



Conduct of Engineering Request for Variance or Alternate Method

To display the *VAR Request Metadata* pane for this document, click **File > Info > Properties > Show Document Panel.**

1.0 General

1.1 Document Number: VAR-10066	1.2 Revision: 2								
1.3 Brief Descriptive Title: Electronic Drawing Approval									
1.4 Affected Program: Engineering Standards	1.5 Request Type: Variance								
1.6a Affected Tech Area 99	1.6b Affected Buildings Sitewide								
1.7 Requestor: Cardon, Tyson Levi Organization: ES-IPD									
1.8 Revision History <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 15%;">Revision Number</th> <th style="text-align: left;">Changes and Comments</th> </tr> </thead> <tbody> <tr> <td style="padding-left: 20px;">0</td> <td>Initial issue 11/29/2016</td> </tr> <tr> <td style="padding-left: 20px;">1</td> <td>10/21/2020: Converted VAR-10066 into a variance from its original alternate method; removed previous title block and title sheet templates from the website in favor of a new single template posted with approval of this VAR rev1</td> </tr> <tr> <td style="padding-left: 20px;">2</td> <td>Removed requirements for Entrust or Adobe Digital Signature Certificates. Requirements for certificate validation and digital signature encryption are not with the scope of the CAD standards.</td> </tr> </tbody> </table>		Revision Number	Changes and Comments	0	Initial issue 11/29/2016	1	10/21/2020: Converted VAR-10066 into a variance from its original alternate method; removed previous title block and title sheet templates from the website in favor of a new single template posted with approval of this VAR rev1	2	Removed requirements for Entrust or Adobe Digital Signature Certificates. Requirements for certificate validation and digital signature encryption are not with the scope of the CAD standards.
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2.0 Affected Conduct of Engineering Program/Documents

2.1 Affected "P" Document: P342 Engineering Standards If against the P document itself, revision (or N/A): <p style="text-align: center;">N/A</p>	2.2 Subordinate or related document(s) [AP, master spec, LANL ESM chapter & section; or code, Order, standard, etc.]: Document Title/No.: CAD Standards Manual, Section 100 Revision 5 Document Title/No.: CSM Section 200 Revision 5 chg2 Document Title/No.: <i>Enter text..</i> Revision <i>Enter text..</i>
2.3 Section/Paragraph: Section 103.1.0.B.6 (Revisions to Drawings); Section 202 (Title Blocks, except non-electronic Sketches); and Section 203 (Title Sheets, except non-electronic Sketches)	
2.4 Specific Requirement(s) as Written in the Document(s): Various locations within the cited sections of the documents specifically mention "hand written signatures or initials" for the required approvals of each sheet of drawings.	

2.5 Contractual, preference, or other basis for requirement in 2.4:

The standard title block is based on the historical title block in use at LANL for many years. It was developed for traditional "wet" signatures of approval of the individual drawing sheets for procedural control of approving drawings and electronically produced sketches for implementation of design in the field.

2.6 Type of VAR from ESM Chap 1, Z10 [Applies only to standards variances)

Type 1

2.7 Discipline

CAD

3.0 Request Information & Comments

3.1 NCR required (work has occurred)? No

If Yes, NCR Number: Enter text.

3.2 System/Component Affected

OpSystem Acronym & Name [Select OpSysAcronymAndName]

System Number or Name [Select SystemNumberOrName]

3.3 Highest ML Level

ML-1

3.4 Proposal with Justification/Compensatory Measures:

A modified drawing title block, similar in appearance to the standard title block but with approval blocks large enough to accommodate digital signatures supersedes all previous drawing title blocks that only supported "wet" signatures, including sketches.

This modified title block template is available from the CAD Manual website as a replacement to the current "wet" signature templates. Should the need arise, new templates can be printed, wet-signed, and scanned; however, this is discouraged due to loss of legibility and the maximum allowable number of scans is one time—i.e., once during the entire signature routing process (typically at the end). Additionally, if "wet" signatures are to be used, all signers must use the "wet" signature method.

Templates may be updated by POC without revision of this VAR.

Revision to the affected Sections of the CAD Manual itself will supersede this Variance

The CAD Standards Manual POC may allow alternatives to use of this approach by email permission.

Justification

The elimination of large quantities of paper and printer ink consumption has a significant cost benefit. Additionally, eliminating scanning of signed hardcopy drawings (as the current practice requires) to electronic document formats greatly improves the functionality and usability of the final electronic document for its expected life.

The summer 2020 release of an Acrobat Pro script (a reference to the templates) allows users to sign multiple, separate documents simultaneously eliminated concerns that e-signing is more time-consuming than wet-signing; it is posted with the Manual.

Intent of Rev. 2 of this VAR is to eliminate HOW digital signatures are to be executed and focus on the fact drawings are to be digitally signed. Whatever method of digitally signing is approved/acceptable at LANL should apply to CSM as well.

3.5 Attachments

Document Title or Description none

3.6a Project ID N/A	3.6b: Project Name N/A or Project Name	3.6c: Code of Record Date N/A or Date
3.7 Duration: Lifetime	3.8a If Finite Period, Start Date: Click to enter a date.	3.8b End Date: Click to enter a date
3.8c Provide the PFITS number for tracking removal/correction: [PFITSNum]		
3.9 USQD/USID required (Nuclear, High/Mod Hazard)? No If Yes, USQD/USID Number Click here to enter text.		
3.10 QA Review for process change matters potentially affecting LANL's NQA-1 implementation Is a QPA Determination required?: No If Yes, then: Choose an item. QPA Comments: Enter text..		
3.11 POC Determination: Accept POC Comments: Enter text..		
3.12 Management Program Owner's (SMPO) Approval for P341 and APs; P342, ESM, ML-1 and -2, and Contract Matters; and P343 SMPO Determination: Accept Comments: Enter text..		

4.0 Participant Signatures **NOTE:** DO NOT ADD NAMES FROM WITHIN WORD! [Save and close the form first](#), then do 1-4 below:

1. From the SharePoint library, select the document, then click the **ellipsis (...)** in the second column; a small dialog appears
2. In the small dialog click the **ellipsis** again
3. Click **Edit Properties** and check out the document if prompted to Enter names using the controls provided, then **Save**

4.1 POC (Management Program Owner's Representative): Richardson, Scott C	Organization ES-IPD	Signature
4.2 Facility Design Authority Representative [FDARName] FDAR signature not required <input checked="" type="checkbox"/>	Organization Enter text..	Signature
4.3 LANL Owing Manager (FOD or R&D/Program) [FODorPrgmMgrName] FOD or Program Manager signature not required <input checked="" type="checkbox"/>	Organization Enter text..	Signature
4.4 Quality Reviewer's Name: [QPAName] QPA review/signature not required <input checked="" type="checkbox"/>	Organization Enter text.	Signature
4.5 Safety or Security Management Program Owner's Approval for P341 and APs; P342, ESM and Contract Matters; and P343 [SMPOName] SMPO signature not required (Type 1 variance) <input checked="" type="checkbox"/>	Organization Enter text..	Signature

<p>4.6 Additional Signer 1 [AdditionalSigner1] Role: Enter text.</p>	<p>Organization Enter text.</p>	<p>Signature</p>
<p>4.7 Additional Signer 2 [AdditionalSigner2] Role: Enter text.</p>	<p>Organization Enter text.</p>	<p>Signature</p>

<p>4.8 CoE Administrator Signature</p> <p>Salazar-Barnes, Christina L</p> <p><u>NOTE:</u> The CoE Admin is always the last signature placed on this document. The date of that signing is the date of this document.</p>	<p>Signature</p>
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