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Directives and Standards

Subject:	Transportation Program
Purpose:	To provide Transportation Program requirements regarding funding, project planning, inventory, inspections, and project completion for transportation assets. In addition, to ensure bridges on Bureau of Reclamation projects are comprehensively inventoried for ownership and inspection responsibilities, and to ensure inspections are conducted properly and uniformly on Reclamation-owned bridges. The benefits of this Directive and Standard (D&S) include inventory and inspection activities, protecting the Federal investment, asset management, and public interests.
Authority:	Fixing America's Surface Transportation (FAST) Act, 23 United States Code (U.S.C.) Part 101, 201, 203, and 204. 23 Code of Federal Regulations (C.F.R.) Part 650 Subpart C, National Bridge Inspection Standards (NBIS).
Approving Official:	Director, Dam Safety and Infrastructure
Contact:	Asset Management Division (86-67200)

1. **Introduction.** Reclamation was included as a Federal Land Management Agency (FLMA) when the FAST Act was authorized in December 2015. This allowed Reclamation to participate in new Department of Transportation funding programs. These programs provide a new source of funding for transportation facilities outside of Reclamation's appropriated budget and introduce new requirements to develop a Transportation Program. This D&S describes transportation funding requirements as well as transportation asset management requirements. In addition, this D&S combines the previous Temporary Reclamation Manual (RM) Release D&S, *Bridge Inventory and Inspection Program* (FAC TRMR-98) with the new transportation requirements from the FAST Act. The FAST Act defines the requirements of the programs included in this D&S.
2. **Applicability.** This D&S applies to all Reclamation staff and offices having jurisdiction and oversight responsibility for Reclamation-owned transportation facilities.
3. **Coordinated Technology Implementation Program (CTIP).** CTIP is a joint technology development and sharing effort between Federal Highway Administration (FHWA) and the FLMAs focused on developing resources to implement new technologies related to transportation. The goal is to provide funding for vetting and deploying new or under-utilized innovations on Federal land transportation projects. The results of CTIP projects are also usable in the planning, design, or construction of other FLMA projects. The Transportation Program Manager (TPM) will send out an annual call for CTIP proposals to the regional transportation coordinators (RTCs), the regional bridge program managers (RBPMS), and Reclamation's Research and Development Office. In addition, the TPM will serve on the CTIP council that reviews all CTIP proposals submitted by FLMAs.

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4. **Emergency Relief for Federally Owned Roads (ERFO).**

- A. **Eligibility.** ERFO is an FHWA program that provides funding to FLMAs to repair Federally-owned transportation facilities damaged after natural disasters or catastrophic failures. Any Reclamation-owned transportation facility open to the public that is damaged by a natural disaster or catastrophic failure could be eligible for ERFO funding to repair the transportation facility to the condition level it was in prior to the disaster. To qualify, the transportation facility must be included in Reclamation's transportation inventory prior to the failure event. All transportation facility damage from a natural disaster or catastrophic failure shall be reported to the RTC and TPM. The program is managed by the FHWA Office of Federal Lands Highway (FLH). Detailed information can be found in the FLH ERFO Manual found on FLH's website.
- B. **Transportation Facility Damage.** Area offices and RTCs must identify potential transportation facility damage caused by natural disasters or catastrophic failures. Reclamation must notify FLH of transportation facility damages through an official Notice of Intent letter within 45 days from the date of the disaster. A Notice of Intent template can be found in the FLH ERFO Manual. The TPM must coordinate with FLH to see if the damage qualifies for funding. FLH will determine if the event qualifies. An emergency declaration does not need to be made for an event to qualify for funding.
- C. **Qualified Events.** If the reported event and damage qualifies as an ERFO event, the RTC must oversee the overall coordination and documentation of the ERFO event including the Notice of Intent, damage survey reports, program of projects, ERFO software training for applicable employees, and the construction of the ERFO project. These responsibilities are further described in the FLH ERFO Manual. For projects receiving ERFO funding, Reclamation can request FLH to deliver the ERFO project. Critical repairs that are required to the transportation facility for public safety must occur as soon as possible even if the ERFO event has not been approved by FLH yet. If the event qualifies for ERFO funding, Reclamation can be reimbursed for the repair expenses that occurred prior to the official designation. All ERFO funds shall be obligated by the end of the fiscal year (FY) 2 years after the FY of the event. ERFO funds expended on Reclamation-owned facilities are non-reimbursable by project beneficiaries.
- D. **Reporting.** The RTC must keep detailed records of all expenses, plans, specifications, contracts, modifications, photos, and other documents for all qualified ERFO events. Reclamation is required to submit all documentation for qualified ERFO events to FLH at the end of the project.

5. **Federal Lands Access Program (FLAP).**

- A. **Eligibility.** FLAP is an FHWA program that provides funding to non-Federal entities that own or maintain transportation facilities located within, around, or provide access to Federal land. FHWA gives priority to projects accessing high-use Federal recreation

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sites or Federal economic generators. Reclamation is not eligible to receive FLAP funding; only non-Federal entities are eligible to receive FLAP funding. Reclamation-owned transferred works transportation facilities are eligible to receive funding through the non-Federal operating entity or managing partner. There are also non-Federal transportation facilities that access Reclamation facilities that are eligible for FLAP. FLAP funding is distributed by state. Each state has a separate call for projects, typically on a 3-year cycle, to program the state's FLAP funding. FLAP projects, other than predominantly safety activities found in 23 C.F.R. 120(c)(1), require a match that varies per state ranging from 5 to 20 percent. More information can be found on FLH's FLAP website. FLAP funds expended on Reclamation-owned facilities are non-reimbursable by project beneficiaries.

- B. **Partnerships.** Reclamation must work with its partners to develop FLAP proposals and applications that benefit both Reclamation and its partners. Reclamation is required to write a letter of support or endorsement for each FLAP project that it endorses. The letter of support or endorsement is signed by the area manager.
 - C. **Technical Advisory Group (TAG).** The voting members for selecting FLAP projects in each state are an FLH member, a state government member, and a local government member. Reclamation is not a voting member but shall participate in the TAG, which helps to evaluate FLAP proposals and advocate for the most beneficial projects. Reclamation shall have at least one TAG member for each of the 17 Western states. Reclamation may need to have multiple TAG members for each state to appropriately cover each Reclamation administrative unit found in that state. The area manager, in coordination with the RTC is responsible for appointing TAG members for their area office and region. Federal Lands Planning Program (FLPP) funds are used to cover labor and travel costs associated with participating in TAG reviews for FLAP projects.
 - D. **Overlap with Federal Lands Transportation Program (FLTP).** Transferred works transportation facilities open to the public are eligible for both FLTP and FLAP funding. The RTCs will develop a strategy for the best way to fund these projects. Typically, the strategy involves seeking FLTP funds first to fund the match requirement for the FLAP proposal. The RTCs will put in proposals for FLTP match funds well in advance of the next FLAP call for projects in order to secure the FLTP match funds prior to the FLAP call for projects.
6. **FLPP.**
- A. **Eligibility.** FLPP is an FHWA program that provides funding to Reclamation to be used on transportation planning activities such as Type 1 bridge inspection program activities, long range transportation plans, transportation inventory activities, FLAP participation, FLTP proposal development, preliminary planning/feasibility studies related to transportation, road condition assessments, traffic counts, visitor surveys, and other transportation planning activities. FLPP funds shall be obligated in the FY they were received. FLPP funds cannot be spent on design projects.

