



FPS Guidance Note 2: BIM Introduction and Workflow

SCOTT WHITE



BIM INTRODUCTION

Building Information Modelling (BIM) Government lead to encourage great efficiency in the construction industry.

BIM embeds key information and data within a three dimensional computer generated model that can be used for effective management of information throughout a project – from early design all the way through to operation.

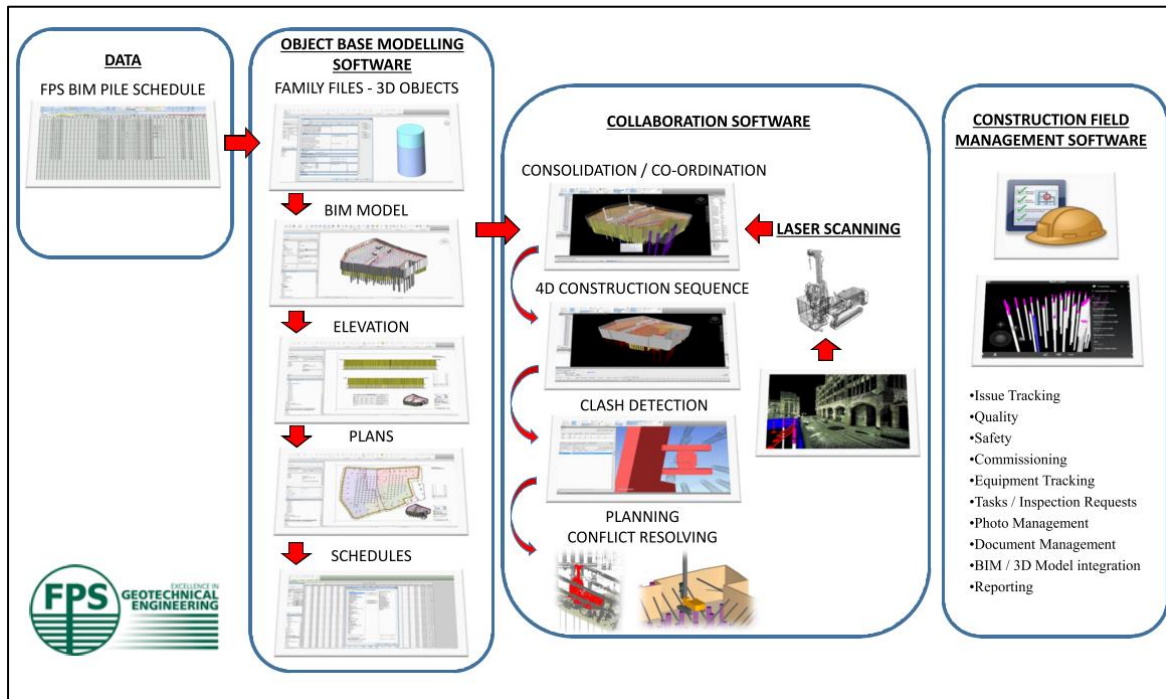
The aim is to streamline construction projects by using this smarter way of working , digital construction technology unlocks many aspects of your project and its data, giving you the tools to :

- Eliminating defects before construction phase.
- Enable intelligent decisions.
- Safer working.
- Greater efficiency.
- Spatial coordination checks.
- Collaborative working.

The Government has mandated that all construction companies tendering for Government work should achieve level 2 BIM by 2016.

BIM WORKFLOW

To understand how BIM could look like on a project, we have produced a BIM workflow diagram to show the stages of information flow, what this data can be used for and each stage through the lifecycle of a project.



Below are the definitions to accompany the BIM workflow diagram.

DATA STAGE

FPS BIM Pile Schedule, container of design data, starting point for your BIM project.

OBJECT BASE MODELLING SOFTWARE

Family Files: 3D object based models created to hold the meta data from the FPS schedule, within these family files the meta data will drive the shape, size and length of the object creating a 3D representation of the data provided.

Once these links have been made your BIM model is generated.

Generation of elevations, plans and scheduling project information from the BIM model is a very easy and fast process, all generated from one source and all reflecting the same information.

COLLABORATION SOFTWARE

The sharing your BIM model with your teams within the project, using this software to understand and check many aspects of the project requirements.

4D Construction Sequence: Linking of the construction programme of works to each object within the BIM model, giving you and your team's access to the proposed sequence of works.

Clash Detection: The ability to highlight any issues within your project, these issues can be anything from objects touching; to objects outside a tolerance zone, you and your teams can control what you want this software to report back on.

Laser Scanning: Real life information captured in a digital format, creating a point cloud that can be incorporated into your BIM project.

CONSTRUCTION FIELD MANAGEMENT SOFTWARE

Taking your BIM project and all the digital data collection requirements onto site, using tablets to access, check and collect data digitally while on site as it happens.