

Appendix D-4: Construction Deliverables

Project Deliverables	Project Type			
	Conceptual Design	Preliminary Design	Final Design	Construction Project ¹
Conceptual Design Report and Drawings	✓	Application	Application	Application
Preliminary Design Report and Drawings		✓	✓	✓
Landownership Certification Form	✓	✓	✓	✓
Permit Applications		Optional	Optional	✓
Design Review Comments		Optional	✓	✓
Final Design Report and Drawings			✓	✓
Technical Specifications			✓	✓
Construction Quantities and Costs	3		✓	✓
Bidding Documents			✓	✓
Permits		Optional	Optional	✓
Cultural Resources Compliance	2	2	2	✓
Control and Tenure Documents				✓
As-Built				✓

¹Design-build construction projects have an abbreviated set of design requirements before construction. See Appendix D-4.

²Cultural resources compliance may be required if sponsor is conducting ground-disturbing activities during the design phases.

³Rough cost estimate of the preferred alternative.

Conceptual Design

For restoration projects, preliminary and final design projects, the application requirements in the project proposal comprise an adequate conceptual design.

Preliminary Design

Submit preliminary design deliverables to the RCO grants manager before moving onto the final design and restoration phases. See Appendix D-2: Preliminary Design Deliverables for detailed information on the preliminary design process.

Final Design

Before awarding the construction contract or initiating construction, submit the final design deliverables to the RCO grants manager. See Appendix D-3: Final Design Deliverables for detailed information on the final design process and required pre-construction design deliverables.

Design-Build Projects

Most sponsors complete final design reports before moving forward into construction. However, some sponsors prefer to proceed to construction after completing a preliminary design. RCO refers to these projects as “design-build” projects.

Design-build projects are considered only in cases where the sponsor, the engineer, and construction crew have extensive experience and have been successful with a particular project type. Additionally, design-build may be considered where design is straightforward and liability concerns are minimal. Design-build projects typically develop less detailed drawings before construction than other construction projects. In exchange, design-build documents typically include a detailed written description of how to locate and construct various project elements in the field. Design-build projects require the project designer to provide a high level of construction oversight to ensure the project goes as planned. Sponsors should develop detailed, as-built drawings following construction, and submit them to the RCO grants manager before project close-out. Sponsors must obtain all required permits before construction.

If proposing the design-build method to complete the project, indicate this on the salmon project proposal and describe the pre-construction design deliverables that will be submitted to RCO in lieu of the final design and report.

The application and the SRFB Review Panel’s recommendations will develop the specific deliverables for design-build projects. The special conditions section of the project agreement will identify specific project deliverables.

Construction Phase

This section identifies the required pre-construction deliverables, the construction management process, and “as-built” requirements.

Pre-Construction Deliverables

- 1. Control and tenure documentation.** Before construction, provide control and tenure documentation of the property being restored. See [Section 6](#) for more information.
- 2. Cultural resources review.** Real property restored through RCO funding is subject to [Governor’s Executive Order 05-05](#) or compliance with Section 106 of the National Historic Preservation Act. RCO requires documented compliance with the applicable cultural resources review process. For more information on cultural resources review, see [Section 6](#).
- 3. Proof of permits.** Before construction, secure all necessary permits and submit proof of permit receipt (e.g. copies of permits or permit numbers and issue dates) to the RCO grants manager or in a PRISM progress report.

Construction Management

To minimize unintended errors introduced during construction, RCO highly recommends that the project engineer has direct, on-site involvement during construction. Some project sponsors may have extensive construction experience and knowledge, and may perform daily construction supervision. RCO recommends that the sponsor and the engineer agree to share construction supervision responsibilities with mutual confidence required of both entities. The engineer should be confident that the on-site construction inspector will recognize any problems before construction is complete and ensure daily communication between the construction inspector and engineer. The engineer should review and approve substantial changes during construction before implementation.

Post-Construction Deliverable: “As-Built Drawings”

Document all changes made during construction. “As-built drawings” refers to the conventional term applied to project design drawings modified by the engineer after completion of construction to document the completed project. Prepare “as-built drawings” if changes were made to the final design during construction and if the sponsor used a design-build construction approach. Submit these drawings to the RCO grants manager after project completion.

Instead of the conventional “as-built drawings” described above, RCO may allow the sponsor to submit the following as-built documentation:

- Original final designs (if no changes were made during construction).

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- Original final designs with a list of change orders describing the construction changes.
- A design memo from the engineer with notations on the final design/construction plans identifying the changed elements of the project with photo points and photographs showing the project post-construction.