

This Agenda is posted pursuant to Chapter 551, Texas Government Code

**Matters to Come Before a Meeting of the Board of Directors
of Tarrant Regional Water District**

To Be Held the 13th Day of December 2022 at 9:00 a.m.

**Front Doors to the Main Admin Building at 800 East Northside Drive Will Open to
the Public at 8:30am and Close Fifteen (15) Minutes After the Meeting Adjourns**

**TRWD Board Room
800 East Northside Drive
Fort Worth, Texas 76102**

**PLEASE BE ADVISED THAT A QUORUM OF THE BOARD OF DIRECTORS OF TRWD
WILL CONVENE ON THE ABOVE DATE AND TIME FOR THE PURPOSE OF
CONSIDERING AND ACTING UPON THE MATTERS SET FORTH IN THIS AGENDA.
THE LINK TO VIEW AND LISTEN TO THE MEETING VIA INTERNET IS
<HTTPS://WWW.TRWD.COM/BOARDVIDEOS>. A RECORDING OF THE MEETING
WILL ALSO BE AVAILABLE AT <HTTPS://WWW.TRWD.COM/BOARDVIDEOS>.**

- 1. Pledges of Allegiance**
- 2. Public Comment**

Citizens may present public comment at this time, limited to a total time of three (3) minutes per speaker, unless the speaker addresses the Board through a translator, in which case the limit is a total time of six (6) minutes. If citizens wish to address the Board in person, each proposed speaker must have completed and submitted a speaker card prior to the commencement of the meeting, identifying any agenda item number(s) and topic(s) the speaker wishes to address with the Board. If citizens wish to address the Board virtually, each proposed speaker must have contacted Mr. Chad Lorange of TRWD - by telephone at (817) 720-4367 or by email at chad.lorange@trwd.com - by no later than 3:00 p.m. on Monday, December 12, 2022, identifying any agenda item number(s) and topic(s) the speaker wishes to address with the Board. In such event, the speaker will be provided with a dial-in number to address the Board. By law, the Board may not deliberate, debate, or take action on public comment but may place the item on a future agenda.

- 3. Consider Adoption of Resolution Honoring James Warren Lane - Dan Buhman, General Manager**
- 4. Consider Approval of the Minutes from the Meeting Held on November 15, 2022**

5. **Consider Approval of Resolution Regarding the Investment Policy and Strategies for the Tarrant Regional Water District - Sandy Newby, Chief Financial Officer**
6. **Consider Approval of Secondary Depository Services Contract with Plains Capital - Sandy Newby, Chief Financial Officer**
7. **Consider Board Appointments for Tax Increment Financing Districts - Linda Christie, Government Affairs Director**
8. **Consider Approval of Contract with Accenture LLP for an Enterprise Resource Planning Needs Assessment - Travis Bird, Director of Information Services**
9. **Consider Approval of Contract with Freese and Nichols, Inc. to Take Over Groundwater Treatment System Operation and Maintenance Support for Luminant - Woody Frossard, Program Director, Central City Flood Control Project**
10. **Consider Approval of Contract with HDR, Inc. for Engineering Services for Pipeline Design for the Cedar Creek Wetlands Project - Jason Gehrig, Infrastructure Engineering Director**
11. **Consider Approval of Second Amendment to the Handley Generating Station 1971 Water Supply Contract with Constellation Handley Power, LLC - Zachary Huff, Water Resources Engineering Director**
12. **Consider Approval of Contract with Plummer Associates, Inc. for CE-QUAL-W2 Reservoir Model Development for Eagle Mountain Lake - Darrel Andrews, Environmental Division Assistant Director**
13. **Consider Approval of Purchase from Thompson Group for Replacement Pipe Segments for the Richland-Chambers Pipeline - Darrell Beason, Chief Operations Officer**
14. **Consider Approval of Contract with United Site Services for Portable Restrooms - Darrell Beason, Chief Operations Officer**
15. **Staff Updates**
 - **Excellence in Financial Reporting Award Presentation - Sandy Newby, Chief Financial Officer**
 - **Transparency Star Update - Sandy Newby, Chief Financial Officer**
 - **Exflow Permit Update - Woody Frossard, Environmental Director**
 - **Water Resources Update - Rachel Ickert, Chief Water Resources Officer**

16. Executive Session under Texas Government Code:

Section 551.071 of the Texas Government Code, for Private Consultation with its Attorney about Pending or Contemplated Litigation or on a Matter in which the Duty of the Attorney to the Governmental Body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas Clearly Conflicts with this Chapter, Including Discussion of Legal Aspects of Board Vacancy; and

Section 551.074 of the Texas Government Code Regarding Personnel Matters related to Board Vacancy

- 17. Discussion of Mid-Term Vacancy on TRWD Board of Directors and Potential Action to Address Same - Stephen Tatum, General Counsel**
- 18. Consider Election of New Board Secretary - Stephen Tatum, General Counsel**
- 19. Future Agenda Items**
- 20. Schedule Next Board Meeting**
- 21. Adjourn**

TARRANT REGIONAL WATER DISTRICT

AGENDA ITEM 3

DATE: December 13, 2022

SUBJECT: Consider Adoption of Resolution Honoring James Warren Lane

FUNDING: N/A

RECOMMENDATION:

Management recommends adoption of a proposed resolution honoring James Warren "Jim" Lane.

Submitted By:

Dan Buhman
General Manager

RESOLUTION OF THE BOARD OF DIRECTORS
OF
TARRANT REGIONAL WATER DISTRICT

James Warren Lane

WHEREAS, the Tarrant Regional Water District joins the Fort Worth community in mourning the passing of its long-time board member James Warren “Jim” Lane; and

WHEREAS, Jim Lane passed away on November 27, 2022, after a distinguished career of devotion and service for several community causes; and

WHEREAS, Jim Lane served on the Tarrant Regional Board of Directors for sixteen years from 2006 until his death; and

WHEREAS, Jim Lane championed many Tarrant Regional Water District’s plans and initiatives, from billions of dollars in water supply infrastructure that ensured reliable water supply for over 2 million residents in 11 counties, to over a billion dollars in vital flood control investments to protect our community; and

WHEREAS, Jim Lane played a critical role in the development of the Central City Flood Control Project and Panther Island development plans, and supported Tarrant Regional Water District’s recreation opportunities for the community, including a system of parks and trails to improve the quality of life in Tarrant County; and

WHEREAS, Jim Lane also served on the Fort Worth City Council from 1993 to 2005 and made numerous contributions to the community he loved; and

WHEREAS, Jim Lane was instrumental in many key developments throughout Fort Worth, including a long record of support for the North Side district and the Fort Worth Stockyards; and

WHEREAS, Jim Lane was born on June 9, 1944 in Uvalde Texas and later moved to Fort Worth where he earned his bachelor’s degree from Texas Christian University, and later received his Doctor of Jurisprudence from Baylor Law School in 1966; and

WHEREAS, Jim Lane was admitted to the State Bar of Texas in 1968 and served as a captain in the U.S. Army JAG Corps from 1969 to 1973, before returning to Fort Worth to practice law, and in 1975 opened his own law practice in North Side; and

WHEREAS, Jim Lane is survived by his wife, Janet Lane, and his son, Jake, and a brother, Bill Lane; and

THEREFORE, BE IT RESOLVED, that we, the board of the Tarrant Regional Water District recognize Jim Lane’s sixteen years of service to the District and his many contributions to the communities we serve, and adopt this resolution honoring him. Further, that this resolution be recorded in the permanent minutes of the District and that a copy of this resolution be presented to his wife, Janet, and son, Jake.

