# **REQUEST FOR QUALIFICATIONS (RFQ)**

# For the Preparation of a Preliminary Engineering Report (PER)

## For A Project Seeking Funding from One or More of the Following Agencies:

USDA - Rural Development Indian Community Development Block Grant Program U.S. Dept. Of Commerce - Economic Development Administration

#### **PURPOSE**:

NyE Communities Coalition (NyECC) desires to seek financial assistance from a selected combination of the above listed agencies to provide a resolution for Duckwater, Nevada irrigation system issues. It becomes necessary for the community to have a Preliminary Engineering Report (PER) prepared by a qualified Nevada licensed civil engineer. The community desires to select the best-qualified firm through the Request for Qualifications process to prepare a PER that will provide the appropriate technical information to help the community make important decisions on actions which will best ensure its residents' ability to effectively use existing resources to produce agricultural product, thereby allowing the community to experience stable, orderly growth and economic prosperity.

# **BACKGROUND INFORMATION:**

**Community Location:** Duckwater, Nevada located in the Duckwater Valley, County of Nye at Lat/Lon (DMS) 38° 55′ 55″ N, 115° 42′ 54″ W which is located at Nevada State Route 379, mile marker 16.

**Population:** 151 people living on the reservation as of 2/20/2019 / Approximately 406 tribally enrolled members

Number of households in community: 70 households as of 2/20/2019

**Facility that needs rehabilitation and/or construction:** Agricultural irrigation system: Currently, 1,653 acres are designated as agricultural land assignments and the existing irrigation system was originally intended to serve all acreage. However, due to degradation and design issues, it only provides water to about 50-60% of the land assignments. The Tribe has been conveyed an additional 31,229 acres of land by the Nevada Nations Land Act, signed into law by President Obama on October 7, 2016. Most of that land is believed to be non-irrigable, but some may be utilized in an agricultural manner. This new land is not irrigated by the existing system.

The following issues need to be addressed in the PER:

- 1. The Shoshone Tribe on the Duckwater Reservation utilizes spring generated groundwater (Big Warm Spring, Little Warm Spring and other surface discharge) that feeds an existing irrigation system. The collection of that groundwater needs to be maximized into the system.
- 2. The existing irrigation system has degraded significantly and needs to be redesigned and repaired/replaced to return it to a fully operational status. Potential hazardous material issues may exist in the current system, e.g. asbestos concrete piping. Those issues need to be addressed in the repair/replace plan. The use of solar, or wind-powered pumping

should be investigated. If necessary, an 'abandon-in-place' plan can be considered for old elements.

- 3. The amount of the 'new' 31,229 acres that can be utilized for agriculture needs to be determined.
- 4. The existing irrigation system needs to be expanded to feed the 'new' irrigable land as much as possible.
- 5. The Tribe has 100% water rights for several wells located just off the North-West corner of the 'new' land area. Utilization of this water for irrigation in the North-West corner of the new land needs to be investigated. Water for that region of the new land cannot be delivered by the main irrigation system fed by Big and Little Warm Springs. If applicable, an independent irrigation system needs to be designed for that NW area of the reservation.
- 6. The Tribe is required by law to allow a minimum amount of groundwater to flow off the reservation onto adjacent non-reservation land. Currently, a significantly larger amount than this minimum flows off the reservation and is lost. Various water catchment systems, e.g. berms, reservoirs and catchment basins need to be investigated to find way to catch excess before it exits the reservation.
- 7. Any new water catchment system needs to have transport method designed to feed water back to top of irrigation system. Solar or wind driven pumping should be investigated for this issue.
- 8. Any methods to maximize effectiveness of irrigation water on reservation should be investigated. Automation should be considered.
- 9. The possibility of pre-fertilizing the irrigation water as it enters the system should be investigated.
- 10. Possibility of having a Hydrologic Modeling and Aquifer Study done of underground valley water flow needs to be investigated. One question to be ideally addressed by study would be to determine why some cold-water wells on reservation have changed to warm.
- 11. A water flow/storage data collection system needs to be implemented across the two potential irrigation systems (North-West and Main) to allow for assessment and adjustment.
- 12. The potential for utilizing excess irrigation water for a 'water-bottling' operation should be investigated.
- 13. Multiple water-borne species existing on the reservation are listed as endangered or are at risk for being listed as endangered. All work done on the PER needs to take those species and their current or anticipated future status into account.

**Recent Growth Trend:** In last six (6) months, ten (10) people have left the community

**Community Economic Base:** The economic base is derived from the federal, state and private funding to the tribal government and its programs.

