




INSTRUCTIONAL MEMORANDUM

GENERAL SUBJECT: Design Submittal Requirements	NUMBER: IM-25-01
SPECIFIC SUBJECT: Requirements for Design Submissions for VPRA-led projects	EFFECTIVE DATE: October 10, 2025
	SUPERSEDES: N/A
APPROVED: <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <small>DocuSigned by:</small>  <small>9D590E07D4A14BD...</small> </div>	

Purpose

This Memorandum sets forth the requirements for design submittals, process for design review, and applicable standards.

Basis of Design

Prior to beginning design efforts on a project, design consultants will submit a Basis of Design (BOD) document for the project, which will be reviewed and approved by the VPRA Standards and Engineering Practices Director or assigned VPRA representative, and the VPRA Project Manager. The BOD document should, at a minimum, include the scope narrative, design criteria and design approaches. It will vary in complexity and format, depending on the nature of the project. The appropriate contents of the BOD will be discussed with and agreed to by VPRA. The BOD document must be updated with each design submittal to capture any changes.

Design Submittals

VPRA follows transportation industry standards regarding our requirements for design submittals. Our required submittals typically include the following:

- Conceptual/Project Development
- 30% Design Submittal
- 60% Design Submittal
- 90% Design Submittal
- 100% Design Submittal/Final Plans
- Issue for Construction (IFC) set

The attached checklist sets forth the required elements and deliverables at each stage of design. The checklist is not intended to be comprehensive for all project types. Additional documents maybe needed for specific projects.

With each subsequent design submittal, the design consultant will progress the design, as appropriate. At a minimum, this will include progressing the engineering design by incorporating, resolving, and/or responding to review comments; providing additional details, creating, and/or updating calculations; and creating and/or updating quantities and estimates.

Comment Resolution

For each design submission, VPRA will review and comment on the plans, and other submitted documents. VPRA uses Bluebeam Studio sessions to perform a collaborative review. Bluebeam Studio Usage Guidance Memo is attached and posted on the VPRA website. If external stakeholders do not use Bluebeam Studio for review, the design consultant will provide the attached comment resolution template for comment submittal, documentation and resolution. Comment responses by the design consultant are required to be submitted to VPRA within a reasonable timeline from receipt, which timeline will be established for each project, depending on complexity of the design. Comment resolution meetings may be required, depending on the volume of comments.

CADD Standards

VPRA's preferred CADD platform is MicroStation, and any electronic files/digital submissions must be in MicroStation (*.dgn) format. Electronic design submittals must include all reference files. VPRA accepts pdf files for plan sets and uses Bluebeam Studio for collaborative review and markup, as discussed above. Refer to the attached Bluebeam Usage Guidance memo for more details.

VPRA recommends the following CADD standards, unless otherwise directed by VPRA:

- CSX CADD standards for rail projects
- VDOT CADD standards for roadway and civil site projects in Virginia
- National CAD Standard (NCS) for vertical projects
- Local municipal CADD standards, as appropriate for the project

For plan revisions within the same submission, design consultants will update the plans as indicated below:

- Revisions – the changes will be delineated in a revision cloud
- Title block – add the revision number and date to the title block

Attachments:

- Design Submittal Requirements Checklist, EC-001
- Comment Resolution Template, EC-002
- Bluebeam Studio Usage Guidance Memo