

Fiscal Year 2022 HHPD IJA Funded Construction Ready Projects

The Fiscal Year 2022 Rehabilitation of High Hazard Potential Dams (HHPD) Notice of Funding Opportunity identifies Infrastructure Investment and Jobs Act funding to support eligible Construction Ready projects. This Job Aid provides a checklist to submit a complete application for an HHPD Construction Ready project.

Documents required:

At a minimum the application should include:

1. **Project summary Sheet** (FEMA HHPD Construction Ready template)
2. **Construction Ready Project description:**
 - a. Project location and community description
 - b. Summary of the watershed characteristics including topography, soils, ground cover, and land use etc.
 - c. Summary of dam data including National Inventory of Dams identifier height, storage volumes, purpose of the dam and reservoir, deigned and incidental flood control benefits, and other relevant data
 - d. The dam deficiency (ices) identified to bring the dam in compliance with state dam safety regulations for each of the static, hydrologic, and seismic failure mode
3. **Design Summary** – A summary of alternatives evaluated to address the dam deficiency (ices) and the justification for selection of the construction-ready alternative.
4. **Design Objective** – Describe how the design of the construction-ready projects brings the dam in full compliance with state dam safety regulations for static, hydrologic, and seismic failure modes or is part of a phased program for full compliance of “all dam risk”. This should include a description of how the completed project will reduce the risk of potential life loss, reduce the risk of economic consequences, reduce the risk to critical infrastructure and facilities, and reduce the risk to disruptions to lifelines including interdependencies of the dam.
5. **Basis for Design** – Summarize the guidelines, regulations, and design criteria used for the project. Reference the Design Report for full details of the basis of design.
6. **Final Engineering Design (Bid ready)** – Describe the engineering design measures for the project to comply with state dam safety regulations:



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- a. Geotechnical design considerations – Address foundation and embankment design measures for stability, factor of safety, and seepage control
 - b. Hydrologic and hydraulic design considerations – to address principal, auxiliary and emergency spillway performance. Identify the designed hydraulic capacity of the combined outlet works by frequency compared to the Probable Maximum Precipitation or flood.
 - c. Structural design considerations – Describe the assumptions, loading conditions, and design considerations.
7. **Environmental Considerations** – Provide all environmental permits that are required to construct the project. This includes but is not limited to local environmental permits, state permits including water quality and permits allowing construction in areas owned by or under the jurisdiction of the state, and federal permits including NEPA compliance.
 8. **State and local permits** – Provide a list of all other local planning, zoning, site design, land disturbance, floodplain, and building permits required and obtained for construction.
 9. **Construction Drawings (Bid ready)** – Reference applicable local, state, or federal standards used to prepare the construction drawings. The drawings must be certified by a Professional Engineer licensed in the state for which the project is constructed.
 10. **Specifications** – Final specifications and any special provisions specific to the project. Identify sections of the specifications that address “Buy American” ["Buy America" Preference in FEMA Financial Assistance Programs for Infrastructure | FEMA.gov](#) and Davis-Bacon compliance [Contract Provisions Guide: Navigating Appendix II to Part 200 - Contract Provisions for Non-Federal Entity Contracts Under Federal Awards \(fema.gov\)](#).
 11. **Provide Bid and Construction Schedule** – List major milestone dates. Please note typically, HHPD projects have a 3-Year Period of Performance.
 12. **Project Cost Estimate** – Identify the source(s) of cost estimate and any contingencies and cost escalation factors. Where lump sum bids may be acceptable, lump sum cost estimates are not. Cost estimates must have enough itemized breakdowns for FEMA or an independent cost estimator to evaluate if costs are reasonable and necessary. Soft costs such as bond costs, general conditions, escalation factors, etc. Must be identified separately in the cost estimate. Costs must be signed/sealed by a professional cost estimator or A/E licensed to practice in the jurisdiction. The project cost estimate must include and identify the 35% required match.
 13. **Operation and Maintenance (O&M)** – A summary of the O&M Plan activities for a period of not less than 50-years after construction of the project and include responsibilities of the non-federal sponsor and state to ensure O&M is performed and including a legally enforceable covenant or agreement has been exercised by the dam owner and the local government with jurisdictional authority under the NFIP that ensures that the feature will be maintained by the subrecipient/ non-federal sponsor or state if not maintained according to the O&M Plan by the dam owner.
 14. **Construction Review** – A summary of items, conditions, or features encountered during construction that require a field review by the designer, geologist, soil engineer, or other specialist to ensure that conditions anticipated during the design are verified and consistent with the design assumptions. Include the request for timely notification.

15. **Authority** – The name, title, and signature of the Engineer of Record for the project design in accordance with the requirements of sealing engineering plans in the state for which the project is located.
16. **Land Ownership Land Rights** – A statement documenting that land ownership or easements have been obtained for all temporary or permanent impacts. Land rights and easement plats should be included in the construction plans.
17. **State Assurance Letter** – State assurance letter signed by State Dam Safety authorized Official and Governors Authorized Representative (GAR) stating review and approval of construction ready project documents and quality assurance for compliance with state dam safety and construction standards.