1. **SCOPE OF WORK**

Provide for the operating efficiency of irrigation pump and water well systems repair and maintenance to include but not limited to variable frequency drives, pump control panels, motors, valves, flow meters, and all associated components. Services shall include but are not limited to maintenance, repair, parts, material, travel time, and inspections.

Contractor shall obtain licenses, permits, and fees (including inspection fees) as required to comply with all laws, ordinances, regulations, and code requirements applicable to complete projects. This is an indefinite quantity contract with no guarantee services will be required. County does not guarantee a minimum or maximum dollar amount to be expended. All work performed shall be in strict compliance with the latest codes, standards, and practices and in accordance with Federal, State, and Local laws.

1. **CONTRACTOR RESPONSIBILITIES**

Contractor shall:

* 1. Be licensed and fully competent in all aspects of water well and irrigation pump systems and their components in a safe manner.
	2. Employ only skilled, qualified workers.
	3. Be responsible for keeping the work area clean and the disposal of hazardous waste materials resulting from work performed.
	4. Be responsible for inspections, penalties, fees, or fines for projects.
	5. Be responsible for damages caused as the result of completing projects.
	6. Furnish all tools and equipment (cranes, lift trucks, boom trucks, cherry pickers, etc.) to complete projects timely.
	7. Change orders shall not be issued for incidental items or tasks that should have been reasonably construed to be part of the project by Contractor.
1. **COUNTY RESPONSIBILITIES**

County will:

* 1. Reserve the right to add or remove services in conjunction with County’s needs.
	2. Reserve the right to inspect materials, workmanship, and equipment for each project prior to final acceptance.
	3. Reserve the right to obtain competitive pricing for substantiated repairs due to abuse, misuse, or acts of God and shall be responsible for such repairs.
1. **INVOICING**
	1. Invoices shall be made in quarterly payments of the annually quoted Contract price.
	2. Inspection reports with the invoice shall be emailed in PDF format to the Office of Parks & Trails for payment.
2. **PRELIMINARY INSPECTIONS**
	1. Within sixty (60) days after issuance of the Notice to Proceed, Contractor shall inspect all equipment that is part of the Contract.
		1. These inspections will be used to determine the current condition of the existing systems.
	2. An inspection report for each location and system shall be provided to County.
		1. Inspection report shall include a list of deficiencies of the system and shall be accompanied by a quote to repair the listed deficiencies bringing each system to fully functional condition.
	3. The quote shall contain the cost for labor and parts derived from Contract pricing and include justification for replacement parts to be considered.
		1. If quote is accepted by County, Contractor shall maintain the newly repaired and updated system in the same condition throughout Contract term.
		2. If quote is not accepted by County, Contractor shall maintain the system in the same condition as when the inspection was completed.
		3. If any of the recommendations from the initial inspection fails, County will be responsible for the cost based on Contract pricing to repair the system.
3. **QUARTERLY INSPECTIONS AND PREVENTATIVE MAINTENANCE**
	1. Inspections and preventative maintenance service shall be performed at each location every annual quarter.
	2. Inspections shall include the following:
		1. Verify performance of all wells/pumps to include static pressure, dynamic flow, and pressure not only by design, but also according to manufacturer’s pump curve.
		2. Test pump control panel and verify that all connections and surge protection components are functioning properly.
		3. Verify all motor amperages at full load are within specifications.
		4. Check and document running amps on well pumps and compare to manufacturer’s specifications.
		5. Confirm pump flow and pressure performance.
		6. Test flow meter and pressure transducer for proper operation.
		7. Open and inspect all motor and variable frequency drive connections to prevent catastrophic failure from heated connections.
		8. Inspect wiring and connections for signs of overheating and deterioration.
		9. Inspect electrical conduit verifying all connections are secure.
		10. Service/grease pump motor bearings and check/maintain oil level (if applicable).
		11. Inspect and test pressure tanks for items such as cracks, structural damage, leaks, corrosion, and verify proper air pressure according to pump start pressures.
		12. Check condition of pump seal/packing.
		13. Inspect piping condition.
		14. Inspect systems for rust/corrosion, perform rust remediation and apply paint to station components as needed.
		15. Check for any visible water leaks.
		16. Check well for unusual operation conditions such as noise in operations, failure to start normally, excessive sparking, smells, or vibrations.
		17. Verify and record appropriate pump cycle rate.
		18. Check and test pressure relief valves for proper functionality including start and stop pressure settings.
		19. Verify pump controls and gauges are functioning properly.
		20. Exercise all well system valves. Document the valve condition.
		21. Check pipe fittings for tightness.
		22. Inspect, clean, and repair interior and exterior of control panels and disconnects. Panels shall be cleaned and carefully compressed with air. Note on report if pests are present.
		23. All well circuit breakers shall be inspected for physical damage, burning, overheating, proper alignment, and general condition.
		24. All well circuit breakers shall be mechanically exercised and lubricated.
		25. Tighten all electrical connections and apply antioxidant grease as appropriate.
		26. Provide data service to allow remote access by County (only on systems with variable frequency drives).
		27. Provide 24-hour remote station monitoring and automated system alerts / warnings via e-mail. (Only on systems with variable frequency drives).
		28. Inspection reports shall note any deficiencies found in the systems, repairs made, and photo documentation of deficiency repair.
4. **SERVICE REQUESTS AND QUOTES**
	1. Response time for service requests shall not exceed four (24) hours from notification.
	2. Contractor shall notify the County of needed repairs and shall provide a quote with costs derived from Contract pricing.
	3. Quotes shall be for a 100% turnkey project and shall include but not limited to all required labor, material, equipment, plans, engineering, surveys, travel time, fuel, permitting and local and state inspections.
5. **WARRANTY REQUIREMENTS**
	1. Contractor shall promptly correct all apparent and latent deficiencies in work, or any work that fails to conform to the specifications at the contractor’s expense.
	2. Corrections shall be made within three (3) calendar days after notification.

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