Post Appointment - BIM Execution Plan (BEP)

Company-Name

Project-Name

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BIM Execution Plan
Project-Name

Version Control

Issue Record			
Rev	**Purpose**	**Date**	**By**
P01	Issued for Information	12/08/2025	User A
P02	Amended to suit comments	09/09/2025	User A
P03	Updated with CHL comments regarding worksets	30/09/2025	User B
P04	Updated sections 2.18, 2.19, 3.10, 3.18,	02/12/2025	User B

Document Authority & Status

This BIM Execution Plan has been agreed by the representatives of the project team as listed in Section 1.2 with the authority of their parent companies to accept this document as the agreed BIM Execution Plan.

Any changes to this BEP should be agreed with the Lead Appointed Party Information Manager and authorised by the Appointing Party (Company-Name).

NOTE – Any text, section or information highlighted in Yellow is still in development and needs agreement with the whole project team and client. This will be confirmed in a future issue of the document.

Appointing Party (Client) Approval

Appointing Party (Client) Approval		
Name	**Signed**	**Date**
User C – Company-Name		

BIM Execution Plan
Project-Name

1.0 Project information

The client requires all project stakeholders to work in BIM (Building Information Modelling), this post appointment BEP has been generated based on the information need in the following Appointing Party (client) issued documents.

EIR – 001-SYM-XX-XX-BI-Z-0001-EIR
AIR - 001-SYM-XX-XX-BI-Z-0001-AIR

The HM Government defines BIM as "a collaborative way of working, underpinned by the digital technologies which unlock more efficient methods of designing, delivering and maintaining physical built assets. BIM embeds key product and asset data in a 3D computer model that can be used for effective management of information throughout an assets lifecycle – from earliest concept through to operation." (2015)

The purpose of this Post Appointment BIM Execution Plan (BEP) document is to define the deliverables, processes, workflow, technology and information to meet the Appointing Party (client) information need on the Project.

The site is situated in the south-western corner of a prominent London borough. Currently, the area includes pubs, cafes, design studios, and various businesses, alongside new residential developments, low-rise Victorian houses, and the local power station project. The primary strategic goal of the clients is to use the information outlined in this document to support the "BIM Organisational Information Need" referenced herein.

Strategic Goals of Appointing Party (Client)

- To present a strategic paper that provides vision, leadership, and a collective voice for the advancement of digital design, and the operation of built assets.
- To develop a road map to optimise the successful implementation of BIM. The roadmap is to be informed by BIM adoption on our pilot projects and considered in the context of the updated RIBA requirements and the Hackett report recommendations
- Engage as a client of to support the adoption of BIM on our projects.
- To align the industry's digital transition with central and local government regulation and guidelines to bring wide ranging economic, environmental, and societal benefits.
- Measure, evaluate and assess the impact and maturity of BIM on a regular basis.
- To recognise the role that technology and 'better information management' plays in achieving measured improvements in productivity, international competitiveness, collaboration, and innovation
- Identify and prioritise the key enablers and key challenges of a successful digital transition to support a successful implementation.

Company-Name understands that the project must be compliant with the following requirements from the client as stated below:

- Information protocol to support BS EN ISO 19650-2
- Exchange Information Requirements (EIR) and associated appendices
- Asset Information Requirements (AIR)
- COBie requirements (Operations Building Information Exchange)
- Appointing Party (client's) BIM protocols or Information Management and documentation
- Industry standards

- Establish and work with an approved CDE and clients CDE

NOTE - For relevant Acronyms and glossary of terms please refer to the standards referenced in this BEP or seek advice from the Project BIM Manager.

1.1 Overview

Project Information

Project name	Project-Name
Project address	Project-Name, Chelsea, London, SW10 0QD
Project number	LOT01
Contract form	JCT Standard Form Design & Build Contract
Project start date	July 2025
Project completion and handover date	June 2029
Project description	New Build
Existing building and information	New build and no information on surrounding buildings

1.2 Functions (roles) and responsibilities

Functions (roles) and Responsibilities

Function (Role)	Name	Email and telephone number
Architect (Lead Appointed Party)		
BIM Lead	User D	Contact information
Task Team Manager (Design Lead)	User E	Contact information
Structure (Appointed Party)		
BIM Lead	User F	Contact information
Task team BIM author	User G	Contact information
Building Services (Appointed Party)		
BIM Lead	User H	Contact information
Project Manager	User I	Contact information
Landscape Architect		
BIM Lead	User J	Contact information
Client/Company-Name (Appointing Party)		
BIM PM	User A	Contact information

Function (Role)	Name	Email and telephone number
BIM Lead Information Manager	User AA	Contact information
BIM Co-ordinator	User AAA	Contact information

The following section is to add clarity on the roles of BIM responsibilities.

Lead Information Manager (Lead Appointing Party – Company-Name/Symetri)

The Lead Information Manager will be responsible for defining the delivery of the BIM strategy to meet the client's requirements and will have an overview and responsibility on how the BIM information is to be produced and managed through the required stages of the appointment. This will include model audits, information audits and exchange reviews between all parties. The Information Manager will work with the other Appointed Parties into the exact nature of how the model or drawing files are to be organised and generated to suit the delivery and ensure the information need are met before formal issue to the Appointing Party (client).

The Information manager should also identify any additional software training required on the relevant platform technology, so co-ordination and collaboration has full effect on the project. Any changes required that are not defined in this BEP will need approval from the Lead Information manager before deployment on the project.

The Lead Information Manager will have several responsibilities:

- Take a leading role in planning setup, implementation and deployment of all BIM processes and workflows.
- Manage the group and project strategy going forward
- Keep aware of new technology to deliver BIM
- Manage and maintain this BIM Execution Plan ensuring it is updated through the life of the project
- Liaise with the client to ensure future aspirations are adhered to.
- Confirm and approve Project standards and protocols with the design teams.
- Manage with the design team the required information deliverables.
- Manage and advise on the supply Chain (Appointed Parties) BIM and Information delivery
- Ensure the requirements are fulfilled within the BIM environment for FM and O&M deliverables.
- Establish a data exchange procedure for the project across all stages – Design, Build and Manage.
- To ensure the Project Information Model (PIM) meets all requirements on this project.
- To ensure all the required parameters on the project are maintained and signed off.
- To be the focal point for all BIM activity
- Work with The Appointing Party (client) and Lead Appointed Party (Company-Name) Document Controller for CDE management and compliance
- To ensure the BIM is delivered capturing the changes during and random visual inspections are carried out to check the model for handover validation.

- Ensure all stakeholders (internal and external) work to the agreed Project BIM Execution Plan
- Facilitate/ identify appropriate levels of staff training and support to comply with the project execution strategy
- Ensure that necessary software and hardware are in place to support efficient delivery

Project BIM Co-ordinator (Company-Name)

The Project BIM Co-ordinator will setup a Project Information Model (PIM), which will federate the individual models into a single collaborated model, removing any duplicated information provided by the Appointed Parties (supply chain) partners. The PIM will be issued to the client as a Navisworks NWD at handover.

The BIM Co-ordinator will be responsible for maintaining progress and the required quality of information produced within the BIM environment.

The BIM Co-ordinator should have advanced knowledge of BIM technologies and processes or otherwise have experience in a BIM Information Management role.

The BIM Co-ordinator shall:

- Assist in the Development and implementation of the post appointment BIM Execution Plan which shall record key information on how BIM will be implemented and used on this project
- Take a leading role in planning, configuring, and maintaining project files
- Compile Single disciplinary models (SDM) into multi-disciplinary models (MDM) in Navisworks and provide clash reports at milestone points as required as part of the PIM.

The BIM Co-ordinator should be the first point of contact for any technical or process issues that arise during the project. If these cannot be resolved immediately, the BIM Co-ordinator should liaise with the Project Information Manager who will escalate or seek a resolution to the problem and communicate it through the appropriate channels

Throughout the life of the project, the BIM Co-ordinator shall actively monitor the status of project files and folders to ensure they maintain their integrity. Audits will be conducted on a regular basis, as part of the Project Appraisal process and any non-conformance addressed at the earliest opportunity.

Task Team Information Manager (Consultants and Supply Chain Partners)

Each engaged company shall have their own Information manager or defined representative and should be the first person to approach around any BIM related issues or request for information from that party.

The discipline Information Managers need to take responsibility to ensure the project information submitted is in line with the requirements defined in this BEP and that all SDM are clash resolved before being issued for co-ordination.

Information Manager / BIM PM (Company/Company-Name)

The Appointing Party (client) Information Manager is appointed by the client project team and have the key objectives going forward.

- To oversee the BIM Co-ordinator activities and information being generated in a BIM process so that it suits the requirements of the FM/asset management system, O&M delivery & as-built data to name a few areas, on project completion and hand over.
- Assist and advise the Lead Information Manager in the maintenance of this BEP

- Support and assist the Lead Information Manager on managing the delivery of the asset information requirements to suit the Appointing Party (client's) Information need.

Project Information Management

- Agree the responsibility matrix covering information delivery structure across roles e.g. software platforms appropriate to meet the Appointing Party requirements and Project Team resources
- Ensure that the information delivered at each Stage meets the project requirements defined in this BEP.
- Level of information need required for specific Project Outputs e.g. Planning, Procurement, FM Procurement are being met.
- The process for incorporating for construction, testing, validation, and commissioning information
- Enable integration of information within the Project Team and co-ordination of information by Design Lead
- Agree formats for Project Outputs
- Assist Appointed Party Members in assembling information for Project Outputs

Collaborative working, information exchange and project team management

- Support the implementation of the Project BIM protocol.
- Liaise with and co-operate with Project Task Team Members and Appointed Parties in support of a collaborative working culture
    - Assist the Appointed Parties in establishing information exchange processes, including: define and agree procedures for convening, chairing, attendance and responsibility for recording "information exchange process meetings"
    - Participate in and comply with Appointing Parties management procedures and processes including: risk and value management
    - Performance management and measurement procedures
    - Change management procedures including adjustments to budgets and program.
    - Attendance BIM project and design team meetings as required
    - Agree and implement record keeping, archiving and audit trail for Information Model.