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- B. **Annual Budget Request.** The TPM will annually send out a budget request to the RTCs, RBPMs, and regional budget officers. Each region's RTC and RBPM will work together to develop an annual transportation planning budget for their region. The TPM will allocate funds to each region based on budget requests received and available FLPP funds.
- C. **Reporting.** The RTCs and RBPMs, in conjunction with the regional budget officers, are responsible for managing their region's FLPP budget. Near the end of each FY, the TPM will coordinate with the regions to make funding adjustments to ensure all FLPP funds are obligated by the end of the FY. FLPP funds are non-reimbursable.
7. **FLTP.**
- A. **Eligibility.** FLTP is an FHWA program that provides funding to Reclamation to improve Reclamation-owned transportation facilities open to the public. In order to be eligible for FLTP funding, the asset receiving funding must be a Federal lands transportation facility that is open to the public with title and maintenance responsibility vested with Reclamation. Both transferred works and reserved works are eligible for FLTP funding since transferred works have maintenance responsibility vested in Reclamation through the operation and maintenance (O&M) transfer contracts with operating entities. In addition to the definition of a Federal lands transportation facility, 23 U.S.C. 203 also allows FLTP funds to be spent on other things such as adjacent parking areas, provisions for pedestrians and bicycles, sanitary facilities, and "other appropriate public road facilities." Reclamation also allows FLTP funding to go to public boat ramps. In order to receive FLTP funding, the transportation facility must be identified in Reclamation's transportation inventory and be identified in Reclamation's Major Rehabilitation and Replacement. Reclamation Project authorities relating to public access and recreation must be consulted when using FLTP funds.
- B. **Funding.** Reclamation's FLTP funding can change year to year. FLTP funds must be obligated by the end of the third FY after the FY when the funds were awarded, or the funds will lapse. However, Reclamation will strive to achieve the highest annual FLTP obligation rate possible. FLTP funds expended on Reclamation-owned facilities are non-reimbursable by project beneficiaries.
- C. **Annual FLTP Proposals.** The Asset Management Division (AMD) sends out an annual call for FLTP projects. The RTCs are responsible for compiling FLTP proposals from their region and submitting them to AMD. After proposals are received, AMD convenes an FLTP evaluation team to objectively evaluate each proposal on maintenance responsibility, turn back risk, safety concerns, recreation and economic generation, benefits to Reclamation's transportation program, project plan, and cost estimate. AMD provides funding to the highest rated projects based on available FLTP funding. To improve project planning, AMD announces funding for projects as far into the future as possible, preferably 2 to 3 years out. Reclamation is

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required to develop a Transportation Improvement Program (TIP) that shows all FLTP projects over the next 4 years. Reclamation needs to balance TIP requirement while still maintaining flexibility to move FLTP funds around as more urgent needs present themselves. The TPM must hold a debrief with each region after FLTP projects are announced, so the regions are better prepared in the next call for projects.

- D. **Funded FLTP Projects.** The area manager, RTC, and TPM over each funded project will decide whether Reclamation or FLH will deliver the FLTP project.
- (1) **Reclamation-Delivered FLTP Projects.** For Reclamation-delivered projects, a project management plan (PMP) shall be completed by the FLTP project manager appointed by the area manager. The FLTP project manager shall use the PMP template provided by the TPM which includes the project scope, procurement details, stewardship and oversight (S&O) requirements, stakeholders, project milestones and schedule, communication plan, change management, funding breakout by activity and FY, and project closeout. The FLTP project manager is responsible for complying with all S&O requirements. The RTC and TPM are responsible for ensuring each FLTP project complies with S&O requirements. Unobligated FLTP funds at the end of each FY must be returned to FLH and then requested back the following FY. The FLTP project manager shall only request the amount of FLTP funds that will be obligated during that FY.
- (2) **FLH-Delivered FLTP Projects.** For FLH-delivered projects, the area manager, in conjunction with the RTCs, shall designate a point of contact for FLH to work with throughout the project. Reclamation must enter into a project agreement with FLH for each project to better define project expectations, roles and responsibilities, schedule, and review requirements. For FLH-delivered projects, the FLTP funds remain with FLH and no FLTP funds are transferred to Reclamation.
- E. **FLTP Point of Obligation.** Title 23 U.S.C. 201 allows FLTP funds to be obligated upon approval of plans, specifications, and estimates (PS&E). The PS&E package must be approved by the TPM and the RTC in order to use the FLTP Point of Obligation authority. A Miscellaneous Obligation in the Financial and Business Management System is used to record a FLTP Point of Obligation.
- F. **Annual FLTP Accomplishment Report.** Each RTC shall transmit a report to the TPM by January 1 of each year that provides a summary of every FLTP project worked on in the previous FY. The report shall contain a status update for each project through the end of the previous FY and shall include relevant photos. The TPM compiles each region's report into an annual Reclamation FLTP accomplishment report and transmits the report to FLH by April 1 of each year.
- G. **Reporting.** The RTC, in conjunction with the regional budget officer, is responsible for managing their region's FLTP budget for Reclamation-delivered FLTP projects.

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8. Road and Parking Lot Inventory.

A. **Inventory Requirements.** All Reclamation roads in Class 1 through 5 and all Reclamation parking lots in Class 1 and 5 shall be included in the Reclamation road and parking lot inventory. Class 6 roads and parking lots may be optionally added to the inventory if the area office elects to do so. The area managers are responsible for updates to the road and parking lot inventory. All Reclamation roads are required to have a Route Number and RouteID.

B. **Condition Assessment Requirements.** A condition assessment of all surfaced (paved or graveled) roads and parking lots open to the public is required every 5 years. FLH will perform these road and parking lot condition assessments for Reclamation using FLPP funds. More details on the Road Inventory Program process can be found in Reclamation's Road Inventory Program Guidelines document.

9. **Trail Inventory.** All Reclamation-owned trails open to the public are eligible for FLTP funding. All Reclamation-owned trails must be included in Reclamation's trail inventory and be assigned a Trail Classification from 1 to 5. Area managers are responsible for updates to the trail inventory.

10. **Accessibility Requirements.** All modifications to public access shall be reviewed for compliance with the Architectural Barriers Act Accessibility Standards for access to persons with disabilities. Each area office shall consult with their regional and/or area office accessibility coordinator on any proposed public transportation facility project. Refer to RM D&S, *Nondiscrimination on the Basis of Disability in Federally Conducted Programs, Activities, and Services (Accessibility Program)* (CRM 03-01).

11. **Boat Ramp (Launch) Inventory.** All designated Reclamation-owned boat ramps shall be included in Reclamation's boat ramp inventory. Area managers are responsible for updates to the boat ramp inventory. Minimum requirements for the boat ramp inventory include surface type, length, width, minimum and maximum water surface elevation, accessible features, and maintenance entity. All Reclamation-owned boat ramps open to the public are eligible for FLTP funding. Regions may also individually elect to further classify boat ramps based on the Water and Land Recreation Opportunity Spectrum Users' Handbook.

12. **Road Designation.** According to 43 C.F.R. 423, all Reclamation lands, facilities, and waterbodies are opened to lawful use by the public unless they are closed to public use under 43 C.F.R. 423 Subpart B, or as provided by 43 C.F.R. 420, Off-Road Vehicle Use. Reclamation-owned roads are considered Reclamation facilities. Reclamation must use appropriate levels of planning for designating public roads including using resource and travel management plans where appropriate. User-created roads discovered on Reclamations lands are not considered Reclamation facilities and must be managed and closed in a timely fashion. Areas and trails designated for off-road vehicle use under 43 C.F.R. 420 are not Reclamation roads. Any trail designated for off-road vehicle use

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under 43 C.F.R. 420 shall be included in the Reclamation trail inventory discussed in Paragraph 9. Reclamation's public road inventory will be designated after the completion of the first cycle of road condition assessments performed by FLH.

