

**Massachusetts Department of Transportation
Highway Division
Interoffice Memorandum**

TO: District Highway Directors and Deputy Chief Engineers
FROM: Patricia A. Leavenworth, P.E., Deputy Administrator and Chief Engineer
DATE: February 12, 2021
SUBJECT: Design Reviews

The purpose of this memorandum is to provide information regarding the timeframes for design reviews given changes in the design review process implemented as part of the Bluebeam roll-out. This memorandum supersedes the previous guidance contained in the February 6, 2019, Design Review memorandum.

All Highway Division projects, except NFA Task Order Contracts, are required to have a Design Schedule prepared utilizing MS Project. The individual project schedules shall be based on the templates that are available on mass.gov (sample attached). These schedule templates were developed based on input from reviewing sections and are designed to be consistent with the Project Development and Design Guide Submission Distribution Workbook (SOP 206).

At the outset of a project it is the Project Manager's responsibility to establish the design review times based on the proposed advertising date and the guidance provided below. The Design Engineer is then required to prepare and submit a proposed design schedule utilizing the appropriate schedule template and the guidance provided by the Project Manager. The Project Manager then reviews and accepts the Design Engineer's baseline schedule. Once the baseline schedule has been accepted, the review periods are fixed unless modified as described in this memorandum. The Project Manager is also responsible for saving the design schedule as an MS Project file and in pdf format in ProjectInfo. Project Managers are responsible for monitoring the project schedule, requesting new/updated schedules from the Designer when required and notifying the respective proponent (municipal or state) on all schedule correspondence.

The design review times are as follows (see attached chart for clarification):

PRELIMINARY BRIDGE SUBMISSIONS (Bridge Type Studies and Preliminary Structures Reports):

- All Projects – 30 days (Subsequent Submissions – Rev 1, 2 and 3; use review times 21, 14, and 7 days respectively).

BRIDGE SKETCH PLANS:

- Since Bridge Sketch Plans are included with the 25% Design, follow the 25% Design Submission review times (Subsequent Sketch Plan submissions – Rev 1, 2 and 3 will have varying review times depending on the design schedule).

25%, 75%, 100%, and combined 100%/PS&E DESIGN SUBMISSIONS (except for resurfacing projects which have a 14-day review for 100%/PS&E submission):

- Advertising date in the current Federal Fiscal Year – 30 days for all projects with an office estimate of less than \$20 Million, 45 days for all projects with an office estimate of \$20 Million or greater.
- Advertising date of September 30 in the current Federal Fiscal Year – 30 or 60 days (see attached chart). (Note: this date is reserved for projects programmed on the current year's STIP that will not be ready for advertisement during the current federal fiscal year).
- Advertising date between October 1 and October 3 of the next Federal Fiscal Year – 30 days. (Note: these dates are reserved for projects that do not currently have an identified funding source; however, they could be ready for advertisement prior to September 30 of the current year. Examples include candidates for redistribution and potential replacement projects should a currently programmed project not be ready for advertisement prior to September 30.)
- Advertising date in the next Federal Fiscal Year – 30 or 45 days (see attached chart).
- Advertising date that is 2 years or more from the current Federal Fiscal Year – 90 days. This includes all projects programmed on the current STIP included in the current 5-year element as well as unprogrammed projects.

ROW PLANS:

- ROW submissions in the current Federal Fiscal Year – 30 days. Subsequent ROW review times in the current Federal Fiscal Year depend on the ROW schedule critical path.

PS&E SUBMISSIONS:

- All Projects – 7-day review (unless the quantity of review comments from the prior review (100%) demands more time, particularly on larger projects).

It is important to note the limited scope of the 7-day PS&E review. PS&E review will consist solely of verifying that the 100% comments have been addressed. The PS&E review should not be generating new review comments. All review sections should make their final review comments at the 100% review stage. This will help prevent numerous PS&E submissions. Projects requiring extensive changes at the 100% review stage should dictate a 100% re-submission if the advertising schedule permits; otherwise, it may include justification for an extended PS&E review period of 14-30 days in order to ensure the extensive comments have been addressed. **Note this may only apply if the design schedule critical path permits the additional time.**

If the schedule template contains a default time frame of zero days for the review of a revised submittal (REV1), the REV1 review period will be set at 30 days by the Project Manager. If the District Office or other reviewing section determines a submission is not adequate or of sufficient quality, the submission should be rejected in coordination with the Project Manager. This action is far more preferable than spending considerable time making comments and then requesting a re-submission; however, the Project Manager is responsible for coordinating any rejected submissions to eliminate the potential for other reviewing sections wasting time on a submission that is due to be rejected.

