# REQUEST FOR PROPOSAL WATER QUALITY INITATIVE

# DRAINAGE WATER RECYCLING (DWR) PROFESSIONAL SERVICES April 2025

The lowa Department of Agriculture and Land Stewardship (IDALS) is issuing a request for proposals (RFP) from potential firms to assist in design, layout, and checkout of up drainage water recycling (DWR) systems designed to reduce nutrient loading to nearby streams, while providing supplemental irrigation to adjacent cropland. Potential DWR sites should have landowner interest and must be vetted by IDALS for alignment with program objectives. The expected total design cost of this contract is \$50,000 to \$65,000 over the next 3 years. Interested parties are invited to submit a proposal by 4:30 p.m. on Friday, April 18, 2025. Proposals should be sent to the attention of Matt Lechtenberg by e-mail (matthew.lechtenberg@iowaagriculture.gov) by 4:30 pm on the posted closing date.

IDALS anticipates funding available to support drainage water recycling system installation which consists of an irrigation water storage component (wetland, pond, etc.) and corresponding irrigation systems. Design of irrigation system will depend on method of irrigation determined by the landowner and may integrate drainage water management (DWM) plans and design features. Funding is available to cost-share the installation of the water storage component based on siting criteria determined by IDALS.

IDALS intends to coordinate efforts with a third-party on the delivery process of these practices to help augment traditional conservation practice delivery methods. Interested applicants must have a strong background in successful DWR project design and implementation or components of DWR, specifically in ponds, grade stabilization structures, wetlands, drainage water management, irrigation, pumps, etc. References and/or past project examples can be submitted or should be available upon request.

The proposal submitted should include general information about the firm including a brief history and resumes of key personnel who will work on the project. The submittal should also demonstrate relevant experience, including a list of DWR systems and/or DWR component projects on agricultural lands with agricultural landowners as end-point owners. Maintaining drainage rights of upstream and downstream landowners is a key component to the design of these wetlands.

Specific phases to be completed by the selected firm include, but are not limited to, the following:

- Phase 1: Survey and Preliminary Design of DWR component(s) and cost estimate
- Phase 2: Final design of DWR system
- Phase 3: Permitting (cultural resources, 404/401, floodplain, local permits, etc.)
- Phase 4: Easement Boundary survey
- Phase 5: Bid Letting Assistance
- Phase 6: Construction Staking and Monitoring

Bids should utilize the attached "IDALS DWR Bid Template" to provide cost estimates to complete each phase. Selected contractor(s) will provide invoices itemized by phase as completed to IDALS. The agreed to costs will be in place for the entire agreement. Costs can be renegotiated upon conclusion of the agreement, if an extension for additional sites is granted.

Table 1. Bid Template example (use the attached spreadsheet for submittals).

Below is a list of activities which include, but are not limited to, what would be expected to be completed by the awarded firm.

### Phase 1:

- Conduct field Investigation of potential DWR site for installation and verify feasibility of DWR practice installation of conceptual site design
  - Coordinate with IDALS and partners to facilitate the initial contacts and financial assistance options with prospective landowner(s).
- Prepare survey notes showing that a thorough and detailed site survey has been completed. Survey notes shall
  be prepared in accordance with NRCS Technical Release 62, Engineering Field Handbook, Chapter 1 and/or
  standard industry practice.
- Develop and submit preliminary designs that meet or exceed the respective Natural Resources Conservation
   Service (NRCS) or other applicable conservation practice standards for the appropriate practices that are part of
   the RFP (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/ia/technical/?cid=nrcs142p2\_008147):
- Designs must include:
  - A list of necessary permits required and obtained.
  - Accountability to ensure they meet applicable standards and not negatively impact adjacent field drainage.
  - A note on the drawings stating that the contractor is responsible for contacting lowa One Call at least 48 hours prior to construction.
  - o Practice-related computations and analysis to develop design specifications including, but not limited to:
    - Capacity
    - Hydraulics
    - Performance
    - Materials
  - Written plans and specifications, including sketches and drawings, shall be provided to clients in order to adequately describe the requirements for installation of practice(s), including securing of necessary permits. Actual permits will be secured by landowners or IDALS.
- Develop irrigation designs for prospective DWR sites dependent on irrigation method selected by landowners
- All designs must be submitted to IDALS for approval.
- Construction contracts shall be the responsibility of the individual landowners and/or IDALS or partners involved.

