

Design Maturity Determination for Cost Certification – Version 4, Revised 21 Feb 2025

Date:

P2 Designation/Project Name: _____

The Chief of Engineering is responsible for the technical content and engineering sufficiency for all engineering products produced by the command. As such, I have performed the Management Control Evaluation per Engineer Regulation (ER) 1110-2-1150, Engineering and Design for Civil Works Projects, Appendix H, Internal Management Control Review Checklist.

The current design Choose an item. require HQ approval (i.e., engineering waivers), requiring a deviation from mandatory requirements and mandatory standards, as defined in ERs, Engineering Manuals, Engineering Technical letters, and Engineering Circulars.

The current hydrology and hydraulics modeling is at ____% design maturity, per reference (g) below.

The current geotechnical data and subsurface investigations are at ____% design maturity, per reference (g) below. Subsurface investigations shall also include investigations of potential borrow and spoil areas.

The current survey data is at ____% design maturity, per reference (g) below.

Other major technical and/or scope assumptions and risks include the following, which will be refined as the design progresses.

The aggregate for all features is ____% design maturity. Therefore, per Engineer Regulation 1110-2-1302, Civil Works Cost Engineering, I certify that the design deliverables used to generate the cost products for this project and the estimate meet the requirements for a Choose an item. estimate, as per reference (a) below. Design risks, impacts and remaining efforts are summarized on page 2.

The total project baseline schedule for this project is ____ months. This schedule was coordinated with the Project Manager, Project Delivery Team, and Non-Federal Sponsor, and takes into consideration the project constraints, including district execution capacity, capability of providing real estate in a timely fashion, and cost-share budget requirements, along with the market conditions, including industry capability to execute the project.

Considering risks and assumptions noted above, along with all other concerns documented in the Risk Register, the Cost and Schedule Risk Analysis has developed a contingency of ____% at the ____% confidence level for the defined project scope.

Printed Name

Signature

Design Maturity Determination for Cost Certification, Remaining Work

If an engineering waiver is required, list the risks and remaining design work needed to mitigate this issue in the current design. Identify remaining effort to complete the design required for 100% design.

Identify remaining effort to complete geotechnical design effort required for 100% design. List the risks and cost and schedule impacts needed to mitigate this issue in the current design.

Identify remaining effort required to complete H&H required for 100% design. List the risks and cost and schedule impacts needed to mitigate this issue in the current design.

Identify remaining effort needed to complete survey data required for 100% design. List the risks and cost and schedule impacts needed to mitigate this issue in the current design.

If the project is anticipated to be executed in parts, provide a design assessment (percent complete) of each part/phase below.

References:

- a. ER 1110-2-1302 – Civil Works Cost Engineering
- b. CECW-EC memorandum dated 05-June-2023MFR, Guidance on Cost Engineering Products update for Civil Works Projects in accordance with Engineer Regulation 1110-2-1302 – Civil Works Cost Engineering
- c. ER 1165-2-217 – Civil Works Review Policy
- d. ER 1110-2-1150 – Engineering and Design for Civil Works Projects
- e. ER 1110-345-700 – Design Analysis, Drawings and Specifications
- f. EM 5-1-11 – Project Delivery Business Process (PDBP)
- g. Engineering and Construction Bulletin (ECB) 2023-9 – Civil Works Design Milestone Checklists

Design Maturity Determination for Cost Certification – Instructions

Paragraph 1 – Design Date: Use the drop-down menu to populate the date of the design.

Paragraph 1 – Project Information: Enter the P2 Project number and Project name.

Paragraph 3 – Engineering Waivers: Use the drop-down menu to populate this field with either “Does,” or “Does not.” If an engineering waiver is needed, or anticipated to be needed, provide the specific waiver required for the Project. A waiver is any deviation from current mandatory standards, as indicated.

Paragraph 4 – Hydrology and Hydraulics: Populate this field with the % design maturity.

Paragraph 5 – Geotechnical Information: Populate this field with the % design maturity.

Paragraph 6 – Survey Data: Populate this field with the % design maturity.

Paragraph 7 – Other Technical Assumptions and/or Scope: Enter any other major technical assumptions or scope assumptions here. Only include assumptions that pertain to design. Template discussion fields are provided as a courtesy. Please include additional pages as necessary.

Paragraph 8 – Signature: Print the name and provide the title and signature for the District's Chief of Engineering. This authority cannot be delegated; however, the Deputy Chief of Engineering and Design may sign the form in the absence of the Chief of Engineering. All fillable fields must be populated (use N/A if not applicable) in order for the document to be signed.

Page 2 – Remaining Work: Identify the current baseline design assumptions and the remaining design effort and risks to complete 100% design for the authorized project. If the project is to be broken into parts or phases, provide details on the aggregate design level of each phase and anticipated timeline for completion.