

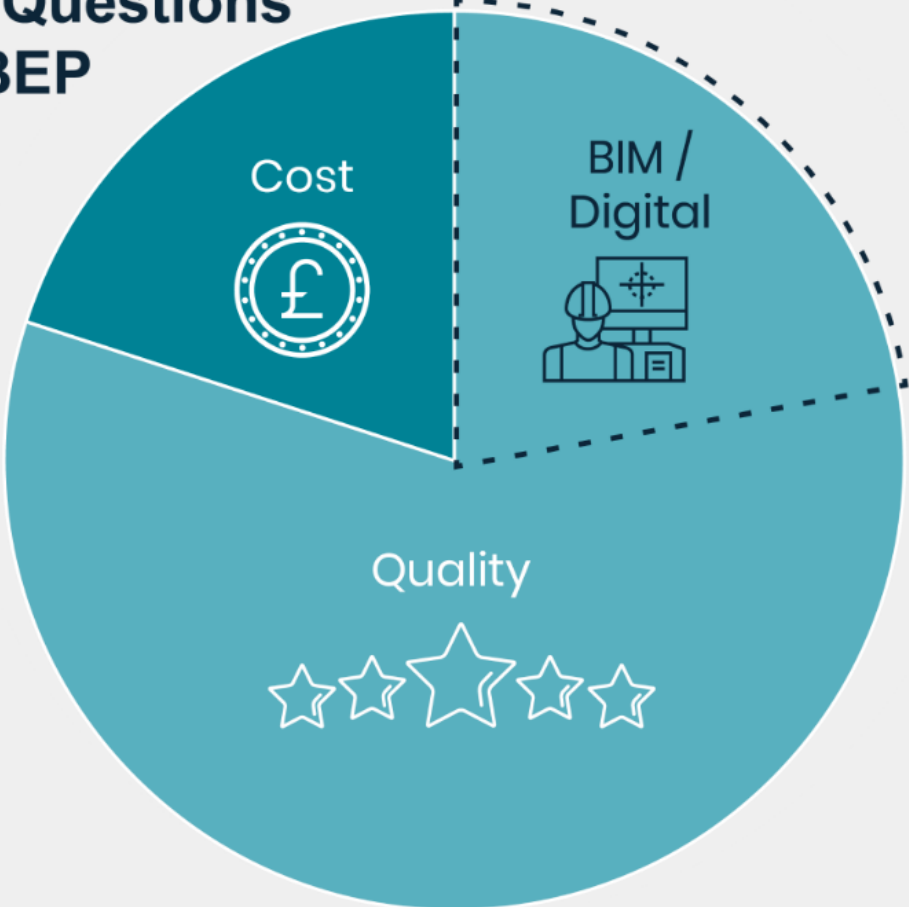


Digital @ HMP Five Wells

The Challenge



**36 Questions
+ BEP**





Deliver in accordance with the FIR/AIR



Deliver in accordance with the EIR/AIR
(Robust BIM Level 2)

Ensure secure data handling throughout all project
phases

- + KPI's including:
 - Visualisation
 - 4D
 - 5D - QTO

1 PROJECT BIM DOCUMENTATION



- 1. Employer Information Requirements (EIR), Information Delivery Plan (IDP) & Asset Information Requirements (AIR)**
These documents describe the management standards and collaborative processes needed to produce the information required by the Ministry of Justice.
- 2. Programme Wide & Site Specific BIM Execution Plan (BEP)**
Guides to delivering BIM on the P2P project. The document addresses The Ministry of Justice's Employer Information Requirements (EIR) and Asset Information Requirements (AIR).
- 3. MODEL PRODUCTION DELIVERY TABLE (MPDT), TASK INFORMATION DELIVERY PLAN (TIDP) & MASTER INFORMATION DELIVERY PLAN (MIDP)**
These documents set out what and when information flow will be receiving from our designers and subcontractors.

2 PROJECT INFORMATION MODEL BREAKDOWN

DESIGN CONSULTANTS

- DECK OVERLEAF**: Architectural Design & Coordination (WBC132 & WBC133)
- ARUP**: Structural Design & Analysis, Structural Design & Detail, Structural Design & Detail, Structural Design & Detail, Structural Design & Detail (WBC134 & WBC135)
- MZA**: Multi-disciplinary Design & Model, Mechanical, Electrical and Public Health (WBC136 & WBC137)
- BIMTech**: BIM Specialist (WBC138)
- Curtins**: Structural Pre-Construction & Model Coordination (WBC139)

SPECIALIST DESIGNERS

- bennett**: Specialist Design (WBC140)
- EMERGENT**: Specialist Design (WBC141)
- EMETSEC**: Specialist Design (WBC142)
- palicki**: Specialist Design (WBC143)
- whitco**: Specialist Design (WBC144)
- ELIUM**: Specialist Design (WBC145)

BUILDING TYPES

- WBC131: Deck Overleaf
- WBC132: Deck Overleaf
- WBC133: Deck Overleaf
- WBC134: Deck Overleaf
- WBC135: Deck Overleaf
- WBC136: Deck Overleaf
- WBC137: Deck Overleaf
- WBC138: Deck Overleaf
- WBC139: Deck Overleaf
- WBC140: Deck Overleaf
- WBC141: Deck Overleaf
- WBC142: Deck Overleaf
- WBC143: Deck Overleaf
- WBC144: Deck Overleaf
- WBC145: Deck Overleaf

3 PROJECT AUTHORING & DIGITAL TOOLSETS

AUTODESK REVIT
Model Authoring Software used by Pick Design & ARUP

COSTX
Cost estimation estimating (C) software to extract existing data and produce bill of bill of quantities

Power BI
A business analysis solution that lets you visualize your data and share insights across your organization

BIMcollab
A cloud based issues collaboration platform that offers both teams and monitors BIM information and coordination issues.

GLIDERBIM
A Data Enhancement and collection platform which allows P2P to become enriched with specialist data while performing validation to check compliance

Asta Powerproject
A planning software that has an integrated ticket to create C4D structures

SYNCHRO SOFTWARE
A BIM tool used to create digital twins and create the models from a mobile device.

DALUX

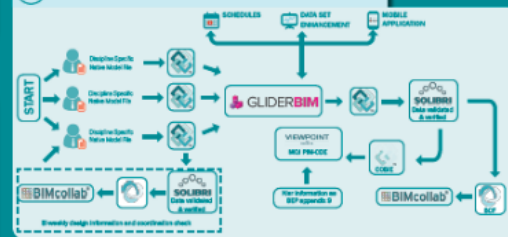
DIGITAL MISSION STATEMENT

Ministry of Justice
New Prison at Wellington

4 DIGITAL ACTION PLAN

LEVEL	PROJECT CODE	START REQUIREMENT	END REQUIREMENT	DELIVERABLES	STATUS
LEADERSHIP	P01	1. Develop information with the Employer	1. Develop information with the Employer	1. Information Requirements (EIR)	Completed
		2. Develop information with the Employer	2. Develop information with the Employer	2. Information Delivery Plan (IDP)	Completed
CHECKPOINT	P02	3. Develop information with the Employer	3. Develop information with the Employer	3. Information Requirements (EIR)	Completed
		4. Develop information with the Employer	4. Develop information with the Employer	4. Information Delivery Plan (IDP)	Completed
ARCHITECT	P03	5. Develop information with the Employer	5. Develop information with the Employer	5. Information Requirements (EIR)	Completed
		6. Develop information with the Employer	6. Develop information with the Employer	6. Information Delivery Plan (IDP)	Completed
STRUCTURE	P04	7. Develop information with the Employer	7. Develop information with the Employer	7. Information Requirements (EIR)	Completed
		8. Develop information with the Employer	8. Develop information with the Employer	8. Information Delivery Plan (IDP)	Completed
MECHANICAL	P05	9. Develop information with the Employer	9. Develop information with the Employer	9. Information Requirements (EIR)	Completed
		10. Develop information with the Employer	10. Develop information with the Employer	10. Information Delivery Plan (IDP)	Completed
ELECTRICAL	P06	11. Develop information with the Employer	11. Develop information with the Employer	11. Information Requirements (EIR)	Completed
		12. Develop information with the Employer	12. Develop information with the Employer	12. Information Delivery Plan (IDP)	Completed
PLUMBING	P07	13. Develop information with the Employer	13. Develop information with the Employer	13. Information Requirements (EIR)	Completed
		14. Develop information with the Employer	14. Develop information with the Employer	14. Information Delivery Plan (IDP)	Completed
MECHANICAL	P08	15. Develop information with the Employer	15. Develop information with the Employer	15. Information Requirements (EIR)	Completed
		16. Develop information with the Employer	16. Develop information with the Employer	16. Information Delivery Plan (IDP)	Completed
ELECTRICAL	P09	17. Develop information with the Employer	17. Develop information with the Employer	17. Information Requirements (EIR)	Completed
		18. Develop information with the Employer	18. Develop information with the Employer	18. Information Delivery Plan (IDP)	Completed
PLUMBING	P10	19. Develop information with the Employer	19. Develop information with the Employer	19. Information Requirements (EIR)	Completed
		20. Develop information with the Employer	20. Develop information with the Employer	20. Information Delivery Plan (IDP)	Completed

5 PROJECT INFORMATION WORKFLOW



6 INFORMATION EXCHANGE SCHEDULE

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
WK 1	Information Exchange				
WK 2	Model Data Verification & validation checking				
WK 3	Information Exchange				
WK 4	Design Coordination Meeting				

Information Exchange
Model Data Verification & validation checking
Information Exchange
Design Coordination Meeting