1.3 BIM Objectives

The Appointing Party (Client) have identified the following strategic requirements:

Goal	Client Objective / Goal	Company-Name's Response
1	The use of 3D collaborative BIM technologies and processes to ensure a fully coordinated design is delivered at the end of each RIBA project stage, free from major "clashes".	A full managed process to deliver a clash resolved fully co-ordinated model has been put in place and will be managed in the project CDE.
2	All traditional design documentation such as drawings and schedules must be derived directly from 3D building information models, not produced as separate instances.	Wherever possible design documentation will be derived from the 3D BIM, however some manufacturing and installation details will need to be delivered in traditional CAD

3	Building information models to be shared in IFC and their native formats	The models will be shared in the native agreed format and IFC 2x3 at the defined data drops
4	Models which may be audited by The Appointing Party (client) BIM representative at agreed stages in order to report to the client the compliance with the BEP and other standards referenced in this document.	Company-Name will work with the Appointing Party (client) representative and make the required information available to them on request. Any actions as a result of these audits will be reviewed and addressed as required.
5	Delivery of Asset data in COBie UK 2012 format and models is currently out of scope.	No COBie Asset information is required
6	The BEP should outline methods for compliance with standards.	This BEP is a project document that all parties will deliver against and will be compliant with defined standards.

Company-Name also believe the following points are important to be stated as BIM objectives for the project.

- Enabling a collaborative culture within the project and amongst the clients' stakeholders
- Facilitate user understanding and input to support satisfaction at operation
- Working openly with shared outcomes and process development
- Increase design and build quality
- Reduce the quantity of change orders
- Create cost savings through the elimination of errors and increased process effectiveness
- Provide a reliable basis for asset management
- Improve information exchange using a Common Data Environment

To aid clarity and alignment, the following table is to be referenced as a high-level definition of the BIM use on the project.

1.4 BIM Use

3D models of existing conditions, existing drainage, buildings landscape etc	*NO*
3D Laser scan of any existing areas	*NO*
3D Models generated to the agreed LOD	*YES*
Drawings and Schedules to be derived from 3D models (where possible)	*YES*
3D Visuals generated to communicate design intent to client etc	*YES*
3D models used to perform clash detection	*YES*
Animated Sequence produced (4D)	*NO*
sequence to be used through (Briefings)	*NO*
3D Models used for quantity take-off	*NO*
Maintainable asset data embedded into 3D models (space and asset information – COBie only)	*NO*
Defined information data drops upon completion	*NO*
COBie data drops provided upon completion	*NO*
Embedding hazards (H&S – CDM) into model	*NO*
Aligned to all The Appointing Party (Client) Naming Protocol's	*YES*
Appointed Party (Supply chain) BIM capability assessments	*YES*
Field Management Solution to be utilised	*NO*
Barcodes to be utilised by FM on required assets	*NO*
Clash Resolved model to be utilised prior to Construction where possible.	*YES*
O&M data linked to model	*NO*
O&M asset data to be available directly in the model	*NO*
Provide a Golden Thread of information throughout all project stages	*YES*

The following are considered client requirements and uses of BIM for the project.

- The use of 3D collaborative BIM technologies and processes to ensure a fully coordinated design is delivered at the end of each RIBA project stage, free from major "clashes".
- All traditional design documentation such as drawings and schedules must be derived directly from 3D building information models, not produced as separate instances.
- Building information models to be shared in their native format, IFC and Navisworks (NWC/NWD).
- Models are to be supplied to The Appointing Party (client) in IFC 2x3 format for viewing and federating on the client's CDE system.
- The IFC files will not be utilised for any rule-based auditing at handover.
- Delivery of Asset data in COBie UK 2012 format and models in their native and IFC format together with traditional as-built PDF documentation at building handover.
- Company-Name will deliver to The Client the PIM, it is the responsibility of The Client to generate the AIM if required.

1.5 Project challenges

COBie as the asset information deliverable if introduced at stage 4
As-Built verification
Appointed Party (Supply Chain) capability
BSA 2022 Gateways
Golden Thread workflow
As-Built verification for final drawing issue

1.6 Standards

It has been agreed with the Appointing Party (Client) that the project team will utilise the listed standards below as reference documents only. Any information defined in this BEP takes precedence over anything defined in the standards referenced below:

M=Mandatory R=Recommended	Application											
Standards	Guidance	Collaboration	Project Stages	File Naming	Object	Drawing	Classification	LOD / LOI	CDE	Costing	Asset	Security
BS EN ISO 19650-0	M	M										
BS EN ISO 19650-1:2018	M	M	M						M	M	M	
BS EN ISO 19650-2:2018	M	M		M					M	M	M	
BS EN ISO 19650-3:2020											M	
AECUK CAD Standard (non BIM Generated drawings)						M						
NBS DPOW - https://toolkit.thenbs.com/definitions								M				
COBie-UK 2012 – BS EN ISO 19650-4:2022 (use PAS1192-4 for guidance) – This is not needed on the project.											M	
Information Protocol to support BS EN ISO 19650-2	M	M	M									
Uniclass 2015 (ISO 12006-2:2018)							M					
BS EN ISO 19650-5:2020												M
RIBA Plan of works			M									
BS 8644:2022	M											

1.7 Compliance Plan

Company-Name requires all Appointed Parties to comply with the following documents in order of precedence:

- Information Protocol to support BS EN ISO 19650-2
- Exchange Information Requirements (EIR) and associated appendices
- The Appointing Party BIM protocols or Information Management and documentation

  Industry standards
- Project BEP and associated appendices
- COBie data drop requirements

The Appointing Party (client) may appoint a third-party consultant to audit project BIM information at key stages of this project.

The Information Protocol to support BS EN ISO 19650-2 shall be appended to any appointment documentation to provide a safe environment for collaboration. Bidders shall indicate whether they are able to accept the protocol.

1.8 Common Data Environment (CDE)

Company-Name are responsible for implementing and maintaining a CDE for the project. This system will be Asite which will manage the delivery team's information. All documentation, drawings, models, etc that needs client approval needs to be uploaded to Asite to run through workflows for Appointing Party (client) approval. The Asite system will be utilised for the sharing of the models on a regular basis between the design teams and the Information Management team for the model federation and clash management process.

Also, any files that are issued as a contractual record shall also be uploaded to the Appointing Party (clients) CDE system.

A guide to the use of Asite titled – 'External Recipients - Completing Tasks User Guide' can be obtained from : User X.

<u>The defined responsibilities on Company-Name are:</u>

- To establish a Common Data Environment within the Asite system and the workflow to the clients Asite system, including processes and procedures to enable reliable information exchange between Project Team Members, the Appointing Party and other parties
- Establish, agree and implement the information structure and maintenance standards for the Information Model
- Receive information into the Information Model is in compliance with the agreed processes and procedures. Validate compliance with information requirements and advise on non-compliance
- Audit the Information Model that is managed by the BIM Co-ordinator to meet integrity and security standards stated in the BEP.
- Manage Common Data Environment processes and procedures, validate compliance with them and advise on non-compliance

2.0 Information required by the EIR

2.1 Naming protocol

For the naming of models and project information documentation this shall be In accordance with the below diagram and the details defined in Project-Name File Naming Requirements document LOT01-MAL-XX-XX-L-X-00001.

Views setup in the model can be managed to suit the individual delivery team again as along as it is clear and can be followed by other parties and by The Appointing Party (client) at handover.

All models shall be delivered with the views/sheets/schedules/view templates/filters at each data drop, these shall **not** be deleted out of the Revit model.

When uploading files to the CDE the revision number shall not be added to the reference. Any reference identifiers (e.g. C01) shall be omitted.

LOT01-SYM-XX-XX-DR-A-00016

The status code, description and the Revision will be managed in the CDE system as meta data.

2.2 Naming Strategy

The following naming strategy shall be used by all parties and referenced accordingly.

Naming Strategy - 20250828 - Rev02					
Category	Subcategory	Notes	Type Name	Unique Reference	Unique Code Description
For flats, bathrooms, utility, kitchens we have separate type for handed. Handed is even number.					
Levels	FFL	Top of Screed/Subfloor (NOT FINISH)	Na	L.X.00.FFL	L.Core.Level.Type
	SSL	Top of Structural Slab	Na	L.X.00.SSL	L.Core.Level.Type
	EXT	Top of surface	Na	L.X.00.EXT	L.Core.Level.Type
	FPT	Top of Brick / Façade (NOT COPING)	Na	L.X.00.FPT	L.Core.Level.Type
	FRL	Top of Roof	Na	L.X.00.FRL	L.Core.Level.Type
Room (Plot)	Dwelling (Flat)	A dwelling GIA in shell model	DW000	DW.X.00.00	DW.Core.Level.No = DW.C.02.45
	Terrace/Amenity Area		AA	AA.X.00.00	AA.Core.Level.No = AA.C.02.45
	BCWS Riser		BC	BC.X.00.00	BC.Core.Level.No = BC.C.02.45
	Balcony		BL	BL.X.00.00	BL.Core.Level.No = BL.C.02.45
	Refuse Store		BS	BS.X.00.00	BS.Core.Level.No = BS.C.02.45
	Corridors/Lobby		CC	CC.X.00.00	CC.Core.Level.No = CC.C.02.45
	Cycle Store		CY	CY.X.00.00	CY.Core.Level.No = CY.C.02.45
	Cleaners Store		CS	CS.X.00.00	CS.Core.Level.No = CS.C.02.45
	Communal Lobby		CL	CL.X.00.00	CL.Core.Level.No = CL.C.02.45
	Community Use		CM	CM.X.00.00	CM.Core.Level.No = CM.C.02.45
	Commercial Unit		CU	CU.X.00.00	CU.Core.Level.No = CU.C.02.45
	External Area		EX	EX.X.00.00	EX.Core.Level.No = EX.C.02.45
	Room In Dwelling	If required (see convention below)	IR	IR.X.00.00	IR.Core.Level.No = IR.C.02.45 if required for COBie
	Evacuation Lift		LE	LE.X.00.00	LE.Core.Level.No = LE.C.02.45
	Fire Fighting Lift		LF	LF.X.00.00	LF.Core.Level.No = LF.C.02.45
	LTHW Riser		LT	LT.X.00.00	LT.Core.Level.No = LT.C.02.45
	Plant Room	Boiler room, Intake rooms,Sub Station	PL	PL.X.00.00	PL.Core.Level.No = PL.C.02.45
	Electrical Riser		RE	RE.X.00.00	RE.Core.Level.No = RE.C.02.45
	Roof		RU	RU.X.00.00	RU.Core.Level.No = RU.C.02.45
	Stair Communal		SC	SC.X.00.00	SC.Core.Level.No = SC.C.02.45
	Smoke Shaft		SS	SS.X.00.00	SS.Core.Level.No = SS.C.02.45
	Fire fighting stair		FS	FS.X.00.00	FS.Core.Level.No = FS.C.02.45
	Undefined		UD	UD.X.00.00	UD.Core.Level.No = UD.C.02.45
Principle Constructions	External Walls		EW000	N/A	
	Party Walls		PW000	N/A	
	Internal Walls	Internal Walls inc. any "other"	IW000	N/A	
	Floor		FL000	N/A	
	Roof		RF000	N/A	
	Ceiling		CE000	N/A	
External Windows Doors	Resi Window / Door		WR000	W.X.00.00	W.Core.Level.No (clockwise NE Corner except where new fenestration is added or removed following first issue of numbered infromation) = W.C.02.45
	Curtain Wall / Communal Window Door		WC000		
	Louvre		WL000		
External Elements	Balcony		BA000	N/A	BA.Associated Dwelling Ref. No, if required for COBIe
	Railing		RA000	N/A	RA.Associated Dwelling Ref. No, if required for COBIe
	Material		MA000	N/A	MA.Associated Dwelling Ref. No, if required for COBIe
Internal Element	Communal Door	Inc. Flat entrance Door	DC000	D.X.00.00	D.Core.Level.No = D.C.02.45
	Riser Door		DR000	D.X.00.00	D.Core.Level.No = D.C.02.45
	Flat Door	Within dwelling	DI000	D.X.00.00-00	D.Dwelling refrence.No. = D.C.02.45-04
	AOV/Hatch	inc. AOVs, hatches, and "Other"	DX000	D.X0.00.00	D.Core.Level.No = D.C.02.45
	Bathroom Pod		BT000	BT.X.00.00	BT.Associated Dwelling Ref. No, if required for COBIe
	Utility Pod		UT000	UT.X.00.00	UT.Associated Dwelling Ref. No, if required for COBIe
	Kitchen Type		KT000	KT.X.00.00	KT.Associated Dwelling Ref. No, if required for COBIe
	Stair Types	Timber & Odd Stairs	ST000	ST.X.00.00	ST.Associated Dwelling Ref. No, if required for COBIe
	Canopy Type		CT000	CT.X.00.00	CT.Associated Dwelling Ref. No, if required for COBIe
	Internal Guarding		GT000	GT.X.00.00	GT.Associated Dwelling Ref. No, if required for COBIe
Fire Stopping	Vertical Internal	Through Superstructure	FV00	FV.X.00.00	D.Core.Level.No = FV.C.02.45
	Horizontal Internal	Through Superstructure	FH00	FV.X.00.00	D.Core.Level.No = FH.C.02.45
	Horizontal External	Penetration through External Façade generally from dwellings for ventilation	FX00	FX.XX.X.00.00.1	FX. Dwelling referefence. No
	Cavity Barriers	for windows	FW	FW.X.00.00	FW.Window Number Ref = FW.C.02.45-04
	Cavit Barriers Horizonta	for compartmentation	CBV	N/A	numbering by specialist
	Cavit Barriers Vertical	for compartmentation	CBH	N/A	numbering by specialist
Other	Signage Wayinding	Internal & External	SN000	S.X0.0.00/00	S.X.00.00-No = RED is derived from Room refrence = S.C.02.45-04
	Signage Statutory		SSS00	N/A	Types of stautory signage will be annotated on Fire Strategy plans

