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DATE: December 5, 2022

TO: Honorable Mayor and Members of the City Council through City Manager

FROM: Dan Herrera, PE, Deputy Director of Operations, Public Works & Utilities  
Gina Benedetti-Petnic, PE, Assistant Director, PW&U  
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SUBJECT: Resolution Accepting Completion of the SRJC 12-Inch Water Main and Maria – Leghorn Recycled Water Main Extension Projects by Michael Paul Company, and Finding This Action is Within the Petaluma Water Recycling Expansion Program EIR State Clearinghouse #2007052146

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### **RECOMMENDATION**

It is recommended that the City Council adopt the attached Resolution accepting completion of the SRJC 12-Inch Water Main and Maria – Leghorn Recycled Water Main Extension Projects by Michael Paul Company, and finding this action is within the Petaluma Water Recycling Expansion Program EIR State Clearinghouse #2007052146

### **BACKGROUND**

#### **SRJC 12-Inch Water Main**

City staff evaluated the water system infrastructure and identified a critical resiliency deficiency in the Zone 4 Water Distribution System, which delivers potable water to areas of the city between Sonoma Mountain Parkway and the Urban Growth Boundary. The design of the City's water distribution system is such that the network of pipes creates various loops and connections to ensure the delivery of potable water to all residents in the event of an emergency shutdown. A critical water main is located in the vicinity of the Santa Rosa Junior College (SRJC)-Petaluma campus, which connects the northern and southern portions of the Zone 4 distribution system via a single pipeline. An additional 12-inch water main was installed for the project within an open space behind the campus and within the City's existing easement, creating a resilient pipeline and looped system. This new pipeline will ensure continued delivery during any emergency which requires either the shutdown of the water main in the area or potable water storage tanks connected to the water distribution zone. This new water main was also necessary for City staff to perform work on a subsequent Capital Improvement Program (CIP) project to address the maintenance and recoating of the Hardin and Manor water storage tanks which are currently under construction.

The SRJC 12-Inch Water Main project installed a new 12-inch water main behind the SRJC Petaluma Campus within the City's existing easement, adjacent to the existing recycled water main. The pipeline was connected to the existing water main distribution system at Tulare Street and Lennox Drive. The construction of the pipeline used trenchless installation methods below the existing Capri Creek to satisfy environmental requirements.

#### Maria-Leghorn Recycled Water System Extension

The Maria-Leghorn Recycled Water Main Extension Project is a project that offsets potable water demand with recycled water and is fully funded by the Water Capital Fund. This project continues the expansion of the recycled water system to urban areas and connects the recycled water system, created as part of the Recycled Water System Expansion -Sonoma Mountain Alignment project, to the Maria Drive Loop Recycled Water Main Extension installed in the summer of 2020.

The City of Petaluma delivers tertiary treated recycled water produced by the Ellis Creek Water Recycling Facility (ECWRF) to urban uses within the city limits to irrigate parks, open spaces, golf courses, and schools, and outside the city limits to agricultural customers. The opening of the ECWRF in 2009 allowed the City to produce tertiary recycled water, which is suitable for non-potable uses such as irrigation. On November 16, 2015, a Recycled Water System Update was presented to the City Council, highlighting the master plan for the expansion of the City's urban and agricultural recycled water systems. The Urban and Agricultural Recycled Water Master Plan identified specific project alignments and phases to expand the City's recycled water system. The Maria Drive Loop pipeline was identified in Phase 1 of this update and is included in the original Water Recycling Expansion Program.

The Maria-Leghorn Recycled Water Main Extension Project installed a new 12-inch recycled water main approximately 1,700 feet long within open space adjacent to Capri Creek and connected the existing recycled water system at Leghorn Park off Sonoma Mountain Parkway to the recycled water main within Maria Drive. The project also extended the recycled water main down Tuxedo Court and Yarberry Drive to deliver recycled water to city parks. The recycled water main extension has the potential to offset up to 14 million gallons of potable water per year from multiple city parks including Bond Park, Meadow View Park, McDowell Meadows Park, and schools such as Meadow Elementary School. Ultimately, the Maria Loop recycled water main can potentially offset up to 30 million gallons of potable water at ultimate buildout. The project also included irrigation conversions at City parks to accept recycled water.

The two projects, SRJC 12-Inch Water Main and Maria-Leghorn Water Main Extension Projects were bid as one construction project but are two separate CIP projects. These projects were combined to provide more cost-effective pricing due to economies of scale as both require the same very specialized construction method.

## **DISCUSSION**

On June 21, 2021, by Resolution No. 2021-099 N.C.S., the City Council awarded the SRJC 12-Inch Water Main and Maria–Leghorn Recycled Water Main Extension Projects to Michael Paul Company. A link to the staff report presented at the June 21, 2021, City Council meeting is provided here:

<http://xlfforms.cp.internal/WebLink/DocView.aspx?id=428027&dbid=0&repo=Petaluma>

The final total construction cost for the project is \$1,268,441.97, which includes seven change orders for \$462,911.97, for the installation of 520 linear feet of 12-inch high-density polyethylene (HDPE) recycled water piping using trenchless methods, repair of irrigation piping, installation of two recycled water fire hydrants and appurtenances, additional finished paving, installation of an 8-inch water main, isolation valve components and water services, and installation of recycled water system components for conversion of irrigation systems to recycled water at multiple city parks. Additionally, the variance between estimated and actual quantities of supplies added up to a decrease of \$1,125.00.

