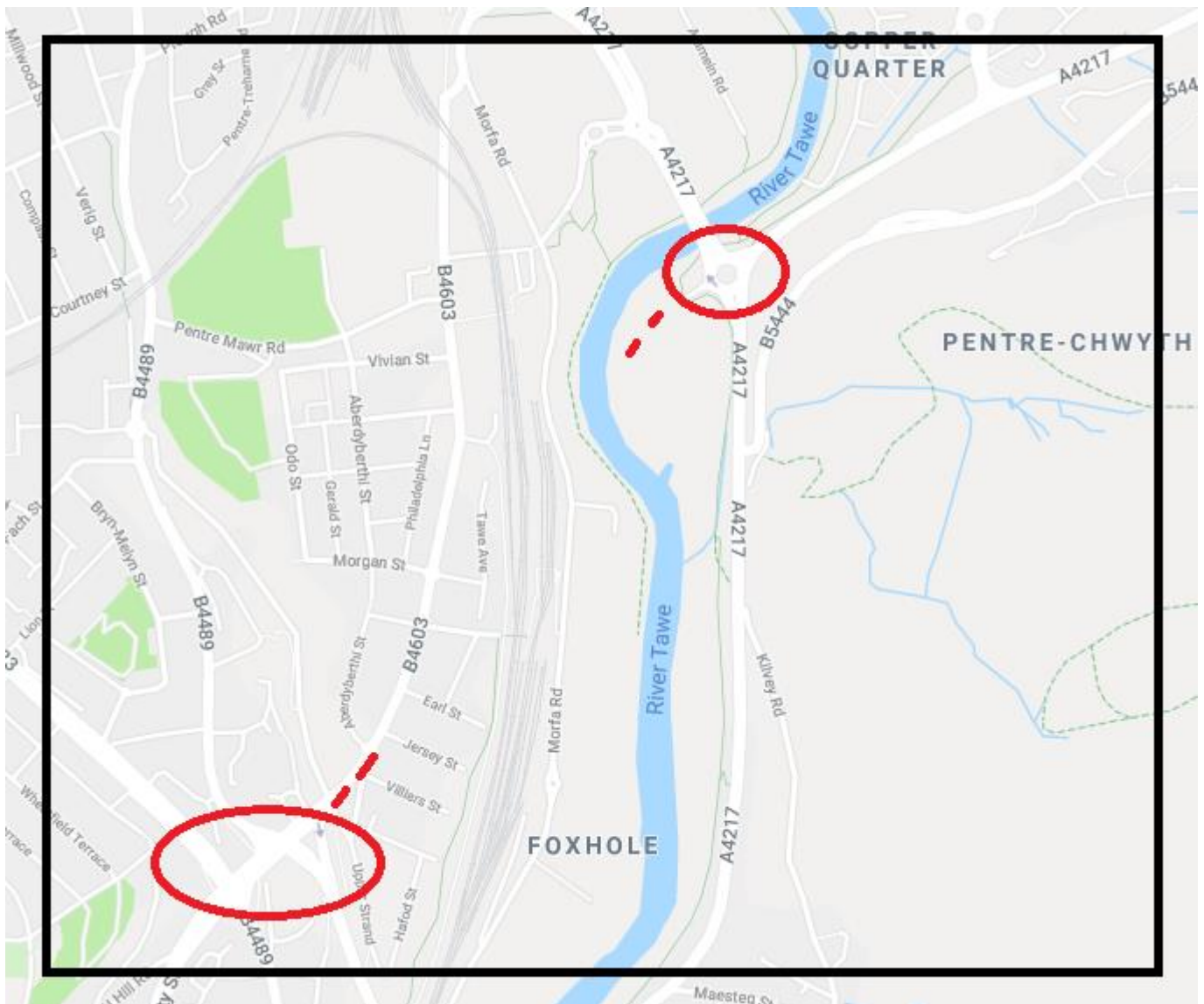
PROJECT C:

A universal learning/lecture hall building is needed for the large number of lectures to be undertaken during term time. The estimation is that 10 classrooms for 30 students and 4 lecture theatres for 80 students are required. Additionally, there is the need for including one lecture theatre for 300 people. The proposal should include all facilities for this activity, such as an entrance hall and reception, toilets, storing and printing room and central open meeting areas. Consideration should be given to specific acoustic requirements for each room. Consideration should be given to the possibility of the renting out of these spaces for conferences/seminars outside term times.

