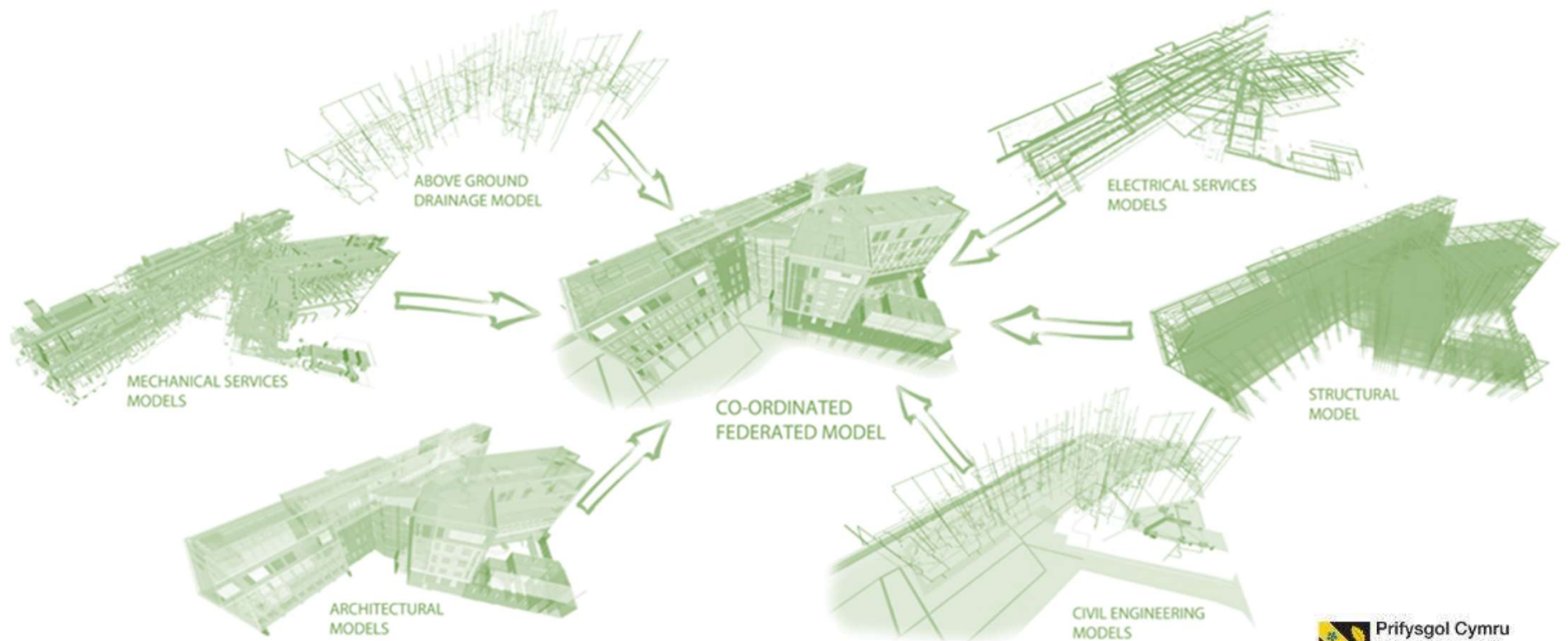


Building Information Modelling



www.onecreativeenvironment.com

Exercise 3

Malibu beach house 2 storey, plus roof terrace

Set up your levels in Elevation view.

Distance between levels of 2700mm

Assumptions.

Concrete finish to the external walls – all other material your choice.

Framed structure with columns at 5m centres and 4m centres

Curved staircase

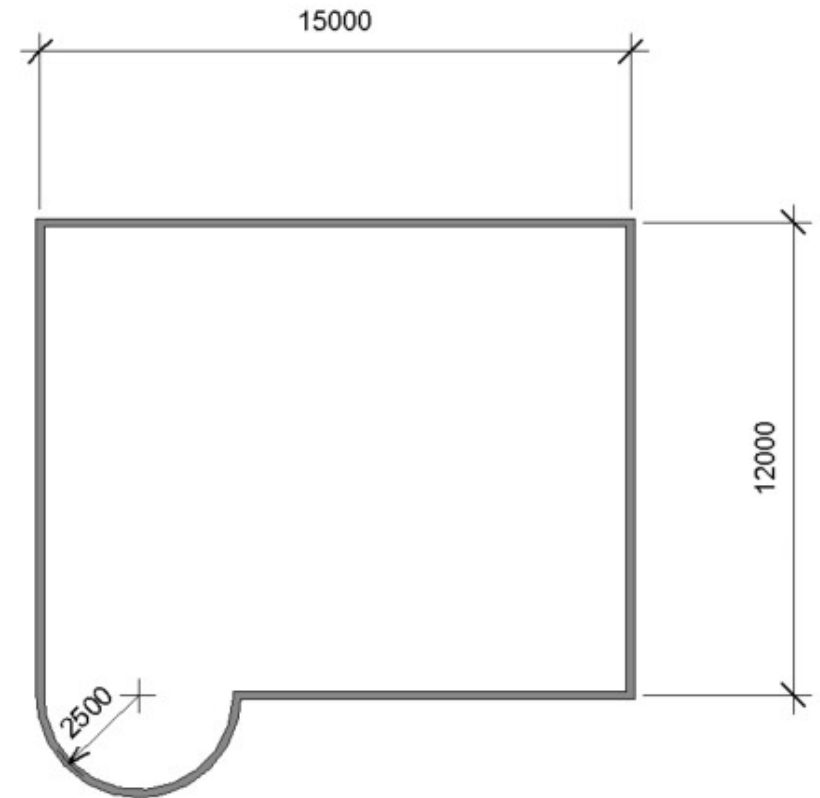
Curtain walling to southern view

GF: open plan living area, hall, kitchen / dining / WC

FF: 2 bedrooms with ensuite facilities

Roof: sun deck, wc / shower

Apply, room names, legends, grids. create plans, section and elevation views. 3D views.



