

CITY OF SANTA ROSA
BOARD OF PUBLIC UTILITIES

TO: BOARD OF PUBLIC UTILITIES

FROM: MARK KASRAIE, PE, SUPERVISING ENGINEER
CAPITAL PROJECTS ENGINEERING

SUBJECT: CONSIDERATION OF THE NOVEMBER 2020 ADDENDUM TO
THE INCREMENTAL RECYCLED WATER PROGRAM
ENVIRONMENTAL IMPACT REPORT AND APPROVAL OF
PROJECT WORK ORDER AMENDMENT NO. 2 FOR
ENGINEERING SERVICES DURING CONSTRUCTION AND
PROFESSIONAL SERVICES AGREEMENT FOR
CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES
RELATED TO THE LAGUNA TREATMENT PLANT
DISINFECTION IMPROVEMENTS PROJECT

AGENDA ACTION: RESOLUTION

RECOMMENDATION

It is recommended by the Transportation and Public Works Department, and the Water Department, that the Board of Public Utilities, by resolution:

1. consider the November 2020 Addendum together with the Incremental Recycled Water Program Environmental Impact Report (IRWP Program EIR) and other information in the administrative record for the Project prior to acting upon or approving the Project,
2. find and determine that the November 2020 Addendum to the IRWP Program EIR is the appropriate CEQA documentation for the improvements, and include it in the IRWP Program EIR by incorporation (CEQA Guidelines, 14 Code.Cal.Reg. § 15164(c)),
3. find and determine that the improvements are within the scope of the IRWP Program EIR, and that the improvements were covered in the IRWP Program EIR for the purposes of CEQA (CEQA Guidelines, 14 Code.Cal.Reg. § 15168, subd. (c)(4)),
4. adopt the Mitigation Monitoring Program (MMP), attached as Exhibit B to the resolution, in accordance with Public Resources Code §§ 21081.6 subdivision (a)(1),
5. direct staff to take those actions as it deems necessary or appropriate to implement the MMP, and

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6. approve the Laguna Treatment Plant Disinfection and Diversion Improvements Project.

Next, it is recommended by the Transportation and Public Works Department, the Water Department, and the Contract Review Subcommittee that the Board of Public Utilities, by resolution:

1. approve Amendment No. 2 to Project Work Order No. A010014-2011-09 under the Master Professional Services Agreement with Carollo Engineers, Inc. of Walnut Creek, CA to provide Professional Engineering Services During Construction for the Laguna Treatment Plant Disinfection Improvements Project in the amount of \$1,981,132, and approve a \$150,000 contingency, for a total Amendment No. 2 amount of \$2,131,132, and a total contract amount not to exceed \$6,519,386, and
2. approve a Professional Services Agreement with Psomas of Walnut Creek, CA to provide construction management and inspection services for the Laguna Treatment Plant Disinfection Improvements Project in the amount of \$4,077,950, and approve a \$393,796 contingency, for a total contract amount not to exceed \$4,471,746.

EXECUTIVE SUMMARY

This staff report includes two proposed resolutions. The first resolution will consider a November 2020 addendum to the Incremental Recycled Water Program Environmental Impact Report (IRWP Program EIR), will find and determine that the improvements of the Laguna Treatment Plant Disinfection and Diversion Improvements Project (Project) are within the scope of the IRWP Program EIR, will adopt the Mitigation Monitoring Program (MMP), and will approve the project.

The second resolution will approve Amendment No. 2 to Project Work Order No. A010014-2011-09 under the Master Professional Services Agreement with Carollo Engineers to provide engineering services during construction for the Project, and will approve a Professional Services Agreement with Psomas to provide construction management and inspection services for the Project.

BACKGROUND

Ultraviolet Light (UV) is the primary disinfection process for the Laguna Treatment Plant (LTP). In 2012, the Division of Drinking Water (DDW) re-evaluated and subsequently re-rated the disinfection system capacity, resulting in deficiency under certain wet weather flow and/or low UV transmittance conditions. Additionally, the existing UV equipment

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was commissioned in 1998 and is at the end of its useful life. These conditions triggered the need to evaluate disinfection equipment options to ensure that LTP has adequate disinfection capacity up to 67 million gallons per day. Through various analyses, the City determined that replacing the existing UV system with a new UV system is the most feasible approach to address the capacity and reliability deficiencies.

In 2013, a preliminary analysis reviewed the feasibility of four alternative concepts for upgrading the disinfection system capacity. These alternatives included adding additional UV channel(s), replacing the existing UV system with new UV equipment, augmenting the existing UV system with pasteurization, and augmenting the existing UV system with ozone.

In 2014, over 20 City staff members and 6 different consultants deliberated over a multi-day disinfection charrette. This charrette evaluated a total of 19 alternatives, each of which were adapted from lessons learned in previous analyses. Alternatives included a “no-action” alternative, ozone, sodium hypochlorite, ultraviolet light, and various combinations thereof.