PROJECTS – CIVIL ENGINEERING COHORT

CHOOSE ONE OF THE FOLLOWING PROJECTS:

PROJECT A:



With reference to the trace given in Figure 1 above, the proposal is to build a road to join the two intersections circled. You are required to propose a bridge solution to cross River Tawe at a suitable location. Besides this, other considerations should be made, as you need to cross the railway line. Different solutions could be valid (e.g. tunnelling or flying bridge?) but you need to justify your final decision comparing aspects such as complexity of technical solutions, costing and environmental impact.

PROJECT B:

To meet the desired access requirements of the pedestrian traffic anticipated within the new development, your company is required to provide road access at the Langdon road roundabout (adjacent to Beacon Health Centre) to the Prince of Wales Dock, and a pedestrian foot bridge crossing this dock from the plot site A14B to the plot B5. This bridge should be innovative in aesthetic, having a design linked to the industrial heritage of the city.

It is also required that this footbridge is illuminated at nightfall. You are also required to provide walkway-linked moorings for the berthing of 60 motor boats on the eastern side of this bridge, within the Prince of Wales dock.

PROJECT C:

To meet the desired access requirements of the pedestrian traffic anticipated within the new development, your company is required to provide road access in to the SA1 development from an access point in the vicinity of Wern Terrace from Fabian's Way (A438) to the point of the dock crossing at Roberts road. The route chosen must consider best access, capacity of traffic, disruption to local business in the retail park on the eastern end of Langdon road and traffic control points. Access must be provided to the anticipated multi-storey vehicle parking site at Plot F. You are also tasked with replacing the lock gates adjacent to plot C6, which have fallen into disrepair, to allow access for motor boats into the Prince of Wales dock from the main river mouth. These gates should replicate those found in Swansea's Marina.

All relevant aspects of a feasibility study should be considered, written work should be supported by: photographs, drawings/sketches and specifications, together with a scale **or** virtual model of the proposed building / structure.

Where group meetings, or meetings with the University's appointed personnel, have taken place, minutes should be taken for inclusion in to the final submission. The group will be asked to meet the Client regularly to update Project progress. **Dates for these meetings will be communicated to the group by the Client.**

The completed project will be presented to members of the academic staff via power point presentation viva, all members of the group participating equally.

NOTE: All members of the group will be individually assessed.

The final written submission is to be presented in a lever arch (or similar) file(s), with the name and role of each member clearly identified alongside work submitted, and summarised on a front sheet.

NOTE : Be aware that the Client may issue variations to the requirements for the project at any stage.

Individual Assessment

You will be required to present an individual report following submission of the Project Lever Arch file (s) **evaluating your own performance (with possible improvement) and (anonymously) the performance of other group members.**

Assessment dates:

An Interim Viva in January 2020 (10%)

Written Course work submitted within the project file on 22nd April 2020 (65%)

Final Viva presentation with contribution from all group members in May 2020 (25%)

(Final dates for the Viva Presentations to be confirmed)

GUIDANCE FOR STUDENTS IN THE COMPLETION OF TASKS

NOTE: The guidance offered below is linked to the five generic assessment criteria overleaf.