13. **Transportation Facility Closure.** Reclamation shall follow the requirements found in 43 C.F.R. 423 for closing Reclamation facilities such as roads, bridges, or other transportation facilities. Where a transportation facility such as a bridge is closed to the public, Reclamation shall install sign R5-11 "Authorized Vehicles Only" from the FHWA *Manual for Uniform Traffic Control Devices* (MUTCD) or a Reclamation approved sign in accordance with the Reclamation *Sign Guidelines* that restricts public access.
14. **Reclamation Bridge Inventory (RBI).**
 - A. **Bridge Inventory Requirements.** Each area manager shall compile an inventory of all Type 1 bridges, Type 2 bridges, Type 3 bridges, and Crossings in their respective area and update the inventory annually. Each area manager shall designate an area office bridge coordinator. The RBPM is responsible for oversight of their region's data within the RBI Application. The RBPM shall compile and update all Structure Inventory and Appraisal (SI&A) data for every Type 1 bridge within the RBI Application.
 - B. **Determination of Bridge Ownership.** The area manager shall determine and document the ownership of new and existing bridges located on and crossing over Reclamation facilities and land interest. If bridge ownership changes and results in a change in the bridge type, then the change in bridge type shall be documented in a memorandum as indicated in Paragraph 14.C.
 - (1) **Public/Private Ownership.** If the owner of the bridge is determined to be a public entity other than Reclamation or a private entity, then the appropriate Reclamation regional/area office shall send a letter to the owner by certified mail, with return receipt requested. The letter will include a copy of the contract, agreement, or other documentation indicating the bridge's ownership, and also include copies of all previous bridge inspection reports and applicable documents. The letter shall advise the owner of the inspection and reporting responsibilities that are applicable under the NBIS. Once this letter and supporting information is provided to the owner, Reclamation will no longer be responsible for conducting future bridge inspections. However, a copy of the documentation of the non-Reclamation-owned bridge will be maintained in the RBI, and the bridge will be categorized as a Type 3 bridge.
 - (2) **Reclamation Ownership.** If Reclamation is the owner of the bridge, the RBPM shall track the bridge data in the RBI Application and shall continue to inspect the bridge in accordance with this D&S.
 - (3) **Unconfirmed Ownership.** When ownership of a bridge is unknown, Reclamation shall temporarily classify it as a Type 1 or Type 2 bridge, based on

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public access; perform all necessary inspections; and perform any O&M activities needed to maintain the bridge in a safe and passable condition. The responsible Reclamation regional/area office will also be required to determine who owns the bridge. If ownership cannot be determined, Reclamation will utilize all legal methods available to either:

- (a) acquire ownership of the bridge; or
- (b) dispose of the bridge in accordance with RM D&S, *Disposal of Bridges and Crossings on Bureau of Reclamation Land and Easements* (LND 11-01).

- C. **Determination of Bridge Type.** The regional director, or the responsible area manager if assigned, will determine the bridge type (Type 1, 2, 3), based on ownership and public/non-public vehicular use. Where it is determined that it is reasonable and prudent to restrict access and use of the bridge by the general public, the entity responsible for O&M shall install appropriate restrictive physical devices, barriers, or prohibitive signs per Paragraph 13. The determination or change of bridge type will be documented by a formal memorandum from the area or field office manager to the RBPM. The region or area office shall upload a copy of the memorandum to the RBI, and a courtesy copy shall also be sent to the Bridge Program Manager (BPM) in AMD, 86-67200.
- D. **Maintenance and Updates of Bridge Inventory.** Each area manager shall ensure that the RBI Application is annually reviewed for accuracy, updated, and revised based on results of inspections, facility reviews/examinations, operational or ownership status changes, or policy changes for all bridge and crossing types.

15. National Bridge Inventory (NBI).

- A. **Content.** Reclamation will inventory Type 1 bridges in accordance with the FHWA publication "Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges," (December 1995) together with subsequent interim changes or the most recent version.
- B. **Annual NBI Submission to FHWA.** As required under the NBIS, Reclamation is responsible for annually reporting Type 1 bridge data to FHWA for inclusion into the NBI. The RBPM shall verify the accuracy of the NBI data annually prior to the submission to FHWA. The BPM is responsible for submitting the NBI data to FHWA each year. All NBI data is maintained within the RBI Application.

- 16. **Bridge Program Quality Assurance (QA)/Quality Control (QC).** The QA and QC organizational requirements apply specifically to activities related to Type 1 bridges reported to the NBI. QA and QC procedures are used to maintain a high degree of accuracy and consistency in the inspection program of Type 1 bridges in accordance with 23 C.F.R. 650.313(g).

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A. Organizational QA/QC Responsibilities.

- (1) **BPM.** The BPM will meet the qualifications outlined in Paragraph 16.B.(1). The BPM will coordinate with FHWA regarding NBI program administration activities, request annual FLPP funding that can be used for bridge inspection related activities on Type 1 bridges, and distribute FLPP funding amongst the regions. In addition, the BPM will:
 - (a) Provide oversight of Reclamation compliance with this D&S.
 - (b) Coordinate and disseminate Reclamation-wide policies and program management related to the bridge program.
 - (c) Coordinate regular bridge program meetings and provide specialized training on the Reclamation bridge program.
 - (d) Perform annual programmatic and field reviews on 10 percent of Type 1 bridge inspections completed each FY.
 - (e) Develop procedures for selecting bridges to perform programmatic reviews. Procedures must include, but are not limited to:
 - (i) whether the bridge is posted for weight limit or not;
 - (ii) whether the bridge has a recommendation in Dam Safety Information System (DSIS) for replacement or rehabilitation;
 - (iii) whether the bridge has an unusual change in the condition rating from the previous inspection;
 - (iv) whether the bridge requires special inspections (underwater, fracture critical, etc.); and
 - (v) whether the bridge is in poor overall condition.
 - (f) Validate the qualifications of the bridge program personnel in each region.
 - (g) Develop procedures for reviewing inspection reports, bridge files, and load ratings.
 - (h) Develop a checklist for QA/QC review of bridge files, load rating analysis, and field inspections.
 - (i) Perform QA checks on a minimum of 10 percent of the NBI data submitted each year to FHWA.

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- (2) **RBPM.** The RBPM will manage inventory and inspection activities of all bridges for their region and meet the qualifications outlined in Paragraph 16.B.(1). The RBPM will also:
- (a) Implement Reclamation-wide bridge inspection policies and procedures, QA/QC, and prepare and maintain a bridge inventory.
 - (b) Manage the bridge program to ensure all Type 1 bridge inspections, reports, and load ratings are performed in compliance with the requirements set forth within the NBIS.
 - (c) Establish and implement processes and procedures for QA/QC of the Type 1 bridge inspection program in accordance with the NBIS.
 - (d) Document changes to the bridge type in the inventory.
 - (e) Maintain Type 1 bridge files which will be available for FHWA to review during NBI compliance reviews. Type 1 bridge files will include as necessary the following items:
 - (i) design and as-built drawings;
 - (ii) routine inspections;
 - (iii) Fracture Critical Member (FCM) inspection plans and FCM inspection reports;
 - (iv) underwater inspection plans and underwater inspection reports;
 - (v) load ratings; and
 - (vi) scour evaluations.
 - (f) Maintain records of the qualifications and refresher trainings for all staff that perform inspections or load ratings on bridges in their region; including, inspection team leaders, inspection team members, load raters, underwater bridge inspection divers, and contractors.
 - (g) Perform QC level review as a Reviewer (see Paragraph 17.C.(11)) for a minimum of 10 percent of Type 1 bridge inspection reports written that year. This level of sampling (along with the other requirements in Paragraph 16.A.(2)) allows the RBPM to sign as the Approver on all Type 1 bridge inspection reports.

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B. Qualifications of Personnel.

- (1) **BPM and RBPM.** The BPM and RBPM shall successfully complete an FHWA-approved comprehensive bridge inspection training course and an inspection refresher course every 5 years thereafter, and meet or possess one of the following qualifications:
 - (a) be a registered professional engineer; or
 - (b) have 10 years of bridge inspection experience.
- (2) **Inspection Team Leader.** The inspection team leader shall successfully complete an FHWA-approved comprehensive bridge inspection training course and an inspection refresher course every 5 years thereafter and meet or possess one of the five minimum qualifications listed below in Paragraphs 16.B.(2)(a) through 16.B.(2)(e):
 - (a) have the qualifications specified under Paragraph 16.B.(1);
 - (b) have 5 years of bridge inspection experience;
 - (c) be certified as a Level III or IV bridge safety inspector under the National Society of Professional Engineers' Program for National Certification in Engineering Technologies;
 - (d) have all of the following:
 - (i) a bachelor's degree in engineering from a college or university accredited by or determined as substantially equivalent by the Accreditation Board for Engineering and Technology (ABET);
 - (ii) successfully passed the National Council of Examiners for Engineering and Surveying Fundamentals of Engineering examination; and
 - (iii) 2 years of bridge inspection experience; or
 - (e) have all of the following:
 - (i) an associate degree in engineering or engineering technology from a college or university accredited by or determined as substantially equivalent by ABET; and
 - (ii) 4 years of bridge inspection experience.
- (3) **Inspection Team Member.** There are no specific requirements to be an inspection team member. However, it is recommended that Reclamation staff

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that participates in inspections successfully complete an FHWA-approved comprehensive bridge inspection training course and an inspection refresher course every 5 years thereafter.