Design review times may also be changed in instances where multiple submissions are made to a review section within a short period of time. The District Office or other reviewing section may contact the Director of Project Management or the Director of Major Projects to assist in the prioritization of reviews.

In order to ensure that our review efforts are as focused and efficient as possible, it is important that the review comments are consistent with the submittal requirements. The Preliminary Design submittal (25% design submittal) is intended to provide documentation and plans that allow project reviewers to evaluate the application of design criteria, impacts to abutting properties and impacts to environmental resources. These documents are not intended to provide information to a potential bidder on how to estimate and construct the project. Therefore, review comments at this stage of design should be restricted to these elements. Reviewers should refrain from making comments that are related to the level of detail associated with a final design submittal (75% or 100% submittal); however, if pertinent comments related to ROW and permitting requirements are identified early at the preliminary design submittal, they can be addressed through design revisions at this stage more easily.

As stated in the Project Development and Design Guide, a Design Public Hearing (DPH) is held for all projects subsequent to the review and acceptance of the 25% design plans by the Highway Division. As part of the 25% review, the District Utility and Constructability Engineer (DUCE) conducts a utility site walk and provides comments. A Design Public Hearing shall only be held after a utility site walk has been conducted and all the proposed utility easements have been identified and shown on the plans. The Director of the Responsible Section will not approve the scheduling of a Design Public Hearing until a DUCE Utility Site Walk has occurred, unless extenuating circumstances require a DPH to be held earlier.

The Final Design submittals (75% or 100% submittals) include a far greater level of design detail. These submittals include the Plans, Special Provisions and Estimate. The 75% submittal provides engineering staff the first opportunity to review the documents that will be made available to prospective bidders. The design review should focus on ensuring that the comments from the previous submittal are adequately addressed and that all the information necessary for a contractor to prepare a bid and construct the project is presented in a clear and unambiguous manner. This review should not revisit earlier decisions related to the project scope and design criteria. The implementation of Comment Resolution meetings should facilitate this matter.

Complying with the review times described in this memorandum is critical to our success in delivering the annual advertising program. Specifically, it will be required that all Districts and review sections submit comments for the current year's projects to the Project Manager within 30 days of receipt of a complete design submission, even if the review is not complete. It is recognized that the reviewer's comments and observations made at the very early stages of the design review capture most of the critical issues that are likely to translate to extra work orders, cost overruns or project delays during construction. As the review continues there are diminishing returns on the impact of the reviewers' comments relative to the workhours invested. It is important that our reviews remain focused on the issues that are most important to deliver a successful project. Comments will not be accepted after the deadline, unless prior arrangements have been made with the Director of Project Management, the Director of Major Projects or the Deputy Chief Engineer of Project Development.

Please feel free to contact me or the Deputy Chief Engineer of Project Development if you have any questions regarding this subject.

cc: Jonathan Gulliver, Highway Administrator
Jeffrey McEwen, FHWA Division Administrator

February 2021 Design Review Memo - Review Time Frames

Project Status	Days*
PS&E	7
Bridge type studies and preliminary structures reports	30
Pre-PS&E resurfacing submissions	14
Current FFY 25/75/100 and combined 100%/PS&E highway submissions for all other projects < \$20M	30
Current FFY 25/75/100 and combined 100%/PS&E highway submissions for all other projects ≥ \$20M	45
Current FFY 9/30 ad date going to the 2nd FFY	30
Current FFY 9/30 ad date going to the 3rd FFY or beyond	60
2nd FFY 1st quarter	30
2nd FFY 2nd through 4th quarter (30 days for projects <\$20M, 45 days for projects ≥ \$20 M)	30-45
3rd FFY and beyond, including all unprogrammed projects (10/01/50 advertising dates)	90

* calendar days

SUBSEQUENT REVIEWS: The current or next Federal Fiscal Year for all Reports and Studies (EX. Hydraulic and Geotechnical Reports, Bridge Type Selection Studies and Preliminary Structures Reports, DJWs, FDRs)	Days*
Rev 1	21
Rev 2, 3	14, 7

