

# Template Instructions README

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## GENERAL

These AutoCAD templates (.dwt) are designed to be brought into “paper space” at 0, 0. They represent an Arch “D” (24” x 36”) size sheet of paper.

The templates have built into them, LANL’s CAD Standards requirements pertaining to layers, fonts, text height, line weight, line type and dimensioning styles.

Do not explode the templates – use the editable attribute command (or double click on an editable field) to add/change information in the title block. Use the block editor to modify all other elements of the title block when necessary.

All elements drawn in model space are to be at full scale. All scaling is to be done in paper space using the viewport scaling feature.

All text and dimensioning is to be completed in paper space.

Layering in the templates is for general use and should be added to/customized as needed based on the National CAD Standard.

The template shows the “ENGINEERING SERVICES” logo and therefore applies to Engineering Services users. Other design agencies are to replace the logo with that of their own.

Some new features have been added to the templates.

When you highlight the north arrow you’ll notice an additional “grip” has been added allowing you to simply rotate the north orientation but only above the horizontal (in keeping with the CAD Standards)

Also, when you edit the attribute for TA and BLDG in the title block (just below the sheet title) it automatically fills in the TA and BLDG in the drawing number sequence below them. Same when you fill in the discipline sheet number – it automatically is entered in the drawing number as well.

Another new feature is the “% REVIEW” block now has a pull down menu with standardized review entries from “CONCEPTUAL” through “100% REVIEW – FINAL”.

Finally, another new feature has been added that automatically adds revision number blocks to the revision block when the grip is pulled up.

### **CONVENTIONAL (WET SIGNATURE) TEMPLATES**

These templates have been posted on the ESM CAD Standards Manual website for several years and have been retired in favor of using the digital signature templates.

### **DIGITAL SIGNATURE TEMPLATES**

These new templates, currently issued under an approved variance (VAR-10066) accommodates digital signatures for all reviewing/approving parties. This eliminates hardcopy plotting, “wet signing” and then scanning back to electronic media thus saving paper and ink and eliminating compromised PDF quality induced by scanning methods. The CAD Standards Manual will be revised to reflect use of the digital signature templates and title blocks, which will close out the VAR-10066.

The digital signature title block utilizes a single signature block for all reviews/approvals for the life of the drawing – the reviews/approvals that appear are for the current revision only, including Rev 0.

Once a drawing (individual PDF file per drawing sheet required) is ready for the approval phase, it is recommended to use the “Export \ PDF”

function in AutoCAD to generate the PDF for highest quality. The export PDF will be driven by AutoCAD's Page Setup configuration assigned to that sheet, same as if were to be printed on a plotter. The PDF(s) are then to be routed to each reviewer/approver (starting with the Derivative Classifier (DC) and ending with LBO-Design Package Reviewer, when applies) who digitally signs (using the LANL standard digital signature software) and sends on to the next approver. The DRAWN signature is not required but is optional – at a minimum a typed first initial and full last name is sufficient.