Moodle - Reading List

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

Dashboard My modules Moodle archives Useful links

Announcements
Online reading List
Assessment Specification 2...
Turnitin Links

Building Information Modelling (ACBA5016)

Course More

 You are viewing this course currently with the role: **Student**
Return to my normal role

 Announcements
 Online reading List

 Assessment Specification 2024-25
 Turnitin Links

BIM (ACBA 5016)

Published Multiple List info

+ Add Manage sections Filter Search Expanded view

Essential reading (9)
Material which is an essential part of the course and students are expected to draw on as a core part of their learning. Must be available from the library and should be available online.

- ☐  **CIS (Construction Information Service) [electronic resource].**
Database | IHS, Total pages Database
Note: Link to the Construction Information Service where you can access the ISO Standards for BIM
Essential
View online
- ☐  **BIM handbook : a guide to building information modeling for owners, managers designers, engineers, an...**
Book | Eastman, Charles M., 2nd ed., Chichester.; Hoboken, N.J. : Wiley, 2011., Total pages xiv, 626 p. :
Essential
View online Available at Swansea Campus Y Fforwm Library Main Collection: 690.028 BIM
- ☐  **Little Book of BIM 2020**
Website | BSI, BSi, 2020
Note: British Standard Institution - Guide to BIM documentation. Essential for all students
Essential
View online
- ☐  **NBS BIM Library**
Website | NBS, NBS, NA
Note: NBS BIM Library of BIM Objects
Essential
View online

Suggested Reading List

Francis Ching (2015) *Architectural Graphics*

BSi (2019) *The Little Book of BIM*

BSi (2019) *Introduction to the New International Standard ISO 19650*

Eastman C, Teicholz P, Sacks R and Liston K (2011)
BIM Handbook: A Guide to BIM for Owners, Managers, Designers, Engineers & Contractors. Hoboken: John Wiley & Sons Inc.

Mordue S Swaddle P and Philp D (2015). *Building Information Modelling for Dummies*. Chichester: John Wiley & Sons Ltd.

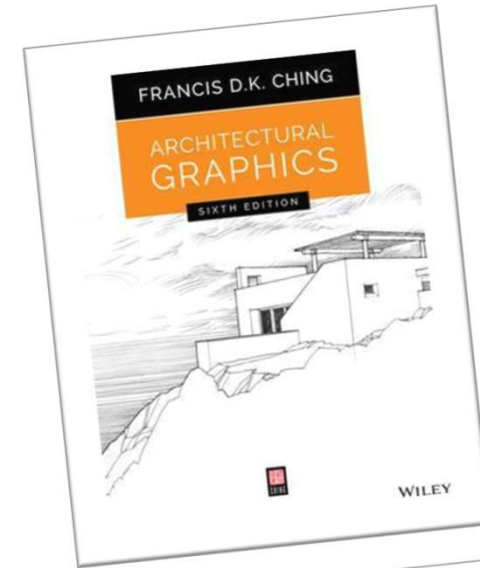
NBS National BIM Library

The BIM HUB: BIM Journal

<https://academy.autodesk.com/>

Revit Tutorials - Youtube.

<https://bimblog.house/> Dan Rossiter (BSi)



Key BIM Standards, ISO and PAS – refer to 'Little Book of BIM' guide

Assessment 1

Submission
deadline:

14th January 2025

Scenario:

You have been commissioned by Merthyr County Council as lead consultant in the of delivery of a 'state of the art' Welsh medium infant school and adjoining community hall. The project is a joint funded venture with the Welsh Government, under the Sustainable Communities for Learning Programme and is required to meet the appropriate standard of BIM maturity.

Merthyr County Council has asked you to outline measures that will be taken to show the competency of the project team in reaching the BIM Maturity requirements.

They have expressed a need for whole life monitoring of the asset through a COBie compatible CAFM system and access to the virtual federated model in Revizto. The client requires you to demonstrate how you will deliver the Level of Information need for the project throughout the RIBA Stages. They currently operate a method of LOI and LOD for all capital projects.

(Set up a company name, business address, company details and imagined employers and consultant partners).

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		
	25	
3. Cognitive and Intellectual Skills		
	25	
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 (if appropriate)	%
	Up to 1 week late (40% Max)	
	Over 1 week late (0%)	

Assessment 1 cont..

Submission
deadline:

14th January 2025

Assessment 1 (50%) 2500 words

Draft a letter to the client that highlights your understanding of the requirements of BIM maturity for this school project. Given the client requirements of the CAFM system and Revizto platform, provide details on how information will be shared, coordinated and managed through the appropriate international standards and the use of a BEP. *(Suggested 1000 words)*

Appended to your letter, explain the client's method of **level of information need** and provide researched examples that demonstrate this at different stages of a project in line with the RIBA Plan of Works. Make recommendations to the client so that can be conveyed in the EIR & AIR. (1500 words)

Digital Submission:

Letter to the client with appended Level of Information Need examples.

Appropriate naming conventions should be applied

Assumptions:

Project Number: 5016

Project Title: Ysgol Clasdir

Description: 1 form entry infant school for 90 pupils, with 48 PT Nursery provision, and Ty Joseph Parry Community Hall

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		
	25	
3. Cognitive and Intellectual Skills		
	25	
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 (if appropriate)	%
	Up to 1 week late (40% loss)	
	Over 1 week late (0%)	

Guidance specific to this assessment: Where techniques are suggested make reference to the sources such as the BIM ISO Standards and Good Practice. Use sources such as the CIS and BSI.

Guidance specific to this assessment: Demonstrate your understanding of the process and application. This will be assessed by the depth and awareness of a professional context within this scenario.

Guidance specific to this assessment: Demonstrate your knowledge and skills regarding BIM and the Production of a BEP, and present the work in a coherent and professional manner.

Guidance specific to this assessment: This will be assessed via the scenario and how your knowledge has been applied.

Guidance specific to this assessment: The letter and appended information should be presented in a professional manner with all work clearly labelled and cross-referenced.

