Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

APPENDIX GA36b

LEVEL 5 ASSESSMENT SPECIFICATION

Student name:		**Student ID number:**	
Programme:	**Construction Portfolio**		
Module:	**BIM**		
Module code:	**ACBA5010**	**Contribution to Overall Module Assessment (%):**	**50%**
Lecturer:	**Gavin Traylor**	**Internal Verifier:**	**Ryan Stuckey**
Assignment Title:	**Federated Models (Architectural & Structural)**	**Word count (or equivalent):**	**2,500 words (or equivalent)**
Submission deadline:	**Thursday 6th May**	**Return date of provisional marks & written feedback:**	**Within 20 working days**
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)
• Demonstrate an ability to analyse, classify and produce 2D and 3D drawings using industry-standard CAD software applications. • Demonstrate an ability to render drawings to various scales and media and export drawings to different formats.

TASK DESCRIPTION

Scenario:

Assessment 2 (50%)

You are the lead consultant in charge of delivering a 'state of the art' infant school in Swansea. The project is a joint funded venture with the Welsh Government, under the 21st Century schools programme and is required to meet the standards of BIM level 2.

Prepare a federated concept Model at RIBA stage One for your first Information Exchange with the client. Your federated model shall consist of architectural and structural models that are linked in Revit using shared coordinates.

The design and construction of the school should be inspiring to create a vibrant facility for the pupils. The schedule of accommodation shall be in accordance with BB99.

Digital Submission:

Architectural Model with Architectural drawings:

- Site location plan
- Existing site plan and demolition
- Works plan
- Proposed General arrangement floor plan.
- Proposed Principal elevations
- Proposed Long and Short Section
- Proposed Materials Take off schedule
- Proposed Visualisations

Structural Model with Structural Drawings:

- Foundations Plan
- Primary Structure Plan
- Structural Visualisation

The project **must** include. Project Base point, survey point. True North/ Project North, Room names, Legends, Tags & Annotations, Dimensions, Levels, North Point.

All Drawings must be appropriately scaled at A1 size and presented in the uwtsd BIM titleblock format with the appropriate naming conventions for all sheets and models.

Digital Submission required in RVT and PDF format.

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Assumptions:

Project Number: 5010
Project Title: Ysgol Bae Abertawe
1 form entry infant school for 90 pupils.

The site plan attached, shows the proposed location of the school adjacent to the existing observatory within the residential district south of the Maritime Quarter in Swansea. There are remains of warehouse retaining walls and foundations on the site which are to be removed. The boat shed and sculpture on the site are to be demolished.

The school is to be single storey though the hall space should be double height.

Schedule of accommodation at BB99 opposite.

Each classroom should have access the outside.

Car parking for 5 vehicles including 2 disabled bays

Drop off point for deliveries and minibuses.

Hard surface playground

Soft landscaped playground

pupil places number of classes Forms of Entry (FE) and type			90 pupils 3 classes **1 FE infants**	
	max. group size	average area (m²)	no. of rooms	total area (m²)
basic teaching				
reception class	30	66	[redacted]	[redacted]
infant classbase	30	60	[redacted]	[redacted]
junior classbase	30	60		
specialist practical				
food/science/D&T	8	24	[redacted]	[redacted]
food/science/D&T	8	38		
ICT/ group room: (no. of computers)				
ICT suite: (no. of computers)			[redacted]	[redacted]
halls				
main hall (used for dining)	30		1	125
small hall	30	80		
studio	30	50		
learning resource areas				
Library resource centre	15 to 30		1	[redacted]
small group room (SENco)	5 to 8	12	1	[redacted]
small group rooms	5 to 8	9		
TOTAL TEACHING AREA				403
staff and admin.				
head's office/meeting room			1	[redacted]
senior management offices		8		
staff room				[redacted]
general office			[redacted]	
sick bay (adjacent)		3	1	[redacted]
entrance/reception			1	
copier/reprographics				
SENco/MI/group room		12	1	[redacted]
interview/social services		8		
storage				
class storage (reception)		3		[redacted]
class storage (infant and junior)		1.5		[redacted]
specialist stores		6 or 8		[redacted]
PE store (adjacent to hall)		12		[redacted]
PE store (external)		4	1	4
non-teaching storage				
central stock		8	1	[redacted]
cloakrooms/lunch box storage		3		[redacted]
dining chair/table store (no. of sittings)			[redacted]	[redacted]
staging/appliance store			1	[redacted]
community store		4	1	[redacted]
caretakers /maintenance store			1	
cleaner's store		1.5	2	[redacted]
TOTAL NET AREA				529
recommended net area				**529**
non-net area				
kitchen (full-service)			1	[redacted]
servery				[redacted]
toilets (and personal care)				
reception toilets				[redacted]
other pupil toilets				[redacted]
accessible toilets/hygiene facilities				[redacted]
staff toilets				[redacted]
circulation		net x 23%		122
plant (incl. server)		net x 3%		17
partitions		net x 5%		26
TOTAL GROSS AREA				757
recommended gross area (net at 70% of gross)				**756**

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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 provide evidence that you have accessed an appropriate *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 5, you should be able to demonstrate: sound knowledge and critical understanding of the well-established concepts and principles of the subject area and the way in which those principles have developed; knowledge of the main methods of enquiry in the discipline. *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.

