

# Northeast Region Design Review Process

## Contents

General Procedures for Review Meetings (Aug. 2020) .....	1
Meetings (Aug. 2020) .....	2
Timeline of NER Design Review Meetings & Life Cycles (LC) (Apr. 2022) .....	3
Bluebeam Guidance for Review Meetings (Apr. 2022).....	5
Example Invite (Apr. 2022).....	6
Project Initiation Phase (Aug. 2020).....	7
Conceptual Scope Meeting (Aug. 2021) .....	7
Project Definition Phase (Aug. 2021) .....	8
NE Region Safety Certification Procedure (Aug. 2021).....	8
Plans Production (Aug. 2020) .....	9
NE Region Procedures for Encroachments (Aug. 2021).....	9
Word/Excel Templates (Aug. 2021) .....	11
Preliminary Scope Review Meeting (July 2022).....	12
Cultural Resources Screening Submittal (Aug. 2021) .....	14
Early DNR Coordination (Jan. 2022).....	15
Pre-Final Scope Certification (PRE-FSC) Review Meeting (Oct. 2021).....	16
Final Scope Certification Document Guidance (Apr. 2022) .....	18
Project Delivery Phase (Aug. 2020) .....	19
60% Quality Control Review (In-house design only) (Aug. 2021) .....	19
Pre-DSR Review Meeting (Aug. 2021) .....	19
Plan-In-Hand Field Review (July 2022) .....	21
Constructability Review (In-house design only) (Aug. 2021).....	22
Pre-PS&E Review Meeting (June. 2022).....	22
Bureau Review for ePS&E/PS&Es. (Aug. 2020) .....	24
Estimate Documentation Review (Aug. 2020).....	24
Final PS&E Submittal – Regional Coordination (Feb. 2022) .....	25
Final PS&E/ePS&E Submittal to Central Office (July 2022) .....	27
Best Practices (Oct. 2021).....	27
Design/ Construction Project Recap Meeting (Aug. 2021).....	27
Other Region Design Review Meetings (Oct. 2021) .....	28
Quantities (Aug. 2020).....	29
Design Schedule Guidance (Apr. 2022).....	30
Semi-Annual Updates of Construction Estimates in Design (Aug. 2020) .....	32
Construction Estimating Procedures for the Northeast Region (Apr. 2022) .....	33
NE Region Change Management Overview (Sep. 2021).....	34

## **General Procedures for Review Meetings** (Aug. 2020)

Region management supports and expects the use of the NE Region Design Review Process with input and cooperation from all sections at each step on both in-house and consultant designed projects.

PDS, TSS, and SPO are expected to participate in all design review meetings. Section managers and supervisors helped put together the attendance/master distribution list. "DOT DL DTSD NE Design Review Meetings" is the master distribution list, which includes multiple people that do the same work in different geographic areas (for example the PDS Supervisors). People can self-determine their participation by declining or accepting the meeting invite. Include design consultant (for consultant design projects) and local representatives (County, City) for connecting highway projects. For other non-connecting highway projects designer and PM may invite local representatives as appropriate.

If there are significant environmental impacts anticipated with the project, the appropriate DNR liaison can be invited to review meeting(s). If there is Federal Oversight on the project and/or it would be effective/efficient to invite the Region's Federal Highway Administration liaison to review meeting(s), particularly to encourage project familiarity and input in decision-making, the designer may want to do so.

Commenting must be completed in a timely manner to be considered for inclusion in the design. Try to submit comments 1 week prior to review meetings so design team can research questions and comments and discuss at the review meeting. Comments brought up after review meetings or late in the process may not be accommodated.

Project Managers and/or designers will provide agendas, minutes and an outline of any follow-up actions that are generated from the design review meetings. Meeting attendees will look over the minutes for assignments for action items.

## Meetings (Aug. 2020)

Review meetings are an important part of the design process. Review meetings serve as milestones to ensure design projects stay on schedule and provide an opportunity for the region to collaborate on the project at the same time. All sections are to provide their insights and concerns at these meetings in addition to commenting prior to the meeting. It is best practice for every design project to have review meetings, this can be e-mail/Bluebeam or face to face/Bluebeam. Consider additional meetings with smaller groups to discuss the details of the design between review meetings if issues arise, don't wait until review meetings to resolve topics. There are five review meetings during the life of a design project which are Conceptual Scope, Preliminary Scope, Pre-Final Scope Certification, Pre-DSR and Pre-PS&E meetings. Additional information on the design process can be found in Chapters 3 & 11 of the Facilities Development Manual. Each meeting will be discussed in further detail later in this manual.

Below is a brief summary of the purpose of each meeting.

**Conceptual Scope Meeting:** The purpose of this meeting is to discuss the conceptual improvement concept, project limits, conceptual estimate and schedule. The Programming Engineer will lead this meeting. This meeting has a smaller number of people to go over the initial concepts of the project and is in the Project Initiation Phase.

**Preliminary Scope Review Meeting:** The purpose of this meeting is to share the improvement concept, existing conditions, safety flags and any other information sections bring forth. The PDS design team leads this meeting. This is in the Project Definition Phase.

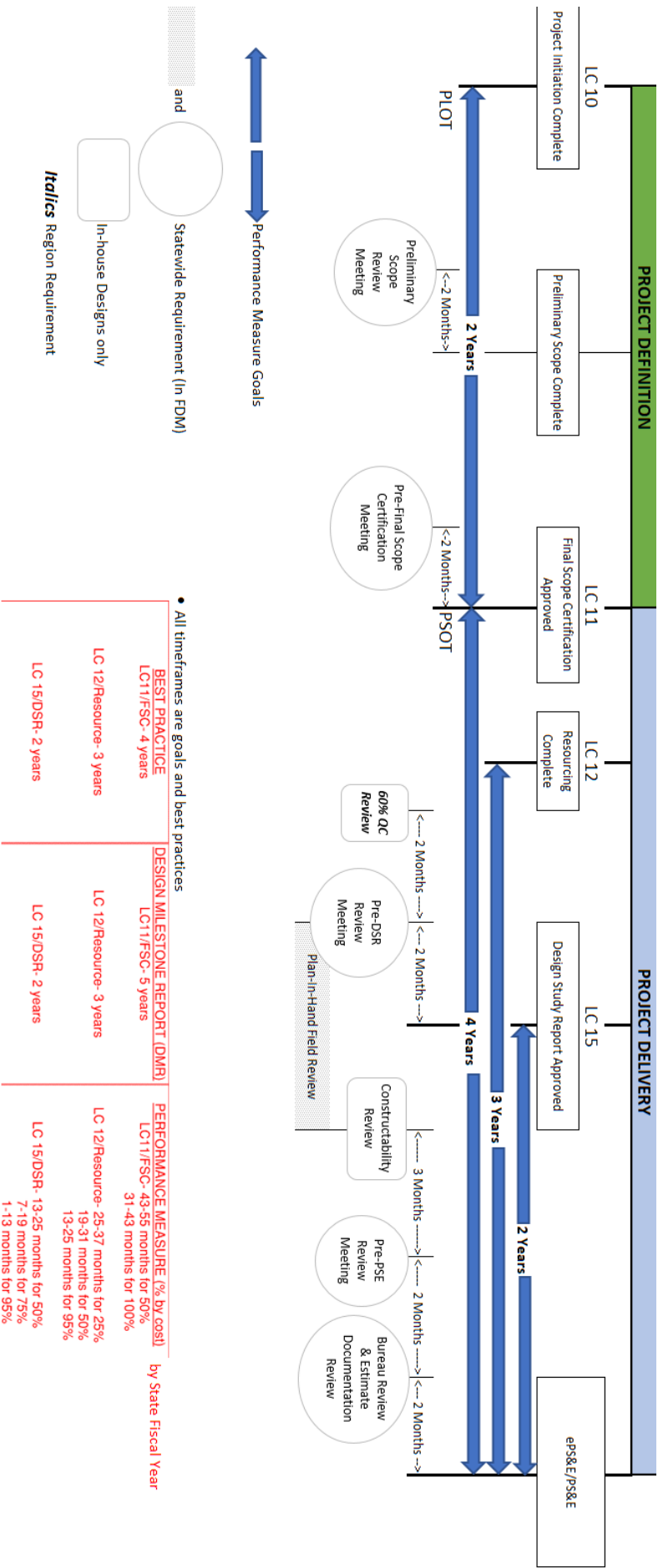
**Pre-Final Scope Certification Review Meeting:** The purpose of this meeting is to discuss the summary of scope of work. For Perpetuation projects, list improvements beyond pavement that are included with this project. For Rehabilitation projects, list improvements beyond pavement and SCD identified mitigations that are included with this project. Discuss the respective preliminary impacts along with any other information sections bring forth. No large-scale modifications should be made after this meeting without Change Management approval. The PDS design team leads this meeting. This is in the Project Definition Phase.

**Pre-DSR (60%) Review Meeting:** The purpose of this meeting is to confirm the design. The preferred design and slope intercepts will be discussed along with any other information sections bring forth. Design should be approximately 90% complete for this meeting. The PDS design team leads this meeting. This meeting is in the Project Delivery Phase.

**Pre-PS&E (90%) Review Meeting:** The purpose of this meeting is to review the final PS&E package. It is important that the design and special provisions are complete. This allows the reviewers the opportunity to provide appropriate comments. The PDS design team leads this meeting. This meeting is in the Project Delivery Phase.