2.3 Room/space numbering procedure

Rooms/ spaces will follow the above naming strategy (2.2).

If required by cobie, the following room/space numbering procedure will be applied on a progressive floor by floor basis going forward with each floor starting at 001. This is still TBC and may only be required if COBie is introduced at stage 4.

Building Ref	Level	Unique Number
A	00	001

So as an example A_00_001

2.4 Rooms and Spaces

The Architect shall model all rooms to the underside of the structural soffit. This will allow the spaces utilised by the MEP contractor to be reused and match the rooms defined. The spaces can then be used across the project to locate COBie assets in the data drop if required going into stage 4. This is to ensure all the maintainable assets in the COBie drop are correctly located.

2.5 Classification

There is no requirement to add a classification system to the modelled elements.

2.6 Asset information requirements

Currently only standard deliverables are required against the assets such as O&Ms etc at handover, there are no COBie and maintainable asset lists required on the project.

2.7 Asset Tagging

This requirement is to be reviewed as and when cobie is instructed.

2.8 Level of Information Need

The level of information need defines the level of maturity required for an information deliverable at a particular plan of work stage. It provides a framework that defines the extent and granularity of information and helps to prevent the delivery of too much information.

The Digital Plan of Works which is embedded in the NBS BIM Toolkit can be used as a reference for information, outlining the requirements for specific model elements. These can be searched by Uniclass classification on the https://toolkit.thenbs.com/definitions which will list LOD and LOI requirements details for a given object.

The level of information need can be broken down into three categories for clarity, these are

- *The level of Definition*
- *The level of Detail (LOD)*
- *The level of Information (LOI)*

2.8.1 The Level of Definition

Covers the geometrical use of the model and the maturity of the data at each stage gate and data drop, this is aligned to the RIBA Plan of work, each RIBA stage is defined below.

Company-Name refer to the 7 Levels of Definition as described below aligned to the RIBA plan of works:

- ***Stage 1**: typically includes only documentation like the project brief and scope.*
- ***Stage 2**: associated with a very high-level design or feasibility study. Approximate volumes or shapes will represent the assets. Some asset information may be attached to the geometric information.*
- ***Stage 3**: equivalent to a preliminary design. Elements are modelled showing approximate volumes, quantities, sizes, etc. Also, some asset information may be attached to the models. Models now used to start the coordination/clash process.*
- ***Stage 4**: of the design process involve progressing from a preliminary design to a detailed design ready for construction—complete with specifications, access, maintenance, and operational information, fully coordinated through clash detection—into a refined model incorporating contractor and sub-contractor specific elements, manufacturer-specific assets, and populated asset information aligned with the Asset Information Requirements (AIR) and workflows, ultimately used to generate 'for construction issue' drawings and support digital construction on site.*
- ***Stage 5**: of the project now needs to be driven by a fully managed change control procedure following the approval of the Gateway 2 submission..*
- ***Stage 6**: the model will include as-built data. This model will include an accurate representation of the built asset. It should also include the relevant information that will be utilised in the CAFM platform as specified I the information needs.*
- ***Stage 7**: the model can be utilised by the Appointing Party and maintenance team for inductions and awareness sessions with the as-built environment. It is this model that shall be kept up to date if required for life cycle of the building.*

2.8.2 The Level of Detail

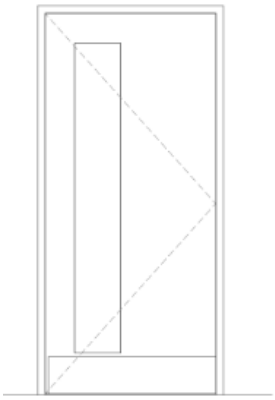
Geometrical information requirements per modelling type (LOD) are defined within the responsibility matrix (Appendix 4).

The Lead Appointed Parties (Lead Designer, Design Manager and Contractor) will document this in the responsibility Matrix details how the LOD will be achieved in line with the BEP which is used for the project and ISO 19650:1 Standards. During early stages of the design during RIBA stages 2 -3 the LOD will not be monitored as the design team can utilise place holder modelling elements for coordination and reference purposes. As the model develops during the technical design the responsibility matrix shall be referenced for the agreed LOD to be delivered for elements.

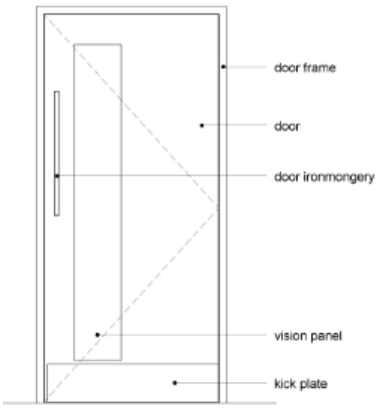
Please refer to the NBS BIM Toolkit for the Level of detail and level of information requirements as a guide only.

LOD 1 Brief - Here there are no geometric info in the model elements, only symbols with attached approximate info.

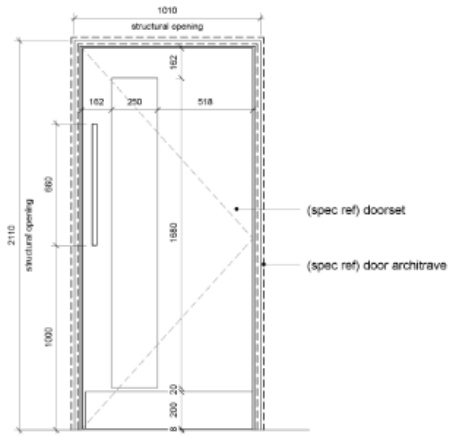
LOD 2 Concept – Provide a visual indication of proposals at a conceptual stage, identifying key requirements such as single or double leaf doors, access and maintenance zones etc. information is suitable for zonal and spatial coordination of primary systems/elements.



LOD 3 Developed Design – Provide a visual representation of proposals at a Design Development Stage and allow general spatial coordination.



LOD 4 Technical Design – Provide a visual representation of proposals at a Technical Stage supporting full spatial coordination.



LOD 5 Construction – Provide sufficient information for construction/installation of the appropriate products.

The project does not need fabrication details included in the elements; however, the exact location of the as-built elements needs to be considered. An agreed tolerance shall be defined in the Project BEP for verification and agreed with the client.

The use of 360 photos and laser scanning is not required to verify the as-constructed state of the model, but traditional surveying techniques shall be utilised to show the model represents the actual true size, shape, form, and location of elements when producing the as-built information as a minimum.

While the principle of the required information needs is defined above, Company-Name recommends that we do not want to over define the Level of detail (LOD) of specific elements and the below table helps define the acceptable minimum LOD for the project at handover (RIBA Stage 6), again the LOD is as stated in the NBS BIM toolkit.