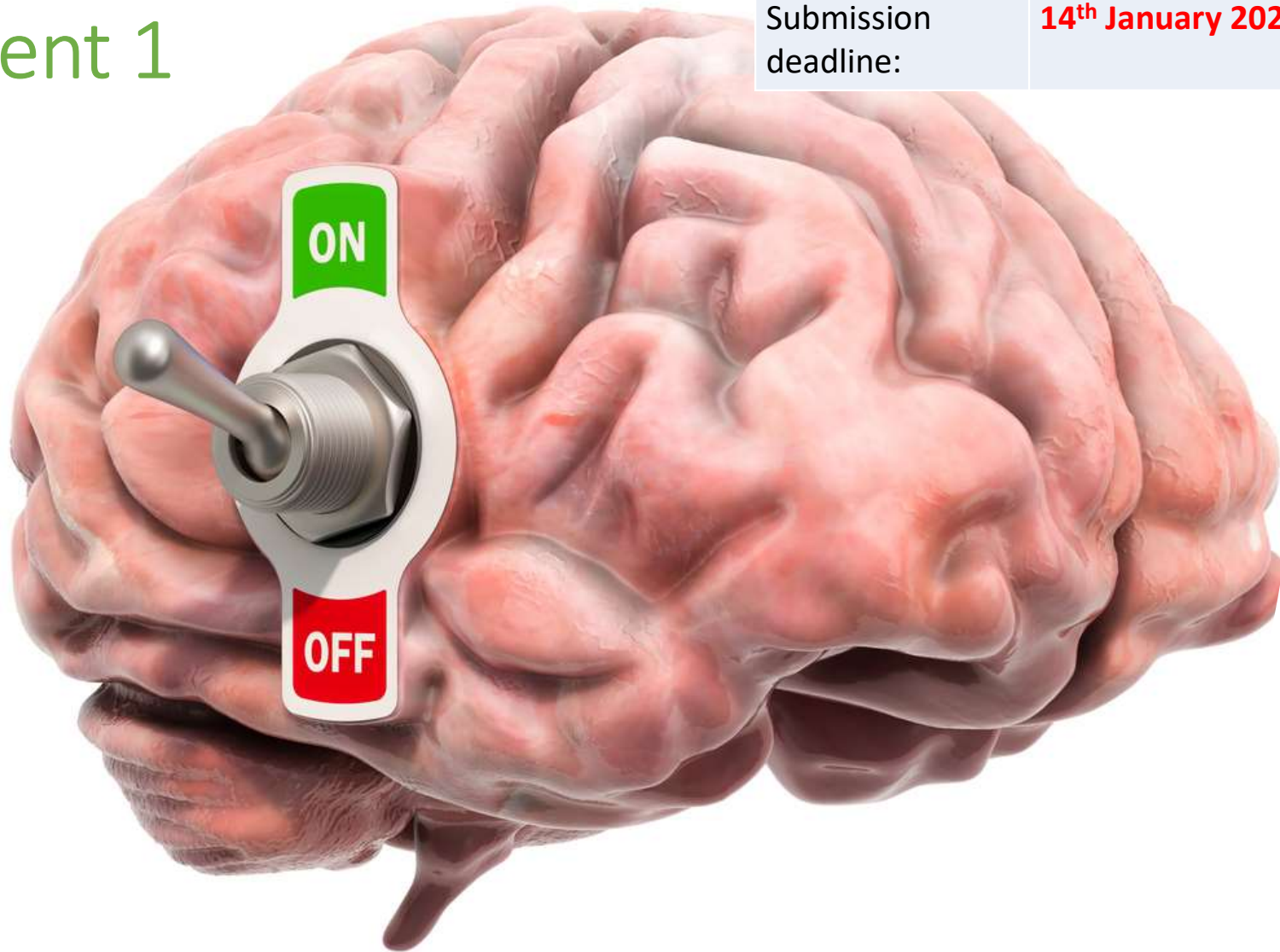
STUDENT FEEDBACK FORM		
This section details the extent to which the assessment criteria are demonstrated by you, which in turn determines your mark. The marks available for each category of skill are shown. Lecturers will use the space provided to comment on the achievement of the task(s), including 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	25	
3. Cognitive and Intellectual Skills	25	
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%)
		%

Assessment 1

Discussion:

Submission
deadline:

14th January 2025

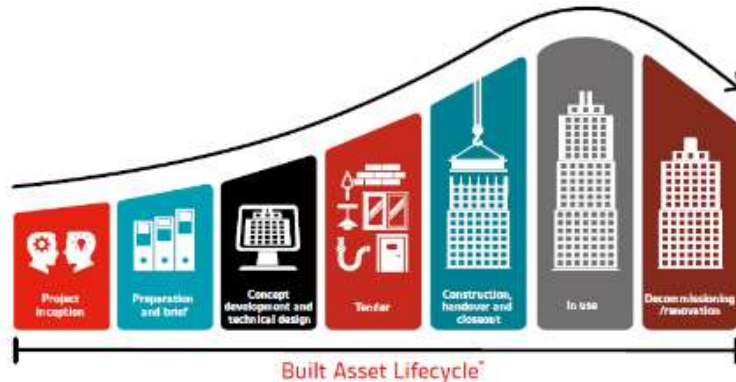


Draft a letter to the client that highlights your understanding of the requirements of BIM maturity for this school project. Given the client requirements of the CAFM system and Revizto platform, provide details on how information will be shared, coordinated and managed through the appropriate international standards and the use of a BEP. (Suggested 1000 words)

The project is a joint funded venture with the Welsh Government, under the Sustainable Communities for Learning Programme and is required to meet the standards of BIM maturity.

BIM Definition

Building Information Modelling (BIM) is a collaborative way of working underpinned by digital technologies, which allow for more efficient methods of designing, delivering and maintaining physical built assets throughout their entire lifecycle. Greater efficiencies can be realized due to significant pre-planning during the design and construction phases, providing comprehensive information at handover stage.



* This asset lifecycle concept is based on the RIBA Plan of Work 2013

3

Key Standards for BIM

BS EN ISO 19650-1:2018 – Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM) – Information management using building information modelling. Concepts and principles. This will supersede BS 1192:2007+A2:2016.

BS EN ISO 19650-2:2018 – Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM) – Information management using building information modelling. Delivery phase of the assets. This will supersede PAS 1192-2:2013.

PD 19650-0:2019 – Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM). Guide to BS EN ISO 19650:2018

PAS 1192-3:2014 – Specification for information management for the operational phase of assets using building information modelling.