# Phase 2:

- Amend and finalize DWR system design based on input from IDALS and landowner(s).
- Develop and submit final designs that meet or exceed the respective Natural Resources Conservation Service
   (NRCS) or other applicable conservation practice standards for the appropriate practices that are part of the RFP
   (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/ia/technical/?cid=nrcs142p2 008147):
- All designs must be submitted to IDALS for approval.
- Construction contracts shall be the responsibility of the individual landowners and/or IDALS or partners
  involved. Firms will assist by attending pre-bid meetings and answering questions that arise during the bidding
  process.

### Phase 3:

All necessary permits will be secured by the consultant on behalf of the landowner(s) with support from IDALS, if
applicable. Design information developed in previous phases and other assessments necessary to provide
supporting documentation to successfully receive the necessary permits will be completed in this phase. All
necessary permits must be received, and documentation provided to IDALS before proceeding to Phase 5.

#### Phase 4:

• This phase of the project shall be completed in conjunction with the final design unless otherwise specified by IDALS. The survey submitted will be used by IDALS or other partner and included in the easement agreement

with the landowner and the easement holder. The number of acres determined will also be used in the CRP-1 (or other funding) contract. The following is a list of requirements for this survey.

- The survey must comply with the requirements set forth in the Code of Iowa. The landowner/participant name (owner of record) must appear on the plat. The Consultant shall furnish a filed 8-1/2 x 11 or 8-1/2 x 14 size plat with metes and bounds description. Larger plats can be prepared and submitted, but a reduced version must be included.
- 2. Any easement area surveyed will not include road right-of-ways or similar areas.
- 3. If the easement area is not adjacent to a public road, an access route description will only be required when requested by IDALS.
- 4. Permanent markers will be installed at each corner or angle change and every 250 feet on straight runs or every 500 feet on existing fences and adjacent to public roads.
- 5. Above ground witness markers will be installed by each permanent marker. The witness marker will be a 6-foot T-steel post and 4-foot (minimum length) of 2 inch solid PVC pipe slid over the T-steel post. The Consultant will be provided with small boundary signs to be installed on every other post.
- 6. In addition to metes and bounds description, global positioning system coordinates for each corner or angle change in the easement area shall be provided. These coordinates shall be provided in both formats as follows: (1) Latitude and longitude in decimal degree format using WGS 84 datum with the projection identified and (2) UTM NAD 83 Zone 15N Meters coordinate system. These coordinates shall be provided in an Excel spreadsheet. The engineer will also provide a shape file of the final easement to IDALS.
- 7. Unless otherwise designated, Consultant shall meet with a representative of the IDALS, local SWCD, or Wetland Field Specialist and the landowner prior to commencing the survey to ensure that the easement area is properly identified and delineated. The Consultant shall meet with the same parties after completing the survey and complete the post survey meeting certification.

#### Phase 5:

- Construction projects using IDALS financial assistance will be required to follow State of Iowa public bidding procedures. IDALS with input from the Consultant, will establish dates for the public notice publication, as well as dates, times, and locations for the pre-bid meeting and bid opening. IDALS will e-mail the notice to bidders to IDALS's current list of contractors and submit the public notice to the necessary newspapers. IDALS will make the plans and specifications available on its website. Several hard copies will be assembled by the Consultant, including one copy for IDALS. The plan holders list and distribution of the contract bidding documents will also be completed by the Consultant. A representative of the Consultant shall attend the pre-bid meeting. The first portion of the meeting will be held indoors and will include a discussion by the Consultant of the contract requirements and a discussion by the Consultant about the project construction. A site visit will be held immediately afterwards.
- The Consultant will distribute meeting minutes and any contract addenda to the plan holders. The Consultant is
  required to submit an electronic version of their discussion and comments at the pre-bid meeting. The
  Consultant shall also provide any necessary drawings and text that may be needed as part of an addendum.
  Consultant will be responsible for answering questions related to the plans and specifications from contractors
  during the bidding process.