	Level of Detail (LOD)
Sub Structure (Desirable, Not Essential) *Building & Landscape Foundations* *Underpinning* *Concrete Works* *Substructure Masonry* *Ground floor and any ground floor works* *Crane & Hoist Base (LOD 2 acceptable)* *Retaining Walls* *Below ground drainage* *External Channels* *Manholes* *Threshold Drains* • *Localised RC Upstands*	3/4
Basement *Excavation Works* • *Waterproofing systems and Bars Masonry as well as any special finishes to retaining wall.*	3

Basement Retaining Wall	3/4
Structural Frame *Total structural load* *Structure modelled independently* *Connection details modelled* *Interfaces with suspended floors* *Bracing* *Holding down bolts* *RC Slabs* *RC Walls* • *Localised RC Upstands*	4/5
Upper Floors of Non Framed Buildings *Suspended floor by type* *Joist layout and detailing size and type* *Spacing and necessary intermediate supports* *Bordered finishes* *Trimming details size and type (for stairs and floors)* *Joist layout* • *Edge details*	4/5
Stairs and Ramps *Stairs by type, construction, total rise per story and finish.* *Balustrades, handrails and similar.* • *Edge details.*	4/5
External Walls	4
Windows and External Doors *Windows and external doors with unique identification reference.* *Windows and External doors separated by type, glazing treatment, thermal performance, security requirements, wall treatment, size and location.* *Separate glazing types N/A – Included in specs, schedules and within the above AOVs* • *Access hatches*	4
Internal Walls and Partitions *Walls by type and floor to ceiling height* *Acoustic encasement (RWP + SVP transfers)* *Fire curtains* *Letter boxes* • *Access panels/hatches*	4
Internal Doors (Including door jamb stud)	5
Wall Finishes	3
Floor Finishes	3
Ceiling Finishes	3

Fixed and Furniture	3
Kitchens	4/5
Sanitary Fittings and Fixtures	4/5
Mechanical and Electrical Layout/Details *Incoming Gas, Water and Non potable locations and detailing.* *Incoming Gas, Water and Non potable water metering and locations.* *Above ground foul drainage.* *Heat source type.* *Fuel distribution pipework & storage* • *Combined Heat & Power (CHP) Installations*	4
Mounting *Firing equipment, pressure equipment.* *Controls to Heat Sources.* *Fire Breaks where Services enter Apartments and Communal Spaces.* *Sprinkler system.* *Flues & Chimneys including forced draft* • *Extract*	4
Preparatory Groundwork's	3
Soft Landscaping, Planting and Irrigation	4
Fencing Railings, Boundaries and Walls	4
External Finishes	3
Roofs *Area of roof finish by type.* *Roof structure* • *Build-up of roof*	4
Signage	3
External Stairs	4
Street Furniture	3
Hard Landscaping	3
Cycle Storage	4
Lighting (Internal, External and Communal)	4
Fire Services	4
Security CCTV	3

NOTE – If assistance or clarity is required, please reach out to the project Information Manager who will explain the requirements.

2.8.3 The Level of Information

The Level of Information (LOI) will not be required and will not be audited due to the lack of Maintainable assets or COBie data being requested by the client.

2.9 Responsibility Matrix

The Responsibility Matrix can be found in appendix 4, the purpose of this document is to define:

- Design Responsibility
- Information format delivery
- Modelling responsibility
- Information Requirements (COBie information)
- LOD to be delivered

2.10 Master Information Delivery Plan (MIDP)

The development of a detailed MIDP is not required on this project and a simplified version to define the data drops of the models only can be found in appendix 5 (LOT01-SYM-XX-XX-T-BI-00005), the purpose of the MIDP is to define key milestone dates to suit the data drops as defined in section 3.2 for information deliverables.

Company-Name are not demanding the utilisation of individual Task Information Delivery Plans (TIDP) and will leave each individual party to manage their own data based on the MIDP.

2.11 Parameter Requirements

The design team are to identify any additional parameter requirements that need to be shared.

Company-Name will own and manage the project shared parameter file for Revit if required. Any additional fields need to be requested via the Lead Information Manager. This Parameter file shall be shared with each organisation and will be distributed to the Client on project completion.

This may be required to capture FIREie data against materials in the buildings, but other methods to evidence this for the regulator as being investigated.

2.12 Model Management

The models shall be upload to the relevant discipline folder on the clients CDE Asite.

From here Symetri will federate the individual models and generate a single federated Project Information Model (PIM) which will be in the format of a Navisworks NWD file. It is in this file that the clash management review will take place. For details see the Clash User Guide (LOT01-SYM-XX-XX-T-BI-00008) and the diagram in section 3.7.

sequencing will not be utilised on this project.

Methods to forecast movement on site and considering security requirements, focusing on traffic management, waste, and refuge management etc will be covered in Company-Name's documents:

- Site Logistics Plan
- Phase Plan
- Smart Waste Plan
- Program

2.13 Accuracy of information

The Appointing Party place great value on the accuracy of all design information supplied by Contractors, Consultants and Sub-Contractors. It is expected that all information supplied is drawn Geometrically and dimensionally correct. The model will be visually checked only for accuracy. All data within CAD/BIM files should be drawn 'Full Size' (1:1), and should be accurately representative of the installation to within the following tolerances:

All data must work to an updated/correct 'master footprint' to ensure all as-installed drawings and information is accurate. The Lead appointed party will distribute a level and grid model model which will contain the share coordinate system that should be utilised to ensure the coordination of models.

Company-Name will not be verifying the accuracy of the information via laser scanning only via means of photographic capture and comparison with the BIM.

Precision and Dimensioning

Items Not to be Considered Accurate for Dimensioning or Placement
MEP Model – • The design and installation MEP model will not host all the fabrication detail, it will be dimensionally correct and located in the correct placement as installed. The Model Element is geometrically represented within the Model as a specific system, object, or assembly in terms of quantity, size, shape, orientation, and interfaces with other building systems. As the models will be produced to the NBS LOD, fabrication detail may not be shown in the model. • This approach is to be defined in the design appointment documents.
Architects Model - • FFE Items. (Furniture to represent final design and equipment is to be placed for co-ordination only) • Stair Core Handrails and Guarding • Sanitary ware • Office shelving. • Some Revit families are floor based and will require the floor to remain in the model, doubling up on any floors modelled in other model • Miscellaneous joinery items
Structural Model – • Material Quantities (i.e. beams and slabs use the same top plane for analysis purposes. so double counting will occur at these locations), Pile Lengths (to Piling contractor design), Material properties/parameters displayed in the model are not always accurate such as cover to reinforcement. Elements such as this will be defined on the relevant reinforcement drawings. Concrete grades/finishes etc will be detailed in the model with a "Specification Clause Reference".

Element modelling
When creating elements within models it is important to ensure that they are created in a manner that integrates with the other solutions that will be appointed later in the project. This relates to the dimensions and properties that are allocated to an element, as well as the method used in it.

Elements modelled using Revit should follow the guidance set out in this document. Other models should be able to distinguish between elements within their model, however naming conventions are left to each model author. The important information that needs to be considered is the meta data that must be contained within the model elements.

It is also critical that the model represents the elements on site to the agreed maximum stated in the responsibly matrix, as additional detail could enlarge the model so that it is unusable on today's hardware.

Elements should never overlap. If elements overlap, they will cause clashes. The project has solutions for identifying and eradicating any clashes, but all stakeholders should aim to avoid creating clashes from the outset to streamline the design process.

Maintenance and access zones shall be modelled to ensure the operational zone around an asset is acceptable.

Important Note:
The BIM coordinator should be the last line of defence for capturing the occasional clash between models. It is the author's responsibility to be the first line of defence and police their own model both internally and by reviewing against the latest models from others.

Please respect your peers by policing your own models appropriately.

Tolerances for the as-built model shall be aligned to BS 5606:2022 as a guide.

Company-Name will not be verifying the accuracy of the information via laser scanning, only via means of random mobile media device checks and/or traditional site survey measured spot checks to ensure the as-constructed state.

The following Information will not be included in the BIM:

MEP Model –

- Minor support systems
- Secondary support steelwork for unit heaters, etc.
- Brackets and clips
- Joints gaskets/bolts etc
- Gripple wire, drop rods, screws/fixing, and other supports
- Electrical conduit
- All cables including sub mains and sub circuits.
- Insulation banding, colour coding and sections
- Grab rails, sanitary ware and access hatches

Architects Models –

- Stair Core Handrails and Guarding
- Anything external to the building envelope. (some modelled for reference only)
- Ironmongery
- Internal Signage (some modelled for reference only)
- Sanitary FFE (i.e. toilet roll holders, towel Dispensers, hand dryers etc)
- Warehouse racking units
- Suspended ceilings support systems

Structural Model –

- Reinforcement Drawings/Details,
- Steelwork Connections (Base plates, Endplates, Bolts, Welds), slab mess, staircase details
- Metal deck profile, shear studs, metal deck edge trims.
- Open grid flooring – bars / mesh, durbar – anti slip, kicker plates and edge protection.
- Steelwork stays – primary and secondary, sag rods and shear studs. External works and drainage surrounds and bedding, tanks and ducting, 3D modelling of existing site services and draw pits. Existing site features that are not interfacing directly with the works.

Clarity on FFE (FFFE - Fittings, Fixtures, Furniture and Equipment).

The following table is to be utilised to aid the delivery of the FFFE elements for the project. All elements shall be modelled to the responsibility matrix as defined in this BEP unless otherwise stated.

Element Description	Information Details	Additional Comments
Notice Boards / Display Boards	Where provided will be modelled and drawn by Architect	Will only be delivered to an LOD 3
Mirrors, hat/ coat hooks, cloak room fittings	Where provided will be modelled and drawn by Architect	Will only be delivered to an LOD 3
Lockers, Benches	Where provided will be modelled and drawn by Architect.	Will only be delivered to an LOD 3
Toilet roll holders, towel dispensers	Not Modelled	Will only be delivered to an LOD 3
Worktops	Where provided will be modelled and drawn by Architect.	
Vanity units	Where provided, they will be modelled as part of IPS, by the Architect	
Corridor or feature protection systems	Where provided, they will be modelled as part of the specialist wall finishes. By the Architect	
Bins	Not modelled	
Shelving, racking, storage solutions	Not Modelled	
Soft furnishings, chairs/seating	Not modelled	
Window Blinds	Not modelled	
General desking, reception desks and counters, Information Desks, Information Displays	Where provided will be modelled	Will only be delivered to an LOD 3
Bespoke joinery, worktops, cupboards and benching, moveable storage cupboards	Where provided will be modelled and drawn by Architect	
Kitchenettes, refreshment points, vending points	Where provided will be kitchenettes and equipment will be modelled and drawn by Architect	
Microwaves, fridges, dishwashers, coffee machines etc	Not Modelled	
Fire extinguishers incorporation to design including support.	Not Modelled	
M&E Misc equipment		
CCTV system	Will be modelled by MEP Contractor - TBC	

Disabled call points	Will be modelled by MEP Contractor	
Audio Visual systems	The AV equipment will be indicated in the model as part of the M&E delivery and co-ordinated with the Architect.	
PA system	The speakers will be modelled by MEP Contractor	
Hard of hearing system	Not Modelled.	
Noxious gas monitoring system	Not modelled.	
Central compressor system	Will be modelled by MEP Contractor	

2.14 Revit Shared Parameter File

Company-Name will own and manage the project shared parameter file for Revit if required. Any additional fields need to be requested via the Lead Information Manager. This Parameter file shall be shared with each organisation and will be distributed to the Client on project completion.