Adopted this 13th day of December, 2022

Leah M. King, President

James Hill, Vice President

Marty V. Leonard, Director

Mary Kelleher, Director

MINUTES OF A MEETING OF THE BOARD OF DIRECTORS OF
TARRANT REGIONAL WATER DISTRICT
HELD ON THE 15th DAY OF NOVEMBER 2022 AT 9:00 A.M.

The call of the roll disclosed the presence of the Directors as follows:

Present
Leah King
James Hill
Marty Leonard
Mary Kelleher

(Director Lane was not present at the call of the roll but joined the meeting at 9:16 a.m.)

Also present were Dan Buhman, Alan Thomas, Crystal Alba, Darrell Beason, Frank Beaty, Lisa Cabrera, Steve Christian, Linda Christie, Dustan Compton, Ellie Garcia, Jason Gehrig, Natasha Hill, Zach Hatton, Zachary Huff, Rachel Ickert, Courtney Kelly, Sandy Newby, Stephen Tatum, and Ed Weaver of the Tarrant Regional Water District (District or TRWD).

President King convened the meeting with assurance from management that all requirements of the Texas Open Meetings Act had been met.

1.

All present were given the opportunity to join in reciting the Pledges of Allegiance to the U.S. and Texas flags.

2.

Public comment was received from Jackee Cox, who spoke regarding items 2 – public comment, 3 – minutes from 11/18/2022, 5 – general manager compensation, and 6 – consent agenda. Public comment was received from Doreen Geiger who spoke regarding item 6. Public comment was received from Daniel J. Bennett, who spoke regarding item 2 Public Comments and TIF #9.

3.

Director Hill moved to approve the minutes from the meeting held on October 18, 2022. Director Kelleher seconded the motion, and the votes were 4 in favor, 0 against. Director Lane was absent for the vote. It was accordingly ordered that these minutes be placed in the permanent files of the District.

The Board of Directors recessed for a break from 9:11 a.m. to 9:12 a.m.

4.

The Board next held an Executive Session commencing at 9:12 a.m. under Section 551.071 of the Texas Government Code to Consult with Legal Counsel on a Matter in Which the Duty of Counsel Under the Texas Disciplinary Rules of Professional Conduct Clearly Conflicts with Chapter 551, Texas Government Code, and to Discuss Pending or Contemplated Litigation; Section 551.072 of the Texas Government Code to Deliberate the Purchase, Exchange, Lease or Value of Real Property; and Section 551.074 of the Texas Government Code Regarding Personnel Matters.

Director Jim Lane joined the meeting at 9:16 a.m.

Upon completion of the executive session at 9:53 a.m., the President reopened the meeting.

5.

Thompson & Horton, LLC, engaged by the Board of Directors in September of 2022, completed the annual performance evaluation of Dan Buhman in accordance with section 4.4 of the Board Governance Policy. President King moved to approve an 8% annual pay raise for Dan Buhman, which is commensurate with market adjustments and performance measurements, and is in alignment with adjustments made for other District employees; an annual car allowance of \$12,000; a one-time or divided payment in the

amount of \$4,800 for travel and vehicle expenses to be included in remaining 2022 paychecks; and for the District's Human Resources Department to enter into a letter of agreement with these updated terms to the General Manager compensation package. Funding for this item is included in the Fiscal Year 2023 General Fund. Director Leonard seconded the motion, and the votes were 5 in favor, 0 against.

6.

With the recommendation of management, Director Kelleher moved to approve the consent agenda which includes conservation program support expenditures and operations and maintenance expenditures. Consent agenda items are detailed in the attached spreadsheet. Funding for these items is included in the Fiscal Year 2023 General and Revenue Funds. Director Leonard seconded the motion, and the votes were 4 in favor, 0 against.

**Tarrant Regional Water District
November 15, 2022 Board of Directors Meeting
Consent Agenda**

CONSERVATION PROGRAM SUPPORT EXPENDITURES

Project	Vendor	Amount	Purpose	Budget
1 20-051 Learn and Grow Program	Tarrant County Master Gardener Association	\$56,600 annually; total potential spend \$226,400	Water conservation program services including public presentations, workshops, events and innovative water conservation projects. Original contract term was for one year with three annual renewal options. FY 2023 is the third annual renewal option.	Revenue \$160,000
		Total		Total
		<u>\$56,600 annually</u>		<u>\$160,000</u>

OPERATIONS AND MAINTENANCE EXPENDITURES

Project	Vendor	Amount	Purpose	Budget
2 ITB No. 23-024 Crawler Crane and Operator for for FY23 Pipe Replacement	Davis Crane	\$80,000	Pipeline maintenance for section III of the Ceder Creek Pipeline.	Revenue 80,000
3 Stand-by Generator Preventative Maintenance Contract	KW Power Services	\$77,793	Texas Local Government Code 271 allows TRWD to participate in a Cooperative Purchasing Agreement with North Texas Municipal Water District (NTMWD). KW Power Services has been awarded a Contract by NTMWD that TRWD recommends piggybacking off of for Stand-by Generator Preventative Maintenance - Annual PM, load bank test, quarterly inspections, fuel polishing, repairs.	General, Revenue General Fund: \$390,000; Revenue Fund: \$405,000
4 ITB No. 23-023 Consider Approval of Contract for the construction of a Security Fence at the Bridgeport Spillway	Swift Corporation, LLC	\$124,450	Contract consists of chain link security fence, mow strip, gate, gate operator, concrete approach, bollards and barrier system to provide an expanded security perimeter at the Bridgeport Spillway.	Revenue 240,000
		Total		Total
		<u>\$282,243</u>		<u>\$1,115,000</u>

President King left the meeting at 10:02 a.m. and Vice President Hill assumed chairmanship of the meeting.

7.

With the recommendation of management, Director Leonard moved to approve a contract in an amount not-to-exceed \$129,000 with Pipeline Inspection and Condition Analysis Corporation for the advancement of condition assessment on 72-inch diameter Cedar Creek pipe. This sole source purchase will be made utilizing Local Government Code 252.022. Funding for this item is included in the Fiscal Year 2023 General Fund. Director Kelleher seconded the motion, and the votes were 3 in favor, 0 against, with Director Lane present but not voting.