## Phase 6:

- Provide construction oversight for critical aspects of the construction of these practices as determined by IDALS.
  - Pre-construction conference with contractor and applicant.
  - Staking and layout of practice(s) according to design and specifications
  - Pre- and Post-installation inspection of materials used to ensure standards and specifications have been met.
- Notify IDALS and applicant of modifications that deviate from original design.
- Provide as-built documentation:
  - Extent of practice units installed

- Design drawings
- Final quantities
- Provide technical certification that the practices and materials used meet necessary NRCS or other applicable standards and specifications. Complete IDALS-approved form to document technical certification of applied practices.

If any of the phases are proposed to be handled by subcontractors, please indicate in the plans in the proposal. Subcontractor(s) qualifications must be vetted and approved by IDALS in writing.

The selected contractor will be expected to work closely with IDALS, Iowa State University (ISU), and prospective landowners throughout the process.

The submitted proposal shall include a discussion of the firm's capabilities to perform the services described. Each proposal will be evaluated relative to criteria established by IDALS which may include but may not be limited to:

- (1) Sufficiency of professional and technical staff to meet the project schedule and work requirements.
- (2) Performance records for timeliness, quality and project management.
- (3) Specialized expertise.
- (4) Proposed method of accomplishing the desired service.

In summary, the proposal submittals shall include the following information:

- A) Proposal
  - Proposed timeline for completing each of Phases 1-4 in order to meet a reasonable construction bid (Phase 5) date or other key dates provided in the project summary information,
  - Estimated hours per Staff Position for each phase along with total hours for each phase.
- B) Upon selection of a consultant, IDALS will request that the selected consultant provide a full cost proposal within 24 hours of request.
  - Using the spreadsheet supplied by IDALS, provide a breakdown of the total cost for each phase, including personnel costs, equipment costs, mileage, office expenses, and any other miscellaneous expenses.

IDALS reserves the right to negotiate the cost proposal and, if an agreement cannot be reached, to proceed with the next best consultant.

Once selected, the contractor shall enter into a contract with IDALS. The total estimated price shall serve as a not-to-exceed price for the contract. Amendments to the contract may be made as needed, subject to approval by both parties for work outside of the defined scope of work. Services may commence after the contract is fully executed by all parties. All work shall be coordinated with IDALS. The firm agrees to retain all records relating to this project for a period of three years following completion.

IDALS is targeting June 1, 2025 as the start date for this contract, which shall end May 30, 2028. The following dates are anticipated timelines established by IDALS. A firm who submits a proposal agrees to the following completion timelines or is invited to propose alternative, but not substantially different, dates.

Posting to Targeted Small Business site
 RFP Posting/Notification
 Proposals Due
 Notice of Award
 Approved Contract
 Contract Start
 Project orientation meeting
 March 24, 2025
 March 28, 2025
 April 18, 2025
 May 2, 2025
 June 1, 2025
 by June 15, 2025

If construction of the system is done with or without non-IDALS financial assistance, the following will be required after completion of the project the consultant shall submit the following deliverables:

- The engineer of record shall submit a letter of completion and acceptance to IDALS certifying that the project has been completed in general accordance with the plans and specifications and the date that this was completed.
- All copies of field records and reports.
- Meeting minutes for pre-construction meeting and final site meeting with landowner, Wetland Field Specialist (WFS), and IDALS.
- A flash drive or data sharing site that includes a copy of all digital photographs taken of the site during construction.
- An electronic copy (pdf) of a plan sheet highlighting any major changes that were made during construction that vary significantly from the original plan used for bidding.

These documents will be required prior to final invoicing by the Consultant.