## Timeline of NER Design Review Meetings & Life Cycles (LC) (Apr. 2022)

<p><b>Conceptual Scope</b> – Conceptual improvement concept, project limits, cost per mile estimate, preliminary LET date and advanceable LET date, authorized design ID, WiSAMS primary recommendations.</p> <ul style="list-style-type: none"> <li>• Programming sets up meeting with Pavements, Maintenance and PDS</li> <li>• Typically, 1-2 weeks before – send invite</li> <li>• Typically, 1-2 months after (once authorized) – transfer project from Programming to PDS</li> </ul>
<p><b>LC 00-10:</b> <i>Programming Engineer changes the life cycle</i>  <b>Phase Changes:</b> <i>Project Initiation to Project Definition – Programing Engineer changes phase</i></p>
<p><b>Preliminary Scope</b> – All project needs identified, possible alternatives identified, safety certification document completed, updated estimate &amp; schedule.</p> <ul style="list-style-type: none"> <li>• PDS sets up meeting with all sections</li> <li>• 4 weeks before – send invite with Bluebeam studio link</li> <li>• 1 week before – review comments due</li> <li>• 2 weeks after – responses to comments due and minutes</li> </ul>
<p><b>LC 10 stays the same</b>  <b>Phase:</b> <i>Project Definition</i></p>
<p><b>Pre-Final Scope Certification</b> – Project scope finalized, updated estimate &amp; schedule</p> <ul style="list-style-type: none"> <li>• PDS sets up meeting with all sections</li> <li>• 4 weeks before – send invite with Bluebeam studio link</li> <li>• 1 week before – review comments due</li> <li>• 2 weeks after – responses to comments due and minutes</li> </ul>
<p><b>LC 10-11:</b> <i>Project Manager sends Improvement Strategy, Safety Site of Promise, Safety Mitigations and Signed Final Scope Complete with updated estimate to FIIPS Coordinator.</i>  <b>Phase Change:</b> <i>Project Definition to Project Delivery – Project Manager changes</i>  <b>LC11-12:</b> <i>Project Manager sends FIIPS Coordinator notification of resources being completed (in-house designer has been selected or when consultant contract has been approved)</i>  <b>Phase:</b> <i>Project Delivery</i></p>
<p><b>Pre-DSR</b> - Review project design and prepare for DSR submittal. Update Estimate and Schedule</p> <ul style="list-style-type: none"> <li>• PDS sets up meeting with all sections</li> <li>• 4 weeks before – send invite with Bluebeam studio link</li> <li>• 1 week before – review comments due</li> <li>• 2 weeks after – responses to comments due and minutes</li> </ul>
<p><b>LC 12-15:</b> <i>Project Manager sends signed DSR cover sheet with updated estimate to FIIPS Coordinator.</i>  <b>Phase:</b> <i>Project Delivery</i></p>
<p><b>Pre-PS&amp;E</b> - Confirms constructability and biddability. Prepare for PS&amp;E submittal.  Meeting held 2 months before Bureau Review</p> <ul style="list-style-type: none"> <li>• PDS sets up a meeting with all sections</li> <li>• 4 weeks before – send invite with Bluebeam studio link</li> <li>• 1 week before – review comments due</li> <li>• 2 weeks after – responses to comments due and minutes</li> </ul>
<p><b>LC15-20:</b> <i>Project Manager sends FIIPS PS&amp;E Data Sheet, title and estimate to FIIPS Coordinator</i>  <i>life cycle changed to 20 prior to PS&amp;E date</i>  <b>Phase Change:</b> <i>Project Proposal Execution when PS&amp;E is submitted</i></p>
<p><b>LC 20-40:</b> <i>Central Office changes life cycle when project is awarded</i>  <b>Phase:</b> <i>Project Proposal Execution</i></p>



## **Bluebeam Guidance for Review Meetings** (Apr. 2022)

A Bluebeam session is required for all PDS led design review meetings. This is the platform the Department has chosen to share review documents and to gather comments. This is required for consultant design and in-house designed projects.

For consultant designed projects, the Project Manager may have to set up the Bluebeam session and send the meeting invite. If anyone, including the consultants does not have Bluebeam Revue, they can access the session through a free version called Vue. The link to the studio session will allow them to view the information in Vue.

Store documents for the review in Box, Design Folder, Project ID, MilestoneReview and then the appropriate milestone the project is working towards.

Add the sign-off stamp to the title sheet for each review meeting to allow the reviewers to document their review in an organized manner. Guidance is found here

[BOX\DTSD\DTSD\DTSD-NER\PDS\NER-PDS-Resources\TechGuidance\Design\MilestoneMeeting\Plan Reviewer Stamp.](#)

Guidance for setting up Bluebeam studio, saving a record of the session comments and other topics are found:

[Box\DTSD\DTSD-NER\PDS\NER-PDS-Resources\TechGuidance\Design\Bluebeam\Training Aids.](#)

Include the following in the invite: project ID, title, limits, county, PS&E information, LET date, connecting highway (yes or no), project description including proposed improvements and other important information beneficial to the reviewers and hyperlink to all the review material. See example on next page.

The most current profile to use for commenting is found [Box\DTSD\DTSD-NER\PDS\NER-PDS-Resources\TechGuidance\Design\Bluebeam\Current Design Review Profile\\_USE FOR SESSION SETUP.](#)

# Example Invite (Apr. 2022)

PROJECT I.D.: 1500-71-00/71  
HIGHWAY: USH 10  
LIMITS: Brillion - Reedsville  
DESC: C-08-3329 & C-36-0058  
COUNTY: Calumet and Manitowoc

The Pre-PS&E meeting for the project above has been scheduled for **Thursday May 26th, 2022 at 1:00pm to 2:00 PM on Microsoft Teams** for this project.

We are letting you know that the agenda will be sent the week of the meeting.

Project Manager: Brian Haen  
Designer: Travis Maatta (WisDOT NER)  
PS&E Date: 08/01/2022  
Let Date: 11/08/2022

## Project Description

This project is listed as a BRRPL and the main components of work include removing structures, removal of beam guard, horizontal elliptical culvert pipe installation, box culvert replacement, common excavation, borrow, roadway aggregate, shoulder aggregate, asphaltic paving, pavement marking, and signs.

Real estate is necessary and has been purchased.

## Bluebeam Session Information:

Please provide all comments using Bluebeam. Below is the link to the Bluebeam Session for this review. **Comments are due by Close of Business Tuesday May 24<sup>th</sup>.**

You have been invited by dotmst to join a Bluebeam Studio Session:

1500-71-71 Pre-PS&E

Session ID: [744-806-383](#)

Session URL: <https://studio.bluebeam.com/hyperlink.html?link=studio.bluebeam.com/sessions/744-806-383>

Documents are also available on Box at the following link:

<https://wisdot.box.com/s/sbabisfgzc3r12d2qe63rvh8omqojsmm>

Please be prepared to discuss your comments and any changes at the review meeting.

If you're unable to attend, please have someone attend in your place to represent your area's interests in the project. If no one can attend from your area, please provide any comments or questions you have prior to the meetings so these can be discussed.

If you have any questions, please let me know.

## **Project Initiation Phase** (Aug. 2020)

The Project Initiation Phase is the first design phase. It establishes the project conceptual scope, project PS&E and LET date, cost per mile estimate and the project limits. See FDM Chapter 3 for more information.

Prior to the Conceptual Scope Meeting the Programming Engineer leads an effort to determine the region's programming needs in collaboration with the roadway and structures maintenance engineers, safety engineer and pavements engineer.

## **Conceptual Scope Meeting** (Aug. 2021)

One of the last steps of the Project Initiation Phase is the Conceptual Scope Meeting. At this meeting the Programming Engineer introduces the project to the PDS Project Manager and Supervisor. Also, at this meeting are the Pavement Engineer, Roadway/Structure Maintenance Engineers, Design Quality Assurance Engineer and at times the Traffic Safety Engineer and Regional Chiefs. The project limits, scope of work recommendations from PAM (Pavement Asset Management), and WISAMs (Wisconsin Structures Asset Management System) tools, cost per mile estimate and conceptual schedule and advanceable schedule are discussed.

For more detailed information on this process see the NER Scoping Process located in the PDS Resource [\Box\DTSD\DTSD-NER\PDS\NER-PDS-Resources\TechGuidance\Design\MilestoneMeeting\Conceptual Scope](#)

FDM 3-1-5 houses the statewide information on this phase and additional information.

At the completion of the Conceptual Scope/ Project Initiation Phase the Programming Engineer sends out an e-mail to area leads in the region and central office notifying them of the project. This e-mail is the trigger for people in the office to start working on the design project. Areas that are automatically triggered by the e-mail are:

- Bike/Pedestrian: Bike/Ped Coordinator investigates bike/peds needs within the project limits.
- Safety Certification: Safety Engineer to start Safety Certification Process
- Surveys: Survey Coordinator will contact Project Manager to ask if the design will be in-house or consultant designed. If in-house design, Survey Coordinator will start gathering County Imagery and County LiDAR surfaces. First survey request should be requested prior to Preliminary Scope Review Meeting. Second survey request should be requested after design needs are identified.
- Utilities: Utility Coordinator will start the DT1077 process for the project.
- Traffic Operations: Respective personnel will enter information on the project in PMP, such as OSOW, lighting, signals, etc.
- Soils: Soils Engineer will complete a soils report for the necessary pavement design. If additional work is needed on the project, design team should contact Soils Engineer for an updated soil report to capture the additional work.
- Pavements: The Pavement Engineer will enter the proposed pavement design completion date in the Scope tab in PMP. Project Managers need to enter that date as the Target End date for Pavement Design Task in PMP.
- Roadway Maintenance: Roadway Maintenance Engineer will enter PMP comments in the scoping tab filled out with results of CAMP (Culvert Asset Management Program) for culvert pipe needs and any other observations of the existing project conditions.

- Structures Maintenance: Structures Maintenance Engineer will enter in all inspection data prior to the Conceptual Scope Review Meeting.
- PDS: Starts investigation of existing conditions. Plans Production Unit is creating title sheet and project overview for in-house design. Preliminary Design Engineer and NE Region Design QA Engineer is working on Safety Certification Document with Safety Engineer.
- Traffic Forecasting:
  - Planning level forecasts are completed by the WisDOT Region planning-level forecast contact for resurfacing, reconditioning, pavement replacement and bridge rehabilitation (unless there is a bridge/box culvert replacement then a project level forecast is needed) within one month of the e-mail. Upon completion they will email the Project Manager and cc the Pavement Engineer and Traffic Forecast Liaison stating that the forecast is complete and including a link to the document. Forecast documents will be saved in the Project files under Box\DTSD-Projects-Public\NER-Projects-State\Design\Design ID\Traffic. For workshare projects that do not go through the NE Region's Conceptual Scope process design teams need to contact the NE Region planning-level forecast contact to complete this task.
    - Refer to FDM 11-5-2 and the Planning-Level Forecast SharePoint for additional information on planning level forecasts and who the NE Region's contact is.
  - Project level forecasts need to be requested by the design team for new construction, reconstruction, expansion and bridge replacement and ANY project that includes a bridge replacement (anything with a "B" or "C" number), or intersection work that needs turning movement counts. The design team submit form(s) DT1601 and/or DT1594 to the Region's Traffic Forecasting Liaison.

## **Project Definition Phase** (Aug. 2021)

The Project Definition Phase is to create the ultimate scope of the project, construction schedule & estimate, and delivery schedule & budget. See FDM Chapter 3 for more information.

There are two review meetings in this design phase, Preliminary and Pre-Final Scope Review Meetings.

An important performance measure during this phase is Program Effectiveness. It ensures the project is the right place, right time and right scope. It is documented on the Final Scope Certification. A draft document discussing Program Effectiveness is found Program [\Box\DTSD\DTSD-NER\PDS\NER-PDS-Resources\TechGuidance\Design\3R Program Effectiveness](#) would be affected if additional work is added to a project that would change the FIIPS Improvement concept (changes in the pavement structure, additional ground-breaking activities, etc.).

## **NE Region Safety Certification Procedure** (Aug. 2021)

The Safety Certification Process is a very important step in the design process. The Safety Certification Process is needs to be completed before a Preliminary Scope Review Meeting can be held. It is the safety process that reviews both segments and intersections within the project limits that have safety flags. Locations with safety flags will go through a vetting process that will dictate if geometric conditions will be left in place due to lack of safety concerns or if there are possible safety mitigation measures/alternatives that address the safety concerns in a financially sound manner. If there are multiple approved alternatives from the Safety Certification Process the design team will decide what alternative will be included in the final design.

This process is completed by the Safety Engineer, Preliminary Design Engineer, Bike/Pedestrian Coordinator and Design Quality Assurance Engineer. Below is the regional process, for additional details on this process refer to FDM 11-38.

