CITY OF BANNING
STAFF REPORT

TO:	**CITY COUNCIL**
FROM:	**Robert Fisher, Acting City Manager**
PREPARED BY:	**Shah Nawaz, Deputy Water/Wastewater Director** **Art Vela, Director of Public Works**
MEETING DATE:	**February 25, 2025**
SUBJECT:	**Consideration of Resolution 2025-30, Awarding a Progressive Design-Build Agreement for Phase 1 to AECOM Lyles JV for Project No. 2022-01W "Wastewater Treatment Plant and Recycled Water Upgrades" in the Amount of $3,998,627, and Approving a 10% Contingency for a Total Project Budget of $4,398,490**

RECOMMENDATION:

Adopt Resolution 2025-30.

BACKGROUND:

Wastewater Treatment Plant

The City of Banning Wastewater Treatment Plant (WWTP), also known as the Water Reclamation Facility, provides for the collection, treatment, and disposal of municipal sewage. The WWTP dates back to 1925 and began to see significant additions beginning in 1950's and the last major renovation occurring in the early 2000's. Currently, the WWTP treatment process consists of preliminary, primary, secondary, disinfection (currently not in use), and sludge disposal.

The WWTP has a design treatment capacity of 3.6 million gallons per day (MGD) and typical average daily discharges range from 2.0 MGD to 2.1 MGD into 10 unlined evaporation/percolation ponds. The treated effluent then percolates into the groundwater of the San Gorgonio Hydraulic Unit. Groundwater from this basin is used for municipal and industrial applications.

In 2007, the City contracted Parsons to evaluate treatment technologies for a 1.5 MGD water reclamation facility (WRF) for the production of recycled water. Treatment alternatives investigated included oxidation ditch (OD), conventional activated sludge (CAS), and membrane bioreactor (MBR). The purpose of the evaluation was to determine the best option to comply with future Title 22 requirements for the beneficial reuse of recycled water. Parsons determined an MBR system was the best treatment option and completed a 90% design package of the WRF. Unfortunately, the project never reached 100% design and was terminated for various reasons.

2016 Regional Water Quality Control Board Order

On June 30, 2016, the California Regional Water Quality Control Board, Colorado River Basin Region (RWQCB) adopted Board Order R7-2016-0015 (Board Order), which describes the Waste Discharge Requirements (WDRs) and other terms and conditions of operation for the City's WWTP. The Board Order requires the WWTP to remove constituents that present the greatest risk to groundwater quality such as nitrogen, coliforms, and total dissolved solids (TDS).

According to the United States Environmental Protection Agency (US EPA), the maximum contaminant level (MCL) for Nitrate as Nitrogen (TN) is 10 mg/L. Currently, the average TN concentration in the WWTP's effluent is 29 mg-N/L, well above the future TN limit of 10 mg-N/L specified in the Board Order. As a result, the Board Order required the City to conduct a nitrogen removal analysis and to summarize the findings in a technical report that includes a tentative work plan and time schedule for the installation and implementation of nitrogen removal treatment alternatives. The final technical report (Nitrogen Removal Feasibility Study), attached hereto, was completed and submitted to the RWQCB by the due date of June 30, 2020.

The City has had plans for the development of a Title 22 compliant recycled water source dating back to the early 2000's and for this reason, the scope of the Nitrogen Removal Feasibility Study was expanded beyond complying with TN limits and included discharge requirements related to the use of recycled water.

Additionally, the Board Order requires that the City submit a plan for capacity improvements to the RWQCB once the WWTP reaches 80% of its design capacity, or 2.88 MGD, which is fast approaching due to increased development activity within the City.

2018 Integrated Master Plan

In 2016 the Public Works Department set out to develop new master plans for the City's water, wastewater and future recycled water systems, which were previously updated in 2006. The final document resulted in a combined plan titled the Integrated Master Plan (IMP). The objective of the IMP was to develop capital improvement plans that would guide the City in the planning and development of water, wastewater and recycled water system facilities to meet system performance for existing customers as well as to support anticipated demands through the City's buildout.

The IMP projected that the City would reach 80% capacity by 2025 (although could be later if development slows down) and have a buildout wastewater flow of 6.35 MGD.

2020 UWMP

On June 8, 2021 the City Council approved Resolution 2021-50, adopting the 2020 Urban Water Management Plan (UWMP). The UWMP is a planning document with a 20-year planning horizon that assess the water supply and water demand for the City. As part of the assessment all current water supplies and in the future water supplies are include as part of the City's water supply portfolio, which includes the use of "recycled water" to supplement potable demands (i.e. irrigation demands) and for groundwater recharge.

Owner Advisor

On December 13, 2022, City Council adopted Resolution 2022-14UA, awarding a Professional Services Agreement to N2W Engineering ("N2W") to provide Owner Advisor ("OA") services for the Wastewater Treatment Plant Improvement project.