1. Engagement with Literature Skills

Your work must be informed and supported by scholarly material that is *relevant* to and *focused* on the task(s) set; you should make use of scholarly reviews and primary sources, where appropriate (for example, refereed research articles and/or original materials appropriate to the discipline). You should provide evidence that you have accessed a wide *range* of sources, which may be academic, governmental and industrial; these sources may include academic journal articles, textbooks, current news articles, organisational documents, and websites. You should consider the *credibility* of your sources; academic journals are normally highly credible sources while websites require careful consideration/selection and should be used sparingly. Any sources you use should be current and up-to-date, mostly published within the last five years or so, though seminal/important works in the field may be older. You must provide *evidence* of your research/own reading throughout your work, using a suitable referencing system, including in-text citations in the main body of your work and a reference list at the end of your work.

Guidance specific to this assessment:

2. Knowledge and Understanding Skills

At level 6, you should be able to demonstrate coherent and detailed knowledge and a systematic understanding of the subject area, at least some of which is informed by the latest research and/or advanced scholarship within the discipline. You should be aware of the uncertainty, ambiguity and limits of knowledge. Your work must demonstrate the growing extent of your knowledge and systematic understanding of concepts and underlying principles associated with the subject area. *Knowledge* relates to the facts, information and skills you have acquired through your learning. You demonstrate your *understanding* by interpreting the meaning of the facts and information (knowledge). This means that you need to select and include in your work the concepts, techniques, models, theories, etc. appropriate to the task(s) set. You should be able to explain the theories, concepts, etc. meaningfully to show your understanding. Your mark/grade will also depend upon the *extent* to which you demonstrate your knowledge and understanding; ideally each should be complete and detailed, with comprehensive coverage.

Guidance specific to this assessment:

3. Cognitive and Intellectual Skills

You should be able to: critically evaluate evidence, arguments, assumptions, abstract concepts and data some of which are at the forefront of a discipline (and that may be incomplete) to devise and sustain arguments, to make judgements and/or solve problems; describe and comment upon particular aspects of current research, or equivalent advanced scholarship, in the discipline. Your work must contain evidence of logical, analytical thinking, evaluation and synthesis. For example, to examine and break information down into parts, make inferences, compile, compare and contrast information. This means not just describing what! But also justifying: Why? How? When? Who? Where? At what cost? At all times, you must provide justification for your arguments and judgements. Evidence that you have reflected upon the ideas of others within the subject area is crucial to you providing a reasoned and informed debate within your work. Furthermore, you should provide evidence that you are able to make sound judgements and convincing arguments using data and concepts. Sound, valid conclusions are necessary and must be derived from the content of your work. Where relevant, alternative solutions and recommendations may be proposed.

Guidance specific to this assessment:

4. Practical Skills

At level 6, you should be able to apply the methods and techniques that you have learned to review, consolidate, extend and apply your knowledge and understanding, and to initiate and carry out projects. You

will deploy accurately established techniques of analysis and enquiry relevant to the discipline, and apply them in complex and unpredictable contexts, to devise and sustain arguments and/or to solve problems. You should be able to frame appropriate questions to achieve a solution - or identify a range of solutions. You should be able to demonstrate how the subject-related concepts and ideas relate to real world situations and/or a particular context. How do they work in practice? You will deploy models, methods, techniques, and/or theories, in that context or circumstances, to assess current situations, perhaps to formulate plans or solutions to solve problems, or to create artefacts, some of which may be innovative and creative. This is likely to involve, for instance, the use of real world artefacts, examples and cases, the application of a model within an organisation and/or benchmarking one theory or organisation against others based on stated criteria. You should show awareness of the limitations of concepts and theories when applied in particular contexts.

Guidance specific to this assessment:

5. Transferable Skills for Life and Professional Practice

Your work must provide evidence of the qualities and transferable skills necessary for graduate-level employment requiring the exercise of initiative and personal responsibility and decision-making in complex and unpredictable circumstances. This includes demonstrating: the learning ability for professional development to advance existing skills and acquire new competences of a professional nature that will enable you to assume significant responsibility within organisations; that you can initiate and complete tasks and procedures, whether individually and/or collaboratively; that you can use appropriate media to effectively communicate information, arguments and analysis in a variety of forms to specialist and non-specialist audiences; fluency of expression; clarity and effectiveness in presentation and organisation. Work should be coherent and well-structured in presentation and organisation.

