 

**AS ISO 19650 Aligned**

October 2022

**Project BIM Brief (PBB) Template**

|  |  |
| --- | --- |
| Project Reference: |  |
| Project name: |  |
| Project address/location: |  |
| Brief project description: |  |
| Appointing party: |  |

|  |  |
| --- | --- |
| Version: |  |
| Date: |  |

**NATSPEC Project BIM Brief Template**

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|  |
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Dark red text followed by: [complete/delete] indicates that information prompted by the text should be entered after the colon. If the wording of the item is not appropriate for the project, it can be edited to suit. If the item is not relevant, simply delete it.

Normal italicised text, *e.g. NATSPEC National BIM Guide* indicates the name of a document or standard.

Bold text, e.g. **Project schedule** indicates a cross reference to a Section, clause, schedule or table elsewhere in the document.

**Document references**

In this document:

* The ‘*PBB Template’* or ‘*Template*’ means the *NATSPEC Project BIM Brief Template*.
* The ‘*BEP*’ means the *BIM Execution Plan* for the nominated project.
* The ‘*National BIM Guide’* or ‘*Guide*’ means the *NATSPEC National BIM Guide*.

**Acknowledgements**

NATSPEC thanks the numerous individuals and organisations who contributed to the development of this document through material they provided and/or comments they made on drafts.

**Comments**

NATSPEC welcomes comments or suggestions for improvements to this document and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. NATSPEC also encourages users to share their experiences of applying it on projects with us. Contact us via email at [bim@natspec.com.au](mailto:bim@natspec.com.au).

**Project BIM Brief**

**Document control**

This table is for listing the contacts who worked on the development of the Project BIM Brief, and who can be contacted to answer queries about them. Indicate responsibilities for the development of the PBB in the ‘RACI’ column.

| Title/Role | Name | Company/  Organisation | Email | Tel. No. | RACI |
| --- | --- | --- | --- | --- | --- |
| Author |  |  |  |  |  |
| Owner |  |  |  |  |  |
| Appointing party representative |  |  |  |  |  |
| Information Manager |  |  |  |  |  |

**Key to responsibilities for developing the PBB**

R Responsible for undertaking activity

A Accountable for activity completion

C Consulted during activity

I Informed following activity completion

Add or amend roles in the table as required. Those shown are examples only – customise to suit the project.

Role responsible for maintaining and updating the Project BIM Brief:

Enter the role or individual/s responsible. Refer to required procedures for consultation, notification, review, approval, etc in **Technical**, **Project information production methods and procedures directory**.

**Version history**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Version | Date | Amended by | Approved by | Comments |
|  |  |  |  |  |
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# This Project BIM Brief document

## Purpose

This *Project BIM Brief* defines the Client’s requirements for the use of Building Information Modelling (BIM) for the Project.

Make sure the project to which this document applies is clearly identified, e.g. in the document title, on the cover.

## Application

This *Project BIM Brief* is to provide information about the Client’s requirements for the project. This *Project BIM Brief* forms part of the invitation to tender documentation and is to be read in conjunction with the Project Conditions of Contract and other briefing documents.

Applicable project phases:

Examples of options – adjust wording to suit project:

* This Project BIM Brief document applies to the design phases only of the project, up to and including the handover of design deliverables from the design team to the construction team.
* This Project BIM Brief document applies to the construction phases only of the project, from the handover of design deliverables from the design team to the construction team and up to and including the handover of as-built deliverables from the construction team to the operators of the completed built asset.
* This Project BIM Brief document applies to the design and construction phases of the project, up to and including the handover of as-built deliverables from the design and construction teams to the operators of the completed built asset.

The last option offers the most opportunities to realise the potential benefits of BIM.

**Design status**

A brief description of the point design development has reached at the time invitations to tender are issued, (e.g. functional brief, concept design, sketch design, developed design, contract documentation) will also give prospective consultants and contractors a clearer picture of the extent to which the design has been resolved, so they can assess the resources and risks associated with developing it further, without having to infer it from the details included in the Project BIM Brief alone.

Include any additional information that provides context for the Project BIM Brief, e.g. project plan of work, program.

# Project details

## Project description

Outline description:

Insert a brief description of the project including its purpose and/or refer to documents that describe it in more detail.

## Project goals

The Client’s goals for the project are described in the **Project goals table**.

