



AGENDA MEMORANDUM

Action Item for the City Council Meeting of April 28, 2026

DATE: April 28, 2026

TO: Peter Zanoni, City Manager

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Professional Services Contract Amendment
Mary Rhodes Pipeline Phase I Condition Assessment

CAPTION:

Motion authorizing Amendment No. 3 to a professional services contract with HDR, Inc., of Corpus Christi, Texas, to provide additional support services for the Mary Rhodes Pipeline Phase I Condition Assessment project, in an amount of \$474,896.00, for a total contract value not to exceed \$3,055,157.00, with FY 2026 funding available from the Raw Water Capital Fund.

SUMMARY:

This motion authorizes the approval of Amendment No. 3 to a professional services contract for Evangeline integration coordination services, pump station capacity analysis, pressure exceedance investigation, and additional support for the Mary Rhodes Pipeline Phase I Condition Assessment project. The project provides condition assessment planning, data collection, and external and internal investigation of the Mary Rhodes Pipeline Phase I.

BACKGROUND AND PURPOSE:

The City of Corpus Christi owns and operates the Mary Rhodes Pipeline (MRP) to deliver raw water from the Colorado River and Lake Texana to the O.N. Stevens Water Treatment Plant (ONSWTP). The City has a contract with the Lavaca Navidad River Authority (LNRA) to purchase water from Lake Texana. The MRP Phase I construction was completed in 1998 and serves as a critical water supply line that provides approximately 70 MGD under normal operating conditions. The 64-inch diameter bar-wrapped pipe supply line spans 101 miles from Lake Texana in Edna, Texas to the ONSWTP. The MRP has two booster pump stations, located in Bloomington and

Woodsboro, to assist with high flow pumping conditions. The pipeline has four different pressure ratings (100, 125, 150, and 175 psi) installed at varying locations along the alignment.

The Mary Rhodes Pipeline (MRP) Phase I Condition Assessment project was originally established to conduct a comprehensive condition assessment of the water transmission main. The initial scope of services was multifaceted, beginning with visual and aerial inspections that utilized drone surveys and on-site assessments of air relief valves and access points. It also included internal assessments via acoustic tools and pressure data loggers, alongside extensive external field surveys ranging from electromagnetic conductivity and soil analysis to stray current investigations.

Amendment No. 1 was executed to address specific hydraulic and emergency requirements. This amendment provided initial engineering support for hydraulic analysis to facilitate the integration of Evangeline groundwater into the existing conveyance system. Furthermore, it authorized an emergency internal assessment to investigate a critical leak in the 72-inch diameter section of the MRP to ensure the continued integrity of the transmission line.

Amendment No. 2 focused on construction-related support and fiscal management. This amendment provided ongoing engineering services during the installation of supplementary air release valves across the pipeline. Additionally, it served to restore the budget for the final condition assessment report, which had been previously reallocated to manage the urgent requirements of the air release valve installation tasks.

The current action, Amendment No. 3, is required to coordinate the integration of the Evangeline groundwater source into the MRP Phase I pipeline, perform a comprehensive capacity analysis of the MRP pump stations, and provide a detailed assessment of pressure exceedance areas along the pipeline alignment. This amendment also provides additional engineering support to assist with ongoing MRP Phase I system analysis and operational coordination.

The HDR engineering team will review MRP hydraulic conditions, evaluate potential pump station modifications, explore the possibility of constructing a new pump station at the Evangeline property, and recommend pumping strategies to support efficient conveyance of 24 MGD additional flow from the Evangeline groundwater supply program to the ONSWTP. Water storage requirements will be updated for the balancing tanks to support MRP flows up to 100 MGD.

The subconsultant, Insight Water, will perform an internal condition assessment using an advanced tool with sonar and pressure sensors to more precisely locate potential debris, blockages, and air pockets suspected of causing pipeline pressure exceedances between the LNRA Pump Station and the Bloomington Pump Station. Potential obstructions causing decreased pipeline conveyance capacity may include sediment, biofilm, invertebrates, construction materials, debris, or pipe damage.

Further assessment of the MRP is necessary to evaluate the condition and capacity of the pipeline under various operational scenarios, including the addition of flows from groundwater sources. The assessment will provide findings and recommendations to support additional water flow through the system, improve pipeline conveyance efficiency, extend the useful life of the pipeline, and reduce maintenance costs by implementing proactive measures to protect pipeline integrity.

PROJECT TIMELINE:

2026 – 2027
May – May
Engineering Assessment and Evaluation (Amendment No. 3)

Projected schedule reflects City Council award on April 28, 2026, with anticipated assessment completion in May 2027.

ALTERNATIVES:

Not awarding the contract amendment for professional services to HDR, Inc. will delay the proposed evaluation, which staff have identified as necessary for the future operation of this critical transmission main. Not addressing potential failures in the conveyance system may affect raw water supply to the O.N. Stevens Water Treatment Plant.

FISCAL IMPACT:

The fiscal impact for FY 2026 for Amendment No. 3 is an amount of \$474,896.00, for a total contract value not to exceed \$3,055,157.00, with funding available through the Raw Water Capital Fund.

FUNDING DETAIL:

Fund: RWSpplyDvChgCIP (Fund 4481)
Department: Water (45)
Organization: Grants & Capital Projects Funds (89)
Project: Mary Rhodes 1 Condition Assessment (Project No. 23027)
Account: Outside Consultants (550950)
Activity: 23027
Amount: \$474,896.00

RECOMMENDATION:

Staff recommend approval of the professional services contract amendment with HDR, Inc. in the amount of \$474,896.00 for a total contract value not to exceed \$3,055,157.00 for the Mary Rhodes Pipeline Phase I Condition Assessment project.

LIST OF SUPPORTING DOCUMENTS:

Location & Vicinity Maps
CIP Page
Contract
Presentation
COF