

APPENDIX Ei PROJECT BIM BRIEF – EXAMPLE

THE NEW ZEALAND BIM HANDBOOK 2019 THIRD EDITION ISBN 978-0-473-47831-5 (EPUB), ISBN 978-0-473-47832-2 (PDF)







Project BIM brief – example

The Project BIM Brief (PBB) is a document that defines the client's requirements and expectations for a project with regard to BIM.

The document identifies goals, uses, objectives, and responsibilities with regard to BIM.

The project BIM brief should be developed in the project establishment phase to be fully effective. It is a briefing document in its own right and could form part of a Request For Proposal (RFP). The BIM evaluation and response template should accompany this brief to provide a consistent set of questions for suppliers. After this phase, the BIM execution plan provides the framework for management and operational functions of BIM throughout the project's life cycle.

The project BIM brief should be developed with reference to <u>the New</u> <u>Zealand BIM handbook</u> and client information strategy and operations requirements.

The briefing document should be used at pre-appointment stages when procuring a delivery team.



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| PREPARED BY: | COMPANY: | DATE: |
|------------------------|-------------|----------|
| Jim Bim | ABC Company | 1/1/2019 |
| | | |
| Revision Record | | |

| REVISION: | DATE: | REVIEWER: | COMMENTS: |
|-----------|------------|-----------|-----------|
| А | 1 NOV 2018 | XMT | |

| Project Information | |
|---|--|
| PROJECT NAME: | North West Tower |
| PROJECT OWNER: | XYZ Ltd |
| PROJECT ADDRESS/LOCATION: | 1 Closer Street |
| BRIEF PROJECT DESCRIPTION: | 30 storey office and residential tower with 6 levels below grade |
| CONTRACT TYPE/DELIVERY METHOD: | Design and Build |
| CONTRACTOR ENGAGEMENT - INDICATIVE DATE: | December 2019 |

Project schedule

Use this form to record major project milestones during the project life cycle.

| PROJECT PHASE/MILESTONE: | ESTIMATED START DATE: | ESTIMATED COMPLETION DATE: | BIM MEETINGS: |
|--------------------------|-----------------------|----------------------------|-----------------------|
| PROJECT ESTABLISHMENT | 1 July 2019 | 1 September 2019 | One |
| CONCEPT DESIGN | 15 September 2019 | 15 November 2019 | - |
| PRELIMINARY DESIGN | 25 November 2019 | 25 January 2020 | One (approx. 2 hrs) |
| DEVELOPED DESIGN | 10 February 2020 | 10 April 2020 | Three (approx. 2 hrs) |
| DETAILED DESIGN | 15 April 2020 | 1 July 2020 | Four (approx. 2 hrs) |
| PROCUREMENT | 10 July 2020 | 1 September 2020 | - |
| CONSTRUCTION | 10 September 2020 | 1 September 2022 | ТВС |
| HANDOVER | September 2022 | November 2022 | - |
| OPERATION | November 2022 | NA | - |

Key project contacts

List all the known key stakeholders involved in BIM on this project.

| ROLE: | DISCIPLINE: | COMPANY NAME: | CONTACT NAME: | CONTACT DETAILS: |
|-----------------------|-------------|---------------------|----------------|------------------|
| CLIENT REPRESENTATIVE | NA | CR Management | Joan Jenkins | joan@crm.com |
| PROJECT MANAGER | NA | PM Project Managers | Geoff Geoffrey | geoff@pm.com |
| BIM MANAGER(S) | NA | ABC Consultants | Jim Bim | jim@abc.com |
| LEAD CONSULTANT | | LC Architects | Lee Brown | lee@lca.com |
| QUANTITY SURVEYOR | | STR QS | Clare Costings | clarec@strqs.com |
| OTHER PROJECT ROLES | | | | |

Refer to the NZ BIM handbook for BIM roles and responsibilities.