Guidance specific to this assessment:

3. Cognitive and Intellectual Skills

You should be able to critically analyse information, and propose solutions to problems arising from that analysis, including the critical evaluation of the appropriateness of different approaches to solving problems. 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/evidence 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, with an understanding of the limits of knowledge, and how this influences analyses and interpretations. 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 5, you should be able to use/deploy a range of established techniques within the discipline, and apply underlying concepts and principles outside the context in which they were first studied, including, where appropriate, the application of those principles in an employment context. 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, to assess current situations, perhaps to formulate plans or solutions to solve problems, or to create artefacts,

some of which may be 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: *This will be assessed via the scenario and how your knowledge has been applied.*

5. Transferable Skills for Life and Professional Practice

Your work must provide evidence of the qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and decision-making. This includes demonstrating: professional development to advance existing skills and acquire new competences 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:

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		
2. Knowledge and Understanding Skills		
3. Cognitive and Intellectual Skills		
4. Practical Application Skills		
	100	
5. Transferable Skills for Life and Professional Practice		

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 5

In accordance with the Framework for Higher Education Qualifications, at the end of Level 5 students will be expected to have developed sound knowledge and critical understanding of the well-established concepts and principles in their field of study, and of the way in which those principles have developed. They will have learned to apply those concepts and principles more widely outside the context in which they were first studied, including, where appropriate, the application of those principles in an employment context. They will have knowledge of the main methods of enquiry in the subject area, and ability to evaluate critically different approaches to problem solving. They will possess an understanding of the limits of their knowledge, and how this influences their analyses and interpretations. They will be able to use a range of established techniques to initiate and undertake critical analysis of information, and to propose solutions to problems arising from that analysis. They will be able to effectively communicate information, arguments and analysis in a variety of forms to specialist and non-specialist audiences, and deploy key techniques of the discipline effectively. They will be able to undertake further training, develop existing skills and acquire new competences that will enable them to assume significant responsibility within organisations. They will have the qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and decision-making.

Level 5	**FAIL**	**MARGINAL FAIL**	**SATISFACTORY (3rd / Pass)**	**GOOD (2.2 / Pass)**	**VERY GOOD (2.1 / Merit)**	**EXCELLENT (1st / Distinction)**	**EXCEPTIONAL (1st / 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 literature, including sources retrieved independently. Some over-reliance on texts. Referencing may show minor inaccuracies or inconsistencies.	Engagement with a wide range of 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. Consistently accurate application of referencing.	Exceptional engagement with an extensive range of relevant and credible literature. High-level referencing skills consistently applied.
Knowledge and understanding (Sound knowledge and	Major gaps in knowledge with unsatisfactory, uncritical understanding of	Fragmentary knowledge, with only superficial critical understanding.	Limited but adequate knowledge and critical understanding of	Knowledge is reasonably detailed and accurate. A good critical	Knowledge is reasonably extensive. Exhibits very competent	Excellent, detailed knowledge and highly critical understanding of	Exceptionally detailed knowledge and outstanding critical