- (4) **Load Rater.** The individual charged with the overall responsibility for review or calculation of load ratings must be a registered professional engineer.
- (5) **FCM Inspection Team Leader.** The individual leading each FCM inspection shall be a qualified team leader, per Paragraph 16.B.(2), who has also completed the National Highway Institute's training course titled "Fracture Critical Inspection Techniques for Steel Bridges."
- (6) **Lead Underwater Bridge Inspection Diver.** The lead underwater bridge inspection diver must complete an FHWA-approved comprehensive bridge inspection training course or other FHWA-approved underwater bridge inspection training course.
- (7) **Contractor Qualifications.** Consultants, architectural and engineering (A&E) firms, or other governmental agencies may be contracted to provide the inspection requirements described herein. Consultants conducting these inspections will be required to meet the qualifications and experience required as specified in this D&S for the roles and activities they will be performing. All contractors performing bridge inspections shall have an individual with BPM qualifications as specified in Paragraph 16.B.(1) that approves all inspection reports. If an A&E service contract is utilized, Reclamation's Contracting Officer's Representative (COR) will designate a qualified Reclamation team leader to review all aspects of the bridge inspection contract.

17. Bridge Inspection Activity Requirements.

- A. **Job Hazard Analysis (JHA).** A JHA is required for every bridge inspection. The JHA shall be developed based on the requirements in RM D&S, *Review of Operation and Maintenance Program Examination of Associated Facilities (Facilities Other Than High- and Significant-Hazard Dams)* (FAC 01-04) and the Reclamation Safety and Health Standards.
- B. **Traffic Control.** The inspection team leader is responsible for developing and implementing a temporary traffic control plan if required by the MUTCD. The temporary traffic control plan shall follow the requirements of the MUTCD.
- C. **Type 1 Bridge Inspections/Activities.** Bridge inspection procedures must meet all requirements set forth in the NBIS and the Bridge Inspector's Reference Manual (BIRM). A qualified team leader, per Paragraph 16.B.(2), shall be at the bridge at all times during each initial, routine, in-depth, FCM, special, and underwater inspection. All Type 1 bridge activities shall follow the procedures found in the BIRM. In general, some of the primary requirements are:

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(1) Load Ratings.

- (a) **Requirements.** Each bridge shall be load rated as a basis for determining the safe load-carrying capacity in accordance with the current edition of the American Association of State Highway and Transportation Officials (AASHTO) Manual for Bridge Evaluation (MBE) and all applicable FHWA Memoranda on load ratings. The load rating shall be established based on the current conditions of the bridge. The individual charged with the overall responsibility for load rating bridges shall be a registered professional engineer and shall be noted on the load rating report. Every load rating report shall be independently reviewed by a separate registered professional engineer and shall be noted on the load rating report. Every load rating report shall at a minimum contain the following:
- (i) summary;
 - (ii) assumptions;
 - (iii) controlling member and location;
 - (iv) design and legal load rating factors; and
 - (v) NBI load rating data to be reported in:
 - (aa) Item 63: Operating rating methodology;
 - (bb) Item 64: Operating rating value;
 - (cc) Item 65: Inventory rating methodology; and
 - (dd) Item 66: Inventory rating value.
- (b) **Posting and Closure.** If a load rating results in the closure or posting of the bridge in accordance with the latest MBE edition, then a Critical Finding (CF) shall be issued as specified in Paragraph 18.C for the entity with O&M responsibility to post or close the bridge. Information on bridge closure can be found in Paragraph 18.D. If it is determined under the rating procedure that the maximum unrestricted legal loads or state permit loads exceed the load permitted under the operating rating or equivalent rating factor, the bridge shall be posted in accordance with the current edition of the MUTCD.
- (i) All Type 1 bridges located on state routes, or with an Average Daily Traffic (ADT) greater than or equal to 50 vehicles per day, shall be posted following the posting requirements of the applicable state Department of Transportation.

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- (ii) For Type 1 bridges located on non-state routes and with an ADT less than 50 vehicles per day, it is recommended to post the bridge with a maximum weight limit or maximum axle weight sign. The load rating engineer may also use engineering judgment to recommend a posting value and sign based on the characteristics of the bridge, road, and surrounding area.
 - (iii) Posting shall be performed by the entity with O&M responsibility within 30 calendar days of the notification from the load rating engineer.
 - (iv) A CF shall be issued for Type 1 bridges requiring posting that are found with a missing or severely damaged load posting sign and the bridge shall be properly posted within 30 calendar days of the finding.
- (2) **Initial Inspections.** Initial inspections shall be performed on new or rehabilitated bridges within 90 days of opening to the public.
 - (3) **Routine Inspections.** Every bridge is to be inspected at regular intervals not to exceed 24 months, with certain exceptions. With the written approval of the FHWA Headquarters Office of Bridge Technologies, bridges will be allowed to be inspected on less frequent intervals, not to exceed 48 months.
 - (4) **Special Inspections.** Certain bridges may require inspections more frequently than on a 24-month interval, depending on factors such as age, traffic characteristics, load rating, and known deficiencies. The team leader can make a recommendation to inspect the bridge more frequently based on the conditions and characteristics of the bridge. At a minimum, bridges with a deck, superstructure, or substructure rating of a 3 or less shall be inspected every 12 months. The RBPM may also recommend special inspections based on unique circumstances such as heavy construction or hauling, seismic events, flooding events, or others. Special inspection recommendations shall be documented in the inspection report.
 - (5) **FCM Inspections.** FCM inspections are performed at an interval not to exceed 24 months. All fracture critical bridges shall have a fracture critical plan developed and reviewed by the FCM inspection members before inspecting the bridge.
 - (6) **Underwater Bridge Inspections.** An underwater inspection is to be performed at an interval not to exceed 60 months. An underwater inspection is required when two subsequent routine inspections cannot inspect all substructure components due to some substructure components being underwater without safe access. All underwater bridge inspections shall have an underwater bridge inspection plan developed before inspecting the bridge.

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- (7) **Damage Inspections.** A damage inspection is required when damage has been reported at a bridge. A qualified team leader, per Paragraph 16.B.(2), does not have to be present for damage inspections. If a team leader is not present, a professional engineer from the local Reclamation office shall perform the damage inspection and compile the damage inspection report. The RBPM shall review all damage inspection reports and determine if a follow-up inspection by a qualified team leader is required.
- (8) **In-Depth Inspections.** An in-depth inspection is required when more analysis, investigation, or more advanced tools and equipment are needed at a bridge.
- (9) **Scour Evaluations.** All new bridges over a waterbody shall have a scour analysis performed during design following the requirements of FHWA's publication "Evaluating Scour at Bridges," referred to as HEC-18. All existing bridges over a waterbody shall be screened for scour using Reclamation's Scour Screening Guidelines. A bridge found to be scour critical shall have a Plan of Action (POA) developed which may include various actions based on the risk of bridge failure such as closing the bridge, installing countermeasures, or performing more frequent inspections and monitoring. The POA shall describe the required action and provide a due date.
- (10) **Personnel Involvement.** The team leader of the inspection team for Type 1 bridges will be from the regional office. However, this responsibility can be assigned to an area office upon agreement between the regional director and the area manager, provided that the area office staff meets the qualification requirements in this D&S and is one office removed from the operating office/entity. The regional office can also request the Technical Service Center (TSC), or contract with other Federal agencies or A&E private consultants, to perform inspections. Team members are not required to be from the regional office.
- (11) **Type 1 Bridge Inspection Reports.** A separate inspection report for each Type 1 bridge will be prepared even if the inspection was conducted as part of a Review of Operation and Maintenance (RO&M) Program examination, Annual Site Inspection (ASI), Periodic Facility Review (PFR), or Comprehensive Review (CR). The RBPM is responsible for ensuring that the RBI and the SI&A data are updated within the RBI Application based on the results of the inspection within 90 calendar days of the bridge inspection date.
 - (a) **Inspection Report Format.** Routine Type 1 bridge inspection reports shall use the Reclamation Type 1 bridge inspection report template and shall include all information required in accordance with the NBIS. Unique inspection types such as in-depth, FCM, or underwater inspections may modify the Reclamation Type 1 bridge inspection report template as needed.