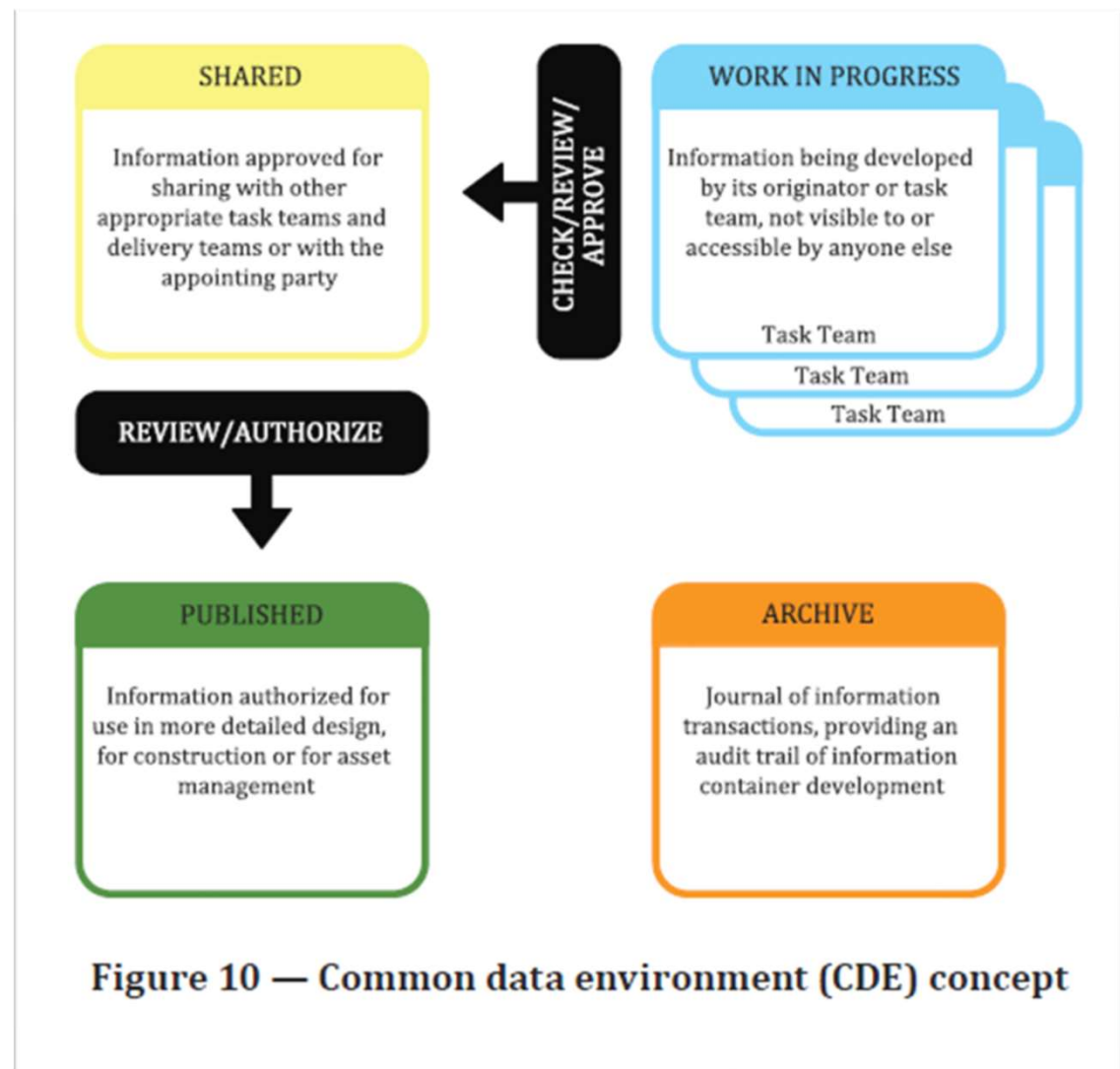
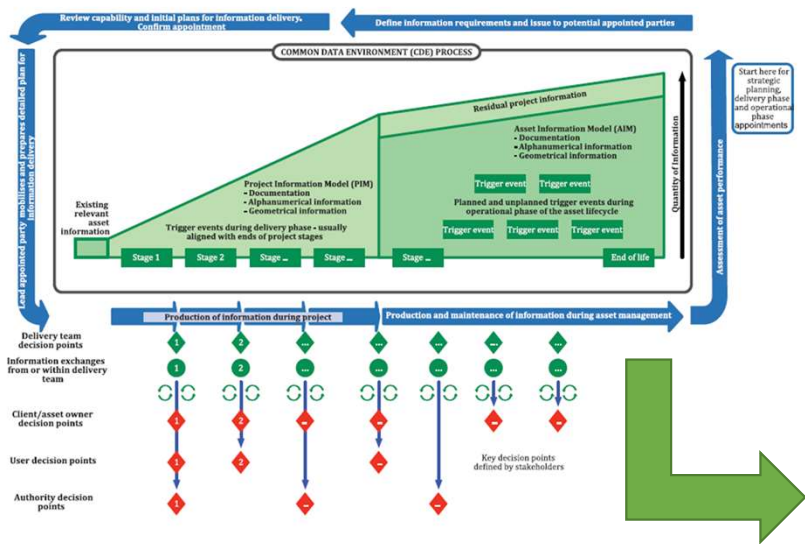