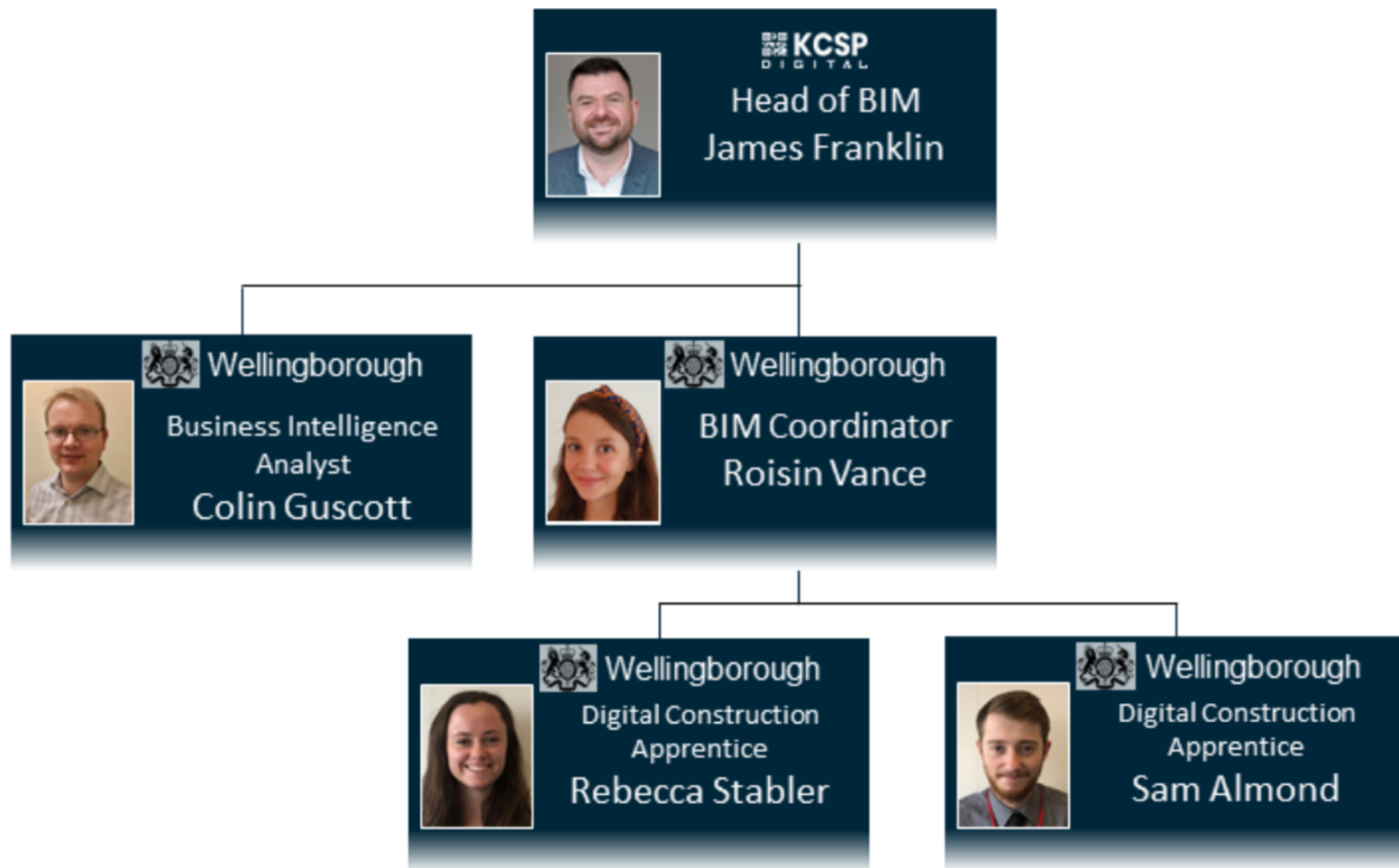
7 SITE AERIAL DRONE SURVEYS

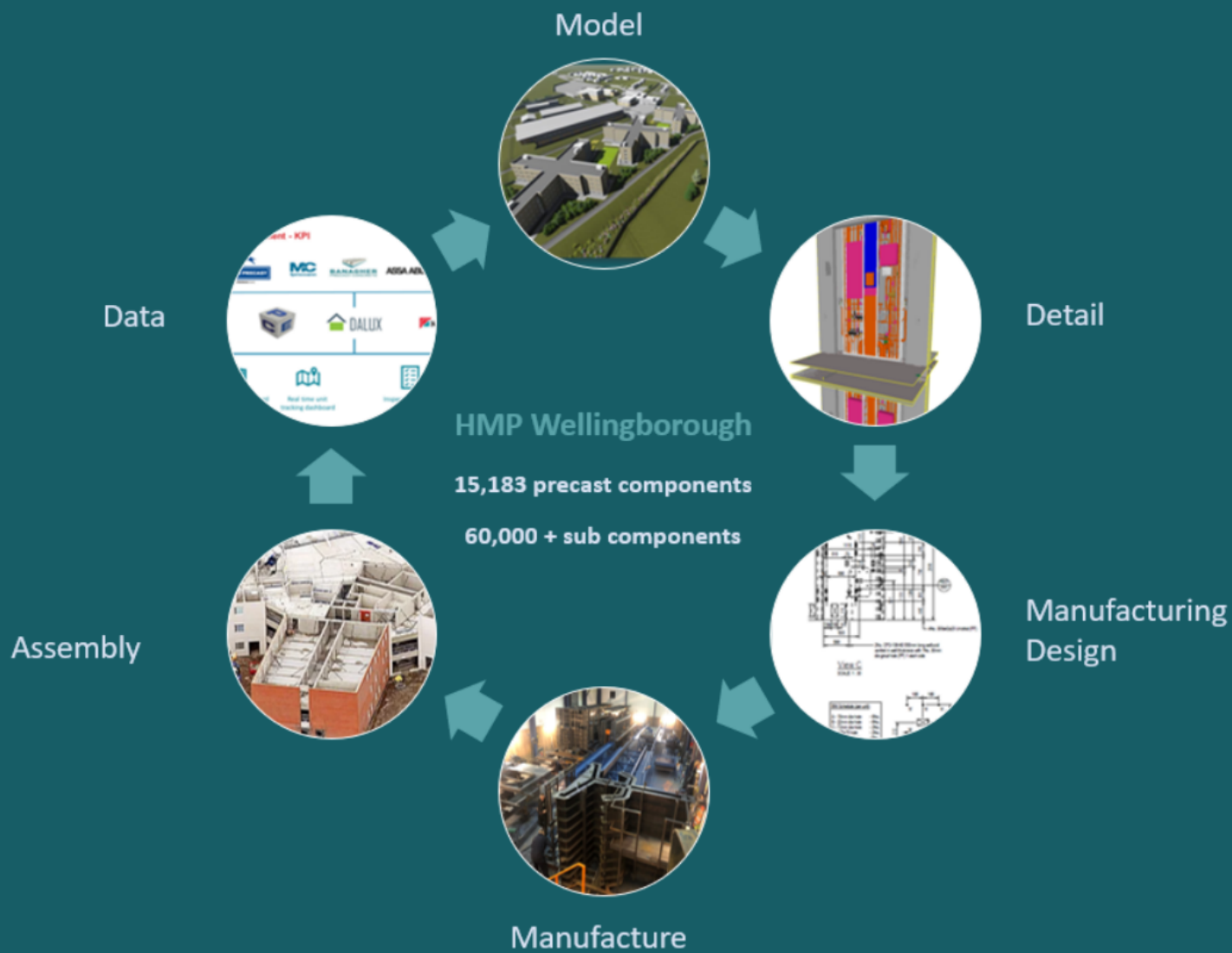


8 DIGITAL HANDOVER

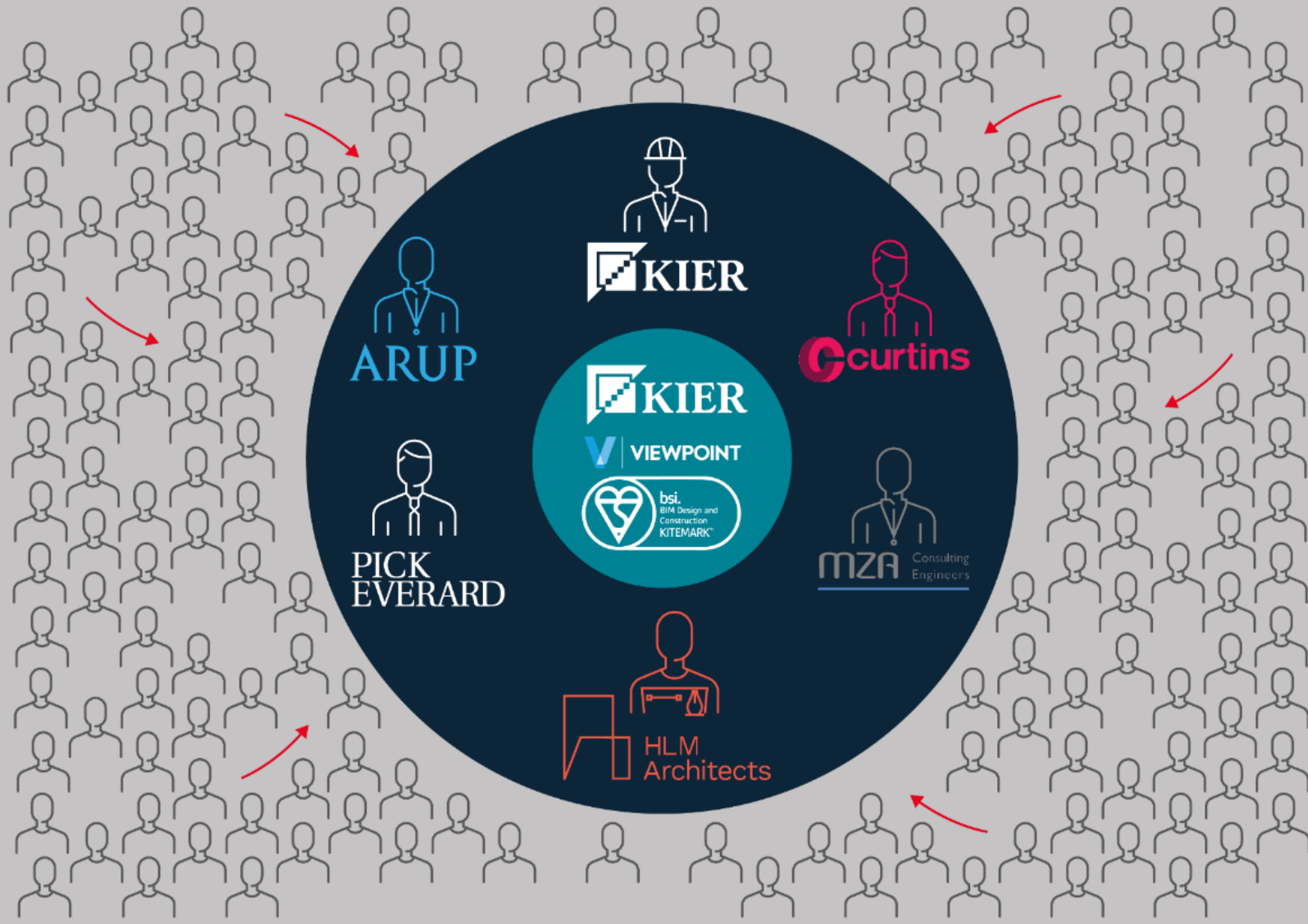


PROJECT MANAGER SIGN OFF _____ Date _____









The PIM comprises of 283 models so far....