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- (b) **Repairs/Improvements.** Inspection reports will document all repairs and maintenance improvements that have been performed on the bridge since the previous inspection. This is done to document all known maintenance activities that have been performed on the bridge.
 - (c) **Review.** A separate individual who meets the qualifications for a team leader as defined in the NBIS shall independently review every inspection report. If the team leader is not a registered professional engineer, the peer reviewer, who will review and sign the report, must be a registered professional engineer.
 - (d) **Approval.** The RBPM shall approve all inspection reports.
 - (e) **Report Signature.** Every inspection report shall include the name, signature, and date of the team leader, reviewer who is qualified as a team leader, and the RBPM approver. The team leader is signing for technical content, the reviewer is signing for QC, and the approver is signing for QA.
 - (f) **Report Transmittal and Distribution.** Final Type 1 bridge inspection reports shall be uploaded into the RBI Application within 120 calendar days of the inspection date by the responsible regional/area office that authored the report. The RBPM shall notify the BPM once the reports have been uploaded into the RBI Application. The area office or field office (when applicable) is responsible for transmitting the bridge inspection reports to the operating entities.
- D. **Type 2 Bridge Inspections/Activities.** The requirement of a separate bridge inspection on every Type 2 bridge is a new requirement for Reclamation and will take time to implement with a reasonable 6-year inspection cycle. Considering this, every initial Type 2 bridge inspection report needs to be completed by the end of calendar year 2024.
- (1) **Qualifications.** A team leader meeting the qualifications found in Paragraph 16.B.(2) shall lead each Type 2 bridge inspection and be on-site for the duration of the bridge inspection. However, a non-team leader who has successfully completed a FHWA-approved comprehensive bridge inspection training course and an inspection refresher course every 5 years thereafter may lead Type 2 bridge inspections of low risk bridges if the inspection report is reviewed by an individual meeting the qualifications for a team leader found in Paragraph 16.B.(2). The low risk bridge determination will be made by the RBPM. Type 2 bridge inspections will be conducted by at least one office removed from the operating office/entity or an independent review will be made. The conducting office requirements are defined in FAC 01-04.
 - (2) **Inspection Frequency.** Type 2 bridges shall be inspected on a frequency not to exceed 6 years. The qualified team leader or RBPM may recommend more

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frequent inspections based on factors such as condition, load rating, traffic characteristics, scour, fracture critical members, the desire to align the frequency with other examinations, or other factors.

- (3) **In-Depth Inspection.** In-depth inspections of Type 2 bridges may be recommended by the area or regional office. See Paragraph 17.C.(8).
- (4) **Associated Facility.** The inspection of Type 2 bridges may be included as part of a RO&M examination if the bridges are part of, or related to, an “associated facility” as defined in FAC 01-04 if there is a qualified team leader, per Paragraph 16.B.(2) or Paragraph 17.D.(1), on-site for the RO&M examination.
- (5) **High- and Significant-Hazard Dam.** The inspection of Type 2 bridges associated with the review/examination of High- or Significant-Hazard Dams may be included as part of the ASI, PFR, or CR as defined in RM D&S, *Review/Examination Program for High- and Significant-Hazard Dams* (FAC 01-07) if there is a qualified team leader, per Paragraph 16.B.(2) or Paragraph 17.D.(1), on-site for the ASI, PFR, or CR.
- (6) **Type 2 Bridge Inspection Reports.** Each Type 2 bridge shall have a separate bridge inspection report similar to Type 1 bridges, but more condensed. If the Type 2 bridge is inspected in conjunction with a larger RO&M examination, ASI, PFR, or CR, the Type 2 bridge inspection report information may be included in the RO&M examination, ASI, PFR, or CR report as long as the report includes a list of every Type 2 bridge inspected and a separate section on each Type 2 bridge that contains the minimum Type 2 bridge information specified below. For each Type 2 bridge inspection, the data shall be updated, and the report uploaded to the RBI Application within 180 days of the inspection date. The person leading each Type 2 bridge inspection is responsible for the Type 2 bridge data update and report upload into the RBI Application. At a minimum, each Type 2 bridge inspection report shall include:
 - (a) an overall structural evaluation;
 - (b) a component condition rating for the deck, superstructure, substructure, channel/channel protection, and culvert (when applicable);
 - (c) recommendations;
 - (d) photos; and
 - (e) bridge inventory data based on the requirements in the RBI Application.
- (7) **Type 2 Bridge Inspection Report Signature.** Each Type 2 bridge inspection report shall be signed by the team leader that was on-site leading the inspection. For Type 2 bridges inspected using a non-team leader as described in

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Paragraph 17.D.(1), the non-team leader that led the inspection, the individual meeting the qualifications of a team leader that reviewed the report, and the RBPM shall sign the Type 2 bridge inspection report. The RBPM can sign as both the reviewer and the RBPM.

- E. **Type 3 Bridges.** The inspection requirements for these bridges will be implemented by the owner or responsible entity. If the condition of a Type 3 bridge is known to threaten the operation of a Reclamation facility, or the bridge presents an immediate danger to the public or operating personnel, then the area manager shall notify the responsible owner or entity for their attention and correction as soon as possible.
 - F. **Crossings.** Reclamation-owned crossings, whether open to public travel or not, are not required to be inspected and reported similar to Type 1 or Type 2 bridges, unless their design and existence, as determined by the responsible regional/area office, presents a significant hazard to the public or operating personnel. Crossings generally will be inspected and reported in conjunction with the larger associated facility that the crossing is part of. Crossing information is not required to be submitted for inclusion in the NBI, but Crossings are required to be inventoried in the RBI Application.
18. **O&M Recommendations Resulting from Bridge Inspection Activities.**
- A. **Categorizing Recommendations.** Recommendations will be developed by Reclamation staff based on deficiencies identified during the inspection of Type 1 or Type 2 bridges. Recommendations will be categorized according to the three recommendation categories established under FAC 01-04. Refer to FAC 01-04 for more information and requirements on each recommendation category. The three types of recommendations are titled:
 - (1) Category 1 recommendations;
 - (2) Category 2 recommendations; and
 - (3) Category 3 recommendations.
 - B. **Recommendation Tracking.** Regardless of whether the bridge was inspected individually, as part of an associated facility review, or a facility review; all Category 1, 2, and 3 recommendations resulting from the inspection of Type 1 or Type 2 bridges will be tracked according to the requirements outlined in FAC 01-04.
 - C. **Critical Findings (CF).** The NBIS requires CFs to be issued when a structural or safety related deficiency is discovered that requires immediate follow-up inspection or action.
 - (1) **Discovery.** Immediate action is required when a CF is discovered at a Type 1 or Type 2 bridge. For CFs that require bridge closure, see Paragraph 18.D. A CF will always be accompanied by either a Category 1 or Category 2

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recommendation depending on the severity of the finding as it relates to the recommendation definitions in FAC 01-04. The team leader, or the Reclamation team leader appointed by the COR for bridges inspected by contract, is responsible for summarizing the CF, including a statement on whether or not the bridge needs to be closed, and notifying the following individuals within 48 hours of identifying the CF:

- (a) area manager;
- (b) RBPM; and
- (c) BPM.