**Project goals table**

|  |  |  |  |
| --- | --- | --- | --- |
| Priority | Goal description | BIM Uses | Measures of success |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Priority:** e.g. High, Medium, Low, 1, 2, 3, etc. Define numerical designations to make it clear what is meant by each.

**Goal description:** A brief description, e.g. Increase cost certainty, Improve asset maintenance efficiency.

**BIM uses:** The uses that support the goal, e.g. Cost management (5D modelling), Building maintenance management.

**Measures of success:** Quantifiable, if possible, e.g. reduced number of requests for information.

If goals are documented elsewhere, you may prefer to delete the table and reference the relevant document instead.

# Commercial

## Procurement strategy

The project procurement strategy is shown in the **Project procurement strategy table**.

**Project procurement strategy table**

|  |  |
| --- | --- |
| Project procurement strategy: |  |
| Contractor engagement: indicative date: |  |

**Project procurement strategy**: e.g. Design Bid Build, Design and Construct, Integrated Project Delivery*.* Refer *National BIM Guide* clause 4.3.If unknown, write ‘to be confirmed’.

The procurement strategy will determine if a single or multiple BIM Execution Plans are required and when/how responsibilities are handed over. If the designer’s engagement is included with the contractor’s, the Design BEP and Construction BEP can be combined in one document.

If procurement details are documented elsewhere, you may prefer to delete the table and reference the relevant document instead.

## Project team members

The contact details for key stakeholders who have contributed to the development of the Project BIM Brief are shown in the **Project team members table**.

**Project team members table**

| Role | Discipline | Name | Company/  Organisation | Email |
| --- | --- | --- | --- | --- |
| Client representative |  |  |  |  |
| Project Manager |  |  |  |  |
| Lead consultant |  |  |  |  |
| Information Manager |  |  |  |  |
| Design BIM Manager |  |  |  |  |
| Construction BIM Manager |  |  |  |  |

Add or amend roles in table as required. Those shown are examples only – customise to suit the project.

Confine contacts to those who need to be kept informed of changes in AIR or can answer queries about them.

If the details are extensive, you may prefer to include them in the **Annex** and reference it here.

## Project schedule

The estimated dates for major project milestones are shown in the **Project schedule**.

This table is for summarising key project dates. Make sure they do not conflict with those documented elsewhere. If a program is available, it may be preferable to append it or cross reference it rather than use the table.

**Project schedule**

|  |  |  |
| --- | --- | --- |
| Project phase or milestone | Estimated start date | Estimated completion date |
| Project planning |  |  |
| Conceptual Design |  |  |
| Schematic Design |  |  |
| Design Development |  |  |
| Contract Documentation |  |  |
| Construction |  |  |
| Commissioning/Handover |  |  |

* Edit the table as required, e.g. add or delete project phases or milestones.
* Edit phase names to reflect project terminology. Those shown are examples only.
* Enter estimated dates for the start and completion of each project phase or milestone.

## Existing conditions information

Available existing conditions information:

Describe the existing conditions information that will be made available for prospective consultants and contractors, e.g. surveys, geotechnical reports, models, asset registers. Include it in the common data environment (CDE) (or tender resources) and reference it in the **Project reference information directory**. If none is available, enter ‘None’ at the prompt.

Additional existing conditions modelling requirements:

Specify any modelling of existing conditions required in addition to that provided by the Client. Refer to *Appendix C – BIM use & enabler descriptions* **2.1 Existing conditions modelling** for guidance on defining the scope of information required.

## BIM uses

Only BIM uses requested by the Client are included in the **BIM uses table**. Determine what other BIM uses are necessary to meet the requirements of the project during the development of the BIM Execution Plan. The uses listed correspond to those found in the NATSPEC National BIM Guide, *Appendix C – BIM use & enabler descriptions*, and are identified by the clause reference number.

The table provides a place for clients with established prerequisites for the use of BIM, e.g. institutional clients, to document them. For clients without prerequisites, it is recommended they seek professional guidance on the selection of BIM uses appropriate for the project.

