

# Beale & Company

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## BIM Protocol, Second Edition

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## Introduction

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  - Partner, Projects and Contracts Advisory

## CIC Protocol Second Edition

- + Second edition of the CIC BIM Protocol published on 10 April 2018.
- + *“We are very pleased to have been involved in what has been an extremely interesting project and hope that the second edition of the Protocol will help provide additional clarity as to how contractual obligations in relation to BIM are addressed”.*



## Webinar Outline

- + Original BIM Protocol and Background to Second Edition.
- + Second Edition, Key Changes.
- + Using the BIM Protocol Second Edition.
- + Industry Reception.
- + Conclusions.



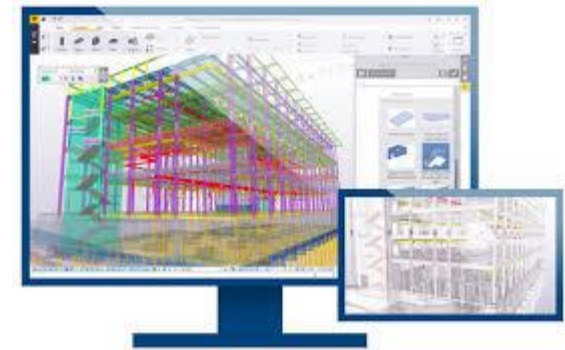
## Original BIM Protocol

- + The CIC BIM Protocol is the UK's only standard contractual protocol for use in projects using Building Information Models.
- + Original Protocol published in 2013.
- + Part of the suite of BIM Level 2 documents which support the UK government's BIM strategy, including the mandate to use BIM on centrally procured government construction projects by 2016.
- + Key aims of the Protocol:
  - Make BIM a contractual requirement;
  - Minimal amendments to existing contracts; and
  - Consistency across project team.
- + Generally well received and used (e.g. Cambridge University, NHS Trusts).



## Why was a Second Edition published?

- + Use of BIM now standard practice.
- + PAS 1192-2 currently adopted.
- + Approach to BIM has developed since the original Protocol was published and new standards released, including PAS1192-5 in relation to security.
- + Contracts have not kept pace (Enabling BIM through Procurement and Contracts & Winfield Rock Report).
- + Feedback suggested:
  - the Protocol would benefit from further flexibility (e.g. in relation to IP); and
  - the Appendices needed to be easier to complete.
- + To promote increased uptake of the Protocol and update the document to create a more flexible document and reflect industry practice.



## Consultation

- + CIC consulted across industry with:
  - those working on BIM projects.
  - those advising on and negotiating construction contracts.
  - industry bodies and contract publishing bodies.
  - BSI (drafters of PAS suite).
  
- + Took into account other feedback on original Protocol (e.g. Kings College and Winfield Report).





## Summary of Changes

- + Protocol applies to all information, not just models.
- + Terminology more consistent with PAS 1192-2.
- + Greater flexibility: Protocol “piggy backs” on underlying agreement - in a number of areas.
- + Appendices easier to complete (editable and more guidance) - will make incorporating and completing the Protocol more straightforward.
- + Optional security provisions.

PROJECT DIRECTORY	INDEX TO DRAWINGS	Rev
<p>PROJECT ADDRESS: SPRUE HALL 35 WILLOUGHBY AVE BROOKLYN, NY 11201</p>	<p>1000 TITLE SHEET 0100 NOTES, LEGENDS &amp; EXHIBITS 0101 FIRE RISKING 0102 SCHEDULE 0200 SITE PLAN 0300 EXISTING AND SITE EXISTENCE A 100 CELLAR PLAN A 110 GROUND FLOOR PLAN A 115 TYPICAL FIRST LEVEL FLOOR PLAN A 120 TYPICAL SECOND LEVEL FLOOR PLAN A 200 SOUTH ELEVATION A 201 WEST ELEVATION A 300 BUILDING SECTION I A 301 BUILDING SECTION II A 400 EXTERIOR SECTION ENLARGEMENTS A 401 FIRE STAIR ENLARGEMENT A 402 UNIT ENLARGEMENT PLANS A 403 UNIT ENLARGEMENT ELEVATIONS A 404 UNIT ENLARGEMENT ELEVATIONS A 405 UNIT ENLARGEMENT FURNITURE PLANS A 406 UNIT ENLARGEMENT REFLECTED CEILING PLANS A 407 EXTERIOR DETAILS A 408 SCHEDULES A 409 SPECIFICATIONS OUTLINE A 410 SAMPLE SPECIFICATIONS CONTRACTS F 000 FOUNDATION PLANS F 001 FOUNDATION DETAILS M 000 UNIT MECH PLAN E 000 UNIT ELECTRICAL PLAN P 000 UNIT PLUMBING PLAN A 1000 A-RISK DIAGRAM</p>	<p>1-01</p>