- (2) **Plan of Action.** Within 30 days of discovering the CF, a POA shall be developed by the entity with O&M responsibility based on input from the RBPM. The POA shall be transmitted by the entity with O&M responsibility to the area manager, RBPM, and BPM. The POA shall summarize the finding or findings, describe the required action, and provide a deadline. The area manager shall coordinate with the entity with O&M responsibility to ensure that the CF is addressed. It should be noted that CFs involving posting weight limit signs or bridge closures have unique time frames for action as outlined in Paragraph 17.C.(1).(b) and 18.D. The BPM is responsible for tracking all CFs.

D. **Bridge Closures.** If inspection or load rating calculations indicate that the bridge is not safe for use, then a CF will be issued with a requirement to close the bridge immediately.

(1) **Requirements for All Bridge Closures.**

- (a) Efforts to close the bridge must start immediately upon discovery. Bridges shall be closed using a barrier, and a bridge closed sign installed on both sides of the bridge. Following the closure of the bridge, the area office will document with photos that the closure was completed.
- (b) Follow-up recommendations based on the POA will be issued to remove, rehabilitate, or replace the bridge. Follow-up site visits will be performed on a frequency determined by the regional/area office to verify the bridge remains closed until the recommendation to remove, rehabilitate, or replace the bridge has been completed.
 - (i) If the entity with O&M responsibility elects to rehabilitate or replace the bridge, then after the work has been completed, an initial inspection will be performed, and routine inspections will resume.
 - (ii) If the bridge is removed, the area office staff will remove the bridge per LND 11-01 and draft a Bridge Type Change memo per Paragraph 14.C.

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The bridge shall be marked as “Removed” in the RBI Application after the Bridge Type Change memo has been finalized and uploaded to the RBI Application.

- (2) **Requirements for Reserved Works Bridge Closures.** If the bridge is a reserved work, then the area office shall close the bridge within 10 days of the CF notification. If the bridge is closed within 10 calendar days of the CF notification, then a Category 2 recommendation for bridge closure can be issued for bridge closure and marked as complete. The region can also elect to immediately issue a Category 1 recommendation for any bridge closure. If the bridge is not closed within 10 calendar days of the CF notification, then a Category 1 recommendation shall be issued.
- (3) **Requirements for Transferred Works Bridge Closures.** If the bridge is a transferred work, then the area office is responsible for issuing a Notification of Closure letter to the operating entity within 10 calendar days of the CF notification. The bridge shall be closed within 10 calendar days of the date of the Notification of Closure letter. If the bridge is closed within 10 calendar days of the Notification of Closure letter, then a Category 2 recommendation for bridge closure shall be issued for bridge closure and marked as complete. Alternatively, the region may instead elect to immediately issue a Category 1 recommendation for any bridge closure. If the bridge is not closed within 10 calendar days of the Notification of Closure letter, then a Category 1 recommendation shall be issued. If the operating entity does not close the bridge within 10 calendar days of the Notification of Closure letter, then Reclamation will close the bridge and charge the operating entity if allowed under the O&M contract. The Notification of Closure letter will include the following:
 - (a) a description of the CF resulting in the closure of the bridge, and a clear written statement noting that the bridge will not be reopened until the CF is corrected.
 - (b) a statement requiring the bridge to be closed within 10 calendar days of the notification letter.
 - (c) a statement that a Category 1 recommendation will be issued if the bridge is not closed within 10 calendar days (if a Category 1 recommendation was not immediately issued.)
 - (d) instructions to close the bridge with barriers and sign the bridge as closed in accordance with the MUTCD.
 - (e) notification to the operating entity of their duty to monitor and maintain closure barriers and signs to assure they remain in place until the bridge is removed or repaired and reopened.

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- (f) explanation that a CF could cause failure or partial failure of the bridge or could pose a serious traffic safety hazard and include the sentence, “Bridge failures have occurred nationally that might have been avoided if prompt attention had been given to concerns noted in bridge inspection reports.”
- (g) notification to the operating entity to adhere to 43 C.F.R. Part 423 *Public Conduct on Bureau of Reclamation Facilities, Lands, and Waterbodies*, which describes the process for closing areas otherwise open to the public.

19. **Bridge Railcar Superstructures.** Railcar superstructures shall not be used as a bridge superstructure for any new Reclamation-owned bridge. In addition, no rehabilitations shall be made to existing Reclamation-owned railcar superstructures.

20. **Bridge Funding.**

- A. **Bridge Inventory and Inspection Activities.** Funds expended on all Reclamation-owned bridges or crossings related to inventorying, inspection, and load rating activities are non-reimbursable.
- B. **Funding of Recommended Work.** For bridges where O&M responsibility has been transferred to an operating entity, the costs associated with completing a recommendation that was identified in a Type 1 or Type 2 bridge inspection, shall be funded by the operating entity as a project O&M activity unless otherwise authorized (e.g., existing contract language provides for different funding; or FLTP, FLAP, or ERFO funding is being used). For reserved works, funding and reimbursement will be in accordance with current project O&M allocations.

21. **Transferred Works O&M Bridge Responsibilities/Status.**

- A. **Notification Letter to Operating Entities.** By formal letter, each regional/area office will inform operating entities, under their jurisdiction, of Reclamation’s bridge inspection responsibilities. This is meant to be a one-time notification and documentation effort, unless the operating entity or managing office changes in the future. The formal letter will include the following, as applicable:
 - (1) Information regarding Reclamation’s bridge inspection program and requirements including definitions of Type 1 and Type 2 bridges.
 - (2) A listing of all confirmed Type 1 and 2 bridges that the operating entity is currently responsible for operating and maintaining.
 - (3) A request for the operating entity to submit a list of current bridges necessary for project purposes.
 - (4) A request for the operating entity to identify a list of Type 1 bridges that should be restricted for desired reclassification as Type 2 bridges.

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- (5) A request for the operating entity to identify any bridges that are currently classified as Type 2 bridges that are open to public vehicular traffic.
- (6) A request for the operating entity to submit a list of bridges it believes are unnecessary for project purposes and any recommendations regarding removing, selling, or transferring title.
- (7) Notification that the operating entity is responsible for implementing any access restrictions, in addition to resolving any formal recommendations regarding bridges to safeguard employees and the general public. Any such restrictions or improvements are to be subject to the approval of Reclamation. If upgraded, improved, or restricted, the bridge will then be considered for re-categorization and inspected as outlined within this D&S.
- (8) Notification of Reclamation's inspection schedule related to Type 1 bridges on related project facilities, in accordance with the NBIS.
- (9) Notification of Reclamation's inspection schedule related to Type 2 bridges on related project facilities, in accordance with this D&S.

B. Bridges Designated as Unneeded.

- (1) Certain bridges will require special attention to determine or verify ownership and their necessity, possibly requiring significant time and resources for resolution. If a bridge is determined to be unnecessary for project purposes by the responsible operating entity, then Reclamation will consider each bridge and do one of the following:
 - (a) formally justify the necessity of the bridge to the operating entity, and retain ownership of the bridge;
 - (b) transfer ownership/title of the bridge to the operating entity;
 - (c) negotiate the terms of, and complete, a disposal of the bridge to a private landowner or other entity if desired; or
 - (d) demolish or otherwise permanently remove the bridge from service, because no bridge is to be abandoned in place.
- (2) For items (b), (c), and (d) above, refer to LND 11-01 for Reclamation requirements and procedures related to disposal of bridges that are not needed for project purposes.

C. Historic Bridges. Any action including O&M activities, title transfer, sale, or removal, to be taken on a bridge considered to be "historic" requires consideration

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under Section 106 of the National Historic Preservation Act. Refer to RM D&S, *Cultural Resources Management (CRM)* (LND 02-01) for further information and requirements.