8.

With the recommendation of management, Director Kelleher moved to approve a contract amendment in the amount of \$137,000 with CDM Smith for preparing Joint Booster Pump Station Number 3 as-built record drawing, and Joint Cedar Creek Lake Pump Station chemical feed and pump control valve supervisory control and data acquisition programming. In addition, the General Manager or his designee is granted authority to execute all documents associated with this contract. Funding for this item is included in the Bond Fund. Director Leonard seconded the motion, and the votes were 3 in favor, 0 against, with Director Lane present but not voting.

9.

With the recommendation of management and outside counsel, Director Kelleher moved to approve the settlement of claims in the Integrated Pipeline Project - Bancroft (865, 920) lawsuit for payment in the sum of \$390,000. Funding for this item is included in the Bond Fund. Director Lane seconded the motion, and the votes were 4 in favor, 0

against.

10.

Staff Updates

- Conservation Programs Update provided by Linda Christie, Government Affairs Director, and Dustan Compton, Conservation Manager
- MWBE Vendor Participation Update provided by Crystal Alba, Diverse Business Specialist
- Water Resources Update provided by Rachel Ickert, Chief Water Resources Officer

11.

There were no future agenda items approved.

12.

The next board meeting was scheduled for December 13, 2022 at 9:00 a.m.

13.

There being no further business before the Board of Directors, the meeting was adjourned.

President

Secretary

TARRANT REGIONAL WATER DISTRICT

AGENDA ITEM 5

DATE: December 13, 2022

SUBJECT: Consider Approval of Resolution Regarding the Investment Policy and Strategies for the Tarrant Regional Water District

FUNDING: N/A

RECOMMENDATION:

Management recommends approval of the Investment Policy and Strategies dated December 13, 2022 and recommends adoption by the Board of Directors.

DISCUSSION:

The Public Funds Investment Act requires the District's Board to adopt a written instrument by rule, order, ordinance or resolution stating that it has reviewed the investment policy and investment strategies and must record any changes made to either. This is to be done annually. The only change in policy from the prior year was the effective date.

Please find attached:

Resolution

Proposed 2023 Investment Policy

This item was reviewed by the Finance Committee on December 7, 2022.

Submitted By:

Sandy Newby
Chief Financial Officer

**RESOLUTION OF THE BOARD OF DIRECTORS
OF
TARRANT REGIONAL WATER DISTRICT
REVIEWING AND RECORDING CHANGES MADE TO THE DISTRICT'S
INVESTMENT POLICY AND INVESTMENT STRATEGIES**

WHEREAS, TARRANT REGIONAL WATER DISTRICT ("the District") is a political subdivision of the State of Texas, created under authority of Article XVI, § 59 of the Texas Constitution; and

WHEREAS, the District as a political subdivision of the State of Texas has legal authority to invest local funds (which are public funds in the custody of the District that are not required by law to be deposited in the State treasury and that the District has legal authority to invest); and

WHEREAS, TEX. GOV'T CODE ANN. § 2256, Subchapter A, requires the District, as a political subdivision, to adopt rules governing the investment of the local funds of the District and to specify the scope of authority of officers and employees of the District that are designated to invest local funds; and

WHEREAS, the District has heretofore adopted a written Investment Policy governing the investment of local funds; and

WHEREAS, the District has heretofore adopted a written Resolution designating the Investment Officers of the District in compliance with the requirement of TEX. GOV'T CODE ANN. § 2256, Subchapter A, authorizing such persons to deposit, withdraw, invest, transfer and manage in any other manner such funds;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF TARRANT REGIONAL WATER DISTRICT that notice is hereby given that the Board of Directors has on this date reviewed the District's investment policy and investment strategies. All changes made to either the District's investment policy or investment strategies following such review are as set forth herein below:

Passed and approved this 13th day of December, 2022.

Leah King, President

ATTEST:

James Hill, Vice President

103 INVESTMENT POLICY

It is the policy of TRWD that after allowing for the anticipated cash flow requirements of the District and giving due consideration to the safety and risk of investments, all available funds shall be invested in conformance with these legal and administrative guidelines, seeing to optimize interest earnings to the maximum extent possible.

Effective cash management is recognized as essential to good fiscal management. Investment interest is a source of revenue to TRWD funds. The District's investment portfolio shall be designed and managed in a manner which maximizes this revenue source, is responsive to public trust, and complies with legal requirements and limitations.

Investments shall be made with the primary objectives of:

- **Safety** and preservation of principal;
- Maintenance of sufficient **liquidity** to meet operating needs;
- **Public trust** from prudent investment activities; and
- Optimization of **interest earnings** on the portfolio.

103.1 Purpose. The purpose of this Investment Policy is to comply with Texas Water Code Chapter 49 and Texas Government Code Chapter 2256, the Public Funds Investment Act, which requires the governing body of a local governmental entity, such as TRWD, to adopt a written investment policy regarding the investment of its funds and funds under its control. The Investment Policy addresses the methods, procedures, and practices that must be exercised to ensure effective and judicious fiscal management of TRWD's funds.

103.2 Scope. This Investment Policy shall govern the investment of all financial assets of TRWD. These funds are accounted for in TRWD's Annual Financial Report and include:

- General Fund;
- Governmental Contingency Fund;
- Capital Projects Fund – TRV;
- Governmental Debt Service Fund;
- Revenue Fund;
- Interest and Redemption Fund;
- Enterprise Contingency Fund;
- Reserve Fund;

- Enterprise Construction Funds;
- Dallas - Revenue Fund;
- Dallas - Interest and Redemption Fund;
- Dallas - Reserve Fund;
- Dallas - Bond Funds; and,
- Any new fund created by the District, unless specifically exempted from this Investment Policy by law.

This Investment Policy shall apply to all transactions involving the financial assets and related activity for all the foregoing funds.

103.3 Investment Objectives. TRWD shall manage and invest its cash with four primary objectives, listed in order of priority: (1) safety; (2) liquidity; (3) public trust; and (4) yield, expressed as optimization of interest earnings. The safety of the principal invested always remains the primary objective. All investments shall be designed and managed in a manner responsive to the public trust and consistent with local, state, and federal law.

TRWD shall maintain a comprehensive cash management program, which includes collection of account receivables, vendor payments in accordance with invoice terms, and prudent investment of available cash. Cash management is defined as the process of managing monies in order to ensure maximum cash availability and maximum earnings on short-term investment of idle cash.

103.3.1 Safety. Safety of principal is the foremost objective of the investment program. Investments shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. The objective will be to mitigate credit and interest rate risk.

