Strategies using Autodesk® Navisworks®

Doing it right the first time!
Bill Knittle, Synergis Engineering Design Solutions, AEC
Bill has a bachelor’s degree in Architectural Engineering Technology from the University of Hartford. Bill has over 13 years of AEC and Autodesk AEC experience, including seven years of field expertise helping design, document, and in some cases, manage a variety of residential, commercial, municipal, and institutional projects. Bill has been training, supporting, and implementing the Building Solutions offered from Autodesk which include AutoCAD, AutoCAD Architecture, Revit, and Navisworks applications. On June 16th, Bill will be blissfully married with 3 children for 13 years.

Tim Bodor, H.T. Lyons, Contractors | Engineers
Tim has an associate’s degree in Architectural Drafting Technology from Lincoln Technical Institute. Tim has drummed up 16 years in the Consulting Engineering business as an MEP CAD/BIM Manager and Plumbing/Fire Protection Designer. For the last 3 years he has been in the Mechanical Contracting business as a part of the Engineering team. Project experience ranges from small office tenant fit out projects to full barracks facilities with classrooms, full service kitchen, and practice field house to a 1,300 seat Performing Arts Center. Tim has been married for 14 years and has 3 children.
Pre-Construction Methodology

- Reviewing 2D BID Design Documents
- Identify Objectives, Assessing Risk
- Requesting Information, Estimating
- Determine Timeframe, Budgeting
- Fab Modeling, Shop Drawings
The Old Strategy

The Software Side

AutoCAD MEP
- MEP.DWG
- Strct.DWG
- Arch.DWG

CADmep
- Fab.DWG
- Fab.NWC

Navisworks Simulate or Manage
- Master.NWF

Xref

Append & Refresh
The BIM Lifecycle
Changing the Game

Graphic courtesy of Patrick MacLeamy AIA / HOK
What is Navisworks®

What can it do?

- Experience the Proposed
- Present the Intent
- Mitigate Conflict
- Simulate Logistics
- Monitor Progress

Autodesk® Navisworks® project review software helps architecture, engineering, and construction professionals holistically review integrated models and data with stakeholders to gain better control over project outcomes. Integration, analysis, and communication tools help teams coordinate disciplines, resolve conflicts, and plan projects before construction or renovation begins.
What is Navisworks®

How does it work?

CAD File Types

- NWC
- NWC
- NWC
- NWC
- NWC
- NWC/NWD

360 Glue Mobile App

- Glue

Navisworks Manage / Simulate

- Append
- Publish
- Open

- NWF
- NWC
- NWD

Navisworks Freedom

- Glue it

SU13

SYNERGIS UNIVERSITY
The New Strategy

The Value &

The Struggles
The New Strategy

Stakeholders

Revit Arch
NWC

Revit Struct
NWC

Revit MEP
NWC

Master Pointer File

Weekly Review Snapshot File

Working Review File(s)

Master Current Snapshot File

Pointer File to Compile Working Files

Sequencing NWF

Clash Det. NWF

Presentation NWF

Merged NWF

These can be separate or one file

Only when there is more than one Review File

Archive previous version prior to replacing with new

Archive

Archive

Archive previous NWD prior to creating the new

Archive previous NWD prior to creating the new
The Demo

Revit » Navisworks Manage (Clash Detection)

Revit » Navisworks Manage (Sequencing)

Navisworks Manage » Navisworks Freedom