Not all projects require a Safety Certification Document, refer to FDM 11-1, attachment 10.1 for more information.

Regional process to complete the Safety Certification Process:

**Step 1:** Safety Engineer vets crash flags to determine sites of promises.

- If there are flags that have countermeasures continue to Step 2, these are sites of promise.
- If there are no crash flags Safety Engineer will send completed form to Project Manager and NE Region Design QA and process is completed.

**Step 2:** Safety Engineer, Bike and Pedestrian Coordinator (if any bike/pedestrian crashes), NE Region Design QA, Design Project Manager and Preliminary Design Engineer discuss geometric countermeasures that could mitigate the crashes at the sites of promises. Potential countermeasures are documented on the Safety Certification Worksheet.

**Step 3:** NE Region Design QA will contact the Design Project Manager for project schedule, Preliminary and Final Scope Review Meeting dates and if the Preliminary Design Engineer needs surveys to combine with project's initial survey request.

**Step 4:** NE Region Design QA & Preliminary Design Engineer complete a preliminary design of the countermeasures, construction and real estate estimate and provide Safety Engineer with information to complete the IHSDM analysis. Project Managers will be CC'ed on the e-mail to Safety Engineer from NE Region Design QA/Preliminary Design Engineer with the countermeasures.

- Preliminary Design Engineer will complete Phase 1 ICE report, if needed, during Steps 4. Phase 2 ICE report will be completed by the design team.

**Step 5:** Safety Engineer preforms IHSDM analysis, calculates benefit-cost ratio and fills out Safety Certification Document. If there are countermeasures that have a benefit-cost ratio greater than 1, information needs to be verified by BTO before SPO Chief can sign.

**Step 6:** Safety Engineer, Project Manager, NE Region Design QA & Preliminary Design Engineer meet to discuss results.

## **Plans Production** (Aug. 2020)

Include Plans Production Unit (PPU) early in the design process to breakdown tasks the designers and Plans Production Unit are responsible for. Project Manager or designer are to schedule a meeting with the Plans Production Lead Worker (PPLW) to discuss timelines, scope and tasks.

Once the PPLW receives the Conceptual Scope Complete email from Programming the PPLW does the following for in-house design projects:

- Creates C3D project folder on the N drive and inserts the PPU Documents design project (PPU request form, task list, naming convention flow chart) in the project folder.
- Creates sheetset manager, draft title sheet, general notes and project overview. FIIPS and PMP are reference in the creation of these items.

## **NE Region Procedures for Encroachments** (Aug. 2021)

Refer to FDM 12 -1-20 for project requirements for encroachments. Below is to expand statewide guidance to meet the regional needs.

## **Encroachments that are part of a PDS project:**

PDS will create an Encroachment Report on projects following the guidance in FDM 12-01-20.3, which was updated in November 2019. It states that only projects or locations with S2 or S3 applications will be reviewed. The encroachment report only includes the locations of S2/S3 applications for perpetuation projects, not the entire project. The encroachment report should be completed prior to the Pre-Final Scope Certification Meeting.

Link to FDM chapter on encroachments: <https://wisconsindot.gov/rdwy/fdm/fd-12-01.pdf>

PDS will set up a meeting with Maintenance Roadway Engineer to review the report and determine which encroachments need to be addressed. If the encroachment is not a safety concern, it can be left in place, sell or lease the land or issue revocable permits. If the encroachment needs to be removed, PDS will send out letters to the property owner(s), cc'ing Maintenance, directing the removal of the encroachment unless there is also a real estate acquisition on the property; Real Estate will handle the encroachment removals on those properties. The letter should reference Wis. Stat s.86.04(1) and include: description of the encroachment including photographs, a sketch of the encroachment location shown on the construction plan, indicating distances to existing right-of-way line and centerline of roadway. Example letters and reports are found here: [Box\DTSD\DTSD-NER\PDS\NER-PDS-Resources\TechGuidance\Design\Encroachments](#). PDS should send out at least 2 letters to the property owner(s) for the removal of the encroachment. The first letter provides the deadline for removals and should be sent approximately one year in advance of the deadline or more depending on the encroachment and design schedule. The second letter gives the property owner 30 days to remove the encroachment. If the encroachment is not removed in 30 days, Maintenance will work with the county to remove the encroachment. When determining the deadline for removal, take into consideration how long it will take the county and property owner to remove the encroachment, weather, and construction schedule.

Not everything needs to be removed if it is within the right of way. Use engineering judgement if the object is causing a safety hazard or long-term issues if kept within the right of way. Example a fence is a foot within the right of way in a rural setting, right of way is 40 feet from the shoulder, no action should be done with a S2 application (rehabilitation) but if the project was a reconstruct S2/S3 (modernization), it might need to be either removed or issued a revocable permit depending on the design.

Encroachments on roadways to be jurisdictionally transferred as part of a construction project shall include coordination with the local units of government when determining how the encroachment will be handled.

On connecting highways, PDS is responsible for identifying encroachments and determining how to handle them in cooperation with the local unit of government. The local municipality is responsible for working with the property owner to address the encroachments by the project's advertising date. The local municipality would also issue revocable permits on connecting highways.

## **Outdoor Advertising**

With the changes made to the FDM November of 2019 signs within the right of way are considered an encroachment and are handled as such. In the removal letter to the property

owner reference the following website for them to refer to relocate the sign.  
<https://wisconsindot.gov/Pages/doing-bus/real-estate/outdoor-adv/default.aspx>

## **Hazardous Mailboxes**

Hazardous Mailboxes are described in FDM 11-15-1.13.4 – Hazardous Mailboxes, along with how to remove hazardous mailboxes with coordination of the Maintenance section.

Hazardous mailboxes should be part of the Roadside Hazard Analysis (RHA). That procedure is in FDM 11-45-10.3.1 Roadside Hazard Analysis/Treatment. For many perpetuation improvement strategies, an RHA is not required, an RHA is required in the locations of the S2 and S3 standard applications are being applied.

## **Sale or Lease of Highway Lands**

When PDS believes land can be sold or leased, the encroachment is turned over to the Real Estate Unit to process the lease and/or sell.

TSS Survey Unit is responsible for staking the new right-of-way in the event of a sale.

More information can be found in FDM 12-1-20.3.3 and the Real Estate Program Manual.

## **Revocable Occupancy Permit**

See FDM 12-1-20.4 Procedure for Permits for guidance on how to handle Revocable Permits.

The construction plan shows all encroachments with revocable permits, including document numbers. Where appropriate, encroachments should be identified on Public Information Meeting displays.

## **Encroachments that are identified that are not part of a project (Maintenance Section):**

If the encroachment is not a safety concern, it can be left in place. If the encroachment is a safety concern, the Maintenance Section will contact the property owner and ask for it to be removed within 30 days. If it's not removed, the Maintenance Section will work with the county forces to remove the encroachment.

WisDOT website also provides good descriptions of what should be done as well.  
<https://wisconsindot.gov/Pages/doing-bus/real-estate/roadsides/encroachments.aspx>

## **Word/Excel Templates** (Aug. 2021)

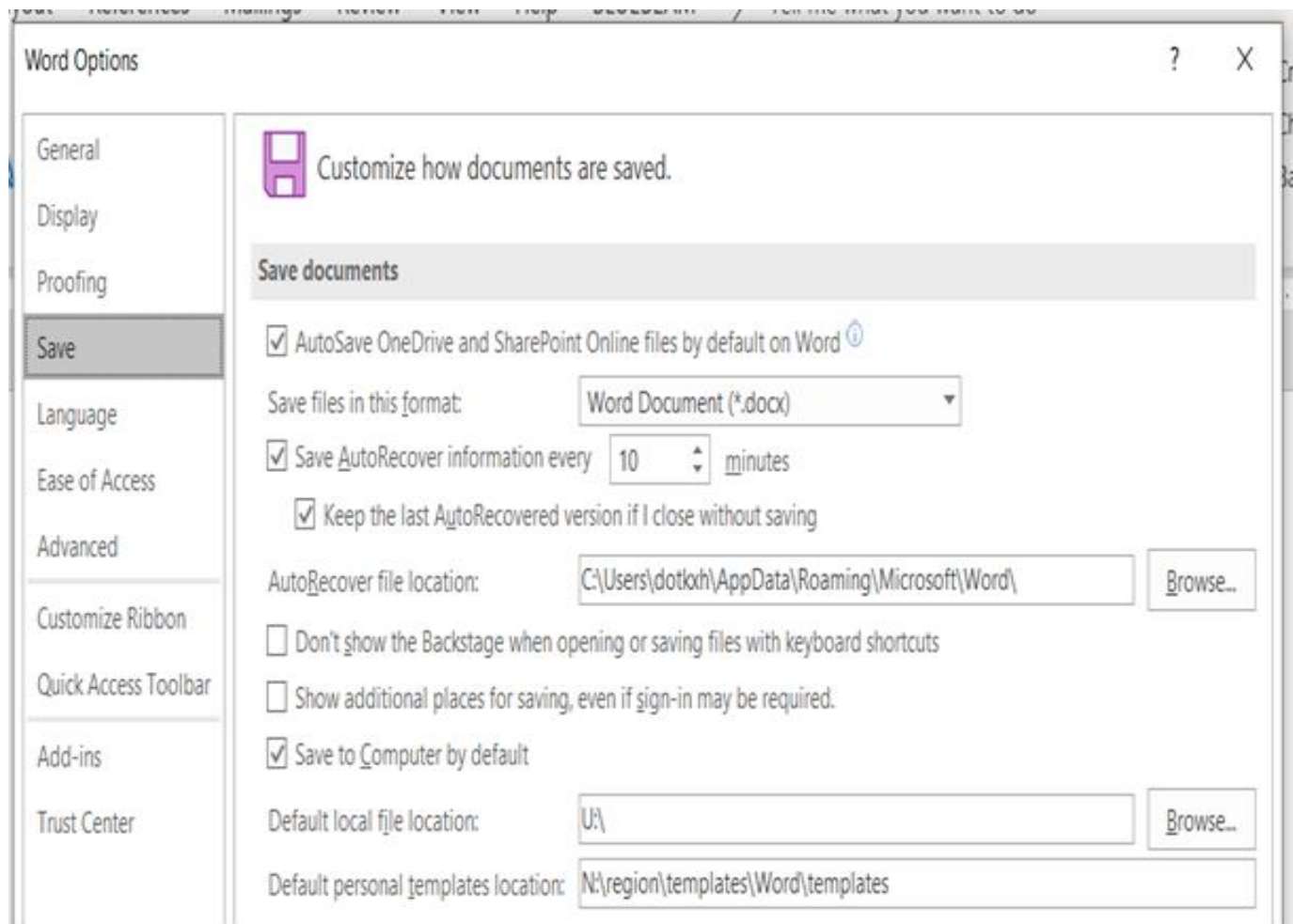
The region has designated standard templates in Microsoft Word and Excel for multiple areas such as: Construction, Consultant, Design, PS&E, RE, RE Appraisal, RE PropMgt and RE Technical.

