



2012 USACE Revit Templates README

The US Army Corps of Engineers (USACE) CAD/BIM Center is releasing for immediate use, (4) 2012 Revit Templates. Registration for download of compressed files is located on the CADD / BIM Technology Center's website <https://caddbim.usace.army.mil/BIM>. Completing the registration page will allow the user to download the files that contain the Architectural, Structural, Electrical and Mechanical templates or a collection of all templates (supporting documentation will be provided later online and to registered users). This README will provide users and CAD/BIM Managers with the reasons why the templates were created, the process used to create them, the current state of the template, and the process and plans to improve them going forward.

The Purpose

Building Information Modeling (BIM) with the Autodesk Revit Platform offers the ability to easily configure save and deploy a standard working environment. Standardizing on district neutral and project agnostic Revit template will ensure that graphic representations, data syntax, taxonomy and software environment are consistent, and that the end deliverable will satisfy industry and USACE CAD/BIM standards.

The Process

The USACE and Autodesk collaborated to create a BIM Template Team consisting of seasoned CAD/BIM Managers with a working knowledge of Revit. Each member has specific disciplinary strengths and shared a draft working district specific Revit template with the team. Each of the district's templates were critiqued and tested by the group, and by teams going through BIM Implementations. The feedback was debated and the group decided on revisions and enhancements that supported the intent, purpose and general needs of the USACE.

The Payoff

The upfront time and effort required to set up, configure, and coordinate a Revit project and environment, be can be minimized significantly by deploying a Revit template file (.rte). Revit templates will increase graphic and non graphic consistency across teams, districts and divisions. Templates will provide a team with a common starting point and will improve the overall USACE product and brand.

Standards and References

Throughout the refinement and coordination of the templates, the teams referred to the National CADD Standard (NCS) 5.0, the USACE AEC 4.0 CADD Standard and the USACE CADD Supplement for guidance and matched standards were applicable. CD drawing sets from various USACE Districts were also used as examples of working in-practice drawing standards.

The standards in the USACE Revit BIM Template do not replace any contract requirements that may be part of a contract agreement with an owner or organization. The contract requirements shall be used in lieu of these standards.



Template Contributors

David Johnson, ERDC – Architectural and Template Team Lead

[Questions/Comments on USACE Revit Templates](#)

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Release and Testing Schedule

Date	Name	Audience	Purpose
7/15/11	alpha	USACE COS Districts	Released for internal USACE testing, review and comments.
9/15/11	beta	USACE COS Districts	Released to internal USACE Implementation Teams for testing.
5/01/12	v1	All USACE Districts & AEC Firms	Released to USACE and All AEC Firms
Future	v2	US AEC Advisory Board	Review by AEC firms for commercial usability
Future	v3	Metric Team	Templates created for OCONUS work
Future	v4	COS Project Types	Create templates for standard building types

What is addressed in this release?

USACE Start Screen

Browser Organization

USACE Border Sheets

Typical View Placeholders

View Naming Conventions

Typical USACE Sheet Borders

Project Settings

Fonts

Keynotes

Project Parameters

Line Patterns

Line Styles

Arrow styles



Text styles
Spot dimensions
Dimension tpestyles
Object Styles V/G
Patterns, Filled Regions
View Templates
Legends
Viewports, View Types
View Tags
Schedule Appearance
Line patterns
Line styles
Fill patterns
Shared Parameter Files
Custom Revit Families (see lists in Guides)

What is not addressed in this release?

Materials
Design Options
Zone Color Schemes
Site Settings
Sun & Shadow Settings
Phases
Room/Area Color Schemes (except as used for MEP templates)
Typical Details
Schedule Keys
Revit->DGN mapping tables
Revit -> DWG mapping tables
COBIE

Contents of .ZIP file on CAD/BIM Center Website

<https://cadbim.usace.army.mil/BIM>

BIM-> Documents

Documents & Publications



1. 2012 Revit Architecture V1. rte
2. 2012 Revit Structure V1. rte
3. 2012 Revit MEP V1. rte
4. USACE Architecture Shared Parameters V1.txt
5. USACE Structural Shared Parameters v1.txt
6. USACE Mechanical and Plumbing Shared Parameters v1.txt
7. USACE Electrical Shared Parameters v1.txt
8. Revit Arch Template Guide v1.doc
9. Revit Structure Template Guide v1.doc
10. Revit Mech Template Guide v1.doc
11. Revit Electrical Template Guide v1.doc
12. Pipe Fitting-Steel.csv
13. Revit Template Feedback Form.doc

Deploying a Revit Template

Deploying a Template from the beginning of a project.

Wiki: http://wikihelp.autodesk.com/Revit/enu/2012/Help/Revit_User's_Guide/2921-Customiz2921/3108-Project_3108

Transferring aspects of a Template after a project has started.

Wiki: http://wikihelp.autodesk.com/Revit/enu/2012/Help/Revit_User's_Guide/2921-Customiz2921/3111-Transfer3111

Editing a Revit Templates

http://wikihelp.autodesk.com/Revit/enu/Community/Articles/Building_a_Revit_Template

Comments and Feedback

The template team welcomes feedback from the AEC community. We understand that a template is a living document and will transform over time. Please send your suggestions and ideas for edits on the provided template feedback form to USACE at the ERDC [CAD/BIM Technology Center](#).

If you would like to become a member of the template team please indicate so on the form.

END