



Connecticut DOT

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Bureau of Engineering and Construction

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ENGINEERING DIRECTIVE

Engineering Administrator

Digital Review of Design Submissions

The digital review procedures identified in this directive are to be used for all design development reviews (i.e., review milestones) conducted after August 1, 2015.

Digital Reviews involve preparing review materials (e.g., plans, specifications, estimates, reports) in Portable Document Format (PDF) and making them available via the web. Reviewers use software tools to comment. All comments, from all participating reviewers, are visible on the base review document (e.g., plan sheet, report). The advantages are significant, including:

1. Greater collaboration (reviewers-to-designer, reviewer-to-reviewer);
2. Eliminates paper printing cost and associated waste stream;
3. Saves time and money (transportation of review materials, comments);
4. Flexible and timely comment resolution; and
5. Efficient search capabilities and permanent records of comments and resolutions.

The Digital Review procedures were developed by the AEC Applications unit in conjunction with several design units and refined through highway and facility pilot projects. The Digital Review procedures are outlined in [Digital Project Development Manual](#), Section 7 (Digital Review and Commenting). Both narrative and [video](#) instructions are provided.

The Department has selected Bluebeam as its digital review software. AEC Applications has coordinated with the Office of Information Systems for the installation of Bluebeam on Engineering's computers and selected others that are anticipated to be participating in digital reviews.

2015-4-E
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Ideally, the entire review and commenting processes will be conducted using PDFs through Bluebeam. This eliminates printing, facilitates collaborative commenting and provides an easily-archiveable record of the review. However, it is recognized that certain external reviewers (e.g., railroads, utilities) cannot or will not review PDFs and/or submit comments through Bluebeam. In these cases, partial implementation, with commensurate benefits, is possible. For example, commenting through Bluebeam is highly desirable even when hard copy materials are used for the review. Other variations are also possible. Lead design units shall continue to encourage all project partners to perform fully-digital reviews. AEC Applications is available to provide support and technical assistance in these efforts.

Regardless of the review/commenting process(es) used by reviewers, all comments and corresponding dispositions for a particular review shall be included in a single PDF and then stored in Projectwise as described in the [Digital Project Development Manual](#). In some cases, this will require that a PDF be created to capture narrative comments and appended to the Bluebeam-generated report.

Please contact Bruce Bourgoin (860-594-2760) or Mathew Calkins (860-594-2988) with any questions regarding this directive or to obtain Bluebeam.