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critical understanding of the well-established concepts and principles in their field of study; knowledge of the main methods of enquiry in the discipline.)	the subject matter. Much irrelevant material. Substantial inaccuracies. Significantly flawed understanding of the main methods of enquiry in the discipline.	Some significant inaccuracies and/or irrelevant material. Incomplete or partially flawed understanding of the main methods of enquiry in the discipline.	the well-established concepts and principles within the subject area, with a few gaps in the selection of material. A narrow critical understanding of the main methods of enquiry.	understanding of the well-established concepts and principles and the main methods of enquiry, with minor gaps in the selection of material.	critical understanding of the well-established concepts and principles of the subject and the main methods of enquiry. Breadth and depth of knowledge.	the well-established concepts and principles of the subject and the main methods of enquiry.	understanding of the well-established concepts and principles of the subject and the main methods of enquiry. May go beyond established theories.
Cognitive and intellectual skills (Critical evaluation and analysis of concepts and principles; argument and judgement**;** the limits of their knowledge, and how this influences their analyses and interpretations.)	Wholly or almost wholly descriptive work. Little or no critical evaluation and analysis of concepts and principles. Failure to develop arguments, leading to illogical or invalid judgements. Unsubstantiated generalisations or opinion, made without use of any credible evidence.	Largely descriptive work, with superficial use of critical evaluation and analysis of concepts and principles. 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 evaluation and analysis of concepts and principles, tending towards description. Some evidence to support arguments and judgements but these may be underdeveloped, with a little inconsistency / mis-interpretation or failure to fully recognise limits of knowledge.	Some critical evaluation and analysis of concepts and principles, though descriptive in parts. An emerging awareness the limits of their knowledge and ability to use evidence to support the argument though with some tendency to assert/state opinion rather than argue on the basis of reason and evidence. Mostly valid arguments and logical judgements.	Sound critical evaluation and analysis of concepts. Is selective in the range of evidence used and synthesises rather than describes. Ability to devise arguments that show awareness of different stances, and use evidence convincingly, to support appropriate and valid judgements.	Excellent critical evaluation and analysis of concepts and principles leading to logical, evidence-based, reasoned arguments and judgements. Explicit recognition of other stances and a strong awareness of the limits of their knowledge. A capacity for independent thought and ability to 'see beyond the question', suggesting some grasp of the broader field and wider concepts.	Outstanding critical evaluation and analysis of concepts and principles. Uses evidence exceptionally well to connect ideas, and support highly logical and persuasive, arguments and judgements. Evidence of independent thought and ability to 'see beyond the question', suggesting a clear grasp of the broader field and wider concepts. Perceptive recognition of

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							the limits of their knowledge, and how this influences their analyses and interpretations.
Practical skills (Apply underlying concepts and principles more widely outside the context in which they were first studied; use a range of established techniques; propose solutions to problems arising from analysis.)	Limited or no use of established 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 outside the context in which they were first studied.	Rudimentary application of established 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 outside the context in which they were first studied.	An adequate awareness and mostly appropriate application of 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 outside the context in which they were first studied.	A good and appropriate application of established 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 outside the context in which they were first studied.	A very good application of a range of established methods, materials, tools and/or techniques. Very good consideration of the context of the application, with perceptive insights. Consistent, accurate and logical application of theory to practice, making appropriate links between the two. Can identify problems and propose appropriate solutions outside the context in which they were first studied. Evidence of some creativity.	An advanced application of a range of established methods, materials, tools and/or techniques. The context of the application is well considered, and insightful. Consistent, accurate and logical application of theory to practice, making well-developed links between the two. Can identify problems and propose excellent, creative solutions outside the context in which they were first studied.	Exceptional levels of application and deployment skills using established methods, materials, tools and/or techniques. Consistent, accurate and logical application of theory to practice, making highly developed links between the two. Can identify routine and non-routine problems and propose quite sophisticated, creative solutions outside the context in which they were first studied.
Transferable skills for life	Communication medium is	Communication medium is poorly	Can communicate in	Can communicate	Can communicate	Can communicate	Can communicate

