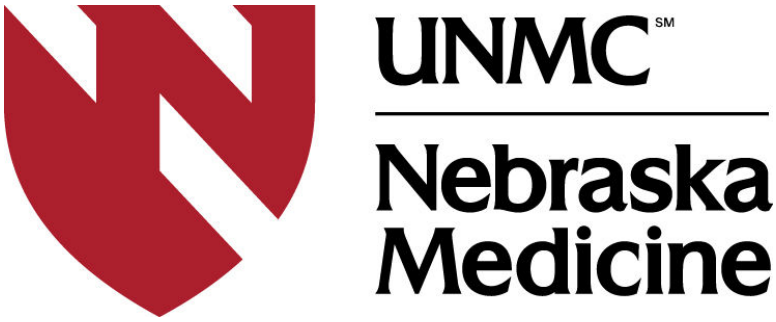

BIM Execution Plan Guide

Version 1.0

Purpose and Summary

The BIM Execution Plan (BIMxP, BEP, or BxP) should be understood and used as a project-specific tool for planning a project's uses of Building Information Modeling. The chief goal of the BIMxP Template, as provided by the University of Nebraska Medical Center and Nebraska Medicine, is to provide a structured framework that will allow a team to collaboratively create a plan for digital deliverables that mutually benefits team coordination as to ensure the creation of models that will possess valuable attributes that can be leveraged during the lifecycle of the facility.

Furthermore, the BIMxP incorporates an understanding of UNMC's BIM Standards that emphasizes important model attributes and conventions that are expected to be implemented as a project progresses through the design development and construction stages.

This BIMxP Guide provides a brief overview of the different sections present in the BIMxP template. The goal of this guide is to provide a general orientation to the intent of each section and offer considerations for the team that is planning their BIM efforts.

1 – Project Vision

The project vision section gives the team an opportunity to articulate the broader context of the project and state the project-specific goals for utilizing BIM during the project's design and construction.

Project Goal

The section begins with a "project goal" which is understood as a general statement regarding the use of BIM for the project.

For example, a goal statement should be oriented to the nature of the project such as:

> *"The project team will utilize BIM to support the streamlined design and delivery of a patient-centered experience for receiving urgent care treatment."*

Project Overview

The team should provide a 3-4 sentence summary of the project program and design considerations to orient the reader to the project scope. Any special constraints or project design considerations should be considered here.

BIM Execution Plan Goal

This section contains a general statement of the benefits of BIM. The measures of success outlined here include what UNMC has identified as key measures to gauge if the BIM process has been successful.

Contract Alignment

This section identifies and references sections in the architectural and construction contracts that reference BIM and digital deliverables more broadly.

2 – Project Information

General Information

This section provides a single table with the general project information. This table includes fields – such as project name, address, and project reference number - that can be reliably used within a Revit document's project metadata.

3 – Project Team Roles & Responsibilities

BIM Role Definitions

This section outlines and defines the "BIM roles" that will be present for a project including BIM Manager, VDC Manager, and Model Manager.

Project Team Contacts

The tables in this section represent a project directory for key contacts for the owner, architect, and contractor as it relates to project management and BIM management. An expanded project team directory for subconsultants are included in Exhibit A

4 – BIMxP Participant Review and Acceptance

This section serves as a confirmation that project managers understand and have had the opportunity to provide input in the components of the BIMxP for the project and are in agreement with the various processes and protocols specified in the BIMxP.

5 – Building Information Model Uses

Model Use Responsibility Matrix

Model uses establish the anticipated use cases for a given model. For example, a model may be deemed useful for 3D clash detection in design but it may not be used for 3D clash detection in construction. Project authors of the BIMxP should select, add, or subtract BIM uses from this table as needed or required by the project. Exhibit B can be referenced for a complete list of BIM uses that may have relevance to a project.

Level of Development Definitions

This section defines the Level of Development definitions (LOD) that have priority for the University of Nebraska Medical Center. While many LOD definitions exist within the building design and construction industry, this BIMxP considers three primary levels for Level 100, 200, and 300 respectively.

Model Element FM LOD Matrix (Owner Priority)

The FM LOD matrix defines and prioritizes specific model elements that have special bearing on the use of a model for Facilities Management by the University of Nebraska Medical Center. Additional matrices can be created and supplemented by the project team to account for other uses.

6 – Coordination Approach

Project Technology & Software

The project technology section identifies the primary project technologies to be implemented by the project team for design, coordination, analysis, and construction activities. Attention should be given to the software versions. Any specialized software can also be listed.

Additionally, the project team should establish the appropriateness and relevance of “software upgrades” that may occur during the design and construction stages of a project. Depending on the project scope and schedule, it may be advantageous to the project team to schedule software upgrades to ensure the team is using the latest feature sets for the benefit of the project.

Model Datums

Model datums refer to coordination and reference geometry for locating and orienting the project model in various software. This section contains tables and file lists that can be referenced by the project team to properly coordinate a project model relative to other models. This section can also be used as a reference for specifying project coordinate systems, site survey origins, and other location data.

Coordination Protocols

The project team shall provide a general coordination process diagram and/or schedule indicating how the architecture and construction teams will perform coordination activities including clash detection and conflict resolution.

Data Exchange & Coordination Protocols

This section outlines several generalized protocols and process diagrams pertaining to project data exchange that are expected to occur among the owner, architect, and contractor. The process diagrams explain the general steps taken to verify the handoff and exchange of various data exchanges as well as the supporting goal for each protocol.

7 – Information Exchanges & Digital Deliverables

Owner Model Submittals

This section describes a matrix for BIM deliverables pertaining to owner-related model uses and verification processes and the steps taken to transmit this data between parties.

8 – Output Format Requirements

Model List

The team should maintain a listing of building information model files in the provided table. Models may be added or subtracted in the even that models become combined or created over time during the duration of the project. The project team should verify the addition or subtraction of the models among the owner, architect, and contractor BIM managers.