Figure 10 — Common data environment (CDE) concept

Conventions

UNIVERSITY OF WALES TRINITY SAINT DAVID

BIM NAMING CONVENTION GUIDE: All files: Models, Drawings & Documents

THE CODE	Project	Originator	Functional Breakdown	Spatial Breakdown	Form	Discipline	Number	Description*	Status*	Revision*
CODE LENGTH	2-6 Characters	3 - 6 Characters	1-2 Characters	2 Characters	2 Characters	1 Character Only	4 Characters	6-8 Characters	2 Characters	Single Character
DESCRIPTION	A single common project identifier that is recognizably distinct from any individual organization's internal job number.	The company that produced the data.	Use XX as the default. Only use Zones if project requires. This is then defined by the chosen Model segregation. There should be at least one 'zone' per role. EG, Arch Model, Mech Model, Struct Model, etc.	The level the data refers to: ZZ – Multi Level XX – No Level 00 - Ground Flr 01 – First Flr 02 – Second Flr Etc. Mezzanines M1 M2 Etc. All levels below ground floor prefix 'B' B1 B2 Etc.	This is simply the type or form of data eg: For Files: D - Drawing G Diagram I Image L List M Model T Textual V Video/Audio	A Architect / Architectural B Building Surveyor C Civil Engineer D Demolition/Dismantling E Electrical Engineer F Facilities Manager G Ground Engineering H Highways & Transport I Interior Designer K Client L Landscape Architect M Mechanical Engineer Other P Public Health Engineer Q Quantity Surveyor Project Mgmt S Structural Engineer T Planner W Water Engineering X non discipline specific Y Topographical Z Multi Discipline	This is a 4 digit code denoting drawing grouping and number. It consists of a 1 digit Drawing Group plus the 3 digit individual drawing no: Eg- 1001 Where 1 at the beginning is the drawing group and the 3 latter digits are sequential numbers.	Drawing / Model description ie. GAPLAN SITE GEO MOD SECTION SCHEMAT BREEAM FINISHES etc.	This is for the 2 digit suitability code that indicates and governs the development stages of information and documents throughout the BIM process.	The revision number of the drawing. eg: Preliminary revisions and Construction revisions as image opposite
NOTES	Use the 4 digit Company project numerics here - NB. NUMBER ONLY For Student Projects MODULE CODE ie 4005	NB. A specific unique identifier for each organisation should be defined upon them joining the project ie. Use company initials	NB. A more complex project may need to be divided into several diff zones. If so the Zone Strategy should be agreed at beginning of project	IE. Roof plan would be multi level.			Drawings Groups are as follows: 0 - General 1 - Substructure 2 - Superstructure 3 - Openings 4 - Finishes 5 - Piped & ducted services 6 - Electrical 7 - Fixtures & Fittings (Fixed) 8 - Loose Furniture 9 - External Works	There is no specific standard for description but avoid long, unwieldy descriptions as this will affect your ability to file in Windows		
EXAMPLE	4005	UWTSD	XX	ZZ	D	A	1001	GEO MOD	SI	A

* = Optional add ons within schema that we as UWTSD have chosen to include.

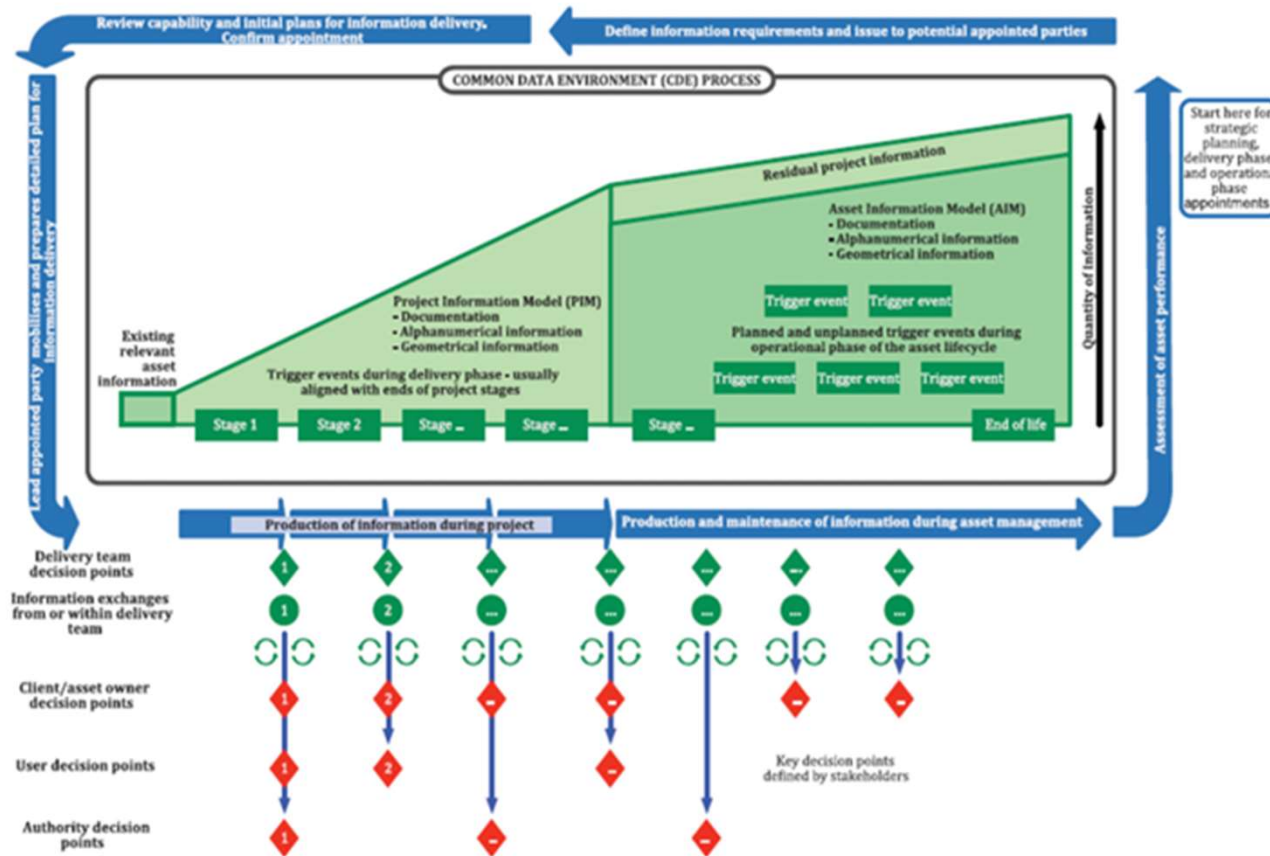
NB. There are other optional fields in the schema that we have opted to leave out ie: Classification (uniclass codes)