OpenBIM standards



IFCs



COBie



BCF

Total Component count

408,029. Although
18,542,839 objects
have passed through



SOLIBRI

Over **6million**
pieces of data to
collect for handover



BIMTech handling
all MEP modelling
throughout



Detailed design
required earlier in
the programme to
enable the
manufacture of
off-site components



ough

jects

ough



SOLIBRI

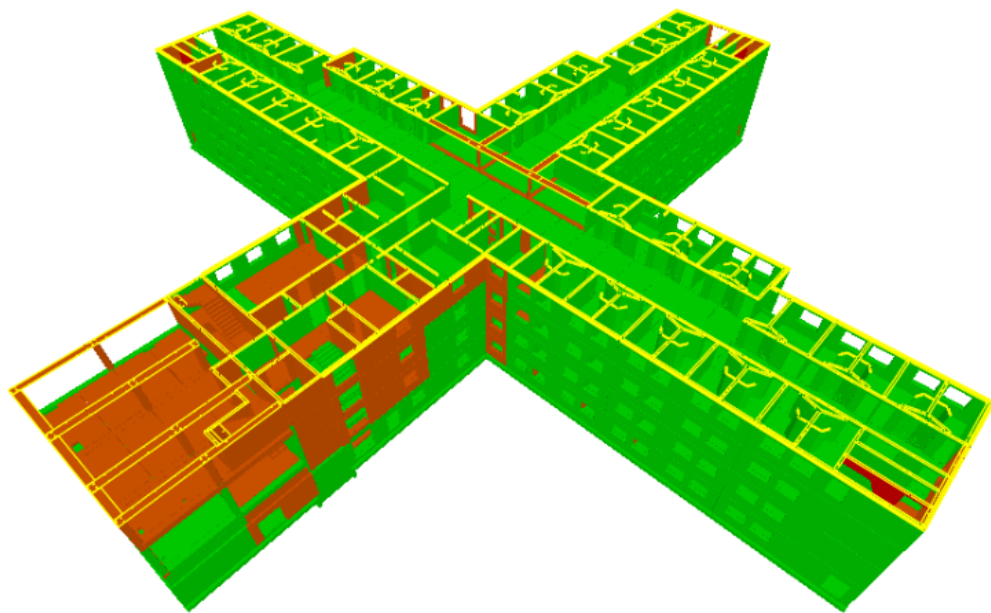
esign



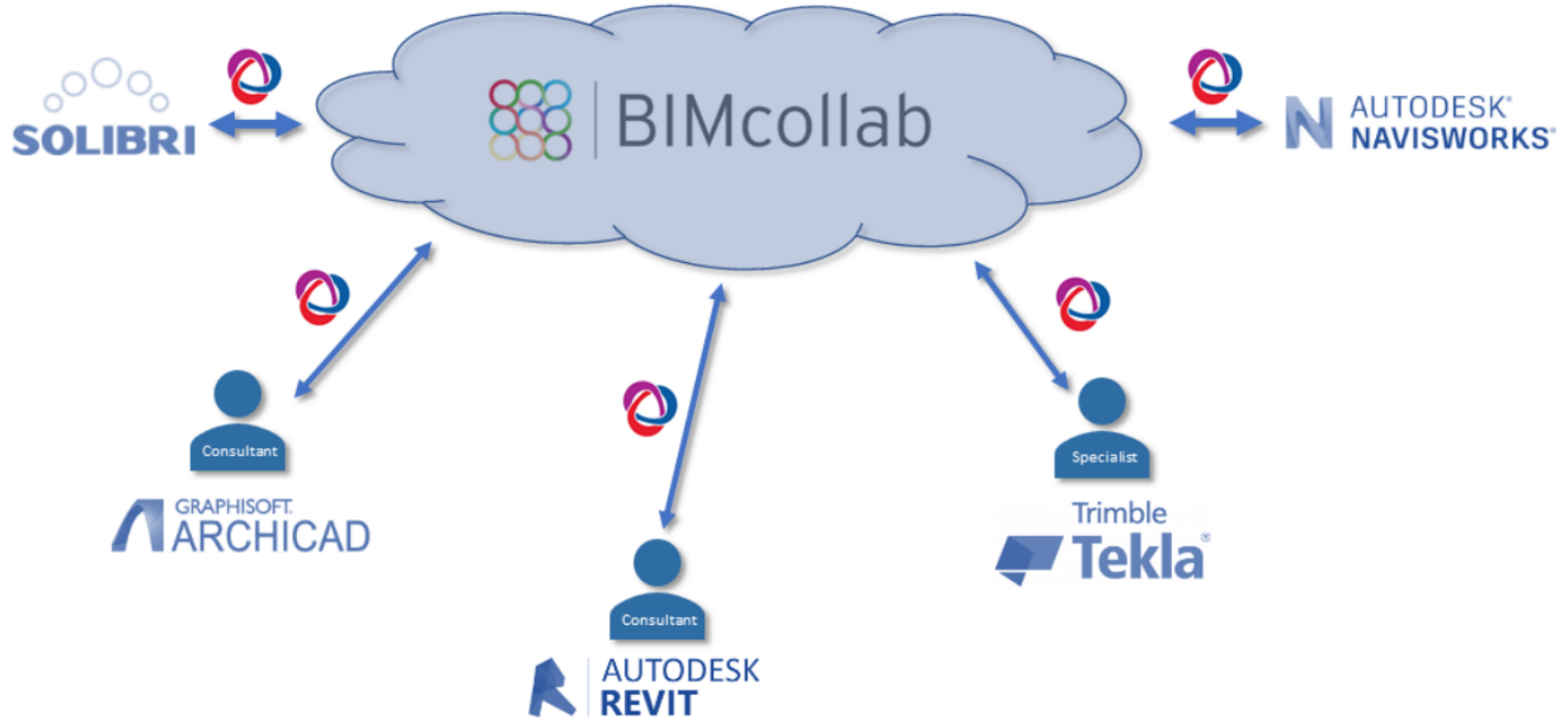
COBie Sheet Name:	COBie Attributes Name:	Required in IFC at end of Stage 3:	Required in IFC at end of Stage 6:	Typical Example Data & Format:	Required at Information Exchange:	Milestone / Purpose:	Information Supplier
Facility	Name	Yes	Yes	WBC102	3	Completion of RIBA Stage 3	Lead Designer
Facility	SpaceName	Yes	Yes	Wellington Prison	3	Completion of RIBA Stage 3	Lead Designer
Floor	Name	Yes	Yes	Level 00	3	Completion of RIBA Stage 3	Lead Designer
Space	Name	Yes	Yes	00-009	3	Completion of RIBA Stage 3	Lead Designer
Zone	Name	Yes	Yes	Z001	3	Completion of RIBA Stage 3	Lead Designer
Type	Name	Yes	Yes	Door_Type10	3	Completion of RIBA Stage 3	Design Team
Type	CreateOn	Yes	Yes	2019-04-13T15:33:35	3	Completion of RIBA Stage 3	Design Team
Type	Category	Yes	Yes	Uniclass2015 Pr Code	3	Completion of RIBA Stage 3	Design Team
Type	Description	Yes	Yes	Uniclass2015 Pr Description	3	Completion of RIBA Stage 3	Design Team
Type	AssetType	Yes	Yes	Fixed or Movable	3	Completion of RIBA Stage 3	Design Team
Type	NominaLength	Yes	Yes	100	3	Completion of RIBA Stage 3	Design Team
Type	NominaWidth	Yes	Yes	1010	3	Completion of RIBA Stage 3	Design Team
Type	NominaHeight	Yes	Yes	2100	3	Completion of RIBA Stage 3	Design Team
Component	Name	Yes	Yes	XXXX-00001 (See IFC Nomenclature)	3	Completion of RIBA Stage 3	Design Team
Component	CreateOn	Yes	Yes	2019-04-13T15:33:35	3	Completion of RIBA Stage 3	Design Team
Component	Description	Yes	Yes	Description of Component	3	Completion of RIBA Stage 3	Design Team
System	CreateOn	Yes	Yes	2019-04-13T15:33:35	3	Completion of RIBA Stage 3	Design Team
Attribute	SystemName	Y	Y	To be populated as required	3	Completion of RIBA Stage 3	Design Team
Attribute	SystemDescription	Y	Y	To be populated as required	3	Completion of RIBA Stage 3	Design Team
Attribute	SystemCategory	Y	Y	To be populated as required	3	Completion of RIBA Stage 3	Design Team
Type	Manufacturer	Y	Y	company@email.co.uk	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	ModelNumber	Y	Y	Unique Reference to be populated	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	ModelReference	Y	Y	Unique Reference to be populated	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	Shape	Y	Y	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	Color	Y	Y	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	Finish	Y	Y	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	Grade	Y	Y	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	Material	Y	Y	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Attribute	ContentAuthor	Y	Y	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	ContentRevision	Y	Y	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	ContentSoftwareName	Y	Y	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	ContentSoftwareVersion	Y	Y	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	ContentSuitability	Y	Y	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	ManufacturerName	Y	Y	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Attribute	AccessionString	Y	Y	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	FireRating	Y	Y	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	IronmongerySet	Y	Y	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	IsExternal	Y	Y	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	SelfClosing	Y	Y	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	SecurityRating	Y	Y	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	IsEmailTransmittance	Y	Y	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	EmbodiedEnergy	Y	Y	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Attribute	GlobalWarmingPotential	Y	Y	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Attribute	VolatileOrganicCompounds	Y	Y	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	WarrantyGuarantorParty	Y	Y	company@email.co.uk	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	WarrantyDurationParts	Y	Y	5	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	WarrantyGuarantorLabor	Y	Y	company@email.co.uk	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	WarrantyDurationLabor	Y	Y	5	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	WarrantyDurationLimit	Y	Y	15	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	ReplacementCost	Y	Y	500.50	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	ExpectedLife	Y	Y	15	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	DurationLimit	Y	Y	15	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	WarrantyDescription	Y	Y	e.g. Replacement Warranty	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Component	SerialNumber	Y	Y	Unique Reference to be populated	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Component	InstallationDate	Y	Y	2019-04-13T15:33:35	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Component	WarrantyStartDate	Y	Y	2019-04-13T15:33:35	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Component	TagNumber	Y	Y	Unique Reference to be populated	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Component	BarCode	Y	Y	Unique Reference to be populated	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Component	AssetIdentifier	Y	Y	Unique Reference to be populated	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	ExtSystem	A	A	ARCHICAD-64	A	Automated Attribute	Design Team
Type	ExtObject	A	A	IfcObject	A	Automated Attribute	Design Team
Type	ExtIdentifier	A	A	ZKA_sIPKDI (ZbaCoPqmEa	A	Automated Attribute	Design Team
Component	ExtSystem	A	A	ARCHICAD-64	A	Automated Attribute	Design Team
Component	ExtObject	A	A	IfcObject	A	Automated Attribute	Design Team
Component	ExtIdentifier	A	A	IfcEquiv_41 (ZbaCoPqmEa	A	Automated Attribute	Design Team
System	ExtSystem	A	A	ARCHICAD-64	A	Automated Attribute	Design Team
System	ExtObject	A	A	IfcPropertySingleValue	A	Automated Attribute	Design Team
System	ExtIdentifier	A	A	na	A	Automated Attribute	Design Team
Type	Size	P	P	1010 x 2100 x 100	P	Placeholder Attribute	Sub-contractor / Supplier
Type	Consultants	P	P	To be populated as required	P	Placeholder Attribute	Sub-contractor / Supplier
Type	Access	P	P	To be populated as required	P	Placeholder Attribute	Sub-contractor / Supplier
Type	AccessibilityPerformance	P	P	To be populated as required	P	Placeholder Attribute	Sub-contractor / Supplier
Type	CodePerformance	P	P	To be populated as required	P	Placeholder Attribute	Sub-contractor / Supplier
Type	SustainabilityPerformance	P	P	To be populated as required	P	Placeholder Attribute	Sub-contractor / Supplier
Type	CreateBy	R	R	company@email.co.uk	R	Referenced to other COBie Sheet	Design Team
Component	CreateBy	R	R	company@email.co.uk	R	Referenced to other COBie Sheet	Design Team
Component	TypeName	R	R	XXXX_Type01 (See IFC Nomenclature)	R	Referenced to other COBie Sheet	Design Team
Component	Space	R	R	00-009-00-011	R	Referenced to other COBie Sheet	Design Team
System	CreateBy	R	R	company@email.co.uk	R	Referenced to other COBie Sheet	Design Team
System	ComponentNames	R	R	D-018, D-185, D-183, etc	R	Referenced to other COBie Sheet	Design Team

