

CITY OF SANTA ROSA  
BOARD OF PUBLIC UTILITIES

TO: BOARD OF PUBLIC UTILITIES  
FROM: JASON ROBERTS  
ASSOCIATE CIVIL ENGINEER – ASSET MANAGEMENT  
WATER DEPARTMENT  
SUBJECT: PROFESSIONAL SERVICES AGREEMENT AMENDMENT  
APPROVAL – PROFESSIONAL ENGINEERING SERVICES WITH  
BLACK AND VEATCH FOR THE 2019 WATER SYSTEM  
RELIABILITY STUDY

AGENDA ACTION: MOTION

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RECOMMENDATION

It is recommended by the Water Department that the Board of Public Utilities, by motion, approve an amendment to the Professional Services Agreement (PSA) with Black and Veatch Corporation to provide additional professional services for the 2019 Water System Reliability Study, including evaluation of A Place to Play Emergency Well Alternatives and Ongoing Modeling Services with a total contract amount not to exceed \$606,834.

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EXECUTIVE SUMMARY

This proposed action will allow the research, engineering studies, and preparation of a feasibility study and recommendations for converting of A Place to Play test boring into a potable water source for the City in light of recently discovered water quality concerns, and provide for ongoing modeling services to support water system CIP development.

BACKGROUND

On March 21, 2019, Black and Veatch Corporation was engaged under a Professional Services Agreement (PSA) to perform a City-wide Water System Reliability Study in the wake of the October 2017 Tubbs Fire. The study required creating a model of the City's water system to investigate deficiencies in the system and develop alternatives to improve fire flow capabilities, increase resilience to power outages, and evaluate operational flexibilities to enhance water delivery between pressure zones during a fire.

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On June 17, 2019, the Water Department entered into Amendment 1 to the PSA, approved by the Assistant City Manager, in the amount of \$44,256.00 to perform a modeling analysis and develop a Technical Memorandum identifying fire flow deficiencies and proposed water system improvements within the downtown area in support of the Downtown Station Area Specific Plan (DSASP).

PRIOR BOARD OF PUBLIC UTILITIES REVIEW

The Board approved, by motion, Professional Services Agreement F001939 with Black and Veatch Corporation on March 21, 2019, to perform a Water System Reliability Study in the wake of the October 2017 Tubbs Fire.

ANALYSIS

In 2006, a test well was constructed at A Place to Play park to collect data about the groundwater basin. At that time, groundwater was sampled to assess compliance with Title 22 drinking water requirements. The water met all primary drinking water standards for health and safety, and met all secondary drinking water standards for taste and odor, with the exception of manganese. In 2016, a full inspection of the physical condition of the test well was completed, the well was reconditioned, and a subsequent pumping test determined an optimal pumping rate to be 475 gallons per minute (gpm) or 0.68 million gallons per day (mgd), similar to test results in 2006. Again, the groundwater was sampled to assess compliance with Title 22 drinking water requirements. The water met all primary drinking water standards for health and safety, and met all secondary drinking water standards for taste and odor, with the exception of manganese and iron. Data from the 2016 well pump test was used to prepare a design for converting the test well to an emergency groundwater well and installing the necessary infrastructure to complete the conversion. On May 7, 2020, the Board of Public Utilities awarded a construction contract for well development to Team Ghilloti, Inc.. Following cleaning and rehabilitation of the well, Water Quality staff again sampled for full Title 22 drinking water requirements. Test results showed slight exceedance of the primary standard for health and safety for arsenic and exceedences of the secondary standards for taste and odor for iron and manganese. The construction contract was suspended while staff began assessing appropriate next steps to address the presence of arsenic above allowable levels.

The scope of work included with this second amendment will provide engineering services to evaluate the feasibility of a range of options for meeting water quality standards and determine options for incorporating this water into the system as either an emergency supply source or production use.

This amendment will also authorize Black and Veatch to perform ongoing modeling services for a period of 5 years. Ongoing modeling services will support planning and

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decision-making in CIP water projects, and provide staff with the ability to analyze alternative engineering solutions.

FISCAL IMPACT

Adequate funds are available and were appropriated in prior fiscal years.

ENVIRONMENTAL IMPACT

This action is exempt from the California Environmental Quality Act (CEQA) because it is not a project which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, pursuant to CEQA Guideline section 15378.

BOARD/COMMISSION/COMMITTEE REVIEW AND RECOMMENDATIONS

Not applicable.

ATTACHMENTS

- Attachment 1 – Second Amendment to Professional Services Agreement

CONTACT

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