**BIM uses table**

| Required (Yes/No) | NBG App C  Clause No. | Use of BIM |
| --- | --- | --- |
|  | 2.1 | Existing conditions modelling |
|  | 2.2 | Cost management (5D modelling) |
|  | 2.3 | Phase planning (4D modelling) |
|  | 2.4 | Spatial programming |
|  | 2.5 | Site analysis |
|  | 2.6 | Design authoring |
|  | 2.7 | Design review |
|  | 2.8 | Structural analysis |
|  | 2.9 | Lighting analysis |
|  | 2.10 | Engineering analysis (mechanical, other) |
|  | 2.11 | Energy analysis |
|  | 2.12 | Sustainability analysis |
|  | 2.13 | Code validation |
|  | 2.14 | 3D coordination |
|  | 2.15 | Construction documentation |
|  | 2.16 | Site utilisation planning |
|  | 2.17 | Construction system design (virtual mockup) |
|  | 2.18 | Digital fabrication |
|  | 2.19 | 3D control and planning (digital layout) |
|  | 2.20 | Record modelling |
|  | 2.21 | Digital twins |
|  | 2.22 | Asset management |
|  | 2.23 | Building maintenance management |
|  | 2.24 | Building systems performance analysis |
|  | 2.25 | Space management and tracking |
|  | 2.26 | Emergency response planning |
|  | - | Other |

Enter ‘Yes’ or ‘No’ for each use of BIM.

*NATSPEC National BIM Guide Appendix C – BIM use & enabler descriptions* includes guidance on selecting appropriate BIM uses. It can also be used to help define their scope.

Specify the scope of use under each item in the table as required.

Recording of BIM use amendments:

Changing uses of BIM during the project alters the scope of service previously agreed and has contractual implications.

To reduce the risk of disputes, use this prompt to document the agreed method of recording changes to BIM uses and where they will be stored, e.g. the **Annex** of this document, the common data environment (CDE).

If this is covered by the terms and conditions of agreements or contracts, reference them here.

## BIM deliverables

Only deliverables requested by the Client to be derived from BIM are included in the **BIM deliverables table**. Determine what other deliverables are necessary for the management and delivery of the project during the development of the BIM Execution Plan.

**BIM deliverables table**

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Associated BIM use | Indicative delivery time | Comments |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Item:** e.g. asset register

**Associated BIM use:** e.g. Asset management

**Indicative delivery time:** e.g. Completion of construction phase, date

# Management

## Information quality assurance

Information quality assurance requirements:

Describe the measures required for assuring the quality of project information.

If the Client does not have existing quality assurance requirements for project information, they may choose to request proposals from tenderers for consideration. In this instance, delete the following text about quality assurance standards.

Quality assurance standards: Conform to the standards documented in **TECHNICAL, Standards and project reference information**.

## Information security and privacy

Information security requirements:

Describe the measures required for ensuring the security and privacy of project information including governance protocols and responsibilities. This includes but is not limited to technical measures, authorisation processes for access, levels of access, security classification of information, privacy and IP protection measures and procedures in the event of breaches.

Reference the relevant sections of the Client’s existing security policies and strategies, security management plans and security breach/incident management plans if available.

AS ISO 19650.5 specifies the principles and requirements for security-minded information management. It addresses the steps required to create security strategies, security management plans, etc (but does not provide them ready-made).

## Project meetings

Requirements: The meetings required by the Client are shown in the **Meetings schedule**.

**Purpose of this schedule**

This schedule is to show only the meetings required by the Client for their decision making and management purposes. Prospective consultants and contractors may propose additional meetings for their own purposes in the pre-appointment BEP.

Include only meetings specifically about BIM and information management-related matters.

Coordinate with any other project meeting requirements documented elsewhere.

**Meetings schedule**

| Meeting type | Frequency | Chairperson | Participants |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Meeting type**: Add meeting types as required.

**Frequency**: e.g. weekly, fortnightly, monthly, 1st Tuesday of each month. If required, this column can be subdivided into project phases to show different frequencies at each.

**Chairperson**: e.g. Client’s representative. If a specific person is nominated, also include their project role.

**Participants**: e.g. BIM Manager, lead consultant’s representative.

# Technical

## Software file formats

Only software file formats required by the Client (to be compatible with their systems, for example) are included in the Software file format table. Determine the software required to deliver them during the development of the BIM Execution Plan.

Upgrades to subsequent versions of the software after commencement of the project will be subject to agreement by the project team.