COBie Sheet Name:	COBie Attributes Name:	Required in IFC at end of Stage 3:	Required in IFC at end of Stage 6:	Typical Example Data & Format:	Required at Information Exchange:	Milestone / Purpose:	Information Supplier
Facility	Name	Yes	Yes	WBC102	3	Completion of RIBA Stage 3	Lead Designer
Facility	SiteName	Yes	Yes	Wellingborough Prison	3	Completion of RIBA Stage 3	Lead Designer
Floor	Name	Yes	Yes	Level 00	3	Completion of RIBA Stage 3	Lead Designer
Space	Name	Yes	Yes	00-009	3	Completion of RIBA Stage 3	Lead Designer
Zone	Name	Yes	Yes	ZC01	3	Completion of RIBA Stage 3	Lead Designer
Type	Name	Yes	Yes	Door_Type10	3	Completion of RIBA Stage 3	Design Team
Type	CreatedOn	Yes	Yes	2019-04-13T15:33:35	3	Completion of RIBA Stage 3	Design Team
Type	Category	Yes	Yes	Uniclass2015 Pr Code	3	Completion of RIBA Stage 3	Design Team
Type	Description	Yes	Yes	Uniclass2015 Pr Description	3	Completion of RIBA Stage 3	Design Team
Type	AssetType	Yes	Yes	Fixed or Movable	3	Completion of RIBA Stage 3	Design Team
Type	NominalLength	Yes	Yes	100	3	Completion of RIBA Stage 3	Design Team
Type	NominalWidth	Yes	Yes	1010	3	Completion of RIBA Stage 3	Design Team
Type	NominalHeight	Yes	Yes	2100	3	Completion of RIBA Stage 3	Design Team
Component	Name	Yes	Yes	XXXX-00001 (See MoJ Nomenclature)	3	Completion of RIBA Stage 3	Design Team
Component	CreatedOn	Yes	Yes	2019-04-13T15:33:35	3	Completion of RIBA Stage 3	Design Team
Component	Description	Yes	Yes	Description of Component	3	Completion of RIBA Stage 3	Design Team
System	CreatedOn	Yes	Yes	2019-04-13T15:33:35	3	Completion of RIBA Stage 3	Design Team
Attribute	SystemName	P	Yes	To be populated as required	3	Completion of RIBA Stage 3	Design Team
Attribute	SystemDescription	P	Yes	To be populated as required	3	Completion of RIBA Stage 3	Design Team
Attribute	SystemCategory	P	Yes	To be populated as required	3	Completion of RIBA Stage 3	Design Team
Type	Manufacturer	P	Yes	company@email.co.uk	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	ModelNumber	P	Yes	Unique Reference to be populated	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	ModelReference	P	Yes	Unique Reference to be populated	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	Shape	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	Color	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	Finish	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	Grade	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	Material	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Attribute	ContentAuthor	Yes	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	ContentRevision	Yes	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	ContentSoftwareName	Yes	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	ContentSoftwareVersion	Yes	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	ContentSuitability	Yes	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	ManufacturerName	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Attribute	AcousticRating	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	FireRating	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	IronmongerySet	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	IsExternal	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	SelfClosing	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	SecurityRating	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	ThermalTransmittance	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	EmbodiedEnergy	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Attribute	GlobalWarmingPotential	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Attribute	VolatileOrganicCompounds	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	WarrantyGuarantorParts	P	Yes	company@email.co.uk	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	WarrantyDurationParts	P	Yes	5	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	WarrantyGuarantorLabor	P	Yes	company@email.co.uk	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	WarrantyDurationLabor	P	Yes	5	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	WarrantyDurationUnit	P	Yes	15	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	ReplacementCost	P	Yes	500.50	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	ExpectedLife	P	Yes	15	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	DurationUnit	P	Yes	15	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	WarrantyDescription	P	Yes	e.g. Replacement Warranty	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Component	SerialNumber	P	Yes	Unique Reference to be populated	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Component	InstallationDate	P	Yes	2019-04-13T15:33:35	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Component	WarrantyStartDate	P	Yes	2019-04-13T15:33:35	5	Completion of RIBA Stage 6	Sub-contractor / Supplier

Type	Color	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	Finish	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	Grade	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	Material	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Attribute	ContentAuthor	Yes	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	ContentRevision	Yes	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	ContentSoftwareName	Yes	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	ContentSoftwareVersion	Yes	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	ContentSuitability	Yes	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	ManufacturerName	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Attribute	AcousticRating	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	FireRating	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	IronmongerySet	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	IsExternal	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	SelfClosing	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	SecurityRating	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	ThermalTransmittance	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Design Team
Attribute	EmbodiedEnergy	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Attribute	GlobalWarmingPotential	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Attribute	VolatileOrganicCompounds	P	Yes	To be populated as required	4	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	WarrantyGuarantorParts	P	Yes	company@email.co.uk	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	WarrantyDurationParts	P	Yes	5	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	WarrantyGuarantorLabor	P	Yes	company@email.co.uk	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	WarrantyDurationLabor	P	Yes	5	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	WarrantyDurationUnit	P	Yes	15	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	ReplacementCost	P	Yes	500.50	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	ExpectedLife	P	Yes	15	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	DurationUnit	P	Yes	15	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	WarrantyDescription	P	Yes	e.g. Replacement Warranty	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Component	SerialNumber	P	Yes	Unique Reference to be populated	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Component	InstallationDate	P	Yes	2019-04-13T15:33:35	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Component	WarrantyStartDate	P	Yes	2019-04-13T15:33:35	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Component	TagNumber	P	Yes	Unique Reference to be populated	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Component	BarCode	P	Yes	Unique Reference to be populated	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Component	AssetIdentifier	P	Yes	Unique Reference to be populated	5	Completion of RIBA Stage 6	Sub-contractor / Supplier
Type	ExtSystem	A	A	ARCHICAD-64	A	Automated Attribute	Design Team
Type	ExtObject	A	A	lfcObject	A	Automated Attribute	Design Team
Type	ExtIdentifier	A	A	2KA_sIP2kDHzbeCoPqmlEa	A	Automated Attribute	Design Team
Component	ExtSystem	A	A	ARCHICAD-64	A	Automated Attribute	Design Team
Component	ExtObject	A	A	lfcObject	A	Automated Attribute	Design Team
Component	ExtIdentifier	A	A	0h3Evcz_eV1Z6O4QSANBsH	A	Automated Attribute	Design Team
System	ExtSystem	A	A	ARCHICAD-64	A	Automated Attribute	Design Team
System	ExtObject	A	A	lfcPropertySingleValue	A	Automated Attribute	Design Team
System	ExtIdentifier	A	A	n/a	A	Automated Attribute	Design Team
Type	Size	P	P	1010 x 2100 x 100	P	Placedholder Attribute	Sub-contractor / Supplier
Type	Constituents	P	P	To be populated as required	P	Placedholder Attribute	Sub-contractor / Supplier
Type	Features	P	P	To be populated as required	P	Placedholder Attribute	Sub-contractor / Supplier
Type	AccessibilityPerformance	P	P	To be populated as required	P	Placedholder Attribute	Sub-contractor / Supplier
Type	CodePerformance	P	P	To be populated as required	P	Placedholder Attribute	Sub-contractor / Supplier
Type	SustainabilityPerformance	P	P	To be populated as required	P	Placedholder Attribute	Sub-contractor / Supplier
Type	CreatedBy	R	R	company@email.co.uk	R	Referenced to other COBie Sheet	Design Team
Component	CreatedBy	R	R	company@email.co.uk	R	Referenced to other COBie Sheet	Design Team
Component	TypeName	R	R	XXXX_Type01 (See MoJ Nomenclature)	R	Referenced to other COBie Sheet	Design Team
Component	Space	R	R	00-009,00-011	R	Referenced to other COBie Sheet	Design Team
System	CreatedBy	R	R	company@email.co.uk	R	Referenced to other COBie Sheet	Design Team
System	ComponentNames	R	R	D-018, D-185, D-183, etc	R	Referenced to other COBie Sheet	Design Team