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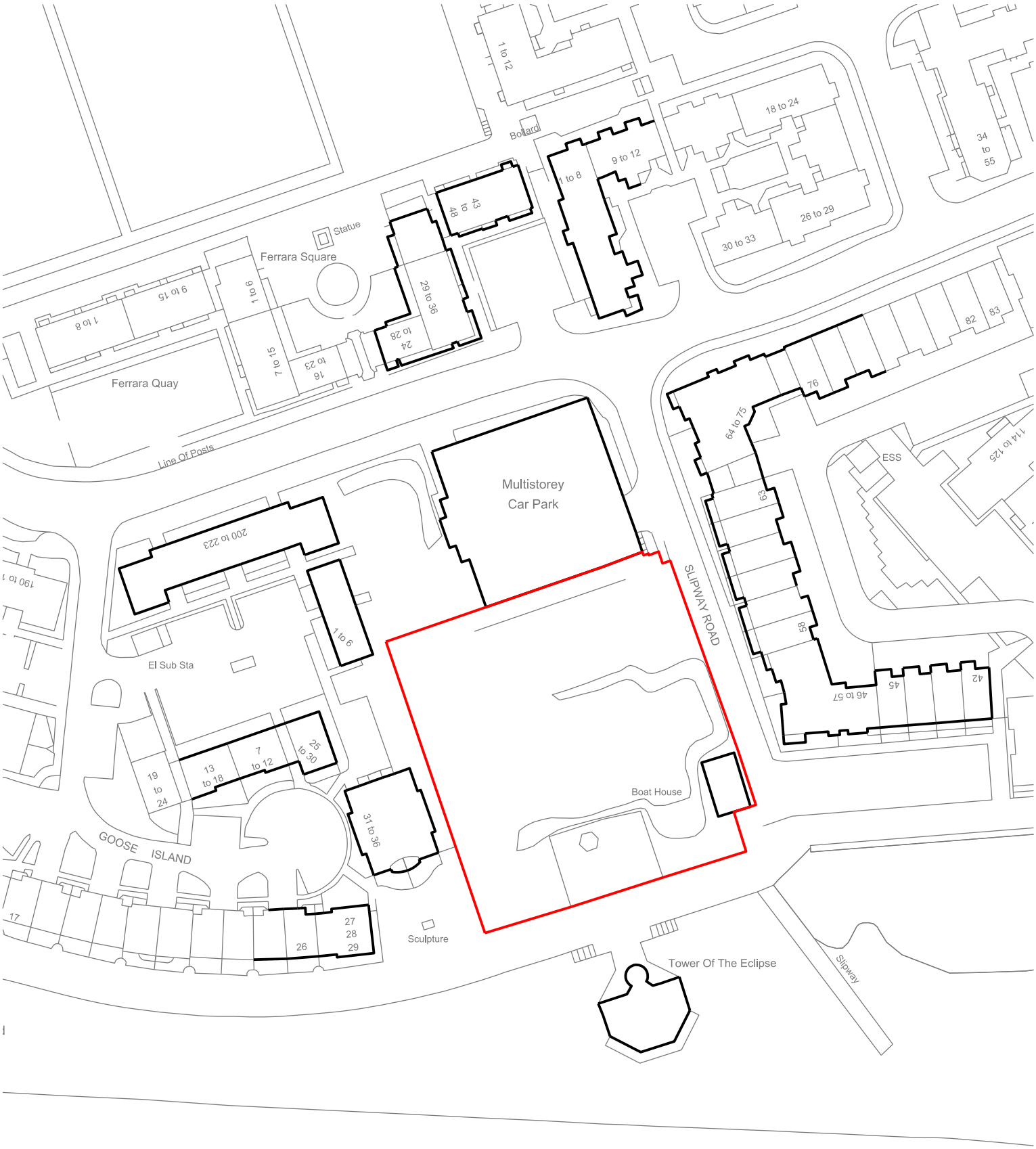
and professional practice (Effectively communicate in a variety of forms to specialist and non-specialist audiences; the qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and decision-making.)	inappropriate or misapplied. Work is poorly structured, disorganised and/or confusingly expressed. Very weak use of language and/or very inappropriate style. Failure to work effectively as part of a group. Little or no evidence of the skills for employment requiring the exercise of personal responsibility and decision-making.	designed and/or not suitable for the audience. Work is poorly presented in a disjointed manner. It is loosely, and at times incoherently, structured, with information and ideas often poorly expressed. Weak use of language and/or inappropriate style. Flawed approach to group work, meeting only partial obligations to others. Limited evidence of the skills for employment requiring the exercise of personal responsibility and decision-making.	a suitable medium for the audience but with some room for improvement. Mostly ordered presentation and structure in which relevant ideas / concepts are reasonably expressed. Work may lack coherence in places. Can work as part of a group, meeting most obligations to others but perhaps with limited involvement in group activities. Demonstrates the basic skills for employment requiring the exercise of personal responsibility and decision-making, with some areas of minor weakness.	effectively in a suitable medium for the audience, but may have minor errors. Mostly coherent, organised work, 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 for employment requiring the exercise of personal responsibility and decision-making, with some areas of strength and some of minor weakness.	well, confidently and consistently in a suitable medium for the audience. Work is coherent, fluent, 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 skills for employment requiring the exercise of personal responsibility and decision-making, with just occasional minor weakness.	professionally confidently and consistently in a suitable medium for the audience. Work is coherent, very fluent and is presented proficiently. Can work autonomously with initiative. Where relevant can work professionally within a team, showing leadership skills as appropriate, and meeting obligations. Demonstrates excellent skills for employment requiring the exercise of personal responsibility and decision-making and an appetite for further development.	with an exceptionally high level of professionalism, highly suitable for the audience. Work is exceptionally coherent, very fluent and is presented professionally. Can work exceptionally well within a team, showing leadership skills. Demonstrates exceptional skills for employment requiring the exercise of personal responsibility and decision-making and an appetite for further development.

THIS DOCUMENT IS ALSO AVAILABLE IN WELSH


1 to 12
Bollard
18 to 24
34 to 55
9 to 12
1 to 8
43 to 48
Statue
Ferrara Square
26 to 29
30 to 33
9 to 15
1 to 8
1 to 6
29 to 36
24 to 28
7 to 15
16 to 23
Ferrara Quay
82
83
76
64 to 75
Line Of Posts
ESS
114 to 125
Multistorey Car Park
63
200 to 223
190 to
SLIPWAY ROAD
1 to 6
58
El Sub Sta
46 to 57
45
42
25 to 30
7 to 12
13 to 18
19 to 24
Boat House
31 to 36
GOOSE ISLAND
17
27
28
29
26
Sculpture
Tower Of The Eclipse
Slipway