These templates must be used when preparing PS&E submittals, regional coordination, and other correspondence. These templates change periodically, therefore select from the file location notes below each time for a current form.

The northeast region templates are located at: N:\region\templates\Word\templates.

Add templates to office:

1. File, Options, Save
2. Go to Default personal templates location and type N:\region\templates\Word\templates.



3. To access the files go to Word, File, New, and Personal. They may take a moment to load.

## Preliminary Scope Review Meeting (July 2022)

Participation is expected by PDS, TSS, and SPO.

The Preliminary Scope Review Meeting is the first review meeting in the design process held by PDS. This meeting falls within the Project Definition phase see FDM 3-5 for further information on the design phases.

The goal of this meeting is to identify the needs of the project. To do this, the existing conditions need to be known prior to this meeting, such as: curb ramp conformance, beam guard conditions, pipe conditions, storm sewer conditions, community utilities, etc. Surveying is not required to identify these items, designers can use smart levels, tape measures and visual investigation to create the needs.

Northeast region PDS is also responsible in performing structure and culvert inspection for signs of Northern Long Ear Bat (NLEB) habitants. This includes completing a Bat Assessment Form. Supplemental guidance on performing this inspection is linked below.  
[[Box\DTSD\DTSD-NER\PDS\NER-PDS-Resources\TechGuidance\Design\Environmental\NLEB Coordination 2022\NER PDS NLEB Guidance.docx](#)]

The Safety Certification Process also needs to be completed prior to this meeting and the results will be discussed at this meeting.

The meeting is held between the Conceptual Scope and Pre-Final Scope Certification Review Meetings.

## Meeting set up

The Project Manager/designer will send out an Outlook meeting invitation, with a link to the Bluebeam Studio Session, and Preliminary Scope Review Meeting agenda, located at [Box\DTSD\DTSD-NER\PDS\NER-PDS-Resources\TechGuidance\Design\MilestoneMeeting\Agendas\Preliminary Scope Review Agenda.doc](#), with all the required exhibits, a minimum of **four** weeks prior to the meeting to the DOT DL DTSD NE Design Review Meetings master distribution list.

Consultants will forward all review documents to the Project Manager for placement in the review folder, who will send out an invite with a link to the Bluebeam session.

## Commenting

Project review comments are due a minimum of **one** week prior to the meeting. Comments are to be made in Bluebeam directly on the documents. Once the documents are reviewed, initial next to your job title in the table on the title sheet of the plan. The Designer and Project Manager will review the comments and make a list of all comments for additional discussion at the meeting, including the comments he/she doesn't agree with. Making comments prior to the meeting does not replace the need to discuss the project review at the meeting.

Save documents that need to be shared with the designer here: Box, Design folder, Project ID, MilestoneReview, PrelimScope

Exhibits (will change based on improvement concepts):

- Agenda, use most up to date found in the template folder: [Box\DTSD\DTSD-NER\PDS\NER-PDS-Resources\TechGuidance\Design\MilestoneMeeting\Agendas\Preliminary Scope Review Agenda.doc](#)
- Completed Safety Certification (SCD)
- Primary Structure needs from WiSAMS
- Preliminary results from the Risk Based Environmental Scoping Template (RBEST)
- Results of Culvert Pipe, Storm Sewer, Curb ramps, Beam guard, Cable Guard, traffic barrier, retaining walls, crash cushions, grading, etc., reviews.
- Draft Roadside Hazard Report refer to FDM 11-1 for applicability
- Draft Encroachment Report refer to FDM 11-1 for applicability
- Displays or maps showing the project area

- Photolog
- Google Maps/Street View
- PDF of As-builts
- Visual exhibits of areas of concern
- Draft PIP (Public Involvement Plan)
- Conceptual Scope/Current PMP Report
- Road Builder quantities
- Preliminary Plan including:
  - Title sheet
    - Including reviewer stamp
      - [BOX\DTSD\DTSD\DTSD-NER\PDS\NER-PDS-Resources\TechGuidance\Design\MilestoneMeeting\Plan Reviewer Stamp](#)
  - Project overview
  - Existing typical sections (for mainline, ramps, side roads, trails, etc)
  - Horizontal alignments
  - Vertical alignments
  - Existing surface and profiles
  - Existing access points and access control

#### **Next Steps after meeting:**

- Project Manager or Project Leader will prepare and distribute minutes of the meeting to document project scope, estimate, schedule, and action items within **two** weeks after the Preliminary Scope Meeting.
- Project Manager or Project Leader update PMP as necessary.
- Detailed schedule, delivery and construction estimate updated.
- Coordination with agencies are planned
- Required environmental document has been identified
- Traffic Management Plan (TMP) begins
- Continue utility and railroad coordination

### **Cultural Resources Screening Submittal** (Aug. 2021)

The Screening Form was created to address inconsistencies in project information being received by Cultural Resources Team (CRT) from each Region. Providing consistent information statewide for requests to have projects evaluated for inclusion on the screening list for history and archeology should result in the following:

- Quicker review times by CRT and the Wisconsin Historical Society Museum Archeology Program (MAP)
- Fewer email requests for additional information exchanged between the Regions, CRT and MAP
- Fewer projects needing to go into the “additional research queue”

Submit the Screening form (DT1030) shortly after the Preliminary Scope Review Meeting, or as soon as you have adequate information to complete the form.

Discuss any questions on the process or the form itself with Region Environmental Coordinators.

Information on the Section 106 Screening List is located in FDM Chapter 26-5-1.

<https://wisconsindot.gov/rdwy/fdm/fd-26-05.pdf#fd26-5-1>

Screening information is entered into PMP, by the CRT, when complete. A copy of the current screening list is located at <https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/environment/cultural-resources.aspx>. This can be referenced to find information on current projects as well.

Screening Form use requirements:

- The Screening Form is required for all **new** screening list requests effective March 1<sup>st</sup>, 2020. The CRT will no longer be receiving CDRs or reviewing FIIPS to initiate screening requests to MAP.
  - For SHR projects, the form should typically be submitted to CRT shortly after the “Preliminary Scope Complete” milestone as defined in Chapter 3 of the FDM.
  - For other non-SHR projects, the form should be submitted to CRT at the same stage of project development in which the screening request was made previously.
- If you are asking for a status update on a previously submitted screening list request, please include the Screening Form **unless** you have already supplied additional information that had been requested by CRT. While the Screening Form is not required for status updates, the additional information may help expedite the final screening determinations for the project.

Additional Environmental Information is located in [Box\DTSD\DTSD-NER\PDS\NER-PDS-Resources\TechGuidance\Design\Environmental](#) & [Box\DTSD\DTSD-NER\TSS\Environmental\Training\Tips\distributed](#).

## **Early DNR Coordination** (Jan. 2022)

Send DNR initial coordination letter after the Preliminary Scope Review Meeting and include project information such as culvert pipe replacements, structure work, any potential ground disturbing activities and other potential water way impacts. It is recommended to request wetland determinations after the scope of work has been defined and DNR initial coordination comments are received. This prevents unnecessary reviews by the Regional Environmental Coordinators (REC) and DNR. Wetland field work is only done May to October (sometimes into November depending on weather). Be cognizant of the time of year the request is sent for wetland determination. RECs typically solicit for wetland determinations early in the spring to help avoid receiving requests late in the year.

Projects with no waterway/wetland impacts and low environmental impacts may be eligible for using the Delegated DNR Design Concurrence (DDDC) attachment. Projects that are covered under this do not require design coordination and concurrence with WDNR, but still require standard construction coordination. Review the DDDC template form (found here:

<https://wisconsindot.gov/Documents/doing-bus/eng-consultants/cnslt-rsrcs/environment/delegatedDNRdesignconcurrenceformtemplate.dotx>) for qualification.

If your project qualifies, fill out the form and submit it to the Regional Environmental Coordinators (REC) for certification. Please note that although qualifying projects do not require design coordination with DNR, applicable local, state, and federal regulation still apply. These include, but are not limited to; asbestos, migratory birds and hazardous waste management. If project scope changes, the DDDC form must be resubmitted and recertified.

## Pre-Final Scope Certification (PRE-FSC) Review Meeting (Oct. 2021)

Participation is expected by PDS, TSS, and SPO.

The Pre-Final Scope Certification Review Meeting is held between the Preliminary Scope Review Meeting and Life Cycle 11. It is the last review meeting in the Project Definition Phase for more information on phases see FDM 3-5. PDS leads this meeting.

The goal of this meeting is to finalize the scope of the project. To do this, the approximate real estate and environmental impacts and potential areas of utility conflicts for proposed culvert pipes, beam guard, curb ramps and other areas of design should be identified. Be prepared to discuss the scope of work. Perpetuation projects, list improvements beyond pavement that are included with this project. For Rehabilitation projects, list improvements beyond pavement and SCD identified mitigations that are included with this project.

If there is a geometric issue or desire to change the existing roadway configuration, on a perpetuation or rehabilitation project, a benefit-cost analysis must be performed and have a ratio greater than one to proceed and regional approval. Discuss with NE Region Design QA and Safety Engineer for guidance if a geometric change is desired on a perpetuation or rehabilitation project that wasn't included in the Safety Certification Process.

### Meeting set up

The Project Manager/designer will send out an Outlook meeting invitation, with a link to the Bluebeam Studio Session, and Pre-Final Scope Certification Review Meeting agenda, located at [Box\DTSD\DTSD-NER\PDS\NER-PDS-Resources\TechGuidance\Design\MilestoneMeeting\Agendas\Pre-Final Scope Review Agenda.docx](#) with all the required exhibits, a minimum of **four** weeks prior to the meeting to the DOT DL DTSD NE Design Review Meetings master distribution list.

Consultants will forward all review documents to the Project Manager for placement in the review folder, who will send out an invite with a link to the Bluebeam session.

### Commenting

Project review comments are due a minimum of **one** week prior to the meeting. Comments are to be made in Bluebeam directly on the documents. Once the documents are reviewed, initial next to your job title in the table on the title sheet of the plan. The Designer and Project Manager will review the comments and make a list of all comments for additional discussion at the meeting, including the comments he/she doesn't agree with. Making comments prior to the meeting does not replace the need to discuss the project review at the meeting.