Model Issue Management


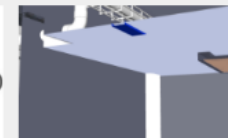
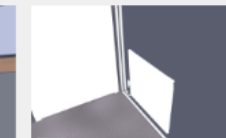

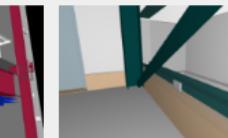


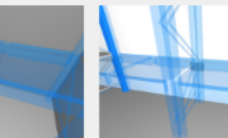
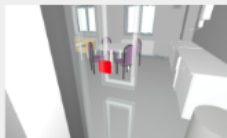



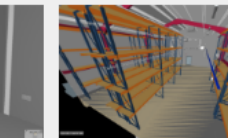
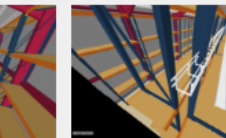
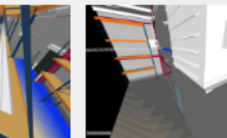

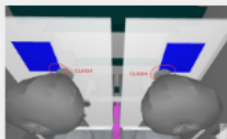


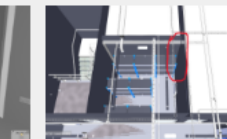



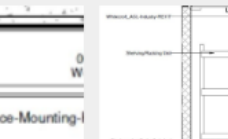


Wellingborough New Prison



Resolved, Label 'WBC104' (59 from 6188)

Show all All open Open for me Filter

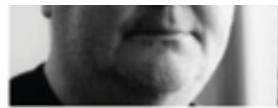
 <p>262 Lock Store - Ensure secure</p> <p>Pranav Patel Resolved, Normal (5-7 Days) Undecided</p>	 <p>1209 Containment clashing with</p> <p>Luca DiBella Resolved, Normal (5-7 Days) Stage 4b</p>	 <p>1227 Rad inside wall</p> <p>Chris Gilbert Resolved, Normal (5-7 Days) Stage 4b</p>	 <p>1228 Ceiling not coordinated wit</p> <p>Chris Gilbert Resolved, Normal (5-7 Days) Stage 4b</p>	 <p>1406 Outlet clashing with Structu</p> <p>Luca DiBella Resolved, Normal (5-7 Days) Stage 4b</p>	 <p>1407 Outlet clashing with Structu</p> <p>Luca DiBella Resolved, Normal (5-7 Days) Stage 4b</p>	 <p>1419 Furniture clashing with Buil</p> <p>Luca DiBella Resolved, Normal (5-7 Days) Stage 4b</p>	 <p>1428 Furniture clashing with Buil</p> <p>Luca DiBella Resolved, Normal (5-7 Days) Stage 4b</p>
 <p>1445 Doors clashing with Buildin</p> <p>Luca DiBella Resolved, Normal (5-7 Days) Stage 4b</p>	 <p>1472 WBC104 - Ceiling lights in</p> <p>Luca DiBella Resolved, Normal (5-7 Days) Stage 4b</p>	 <p>3262 Doors clashing with Buildin</p> <p>Luca DiBella Resolved, Normal (5-7 Days) Stage 4b</p>	 <p>3655 Doors clashing with Buildin</p> <p>Luca DiBella Resolved, Normal (5-7 Days) Stage 4b</p>	 <p>3766 Wiremold at low level wil p</p> <p>Luca DiBella Resolved, Normal (5-7 Days) Stage 4b</p>	 <p>3768 Cable trays not coordinated</p> <p>Luca DiBella Resolved, Normal (5-7 Days) Stage 4b</p>	 <p>3771 Cable tray running through</p> <p>Luca DiBella Resolved, Normal (5-7 Days) Stage 4b</p>	 <p>3797 Light switch and socket cla</p> <p>Luca DiBella Resolved, Normal (5-7 Days) Stage 4b</p>
 <p>3798 Hatch clashing with light fit</p> <p>Joanna Kecka Resolved, Normal (5-7 Days) Stage 4b</p>	 <p>4068 Light switch clashing with d</p> <p>Luca DiBella Resolved, Normal (5-7 Days) Stage 4b</p>	 <p>4129 Light switch and socket cla</p> <p>Luca DiBella Resolved, Normal (5-7 Days) Stage 4b</p>	 <p>5341 Re-Route Heating Pipewor</p> <p>Luca DiBella Resolved, Normal (5-7 Days) Stage 5</p>	 <p>5365 MEP Issues - Architectural</p> <p>Luca DiBella Resolved, Normal (5-7 Days) Stage 5</p>	 <p>5366 MEP Issues - Architectural</p> <p>Luca DiBella Resolved, Normal (5-7 Days) Stage 5</p>	 <p>5367 MEP Issues - Architectural</p> <p>Luca DiBella Resolved, Normal (5-7 Days) Stage 5</p>	 <p>5368 MEP Issues - Architectural</p> <p>Luca DiBella Resolved, Normal (5-7 Days) Stage 5</p>



“Out of the 5,000 (approx) COBie files that the MoJ have received, Wellingborough is the by far the finest example to date.”

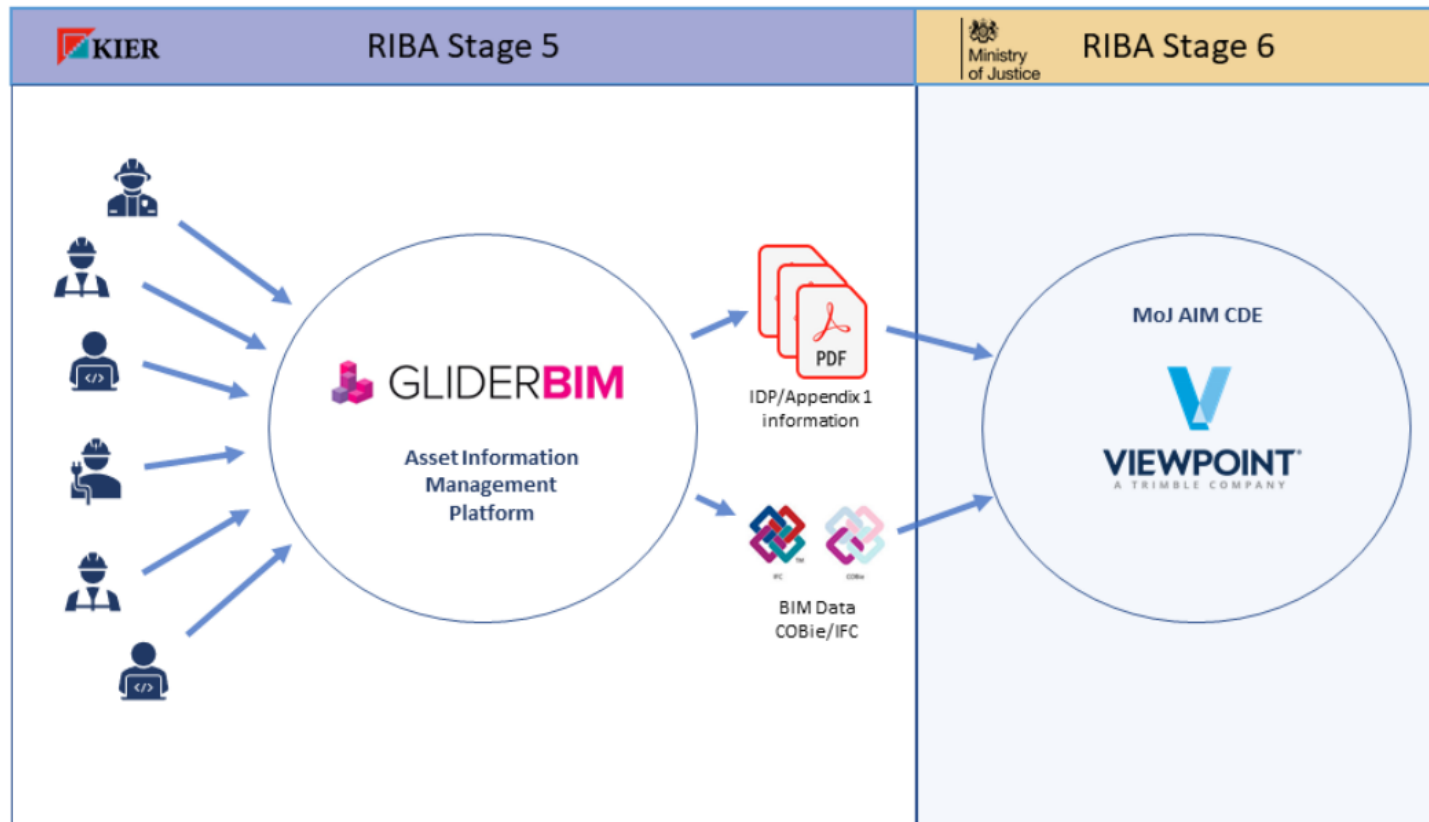
Bill Davis, Head of Technical Standards and BIM, Ministry of Justice