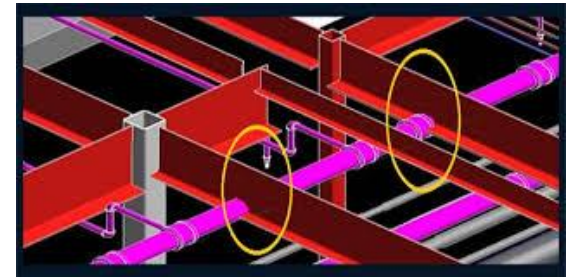


## Protocol and Agreement

- + Protocol now only takes precedence over the Agreement in respect of:
  - clause 3 (Obligations of the Employer), 4 (Obligations of the Project Team Member); and
  - Appendix 1 (Responsibility Matrix) or 2 (Information Particulars).
- + Creates a minimum set of consistent obligations across the project team...
- + ....without overriding the agreed contractual position more than necessary.
- + Means that for the Protocol as a whole to have effect, the order of precedence in the Agreement key.



## Co-ordination



- + Collaboration essential on any BIM project.
- + New process in clause 2.2 for co-ordinating information and resolving inconsistencies:

*“...if a Party becomes aware of any other ambiguity, conflict or inconsistency ...that Party shall notify the other Party and the Parties shall seek to agree how such ambiguity, conflict or inconsistency shall be resolved.*

*If no agreement is reached, the Parties shall, having regard to the Information Particulars, meet with each other, the Employer’s Information Manager and such Other Project Team Members...in order to seek to resolve the ambiguity, conflict or inconsistency”.*

- + Statement that Models take precedence removed; may not always be appropriate.
- + Co-ordination meetings also to be attended as stated in the Information Particulars.
- + If inconsistencies opportunity to resolve before exacerbates.



## Standards, Methods and Procedures

- + Standards (e.g. PAS 1192-2) key on BIM project.
- + Processes in standards are typically followed on a BIM project to clarify the basis on which information is produced and exchanged.
- + Standards often assume that certain tasks will be carried out by the procurer of a Project.
- + Under the Protocol, both parties have obligations in relation to the Information Particulars:
  - the Employer under clause 3.1; and
  - the Project Team Member under clause 4.1.
- + Helps embed the agreed standards in the contract.



## Common Data Environment Process

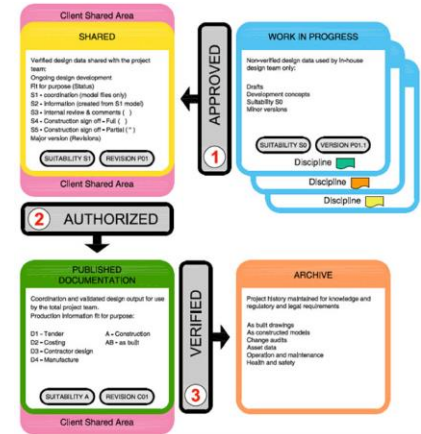
- + The CDE Process and publish – key to any BIM project.
- + Unless this is part of the Project Team Member's Obligations, the Employer to arrange that the Project Team Member can make use of the CDE Process...
- + ..... to the extent necessary to perform its obligation....
- + .....and to download a record copy.
- + Project Team Member to share and publish information using the CDE Process, under clause 3.1.3(d).
- + Help give the CDE contractual basis.
- + Trant v Mott McDonald (2017).





# Permitted Purpose

- + The Permitted Purpose determines how information can be used.
- + The definition now refers to:
  - the Level of Definition (as opposed to the previous “Level of Detail”, in order to be consistent with PAS 1192-2), which is comprised of:
    - the Level of Information; and
    - the Level of Model Detail (as applicable);
  - status code – which under BS1192:2007+A2:2016 indicates the approved “suitability” for use of information at the stage it is issued;
  - the functional state (i.e. either Work in Progress, Shared, Published or Archive under BS1192:2007+A2:2016); and
  - the purpose for which the information was prepared.
- + Exclusion of liability for use other than the Permitted Purpose (clause 7.2).