2.15 Asset model elements

The master PIM (Project Information model) shall only contain a single element to represent an asset. If the Appointed parties (supply chain) partners are developing a design and replaces an element that is already in the design Revit model, this element needs to be deleted or replaced by the new version.

NOTE – If the Appointed parties (supply chain) model is of the same size, form and shape as the design intent model then the existing design intent model may still be utilised in the model for and handover.

2.16 External works modelled

All underground services will be modelled in the delivery of the project, this includes MEP and Utiliities.

The External works that will be modelled will include:

Carpark	Petrol interceptor
Gates	Vehicle yard
Fences	Fire access road
Turn Styles	Cycle storage
External Lighting	CCTV System
External Balustrades	Sprinkler base/tank
External hard landscaping (Paving/asphalt etc)	Access points (Manholes etc)
Attenuation Tanks	All Underground services form both MEP and Utilities
Drainage	Foundations
Below ground build up	Inspection Chambers/Pits
Manholes	

2.17 Project Drawing Frames

All drawings and sheets can be produced on the designers own drawing frames/title blocks.

The title block shall indicate whether the drawing has been extracted from a model and if it has shall indicate the model by its file name reference that they have been extracted from. This requirement will form part of the data drop audit.

The drawing frames shall contain the Project description, drawing number, revision, Drawn/Checked by, date created/amended, Title, Status as a minimum.

2.18 Modelling Strategy

The modelling strategy for each discipline will be different, the details of the approach can be found below:

Architecture:

Shell & Core Models to contain…

- All external wall components (walls, balconies, windows, doors etc)
- All floor principal construction build-ups

- All roof components
- All party walls
- All Communal corridors and core components.
- All doors within a part wall
- All openings through a party wall
- Ceilings to communal corridors
- Any secondary structural elements such as lintels & wind posts

LOT01-PRP-BA-ZZ-M-A-6300003_Block A Shell & Core Model
LOT01-PRP-BE-ZZ-M-A-6300004_Block E Shell & Core Model
LOT01-PRP-ZZ-ZZ-M-A-6300001_Blocks B,C,D Shell & Core Model

……

Structural (workset within main model) to contain…

- All concrete (columns, sheer walls, slabs, upstands & down stands)
- All penetrations through concrete
- Any incoming services info
- Any masonry support
- Any concrete balconies or canopies
- Any structural steelwork
- Any plinths for plant
- Any drainage

……

Internal Model to contain fitout items…

- Any dwelling internal walls, ceilings, finishes etc
- Any dwelling bathrooms, utility cupboards or pods
- Any penetrations through internal dwelling walls
- Any commercial or FOH fitout internal walls, ceilings, finishes etc
- Any cleaners cupboards, communal bathrooms etc.

LOT01-PRP-ZZ-ZZ-M-A-6300002_Internal Fit-Out Model

……

Site wide Models

LOT01-PRP-ZZ-ZZ-M-A-6300000_Site Model

- Topography
- Proposed Trees
- Site context
- Shared Coordinates

LOT01-PRP-ZZ-ZZ-M-A-6300031_Detail Model

- All Details
- All “2d” detail components
- (for internal purposes – not being shared)

LOT01-PRP-ZZ-ZZ-M-A-6300033_Master Model

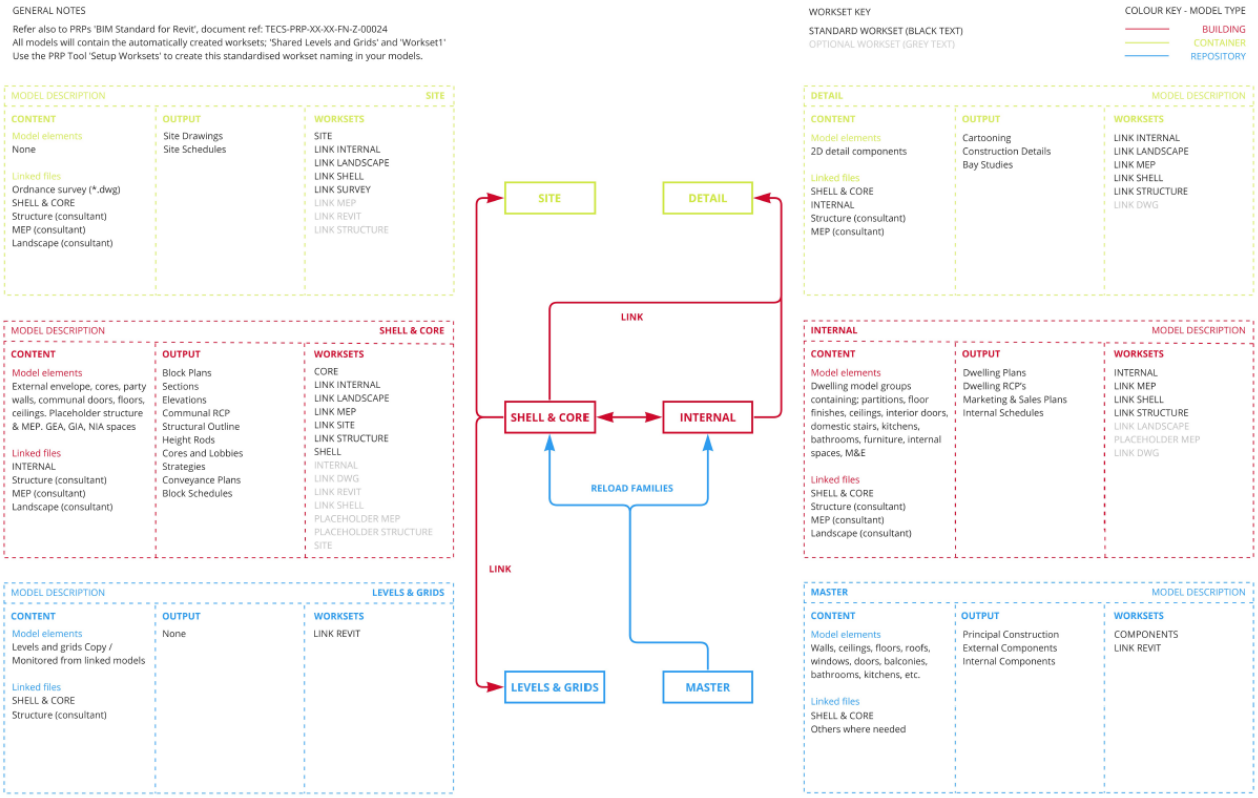
- Templates for all Model Components Generally
- All Principal Construction Components
- All Doors / Windows / Hatch Components

- All Fitout Components
- Principle Construction Drawings
- Window Type Drawings
- Door Types Drawings
- (for internal purposes – not being shared)

LOT01-PRP-ZZ-ZZ-M-A-6300034_Levels and Grids Model

- Origin Points
- Levels
- Grids

This is defined in the diagram below:



Structure

Structural Model to contain:

· All concrete (columns, core walls, slabs, stair landings, upstands, downstands, foundations)
· All penetrations through concrete (BWIC, door openings, shafts)
· Any incoming services information
· Any masonry support
· Concrete or/and Steel Balconies or canopies
· Any structural steel work
· Any plinths
· Any cast-in drainage

This will be delivered in a single model LOT01-GCE-ZZ-ZZ-M-S-00001.

(If the model becomes too large to manage efficiently, it will be segment it into three models as follows: A-E & B-C-D + Site wide model)

MEP

The MEP Models will be delivered and structured as below

	Model Number	Description/ Name
1	LOT01-CHL-BA-ZZ-M-M-00001	Block A Communal Areas MEP Model
2	LOT01-CHL-BE-ZZ-M-M-00005	Block E Communal Areas MEP Model
3	LOT01-CHL-ZZ-ZZ-M-M-00002	Blocks B, C & D Communal Areas MEP Model
4	LOT01-CHL-ZZ-ZZ-M-M-00010	Typical Apartments MEP Model
5	LOT01-CHL-ZZ-00-M-M-00020	Sitewide MEP Model
6	LOT01-CHL-ZZ-ZZ-M-M-00030	BWIC Model

Landscape

The Landscape model will be delivered as a single model.

Survey Information

The Topographical Survey information for the site can be found in the '08 Surveys' folder of Asite and has the following document reference:
LOT01-MET-ZZ-00-D-O-0300001

2.19 Typical Design Strategy

The architectural team will model apartment types as groups to streamline modelling and drawing production. The basis of every apartment will therefore be modelled. One drawing for each apartment type will be produced with a master schedule noting any variations. These variations will be picked up in callout details and modelled in 3d.

The MEP team will model services for typical communal areas including main runs and risers. During stage 3 up to 10 apartment types will be modelled.

3.0 Management

3.1 Model and drawing file exchange

The agreed formats for model and drawing file exchange are:

	RVT (or native)	NWC	NWD	XLSX	PDF	IFC	DWG (2018)
Authored Models	X	X				X	
Federated Models			X				
Clash/Issues/Comments			X		X		
Drawings					X		X (At each data drop)
Schedules and spreadsheets				X			
COBie (UK 2012)				X (At each data drop)			

The models will be provided by the teams to the BIM coordinator in an NWC format wherever possible. The master model will bring these NWC files together and generate a Navisworks NWF Co-ordinated model which will be utilised for clash and review/comments. An NWD file will then be generated, it is this federated NWD file that will be uploaded to the CDE system and utilised for clash detection. The NWF will not be an issued master document.

No amendments shall be made to the DWG files derived from the model; any amendments being carried out shall be performed in the master model.

An open source IFC file shall be generated from the modelling authoring software. This is to be generated for each data drop wherever possible. If manufacturing detail is done in classic authoring tools such as AutoCAD/MicroStation then the native file format shall be issued.

Laser scanning and point cloud information will not be generated on this project by Company-Name. But the client shall be surveying the as-built building to compare against the model prior to handover.

An upload of the model to the Appointing Party (client) CDE system should happen at every model federation this will be in the federated NWD file format for viewing from Asite

3.2 Data Drops

The data drops as defined in the simplified MIDP need to be delivered to the clients Asite system on the dates defined.

3.3 Key modelling deliverables

Important key document deliverables that should be linked into the model are listed below.