Save documents to be shared with the designer in Box, Region Design folder, Project ID, MilestoneReview, FinalScope

Exhibits (will change based on improvement concepts):

- Minutes from the Preliminary Scope Meeting
- Certifications:
  - Draft Final Scope Certification Document
    - Guidance is located at [Box\DTSD\DTSD-NER\PDS\NER-PDS-Resources\TechGuidance\Design\MilestoneMeeting\Guidance on Final Scope Certification.docx](#).
  - Bridge or Structures Certification Document (BOSCD)

- Signed certification is found in the Structure Certification Tool. If the certification is not ready, contact Region's Structure Maintenance Engineer for communication with BOS.
  - [\\mad00fph\n4public\Bos\BOSWare\StructuresCertificationTool\](#)
  - Username: ner, Password: ner
- Resiliency F4R Certification, also called 23 CFR 667 Resiliency Scope Certification Form (DT-1895)
  - <https://wigov.sharepoint.com/sites/dot/forms-docs/Pages/AuthorizedForms.aspx>
- Signed Pavement Design Report (PDR)
- Signed Safety Certification Document (SCD)
- Native American Lands of Interest Scoping Determination
  - <https://wisconsin.gov/Pages/doing-business/eng-consultants/cns-lt-rsrcs/environment/formsandtools.aspx>
  - Designers fill out questions 1-4 and send to Tribal Coordinator to complete the rest.
- Risk Based Environmental Scoping Template (RBEST)
  - <https://wisconsin.gov/Pages/doing-business/eng-consultants/cns-lt-rsrcs/environment/formsandtools.aspx>
  - Guidance is located: [Box\DTSD\DTSD-NER\PDS\NER-PDS-Resources\TechGuidance\Design\Environmental\RBEST\\_NER\\_guidance\\_3.3.2020.docx](#)
- Work Zone Impact Assessment
- Initial Railroad Impacts
- Draft Environmental Document
- Completed Roadside Hazard & Encroachment Reports
  - Refer to FDM 12-1-20 & FDM 11-1 Attachment 10-1 Improvement Strategies, Improvement Concepts, and Standard Applications, for project requirements.
- Updated Road Builder quantities
  - FDM 19-5-3 attachment 3.2 FIIPS Quantities Update Form
- Construction Estimate
  - Tool for preliminary estimating: [Box\DTSD\DTSD-NER\PDS\NER-PDS-Resources\TechGuidance\Design\QuantityEstimate\Estimating\Preliminary Design Cost Estimate\\_template.xlsx](#)
- Drainage information. Refer to FDM Chapter 13 for project guidance.
  - Structure locations
  - Preliminary ditch profiles and capacity
  - Hydraulics /pipe sizing complete
  - Median drainage (if appropriate)
  - Erosion issues
  - Drainage summary worksheet
- Preliminary Plan including:
  - Title sheet
    - Add reviewer stamp
      - [Box\DTSD\DTSD-NER\PDS\NER-PDS-Resources\TechGuidance\Design\MilestoneMeeting\Process for Adding Sign off Table Stamp to Bluebeam Plan Set.docx](#)
  - Project overview
  - Existing typical sections (for mainline, ramps, side roads, trails, etc)
  - Horizontal alignments

- Vertical alignments
- Existing surface and profiles
- Existing access points and access control
- Environmentally sensitive areas
- Right-of-way/slope intercepts
  - culvert pipes, beam guard, curb ramps and other areas of ground-breaking disturbances.
- Cross sections – first run

## Meeting Results

- Project Manager or Project Leader will prepare and distribute minutes of the meeting to document project scope, estimate, schedule, and action items within **two** weeks after the Pre-Final Scope Certification Meeting. Send meeting minutes to the DOT DL DTSD NE Design Review Meetings distribution list.
- Follow-up meetings to address questions from this review will be scheduled as necessary prior to Pre-DSR review.
- Design team completes Final Scope Certification document and circulates for signature.
- Project Manager e-mails FIIPS Coordinator the signed Final Scope Certification, Improvement Strategy, Safety Site of Promise, and Safety Mitigations to change life cycle 10 to life cycle 11 once Final Scope Certification has all signatures.
  - In-house design can be changed to LC12. Consultant design can change to LC12 once contract has been finalized.
- The Project Manager will move the project phase from “Project Definition” to “Project Delivery” in PMP once the life cycles have changed.

## Final Scope Certification Document Guidance (Apr. 2022)

The Final Scope Certification is a very important document that needs concurrence from the Chiefs of BTS, PDS and SPO-Operations and Central Office’s Design Oversight Engineer and final approval by NE Region’s SPO-Planning/Programming Chief. It is required for the project to move to LC11 and the Project Delivery Phase.

Use the most up to date form found in FDM 11-4-3, Final Scope Certification. This chapter also includes how to fill out the document in general terms.

Here is the region-specific process:

Projects with one design ID and multiple construction IDs:

- All projects have the same scope and PS&E dates, one Final Scope Certification can be used, documenting the different schedules, attachments/reference documents and performance measures. The multiple projects should also have the same environmental document and DSR. If the projects cannot have the same environmental document, they should not have one Final Scope Certification.
- Projects have different project scopes and/or different PS&E dates; each project should have their own Final Scope Certification to avoid confusion.

Steps to complete document:

- Guidance on how to fill out the Final Scope Certification document is located at [Box\DTSD\DTSD-NE\PDS\NER-PDS-Resources\TechGuidance\Design\MilestoneMeeting\Guidance on Final Scope Certification.docx](#). If you have any questions, ask NE Region Design QA Engineer.

- Once draft document has been completed send to Central Office's Design Oversight Engineer for comments/concerns.
- Once comments are received update and route to the Regional Chiefs for concurrence in addition to Programing Supervisor and Central Office's Design Oversight Engineer. Once they concur, send document to SPO Chief for approval. Save signed document in project folder.
- Box is the best tool to get everyone's signature on the same page in a timely manner.

Amending the Final Scope Certification:

- An amendment is not needed for change in schedule or performance measure information.
- An amendment is needed if the FIIPS Improvement Concept has changed the Improvement Strategy. (See FDM 11-1, Attachment 10.1 for Improvement Strategy definitions)
  - This needs Regional Approval (Approved Change Management)
- Send amended document to Central Office's Design Oversight Engineer.

## **Project Delivery Phase** (Aug. 2020)

In this phase there are two review meetings, Pre-DSR and Pre-PS&E. The purpose of this phase is for the Final Scope to be implemented in design of the project and to develop and deliver PS&E packages. See FDM Chapter 3 for more information.

There should not be any changes to the Final Scope in this phase.

For statewide information on this phase refer to FDM 3-1-15.

## **60% Quality Control Review (In-house design only)** (Aug. 2021)

The design project must be reviewed in-depth by designated PDS reviewers. This will be completed two months prior to the Pre-DSR Review Meeting, as a quality control check of the design, prior to sending invites for the Pre-DSR Review Meeting. Directions and forms for this process are located at [Box\DTSD\DTSD-NER\PDS\NER-PDS-Resources\TechGuidance\Design\MilestoneMeeting\QC Review](#).

## **Pre-DSR Review Meeting** (Aug. 2021)

Participation is expected by PDS, TSS, and SPO.

PDS will schedule and lead the Pre-DSR Review Meeting (formerly known as 60% Review).

The objective of this review meeting is to again confirm purpose and need, construction estimate, delivery budget, and schedule to be carried forward into final design. The completed plan is reviewed to gain acceptance or receive comments on the project prior to submitting the DSR for approval/concurrence. Complete the design of all geometric and ground-breaking activities, such as beam guard, curb ramps, ext., before this meeting to allow other sections enough time to complete their work prior to PS&E. Once the Final Scope Certificate has been signed, no significant changes can be made to the scope, schedule, or budget without Change Management.

For this review meeting, the Designer has taken all the input from the Final Scope Review Meeting and has completed a design including culverts/storm sewer, slope intercepts, curb and gutter, lighting, erosion control and restoration. All environmental documents, agency coordination, public hearings or hearing opportunities should be complete. The estimate should be updated to reflect the design. The project cost to date should be compared to the delivery budget. Participants should be prepared to discuss contents of the draft Design Study Report and any necessary revisions to the milestone schedule.

Exhibits for the Pre-DSR Review Meeting will include the following:

- Minutes from the Final Scope Review Meeting
- Signed Final Scope Certification
- Draft DSR
- Environmental information, including signed document
- Updated Drainage Summary Worksheet and the initial Data Worksheet
- TMP
- Updated Construction Estimate
- Preliminary Structure Plan
- Updated Road Builder quantities
- Encroachment Report, with action items identified – if required
- Pre-DSR Plan: (Adjust to project. Discuss with Project Manager for plan requirements.)
  - Title Sheet (Location map, project ID/title, design designation, project limits)
  - Typical Section Sheets (Existing cross sections, proposed cross sections - complete with pavement type and thickness- for mainline, side roads, etc)
  - Detail Sheets (Include if applicable - project overview, contour maps with match lines, preliminary traffic control plan/staging plans, signals, signing, lighting, and construction staging, and/or intersection details if not standard)
  - List of Detail Drawings
  - Plan and Profile Sheets (Including existing topography or ortho, construction limits, mainline and side road alignments, and vertical profiles, right of way and easements, existing utilities, drainage arrows, and/or drainage plan)
  - Numbered structures (Including retaining walls and sign bridges)
  - Railroads - planned work
  - Earthwork including rock profiles and marsh profiles
  - Existing and proposed access points
  - Maintenance crossovers on multi-lane highways
  - Cross Section Sheets (Including original ground, marsh and rock lines, proposed subgrade or finished grade, cross drains, sidewalk, curb and gutter, barrier wall, utilities, right of way, etc.)
  - Recordable Plat
  - Marking and signing information – if needed
  - Preliminary erosion control plan
    - Consider if the following are needed
      - Retention or sedimentation basins
      - Right of way
  - Displays or maps showing the project area
  - Photolog
  - Google Maps/Street View

## **Meeting set up**

The Designer will send out an Outlook meeting invitation, with a link to the Bluebeam Studio Session, with all the required exhibits, a minimum of **four** weeks prior to the meeting to the DOT DL DTSD NE Design Review Meetings master distribution list.

Consultants will forward all review documents to the Project Manager for placement in the review folder, who will send out an invite with a link to the Bluebeam session.

The Pre-DSR Review Meeting agenda template can be found in [Box\DTSD\DTSD-  
NER\PDS\NER-PDS-Resources\TechGuidance\Design\MilestoneMeeting\Agendas\Pre-DSR  
Review Meeting Agenda.doc](#).

### **Commenting**

Project review comments are due a minimum of **one** week prior to the meeting. Comments are to be made in Bluebeam directly on the documents. Once the documents are reviewed, initial next to your job title in the table on the title sheet of the plan. The Designer and Project Manager will review the comments and make a list of all comments for additional discussion at the meeting, including the comments he/she doesn't agree with. Making comments prior to the meeting does not replace the need to discuss the project review at the meeting.

Save documents to be shared with the designer here: Box, Design folder, Project ID, MilestoneReview, DesignStudy

### **Meeting Results**

- Project Manager or Project Leader will prepare and distribute minutes of the meeting to document project scope, estimate, schedule, and action items within **two** weeks after the Pre-DSR Review Meeting. Send meeting minutes to the DOT DL DTSD NE Design Review Meetings distribution list.
- The Designer's responses to comments will be distributed back to the reviewer within **two** weeks of the meeting.
- Follow-up meetings to address questions from this review will be scheduled as necessary prior to PS&E.
- Project Manager E-mails FIIPS Coordinator Signed DSR and estimate to request changing life cycle 12 to life cycle 15.

### **Plan-In-Hand Field Review** (July 2022)

According to the FDM 15-10-1, a plan-in-hand field inspection of the project site must be made prior to the Pre-PS&E Review Meeting. Its purpose is to provide a final look at current existing field conditions (i.e. recent changes may have taken place in existing field conditions since design began) and a review of the adequacy of various plan details in meeting these conditions. It also provides an opportunity to discover if any work items, potential conflicts, or problem situations have been overlooked during the plan preparation process. A major focus of the field review is looking for plan omissions that may develop into problems during construction or future maintenance. Region staff involved in design should participate. (Maintenance and/or traffic personnel are optional.)