Credit Risk. TRWD will minimize credit risk, the risk of loss due to the failure of the issuer or backer of the investment, by:

- Limiting investments to the safest type of investments;
- Researching the financial institutions and broker/dealers with which TRWD will do business; and,
- Diversifying the investment portfolio so that potential losses on individual issuers will be minimized.

Interest Rate Risk. TRWD will minimize the risk that the interest earnings and the market value of investments in the portfolio will fall due to changes in general interest rates, by:

- Structuring the investment portfolio so that investments mature to meet cash requirements for ongoing operations, thereby avoiding the need to liquidate investments prior to maturity; and
- Diversifying maturities and staggering purchase dates to minimize the impact of market movements over time.

103.3.2 Liquidity. The investment portfolio shall remain sufficiently liquid to meet all operating requirements that may be reasonably anticipated. This is accomplished by structuring the portfolio so that investments mature concurrent with cash needs to meet anticipated demands. Because all possible cash demands cannot be anticipated, a portion of the portfolio will be invested in local government investment pools that offer same-day liquidity.

103.3.3 Public Trust. All participants in TRWD's investment process shall seek to act responsibly as custodians of the public trust. Investment officers shall avoid any cash management transaction that might impair public confidence in TRWD's ability to effectively manage the District's financial assets.

103.3.4 Yield (Optimization of Interest Earnings). The investment portfolio shall be designed with the objective of attaining a market rate of return sufficient to meet operating needs, taking into account the investment risk constraints and liquidity needs. Return on investment is of secondary importance compared to the safety and liquidity objectives described above.

103.4 Responsibility and Control.

103.4.1 Delegation of Authority to Investment Officer(s). In accordance with the Public Funds Investment Act and the Water Code, the Board of Directors may designate one or more officers or employees of TRWD to be Investment Officer(s) or may contract with a person to act as an Investment Officer. An Investment Officer is authorized to execute investment transactions on behalf of the District. No person may engage in an investment transaction or the management of District funds except as provided under the terms of this Investment Policy as approved by the Board of Directors. The investment authority granted to the investing officers is effective until rescinded by the Board of Directors.

103.4.2 Quality and Capability of Investment Management. All TRWD's designated investment officers and other investment personnel must receive all required training under Section 49.157 of the Water Code to ensure the quality and capability of investment management. The Board may designate approved training from an independent source for TRWD's investment officers and other investment personnel.

103.4.3 Internal Controls. TRWD's Chief Financial Officer is responsible for establishing and maintaining an internal control structure designed to ensure that the assets of the District are protected from loss; theft; or misuse. The internal control structure shall be designed to provide reasonable assurance that these objectives are met. The concept of reasonable assurance recognizes that (1) the cost of a control should not exceed the benefits likely to be derived; and (2) the valuation of costs and benefits requires estimates and judgments by management.

The internal controls shall address the following points:

- Avoidance of collusion;
- Separation of transaction authority;
- Custodial safekeeping;
- Clear delegation of authority to subordinate staff members; and,
- Written confirmation for investments and wire transfers.

The Chief Financial Officer shall establish a process for annual independent review by an external auditor, consistent with Sections 11.2 and 11.3 of the Board Governance Policies, to assure compliance with policies and procedures.

103.4.4 Standard of Prudence. The standard of prudence to be applied by the Investment Officer(s) shall be the "prudent investor" rule. Investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion, and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived.

In determining whether an Investment Officer has exercised prudence with respect to an investment decision, the determination shall be made taking into consideration:

- The investment of all funds, or funds under TRWD's control, over which the Investment Officer had responsibility rather than a consideration as to the prudence of a single investment.
- Whether the investment decision was consistent with the written, approved investment policy of the District.

103.4.5 Indemnification. The Investment Officer(s), acting in accordance with written procedures and exercising due diligence, shall not be held personally responsible for a specific investment's credit risk or market price changes,

provided that these deviations are timely reported and the appropriate action is taken to control adverse developments.

103.4.6 Ethics and Conflicts of Interest. Investment Officers and employees involved in the investment process shall refrain from personal business activity that would conflict with the proper execution and management of the investment program, or that would impair their ability to make impartial decisions.

Investment Officers shall disclose any material interests in financial institutions with which they conduct business. They shall further disclose any personal financial/investment positions that could be related to the performance of the investment portfolio.

An Investment Officer who has a personal business relationship with an organization seeking to sell an investment to TRWD shall file a statement disclosing that personal business interest. An Investment Officer who is related within the second degree by affinity or consanguinity to an individual seeking to sell an investment to the District shall file a statement disclosing that relationship. A statement required under this subsection must be filed with the Texas Ethics Commission and TRWD.

An investment officer has a personal business relationship with a business organization if:

- The investment officer owns 10 percent or more of the voting stock or shares of the business organization or owns \$5,000 or more of the fair market value of the business organization'
- Funds received by the investment officer from the business organization exceed 10 percent of the investment officer's gross income for the previous year; or
- The investment officer has acquired from the business organization during the previous year investments with a book value of \$2,500 or more for the personal account of the investment officer.

103.5 Suitable and Authorized Investments.

103.5.1 Portfolio Management. TRWD currently has a "buy and hold" portfolio strategy. Maturity dates are matched with cash flow requirements and investments are purchased with the intent to be held until maturity. Investments may be liquidated prior to maturity, however, for the following reasons:

- An investment with declining credit may be liquidated early to minimize loss of principal.

- Cash flow needs of the District require that the investment be liquidated.

103.5.2 Investments. TRWD funds governed by this Investment Policy may be invested in the instruments described below, along with any other instruments authorized by the Public Funds Investment Act. Investment of District funds in any instrument or security not authorized for investment under the Act is prohibited. TRWD will not be required to liquidate an investment that becomes unauthorized subsequent to its purchase.

Authorized Investments: Authorized investments in which TRWD funds governed by this policy may be invested include:

- Obligations of the United States of America, its agencies, and instrumentalities.
- Certificates of Deposit issued by a bank organized under Texas law, the laws of another state, or federal law, that has its main office or a branch office in Texas, or by a savings and loan association or a savings bank organized under Texas law, the laws of another state, or federal law, that has its main office or a branch office in Texas and that is guaranteed or insured by the Federal Deposit Insurance or its successor or secured by obligations in a manner and amount provided by law for deposits of the District.
- Money Market Mutual funds that are (1) registered and regulated by the Securities and Exchange Commission; (2) have a dollar weighted average stated maturity of 90 days or less; (3) rated AAA by at least one nationally-recognized rating service, and (4) seek to maintain a net asset value of \$1.00 per share.
- Local government investment pools, which (1) meet the requirements of Texas Government Code § 2256.016; (2) are rated no lower than AAA or an equivalent rating by at least one nationally-recognized rating service; (3) seek to maintain a \$1.00 net asset value; and, (4) are authorized by resolution or ordinance adopted by the Board of Directors.
- Municipal bonds issued by a state or local municipality, which (1) meet the requirements of Section 2256.009 of the Public Funds Investment Act; and (2) are rated no lower than AAA or equivalent rating by at least one nationally-recognized rating service.