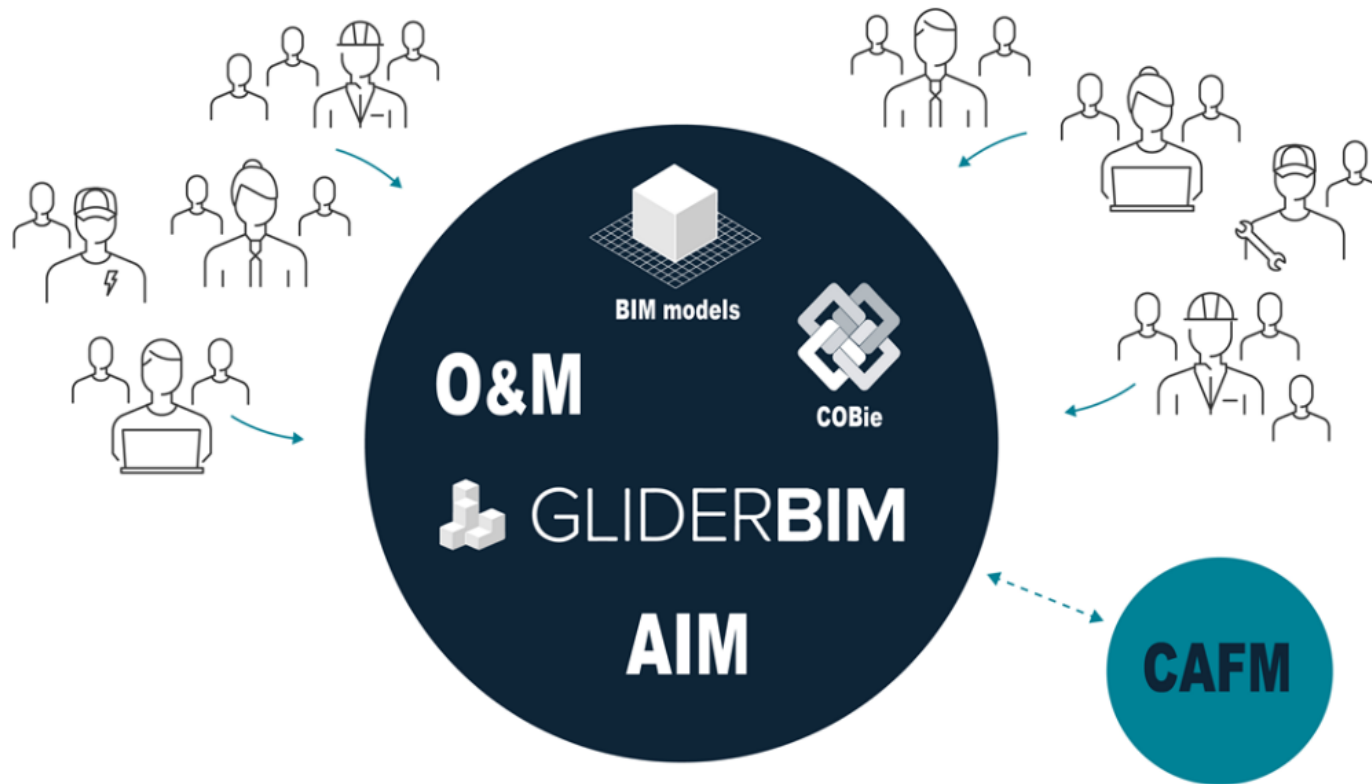




Bill Davis, Head of Technical Standards and BIM, Ministry of Justice

GLIDERBIM







Component Assembly ●

- ASSA Abloy
- Crown House Tech
- WMS Underfloor Heating
- William Hayley Engineering
- Kingspan
- British Gypsum

Precast ●

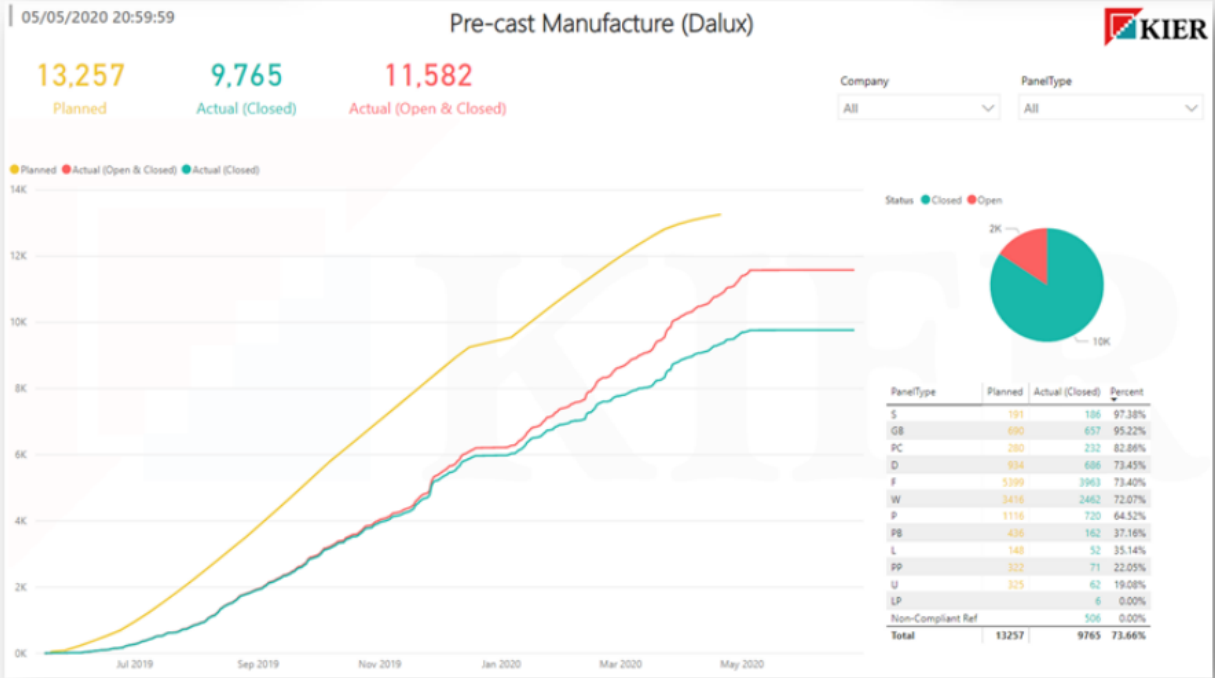
- Bison
- FP McCann
- Banagher Precast

Site ●

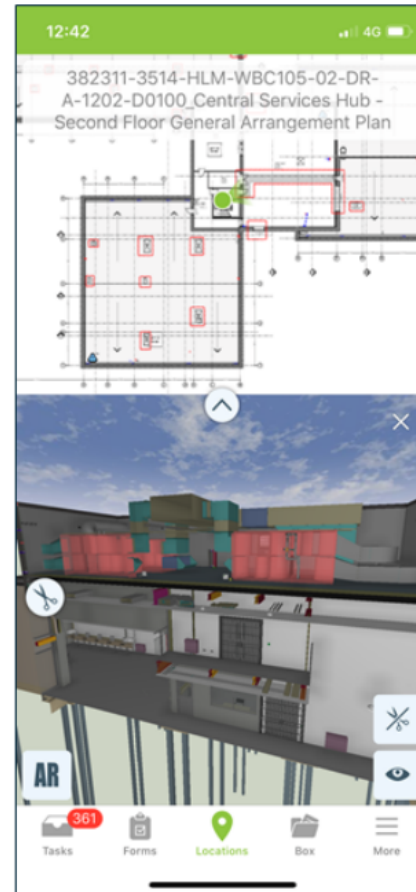
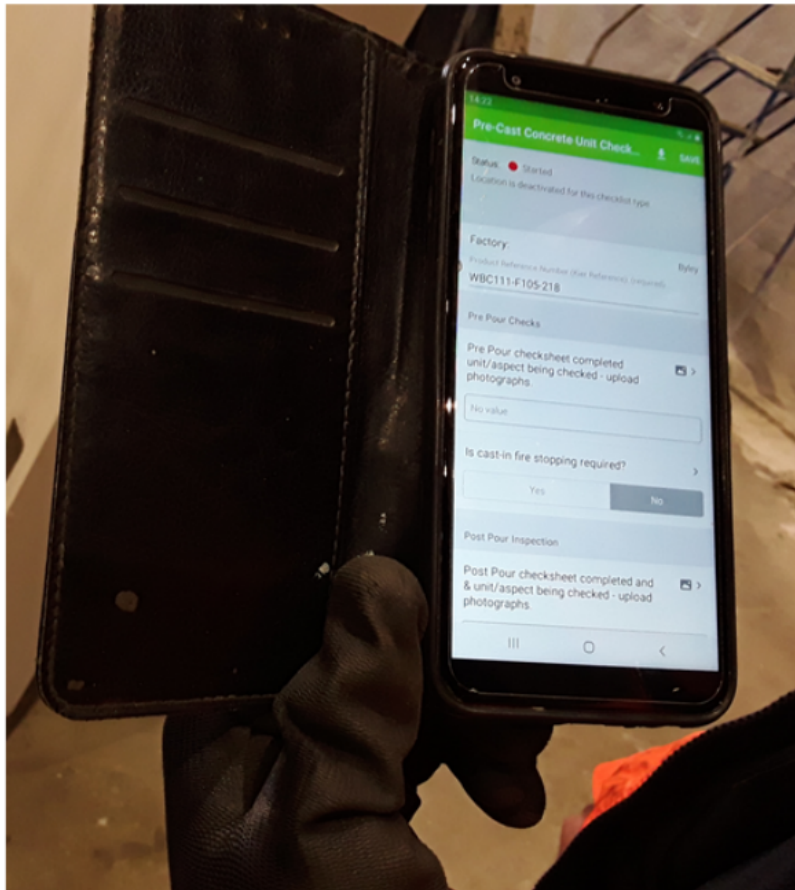
- HMP Wellingborough




Multi-location real time management



Quality control and data transparency






1 Hour Teams Presentation on Dalux Implementation at Wellingborough Prison and RAF Lakenheath

AGENDA

- Dalux Overview
- Quality Assurance
- SHEMS
- Model Viewer
- Plant & Logistics
- Digital Capture & Augmented Reality
- Reporting


FOCUS

- Who/What/Why?
- Progression so far
- Improvement/value
- Future potential



Presenters

James Franklin	Head of BIM
Danny Hine	SHE Manager
Steve Harris	Quality & Aftercare Manager
Ryan Thomas	Graduate Site Manager
Francine Lorrman	BIM Coordinator
Rebecca Stabler	Digital Construction Apprentice




“With almost 5,000 individual precast concrete components to manufacture, providing a sufficiently informative quality assurance record for each would have been challenging without the use of the Dalux QA tracking system. Through it, we are able to create a definitive, instant-access visual record of every single

component at key milestones in its production.

