

Reclamation Manual

Directives and Standards

Subject:	Professional Registration for Engineers, Land Surveyors, Landscape Architects, and Architects
Purpose:	Establishes Bureau of Reclamation requirements for professional registration of engineers, land surveyors, landscape architects, and architects. The benefit of this Directive and Standard (D&S) is to ensure that Reclamation engineering, surveying, and architectural services are performed in a manner that employ the highest professional standards of practice.
Authority:	Title XIV of the Public Health Service Act (Safe Drinking Water Act) as amended through Pub. L. 107-377, Title 5, United States Code, section 5757 (5 USC 5757) (enacted by section 1112 (a) of the National Defense Authorization Act for Fiscal Year 2002, Pub. L. 107-107, December 28, 2001); Classification and Qualifications General Schedule Qualifications Standards ; Paragraph 1.16 of the Department of Interior Departmental Manual (DM) 370 DM 410, 255 DM 2.1 E.
Approving Official:	Deputy Commissioner – Policy, Administration and Budget
Contact:	Human Resources Division, Human Resources Policy Office (84-12100)

1. **Introduction.** Reclamation engineers, surveyors, landscape architects, and architects performing services solely for the Federal government on Federal land are exempt from specific state licensing requirements. However, because Reclamation has the responsibility for the design, construction, operation, and maintenance of water resource projects affecting the property, health, safety, and welfare of the people of the United States, Reclamation chooses to follow the intent of the [Model Law of the National Council of Examiners for Engineering and Surveying](#) for the practice of professional engineering and surveying, and the [Model Regulations of the National Council of Architectural Registration Boards](#) for the practice of architecture, to provide objective evidence that the work is performed by engineers, surveyors, and architects of proven competence.
2. **Applicability.** This D&S applies to all Reclamation personnel engaged in Reclamation design and construction activities that require the application of professional engineering, land surveying, and/or architectural principles and practices to safeguard life, health, and property, and to promote the public welfare.
3. **Professional Registration Requirements.** The Office of Personnel Management (OPM) Individual Occupational Requirements for GS-0800, All Professional Engineering Positions; GS-1373, Land Surveying Series; and GS-0808, Architecture Series, allow Federal agencies to require registration for certain engineering, land surveying, or architectural positions. Supervisors, in conjunction with their servicing Human Resources (HR) office, will determine whether professional registration is required for performance of the work in

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Reclamation positions. Requirements include one or more of the following responsibilities, and involve safeguarding life, health, or property of Reclamation or the general public:

- A. **Design Activities.** In responsible charge of design activities defined in Reclamation Manual (RM) Policy, *Performing Design and Construction Activities* (FAC P03).
- B. **Technical Approval.** Responsible for signing technical approval of drawings, technical documents, memoranda, or construction documents prepared by a process that meets the definition of “Practice of Architecture” (Paragraph 9.H.) or “Practice of Engineering” (Paragraph 9.I.). See Paragraph 4 below.
- C. **Peer Review.** Responsible for signing peer review to document a final, independent technical review of drawings, technical documents, memoranda, or construction documents that are technically approved by a registered professional engineer or architect.
- D. **Construction Activities.** In responsible charge of construction activities defined in FAC P03, which ensures compliance with final specifications, plans, drawings, reports, or other documents. Responsible for signing the as-built revision block on drawings documenting actual construction details.
- E. **Engineering Determinations or Actions.** In responsible charge of engineering determinations or actions concerning major aspects of operation and maintenance work on dams, tunnels, powerplants, switchyards, bridges, pumping plants, water treatment plants, fish facilities, pipelines, canals, roads, and/or associated auxiliary equipment meeting the definition of “Practice of Engineering” (Paragraph 9.I.).
- F. **Architectural Determinations or Actions.** In responsible control of architectural determinations or actions concerning major aspects of operation and maintenance work on dams, power plants, bridges, pumping plants, water treatment plants, and other buildings meeting the definition of “Practice of Architecture” (Paragraph 9.H.).
- G. **Surveying Determinations or Actions.** In responsible charge of land surveying determinations or actions concerning major aspects of dams, tunnels, powerplants, switchyards, bridges, pumping plants, water treatment plants, fish facilities, pipelines, canals, roads, and/or associated auxiliary facilities meeting the definition of “Practice of Land Surveying” (Paragraph 9.J.). Responsible for signing professional land surveying documents, plats, and reports. Boundary surveys require Federal land surveyors to be licensed in the State where the land is located.
- H. **Registration Required by Statute.** In responsible charge of work that, under Federal Statute, requires registration. Some Federal laws require Federal agencies to comply with State law. For example, when producing designs for the Safe Drinking Water Act, Federal design engineers and architects may be required to be registered in the State where the facility is located.