Guidance specific to this assessment:

Your submission must contain / demonstrate:

- Content is succinct with relevant information, fully detailed and referenced.
- Logical and coherent structure;
- Clear understanding of key issues and concerns
- Collaborative working.

STUDENT FEEDBACK FORM

This section details the *extent* to which the assessment criteria are demonstrated by you, which in turn determines your mark. The marks available for each category of skill are shown. Lecturers will use the space provided to comment on the achievement of the task(s), including those areas in which you have performed well and areas that would benefit from development/improvement.

Generic Assessment Criteria	Marks available	Marks awarded
1. Engagement with Literature Skills	10	
2. Knowledge and Understanding Skills	20	
3. Cognitive and Intellectual Skills	30	
4. Practical Application Skills	25	
5. Transferable Skills for Life and Professional Practice	15	

Assessment Mark (Assessment marks are subject to ratification at the Exam Board. These comments and marks are to give feedback on module work and are for guidance only until they are confirmed.)	Late Submission Penalties (tick if appropriate)		%
	Up to 1 week late (40% Max)		
	Over 1 week late (0%)		

GENERIC ASSESSMENT CRITERIA

Level 6

In accordance with the Framework for Higher Education Qualifications, at the end of Level 6 students should have coherent and detailed knowledge and a systematic understanding of their subject area, at least some of which is informed by the latest research and/or advanced scholarship within the discipline. They will be able to accurately deploy established techniques of analysis and enquiry within a discipline, using their conceptual understanding to devise and sustain arguments and/or to solve problems. They should be aware of the uncertainty, ambiguity and limits of knowledge. They should be able to critically evaluate evidence, arguments, assumptions, abstract concepts and data (that may be incomplete), to make judgements, and to frame appropriate questions to achieve a solution - or identify a range of solutions. They will apply the methods and techniques that they have learned to review, consolidate, extend and apply their knowledge and understanding, and to initiate and carry out projects. They will have the ability to manage their own learning, and to make use of scholarly reviews and primary sources (for example, refereed research articles and/or original materials appropriate to the discipline). They will demonstrate the qualities and transferable skills necessary for employment requiring: the exercise of initiative and personal responsibility; decision-making in complex and unpredictable contexts; the learning ability needed to undertake appropriate further training of a professional or equivalent nature.

Level 6	FAIL	MARGINAL FAIL	SATISFACTORY (3 rd / Pass)	GOOD (2.2 / Pass)	VERY GOOD (2.1 / Merit)	EXCELLENT (1 st / Distinction)	EXCEPTIONAL (1 st / Distinction)
Category	0-29%	30-39%	40-49%	50-59%	60-69%	70-84%	85-100%
Engagement with literature (including reading, referencing, academic conventions and academic honesty)	Little or no evidence of reading and/or reliance on inappropriate sources. Views and findings mostly unsupported and non-authoritative. Referencing conventions used incoherently or largely absent.	Poor engagement with essential reading. No evidence of wider reading. Reliance on inappropriate sources, and/or indiscriminate use of sources. Heavily reliant on information gained through class contact. Inconsistent and weak use of referencing.	Engagement with a limited range of mostly relevant and credible sources. Some omissions and minor errors. Referencing conventions evident though not always applied accurately or consistently.	Engagement with an appropriate range of research-informed literature, including sources retrieved independently. Some over-reliance on texts. Referencing may show minor inaccuracies or inconsistencies.	Engagement with a wide range of research-informed literature, including sources retrieved independently. Selection of relevant and credible sources. Very good use of referencing, with no/very few inaccuracies or inconsistencies.	Engagement with an extensive range of relevant and credible literature, informed by the latest research. Consistently accurate application of referencing.	Exceptional engagement with an extensive range of relevant and credible literature, informed by the latest research. High-level referencing skills consistently and professionally applied.
Knowledge and understanding (Coherent and detailed knowledge and	Major gaps in knowledge and systematic understanding of the subject matter.	Gaps in knowledge, with only superficial systematic understanding. Some significant	Limited knowledge and systematic understanding of the relevant concepts and	Knowledge is reasonably detailed, accurate with a good systematic understanding of	Knowledge is reasonably extensive coherent and detailed. Exhibits very	Excellent coherent and detailed knowledge and systematic understanding of	Exceptionally coherent and detailed knowledge and systematic understanding of