In addition to providing Kier and their client robust quality assurance, the Dalux QA system has proven to be an invaluable tool for us at Bison in tracking the progress of this significant project. The ease with which the records can be created and accessed has provided real time-saving benefits. As a result of our experience, we are now considering the implementation of digital quality assurance software across the whole Bison business.”

Mike Nelson, Commercial Director, Bison Precast



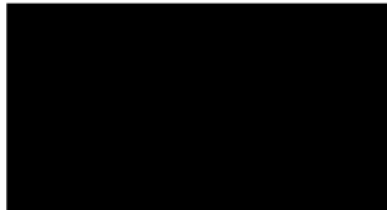
“Handover information packs presented to the client team from Dalux for the foundations at Wellingborough has been the best example of quality records we have seen to date, with these to be used as an important tool at handover.”

Jessica Spain, Senior Project Manager, Mace





1 Hour Teams Presentation on Dalux implementation at Wellingborough Prison and RAF Lakenheath



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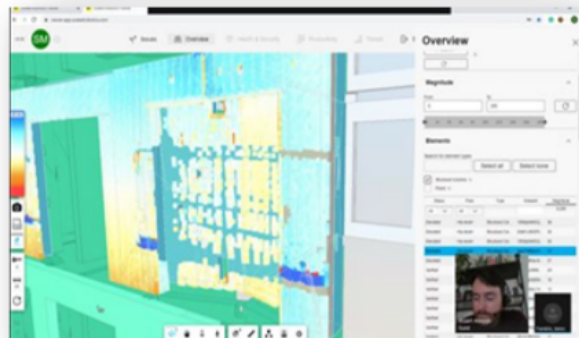
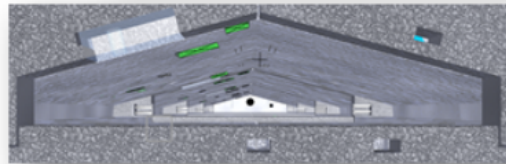
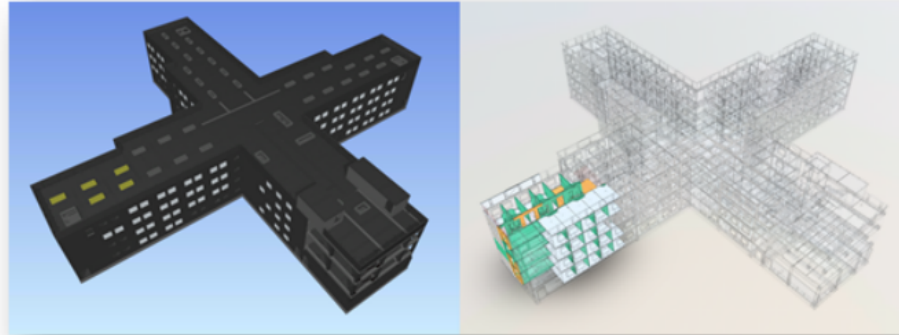
Presenters

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Danny Hine	SHE Manager
Steve Harris	Quality & Aftercare Manager
Ryan Thomas	Graduate Site Manager
Francine Lorriman	BIM Coordinator
Rebecca Stabler	Digital Construction Apprentice





Scanning – Build Verification





Kier Wellingborough Prison

Time Lapse Video

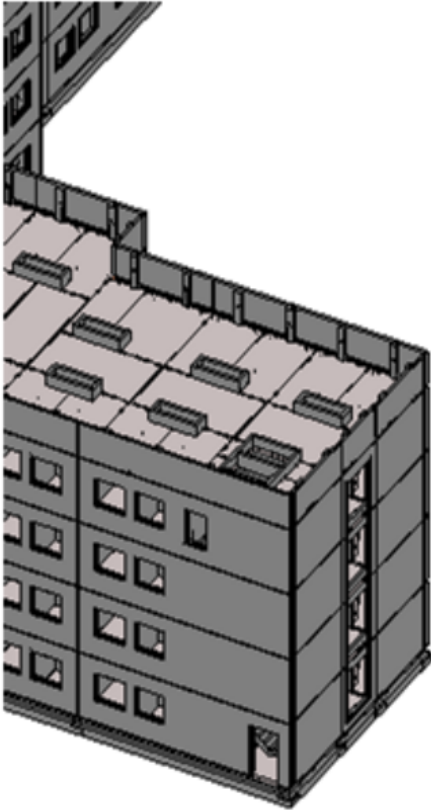
21st July 2018 to 27th April 2020

www.ProDroneWorx.co.uk



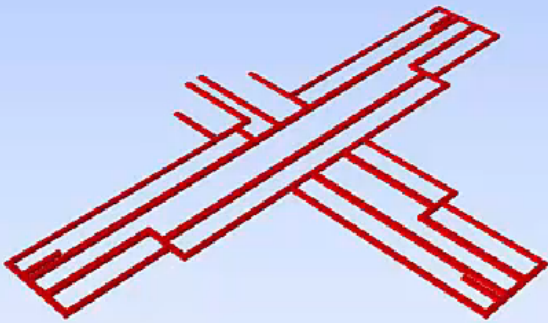


Updated planning data set in Revit model



Copyright	
Copyright	
Copyright	
Copyright	
Copyright	
Copyright	
Copyright	
Copyright	
KIER_Block	WBC111F
KIER_Level	Level R3
KIER_LoadCode	LD193F
KIER_Start	?
KIER_Type	PP402
KIER_Wing	MA
KIER_Grid	?
KIER_Unit	?
KIER_Mapping	Complete
KIER_Crane	Crane 1
KIER_Supplier	?
KIER_UniqueID	001-F-Crane 1-LD193F-PP402-LR3
KIER_Cost	2920.72