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- I. **High-Hazard and Significant-Hazard Dams.** Peer reviews Periodic Facility Review Reports or Comprehensive Review Reports; or is the senior dam engineer on Comprehensive Reviews for high- and significant-hazard dam examinations in accordance with RM, *Review/Examination Program for High- and Significant-Hazard Dams* (FAC 01-07).
 - J. **Acceptance.** Is responsible for acceptance of design or analysis work performed by others in accordance with RM, *Design Activities* (FAC 03-03). This includes, but is not limited to: the review of Architect-Engineer (A-E) design work submitted by engineers or architects in the private sector who are under contract with Reclamation, A-E designs submitted under the Small Reclamation Projects Act Loan Program, A-E designs submitted by other Federal agencies for Reclamation review, A-E designs submitted by private sector sponsors of proposed Lease of Power Privilege projects to be constructed at existing Reclamation facilities, and A-E designs submitted by private sector sponsors of proposed Federal Energy Regulatory Commission licensed hydroelectric projects to be constructed at existing Reclamation projects.
 - K. **Technical Proposal Evaluation Committees (TPEC).** At least one member of the TPEC for procurement of construction services must be registered.
 - L. **Source Selection Evaluation Boards (SSEB).** At least one member of the SSEB for procurement of A-E services must be registered.
4. **Signing for Technical Approval.** An individual who signs an engineering, survey, architectural or landscape architectural document for technical approval is accepting responsibility for the technical information depicted on the document. The individual assuming this responsibility must:
- A. have been in responsible charge and intimately involved in the preparation of the document;
 - B. be familiar with the basic data, criteria, and procedures used to develop the results shown in the document;
 - C. ensure that all technical information prepared by other professions and disciplines and depicted on the document is compatible with the overall design intent on documents that include work from several disciplines;
 - D. ensure that technical approval of associated documents prepared by other professions and disciplines is provided by someone in the profession or discipline preparing the documents; and
 - E. include the appropriate notation: “P.E.”, “R.L.S.”, “R.L.A.”, or “R.A.” immediately after the signature when certifying professional registration status.

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5. **Seals Certifying Professional Registration.** Reclamation personnel must not seal engineering, survey, or architectural documents except when required by Federal statute to comply with state law. Requirements for sealing documents must be clearly identified in the service agreement for the work.
6. **Position Descriptions and Vacancy Announcements.**
 - A. **Position Descriptions.**
 - (1) Designated positions will be determined using the criteria in Paragraph 3.
 - (2) The position description cover page of all designated positions must contain the following remark, as appropriate: “Professional engineering, land surveying, architectural or landscape architectural registration is required.” Details explaining why the credential is required (e.g. by law, provide the citation, and/or this D&S citing the appropriate section) must be addressed in the “Knowledge Required” section of the position description.”
 - (3) Reclamation Leadership Team (RLT) members will determine when certification by a nationally recognized certifying organization meets the requirements of this D&S in the event there is no State recognized certification for a specialized engineering discipline.
 - B. **Vacancy Announcements.**
 - (1) Registration requirements identified in the position description of designated positions must be cited in vacancy announcements and used as a selective placement factor.
 - (2) Since registration will be used as a selective placement factor, it becomes part of the minimum requirements for a designated position. Applicants must provide a copy of their up-to-date registration certification with their application package.
7. **Exceptions.** An incumbent of a position who is not registered at the time their position is designated may be granted an exception for the duration they occupy the position. However, the non-registered employee will not be allowed to sign for technical approval on any drawings or documents. Subsequent incumbents must be registered. There are no exceptions where registration is required by Federal statute.
8. **Obtaining and Maintaining Professional Registration.**
 - A. **Assistance to Obtain or Maintain Professional Registration.** Providing assistance for employees to pursue and/or maintain professional registration is accomplished by following RM D&S, *Payment for State Licenses, Certification Fees, and Professional Credentials and Examinations* (HRM 05-02).

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B. Proof of Registration.

- (1) Engineers, surveyors, architects and landscape architects in designated positions must provide a copy of their renewal certification of professional engineering, land surveying, architectural or landscape architectural registration to their supervisor.
- (2) Supervisors must submit renewal certifications for employees in designated positions to their servicing HR office for inclusion in the employee's Electronic Official Personnel Folder (eOPF).
- (3) Servicing HR offices must:
 - (a) require proof of professional engineering, land surveying, architectural or landscape architectural registration upon application or placement in designated positions; and
 - (b) file proof of up-to-date professional credentials for employees in designated positions, provided by the employee's supervisor, in the employee's eOPF in accordance with appropriate records disposition instructions.

C. Maintenance of Registration.

- (1) The employee is responsible to maintain their professional registration and provide proof of up-to-date professional registration to their supervisor.
- (2) The supervisor is responsible for monitoring and ensuring that employees in designated positions under their jurisdiction maintain up-to-date professional registration credentials and for providing up-to-date credentials to the servicing HR office.
- (3) Failure of an employee to maintain required credentials provides a basis for removal from designated positions.

9. Definitions.

- A. **Architect.** Any person who meets the criteria in the Basic Requirements section of OPM's [*Individual Occupational Requirements for GS-0808: Architecture Series*](#).
- B. **Designated Position.** A position that has been determined to require the incumbent to be a registered engineer, land surveyor, landscape architect, or architect.
- C. **Drawings.** Documents depicting design or contract requirements affecting lands, structures, facilities, or equipment. They include contract exhibits or other documents that contain details or installations intended to become a permanent part of lands, structures, facilities, or equipment.