UNIVERSITY OF WALES TRINITY SAINT DAVID										
BIM NAMING CONVENTION GUIDE: All files: Models, Drawings & Documents										
THE CODE	Project	Originator	Functional Breakdown	Spatial Breakdown	Form	Discipline	Number	Description*	Status*	Revision*
CODE LENGTH	2-6 Characters	1- 6 Characters	1-3 Characters	3 Characters	3 Characters	1 Character Only	1 Character	6-8 Characters	2 Characters	Single Character
DESCRIPTION	A single common project identifier that is recognisably distinct from any individual organisation's internal job number.	The company that produced the data.	Use XX as the default. Only use Zones if project requires. This is then defined by the chosen Model designation. There should be at least one 'zone' per role. EG, Arch Model, Mech Model, Struct Model, etc.	The level the data refers to: ZZ - Multi Level XX - No Level 00 - Ground Flr 01 - First Flr 02 - Second Flr Etc. Mezzanines M1 M2 Etc. All levels below ground floor prefix 'B' B1 B2 Etc. If roof plan would be multi level.	This is simply the type or form of data eg: For Files: D - Drawing G - Diagram I - Image L - List M - Model T - Textual V - Video/Audio	A Architect / Architectural B Building Surveyor C Civil Engineer D Demolition/Dismantling E Electrical Engineer F Facilities Manager G Ground Engineering H Highways & Transport I Interior Designer K Client L Landscape Architect M Mechanical Engineer O Other P Public Health Engineer Q Quantity Surveyor R Project Mgmt S Structural Engineer T Planner W Water Engineering X non discipline specific Y Topographical Z Multi Discipline	A Characters This is a 4 digit code denoting drawing grouping and number. It consists of a 1 digit Drawing Group plus the 3 digit individual drawing no. eg: 1001 Where 1 at the beginning is the drawing group and the 3 letter digits are sequential numbers.	All Characters Drawing / Model description is. GAPLAN SITE GEO MOD SECTION CHIMNEY BREAM FINISHES ETC.	This is for the 2 digit suitability code that indicates and governs the development stages of information and documents throughout the BIM process.	The revision number of the drawing. eg: Preliminary revisions and Construction revisions as image supports
NOTES	Use the 4 digit company project numbers here - NB: NUMBER ONLY For Student Projects MODULE CODE ie 4000	NB: A specific unique identifier for each organisation should be defined upon them joining the project ie, use company initials	NB: A more complex project may need to be divided into several off zones. If so the Zone Strategy should be agreed at beginning of project					Drawings Groups are as follows: 0 - General 1 - Substructure 2 - Superstructure 3 - Openings 4 - Finishes 5 - Piped & ducted services 6 - Electrical 7 - Fixtures & Fittings (Fixed) 8 - Loose Furniture 9 - External Works	There is no specific standard for description but avoid long, unwieldy descriptions as this will affect your ability to file in Windows	
EXAMPLE	4000	UWTSO	XX	ZZ	D	A	1001	GEO MOD	S1	A
* = Optional add on within schema that we as UWTSO have chosen to include. NB: There are other optional fields in the schema that we have opted to leave out ie: Classification (uniclass codes)										
Scried and dated by: S. Davies 16/10/2020 October 2020 Revised on: 03/10/2020 3.0										

Conventions:
Working in a Common
Data Environment CDE

Status code	Which information containers should the status code be used for?	Revision
Work in Progress (WIP)		
S0	Information containers being developed within a task team	P01.01 to Pnn.nn
Shared (non-contractual)		
S1	Information containers that are suitable for geometrical and/or non-geometrical coordination by other task teams within the delivery team	P01 to Pnn
S2	Information containers that are suitable for information/reference by other task teams within the delivery team	
S3	Information containers that are suitable for review and comment within the delivery team	
S4	Information containers that are suitable for review and comment by the Lead Appointed Party (Kier)	
S5	Information containers that are suitable for review and comment by the Appointing Party (Client)	
Published (contractual)		
A3, A4, A5, A6 etc. (number correlates with work stage)	Information containers where there are no comments from the party being invited to either: - authorise them (if they are in response to a lead appointed party exchange information requirement) or; - accept them (if they are in response to an appointed party exchange information requirement)	C01 to Cnn
B3, B4, B5, B6 etc. [Deprecated]	Information containers that are partially signed off where there are comments from the party being invited to authorise or accept them	P01 to Pnn

Key BIM Documentation



EIR

AIR

BEP

Appended to your letter, explain the client's method of **level of information need** and provide researched examples that demonstrate this at different stages of a project in line with the RIBA Plan of Works. Make recommendations to the client so that can be conveyed in the EIR & AIR. (1500 words)

They have expressed a need for whole life monitoring of the asset through a COBie compatible CAFM system and access to the virtual federated model in Revizto. The client requires you to demonstrate how you will deliver the Level of Information need for the project throughout the RIBA Stages. They currently operate a method of LOI and LOD for all capital projects