All prudent measures will be taken to liquidate an investment that is downgraded to less than the required minimum rating.

Investments Not Authorized. Investments including interest-only or principal-only strips of obligations with underlying mortgage-backed security collateral, collateralized mortgage obligations with an inverse floating interest rate or a maturity date of over ten years are strictly prohibited.

103.5.3 Maximum Maturities. The longer the maturity of investments, the greater their price volatility. It is, therefore, TRWD's policy to concentrate its investment portfolio in shorter-term securities to limit principal risk caused by changes in interest rates.

TRWD attempts to match its investments with anticipated cash flow requirements. Specific maturity limitations are discussed below with respect to each Fund's strategy.

103.5.4 Diversification. TRWD recognizes that investment risks can result from issuer defaults, market price changes, or various technical complications leading to temporary illiquidity. Risk is managed through portfolio diversification that shall be achieved by using the following general guidelines:

- Limiting investments to avoid over-concentration in investments from a specific issuer or business sector (excluding U.S. Treasury securities and certificates of deposit that are fully insured and collateralized in accordance with state and federal law);
- Limiting investment in investments that have higher credit risks, such as commercial paper;
- Investing in investments with varying maturities; and,
- Continuously investing a portion of the portfolio in readily available funds such as local government investment pools or money market funds to ensure that appropriate liquidity is maintained to meet ongoing obligations.

103.6 Selection of Banks and Dealers

103.6.1 Depository. At least every five years, the Finance and Audit Committee, along with TRWD staff, will review TRWD's Depository agreement. As part of this review, the Finance and Audit Committee will seek updated pricing and services offered to ensure alignment with TRWD's procedures and goals.

103.6.2 Authorized Brokers/Dealers. In consultation with the Finance and Audit Committee, TRWD shall, at least annually, review, revise and adopt a list of qualified brokers/dealers and financial institutions authorized to engage in

securities transactions with the District. Those firms that request to become qualified bidders for securities transactions will be required to provide a completed broker/dealer questionnaire that provides information regarding creditworthiness, experience, and reputation. Authorized firms may include primary dealers or regional dealers that qualify under Securities & Exchange Commission Rule 15C3-1, and qualified depositories. TRWD will provide a copy of this Investment Policy to all broker/dealers authorized to engage in securities transactions with the District. Investment pools must sign a certification acknowledging that the organization has received and reviewed TRWD's Investment Policy and that reasonable procedures and controls have been implemented to preclude investment transactions that are not authorized by this Investment Policy.

103.6.3 Competitive Bids. It is TRWD's policy to use competitive bidding for all individual security purchases and sales except for: (a) transactions with money market mutual funds and local government investment pools and (b) treasury and agency securities purchased at issue through an approved broker/dealer or financial institution.

103.6.4 Delivery vs. Payment. Securities shall be purchased using the delivery vs. payment method with the exception of investment pools and mutual funds. Funds will be released after notification that the purchased security has been received.

103.7 Safekeeping of Securities and Collateral

103.7.1 Safekeeping and Custodian Agreements. TRWD shall contract with a bank or banks for the safekeeping of securities either owned by the District as part of its investment portfolio or held as collateral to secure demand or time deposits. Securities owned by TRWD shall be held in the District's name as evidenced by safekeeping receipts of the institution holding the securities.

Collateral for deposits will be held by a third-party custodian designated by the District and pledged to the District as evidenced by safekeeping receipts of the institution with which the collateral is deposited. Original safekeeping receipts shall be retained. Collateral may be held by the depository bank's trust department, a Federal Reserve Bank or branch of a Federal Reserve Bank, a Federal Home Loan Bank, or a third-party bank approved by the District.

103.7.2 Collateral Policy. Consistent with the requirements of Chapter 2257 of the Texas Government Code, the Public Funds Collateral Act, it is TRWD's policy to require full collateralization of all District funds on deposit with a depository bank, other than investments. In order to anticipate market changes and provide a level of security for all funds, the collateralization level will be 102% of market value

of principal and accrued interest on the deposits or investments less an amount insured by the FDIC. At its discretion, TRWD may require a higher level of collateralization for certain investment securities. Securities pledged as collateral shall be held by an independent third party with whom TRWD has a current custodial agreement. The agreements are to specify the acceptable investment securities for collateral, including provisions relating to possession of the collateral, the substitution or release of investment securities, ownership of securities, and the method of valuation of securities. A clearly marked evidence of ownership must be supplied to the District and retained.

Collateral shall be reviewed annually by TRWD's external auditors to assure that the market value of the pledged securities is adequate.

103.7.3 Accepted Collateral. The District shall accept only the following types of collateral:

- Obligations of the United States or its agencies and instrumentalities;
- Direct obligations of the State of Texas or its agencies and instrumentalities;
- Obligations of states, agencies, counties, cities, and other political subdivisions of any state rated as to investment quality by a nationally-recognized rating firm not less than A or its equivalent with a remaining maturity of ten years or less;
- A surety bond issued by an insurance company rated as to investment quality by a nationally-recognized rating firm not less than A; and
- A letter of credit issued to the District by the Federal Home Loan Bank.

103.7.4 Subject to Audit. All collateral may be subject to inspection and audit by TRWD's external auditors.

103.8 Performance.

103.8.1 Performance Standards. TRWD's investment portfolio will be managed in accordance with the parameters specified within this Investment Policy. The portfolio shall be designed with the objective of obtaining a rate of return through operating cycles, commensurate with the investment risk constraints and the cash flow requirements of the District.

103.8.2 Performance Benchmark. It is TRWD policy to purchase investments with maturity dates coinciding with cash flow needs. Through this

strategy, TRWD shall seek to optimize interest earnings utilizing allowable investments available on the market at that time. Market value will be calculated on a quarterly basis on all securities owned and compared to current book value.

103.9 Reporting.

103.9.1 Reporting Methods. The Investment Officer(s) shall prepare an investment report on a quarterly basis that summarizes investment strategies employed in the most recent quarter and describes the portfolio in terms of investment securities and maturities and shall explain the total investment return for the quarter.

The quarterly investment report shall include a summary statement of investment activity prepared in compliance with generally-accepted accounting principles. This summary will be prepared in a manner that will allow TRWD to ascertain whether investment activities during the reporting period have conformed to the Investment Policy. The quarterly investment report will be provided to the Board of Directors. The report will include the following:

- A listing of individual securities held at the end of the reporting period.
- Unrealized gains or losses resulting from appreciation or depreciation by listing the beginning and ending book and market value of securities for the period.
- Additions and changes to the market value during the period.
- Listing of investments by maturity date.
- Fully-accrued interest for the reporting period.
- The percentage of the total portfolio that each type of investment represents.
- A statement of compliance of the District's investment portfolio with state law and this Investment Policy.