There are no disputed claims, and the project was completed satisfactorily without any significant incidents.

## **PUBLIC OUTREACH**

Public outreach included presenting the project on the City’s tentative agenda document on Monday, June 7, 2021, which was a publicly noticed meeting, and to the City Council during the authorization for the award of the construction contract, which was approved on June 21, 2021, with Resolution 2021-099 N.C.S.

Public outreach regarding the construction of the project also included notification to all stakeholders within the project area before construction, including mailers to property owner/tenant/utility customers, social media notifications including Facebook and NextDoor, and frequent updates to the City’s website for project information. See the following webpages: <https://cityofpetaluma.org/santa-rosa-junior-college-water-main/> and <https://cityofpetaluma.org/leghorn-maria/>.

Additionally, this item appeared on the tentative agenda for the November 21, City Council meeting.

## **COUNCIL GOAL ALIGNMENT**

The proposed action supports the following Council Goals and Workplan Items:

### **OUR ENVIRONMENTAL LEGACY**

Workplan Item #53 – “Continue to expand recycled water services to support local agriculture and groundwater and surface water resources.”

Workplan Item #55 – “Make the City’s water distribution system more resilient by repairing and replacing leaking water pipes and implementing the Water/Sewer Master Plan.”

Workplan Item #70 – “Continue focus on water conservation and urban recycled water expansion.”

## **CLIMATE ACTION/SUSTAINABILITY EFFORTS**

The SRJC 12-inch Water Main project supports the above goals, repairs, and upgrades existing sewer and water infrastructure. This project also increases the reliability of the water system and reduces pressure loss during firefighting efforts, which are crucial to keeping the City’s residents safe.

The Maria-Leghorn Recycled Water Main Expansion project is an essential project to expand the City’s recycled water system to offset potable water demand. Supplying recycled water to city parks, schools, and other users will reduce the city’s water demand and enhance water conservation efforts, which is essential during times of drought.

## **ENVIRONMENTAL REVIEW**

Environmental review for the SRJC-12 Inch Water Main was determined on June 21, 2021, during the award of the project, to be categorically exempt pursuant to California Environmental Quality Act (CEQA) and Title 14, the California Code of Regulations (“CEQA” Guidelines”), Section 15302 and Section 15303, because the Project consisted of replacement and reconstruction of existing systems and/or minor new construction involving negligible or no expansion of capacity. Also, City staff has selected construction methods that avoided sensitive areas.

The Maria-Leghorn Recycled Water Improvements Project satisfies CEQA analysis as the project is located within the Water Recycling Expansion Program (WREP) Recycled Water Service Area Boundary and subsequent addenda and includes installation of recycled water pipeline segments and use of recycled water as evaluated in the program-level review in the WREP Environmental Impact Report, Petaluma Water Recycling Expansion Program EIR State Clearinghouse #2007052146.

## **FINANCIAL IMPACTS**

The total approved adjusted project budget for the SRJC 12-Inch Water Main Project (C67502123) and Maria-Leghorn Recycled Water Main Extension Project (C66501834) is \$1,991,000. The project budget was funded using Water Capital funds. The following shows the approved CIP budget and a breakdown of the project costs.

<b>Itemized Budget Breakdown</b>	<b>Approved Project Budget</b>	<b>Maria-Leghorn Recycled Water Actual Costs</b>	<b>SRJC 12-Inch Water Main Actual Costs</b>	<b>Total Combined Actual Costs</b>
<b>Uses</b>				
Planning/ Environmental	\$ 25,000	\$ 11,700	\$ 5,000	\$ 16,700
Land & Easements	\$ 5,000	\$ 1,400	-	\$ 1,400
Design	\$ 80,000	\$ 25,700	\$ 14,700	\$ 40,400
Legal Services	\$ 6,000	-	-	-
Administration	\$ 6,000	-	-	-
Construction Contract	<b>\$ 806,655*</b>	\$793,400	\$436,000	\$1,229,400
Construction Management	\$ 150,000	\$ 87,900	\$ 45,500	\$ 133,400
Contingency	\$ 895,345	-	-	-
CIP Overhead	\$ 17,000	\$ 29,000	\$ 11,600	\$ 40,600
<b>TOTAL</b>	<b>\$ 1,991,000</b>	<b>\$949,100</b>	<b>\$512,800</b>	<b>\$1,461,900</b>

**\*Construction Contract – Low Bid Amount + Bid Alternative 2**

<b>Funding Sources</b>	<b>Adjusted</b>
	<b>Project Budget</b>
Water Capital	\$ 1,991,000

Any remaining funds will be returned to their respective funding sources.

### **ALTERNATIVES**

The project was completed satisfactorily by the contractor. Not accepting completion would likely lead to conflicts with the contractor due to a breach of contract.

### **ATTACHMENTS**

1. Resolution
2. Location Map
3. Project Closeout