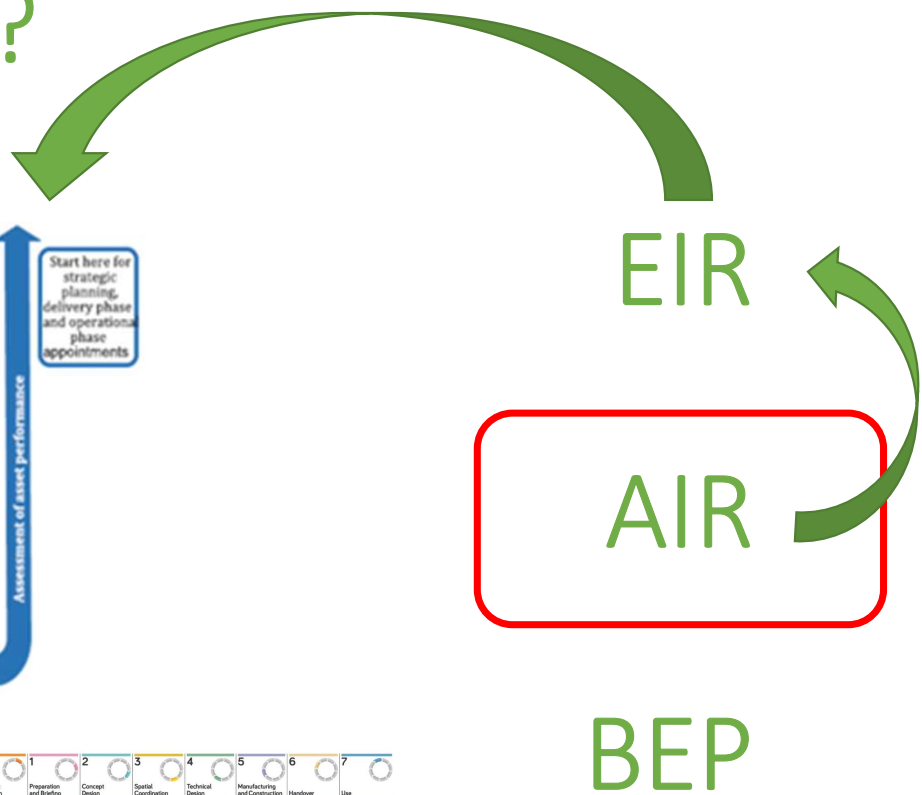
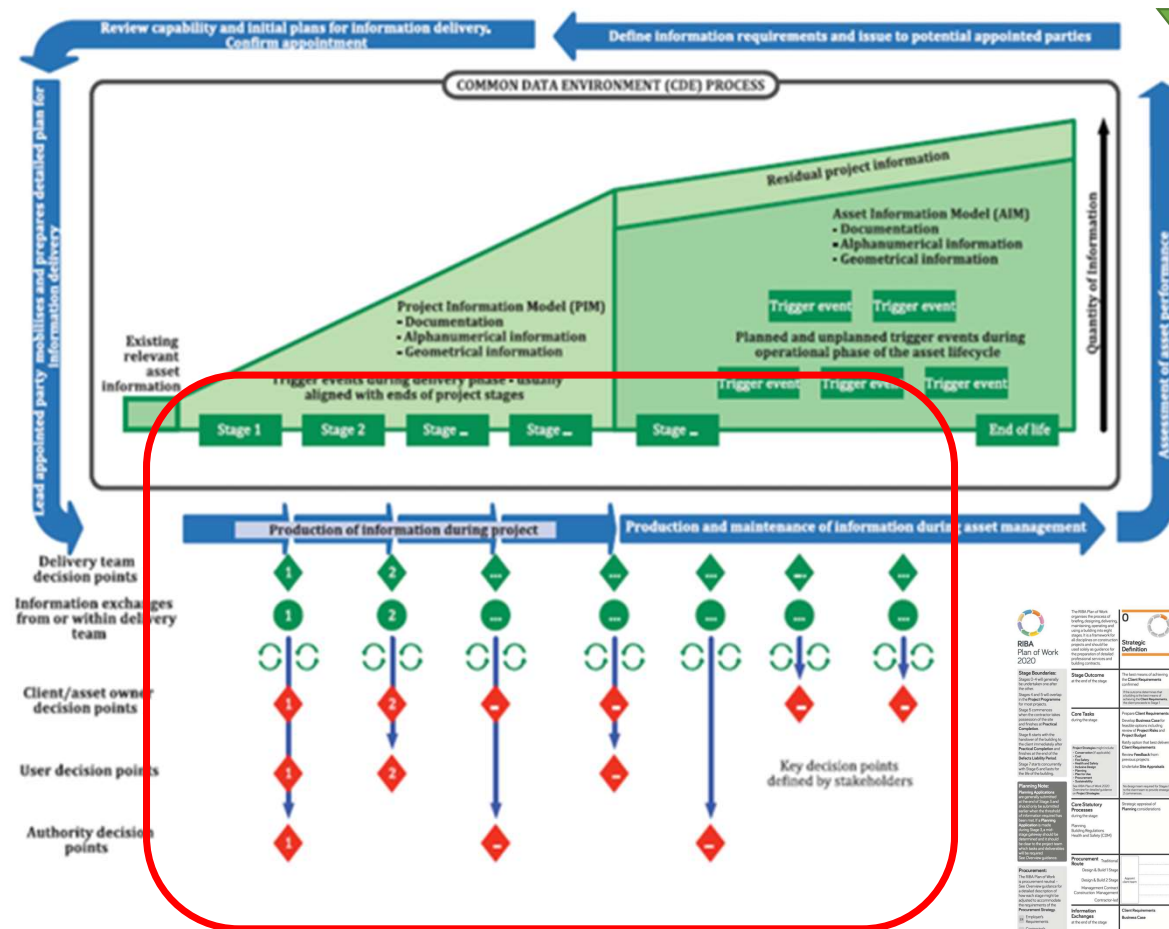
Level of Information Need

They have expressed a need for whole life monitoring of the asset through a COBie compatible CAFM system and access to the virtual federated model in Revizto. The client requires you to demonstrate how you will deliver the Level of Information need for the project throughout the RIBA Stages. They currently operate a method of LOI and LOD for all capital projects

LoD: Level of Detail (graphical / geometric)

Lol: Level of Information (non graphical / data)

Level of Information Need?



RIBA Plan of Work 2020

	0	1	2	3	4	5	6	7
	Strategic Definition	Preparation and Briefing	Concept Design	Spatial Coordination	Technical Design	Manufacturing and Construction	Handover	Use
Stage Rationale	Establish the project's purpose, vision, and strategic objectives. Define the project's scope and boundaries.	Develop a detailed brief and program of requirements. Establish the project's budget and timeline.	Develop a conceptual design and spatial coordination. Establish the project's key performance indicators.	Develop a technical design and manufacturing strategy. Establish the project's key milestones.	Develop a construction strategy and handover plan. Establish the project's key deliverables.	Develop a use strategy and handover plan. Establish the project's key outcomes.	Develop a use strategy and handover plan. Establish the project's key outcomes.	Develop a use strategy and handover plan. Establish the project's key outcomes.
Key Tasks	Strategic Definition	Preparation and Briefing	Concept Design	Spatial Coordination	Technical Design	Manufacturing and Construction	Handover	Use
Key Deliverables	Strategic Definition	Preparation and Briefing	Concept Design	Spatial Coordination	Technical Design	Manufacturing and Construction	Handover	Use
Key Stakeholders	Strategic Definition	Preparation and Briefing	Concept Design	Spatial Coordination	Technical Design	Manufacturing and Construction	Handover	Use
Key Risks	Strategic Definition	Preparation and Briefing	Concept Design	Spatial Coordination	Technical Design	Manufacturing and Construction	Handover	Use
Key Metrics	Strategic Definition	Preparation and Briefing	Concept Design	Spatial Coordination	Technical Design	Manufacturing and Construction	Handover	Use
Key Outcomes	Strategic Definition	Preparation and Briefing	Concept Design	Spatial Coordination	Technical Design	Manufacturing and Construction	Handover	Use

Level of Information Need?



RIBA Plan of Work 2020

Stage Boundaries:

Stages 0-4 will generally be undertaken one after the other.
Stages 4 and 5 will overlap in the Project Programme for most projects.
Stage 5 commences when the contractor takes possession of the site and finishes at Practical Completion.
Stage 6 starts with the handover of the building to the client immediately after Practical Completion and finishes at the end of the Defects Liability Period.
Stage 7 starts concurrently with Stage 6 and lasts for the life of the building.