TRWD's external auditor will perform a formal annual review of the quarterly reports with the results reported to the Board of Directors as part of the yearly audit.

103.9.2. Monitoring Market Value. The market value of all securities in the portfolio will be determined on a quarterly basis. These values will be obtained from a reputable and independent source and disclosed quarterly in a written report provided to the Board of Directors.

The Investment Officer(s) shall monitor the credit ratings on securities that require minimum ratings. This may be accomplished through website research, or with the assistance of investment advisors, broker dealers, banks, or safekeeping agents. If any security falls below the minimum rating required by this Investment Policy, the Investment Officer(s) shall notify the General Manager of the loss of rating, conditions affecting the rating and possible loss of principal with liquidation options available.

103.10 Fund Strategies

103.10.1 Objectives. Investments in all funds discussed below shall be made with the primary objectives of: (1) safety and preservation of principal; (2) liquidity; (3) diversification; and (4) optimization of interest earnings, as follows:

Safety and Preservation of Principal. TRWD maximizes safety and preservation of principal by limiting investments to the safest types of investments and researching the financial institutions and broker/dealers with which the District conducts business.

Liquidity. Liquidity needs are discussed below within each fund type.

Diversification. Within each of TRWD's funds, diversification is achieved by staggering both maturities and purchase dates to minimize the impact of market movements over time.

Optimization of Interest Earnings. Each fund's investment portfolio shall be designed to obtain a market rate of return sufficient to meet operating needs.

An explanation of each fund's specific purpose and primary strategy is listed below.

103.10.2 General Fund. The General Fund accounts for flood control, recreation, economic development, and general operations of the District. Funds available in the General Fund are used to pay the ongoing operational expenditures each fiscal year.

The primary strategy is to match the operational expenditures of the General Fund with tax revenues, investment interest, maturing investments, and other income sources, and invest any surplus fund balance to match future expenditure cash flow needs.

Maximum Maturity – 3 Years

103.10.3 Governmental Contingency Fund. This fund holds non-tax revenue for the Governmental Funds and can be used for Board-approved projects including but not limited to recreation and economic development.

All interest earnings from the Governmental Contingency Fund are reinvested in the Governmental Contingency Fund.

The primary strategy of the Governmental Contingency Fund is to purchase investments utilizing current coupon obligations to meet liquidity needs.

Maximum Maturity – 3 Years

103.10.4 Capital Projects Fund. This fund accounts for unexpended construction proceeds for Governmental Capital projects. Interest earnings from this fund are transferred to the Debt Service Fund to help pay the debt service on the governmental bonds; if no bonds are outstanding interest earnings will remain in the Capital Projects fund.

The primary strategy of this fund is to match maturing investments with anticipated project cash flow needs. Shorter-term obligations and Investment Pools are used to match any immediate liquidity needs that arise due to the estimation of the construction process and its related cash flows.

Maximum Maturity – 3 Years

103.10.5 Governmental Debt Service Fund. The Governmental Debt Service Fund accounts for the monies used to pay the debt service on outstanding governmental bonds. Interest earnings from the Capital Projects Funds are transferred to the Interest and Redemption Fund for debt service.

The primary strategy of this fund is to use investments with maturity dates on or before the debt service payment dates.

Maximum Maturity – 6 Months

103.10.6 Revenue Funds. The Revenue Funds account for the operation of TRWD's water supply and water sales functions. Income from water sales, interest earnings, and other income sources are used to pay the ongoing operational expenses each fiscal year. In addition, monies required to supplement the District's and Dallas's revenue bonds debt service are transferred to the District's and Dallas's Interest and Redemption Funds semi-annually (respectively).

The primary strategy is to keep all investments short-term in nature, allowing maturities to match the semi-annual outflows to the Interest and Redemption Fund and any operational expenses as they arise.

Maximum Maturity – 9 Months

103.10.7 Enterprise Construction Funds –Bond Issue Funds. These funds account for unexpended construction proceeds for the various Construction Funds projects. Interest earnings from these funds are transferred to the Interest and Redemption Fund (TRWD and Dallas respectively) to help pay the semi-annual debt service on the revenue bonds.

The primary strategy of these funds is to match maturing investments with anticipated construction cash flow needs. Shorter-term obligations and Investment Pools are used to match any immediate liquidity needs that arise due to the estimation of the construction process and its related cash flows.

Maximum Maturity – 3 Years

103.10.8 Interest and Redemption Funds. These funds account for the monies used to pay the semi-annual debt service on outstanding revenue bonds. Interest earnings from the Enterprise Construction Funds and the Reserve Funds are transferred to the Interest and Redemption Funds (for TRWD and Dallas respectively) prior to the semi-annual debt service dates. Any remaining funds needed are transferred from the respective Revenue Funds.

The primary strategy of these funds is to use investments with maturity dates on or before the semi-annual debt service payment date.

Maximum Maturity – 6 Months

103.10.9 Reserve Funds. These funds represent bond reserve funds associated with outstanding revenue bonded debt. These funds were originally established with proceeds from bond issues, with the amount retained in the Reserve Fund approximating the maximum debt service payment in any given year. Interest earnings from these funds are transferred to the Interest and Redemption Fund (for TRWD and Dallas respectively) to help pay the semi-annual debt service on the revenue bonds.

The primary strategy of the Reserve Funds is to purchase investments with intermediate to longer-term maturities.

Maximum Maturity – Not to exceed the District's last maturing revenue bond

103.10.10 Enterprise Contingency Fund. This fund is established by bond covenant and is to be used primarily for unexpected or extraordinary expenses of the water supply system for which other funds are not otherwise available. This fund can also be used to pay debt service when funds in the Interest and Redemption Fund are insufficient for that purpose. The Enterprise Contingency Fund contains

moneys received as buy-in premiums from additional water customers who purchased the right to buy water at the system rate. These buy-in premiums are kept in the Enterprise Contingency Fund at the request of the District's customer advisory board. All interest earnings from the Enterprise Contingency Fund are reinvested in the Enterprise Contingency Fund.

The primary strategy of the fund is to purchase investments, utilizing current coupon obligations to meet liquidity needs.

Maximum Maturity – 3 Years

103.11 Investment Policy Adoption and Amendment. TRWD's Board of Directors shall adopt this Investment Policy by a resolution of the Board of Directors. It is TRWD's intent to comply with state laws and regulations. Accordingly, this Investment Policy shall be subject to revisions consistent with changing laws, regulations, and needs of the District. The Board of Directors shall adopt a resolution stating that it has reviewed the policy and investment strategies annually, approving any changes or modifications.