N2W has assisted the City in further review of available technologies and confirmed through a Feasibility Report that an MBR system would be the best solution for the City. Additionally, they prepared two grant applications for the City: (1) Water Recycling Funding Program Planning grant application which led to an award of $300,000 and (2) WaterSMART: Title XVI WIIN Act Water Reclamation and Reuse Program for which the City received a Notice of Funding Opportunity No. R23AS00464 (attached) in the amount of $16,194,576.

N2W also assisted in the preparation of a scope of work for a Request for Qualifications that led to the shortlisting of 3 design-build entities that prepared and submitted proposals for Phase 1 (Design) of the WWTP Upgrade Project.

Selection of Progressive Design Build Entity

On March 22, 2024, the City issued a Request for qualification (RFQ) seeking prospective Progressive Desing-Build (PDB) entities for the project. Statement of Qualifications (SOQs) were received from PDB entities on May 3, 2024. The City evaluated responsive SOQs in accordance with the RFQ; shortly thereafter, the City shortlisted the following three (3) PDB entities:

1. AECOM Lyles JV
2. Innovative Construction Solutions
3. PERC Water Corporation

Only these three (3) PDB entities were eligible to receive the Request for Proposal (RFP) which was issued on August 9, 2024. These PDB entities were requested to advance the design and provide detailed input as to the design and construction of the Project, including benefits to the Project's reliability, ease and extent of upgrades and expansion and interconnection, and sustainability. Award of the Progressive Design-Build Contract was made utilizing a best value selection process and consisted of an evaluation of multiple factors as listed below in this RFP:

- Project Team, Experience, and Approach (25 Points)
- Technical Approach (25 Points)
- Construction & Startup Process (20 Points)
- Phase 1 – Cost and Fee Schedule (10 Points)
- Interview (20 Points)

An evaluation committee consisting of two City Employees and two Owner's Advisors was assembled to score each proposal based on the evaluation factors listed above. The resulting evaluation scores are as follows:

PDB Entity	**Score (out of 100)**
AECOM Lyles JV	82.44
Innovative Construction Solutions	81.24
PERC Water Corporation	77.75

As a result, staff recommends awarding the Progressive Design-Build Agreement ("Agreement") for Phase 1 of the Wastewater Treatment Plant and Recycled Water Upgrades project to AECOM Lyles JV in the amount of $3,998,627.

If awarded, staff anticipates the Phase 1 (Design) scope of work to commence in early March 2025 through April 2026.

Phase 1 Services
This Phase includes all the planning, engineering, and permitting to prepare a complete design-to-develop a Guaranteed Maximum Price (GMP) and a construction schedule for Phase 2.

It shall be noted that at the completion of Phase 1 scope of work and upon agreement on the GMP by the City, AECOM Lyles JV will proceed with Phase 2 (Construction) for equipment procurement, construction, engineering design support during construction, construction management, commissioning and acceptance testing. Following the completion of Phase 1, the current estimated duration for Phase 2 is approximately another 2 years.

JUSTIFICATION:

The Wastewater Treatment Plant and Recycled Water Upgrades project includes the design and construction of major complex treatment technologies that will allow the City to comply with impending wastewater discharge requirements and to produce recycled water. A PDB approach is a collaborative delivery method that involves the design-builder throughout the design and construction process resulting in a project that will meet the City's needs for the best value.

AECOM Lyles JV was ranked the highest following the RFP.

FISCAL IMPACT:

The recommended Progressive Design-Build Agreement for Phase 1 of the Wastewater Treatment Plant and Recycled Water Upgrades project to AECOM Lyles JV is in the amount of $3,998,627. Staff requests a 10% contingency in the amount of $399,862 for any unforeseen changes in scope of work or conditions. The total project budget for Phase 1, including the Agreement and contingency, is for an amount of $4,398,490.

The current adopted budget for Fiscal Year 2024/2025 includes the required funding for the Agreement, which will be funded as follows:

- Account No. 681 -8000- 454.95-12 : $1,000,000
- Account No. 682-8050-454.95-10: $3,398,490

ALTERNATIVES:

Do not approve Resolution 2025-30 and provide alternative direction to staff.

BUDGETED?:

Yes

CONTRACT/AGREEMENT:

Yes

ATTACHMENTS:

1. Resolution 2025-30, WWTP Design Build award.docx
2. Banning DB 545 Agreement.pdf
3. Resolution No. 2021-050 (For Reference Purposes Only).pdf
4. Resolution No. 2022-14UA (For Refrence Purposes Only).pdf
5. RWQCB Order R7-2016-0015.pdf
6. Banning Nitrogen Removal Feasibility Study FINAL.pdf
7. BOR Notice of Funding Opportunity No. R23AS00464.pdf
8. AECOM-Lyles Proposal for RFP-24-074.pdf
9. AECOM-Lyles Pricing Proposal - Supporting Information.pdf
10. Banning DB 535 General Conditions.pdf