Planning Note:

Planning Applications are generally submitted at the end of Stage 3 and should only be submitted earlier when the threshold of information required has been met. If a Planning Application is made during Stage 3, a mid-stage gateway should be determined and it should be clear to the project team which tasks and deliverables will be required. See Overview guidance.

Procurement:

The RIBA Plan of Work is procurement neutral – See Overview guidance for a detailed description of how each stage might be adjusted to accommodate the requirements of the Procurement Strategy.

ER Employer's Requirements
CF Contractor's Proposals

The RIBA Plan of Work organises the process of briefing, designing, delivering, maintaining, operating and using a building into eight stages. It is a framework for all disciplines on construction projects and should be used solely as guidance for the preparation of detailed professional services and building contracts.

	0	1	2	3	4	5	6	7
	Strategic Definition	Preparation and Briefing	Concept Design	Spatial Coordination	Technical Design	Manufacturing and Construction	Handover	Use
	Projects span from Stage 1 to Stage 6; the outcome of Stage 0 may be the decision to initiate a project and Stage 7 covers the ongoing use of the building.							
Stage Outcome at the end of the stage	The best means of achieving the Client Requirements confirmed. If the outcome determines that a building is the best means of achieving the Client Requirements , the client proceeds to Stage 1.	Project Brief approved by the client and confirmed that it can be accommodated on the site.	Architectural Concept approved by the client and aligned to the Project Brief . The brief remains "live" during Stage 2 and is derogated in response to the Architectural Concept .	Architectural and engineering information Spatially Coordinated .	All design information required to manufacture and construct the project completed. Stage 4 will overlap with Stage 5 on most projects.	Manufacturing, construction and Commissioning completed. There is no design work in Stage 5 other than responding to Site Queries .	Building handed over, Aftercare initiated and Building Contract concluded.	Building used, operated and maintained efficiently. Stage 7 starts concurrently with Stage 6 and lasts for the life of the building.
Core Tasks during the stage	Prepare Client Requirements . Develop Business Case for feasible options including review of Project Risks and Project Budget . Ratify option that best delivers Client Requirements . Review Feedback from previous projects. Undertake Site Appraisals . Project Strategies might include: - Conservation (if applicable) - Cost - Fire Safety - Health and Safety - Inclusive Design - Planning - Plan for Use - Procurement - Sustainability See RIBA Plan of Work 2020 Overview for detailed guidance on Project Strategies .	Prepare Project Brief including Project Outcomes and Sustainability Outcomes , Quality Aspirations and Spatial Requirements . Undertake Feasibility Studies . Agree Project Budget . Source Site Information including Site Surveys . Prepare Project Programme . Prepare Project Execution Plan . No design team required for Stages 0 and 1. Client advisers may be appointed to the client team to provide strategic advice and design thinking before Stage 2 commences.	Prepare Architectural Concept incorporating requirements and aligned to Cost Plan , Project Strategies and Outline Specification . Agree Project Brief Derogations . Undertake Design Reviews with client and Project Stakeholders . Prepare stage Design Programme .	Undertake Design Studies , Engineering Analysis and Cost Exercises to test Architectural Concept resulting in Spatially Coordinated design aligned to updated Cost Plan , Project Strategies and Outline Specification . Initiate Change Control Procedures . Prepare stage Design Programme . Specialist subcontractor designs are prepared and reviewed during Stage 4.	Develop architectural and engineering technical design. Prepare and coordinate design team Building Systems information. Prepare and integrate specialist subcontractor Building Systems information. Prepare stage Design Programme . Prepare Building Manual . Building handover tasks bridge Stages 5 and 6 as set out in the Plan for Use Strategy .	Finalise Site Logistics . Manufacture Building Systems and construct building. Monitor progress against Construction Programme . Inspect Construction Quality . Resolve Site Queries as required. Undertake Commissioning of building. Prepare Building Manual .	Hand over building in line with Plan for Use Strategy . Undertake review of Project Performance . Undertake seasonal Commissioning . Rectify defects. Complete initial Aftercare tasks including light touch Post Occupancy Evaluation . Adaptation of a building (at the end of its useful life) triggers a new Stage 0.	Implement Facilities Management and Asset Management . Undertake Post Occupancy Evaluation of building performance in use. Verify Project Outcomes including Sustainability Outcomes . Adaptation of a building (at the end of its useful life) triggers a new Stage 0.
Core Statutory Processes during the stage:	Strategic appraisal of Planning considerations.	Source pre-application Planning Advice . Initiate collation of health and safety Pre-construction Information .	Obtain pre-application Planning Advice . Agree route to Building Regulations compliance. Option: submit outline Planning Application . See Planning Note for guidance on submitting a Planning Application earlier than at end of Stage 3.	Review design against Building Regulations . Prepare and submit Planning Application .	Submit Building Regulations Application . Discharge pre-commencement Planning Conditions . Prepare Construction Phase Plan . Submit form F10 to HSE if applicable.	Carry out Construction Phase Plan . Comply with Planning Conditions related to construction.	Comply with Planning Conditions as required.	Comply with Planning Conditions as required.
Procurement Route	Traditional Design & Build 1 Stage	Design & Build 2 Stage Management Contract Construction Management Contractor-led						
Information Exchanges at the end of the stage	Client Requirements Business Case	Project Brief Feasibility Studies Site Information Project Budget Project Programme Procurement Strategy Responsibility Matrix Information Requirements	Project Brief Derogations Signed off Stage Report Project Strategies Outline Specification Cost Plan	Signed off Stage Report Project Strategies Updated Outline Specification Updated Cost Plan Planning Application	Manufacturing Information Construction Information Final Specifications Residual Project Strategies Building Regulations Application	Building Manual including Health and Safety File and Fire Safety Information . Practical Completion certificate including Defects List . Asset Information . If Verified Construction Information is required, verification tasks must be defined.	Feedback on Project Performance . Final Certificate . Feedback from light touch Post Occupancy Evaluation .	Feedback from Post Occupancy Evaluation . Updated Building Manual including Health and Safety File and Fire Safety Information as necessary.



Examples