TARRANT REGIONAL WATER DISTRICT

AGENDA ITEM 6

DATE: December 13, 2022

SUBJECT: Consider Approval of Secondary Depository Services Contract with Plains Capital

FUNDING: Fiscal Year 2023 General Fund

RECOMMENDATION:

Management recommends approval of Plains Capital as a second depository service provider for the District.

DISCUSSION:

Management recommends approval of Plains Capital as a second depository service provider for the District. With the current environment of cyber-attacks, fraud attempts, and physical disasters, the District would be better protected from potential risks by having a second banking institution. This would allow the District to perform day to day operations such as making vendor payments, payroll to employees, and depositing revenue in the event Chase bank accounts are not accessible for any reason.

After review of four different local banks, Plains Capital is our recommendation for a second depository service provider. Plains Capital submitted a proposal for the past two Depository Services requests for proposals, and while they did not receive the contract, management was able to see that they would be able to provide valuable service as a second banking institution.

This item was reviewed by the Finance Committee on December 7, 2022.

Submitted By:

Sandy Newby
Chief Financial Officer

Memo



Date: 11/28/22

To: Finance Committee

From: Jennifer Mitchell, Finance Director

Re: Plains Capital as Second Depository Service Provider

Management recommends approval of Plains Capital as a second depository service provider for the District. With the current environment of cyber-attacks, fraud attempts, and physical disasters, the District would be better protected from potential risks by having a second banking institution. This would allow the District to perform day to day operations such as making vendor payments, payroll to employees, and depositing revenue in the event Chase bank accounts are not accessible for any reason.

We reached out to the following banks for quotes:

- Bank of Texas- currently used for escrow accounts and managing debt service
- First Financial Bank – used by San Jacinto River Authority
- Plains Capital – bid on our primary depository services
- Texas Capital Bank – reached out to Sandy Newby about services they provide

After review, Plains Capital bank is our recommendation for a second banking depository service provider. There were several deciding factors that led to Plains Capital being our preferred bank.

- They have bid on our depository services the last two times we went out for bid which shows that they are interested in working with us.
 - Their costs were slightly lower than Chase at the bid.
 - Even though they were graded lower than Chase on everything except cost, all areas were still adequate for what we need; it was just in comparison to Chase that made them low.
- They have a reputation of excellent customer service, which they showed while they were working with our accounting team on providing us the information needed in this process.
 - Texas Capital never responded to our staff reaching out for information.
- They provide same day ACH transaction processing. We don't need this often, but when we do, it is very helpful, especially for payroll needs.
 - Bank of Texas and First Financial were unable to process same day ACH transactions and had an earlier cutoff time. In the event of an emergency, which are the situations we are preparing for, we would like the ability to send same day ACH's.

- They have multiple Fort Worth locations with lobbies.
 - First Financial did not have many convenient branches.

We are planning to take Plains Capital to the Board in December for approval as a secondary bank. After approval, staff will work to finalize the details and the goal is to be completely set up with Plains Capital by February 2023.

TARRANT REGIONAL WATER DISTRICT

AGENDA ITEM 7

DATE: December 13, 2022

SUBJECT: Consider Board Appointments for Tax Increment Financing Districts

FUNDING: N/A

DISCUSSION:

As of December 31, 2022, Tarrant Regional Water District appointments to the Tax Increment Financing (TIF) Districts listed below will expire and require new appointments. In accordance with statute, each taxing authority makes recommendations for its Board representatives to the City. The recommended appointments beginning January 1, 2023 are:

TRWD TIF APPOINTMENTS	
TIF District	Appointee(s)
3 Downtown	Leah King
6 Riverfront	Linda Christie
8 Lancaster	Marty Leonard
9 Trinity River Vision	Linda Christie
10 Lone Star	Linda Christie
12 East Berry Renaissance	Linda Christie
13 Woodhaven	Linda Christie
14 Trinity Lakes	Linda Christie
15 Stockyards	Leah King

Approval by this Board shall serve as a notification to the City Council of Fort Worth for TRWD appointments to the governing body of the TIFs referenced above.

Submitted By:

Linda Christie
Government Affairs Director

TARRANT REGIONAL WATER DISTRICT

AGENDA ITEM 8

DATE: December 13, 2022

SUBJECT: Consider Approval of Contract with Accenture LLP for an Enterprise Resource Planning Needs Assessment

FUNDING: Fiscal Year 2023 General Fund Budget - \$300,000

RECOMMENDATION:

Management recommends approval of a contract **in the amount of \$145,000** with Accenture LLP to complete an Enterprise Resource Planning assessment.

DISCUSSION:

Enterprise Resource Planning (ERP) software supports the core business processes needed to run the organization. The District's main Enterprise Resource Planning software, Lawson S3, is the primary platform used to support the HR and Finance functions. Lawson S3, in use at the District since the year 2000, will reach the end of mainstream support in April 2024. This will require a migration to another ERP platform. ERP migrations are complex multi-year endeavors that impact every employee.

The contract with Accenture LLP will ensure that our organization's needs for a modern ERP platform are properly identified and documented. The Accenture team will conduct interviews with key stakeholders across the District to understand our business practices and requirements. The project is expected to begin in January 2023 and is scheduled to complete six weeks after initiation. The needs assessment will provide a set of requirements that will be used to identify the best overall ERP solution for the District.

Accenture LLP was selected based on demonstrated experience with strategic ERP consulting engagements and project approach. This contract for consulting services would be provided as part of the State of Texas Department of Information Resources cooperative purchasing contract DIR-CPO-4923.

This item was reviewed by the Construction and Operations Committee on December 9, 2022.

Submitted By:

Travis Bird
Director of Information Services

TARRANT REGIONAL WATER DISTRICT

AGENDA ITEM 9

DATE: December 13, 2022

SUBJECT: Consider Approval of Contract with Freese and Nichols, Inc. to Take Over Groundwater Treatment System Operation and Maintenance Support for Luminant

FUNDING: Fiscal Year 2023 General Fund Budget - \$264,900

RECOMMENDATION:

Management recommends approval a contract **in an amount not-to-exceed \$74,425** with Freese and Nichols, Inc. (FNI) for operation and maintenance support of the Groundwater Treatment System at the former Luminant site. The District will be reimbursed annually for this expense related to the Luminant site by Texas Commission on Environmental Quality (TCEQ).

DISCUSSION:

This contract provides operation and maintenance services for the groundwater monitoring and treatment services at the former Luminant site. As part of the ongoing treatment, we are required by TCEQ to continue annual groundwater monitoring and maintain the ongoing treatment at the site. Golder has been performing these services for Luminant since 2009 but is no longer able to maintain the system. FNI is familiar with the site and maintaining Groundwater Treatment Systems and has been assisting Golder with recent reports to TCEQ.

