



STAFF REPORT
6/12/2024

TO: Honorable Mayor and City Council Members

FROM: Cástulo R. Estrada, Utilities Manager

SUBJECT: Proposal to Perform Well Site Evaluation, Provide Final Recommendation and Prepare Technical Specifications and Bid Package for the Drilling, Construction and Development of Well #20; CIP W-46, for a Total Cost of \$50,600.00

STAFF RECOMMENDATION:

Authorize the Task Order Proposal to Perform Well Site Evaluation, Provide Final Recommendation and Prepare Technical Specifications and Bid Package for the Drilling, Construction and Development of Well #20; CIP W-46, for a Total Cost of \$50,600.00

BACKGROUND:

The City of Coachella and its Coachella Water Authority (CWA) is responsible for the water service to its residents and customers within its service boundary. The water division of the Utilities Department serves a population of approximately 45,000. Existing land uses consists primarily of single and multi-family homes, but also includes commercial and industrial zones. Full buildout of the City's sphere of influence (SOI), for a total service area of approximately 53 square miles is not anticipated until sometime after 2050.

CWA's current water supply source is groundwater from the Indio Sub-basin produced from CWA owned and operated wells. There are approximately 9,100 (meter) connections to the system.

CWA's existing water system consists of different pressure zones, groundwater wells, storage reservoirs, booster pumping stations, and distribution facilities. The current water system is divided into two pressure zones, the Low Zone and the 150 Zone. The Low Zone Area is generally south of 48th Avenue, bounded by Van Buren on the west, the Coachella Valley Storm Channel on the east, and 54th Avenue on the south. The Low Zone provides water service to the majority of the City and as the City continues to grow, the Low Zone will extend further east. The 150 Zone service area is generally north of 48th Avenue and supplies primarily commercial and light industrial users along the Interstate 10 freeway corridor.

CWA has one principal source of water supply, local groundwater pumped from the CWA-owned wells. There are currently six wells within the City's distribution system. The total pumping capacity of active wells is approximately 11,759 gallons per minute (gpm) or 16.5 million gallons per day (MGD).

There are three storage reservoirs within the City, the 1.5 million gallon (MG) Dillion Road Reservoir, the 3.6 MG Mecca Reservoir, and the 5.4 MG Well 18 Reservoir. CWA has a total reservoir storage capacity of approximately 10.5 MG; of which, approximately 1.5 MG lies within the 150 Zone.

CWA operates two booster pumping stations, the Mecca Reservoir booster pump station (Well 12 Booster) and the Well 18 Reservoir booster pump station (Well 18 Booster). The Well 12 Booster supplies the Low Zone and takes suction from the Mecca Reservoir, and the Well 18 Booster supplies both the 150 Zone and Low Zone, and takes suction from the Well 18 Reservoir.

CWA's distribution system network consists of approximately 120 miles of pipeline, which range from 4- inches to 36-inches in diameter. It is estimated that a majority of pipes in the City's water distribution system network were installed between the year 1940 and year 1990. The older pipes reside in the southerly section of the lower zone, and the newer pipes are in the northerly section. Asbestos cement (AC) is the most common pipeline material in the City, according to operations staff; with the remaining pipelines being either polyvinyl chloride (PVC) or ductile iron (DI) and lined steel.

DISCUSSION/ANALYSIS:

The public water system has a firm capacity of 9,436 gallons per minute, and in early 2023 staff calculated that the surplus firm capacity of the system was approximately 947 gallons per minute. Since then the City has approved several mayor projects that have reduced the surplus significantly. With the approval of the Tripoli Apartments, Sevilla II (Pyramid Ranch), the expansion at 29 Palms and remaining lots at Rancho Mariposa staff calculates the surplus is now approximately 316 gallons per minute.

There are also several significant proposed projects that will quickly encumber the remaining surplus and exceed the available supply. It is for this reason that staff recommends the planning for the construction of a new well #20 to increase the capacity of the system. A new well can cost \$ 2-3 million and take up 2 years to design and construct.

FISCAL IMPACT:

This project is included in the Fiscal Year 2024-25 Water Capital Improvement Budget, W-46 in the amount of \$320,000.00.

ATTACHMENTS:

1. Dudek Proposal
2. Dudek On-call Services PSA