22. **Bridges and Crossings Constructed for Authorized Use by Others.** A bridge or crossing owned by Reclamation for use by others is required to have a use authorization issued to all authorized users as defined in RM D&S, *Land Use Authorizations* (LND 08-01) or other contractual obligation. Bridges or crossings constructed and owned by Reclamation for authorized use by others through a contractual obligation shall be considered needed for project purposes, with ownership vested with Reclamation. Such a bridge or crossing cannot be removed or destroyed unless written agreement with the other party is obtained stating the determination of unneeded for project purposes. All efforts will be made to dispose those bridges that are not needed for project purposes in accordance with LND 11-01.
- A. Reclamation-owned bridges constructed for authorized use by others may be classified as Type 2 bridges if the following conditions are met:
- (1) The roadway leading to the bridge has restrictive signs, barriers, or gates that restrict access to the public in accordance with the definition of a “non-public road” and Paragraph 13.
 - (2) A use authorization is issued by Reclamation to an authorized party or parties that describes the terms of use for the bridge with specific requirements to ensure the public cannot access the bridge. The use authorization shall follow the requirements of LND 08-01.
- B. If the requirements found in Paragraph 22.A. are not met, then the bridge shall be classified as a Type 1 bridge. See Type 1 and Type 2 bridge definition.

23. **Definitions.**

- A. **Bridge.** In accordance with the NBIS, a “bridge” is defined as a structure including supports erected over a depression or an obstruction, such as water, highway, or railway, and having a track or passageway for carrying traffic or other moving loads, and having an opening measured along the center of the roadway of more than 20 feet between undercopings of abutments or spring lines of arches, or extreme ends of openings for multiple boxes; it may also include multiple pipes, where the clear distance between openings is less than half of the smaller contiguous opening.
- B. **Bridge Inspector’s Reference Manual or BIRM.** The current edition of the FHWA publication referenced in the NBIS. The BIRM can be found on FHWA’s website at: <https://www.fhwa.dot.gov/bridge/nbis.cfm>.

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- C. **Bridge Program Manager or BPM.** The designated member of AMD who is responsible for Reclamation's overall bridge program, as specified in Paragraph 16.A.(1).
- D. **Catastrophic Failure.** As defined in 23 C.F.R. 667, "the sudden failure of a major element or segment of a road, highway, or bridge due to an external cause. The failure must not be primarily attributable to gradual and progressive deterioration or lack of proper maintenance." The closure of a facility because of imminent danger of collapse is not in itself a sudden failure. This term is used in the ERFO program.
- E. **Critical Finding or CF.** A structural or safety related deficiency that requires immediate follow-up inspection or action.
- F. **Crossing.** Structures that generally meet the definition of a bridge but have an overall span length between 6 feet and 20 feet. Culvert type structures are included as crossings as long as one of the culvert barrels has a span length equal to or greater than 6 feet. Crossings include both Reclamation-owned and non-Reclamation-owned structures, both vehicular and non-vehicular structures, and both public and non-public structures. The term crossing in this D&S should not be confused with crossing agreements referenced in LND 08-01. Crossings used for pedestrian use-only associated with other Reclamation structures do not need to be included as Crossings in the RBI as long as the crossing is being adequately inspected through another RO&M program. Structures with span lengths less than 6 feet do not need to be tracked or inspected.
- G. **Federal Land Management Agency or FLMA.** Federal agencies responsible for various land management activities that are also eligible for transportation funding in the FAST Act.
- H. **Federal Lands Highway or FLH.** The branch of FHWA responsible for managing transportation programs under Title 23 of the U.S.C. that are applicable to FLMAs. FLH can provide project delivery services to FLMAs.
- I. **Federal Lands Transportation Facility.** As defined in 23 U.S.C. 101, "A public highway, road, bridge, trail, or transit system that is located on, is adjacent to, or provides access to Federal lands for which title and maintenance responsibility is vested in the Federal Government, and that appears on the national Federal lands transportation facility inventory."
- J. **Federal Lands Transportation Program (FLTP) Project Manager.** Only required for FLTP projects that Reclamation delivers. The individual appointed by the area manager responsible for the overall project management for Reclamation-delivered FLTP projects, including complying with all S&O requirements.
- K. **Fracture Critical Bridge.** A fracture critical bridge is any bridge that includes an FCM member.

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- L. **Fracture Critical Member or FCM.** A steel member in tension, or with a tension element, whose failure would probably cause a portion of or the entire bridge to collapse.
- M. **Fracture Critical Member (FCM) Inspection.** A hands-on inspection within arms-length of a fracture critical member or member components that may include visual and other nondestructive evaluation.
- N. **Highway.** The term “highway” includes a road, street, and parkway.
- O. **Load Rating.** The determination of the live load carrying capacity of a bridge using bridge drawings and supplemented by information gathered from a field inspection. In cases where design drawings are not available, a more detailed inspection or analysis may be necessary to develop as-built drawings in order to perform a load rating.
- P. **Managing Partner.** A Federal or non-Federal public entity that manages recreation and other agreed-upon cultural, natural, and environmental resources on Reclamation land through a management agreement with Reclamation.
- Q. **Manual for Bridge Evaluation or MBE.** The current edition of the AASHTO Manual referenced in the NBIS.
- R. **Manual for Uniform Traffic Control Devices or MUTCD.** The current edition of the FHWA manual that can be downloaded from the FHWA MUTCD website.
- S. **National Bridge Inspection Standards or NBIS.** The national standards (23 C.F.R. Part 650 Subpart C) established by FHWA for the proper safety inspection and evaluation of all highway bridges in accordance with 23 U.S.C. 151.
- T. **National Bridge Inventory or NBI.** A database managed by FHWA with information on all bridges on public roads within the United States.
- U. **Natural Disaster.** An unusual natural occurrence such as a flood, hurricane, severe storm, tidal wave, earthquake, or landslide which causes serious damage. This term is used within the ERFO program.
- V. **Non-public Road.** A road where public travel is restricted by physical barriers including restrictive gates, or restrictive signs prohibiting public travel by four-wheel standard passenger cars. If physical barriers are not used, then restrictive signs shall be posted at conspicuous locations at all points of entry and at reasonable intervals along the non-public road according to 43 C.F.R. 423 *Public Conduct on Bureau of Reclamation Facilities, Lands, and Waterbodies*.
- W. **Operating Entity.** A non-Federal entity who is responsible for O&M on a Reclamation-owned facility as designated in a formal O&M transfer contract.

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X. **Parking Lot Classification Definitions.**

- (1) **Class 1.** Public Parking Lot – A paved or unpaved parking lot open to the public. Eligible for FLTP funding.
- (2) **Class 5.** Administrative Parking Lot – A paved or unpaved parking lot that is closed to the public. These parking lots are typically not eligible for FLTP funding.
- (3) **Class 6.** Unimproved Parking Area – An unofficial parking area or disturbance. These parking areas are not considered public parking lots. These parking areas may be open to the public, but they are not a designated parking lot. These parking areas are typically user-created and are not constructed or maintained parking lots. Not eligible for FLTP funding.

Y. **Project Delivery.** A term used to indicate which agency is managing a transportation construction project including project management, design, contract solicitation and award, and construction.

Z. **Public.** Any individual that is not a Reclamation employee, transferred works operating entity, contractor authorized to perform work on Reclamation facilities, or otherwise authorized access to utilize Reclamation facilities through a use authorization or contractual obligation.

AA. **Public Authority.** A Federal, state, county, or township, Indian tribe, municipality or other local government or instrumentality thereof (including all water user organizations), with authority to finance, build, operate, or maintain toll or toll-free highway facilities.

BB. **Public Road.** Any road or street under the jurisdiction of, and maintained by, a public authority and open to public travel per 23 U.S.C. 101(a)(22). A public road is available, passable by four-wheel standard passenger cars, and open to general public travel without the use of restrictive signs or physical barriers prohibiting public travel, or regulations other than restrictions based on size, weight, or class of registration.

CC. **Quality Assurance or QA.** QA includes the use of sampling or other measures to assure the adequacy of QC procedures in order to verify or measure the quality level of the entire bridge inspection and load rating program.

DD. **Quality Control or QC.** QC includes procedures that are intended to maintain the quality of a bridge inspection and load rating at or above a specified level.

EE. **Reclamation Bridge Inventory Application or RBI Application.** The RBI Application is an electronic database and application that is used to store and manage all Reclamation bridge and crossing data along with storing all Reclamation bridge files

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and having a geospatial viewing component. The RBI Application includes data for all Type 1 bridges, Type 2 bridges, Type 3 bridges, Crossings, and documentation of Removed bridges.

