

PART 2 AN IDEAL REVIT IMPLEMENTATION OUTLINE

I understand there is no such thing as an ideal implementation. Each firm brings its own unique issues to the implementation process. Staff composition, size and capabilities as well as types of projects and office hierarchy all influence how BIM will be integrated into the office. That said, in my experience the best implementations happen when the firm budgets, plans and executes a realistic roadmap. Toward that end, here is an outline of the ideal roadmap.

This is really the second part of the implementation one sheets, it refers to Part 1 and expands on the Do-It-Yourself Revit Implementation one sheet:

1.00 Program

Program in the architectural programming sense the implementation including identifying problematic areas where the software process conflict with the office processes.

2.00 Develop the milestones for implementation

(use this outline, or see "Do-It-Yourself Implementation" separate document as starting points for your office milestones)

3.0 Revit Core team selection and training

Just like it says

4.0 Revit Core Team Develops Office Standards

Standards and library development while creating **Office BIM test model**. While developing the testing model, establish a secondary set of milestones for implementation.

4.1 Separate milestones for office standards development:

- 4.1.0 Non-Template related
- 4.1.1 Export layer Text file
- 4.1.2 Import Lineweights text file
- 4.1.3 Revit INI file
- 4.1.4 Revit keyboard shortcuts
- 4.1.3 Shared Parameters file

4.2 Plotting working

- 4.2.0 Lineweights
 - 4.2.0.1 Annotation
 - 4.2.0.2 Model
 - 4.2.0.3 Color
 - 4.2.0.4 Revit grey scale vs traditional acad "screened"

4.2.0.5 Phasing

4.2.0.6 Patterns

4.2.0.7 DWG links (lineweight should be set by 4.1.2, but verify plotting)

4.2.7.1 Linked Drawing files

4.2.7.2 Linked with colors preserved Vs colors as black.

4.2.1 Plotters

Set up test plot sheet with model views at different scales, annotation and line types Test on ALL plotters and printers

4.2.1.1 large format full size

4.2.1.2 Large Format, half size

4.2.1.3 8 ½ x 11

4.2.1.4 11 x 17

4.2.1.5 Document printer settings (printing preferences) for office printing to each of the printers. Create new shared printer if needed.

4.2.1.6 Adjust line weights and grey scale as needed based on plots

4.3.1.7 Plot to pdf and dwf send these to plotters to identify any issues with these as well

4.2.2 print setups

4.2.2.1 Create print setups in office template for:

BW -full size,

BW -half size

BW -11x17

BW - 8 ½ x 11

4.2.2.2 Create print setups in office template for:

Color -full size,

color -half size

color-11x17

color - 8 ½ x 11

4.3 Tags

Create all the office standard tags and load into office template

Make sure there is one centralized shared parameters file and only a few people who know what they are doing have access to it. Note, once loaded into the office template, each tag will have a leader defined as part of the TYPE parameters.

4.3 Patterns

4.3.1 Base set of patterns

4.3.2 Office Process for creating new patterns (I use HatchKit to create .PAT files)

4.4 View Marks Set up

4.4.1 Elevations marks

4.4.2 Section (building, and wall section marks if different)

4.4.3 Detail bubbles

- 4.4.4 Callouts
- 4.4.5 Match line callouts
- 4.5 Leader Arrows
 - 4.5.1 text leaders (create arrowhead, assign by type in text type)
 - 4.5.2 tag leader arrows
- 4.6 Dimension families and types
- 4.7 Text
 - 4.7.1 Simplex and romans are problematic find another font to replace these.
 - 4.7.2 Create text types in the office template
 - 4.7.3 if Arial is NOT used, then you need to create text types in the families:
 - Detail component, generic annotation, all tag rfa files...
- 4.8 Schedules
 - 4.8.1 Create working schedules
 - 4.8.2 Create plotting schedules for all schedules used by the office in the template
- 4.9 Views and Sheets
 - 4.9.1 Create typical levels
 - 4.9.2 Create standard views
 - 4.9.3 Create office title blocks
 - 4.9.4 Create a few typical sheets
 - 4.9.5 Create a few "temporary plotting sheets"
 - 4.9.6 Create typical view templates
 - 4.9.7 Create Browser Organization
- 4.10 Family Creation
 - 4.10.1 Establish minimal set of working families
 - 4.10.2 Establish a routine for migration of families from project to office library

As the Revit Core team works through the Office BIM test project, address each of the issues above .

5.0 Establish Office Procedural standards

File structure for projects
Family Creation, storage and standards
Family transition from project to office library
Consultant files received
Consultant files transmitted
Revit upgrading

6.0 Revisit item 1.0 Program

(in the architectural programming sense) the implementation including identifying problematic areas where the software process conflict with the office processes as identified in the trial Office BIM Test Project

7.0 Pilot project selection

8.0 Pilot project team selection and training

9.0 Pilot project development

10.0 Train rest of office on project by project basis.

This is more on the to do list but not as critical as the first part

A) Create a symbol legend and place it on a sheet in the template. This will identify any tags or symbols that yet need to be created

B) Create a cover sheet title block and keep in template

C) Families:

Create families using the Objects Styles developed for the office. Revise and update Object Styles and layer export sheet as you do this.

Plumbing:

Civil: All the basic site stuff: Curb and sidewalk, adjust the families from the server room.

Others:

Dumpster, electrical equipment (SES etc), fire hydrants, signs and graphics.

Go through the parking components and make them fit your office Object styles

Furniture: get the basic set done to office standards