## Programme

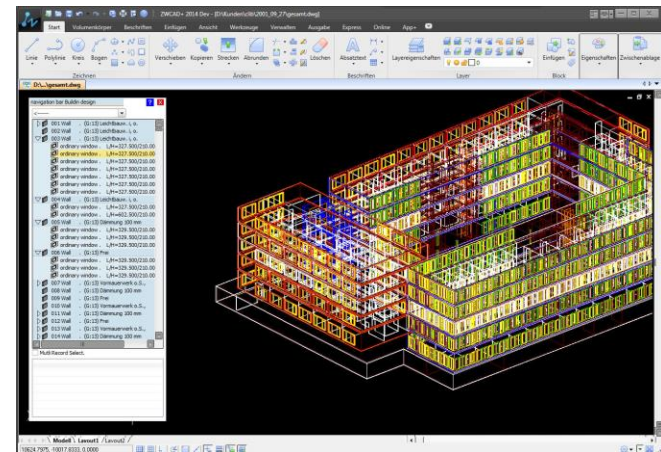
- + Specified Information must be shared and/or published during the stage and at the times stated in the Responsibility Matrix, the Information Particulars or the Agreement.
- + Subject to any extensions of time applicable under the Agreement...
- + .....rather than “reasonable endeavours and events” outside the Project Team Member’s control as per previous edition.
- + This will help create certainty as to timescale for the development and exchange of information.
- + BUT Programme obligations in respect of BIM must be set out in Responsibility Matrix, IP or Agreement.





# Interoperability

- + Interoperability is the ability of software to exchange and make use of information - this is a key issue on any BIM project.
- + The first edition stated that the Project Team member did not warrant the integrity of electronic data.
- + The Project Team Member now gives no warranty that software is compatible with any of the other Project Team member or Employer (clause 5.1)
- + Greater assurance in respect of information provided.
- + Liability for data corruption still excluded (clause 5.2).
- + Important to manage this risk.



## Copyright

- + Now more flexible provisions.
- + Clauses 6.2–6.4, Project Team Member retains copyright ownership and grants a licence. Only if the Agreement contains no provisions regarding intellectual property.
- + If the Agreement contains intellectual property provisions, they will apply to the information provided under the Protocol (Clause 6.1).
- + Protocol can be used (unamended) even if the Project Team Member will not retain ownership of its intellectual property, as it will be transferred to the Employer.
- + If ownership transferred to the Employer, Agreement should make clear if there is any key “background intellectual property” to be retained (e.g. information model objects).





## Security

- + Security is a key factor to take into account on any project when BIM is used, as outlined in PAS 1192:5:2015.
- + Protocol now includes the following additional Security provisions:
  - the Built Asset Security Manager;
  - the Security Requirements – applicable security policies to be set out in Appendix 3 - must be included for the security provisions to have effect;
  - Sensitive Information :
    - will not be shared in the CDE Process.
    - Defined in the Security Requirements and in any instructions given by the employer under clause 4.1.7.
    - Application of Protocol subject to the obligations in relation to Sensitive Information.
  - the Employer remedies if security obligations are breached – including, termination.

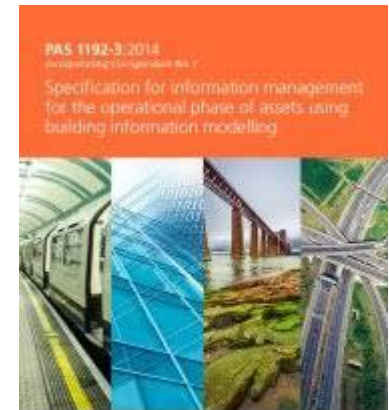


## Linking Capex and Opex

- + The Asset Information Model is a maintained Information Model used to manage, maintain and operate the asset.
- + The Project Team member is required to provide information and assistance in respect of the Asset Information Model, including in connection with any applicable Soft Landings process under clause 4.1.5:

*“The Project Team Member shall, exercising the relevant level of skill and care applicable to its equivalent obligations in the Agreement provide such information and assistance as specified in the Information Particulars in connection with any Asset Information Models at such times as required in the Information Particulars”.*

- + Enables capital phase of project to be linked with operational phase.
- + Reflects PAS 1192-3.