During this review, Northern Long Ear Bat inspection on structures and culverts should be performed to satisfy the environmental requirements. Bat Assessment Forms are required for IPAC submittals within 2 years of construction. Supplemental guidance on performing this inspection is linked below.

To be able to incorporate design the plan-in-hand field review findings in your design, it is best to complete this review shortly after the Pre-DSR Review Meeting and close to the Pre-PS&E Review Meeting. The review shortly after the Pre-DSR Review Meeting should be geared toward any design items that would affect the DT 1078 process. The review close to the Pre-PS&E Review Meeting should verify the plan details one last time prior to PS&E.

### **Constructability Review (In-house design only)** (Aug. 2021)

According to the FDM 19-10-5, constructability reviews are intended to improve the effectiveness of a set of plans and specifications by having those with construction expertise participate in the review, prior to the Pre-PS&E Review Meeting, to ensure projects are buildable while also being cost-effective, biddable, and maintainable. This review will be completed on all types of projects and be performed by an independent PDS reviewer, with relevant construction experience, not associated with the project. The review will occur between the Pre-DSR (60%) Review Meeting and 3 months prior the Pre-PS&E (90%) Review Meeting. Construction industry input should be considered for unique or complex projects. Refer to the NE Region Constructability Plan Review Process document for further instructions or it can be found in [Box\DTSD\DTSD-NER\PDS\NER-PDS-Resources\TechGuidance\Design\MilestoneMeeting\Constructability Review](#).

### **Pre-PS&E Review Meeting** (June. 2022)

Goal is to expedite PS&E review of the Plan, Special Provisions and Estimate & contract documents.

Participation is expected by: PDS, TSS, and SPO.

PDS will schedule and lead the Pre-PS&E Review (formerly known as the 90% Review Meeting).

The purpose of this meeting is to expedite PS&E review by providing a general overview of the contract and discuss major concerns involving any section. It is also an opportunity to review the plan for constructability and biddability, and to ensure that there are no problems with the plan that would prevent the plan from being successfully LET at the proposed scheduled letting. PS&E Exceptions should be discussed, and the actions needed to clear the exceptions by the ePS&E.

Exhibits for the Pre-PS&E Review Meeting will include the following:

- Minutes from the Pre-DSR Review Meeting
- Approved DSR
- Environmental information (404 permit, mitigation site, hazmat information)
  - Update Threatened and Endangered Species with current list:  
<https://www.fws.gov/midwest/endangered/index.html> or via the FWS's Information for Planning and Conservation (IPaC) tool: <https://ecos.fws.gov/ipac/>
- Approved TMP (for types 3 & 4)
- Plan
- Special provisions
- Time analysis
- Standard Detail Drawings list

Have the following exhibits for the Pre-PS&E Review Meeting and stored in *Box, Design folder, Project ID, MilestoneReview, PrePSE*, unless otherwise noted. Do not change the original format (word, excel, etc).

- Governor's Letter (DT25)
- Highway Work Proposal (DT1502)
- Plan Letter
- Right-of-Way Certification (DT1899): Store in *Box, Design folder, Project ID, RealEstate*
- Utility Status Report (DT1080): Utility Coordinator stores in *Box, Design folder, Project ID, Utilities, USR&Specials*
- Estimate (AASHTOWare Preconstruction version) including completed Estimate Documentation
- Updated Road Builder quantities
- Railroad Certification DT1804 (One per project construction project ID, there can be multiple projects in a proposal, multiple DT1804s are needed): *Store in Box, Design folder, Project ID, Railroad*

### Meeting set up

The Pre-PS&E Review Meeting should be held 2 months prior to the Bureau submittal date.

The Designer will send out an Outlook meeting invitation with a link to the Bluebeam Studio Session, with all the required exhibits, a minimum of **four** weeks prior to the meeting to the DOT DL DTSD NE Design Review Meetings master distribution list.

Consultants will forward all review documents to the Project Manager for placement in the review folder, who will send out invite with Bluebeam session.

The Pre-PS&E Review Meeting agenda template can be found in [Box\DTSD\DTSD-NER\PDS\NER-PDS-Resources\TechGuidance\Design\MilestoneMeeting\Agendas\Pre-PS&E Review Meeting Agenda.doc](#)

**Note:** *Plans on the shelf should have Pre-PS&E Review Meeting conducted prior to submitting the PS&E. Re-circulate plans on the shelf for review if the latest review was not within the past 6 months. The purpose would be to ensure special provisions & standard details are up-to-date, NOT to revisit the scope of the project. Shelved projects are different than Advanceable. Advanceable projects are submitted for their earliest PS&E date and are submitted to the ex-LET folder when e-submitted. Shelved projects are not e-submitted but are held in the region until submitted for PS&E.*

### Commenting

Project review comments are due a minimum of **one** week prior to the meeting. Comments are to be made in Bluebeam directly on the documents. Once the documents are reviewed, initial next to your job title in the table on the title sheet of the plan. The Designer and Project Manager will review the comments and make a list of all comments for additional discussion at the meeting, including the comments he/she doesn't agree with. Making comments prior to the meeting does not replace the need to discuss the project review at the meeting.

Save documents to be shared with the designer here: *Box, Design folder, Project ID, MilestoneReview, PrePSE*

### Meeting Results

- Project Manager or Project Leader will prepare and distribute minutes of the meeting to document project scope, estimate, schedule, and action items within **two** weeks after the Pre-PS&E Review Meeting. Send meeting minutes to the DOT DL DTSD NE Design Review Meetings distribution list.
- Follow-up meetings with reviewers and/or feedback will be given to the reviewer if the comment cannot be incorporated into the PS&E
- Designer will finalize the plans
- The life cycle stage of the project will be moved to 20 after the PS&E is e-submitted. After the PS&E is submitted the Project Manager will move the project phase from “Project Delivery” to “Project Proposal Execution” in PMP.
- Next steps to determine how to clear PS&E Exceptions.

## **Bureau Review for ePS&E/PS&Es.** (Aug. 2020)

Submit PS&E packages to Central Office two months prior to earliest PS&E date for Bureau Review. During the final design phase, staff from various central office bureaus will review specific aspects of the project prior to scheduled PS&E submittal.

Refer to FDM 19-10-5.10 for additional information

For the Bureau Review gather the following for submittals:

- Plan, including page numbers.
- Engineer Estimate
- Plan Letter
- Contract Time Chart
- Standard Detail Drawing List
- Special Provisions and STSP's

The Bureau Review should take approximately 1 month for review and comments. Not all projects will get comments back from the different Bureaus.

The designer should refer to FDM 19-10-5-11, PS&E Pre-Submittal Review, to complete a thorough review of the project prior to PS&E submittal. First time reviewers make sure to review this prior to the PS&E date.

## **Estimate Documentation Review** (Aug. 2020)

Estimate Documentation is required for the PS&E submittal package. The PS&E is considered incomplete without it. A major component of the Estimate Documentation is the review by the Project Manager or delegate and the NE Region Design QA Engineer or delegate. This process is outlined in FDM-19-5 and reviewers are verifying the estimate was created following that guidance and flagging current trends that the design team might not be aware of. There are multiple tools and resources on the estimating webpage: <https://wisconsin.dot.gov/Pages/doing-business/eng-consultants/cnslt-rsrcs/tools/estimating/est-tools.aspx>.

This review process is needed for ALL projects, consultant or in-house design and all types of projects, region-wide sign bridges to mega/major projects. Discuss with NE Region Design QA Engineer who will be reviewing workshare projects.

NE Region's process for review is as follows:

- Submit estimate documentation two months prior to ePS&E to NE Region Design QA for review. Project Manager or delegate need to review the estimate documentation prior to this submittal.
- Send updated documentation and Project Manager's comments to NE Region Design QA who verifies comments were addressed
- NE Region Design QA reviews documentation to ensure estimating methodology is up-to-date and documented appropriately. Some review of unit prices will also be completed.
- Design team reviews NE Region Design QA comments and applies updates to estimate and documentation as appropriate.
- The estimate documentation does not need to be reviewed by NE Region Design QA prior to scheduled PS&E if reviewed prior to the ePS&E HOWEVER estimate and respective documentation needs to be updated semiannually, before the actual PS&E and when plan checker comments are received.
- When plan checker comments are received, verify that current bidding trends are accounted for in the estimate.

## Final PS&E Submittal – Regional Coordination (Feb. 2022)

It is important to follow the procedure listed below to ensure all FHWA requirements are being met and prevent projects from being rejected. The information included in FIIPS PS&E Data Sheet, "pink sheet", AASHTOWare Preconstruction, project title sheet and Category Locator shall meet FHWA standards to prevent submittal rejection. This process needs to be followed for the Advanceable PS&E (ePS&E) date along with the actual PS&E date.

### >10 DAYS PRIOR TO PS&E - CATEGORY LOCATOR:

1. Notify FIIPS Coordinator categories in your project, except the roadway category (typically 0010). This should be done during your design.
2. At the Pre-PS&E Review Meeting, the AASHTOWare Preconstruction estimate must include all categories. Example: Category 0030 – lighting. Submit pdf of AASTHOWare Preconstruction estimate to FIIPS Coordinator.
3. FIIPS Coordinator will set up categories in FIIPS
4. Once categories are set up in FIIPS, project leader will locate categories in Category Locator. For consultant projects, the project manager is responsible for this.
5. Categories must be located prior to submitting the FIIPS PS&E Data Sheet (7 days prior to PS&E).
6. The categories located and the categories in the PS&E AASTHOWare Preconstruction estimate must match.

### 10 DAYS PRIOR TO PS&E (Consultant Design):

- Project manager reviews Consultant's **substantially** completed construction cost estimate with funding information in AASHTOWare Preconstruction. *Only small estimate changes can be made, no funding changes.*
- Project Manager reviews Consultant's plan title sheet (pdf), FIIPS PS&E Data Sheet and AASHTOWare Preconstruction estimate (pdf)

### 7 DAYS PRIOR TO PS&E (In-house Design):

- Construction estimate must be **substantially** completed and entered into AASHTOWare Preconstruction with the correct funding. *Only small estimate changes can be made, no funding changes.*
- E-mail FIIPS Coordinator the following:
  - Completed FIIPS PS&E Data Sheet (located in Microsoft Word under New, Shared, PS&E, FIIPS PS&E Data Sheet)
  - Plan Title Sheet (pdf)

- AASHTOWare Preconstruction estimate (pdf)

**ONCE FIIPS COORDINATOR RECEIVES INFORMATION:**

FIIPS Coordinator enters the FIIPS PS&E Data Sheet information and ensures SMFAs match funding type, allocations percentages and caps listed in AASHTOWare Preconstruction. **This information MUST be accurate!**  
No errors / revisions:

- The FIIPS coordinator will notify the Project Manager things are acceptable and that the PS&E package may be eSubmitted.
- **Do not eSubmit a PS&E package until you receive notification from the FIIPS Coordinator**

Errors / revisions:

- FIIPS Coordinator will work with Project Manager to correct the errors.
- PM will notify FIIPS Coordinator when the necessary revisions have been completed.
- FIIPS Coordinator will verify information is correct
- FIIPS Coordinator will notify the Project Manager (and Consultant if applicable) that the PS&E package may be eSubmitted.
- **Do not eSubmit a PS&E package until you receive notification from FIIPS Coordinator**

**IF A PS&E IS NOT SUBMITTED ON THE ASSIGNED QUARTERLY DUE DATE IT WILL BE CONSIDERED A LATE PS&E!**

## **Final PS&E/ePS&E Submittal to Central Office** (July 2022)

Refer to FDM 19-10, PS&E Transmittal and Composition, for the required documents.