In 2016, the City awarded a \$2,803,599 Project Work Order (PWO) with Carollo Engineers, Inc of Walnut Creek to provide professional engineering services for the design of new UV and effluent diversion systems.

In 2017, the City staff and the engineering consultant were directed to pause the design process and perform a value engineering (VE) study. The VE study further evaluated the economic feasibility of disinfection system alternatives and reviewed the system design parameters. Through the VE effort and subsequent analyses, staff and the design consultants collectively determined that the most feasible alternative was to construct a full-capacity UV disinfection system to ensure reliability, operational simplicity, treatment consistency, and compliance with Title 22 Recycled Water requirements.

The Tubbs Fire in October 2017 required substantial City resources, which impacted the delivery schedule of this project by over one year. Because of project delays and changes to the design resulting from the additional analyses, the City executed PWO Amendment 1.

Currently, the City is approaching the construction phase of the project and needs to execute two contracts associated with construction. However, before executing said contracts, the Board of Public Utilities must first consider the November 2020

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Addendum to the IRWP Program EIR. See Analysis Section for discussion of environmental process and proposed contracts.

PRIOR BOARD OF PUBLIC UTILITIES REVIEW

On January 7, 2016, the Board approved a Project Work Order under the Master Professional Services Agreement with Carollo Engineers, Inc., to provide Professional Engineering Services for the LTP Disinfection Improvements Project.

On November 17, 2016, the Board approved the original Memorandum of Understanding with Calgon Carbon, guaranteeing an equipment purchase price of \$4,656,500.00 for a period of 18 months.

On August 16, 2018, staff conducted a staff briefing with the Board to provide an update on the Laguna Treatment Plant Disinfection Improvements Project. The staff briefing covered the status of the Project, associated activities, and anticipated schedules.

On November 15, 2018, staff conducted a staff briefing with the Board to provide an update on the LTP Disinfection Improvements Project. The staff briefing covered the status of the Project, associated activities, and anticipated schedules.

On July 18, 2019, the Board conducted a study session for an update to the LTP Disinfection Improvements Project. Staff reviewed the history of the Project, the current status of the Project, and the anticipated future activities and schedules.

On August 15, 2019, the Board approved Project Work Order Amendment No. 1 under the Master Professional Services Agreement with Carollo Engineers, Inc., to provide professional engineering services for the LTP Disinfection Improvements Project.

On August 6, 2020, the Board approved an Amended and Restated Memorandum of Understanding with Calgon Carbon, of Coraopolis, PA (Supplier), guaranteeing an equipment purchase price of \$5,634,700.00 for a period of 22 months, approved a Professional Services Agreement with the Supplier for design support services in the amount not to exceed \$86,000.00, and authorized the Santa Rosa Water Director to negotiate and execute an amendment to the MOU that will allow an extension to the price guarantee beyond the established 22 months, as feasible.

ANALYSIS

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The first proposed action will consider this November 2020 Addendum to the Incremental Recycled Water Program Environmental Impact Report (IRWP Program EIR), will find and determine that the improvements of the Laguna Treatment Plant Disinfection and Diversion Improvements Project (Project) are within the scope of the IRWP Program EIR, will adopt the Mitigation Monitoring Program (MMP), and will approve the Project.

On November 6, 2003, the Board of Public Utilities certified the Final EIR for the IRWP. Pursuant to CEQA Guidelines Section 15164(a), the lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.

CEQA Guidelines Section 15162(a), states that when an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

- (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:
 - (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

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(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents

The replacement of the UV disinfection facilities was previously evaluated within the Laguna Plant Upgrade Component of the IRWP Program EIR, while other improvements proposed as part of the project, including diversion facilities, stormwater facilities, and a new electrical load center, were not.

The Disinfection & Diversion Improvements have been evaluated for site-specific environmental impacts and have been found to be covered by, and within the scope of, the IRWP Program EIR. Therefore, to satisfy these requirements of the California Environmental Quality Act (CEQA), an addendum to the IRWP Program EIR has been prepared to address minor changes to the Laguna Plant Upgrade component including adding those proposed facilities that were not previously evaluated, as allowed by CEQA Guidelines Section 15162 and 15164. Mitigation measures in the Program EIR that are applicable to the Disinfection and Diversion Improvements have been updated to reflect current regulations and best practices and a project-specific Mitigation Monitoring Program (MMP) has been prepared.

CEQA Guidelines Section 15164 (c) states that an addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration. The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project. Therefore, the BPU will consider the Addendum and Checklist CEQA Document and will adopt the MMP.

The second action is two professional service contracts associated with the construction phase of the Project.