**Official Designation:** The Duckwater Shoshone Tribe, a federally recognized, self-governance compacted tribe with current funding agreements in place with B.I.A. and I.H.S.

#### **SCOPE OF WORK:**

The scope of work will consist of the preparation of a Preliminary Engineering Report (PER) to address the agricultural irrigation needs of the community. The PER should thoroughly examine all reasonable alternatives, as well as consider options which will improve cost effectiveness in the construction and operation of needed facilities, e.g. sharing of services with other utilities. In addition, the scope of work includes preparation of an Environmental Report examining environmental factors associated with the various alternatives examined in the PER. Guidance for completing the PER can be found in the RUS Bulletin 1780-2. That guide is to be used as appropriate for work involving agriculture irrigation.

RUS Bulletin 1780-2 may be accessed via the internet at <a href="https://www.rd.usda.gov/publications/regulations-guidelines/bulletins/water-and-environmental">https://www.rd.usda.gov/publications/regulations-guidelines/bulletins/water-and-environmental</a> .

Procedures for assessing environmental impacts are described in RD Instruction 1970.

The RD Instruction 1970 Environmental Regulations may be accessed via the internet at: <u>https://www.rd.usda.gov/publications/regulations-guidelines/instructions</u> (scroll down to Part 1970: Environmental)

The (engineer/architect) will provide the NyE Communities Coalition (NyECC) with a PDF version of the final PER. The selected firm must provide a completed PER within 90 to 120 days, depending on complexity of the PER, to be negotiated by community and selected firm.

### **PROJECT AREA**:

The primary project area is the Duckwater Reservation, Nevada located in the Duckwater Valley, County of Nye at Lat/Lon (DMS) 38° 55′ 55″ N, 115° 42′ 54″ W which is located at Nevada State Route 379, mile marker 16.

### **PROJECT CONTACT:**

Stacy Smith, Chief Executive Officer NyE Communities Coalition (NyECC) 1020 East Wilson Road Pahrump, Nevada 89048 Phone: (775) 727-9970 Fax: (775) 537-2767 stacy@nyecc.org

### SUBMITTALS OF QUALIFICATIONS:

Qualifications must be submitted to Stacy Smith – CEO NyECC by 5:00 p.m. on Monday, 2 March 2020, at (Mail: 1020 East Wilson Road Pahrump, Nevada 89048; Physical: Same; email: stacy@nyecc.org) . The proposal shall be in PDF format and sent in an email with both PDF file and email marked clearly, "Response to RFQ for Duckwater Irrigation Project". Applicants must have Dun & Bradstreet Universal Numbering System assigned number clearly identified with the firms contact information within the list of qualifications.

## **EVALUATION CRITERIA:**

All Qualifications will be evaluated on the following criteria:

(a) Technical qualifications of the engineering/architectural firm

(b) Technical experience with similar projects - demonstrate by providing contacts (name and phone number) & dates of all similar projects completed in small rural communities in the last 5 years.

(c) Ability to complete the PER in timely manner - demonstrate by providing a listing of key staff (engineering, community relations, financial expertise, and construction management) who will complete this project, along with brief resumes or evidence of their experience in working with similar projects.

(d) Experience with listed and/or multiple funding sources - demonstrate by providing list of projects completed within the last five years that utilize one or more of the above listed funding sources.

(e) Expertise in designing facilities that reflect modest design, ease of operational requirements, and economical cost of operation.

(f) Evidence of firm's ability to provide a complete and thorough PER that complies with the RUS Bulletin 1780-2.

(g) Evidence of firm's ability to design a project appropriate for the community's size, financial strength, and ability to repay the proposed indebtedness and operational costs.

(h) Evidence of firm's expertise in employing in their designs state-of-the-art irrigation methods, controls and power sources.

(i) Evidence of firm's familiarity and established relationships with entities possessing a vested interest in this project.

### **SELECTION PROCESS:**

Out of all Qualifications received by the community, it is expected that the three best will be selected for final consideration.

The engineering/architectural firms under consideration will be notified as to time, date, and location of these interviews in order for the community's/entities selection committee to ask specific questions to each candidate and evaluate their responses.

**NOTE**: Prospective engineering firms are advised that no obligation or commitments are incurred by the community/entity in announcing this Request for Qualifications. It is the intention that Nye and Esmerelda Communities Coalition (NyECC), after appropriate evaluations and interviews, will select the best qualified engineering firm and enter into an Agreement for such services to complete a PER. The Agreement for Engineering Services to

prepare the PER or Agreement for Architectural Services will utilize the prescribed format of the funding agency/agencies.

At the option of the community/entity, the selection process may include the future irrigation system design, inspection, and construction management in addition to the completion of the PER.