



City of Pflugerville

Legislation Text

File #: 2019-7620, **Version:** 1

Approving a Work Authorization Number 2019-1 as a supplement to the professional services agreement for the Water Treatment Plant Engineering Services with DCS Engineering, LLC. in the amount of \$77,760.00 for professional services associated with the Zebra Mussel Chemical Control System.

City Staff approved and executed a five year professional services agreement with DCS Engineering, LLC. on January 20, 2015 for consulting engineering services for the Water Treatment Plant. The agreement included a process for Work Authorization requests for City approval in five service areas:

- A. Engineering Consultation on Plant Operations
- B. Regulatory Permitting
- C. Water Treatment Plant Planning Services and Capital Improvement Program (CIP)

Development

- D. Design Services
- E. Construction Management Services

This Work Authorization is for Design and Construction Management services. The professional services agreement for the Water Treatment Plant will terminate on January 19, 2020.

In 2017, zebra mussels were detected in Lake Travis and the Highland Lakes. In September 2018, routine cleaning and inspection by divers at the City's Colorado River Intake Pumping Station (downstream of Austin) found significant growth of zebra mussels inside the facility. Based on the size of the mussels, their presence at the Colorado River Intake Pumping Station has been about one year. In January 2019, inspection by divers found intermittent zebra mussel growth on the inside of the Lake Intake Tower at Lake Pflugerville and significant growth of zebra mussels inside the 48-inch pipe spanning to the Lake Pumping Station, which feeds water from Lake Pflugerville to the Water Treatment Plant.

DCS and City Staff met on September 19, 2018 to discuss zebra mussel background information and to develop an outline for the proposed plan to combat the pending infestation of the City's water supply facilities and/or Lake Pflugerville. Three phases of the control strategy were identified from that meeting as outlined below. Phase I of the control strategy has been completed. Per that strategy the most effective and common method to combat zebra mussels in the City's raw water infrastructure is by implementing a 20% sodium permanganate dosing system at the City's Colorado River Intake Pumping Station and Lake Pflugerville Intake Tower to the Lake Pflugerville Intake Pumping Station. DCS met with the City Council and Mayor on March 12, 2019, and shortly after, the City requested a proposal to move forward with Phase II and III, as described below.

1. Phase I - Assessment and Evaluation:

This phase included the preliminary investigative steps to determine the extent of the zebra mussel infestation, desk top studies for control options, immediate control methods to implement, and associated field assessments. This phase was completed in previous work efforts.

2. Phase II - Preliminary Engineering:
This phase includes the development of a conceptual design, capital improvement project costs, annual Operation and maintenance costs, and associated analysis of the potential options to implement at each of the City's public infrastructure and amenity facilities to be impacted by the zebra mussels. Tasks will also include pros/cons, and implementation schedules. This scope of work is included in this proposal.
3. Phase III- Final Design, Bidding, and Construction:
This phase includes the development of plans and specifications for project(s) to address the options selected in Phase II to protect each component of the City's infrastructure; protect each component of Lake Pflugerville as a public amenity; and operational strategies/standard operating procedures. Tasks are anticipated to include final design, bidding, and construction phase services . This scope of work is included in this proposal.

Prior City Council Action

N/A

Deadline for City Council Action

Action is requested on June 11, 2019

Funding Expected: Revenue ☐ Expenditure ☒ N/A ☐

Budgeted Item: Yes ☐ No ☒ N/A ☐

Amount: \$77,760.00

1295 Form Required? Yes ☒ No ☐

Legal Review Required: N/A ☐ Required ☒ Date Completed: 06/03/2019

Supporting documents attached:

Work Authorization 2019-1

Recommended Action

Approve Work Authorization Number 2019-1 as a supplement to the professional services agreement for Water Treatment Plant Engineering Services with DCS Engineering, LLC. in the amount of \$77,760.00 for professional services associated with the Zebra Mussel Chemical Control System.