The proposed PWO Amendment No. 2 with Carollo Engineers is for engineering services during construction, which consist of design engineer review of construction submittals, requests for information, and change orders. The contract will also include system commissioning and start-up services, development of operation and maintenance manuals, and completion of record plan drawings. The amendment is not to exceed \$2,131,132, which is consistent with City staff estimates and industry standard for engineering services during construction at less than 5% of the estimated construction cost.

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In pursuit of a contract for construction management and inspection services, a public and competitive Request for Proposals (RFP) was released on August 17, 2020. Three (3) proposals were received on September 18, 2020. A review board consisting of the Deputy Director of Subregional Operations, a Wastewater Treatment Superintendent, two Supervising Engineers, and a Civil Engineering Technician evaluated the proposals. Proposals were evaluated based on the following selection criteria: responsiveness to the RFP, qualifications and experience of the project team, demonstrated technical abilities, availability and plan to perform scope of work, and reference projects.

Upon completion of the evaluations, the review board conferred and made a unanimous recommendation to conduct interviews with two short-listed firms. The review board conducted interviews, contacted all references, and conferred once more to discuss a final recommendation. It was ultimately recommended to select Psomas of Walnut Creek, CA. Psomas demonstrated the greatest qualifications and experience related to construction management and inspection of UV projects, provided the greatest time commitment to this Project, and had the best references and recommendations. Additionally, Psomas demonstrated the greatest experience with the construction claims process.

This proposed construction management and inspection PSA with Psomas includes document administration, daily site inspections, construction meetings, and inspection reports. The contract fee is not to exceed \$4,471,746, which is consistent with City staff estimates and represents approximately 9.6% of the anticipated construction cost. The selection process was consistent with Council Policy 600-01 – Selection of Professional Services.

Construction completion is anticipated at the end of year 2023.

FISCAL IMPACT

Consideration of the November 2020 Addendum to the IRWP Program EIR does not have a fiscal impact on the Project.

The proposed Amendment No. 2 to the PWO with Carollo Engineers for design engineering services during construction includes a scope fee of \$1,981,132 and a \$150,000 contingency for a total a not to exceed amount of \$2,131,132. If Amendment No. 2 is approved, the total PWO contract amount will be \$6,519,386.

The proposed professional services agreement with Psomas to provide construction

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management and inspection services includes a scope fee of \$4,077,950 and a \$393,796 contingency for a total contract amount not to exceed \$4,471,746.

Approval of the two contracts has no additional impact on the budget. Funds for this project were appropriated this fiscal year, 2020/2021 Capital Improvement Program budget.

Approximately \$47 million will be required for the construction project, which includes the UV equipment costs and installation. This funding will be established through a combination of budget transfers from existing appropriated budgets, new budget appropriations from the 1631 Subregional Wastewater Facilities Fund, and a planned bond issuance. The total project cost is estimated at approximately \$63,500,000, which includes engineering design services, equipment cost, construction, construction management and inspection, City staff labor and overhead, and regulatory and administrative fees.

ENVIRONMENTAL IMPACT

On November 6, 2003, the Board of Public Utilities certified the Final Environmental Impact Report (EIR) for the Incremental Recycled Water Program (IRWP).

The replacement of the UV disinfection facilities has been evaluated within the Laguna Plant Upgrade Component of the IRWP Program EIR, while other improvements proposed as part of the project, including diversion facilities, stormwater facilities, and a new electrical load center, were not.

To satisfy the requirements of the California Environmental Quality Act (CEQA), an addendum to the IRWP Program EIR has been prepared to address minor changes to the Laguna Plant Upgrade component including adding those proposed facilities that were not previously evaluated, as allowed by CEQA Guidelines Section 15162 and 15164. The BPU will consider the Addendum and Checklist CEQA Document and will adopt the MMP.

BOARD/COMMISSION/COMMITTEE REVIEW AND RECOMMENDATIONS

On July 29, 2019, the Contract Review Subcommittee reviewed and recommended approval of the proposed Project Work Order Amendment No. 1 with Carollo Engineers, Inc., to provide professional engineering services for the LTP Disinfection Improvements Project.

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On February 13, 2020, staff provided an update to the Subregional Technical Advisory Committee on the LTP Disinfection Improvements Project. Staff reviewed the history of the Project, the current status of the Project, and the anticipated schedule.

On July 28, 2020, the Contract Review Subcommittee reviewed and recommended approval of the Amended MOU and second PSA with Calgon Carbon, and requested that City staff also explore options that would allow for an extension of the pricing terms in the Amended and Restated MOU beyond the 22-month price guarantee.

On October 20, 2020, the Contract Review Subcommittee reviewed and recommended approval of the Design Project Work Order Amendment No. 2 for engineering services during construction and the Professional Services Agreement for construction management and inspection.

ATTACHMENTS

- Attachment 1 – Project Work Order Amendment 2 with Carollo Engineers for Engineering Services During Construction
- Attachment 2 – Professional Services Agreement with Psomas for Construction Management and Inspection

CONTACT

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