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- D. **Engineer.** Any person who meets the criteria in the Basic Requirements section of OPM's [*Individual Occupational Requirements for GS-0800: All Professional Engineering Positions*](#).
- E. **Land Surveyor.** Any person who meets the criteria in the Basic Requirements section of OPM's [*Individual Occupational Requirements for GS-1373: Land Surveying Series*](#)
- F. **Landscape Architect.** Any person who meets the criteria in the Basic Requirements section of OPM's Individual Occupational Requirements for GS-0807: Landscape Architecture Series.
- G. **Licensing.** The process by which an agency of government (Federal, state, or local) grants permission to an individual to engage in a given occupation upon finding that the applicant has attained the minimal degree of competency required to engage in that occupation.
- H. **Practice of Architecture.** Providing services connected to the design, construction, enlargement, or alteration of a building or buildings and the space surrounding such buildings that are intended for human occupancy or habitation. These services include:
- (1) conducting pre-design and planning activities;
 - (2) creating designs, specifications, and other technical submissions; and
 - (3) coordinating elements of technical submissions prepared by others.
- I. **Practice of Engineering.**
- (1) **Service or Creative Work.** Providing services that require the application of engineering principles, data, and experience such as consultation, investigation, evaluation, planning design, final design, expert testimony, responsible supervision of construction, review of material and completed phases of construction, alteration, or repair of any utility, structure, building, machine, equipment, or process to protect and safeguard the public welfare including life, health or property.
 - (2) **Design Coordination.** The incorporation of technical submissions prepared by others, including as appropriate and without limitation, consulting engineers, architects, landscape architects, land surveyors, and other professionals working under the direction of the engineer, into design products.
 - (3) **Engineering Surveys.** Engineering surveys include all survey activities required to support the sound conception, planning, design, construction, maintenance, and operation of engineered projects, excluding activities identified in Paragraph 9.J.

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- J. **Practice of Land Surveying.** Surveying real property to establish land boundaries, rights-of-way, easements, and dependent or independent surveys or resurveys of the public land survey system.
- K. **Practice of Landscape Architecture.** Application of mathematical, physical, and social sciences to consult, evaluate, plan and design improvements principally directed at the functional and aesthetic use of land.
- L. **Professional Engineer.** Any person who is duly licensed as a professional engineer by one of the 50 states, the District of Columbia, or U.S Territory.
- M. **Professional Land Surveyor.** Any person who is appropriately licensed as a professional land surveyor by one of the 50 States, the District of Columbia, or a U.S. Territory.
- N. **Reclamation Leadership Team or RLT.** Reclamation's Executive Schedule, Senior Executive Service, and Senior Level positions comprise the RLT.
- O. **Registered Architect.** Any person who is appropriately licensed as an architect by one of the 50 States, the District of Columbia, or a U.S. Territory.
- P. **Registered Landscape Architect.** Any person who is appropriately licensed as a landscape architect by one of the 50 States, the District of Columbia, or a U.S. Territory.
- Q. **Responsible Charge of Construction Activities.** Personal responsibility that an engineer has over the final authority to evaluate construction operations and determine compliance with final specifications, plans, drawings, reports, or other documents. Receives input from other personnel to assist in the final determination of compliance. Provides direction and control over construction representatives and inspectors having responsibility of observing a construction contractor's means and methods of construction to ensure compliance with the plans and specifications. Ensures the intent of the design is achieved, appropriate quality control/quality assurance measures are implemented, and actual construction details are documented.
- R. **Responsible Charge of Engineering.** Personal responsibility for the independent control and direction that an engineer, acting within their scope of competence, exercises over design activities and engineering decisions that affect the life, health, property, and welfare of the public by personally making, or reviewing and approving, the engineering decisions.
- S. **Responsible Charge of Land Surveying.** Personal responsibility for the independent control and direction that a professional land surveyor exercises over land surveying decisions by considering field observation, physical evidence, and recorded data and personally making, or reviewing and approving, the decisions.

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- T. **Responsible Control of Architecture.** Personal responsibility for the independent control and direction that an architect exercises over design activities and architectural decisions that affect the life, health, property, and welfare of the public by personally making, or reviewing and approving, the architectural decisions.
- U. **Selective Placement Factor.** Knowledge, skills, abilities, or special qualifications that are in addition to the minimum requirements in a qualification standard but are determined to be essential to perform the duties and responsibilities of a particular position. Applicants who do not meet a selective factor are ineligible for further consideration.
- V. **Signatures.**
- (1) **Manual Signature.** The handwritten name of a person applied to a document that identifies the person and serves as a means of authentication of the contents of the document, provides responsibility for the creation of the document, and provides for accountability for the contents of the document.
 - (2) **Electronic Signature.** A unique and verifiable digital authentication process under the sole control of the person using it that carries the same weight, authority, and effects as a manual signature. It is attached to or logically associated with an electronic document in a way that the authentication will be invalidated if any data in the document is changed.
10. **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: _____