Document Type	Comment
Lock Suiting Strategy	The ironmongery supplier will undertake the lock suiting, and where possible the data should be input back into the model as meta data.
Reflective Ceiling Plans	Where required they will be provided and linked to the model data.
Floor, wall and ceiling finishes schedule	The information will be input in the model as data fields
Loaded Room layouts	Loaded room layouts and elevations for all labs and key areas indicating equipment, services termination locations and furniture will be provided from the model.
Miscellaneous material finishes	Wherever possible the corresponding material will be assigned to the model element to reflect the co-ordinated sample boards.

3.4 Model upload

Before the Revit model is uploaded to the CDE system fortnightly the following points must be addressed:

- All formats of linked files to be removed.
- All unused views (except default 3D view), schedules, legends and sheets (except company landing page) to be deleted.
- Model to be detached from central.
- Model to be purged (before handover).
- All elements not part of the model to be deleted. For example, items that have been copied to one side of the model to be kept for later or to try design options with.

The Navisworks model shall address the following points:

- Elements that are not part of the model are not to be included. For example, the MEP Naviswork model will include any MEP subcontractor third party models, but not the architectural or structural reference models.
- All duplicated elements to be removed. For example, floor slabs must appear in either the architectural or the structural model but not both. If the model is copy/monitoring elements from another discipline, then these elements must be placed on a separate workset so it can be turned off when sharing.
- The NWC file shall be generated from a saved view in the model

The Appointing Party (client) has asked that the additional quality requirements are put in place and the BIM authors are required to verify, implement and validate the BIM data as follows prior to sharing:

- Dissociate all dependant, parent or central files, providing access to model processors
- Dissociate all dependant, parent or central files when opening shared native models which are still associated as described above
- Provide up to date 2D and 3D information
- All 2D information is to be directly derived from the 3D model (with the exception of schematics)
- Make all objects within the default 3D view visible
- Remove all drawings sheets which are not required for the design delivery from the models
- Audit and purge any AutoCAD Xrefs
- Unload any Revit linked references
- Provide any associated data required to load the model
- Audit and purge any rogue, random or obsolescent objects
- Audit and correct any misplaced objects
- Segregate the data as per Section 6.1 of the EIR and further agreed standards in the BEP
- Relinquish all ownership of Revit worksets

- Use the shared coordinates system to align all models to the Site Setup coordinates
- Set the Volume Computations to ‘Areas and Volumes’
- Set the Room Area Computation to ‘at wall finish’
- Adhere to the file formats and naming conventions described in LOT01-MAL-XX-XX-L-X-00001.
- Management Protocol
- Close models in plan view or disclaimer view if available to reduce model time
- Audit and insert any missing objects through visual review of the models
- Identify and remove any hard of soft clashes within 2 weeks of their creation. Clashes can be within a single model or between several models.

3.5 File Size Limitations

The Appointing Party (client) requires no single discipline model be in excess of 900mb in size.

No single document, data or model shall exceed 1.2GB.

Model size shall be checked at each data drop and during model federation activities. Early warnings will be issued to the relevant design teams from the BIM Coordinator, when the single discipline models reach 850mb, and other data such as the federated model reaches 1.0GB.

The zoning strategy may need to be reviewed if the file sizes start to reach the limits defined above.

3.6 Model review and commenting

The project will be utilising Navisworks Manage to federate the models and give the project team access for commenting and closing the comments assigned to their party.

It is intended that all parties shall have access to Navisworks Manage to engage in the Clash process, if this is not possible then the project BIM Co-ordinator needs to be informed so the relevant actions can be put in place.

The Clash and commenting procedure can be referenced in Appendix 7, and the following personnel will manage the process.

Project Information Manager	User AA	Contact information
Project Model Co-ordinator	User AAA	Contact information

3.7 Clash detection

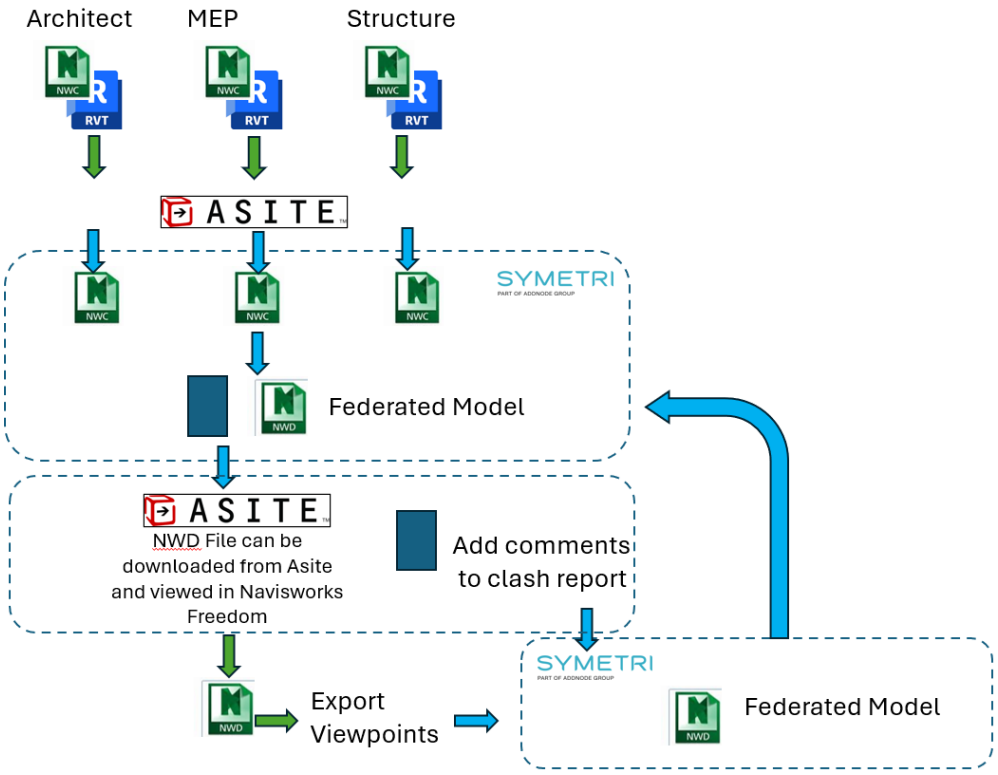
It is the model author's responsibility to be the first line of defence and police their own model both internally and by reviewing against the latest models from others.

The clash detection process will only be performed up to a tolerance of +/- 20mm

Clash detection reviews will be carried out in accordance with the matrix included in Appendix 7.

The clash management process will be within the Navisworks Manage platform and stored in the NWD file format. The NWD file will be distributed on the project CDE at the defined points indicated in the meeting plan in section 3.11.

The clash reports may not be reviewed at the Design Team Meetings (DTMs) and separate clash detection meetings will be hosted by the BIM coordinator again in line with section 3.11.



Please review the clash user guide for details on this workflow and the clash process. (LOT01-SYM-XX-XX-T-BI-00008)

This will also define what input is needed for the design teams.

3.8 CAD Procedure

The design team is working in BIM application tools (such as Revit), CAD exports from BIM should be avoided and if produced should not be amended or revised. Any dwg exports will follow the default export settings from the application and will need to be checked by the user against the latest issued pdf file. These .dwg files will not align to any defined CAD Procedures.

If a DWG file is utilised then **please note** the following key points:

- The DWG exported out of authoring tool shall NOT be used as formal project data, this will always be the PDF.
- DWG files shall be issued in a 2018 format to assist the client.
- It is NOT the responsibility of the design team to amend any data in the DWG file to reflect that in the issued PDF.
- If the DWG is being utilised in another CAD system it is the responsibility of the 3rd party to check the file against the formal PDF issued.
- The DWG will be generated to no CAD standard and the layering system may be a little sporadic
- No Views or sheets shall be retained in the model until final model handover to the client
- The exported DWG data shall NOT be amended in way in the 2D CAD system, any changes shall be directed back to the owner and amended in the authoring master model.
- The DWG files can only be generated at the time a formal issue of a PDF is being produced.

CAD drawings in DWG derived from Revit are never a formal issue and will not follow any kind of CAD standard/procedure. These DWG files are produced using the proprietary Revit format and may result in the data to behave in an unexpected way to the design model itself and may not reflect the information shown in the PDF version of the file.

3.9 Health and safety/ CDM management

(Design and Management) Regulations 2015

The Appointing Parties requirements states that the Lead Appointed Parties (Contractor's) design shall comply with the Regulations. The Contractor's design will be used in adapting and extending the Health and Safety Plan and File for the Project.

This will be managed as a traditional handover procedure.

3.10 PIM origin and orientation

All models shall be set out as defined by the design team. The levels and grids model (LOT01-PRP-ZZ-ZZ-M-A-6300034) shall be correctly positioned (north up) and contains the source of the projects agreed levels, grids and origin points. Co-ordinates are to be acquired from the Site Model (LOT01-PRP-ZZ-ZZ-M-A-6300000).

The following datum position shall be used for 3D generated design data.

The shared coordinate point for the project will be:

Shared Coordinates	
Project Base Point:	E: 526200000.0mm N: 177000000.0mm Elev: 6130mm
Survey Point:	E: 526600000.0mm N: 176900000.0mm Elev: 0mm
Rotation to True North:	239.00°
Notes:	

3.11 Meeting Plan

Regular meetings need to happen in line with the exchange of models, the following chart defines when models shall be uploaded on a bi-weekly basis and on a monthly basis if agreed with the lead designer and when BIM Co-ordination meeting need to take place.

The MIDP LOT01-SYM-XX-XX-T-BI-00005 should be referenced for the agreed data drops and model exchanges.

Regular data exchange timings:

	Week 1					Week 2					Week 3					Week 4				
	M	Tu	W	Th	F	M	Tu	W	Th	F	M	Tu	W	Th	F	M	Tu	W	Th	F
Action/ meeting				①		②	③ ④							* ①		* ②	* ③ * ④			

Legend:
Item ① - BIM Collaboration Exchange (RVT and NWC files)
Item ② - Federated Model upload to Asite (NWD file)
Item ③ - Design Co-ordination meeting
Item ④ - BIM Workshop & Coordination meeting

*These actions will only happen if required.

3.12 Model Audit

At the end of each work stage and before project handover the model files will be audited against this BEP and will be documented in the report attached in Appendix 6 LOT01-SYM-XX-XX-T-BI-00006.

3.13 Site Verification

Site verification of the as-constructed conditions will be carried out by Company-Name via the means of photographic evidence. These photographs will then be monitored and compared against the 3D geometry contained in the PIM.

A report will be generated to define discrepancies found and will act as part of the sign off procedure for handover documentation. This report will be completed at key stages, in line with the program.