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## Responsibility Matrix

- + Appendix 1 to the Protocol is now the Responsibility Matrix rather than the Model Production and Delivery Table.
- + PAS 1192-2 provides for a Responsibility Matrix to be produced setting out responsibility for model or information production in line with defined project stages.
- + Protocol does not require an additional document to be produced and attached.
- + Responsibility Matrix should identify:
  - the Specified Information to be produced, shared and published by the Project Team Member;
  - the Applicable Level of Definition (the Level of Information and/or Level of Model Detail);
  - information to be produced and shared by Other Project Team Members.



## Information Particulars

- + Appendix 2 now refers to the following documents:
  - the Employer’s Information Requirements for the Project; and
  - the BIM Execution Plan (both of which are to be produced under PAS 11921-2).
- + All references to the Information Particulars in the Protocol include these two key documents.
- + For the Protocol to “work” as intended, key that Appendix 2 is completed.
- + Appendices to the Protocol to be reviewed and updated at each defined project stage (clause 3.1.3(a)).



## Using the Protocol

- + Seeks to achieve the intention of creating a minimum set of consistent obligations across the project team, without overriding the agreed contractual position.
- + For the Protocol to have contractual effect it must be incorporated into the Contract.
- + Includes a standard incorporation clause:

*“The [Employer] and the [Contractor/Consultant/Subcontractor] shall:*

- 1. comply with their respective obligations set out in the CIC Building Information Modelling Protocol, Second Edition 2018, in the form attached at Appendix [X] (“BIM Protocol”);*
- 2. have the benefit of any rights granted to them in the BIM Protocol; and*
- 3. have the benefit of any limitations or exclusions of their liability contained in the BIM Protocol.*

*The [Employer] and the [Contractor/Consultant/Subcontractor] agree that, subject to clause 1.4 of the BIM Protocol, this Agreement shall be amended as set out in the BIM Protocol.”*

- + Appendices 1, 2 (and if used 3) must then be completed and appended.



## Using the protocol with the JCT suite

- + JCT DB refers to BIM Protocol.
- + JCT suite provide that nothing will override or modify the Agreement or the contract conditions (clause 1.3, JCT Design and Build Contract, 2016).
- + If the Protocol is used alongside a JCT contract consider either:
  1. amending the JCT form to enable the Protocol to take precedence; or
  2. deleting from “provided that” in clause 1.4 until the end of the clause.



## Using the protocol with the NEC4 contracts

- + NEC4 contained new BIM Secondary Option X10.
- + Guidance on using the Protocol with NEC4 contracts published on same day as Protocol.
- + <https://www.neccontract.com/About-NEC/News-Media/New-NEC-Practice-note-how-to-use-the-CIC-BIM-prot.>
- + Model Scope entry.
- + NEC4 uses its own terminology, so also guidance on terms.
- + If approach followed be careful re instructed changes to scope and ensure no conflict between Protocol and other documents.



## Reception of Protocol

- + Dale Sinclair, Director of Technical Practice, AECOM and Chair of the CIC BIM Forum:  
*“The CIC BIM Protocol is a crucial component of the UK’s BIM level 2 suite of documents. This is an important step forward as we move towards a collaborative digital future.”*
- + Francis Ho, Partner, Pennington Manches, [BIM+](#)  
*“The authors have clearly taken on board feedback from the first edition, including the recent Winfield Rock Report”*
- + May Winfield (ENGIE) and Sarah Rock (Gowling WLG) [BIM+](#)  
*“The Protocol’s more flexible and arguably user-friendly approach will undoubtedly support the continued uptake of BIM while assisting in providing further contractual clarity”*



## Conclusion

- + Winfield Rock Report published 28 February 2018 identified a number of inconsistencies and concerns in relation to the contractual approach to BIM.
- + Echoes Beale & Company's experiences - a "joined up" approach rarely taken.
- + Risk of uncertainty and inconsistency re contractual position.
- + New Protocol:
  - more closely aligned with standards
  - more flexible
  - easier to use
- + Hope the updated Protocol leads to increased uptake and helps clarify contractual approach to BIM!

## Useful Links

– LexisNexis:

- <https://blogs.lexisnexis.co.uk/purposebuilt/the-new-cic-bim-protocol-whats-changed/>

– National Building Specification:

- <https://www.thenbs.com/knowledge/the-cic-bim-protocol-introducing-the-second-edition-2018>

– BIM Plus:

- <http://www.bimplus.co.uk/management/bims-legal-framework-still-being-formulated/>
- <http://www.bimplus.co.uk/people/bim-protocol-winfield-rock-take/>
- <http://www.bimplus.co.uk/news/revised-cic-bim-protocol-meets-industry-demands-nb/>

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