**Software file format table**

| BIM use | Software file format | Version |
| --- | --- | --- |
| Planning/Preliminary cost estimates |  |  |
| Architectural/Spatial programming |  |  |
| Design authoring – Architectural |  |  |
| Design authoring – Structural |  |  |
| Design authoring – Mechanical, Electrical, Plumbing, Fire Engineering (MEPF) |  |  |
| Design authoring – Civil |  |  |
| 3D Coordination (clash detection) |  |  |
| Phase planning (4D modelling) |  |  |
| Cost management (5D modelling) |  |  |
| Specifications |  |  |
| Model checking or validation, IFC file optimisation |  |  |
| Asset management |  |  |
| Energy analysis |  |  |
| Lifecycle assessment (LCA) |  |  |
| Other |  |  |

* Edit the table as required, e.g. add or delete BIM uses.
* Enter software file formats and versions.
* Coordinate with the deliverables listed in the **BIM deliverables table**.

## Standards and project reference information

Standards and project reference information location:

Include a link to an online repository, common data environment (CDE) or a description of a location. Ideally, a CDE or single secure location for these resources should be established prior to invitations to tender. Refer to AS ISO 19650-2, Clause 5.1.7. This is more effective and reliable compared to sending them individually to each tenderer.

### Information standards

See *Appendix D – Defining information requirements* for examples of standards and project reference information.

Only standards that the Client deems mandatory are listed in the **Project information standards directory**. Determine what other standards, including version, will be required for the delivery of the project during the development of the BIM Execution Plan.

**Project information standards directory**

|  |  |  |
| --- | --- | --- |
| Document title | Edition / version | Date |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Edit as required to include all specific information standards required for the project by the Client’s organisation. Refer to AS ISO 19650.2 clause 5.1.4. Give preference to international, national or industry standards, e.g. AS ISO 19650.

Standards can cover topics such as:

* Requirements associated with information exchanges.
* Schema for structuring and classifying information.
* Methods for assigning level of information need.
* Standards relevant to the use of information during the operational phase of the asset.

The project’s information standards determine the organisation of information containers within the CDE.

### Information production methods and procedures

Only information production methods and procedures that the Client deems mandatory are listed in the **Project information production methods and procedures directory**. Determine what other information production methods and procedures will be required for the delivery of the project during the development of the BIM Execution Plan.

**Project information production methods and procedures directory**

| Document title | Edition / version | Date |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Edit as required to include all specific information production methods and procedures required for the project by the Client’s organisation. Refer to AS ISO 19650.2 clause 5.1.

They can cover topics such as:

* The capture of existing asset information.
* The generation, review or approval of new information.
* The security or distribution of information.
* The delivery of information to the Client.
* Information acceptance criteria.

### Reference information

Take the information listed in the **Project reference information directory** into consideration when working on the project. Additional reference information relevant to the project may be added during the development of the BIM Execution Plan.

**Project reference information directory**

| Document title | Edition / version | Date |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Edit as required to include all available information useful or relevant to tenderers and throughout the project. Its provision avoids potential duplication of effort and excessive contingency costs for risks. Refer to AS ISO 19650.2 clause 5.1.6.

It can include – but not be limited to information about:

* The brief.
* Planning and construction approval documentation.
* The site.
* Adjoining assets and utilities.
* Existing assets.
* Guidance material.
* Exemplars of project deliverables, etc.

### Shared resources

Take into consideration, or use as directed, the resources listed in the **Project** shared **resources directory**. Additional shared resources may be added during the development of the BIM Execution Plan.

**Project shared resources directory**

| Document title | Edition / version | Date |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Edit as required to include information or resources that promote consistency of information and facilitates its exchange. Refer to AS ISO 19650.2 clause 5.1.6.

It can include – but not be limited to:

* Templates for BEP, reports, etc.
* Templates for documents, drawings and models.
* Style libraries for text, lines, hatch, etc.
* Object libraries including 2D symbols and 3D objects.

# Annex

## References

Include any documents that you reference in the Project BIM Brief here.

**REFERENCED DOCUMENTS**

**The following documents are incorporated into this Project BIM Brief by reference:**

NATSPEC National BIM Guide NATSPEC 2022

**The following documents are mentioned only in the *Guidance* text:**

AS ISO 19650: Organization of information about construction works — Information management using building information modelling

Part 2: Delivery phase of the assets

Part 5: Security-minded approach to information management