FF. Reclamation Facility. Any facility or structure that is owned by Reclamation or included as part of an authorized Reclamation project.

GG. Regional Bridge Program Manager or RBPM. The representative for each region that is responsible for the overall bridge program in their region, as specified in Paragraph 16.A.(2) of this D&S.

HH. Regional Transportation Coordinator or RTC. The Transportation Program involves multiple program areas across Reclamation with the main ones being the Recreation and Facility/O&M Programs. Due to this, the RTC for each region should come from either the Recreation or the Facility/O&M Program. It is also recommended that each region designate a primary RTC and a secondary RTC, one from each of the two programs. The RTCs are responsible for their region's Transportation Program including maintaining transportation inventories, overseeing transportation funding proposals, complying with S&O requirements, and outreach to regional employees, operating entities, and managing partners on the various transportation programs. Specific duties for each RTC will be decided at the regional level.

II. Reserved Work. A Reclamation-owned facility where Reclamation has retained responsibility for carrying out O&M activities.

JJ. Road Classification Definitions.

- (1) **Class 1.** Principal Road (Public Road) – A primary public access route to high visitation areas or areas of high importance to Reclamation or the surrounding public. These routes are accessible by two-wheel-drive (2WD) vehicles. These roads are nearly always paved and receive the highest traffic volumes compared to other roads in the local office. Eligible for FLTP funding.
- (2) **Class 2.** Collector Road (Public Road) – Routes that provide circulation around Reclamation facilities including reservoirs. These routes are accessible by 2WD vehicles. These routes are usually paved. Eligible for FLTP funding.
- (3) **Class 3.** Special Purpose Road (Public Road) – Roads that provide access to special use areas such as campgrounds, picnic areas, boat ramps, or remote areas of Reclamation land. These routes may not be 2WD accessible. These routes may or may not be paved. Eligible for FLTP funding.
- (4) **Class 4.** Administrative Access Road (Administrative Road) – Routes intended for access to administrative developments or structures such as maintenance offices, employee quarters, or utility areas. These routes are accessible by 2WD

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vehicles. These routes may restrict access to the general public. These roads are typically not eligible for FLTP funding.

- (5) **Class 5.** Restricted Road (Administrative Road) – Routes closed to the public by using gates, barriers, or signage. Examples include maintenance roads, service roads, patrol roads, etc. These routes may not be 2WD accessible. Not eligible for FLTP funding.
- (6) **Class 6.** Unimproved Route – An unofficial route or disturbance. These routes are not considered public roads. These routes may be open to the public, but they are not a designated route. These routes may include areas below a high reservoir watermark that occasionally flood. These routes are typically user-created and are not constructed or maintained roads. Not eligible for FLTP funding.

KK. Road Inventory Unique Identifier.

- (1) **Route Number.** A Route Number is used for a group of roads that are all managed and maintained in the same fashion. All of the route components with the same Route Number need to have the same FLTP, Functional Classification, User Access, and Maintenance Entity fields.
- (2) **RouteID.** A RouteID is a subcomponent of the Route Number. The RouteID is connected to Linear Referencing. Each RouteID has a tangible start and endpoint with no overlap. The RouteID uses the same base number as the Route Number but adds letters to the end to distinguish a subcomponent of the Route Number.

LL. **Stewardship and Oversight or S&O.** The efficient and effective management of the public funds that have been entrusted to FHWA; and the act of ensuring that the Federal highway programs and projects are delivered consistently with applicable laws, regulations, and policies. This term is used within FLTP.

MM. **Structure Inventory and Appraisal or SI&A.** NBI required data collected on all Type 1 bridges.

NN. Trail Classification Definitions.

- (1) **Class 1.** Minimally Developed – The tread is intermittent and often indistinct. The route is narrow and may be vegetated and steep. Obstacles are common and add channels to the experience. Structures are minimal to non-existent, drainage typically managed without structures, natural fords and bridges are not typical. Signs are limited to junctions and markers may not be apparent. Class 1 trails are located in a natural setting and may require route finding.
- (2) **Class 2.** Moderately Developed – The tread is continuous and discernible but is often narrow and rough. Structures are limited in size, scale, and quantity and are typically made from natural materials. The structures are sufficient to protect the

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infrastructure and resources. Natural fords are common as bridges are placed only where necessary for the protection of resources. Obstacles are common, naturally occurring, often substantial and intended to provide additional channels. Trail markers are available but might not be apparent. Regulatory and interpretation signage is rare.

- (3) **Class 3.** Developed – The tread is continuous and apparent. Single lane with allowances for passing where required by traffic volumes. Obstacles may be common but not substantial or intended to create a challenge. Structures are common and may be made from native or imported materials. Trailside amenities are common, and signage is sufficient to provide reassurance.
- (4) **Class 4.** Highly Developed – The tread is wide and relatively smooth with few irregularities. Single lane, with allowances constructed for passing where required by traffic volumes in areas with no reasonable passing opportunities available. Double lanes are present where traffic volumes are high and passing is frequent. Obstacles are infrequent and insubstantial. Structures and trailside amenities are frequent and may be constructed of imported materials. Bridges are used for the protection of natural resources and user convenience. Signage is typical and displayed at the trailhead.
- (5) **Class 5.** Fully Developed – The tread is wide, firm, stable, and generally uniform. Single lane, with frequent turnouts where traffic volumes are low to moderate. Double lanes are present where traffic volumes are moderate to high. The surface is commonly hardened with concrete, asphalt, limestone fines or other imported material. Trail structures along the trail are frequent or continuous and typically constructed of imported materials. May include bridges, boardwalks, curbs, handrails, trailside amenities, and similar features. Associated with high visitor use. Signage is common and is required to be displayed at the trailhead.

OO. Transferred Work. A Reclamation-owned facility where the O&M of that facility is carried out by an operating entity or managing partner under the provisions of a formal O&M transfer contract.

PP. Transportation Program Manager or TPM. The designated member of AMD who is responsible for:

- (1) all transportation facilities except bridges;
- (2) coordination and dissemination of Reclamation-wide policies and program management related to the transportation program;
- (3) providing training to Reclamation staff, managing partners, and operating entities on the various transportation programs;

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- (4) coordinating Reclamation's participation in each state's Technical Advisory Group (TAG) for the FLAP; and
- (5) complying with FLTP S&O requirements.

QQ. **Turn Back.** A turn back is an action taken by a Federal or non-Federal managing partner that ultimately results in having all recreation responsibilities being transferred or conveyed back to Reclamation for its sole management.

RR. **Type 1 Bridge.** Any Reclamation-owned bridge located on a public road.

SS. **Type 2 Bridge.** Any Reclamation-owned bridge not located on a public road. Type 2 bridges include pedestrian bridges, trail bridges, railroad bridges, and non-public highway bridges. Highway bridges included in the Type 2 inventory must have restrictive signs or barriers in place on the road preceding the bridge as defined under "non-public road." Bridge-type structures for pedestrian use-only associated with other Reclamation structures do not need to be included as Type 2 bridges in the RBI as long as the bridge-type structure is being adequately inspected through another RO&M program.

TT. **Type 3 Bridge.** Any non-Reclamation-owned bridge that crosses a Reclamation dam, associated facility, power facility, or land interest.

UU. **Underwater Inspection.** Inspection of the underwater portion of a bridge substructure and the surrounding channel, which cannot be inspected visually at low water by wading or probing, generally requiring diving or other appropriate techniques.

24. **Review Period.** The originating office will review this release every 4 years.

RECLAMATION MANUAL TRANSMITTAL SHEET

Effective Date: _____

Release No. _____

Ensure all employees needing this information are provided a copy of this release.

Reclamation Manual Release Number and Subject

Summary of Changes

NOTE: This Reclamation Manual release applies to all Reclamation employees. When an exclusive bargaining unit exists, changes to this release may be subject to the provisions of collective bargaining agreements.

Filing instructions

Remove Sheets

Insert Sheets

All Reclamation Manual releases are available at <http://www.usbr.gov/recman/>

Filed by: _____

Date: _____