3.14 Software

The software versions that shall be used by the design teams are as follows:

	Platform	Version
Design Authoring – building	Revit	2025
Design Authoring – site* (landscape/infrastructure/utilities)	Revit	2025
3D Coordination	Navisworks	2025
Design Review	Navisworks	2025
Model Validation	Revit/Navisworks	2025
CAD 2D Drawings	AutoCAD	2025
Environmental Performance	N/A	N/A
Simulation	N/A	N/A
Facilities Management	TBC	
Exchange formats	Refer to section 3.1	
Point Cloud	N/A	

If the Appointed Parties (supply chain and manufactures) don't utilise Revit as their design tool then the Lead Information Manager needs to be notified and this can be documented in the responsibility Matrix, this is where each work package will state if the design information is going to be supplied in 3D or in 2D formats. Any work package or trade supplier that will not impact on the coordination of the model or their works are above the LOD 4 can be delivered in 2D and the detail will be picked up in the 1:20 detail drawings.

3.15 Security

All project team members shall employ best practice security controls such as using up to date anti-virus security, personal firewalls, access controls, and the latest software patches.

No data shall be stored or distributed on a system or cloud system not approved on this project. By default, all information shall be managed and transmitted using the approved project CDE, Asite which is ISO 27001 compliant.

Using in-house data standards

- All computer systems, environments and information contained within them will be protected against unauthorised access.
- Information kept within these systems will be managed securely, to comply with relevant data protection laws and to satisfy Company-Name expectations that such assets will be managed in a professional, safe and dependable manner.

- All breaches of security (perceived or real) will be reported to and initially investigated by the Project BIM Manager, who may, at their discretion, seek legal advice.
- All users have a responsibility to report promptly any incidents, whether perceived or real, which may have a security and or risk implication.

3.16 Intellectual Property Rights (IPR) & Liability

The Appointing Party (client) own and retain the IPR for all the documents, drawings, BIM, Project Information Model (PIM) and Asset Information Model (AIM) models and the Appointed Parties (supply chain) use this data under license. As such, all IPR in the Material and the Model(s) created by, or on behalf of any Supplier, shall be the property of the Appointing Party (client). The Appointing Party (client) grants each Supplier a royalty-free, non-exclusive license to transmit, copy and use the Material and the Models produced by, or on its behalf, for the extent necessary to fulfil its obligations, pursuant to the Project Contract and Scope/Works Information. It is recognised that suppliers shall not be liable for any use of the Material and the models for any purpose other than that for which they were prepared and provided. Liability shall typically remain with the originator, and they will not be liable for unpermitted modification or amendment, or any transmission, copying or use of the Material and the Models.

All parties shall sign on to the Information Protocol to support BS EN ISO 19650-2, and the CIC best practice guide for professional indemnity insurance when using building information models.

3.17 Disaster Recovery

Each company delivering information on the project must locally store their own information on their own IT storage system, as back up.

All information shall be able to be recovered within a 48-hour window from the various owners.

Company-Name will look to Asite to recover data on the CDE in line with SLA agreement signed onto at project implementation.

3.18 Revit Worksets

Each design team can generate and name their own worksets to suit their own modelling and team strategy requirements. The worksets must be informative and be easily understand by other team members. The mandated worksets are listed below and must be present in the defined discipline model.

All parties shall not model on Workset 1 so that filters can be used per discipline and across models.

Mandated Worksets

Discipline model	Workset required
MEP	CHL-MEP Services, CHL-Architectural Links, CHL-Structural Links, CHL-BWIC, CHL-External MEP Services, CHL-Shared Grids and Levels, CHL-Block

	A Levels, CHL-Block B,C & D Levels, CHL-Block E Levels, CHL-Gridlines
Architect	Refer to architectural diagram within 2.18
Structural Engineer	LNK_ARCH, LNK_CIVIL, LNK_M&E, LNK_STRUC, STR_ANO_GRIDS AND LEVELS, STR_COL_CONCRETE, STR_COL_STEEL, STR_FLR_CONCRETE, STR_FND_CONCRETE, STR_FND_PILE CAP, STR_FND_SECANT PILE, STR_FND_SHEET PILE, STR_FND_TOWER CRANE, STR_FRA_BALCONY, STR_FRA_CONCRETE, STR_FRA_STAIRS, STR_FRA_STEEL, STR_GEN_EXISTING BUILDINGS, STR_GEN_DRAINAGE, STR_GEN_SERVICES, STR_OPN_DOORS & WINDOWS, STR_OPN_SHAFTS, STR_WAL_CONCRETE, STR_WAL_MASONRY

4.0 Building Safety Act (Phase 2 only)

The Project-Name project is at least 7 storeys or 18m in height and has at least two residential units and will need to align to the Building Safety Act 2022. This will also include the alignment to the requirements specified in BS8644-1:2022 and ensure a Golden Thread of digital data is to be retained and delivered.

4.1 The BSA Gateways

The delivery team need to be aware of the two gateways that need to be passed via the Building Safety Regulator.

The three gateways outlined in the Building Safety Act 2022 are a series of regulatory checkpoints designed to ensure the safety and compliance of high-rise and high-risk buildings throughout their lifecycle. These gateways aim to improve oversight, accountability, and safety during the planning, construction, and occupation phases. Here's an explanation of the purpose of the two gateways that need to be passed on the project:

Gateway 2: Pre-Construction Stage (End of RIBA Stage 4)

This gateway occurs before the construction of a high-risk building can commence. It introduces a more stringent approval process, requiring:

- ***Building Control Approval****: The building design must meet the detailed safety requirements outlined in the Building Regulations.*
- ***Submission of Key Documents****: Developers must provide a comprehensive Building Control Application, which includes design safety information, construction methods, and a fire strategy.*
- ***Mandatory Approval****: Construction cannot begin until the Building Safety Regulator (BSR) grants approval.*

Gateway 3: Pre-Occupation Stage (End of RIBA Stage 5)

This is the final gateway, which takes place after construction is complete but before the building can be occupied. It ensures that the completed building meets the required safety standards. Key requirements include:

- ***Handover of the Golden Thread**: A digital record of the building's design, construction, and safety information must be handed to the building's accountable person.*
- ***Final Inspection**: The BSR conducts a thorough inspection to ensure compliance with safety regulations.*
- ***Completion Certificate**: Occupation is only permitted once the regulator issues a completion certificate, confirming that all safety criteria are met.*

The purpose of the BSA Gateways are designed to:

Improve Transparency: By requiring detailed documentation and oversight at every stage.
Ensure Accountability: Clear responsibilities for safety are assigned to duty holders.
Prevent Unsafe Buildings: Potential risks are identified and mitigated before they escalate.
These measures form a critical part of the Building Safety Act's framework, aiming to prevent future safety issues like those exposed by the Grenfell Tower fire.

4.2 Roles within the Building Safety Act

It is all our responsibility to ensure we understand the requirements and the role we are accountable for on a project.

Overview of Specific Roles Across Gateways

Role	Gateway 1	Gateway 2	Gateway 3
Principal Designer	Prepares Fire Statement	Submits Building Control Application	Verifies as-built compliance.
Principal Contractor	N/A	Prepares for construction phase	Submits As-Built Safety Case.
Building Safety Regulator	Reviews Fire Statement	Reviews and approves design for compliance	Conducts final inspection and issues certificate.
Developer/Client	Ensures competent professionals are hired	Ensures design approval and workforce readiness	Ensures handover to the Accountable Person.
Fire and Rescue Services	Provides consultation input	May review safety-critical systems	Verifies emergency provisions (if required).
Accountable Person (AP)	N/A	N/A	Takes ownership of post-occupation safety.

Key Responsibilities of the Principal Designer

The Principal Designer ensures safety is prioritised from the earliest stages of a project, carrying these considerations through to construction and handover. By proactively managing risks and maintaining compliance, the Principal Designer contributes significantly to achieving the Building Safety Act's goals of creating safer buildings and protecting occupants.

Competency and Accountability

- ***Competency Requirements**: The Principal Designer must have the necessary skills, knowledge, experience, and organizational capability to manage building safety risks.*
- ***Accountability:** As a duty holder, the Principal Designer is legally accountable for ensuring that safety considerations are fully integrated into the design phase.*

Lead on Design Risk Management

- ***Assess Risks:** Identify potential fire and structural risks during the design phase.*
- ***Mitigate Risks**: Develop design solutions that eliminate or reduce these risks to ensure compliance with safety regulations.*
- ***Incorporate Safety:** Ensure safety measures, such as fire escape routes, compartmentation, and structural integrity, are integral to the design.*

Prepare and Submit Safety Documentation

- ***Fire Statement (Gateway 1):** Submit a detailed document outlining fire safety considerations for the building, such as emergency access, materials, and evacuation strategies.*
- ***Building Control Application (Gateway 2):***
  - *Compile and submit essential documentation, including:*
    - *Structural calculations.*
    - *Fire strategy.*
    - *Safety-critical design details.*
    - *Coordinate with the Building Safety Regulator (BSR) to ensure approval before construction begins.*
- ***Golden Thread Records:** Begin the creation of digital safety records, ensuring all safety-related design decisions and changes are documented.*

Coordinate with Duty Holders

- ***Principal Contractor:** Share relevant safety information to ensure risks are managed during construction.*
- ***Other Designers and Specialists: Collaborate with architects, engineers, and other consultants to integrate safety into all design aspects.***
- ***Client/Developer:** Advise the client on compliance and safety matters during the design phase.*

Maintain Compliance

- ***Building Regulations:** Ensure the design adheres to relevant Building Regulations, particularly those related to fire and structural safety.*
- ***CDM Regulations:** Fulfil duties under the Construction (Design and Management) Regulations 2015, which overlap with Building Safety Act requirements.*

Verify Design Post-Construction

- ***At Gateway 3 (Pre-Occupation Stage):***
  - *Confirm that the as-built structure aligns with the approved design.*
  - *Ensure all safety measures have been implemented as planned.*

Key Responsibilities of the Principal Contractor (Company-Name)

The Principal Contractor (PC) under the Building Safety Act 2022 plays a crucial role in managing the construction phase of a project. Their responsibilities centre on ensuring that construction work complies with the approved designs, Building Regulations, and safety requirements. Ensures that the construction phase is carried out safely, effectively, and in full compliance with the Building Safety Act 2022. By prioritizing risk management, maintaining the Golden Thread, and collaborating with other stakeholders, the Principal Contractor plays a vital role in delivering safe, compliant, and high-quality buildings.