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systematic understanding of the subject area, at least some of which is informed by the latest research and/or advanced scholarship within the discipline.)	Substantial inaccuracies. No awareness of knowledge of the latest research and/or advanced scholarship within the discipline.	inaccuracies and/or irrelevant material. No awareness of knowledge of the latest research and/or advanced scholarship within the discipline.	principles within the subject area which to some limited extent, is informed by current research and scholarship.	the field of study and to some extent, current research and scholarship.	good understanding of the breadth and depth of established views, and the work is, at least in part, well-informed by current research and scholarship.	the principles and theories of current research and scholarship. Clear awareness of challenges to established views and the limitations of the knowledge base.	the principles and theories of the subject, well-informed by current research and scholarship. A critical, sophisticated and nuanced awareness of the ambiguities and limitations of knowledge.
Cognitive and intellectual skills (Conceptual and critical thinking, analysis, synthesis and evaluation of research, assumptions, abstract concepts and data (that may be incomplete); logic, argument and judgement.)	Wholly or almost wholly descriptive work. Little or no analysis, synthesis or evaluation. Failure to develop arguments, leading to illogical or invalid judgements. Unsubstantiated generalisations, made without use of any credible evidence.	Largely descriptive work, with superficial use of critical evaluation. Weak development of arguments and judgements. Information accepted uncritically, uses generalised statements made with scant evidence and unsubstantiated opinions. Ideas sometimes illogical and contradictory.	Limited attempt at critical thinking, analysis, synthesis and evaluation, tending towards description. Some evidence to support emerging arguments and judgements but these may be underdeveloped or with a little inconsistency / mis-interpretation. Asserts rather than argues a case.	Some critical thinking, analysis, synthesis and evaluation. Can analyse new and/or abstract concepts and data without guidance. An emerging awareness of different stances and ability to use evidence (that may be incomplete) to support the argument. Mostly valid arguments and logical judgements. Some tendency to assert/state opinion rather than argue on the basis of	Sound critical thinking, analysis, synthesis and evaluation demonstrating critical thinking. Ability to devise and sustain persuasive arguments, and to review the reliability, validity and significance of evidence (that may be incomplete) to make mostly appropriate and valid judgements.	Excellent critical thinking, analysis, synthesis and evaluation. Ability to investigate contradictory or incomplete information and make strong, persuasive, arguments and sophisticated judgements. Some evidence of independent thought and ability to 'see beyond the question', suggesting a grasp of the broader field and wider concepts.	Exceptional critical thinking, analysis, synthesis and evaluation based on judiciously selected evidence. Ability to investigate contradictory or incomplete information and make strong, persuasive, arguments and sophisticated, nuanced, judgements. Evidence of independent thought and ability to 'see beyond the question', suggesting an outstanding grasp of the