PS&E submittal and all documents are to be done for the earliest advanceable date (ePS&E). **If project is not selected for the earliest advanceable date, designers will modify the documents to when the project is selected and e-submit the updated documents.** This may result in Northern Long Ear Bat (NLEB) inspections to be performed again on structures and culverts because IPAC requires as completed assessment to be done within 2 years of construction. See link below for supplemental guidance.

[[Box\DTSD\DTSD-NER\PDS\NER-PDS-Resources\TechGuidance\Design\Environmental\NLEB Coordination 2022\NER PDS NLEB Guidance.docx](#)]

For ePS&Es, the projects will stay at life cycle 15 and the advanceable flag in FIIPS is moved to Yes. Make sure to continue performing semi-annual estimates until the project is selected for actual PS&E.

All projects must submit a final Roadbuilder Quantities to the Northeast Region's Plans Production Lead Worker. Use the form found in FDM 19-5-4, Attachment 3.2 – FIIPS Quantities Update Form to submit the quantities.

Plans will be reviewed in central office. Central office plan examiners will coordinate changes with region design team. Designer will submit revised sheets.

**Note:** On the plan letter, be sure to include a request for 5 11" x 17" size plans and 5 proposals for construction purposes.

## **Best Practices** (Oct. 2021)

Contractor Data Packets shall be submitted through the eSubmit system after the PS&E has been reviewed and corrected, but no later than 8 weeks prior to project let date as stated in FDM 19-10-43.2. However, the design team should prepare and compile the contractor data packet at PS&E submittal. See FDM 19-10 Table 43.4 for a list of recommendations for data to include in the Contractor Data Packet based on project type.

Design team members should schedule a visit with the Project Construction Leader (PCL) and Project Manager while the project is under construction to learn first-hand how well they communicated their design to the contractors and field personnel.

## **Design/ Construction Project Recap Meeting** (Aug. 2021)

The intent of this meeting is to improve the design and construction process and discuss lessons learned for projects that are designed and constructed with in-house staff. The meeting will discuss an overview of the project, as-builts, contract modifications, overruns and underruns, and lessons learned between the construction and design teams.

Once a construction project is complete and the finals documentation is submitted, the Regional Construction Contract Specialist will send out an invite for this meeting. The Designer, Project Construction Lead, Project Manager, Construction Quality Assurance Engineer and Design Quality Assurance Engineer are required to attend. Other sections are invited to constructively discuss lessons learned to improve the design and construction process. Attendance is optional for other work unit leads, supervisors, and Construction Contract Specialist.

The Project Manager, or delegate, is responsible for providing the following documents at the meeting: agenda, contract modifications, overruns, and underruns and as-builts. Depending on room availability, the smart TV/board can be utilized for displaying the documents.

The Project Manager, or delegate, is responsible for meeting minutes and distribution of the minutes within one week of the meeting. The Design Quality Assurance Engineer will post the lessons learned within the PDS Resource Library. The remaining meeting minutes are to be retained in the project folders.

Lessons learned and process documentation is located here: [Box\DTSD\DTSD-NER\PDS\NER-PDS-Resources\TechGuidance\Design\MilestoneMeeting\Project Recap](#).

## **Other Region Design Review Meetings** (Oct. 2021)

### **Production Meeting:**

The Production Meeting's purpose is to communicate project details that affect the scope, schedule, and budget of projects during design.

The meeting is held quarterly on the second Wednesday of February, May, August, and November to discuss every project that has a PMP schedule associated with it. It does not cover mega/major projects or local program projects. Each project's design schedules, non-LET's schedule, construction estimates, non-LET's estimates, and risks are discussed. Action items are assigned, for example: if a schedule date is to be created, further coordination with a section, or any other action or task to keep the project on schedule. If a project is at risk of not making a deadline, a discussion of the status of the issue is required along with what steps will be done to ensure the completion of the milestone, including but not limited to what additional resources are needed. All functional areas are represented at this meeting.

The LC (life cycle) and 24/7 scheduling guidance is also reported.

Meeting attendees are: PDS/SPO/TSS Managers, TSS Supervisors, Programming Supervisor, PDS Supervisors, Environmental Coordinator, FIIPS Coordinator, Programming Engineer, Programming PPA, Railroad Coordinator, UTL Coordinator, Real Estate Project Managers, Plat Coordinator, PDS Design Project Managers, Design Quality Assurance Engineer, Program Controls PPA.

Project Managers ensure schedule and construction budgets are up to date in FIIPS and PMP. If non-LET project IDs need to be created, request from area leads. In order for area leads to provide estimate of non-LET project IDs, they will need some project impact information. Area leads ensure non-LET project IDs have updated schedules and budgets are updated and match FIIPS and PMP. Project parcels for real estate should be verified and updated for this meeting. Project updates are required to be entered into PMP, FIIPS, TUMS and READS prior to the last Saturday of January, April, July and October for the Production Report to have accurate data for the Production Meeting.

For more information discuss with Project Manager and/or Supervisor or refer to:

[Box\DTSD\DTSD-NER\PDS\NER-PDS-ProgramControls\Program Controls\Production&Scheduling Mtg\Northeast Region Production Meeting Procedures.docx](#)

### **PS&E Exception Meeting:**

This meeting is to identify and discuss risks that prevent projects from being cleared for PS&E or LET. Resolution of the risks are discussed, and a record is maintained in pseTrak, including the anticipated clear date for the exception.

Every LET project needs to be cleared in pseTrak. For more information on the PS&E Exception Meeting refer to: [Box\DTSD\DTSD-NER\PDS\NER-PDS-ProgramControls\Program Controls\PSEtrak\Process - Procedures & Calendar\Best Practices\\_PSETrak&Mtg\\_2016.docx](#)

In addition, identifying risks that prevent projects from having a complete PS&E and being LET; it prepares the region for the performance measures of PS&E Milestones and Ads with Holds. The PS&E Milestones measures the region's performance completing the design in the areas of Corps of Engineers permitting, DNR permitting, Railroad agreements, Railroad Real Estate, Real Estate, Utilities, and TMP at PS&E. Ads with Holds measures the same milestones at the time of LET.

## **Quantities** (Aug. 2020)

All LET project's quantities recorded in FIIPS are collected and reported on throughout the year. They are: asphalt pavement, concrete pavement, excavation, base course, bridge deck area, milling, diamond grinding, traffic striping and rubblizing.

FIIPS Quantities, are also known as Roadbuilder's Quantities (RBQs) and/or FIIPS Preliminary Quantities.

**Roadbuilder's Quantities (RBQs)** are distributed to roadbuilding industry every fall to help prepare for future workforce and material needs. See Program Management Manual (PMM) 5-10-15 for additional information.

**FIIPS Quantities** are referenced for performance measures, which are: 90% Quantities Entered, 100% Quantities Entered and 90% Accurate. These performance measures include all LET projects regardless of the program: state, local, mega & majors are all included. See PMM 5-10-15 for additional information.

- **90% Quantities Entered** – On July 1 of each SFY, 90% of scheduled projects will have up- to-date quantities entered (entering 0 if no quantities exist) in each field.
- **100% Quantities Entered** – On August 1 of each SFY, 100% of scheduled projects will have up-to-date quantities entered (entering 0 if no quantities exist) in each field.
- **90% Accurate** – 90% of the August snapshot values for asphalt pavement, concrete pavement, excavation and bridge deck area are within +/- 10% of the final value taken in February after all SFY PS&E's are submitted.

To ensure the performance measures are accurate there are a series of Outlook reminders sent out by Program Controls.

- Verify Quantities before May 1 (Double Check) on 4<sup>th</sup> Monday of April
- Verify Quantities before June 1 (Triple Check) on 4<sup>th</sup> Monday of May
- Quantities – 90% entered before July 1 on the Last Monday of June

To ensure accuracy within the fall Road Builder's Quantity report, the following reminder has been established.

- All Quantities entered no later than August 15 on the First Monday of August

## Regional Process:

To ensure quantities are being updated regularly, Northeast Region updates quantities semi-annually (June 1 & December 1), at every design review meeting, at PS&E submittal and at each of the performance measure's dates listed above.

Send updated quantities to the Plans Production Lead Worker and use FIIPS Quantities Update Form, FDM 19-5 attachment 3.2. For workshare projects discuss with the giving region's workshare contact on who the roadbuilder quantities should be submitted to.

Tip: Utilize the double/triple checks to ensure quantities submitted to the Plans Production Lead Worker are correct in FIIPS.

## Design Schedule Guidance (Apr. 2022)

At the state and region level there is scheduling guidance to meet milestones to reduce risk of the project not being delivered on time. Region Management reviews some of these milestones to help manage risks of the program delivery.

To minimize the risks of delivering the projects, life cycles 11, 12 and 15 have calculated durations that when met ensures the project will be delivered on time. FDM Chapter 3 has more information on these timeframes.

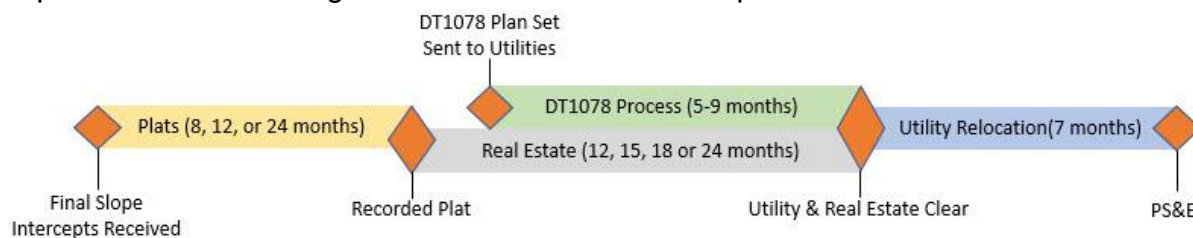
## Life Cycle (LC)/Milestone Timeframes:

**Project Definition Phase** starts at LC10, Project Initiation Milestone, and ends at LC11, Final Scope Certification Milestone. LC10 is also the end of the Project Initiation Phase, and LC 11 is the start of the Project Delivery Phase. The Project Definition Phase must be completed within two years.