Leadership in Risk Management

- ***Manage Construction Risks:*** *Identify, assess, and mitigate risks related to fire, structural safety, and on-site hazards during construction.*
- ***Enforce Safety Standards:*** *Ensure that safety-critical elements of the building are constructed as designed and in compliance with the Building Regulations.*
- ***Monitor Compliance:*** *Conduct regular site inspections to check that construction activities align with safety requirements.*

Preparation and Management of the Construction Phase Plan

- ***Develop and Maintain the Plan:*** *Create a detailed plan that outlines how health, safety, and environmental risks will be managed during construction.*

Update the plan to reflect changes or new risks as the project progresses.

- ***Communicate the Plan****: Ensure all workers and subcontractors understand the Construction Phase Plan and their role in maintaining safety.*

Coordination with Other Duty Holders

- ***Principal Designer****: Collaborate to ensure the design intent is implemented safely and that any changes during construction are documented.*
- ***Building Safety Regulator (BSR):*** *Facilitate inspections and provide documentation to demonstrate compliance with regulatory requirements.*
- ***Subcontractors and Workers:*** *Ensure all on-site personnel are competent, adequately trained, and informed about safety requirements.*

Contribution to the Golden Thread

- ***Update Records:*** *Contribute to the Golden Thread Records, documenting any modifications or deviations from the original design during construction.*
- ***Ensure Accuracy:*** *Provide clear and up-to-date (as-built) information for the handover to the Accountable Person (AP).*

Compliance with Building Regulations

- ***Ensure Compliance:*** *Make sure the construction adheres to the approved Building Control Application and meets all fire and structural safety standards.*
- ***Address Issues:*** *Resolve any non-compliance identified during inspections by the Building Safety Regulator or other authorities.*

Assist in the Pre-Occupation Stage

- ***Prepare the As-Built Safety Case:*** *Collaborate with the Principal Designer to prepare a report demonstrating how risks have been managed during construction.*
- ***Support Final Inspections:*** *Facilitate the Building Safety Regulator's final inspection to obtain the Completion Certificate.*

Competency Requirements

- *Possess sufficient skills, knowledge, and experience to manage construction safely.*
- *Ensure all workers and subcontractors on-site are competent for their roles.*
- *Have organizational capabilities to manage complex projects, especially high-risk buildings.*

Accountability

- *Managing on-site risks.*
- *Ensuring the construction complies with safety standards.*
- *Collaborating effectively with other duty holders to maintain the project's integrity.*

4.3 The BSA Gateway deliverables

The deliverables at each gateway in the Building Safety Act 2022 represent specific documentation and actions required to demonstrate compliance with safety regulations. These deliverables ensure thorough checks at every stage of a building's lifecycle, particularly for high-rise and high-risk buildings. The Lead appointed Party and the Appointing party need to work together along with collated project team to ensure the following deliverables are generated and submitted to the HSE Regulator at each of the required Gateways.

NOTE - The building cannot be occupied until the BSR issues a Completion Certificate.

Gateway 2: Pre-Construction Stage

This gateway acts as a **"hard stop"** before construction begins. The focus is on proving that the building design meets the required safety standards.

Key Deliverables:

1. Full Design Safety Report
Detailed designs demonstrating compliance with building regulations, particularly Part B (Fire Safety) and Part A (Structure).

2. Fire Safety Strategy
Comprehensive fire safety strategy detailing fire detection, alarms, fire suppression systems, means of escape, and compartmentation.

3. Construction Control Plan
A plan showing how compliance with safety regulations will be maintained throughout the construction phase.

4. Appointment of Principal Designer and Principal Contractor
Both must demonstrate competency to manage the fire and structural safety aspects of HRB construction.

5. Golden Thread Information Initiation
Digital records and plans showing the design and intended safety features of the building, including fire doors, alarms, and sprinklers.

6. Safety Case
The safety case outlines the significant fire and structural risks and how these will be mitigated during construction and occupancy.
7. Schedule of Materials
Specification of materials to be used, particularly in relation to fire safety (e.g., cladding materials).

Gateway 3: Pre-Occupation Stage

This is the final checkpoint before the building can be occupied. The focus is on verifying that the building has been constructed in line with approved designs and that all safety systems are functional.

Key Deliverables:

1. Building Control Final Certificate
Certificate issued by the Building Control Body (either local authority or approved inspector) confirming the building meets safety and compliance requirements.
2. As-Built Safety Case Report
A report confirming that the building's fire and structural risks have been identified and mitigated as per the design.
3. Final Fire Safety Strategy
Confirm that the fire safety strategy has been fully implemented and matches the design specification (e.g., fire alarms, sprinklers, escape routes).
4. Golden Thread Finalization
Completion of the digital records detailing the as-built safety-critical elements of the building (fire doors, compartmentation, materials used, etc.).
5. Mandatory Reporting and Testing
Records showing that fire safety systems (fire alarms, sprinklers, etc.) have been tested and are operational.
6. Resident Engagement Strategy
A strategy for ongoing resident engagement and communication around building safety measures, including evacuation procedures.
7. Ongoing Maintenance and Safety Management Plan
Details of how safety features will be maintained throughout the building's occupation phase.
8. Registration of the Building with the Building Safety Regulator
Confirmation that the building has been registered with the Building Safety Regulator.

Ongoing Requirements After Gateway 3 (Occupation Phase)

Post-Gateway 3, there are ongoing responsibilities and documentation to maintain the safety of the HRB.

Key Ongoing Deliverables:

1. Safety Case Reviews
Regular review and updating of the safety case to ensure ongoing risk management.
2. Fire Safety Management Plan
A live plan that gets updated based on inspections, incidents, or modifications.
3. Resident Safety Information
Keep residents informed of safety systems, evacuation plans, and any updates to the building's fire safety measures.
4. Building Maintenance Records
Ongoing maintenance logs to ensure all fire and safety systems (sprinklers, alarms, fire doors) are working properly.
5. Annual Inspection Reports
Annual checks to ensure continued compliance with building safety standards.
6. Compliance with BSR Reporting Obligations
Timely submission of inspection reports and any incidents to the Building Safety Regulator

4.4 The Golden Thread

The Golden thread of data is to be collaborated in the Frimley Park NHS CDE system and a Fire Emergency File (FEF) will be collated in a system such as Createmaster or equivalent. The proposed Golden Thread strategy is to be defined in the Project BEP but must ensure the following points are covered:

- *Accurate.*
- *Kept digitally.*
- *Kept securely.*
- *A building's single source of truth.*
- *Available to people who need the information to do a job.*
- *Available when the person needs the information.*
- *Presented in a way that a person can use.*
- *Handover strategy*

The Fire information provided should be aligned to the Information Exchange Points (IEP) document and defined in BS8644-1:2022 Appendix A and downloaded from the BSI document portal.

4.5 Engaging the fire and rescue service (FRS) or fire brigade

Under the Building Safety Act 2022, the responsibility for contacting the Fire and Rescue Service (FRS) depends on the stage of the building's lifecycle and the roles involved. Here's how it typically works:

Summary of Responsibility		
Lifecycle Stage	Role Responsible for Contacting the FRS	Purpose
Planning (Gateway 1)	Local Planning Authority (with input from Principal Designer / Developer)	Consult on the Fire Statement and assess proposed fire safety measures

Construction (Gateway 2)	Principal Contractor or Principal Designer (if needed)	Address fire safety system installation or site-specific requirements.
Pre-Occupation (Gateway 3)	Building Safety Regulator	Verify compliance with fire safety regulations before issuing the Completion Certificate
Occupation (Post-Handover)	Accountable Person or Building Safety Manager	Ongoing fire safety management, risk assessments, and responding to incidents or concerns.

It is key that the FRS are engaged on the project who will influence the capture and use of the FIREie data that shall be captured and utilised during the lifecycle of the building.

4.6 FIREie data

As part of the Fire information requirements and to ensure the project proceeds through the BSA gateways, FIREie or structured data around the buildings fire stopping and fire performance safety materials and elements will need to be delivered. This is to meet the requirements as specified in BS8644-1:2022, section 5. The approach on how this will be delivered needs to be agreed between all parties, a template has been suggested in the reference documents - FIREie Performance Materials.

The project team are looking at alternative ways to capture this information in other documents to submit to the regulator.

4.7 Supporting the BSA requirements during the defect period

Following the handover of a building under the Building Safety Act 2022, the building owner (or the designated Accountable Person (AP)) has several key responsibilities to ensure the ongoing safety of the building's occupants and compliance with legal requirements. Part of this requirement during any defects period is to ensure that a post-handover the **Golden Thread Records are maintained and kept up to date (this includes As-built records post maintenance),**

4.8 Change Control

A Change Control Log is a critical component of the Building Safety Act 2022, particularly in the health care sector, where maintaining a detailed and transparent record of design, construction, and operational changes is vital for safety and compliance. This log ensures that all modifications affecting the building's safety are documented, reviewed, and approved appropriately, please reference 001-SYM-XX-XX-BI-Z-0005. The purpose of the Change Control Log is as follows: .

- **Tracks Modifications**: Records any changes made to the building's design, construction, or operation that could impact safety.
- **Ensures Accountability**: Assigns responsibility for changes and ensures they are approved by competent individuals or authorities.
- **Maintains the Golden Thread**: Updates the digital records to reflect accurate and up-to-date information about the building.

Supports Compliance: Ensures changes align with Building and construction handover.

4.0 Appendices

2. ~~LOT01-SYM-XX-XX-T-BI-00002_File Naming~~ now replaced with Company-Name File Naming requirements document LOT01-MAL-XX-XX-L-X-00001.

3. ~~LOT01-SYM-XX-XX-T-BI-00003_COBie matrix~~ not Required

4. LOT01-SYM-XX-XX-T-BI-00004_Responsibility Matrix

5. LOT01-SYM-XX-XX-T-BI-00005_MIDP

6. LOT01-SYM-XX-XX-T-BI-00006_Model Audit Template

7. LOT01-SYM-XX-XX-T-BI-00007_Clash Matrix

8. LOT01-SYM-XX-XX-T-BI-00008_Clash User Guide

9. LOT01-SYM-XX-XX-T-BI-00009_Risk Register

10. LOT01-SYM-XX-XX-T-BI-00010_Mobilisation Plan

5.0 BSA 2022 compliant documents references

Building Regulations Relevant Requirement Tracker

Golden Thread Report

FIREie Performance Materials

6.0 Reference Documents

EIR – 001-SYM-XX-XX-BI-Z-0001-EIR
AIR - 001-SYM-XX-XX-BI-Z-0001-AIR