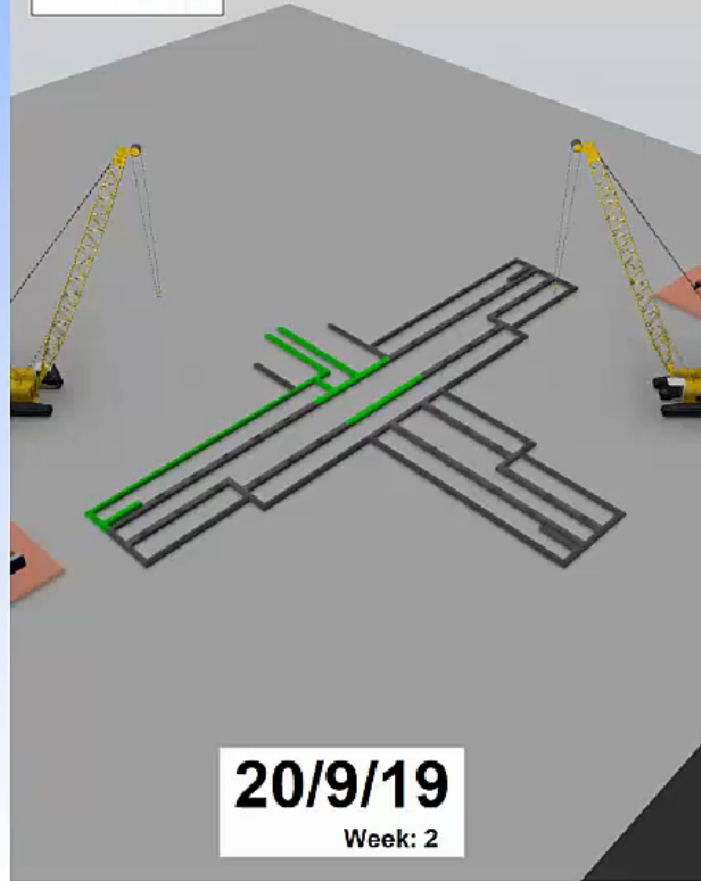
Supplier



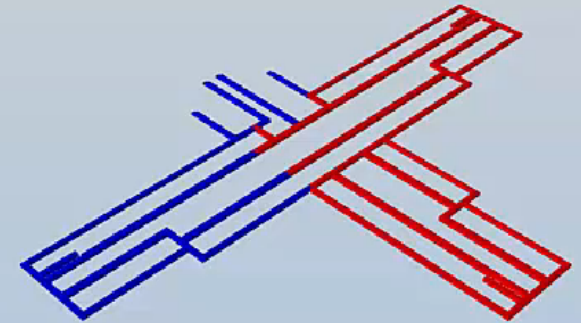
Supplier

- S1: ???
- S1: BISON
- S1: McCANN
- S1: Banagher

Standard



Crane



Crane

- C1: Wing MA, A & B
- C2: Wing C & AW

Project: **HMP Wellingborough**

Owner: **Kier**




Block: **Block F**

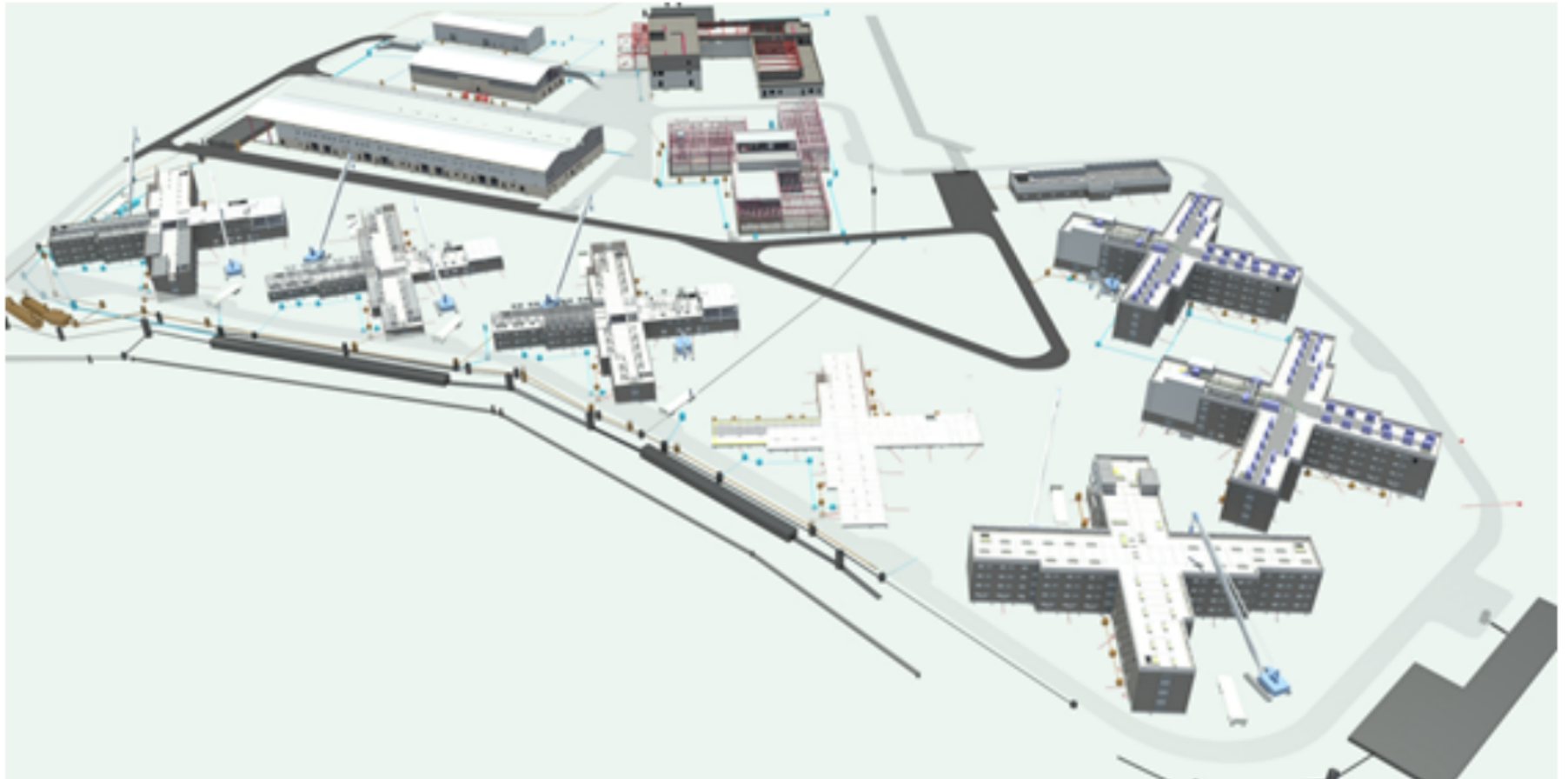
Wing: **Wing XX**

Title: **Automatching Test**

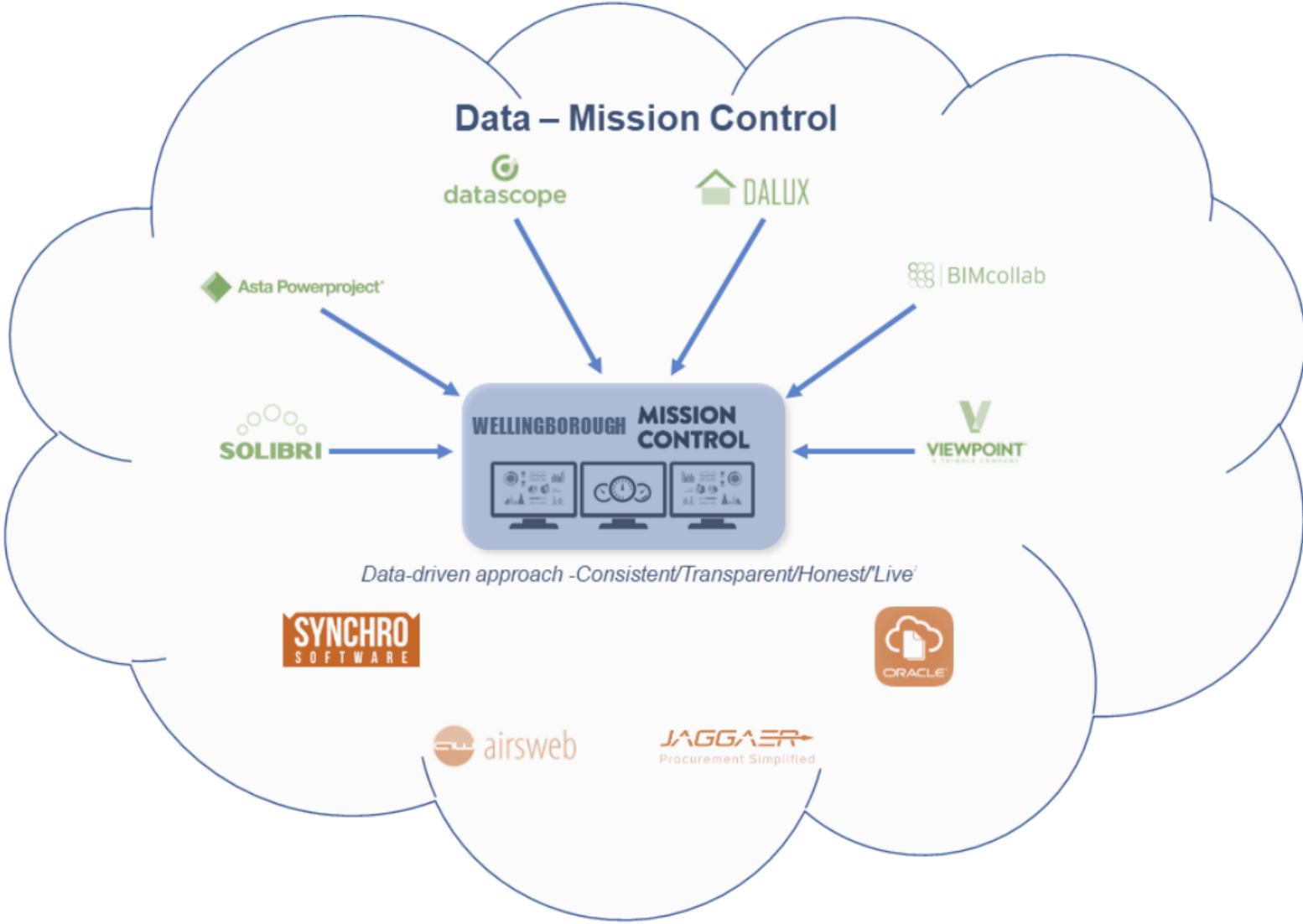
Week: **Wk XX**

Date: **13/10/19**

Rev: **Rev 00**



Data – Mission Control



Data-driven approach -Consistent/Transparent/Honest/Live

SYNCHRO
SOFTWARE

ORACLE

airswab

JAGGAER
Procurement Simplified

5,935.53 -59.24 (0.99%) ↓

13 May, 09:41 BST · Disclaimer

1 day

5 days

1 month

6 months

YTD

1 year

5 years

Max



Open

5,994.77

Low

5,900.32

High

5,994.77

COVID-19




datascope



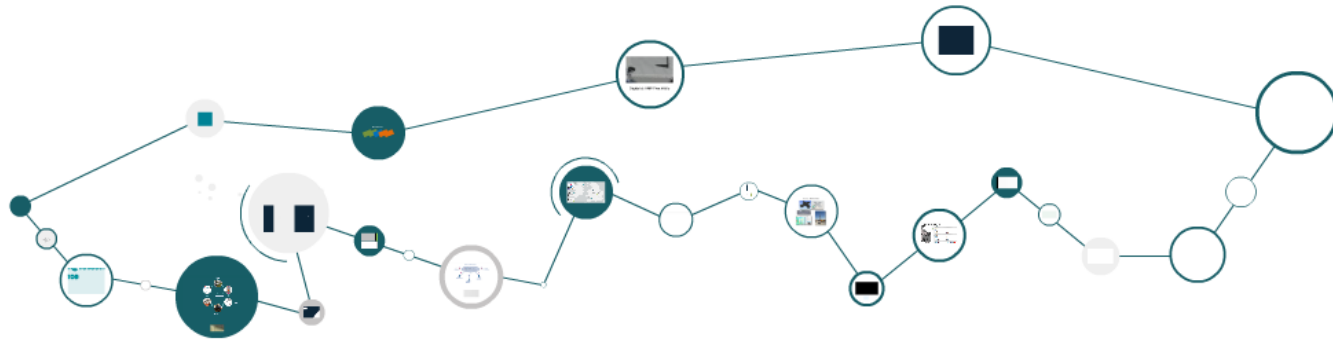
OFFSITE AWARDS 2020

WINNER
BIM/DIGITAL
CONSTRUCTION AWARD
KIER INTEGRATED TEAM



...e of improved performance and better outcomes compared to traditional
...through submission of objective measurement data.





COVID-19




datascope