**Project Delivery Phase** starts at LC11, Final Scope Certification Milestone, and ends at LC20 PS&E Submitted. Within this Phase there are two additional milestones/life cycles, Resourcing Complete/Start Final Delivery, LC12, and Design Study Report Approved, LC15. There should be three years between LC12 and LC20 and two years between LC15 and LC20.

## Scheduling of Utilities, Plats and Real Estate in Design Process

When creating or adjusting a design schedule it is important to understand the relationship between Plats, Real Estate and Utilities. If the timelines discussed below cannot be met or there is a change to the design schedule, discuss with Plats, Real Estate and Utilities sections outside of the Production Meeting. Collaborate with these areas to create new deadlines. This will allow the departments to work together and be as efficient as possible with the allowable time.



It is critical to deliver accurate slope intercepts at the agreed upon deadline to the plats section. If this design milestone is missed it will have a ripple effect on other design milestones by decreasing timelines or delaying deadlines. Accurate slope intercepts are important to prevent re-work which would affect other milestones, as well. Review [Best Practices to Reduce Plat](#)

**Amendments** to avoid easy mistakes that could potentially derail the schedule. Plat efforts are broken up based on number of parcels. The durations shown below.

#### Timeframes for Plats:

- Less than 19 parcels: 3-8 months
- 20-39 parcels: 8-12 months
- 40-99 parcels: 12-24 months
- 100+ parcels: 24 months plus

Real Estate acquisitions begins when the plat is recorded and ends when all real estate is acquired, prior to the completion of the completion of the USR. This will reduce schedule risk. It is unknown when the design schedule is created if utilities will need to be moved to a new parcel or not. Having the real estate cleared prior to the USR will ensure the utilities will be able to relocate as soon as their permits are completed. Real Estate efforts are broken into number of parcels. See below for different durations.

#### Timeframes for Real Estate acquisition:

- Less than 19 parcels: 12 months
- 20-39 parcels: 15 months
- 40-99 parcels: 18 months
- 100+ parcels: **24 months**

Any relocation requires 24 months to complete.

Utilities need to be cleared, USR signed, **seven(7)** months prior to PS&E. This allows utilities to have adequate time to move prior to construction to reduce conflicts in construction. It also allows a buffer if a utility is not timely in completing the DT1078 process. Scheduling coordination between the Utility Section and design teams should happen early on in the design process, when the initial design schedule is established. The Utility Task List is a tool used to coordinate these schedules. If deadlines need to be adjusted collaborate with utilities to set new deadlines. Utilities are historically an area with exceptions at PS&E, by having a goal of clearing utilities **seven(7)** months prior to PS&E we are reducing the risk of exceptions.

#### Timeframes for DT1078:

DT1078 plan set to Utility Coordinator: 1 month before DT1078 Start date (Date when DT1078 sent to Utilities per TUMs)

- **Perpetuation** project: 2 months (Trans 220) +3 months UC Review/Completion=5 months
- **Rehabilitation** project: 3 months (Trans 220) +3 to 4 months UC Review/Completion=6 to 7 months
- **Modernization** project: 4 months (Trans 220) +4 months UC Review/Completion=8 months

If Utility needs to coordinate with other OR if compensable, add 1 month (Trans220\*)

\*Per Trans 220, the utilities are allotted specific timeframes for investigation/design before responding to the initial DT1078 submittal.

#### **Scheduling of advanceable ePS&Es**

Fifty percent of the annual advanceable program must have an ePS&E prior to May 1<sup>st</sup>, 75% prior to September 1<sup>st</sup> and 100% prior to December 1st. These dates are taken into consideration when creating ePS&E dates and when moving an ePS&E date. More information can be found in FDM 19-1-3.

#### **Design Risk Report (DRR)**

This DTSD business report is a tool used to identify and communicate delivery risk in the 303 program. The report uses information pulled from PMP and TUMs applications to calculate a project risk level and determine project schedule status to meet PS&E delivery (Adv & Regular). For more information and region guidance, refer to: [Box\DTSD\DTSD-NER\PDS\NER-PDS-Resources\Training\Design\New PM Mentor Sessions - 2021 & 2022\12\\_2021\PM tools\DRR PMP Task dates.docx](#)

## **Semi-Annual Updates of Construction Estimates in Design** (Aug. 2020)

To assist program stability, it is important FIIPS reflects the most up to date estimates of the construction projects. This allows the region to maximize the projects being constructed and to proactively react if projects need to move to utilize all the program allocation. Ensure the estimate in FIIPS matches the current estimate and matches with the Change Management Excel Sheet. This guidance doesn't pertain to Local or Mega/Majors Programs.

### **All estimates are due to the FIIPS Coordinator by June 1<sup>st</sup> & December 1<sup>st</sup>.**

Estimates are to be updated June 1<sup>st</sup> and December 1<sup>st</sup> unless a design review meeting has been held within 3 months prior to June and December 1<sup>st</sup> and the estimate was updated at that time.

All estimates are required to be signed off by the Supervisor.

For all categories listed below, email Programing Supervisor, FIIPS Coordinator and Programing Engineer. Include the Construction Project ID, Change Management Excel Sheet and construction estimate (without delivery) broken down by categories.

There are three updating categories.

- 1.) No Change
- 2.) Cumulative change not requiring change management
- 3.) Changes requiring change management.

Each category has a different procedure to follow:

- 1.) **No Change** (FIIPS estimate matches construction estimate) –Add date and project cost to the Change Management Excel Sheet with the reason code of semi-annual estimate.
  - FIIPS coordinator will add a dollar to estimate to show the estimate was reviewed and there was no change in construction estimate.
- 2.) **Cumulative cost change not requiring change management** – the cumulative change in cost is not greater than \$200,000. Update the Change Management Excel Sheet.
- 3.) **Cost change requiring change management** – the cumulative change in cost is greater than \$200,000. Update the Change Management Excel Sheet and follow the Change Management Procedure for approvals and distribution.

Things to think about while updating your estimate:

- Do a field review of your project. See if any conditions have changed since the last field review. Are the pipes still acceptable, are there more pot holes, is there more alligator cracking that will require more patching, etc.
- Update the estimate with the current estimator catalog. The catalog is updated every year.

- Review significant items in Bid Express for current trends.

## Construction Estimating Procedures for the Northeast Region (Apr. 2022)

Guidance below is for all projects.

- Update estimate at every design review meeting
  - Conceptual Scope Review Meeting – setting the initial estimate
  - Preliminary Scope Review Meeting (Project Manager to review)
  - Final Scope Review Meeting (Project Manager to review)
  - Pre-DSR Review Meeting (Project Manager to review)
  - Pre-PS&E Review Meeting (Project Manager to review)
- Update estimate documentation two months prior to PS&E/e-PS&E
  - See Estimate Documentation Review.
- Semi-Annual Estimate Update
  - This is a calendar reminder to everyone in PDS
    - Updates are December 1 and June 1 (Project Manager to review)
    - Supervisors review and document on the Change Management excel sheet.
- Estimate update during Plan Checker's review/comments
  - After PS&E when comments on the PS&E submittal are received from Central Office, design team reviews estimate and updates appropriately. (Project Manager to review)
  - Keep pdf of estimate at PS&E and after any modifications to track changes of the estimate.
- NE Region Design Quality Engineer provides state trends when they are known, either at staff meetings or through e-mails, and can assist the design team in creating unit prices.
- The region has an excel sheet for creating Preliminary Scope, Final Scope and DSR estimates, used for the Perpetuation and Rehabilitation projects [Box\DTSD\DTSD-NER\PDS\NER-PDS-Resources\TechGuidance\Design\QuantityEstimate\Estimating\Preliminary Design Cost Estimate\\_template.xlsx](#) a version of this is also on the Statewide estimating website called Estimating Project Tool: <https://wisconsin.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/tools/estimating/est-tools.aspx>
- For the PS&E estimate, use the standardized estimate documentation format found in the FDM and estimating website. <https://wisconsin.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/tools/estimating/est-guidance.aspx>
- Backbone has an excel sheet to create the estimate. It is titled Backbone Estimating tool on the Estimating Website.: <https://wisconsin.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/tools/estimating/est-tools.aspx>
- Mega/Majors has an excel sheet found on the Estimating Website: <https://wisconsin.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/tools/estimating/est-tools.aspx>
  - Mega/Majors can also use FHWA guidance found here: [https://www.fhwa.dot.gov/majorprojects/cost\\_estimating/resources.cfm](https://www.fhwa.dot.gov/majorprojects/cost_estimating/resources.cfm)

## NE Region Change Management Overview (Sep. 2021)

Change management applies to all projects.

- Perpetuation, Rehabilitation and Modernization (3R) projects
  - Actions that require actions through change management are:
    - Aggregate change of construction estimate (including non-LETs) change greater than \$200,000 the Programming Supervisor approves the change.
    - Estimate changes of \$200,000 or less the Section Supervisor approves.
    - Schedule Changes
    - Project Limit Changes
    - Improvement Concept Changes
  - Current change management procedure is found at [Box\DTSD\DTSD-NER\PDS\NER-PDS-Teams\Sup\\_SquadLeaders\ProjectMgmtTools\ChangeManagement\NERegionChangeManagementPolicyandProceduefor3R\\_February2016.pdf](#)
  - Programming Engineer prepares each project's Change Management Excel sheet during the Project Initiation Phase and saves it in the project design folder.
- Backbone projects:
  - Region Programming is notified project revisions.
    - Region Programing can load revision in FIIPS immediately when project revisions on the program are small (<\$50k),
    - If impacts of project revision are larger, region provides BSHP with the details of the change, a revision request is completed to include changes to the estimate, schedule and would include justification. Next steps could be any of several possibilities including (but not limited to):
      - Revision approved; load the change in FIIPS immediately, no further review necessary.
      - Revision tabled until further information is provided by the region.
      - Revision needs to be reviewed by others (BB Committee, upper management, C.O. experts, etc.) before a decision can be made.
      - Revision is denied.
- Mega/Majors projects:
  - NE Region has a dedicated "liaison" identified to communicate changes with the Majors Program Manager for all Mega/Major projects.
  - Also known as "Programming Estimate Changes" are broken down into individual project IDs.
    - FIIPS estimate updates for each project ID are required at a minimum twice per year, in addition to each time a project advances through the life cycle Stages 11, 12, 15, and 20. See PMM 06-01-25 - life cycle responsibilities for more information.
    - Programming approval for estimate changes is based on the magnitude of the estimate changes, and whether the project is programmed in the current fiscal year.

- For projects programmed in the current fiscal year, region teams should follow these guidelines for programming approval:
  - Changes less than \$200,000: Update FIIPS as the changes become known.
  - Changes \$200,000 to \$500,000: Liaison notifies the Majors Program Manager, who will approve or deny the change request on behalf of BSHP and/or the Majors Projects Programming Committee.
  - Changes over \$500,000: Liaison submits requests for change to the Majors Program Manager, who will coordinate a response from BSHP and/or the Majors Projects Programming Committee.
- For projects programmed in years beyond the current year, update FIIPS as the changes become known, liaison notifies Majors Program Manager if the estimate changes are more than \$500,000.

<https://iisgtwyp.wi.gov/ffm/pmm/03/03-01-20e.pdf>