The vision

Provide structured information and defined processes for collaboration to create value for the client and parties involved in a project

Project goals

List client goals and expectations for the project. This table will help define BIM uses required for the project and ensure they align with project goals. Refer to <u>Appendix D</u> for BIM uses.

| PRIORITY: | GOAL DESCRIPTION - VALUE ADDED OBJECTIVES: | HOW: | BIM USES: |
|-----------|--|---|---|
| High | Optimisation of design, improved stakeholder engagement | Use the 3D model as a visual communication aid, through the use of virtual walk-throughs of facilities and static renders | Design authoring Design review Phase planning (4D Modelling) |
| High | Respect to overall project value and budget control | Reduced errors and rework through improved design and construction coordination | Cost estimation Design authoring Design review 3D coordination |
| Med | Support safety in design | Safety in design and HAZOP reviews using the 3D model as a visual aid | • Design review |
| Med | Optimised handover, improved O&M | A digital As-Built model at handover that includes site-verified information about critical assets, such as mechanical, electrical, hydraulic, and plumbing equipment. | Record modelling |

BIM use competency requirements

The purpose of this table is to identify the potential value, experience, and competencies required of parties responsible for the BIM enablement of the project.

| BIM USE: | VALUE TO PROJECT: | RESPONSIBLE PARTIES: | VALUE TO RESPONSIBLE PARTIES: | COMPETENCIES REQUIRED TO IMPLEMENT: | VALUE TO THE CLIENT: |
|----------------------------------|----------------------|--------------------------------------|-------------------------------------|--|-------------------------|
| Design Authoring | High | ARCH, STRUCT MEP, FIRE | High | Ability to create and develop a Building Information Model Design and construction experience | High |
| Design Review | Med | ARCH, STRUCT MEP, FIRE | High | Ability to manipulate, navigate, and review a 3D model Strong understanding of how building/facility systems integrate | High |
| 3D Coordination | High | ARCH, STRUCT MEP, FIRE | High | Ability to manipulate, navigate, and review a 3D model Ability to run clash detection software Knowledge of building systems | Med |
| Cost Estimation | High | QS, CONSTRUCT ARCH, STRUCT MEP | High | Ability to identify quantities for the appropriate estimating level upfront Ability to adjust a cost plan to suit data available in the model over the duration of design phase | High |
| Record Modelling | Med | CONSTRUCT | Low | Ability to manipulate, navigate, and review a 3D model Ability to use BIM application for building updates Ability to effectively communicate between the design, construction and Facilities Management teams | High |
| Phase Planning (4D Modelling) | Med | CONSTRUCT | High | Knowledge of construction programming and general construction process (a 4D model is connected to a | Med |

programme, and is therefore only as good as the programme to which it is linked)

• Knowledge of 4D software: ability to import geometry, manage links to programmes, produce and control animations, etc.

Refer to Appendix D for BIM use deliverables

| Common Data Environment (CDE) Identify who will set up and manage the project Common Data Environment (CDE) for the different project phases. | | | | |
|---|---------------------------|-----------------------|--|--|
| CDE PLATFORM: | RESPONSIBLE PARTY: | PROJECT PHASE: | | |
| Cloud XYZ | Project Manager | Project establishment | | |

Client specific requirements

List client-specific requirements, including any common data environments, standards, or protocols that might require different workflow for the project team.

SPECIFIC REQUIREMENTS:

The client's company BIM guide and standards are to be used

The organisations project asset information requirements - schedule A

Project deliverables

In this section, list the BIM deliverables for the project and the format in which the information will be delivered.

| BIM USE: | APPROXIMATE DUE DATE/STAGE: | FORMAT: | COMMENTS: |
|---------------------|--|----------|---|
| Cost Estimation | Concept design/preliminary design/developed design/ detailed design/construction design | .xyz/IFC | |
| Design Authoring | Preliminary design/developed design/ detailed design/construction design | .xyz/IFC | |
| Record Modelling | Handover | IFC | Ensure that the proper information is contained in this model from the MEA table and clients asset information requirements |
| 3D Co-ordination | Developed design/detailed design/construction design | .xyz/IFC | |

Where design authoring is required, refer to the MEA schedule for the extent, objects level of development, and timings of delivery for the BIM objects. The LOD determines the extent and nature of geometry to be included within BIM objects

Provision of BIM models at tender

The consultants federated/collaborated/co-ordinated 3D BIM model(s) are to be part of the tender documents. In the case of any errors or omissions in the 3D BIM model(s), the 2D drawings and documents will take precedence.

Reference documents and standards

The following documents are listed for reference

| GENERIC TITLE: | APPLICABLE REFERENCE DOCUMENT/NOTES: | VERSION: |
|--|---|----------|
| Project asset information requirements | XYZ Ltd asset information requirements - schedule A | v1.0 |
| BIM guide and standard | XYZ Ltd BIM guide and standard | V1.0 |
| Client brief | NWT client brief | V1.0 |

The New Zealand BIM handbook

This document is one of a suite of documents forming the New Zealand BIM handbook. You can download or view the remaining documents here:

http://www.biminnz.co.nz/nz-bim-handbook