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Category	0-29%	30-39%	40-49%	50-59%	60-69%	70-84%	85-100%
				reason and evidence.			broader field and wider concepts.
Practical skills (Apply/deploy accurately established tools and techniques; initiate and carry out projects; formulate solutions to solve problems in complex and unpredictable contexts.)	Limited or no use of methods, materials, tools and/or techniques. Little or no appreciation of the context of the application. Limited understanding of the application of theory to practice or making appropriate links between the two. Very weak problem-solving skills in complex and unpredictable contexts.	Rudimentary application of methods, materials, tools and/or techniques but without consideration and competence. Flawed appreciation of the context of the application. Weak understanding of the application of theory to practice, with only occasional evidence of making appropriate links between the two. Weak problem-solving skills in complex and unpredictable contexts.	An adequate awareness and mostly appropriate application of well-established methods, materials, tools and/or techniques. Basic appreciation of the context of the application. Theoretical knowledge and understanding applied in practice, but not always making logical links between the two. Can identify problems and propose basic solutions in complex and unpredictable contexts without fully appreciating the complexity.	A good and appropriate application of standard methods, materials, tools and/or techniques. Clear appreciation of the context of the application. Mainly consistent, accurate and logical application of theory to practice, making appropriate links between the two. Can identify problems and propose mostly appropriate solutions in complex and unpredictable contexts.	A very good application of a range of methods, materials, tools and/or techniques. Very good consideration of the context of the application, with perceptive insights. Can identify problems and propose appropriate solutions in complex and unpredictable contexts. Evidence of some innovation and creativity.	An advanced application of a range of methods, materials, tools and/or techniques. The context of the application is well considered, and insightful. Application and deployment extend beyond established conventions. Can identify complex problems and propose excellent solutions. Innovation and creativity evident.	Exceptional levels of application and deployment skills in unpredictable, practical contexts, drawing skilfully on the latest research within the discipline. Can identify complex problems and propose sophisticated solutions. Assimilation and development of cutting edge processes and techniques.
Transferable skills for life and professional practice (Exercise of initiative and personal	Communication medium is inappropriate or misapplied. Work is poorly structured, disorganised and/or	Communication medium is poorly designed and/or not suitable for the audience. Work is poorly presented in a disjointed	Can communicate in a suitable medium but with some room for improvement. Mostly ordered presentation and	Can communicate effectively in a suitable format, but may have minor errors. Mostly coherent, organised work,	Can communicate well, confidently and consistently in a suitable format. Work is coherent, fluent,	Can communicate professionally confidently and consistently in a suitable format. Work is coherent, very	Can communicate with an exceptionally high level of professionalism. Work is exceptionally

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responsibility; professional development; initiate and complete tasks and procedures: individually and/or collaboratively; use appropriate media to communicate effectively; fluency of expression; clarity and effectiveness in presentation and organisation.)	confusingly expressed. Very weak use of language and/or very inappropriate style. Little or no evidence of autonomy (or collaboration, where relevant) in the completion of tasks. Little or no evidence of the skills required in graduate employment.	manner. It is loosely, and at times incoherently, structured, with information and ideas often poorly expressed. Weak use of language and/or inappropriate style. Weak independent initiative (or collaboration, if relevant). Limited evidence of the skills required in graduate employment.	structure in which relevant ideas / concepts are reasonably expressed. Work may lack coherence in places. Can work as part of a team, but with limited involvement in group activities. Demonstrates the basic skills required in graduate employment, with some areas of minor weakness.	in a suitable structure and is for the most part clearly expressed. Can work effectively independently and/or as part of a team, with clear contribution to group activities. Demonstrates the skills required in graduate employment, with some areas of strength and some of minor weakness.	well-structured and organised. Can work very well autonomously and/or as part of a team, with very good contribution to group activities. Demonstrates very good graduate employment skills, with just occasional minor weakness.	fluent and is presented professionally. Can work autonomously with initiative. Where relevant can work professionally within a team, showing leadership skills as appropriate, managing conflict and meeting obligations. Demonstrates excellent graduate employment skills and an appetite for further development.	coherent, very fluent and is presented professionally. Can work exceptionally well and professionally within a team, showing advanced leadership skills. Demonstrates exceptional graduate employment skills and an appetite for further development.

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