Due to their knowledge and history with the site, staff recommends awarding a contract to FNI. Services performed include: routine maintenance and on-call O&M services for the system; sulfuric acid replacement; quarterly air compressor maintenance; grass maintenance; maintenance of records; and biennial groundwater sampling and reporting.

This item was reviewed by the Construction and Operations Committee on December 9, 2022.

Submitted By:

Woody Frossard
Program Director
Panther Island/Central City Flood Control Project

November 4, 2022

Ms. Jenna Brummett
Tarrant Regional Water District
800 East Northside Drive
Fort Worth, Texas 76102

RE: Proposal for Professional Environmental Services
Operation and Maintenance of Luminant Groundwater Treatment System
Fort Worth, Tarrant County, Texas

Dear Ms. Brummett,

Freese and Nichols, Inc. (FNI) is pleased to submit this proposal for providing professional environmental services to Tarrant Regional Water District (the Client) for the operation and maintenance of the Luminant Groundwater Treatment System Project located at 102 NW 4th Street in Fort Worth, Tarrant County, Texas (hereafter referred to as the Site).

PROJECT UNDERSTANDING

It is our understanding that the an updated groundwater treatment system was installed at the Site in 2009. The primary components of the system are:

- Five groundwater extraction wells (EW-2, EW-3, EW-4, EW-5, and EW-6), each fitted with a dedicated pneumatic pump, piping, valves, etc and installed inside a below-grade concrete vault.
- Underground piping to convey air to and extracted groundwater from each well.
- A groundwater treatment system consisting of a 1,000-gallon equalization tank, a tray aeration system, an air compressor, and associated piping and controls housed inside a treatment building.
- A sulfuric acid feed system to reduce scaling in the stripper. Sulfuric acid is stored onsite in a 275-gallon tote.
- Underground piping to convey treated groundwater to the City of Fort Worth sanitary sewer system. Discharges to the sanitary sewer are regulated under Permit No. TX0047295-511.

It is also our understanding that the system is in generally good working condition and will not require extensive maintenance to resume regular operations.

SCOPE OF SERVICES

FNI will render the following professional services in connection with the development of the Project:

Task 1. Groundwater Treatment System Operation and Maintenance Services

FNI will provide routine and on-call operation and maintenance (O&M) support for the system, including the following;

- Perform all services in accordance with a site-specific Health and Safety Plan (HASP)
- Routine maintenance and on-call O&M services for the groundwater treatment system
- Routine maintenance and on-call O&M services for the extraction wells
- System O&M support
- On-call system repair services
- Sulfuric acid replacement
- Quarterly air compressor maintenance
- Compilation of O&M records for the system available for TRWD review
- Update facility process flow diagrams and O&M manuals, as needed, over contract term.

ASSUMPTIONS

This proposal was prepared based on the following assumptions:

- Regular system O&M assumes one (1) visit per week by an Environmental Technician (Professional 1) and one (1) visit per month by a Senior Scientist (Professional 3). Each visit is assumed to be four (4) man hours.
- On-call system repair service assumes an average of eight (8) man hours per month by an Environmental Technician (Professional 1), two (2) man hours per month by a Senior Scientist (Professional 3), and two (2) man hours per month by a Junior Scientist (Professional 1).
- Office support and recordkeeping assumes an average of four (4) man hours per month as Administrative Support (Corporate Project Support 2) and one (1) man hour per month for the Project Manager (Professional 5).
- Equipment repair/replacement costs are assumed not to exceed \$10,000 during a 12-month period.
- The sulfuric acid tote is assumed to be replaced every four (4) months (three (3) replacements per a 12-month period).
- The Client will be responsible for overall system regulatory compliance and reporting (City of Fort Worth discharge monitoring reports, etc.).
- Costs do not include meetings with regulatory agencies or other third party groups.

TIME OF COMPLETION

FNI is authorized to commence work on the Project upon execution of this Agreement and agrees to complete the services for a period of 12 months. If FNI's services are delayed through no fault of FNI, FNI shall be entitled to equitable adjustment of rates and amounts of compensation and FNI shall be entitled to adjust contract schedule consistent with the number of days of delay.

RESPONSIBILITIES OF CLIENT

The Client shall perform the following in a timely manner so as not to delay the services of FNI:

- A. Designate in writing a person to act as Client's representative with respect to the services to be rendered under this Agreement. Such person shall have contract authority to transmit instructions, receive information, interpret and define Client's policies and decisions with respect to FNI's services for the Project.
- B. Assist FNI by placing at FNI's disposal all available information pertinent to the Project including previous reports and any other data relative to the Project.
- C. Arrange for access to and make all provisions for FNI to enter upon public and private property as required for FNI to perform services under this Agreement.
- D. Examine all studies, reports, sketches, drawings, specifications, proposals and other documents presented by FNI, obtain advice of an attorney, insurance counselor and other consultants as Client deems appropriate for such examination and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of FNI.

DESIGNATED REPRESENTATIVES

FNI and CLIENT designate the following representatives:

CLIENT's Primary Contact

Name: Jenna Brummett
Address: 800 East Northside Drive
Fort Worth, Texas 76102
Phone: 817-698-0700
Email: Jenna.Brummett@trwd.com

FNI's Primary Contact

Name: Charles P. Gaddy, PE, PG
Address: 801 Cherry Street, Suite 2800
Fort Worth, Texas 76102
Phone: 214-208-6805
Email: Charles.Gaddy@freese.com

FNI's Accounting Contact

Name: Erin Westbrook
Address: 801 Cherry Street, Suite 2800
Fort Worth, Texas 76102
Phone: 817-735-7395
Email: Erin.Westbrook@freese.com

COMPENSATION

FNI proposes to provide our services as described herein for the not to exceed fee of Seventy Four Thousand Four Hundred Twenty Five Dollars (\$74,425.00). If FNI sees the Scope of Services changing so that additional services are needed, FNI will notify the CLIENT before proceeding.

Payment of the services shall be due and payable upon submission of a statement for services. Statements for services shall not be submitted more frequently than monthly.

We appreciate this opportunity to submit this statement of qualifications, which is good for 60 days. If additional information or clarification is desired, please do not hesitate to contact us.

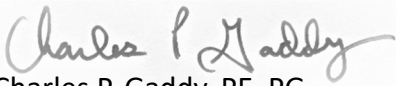
If you are in agreement with the services described herein and wish for FNI to proceed with this assignment, please sign below and return one copy of the agreement for our files. If you wish to authorize our services by a Purchase Order, please refer to this letter as an attachment on the face of the Purchase Order.

Yours very truly,

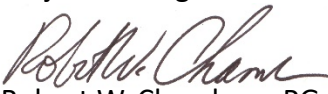
Approved:

FREESE AND NICHOLS, INC.

TARRANT REGIONAL WATER DISTRICT


Charles P. Gaddy, PE, PG
Project Manager

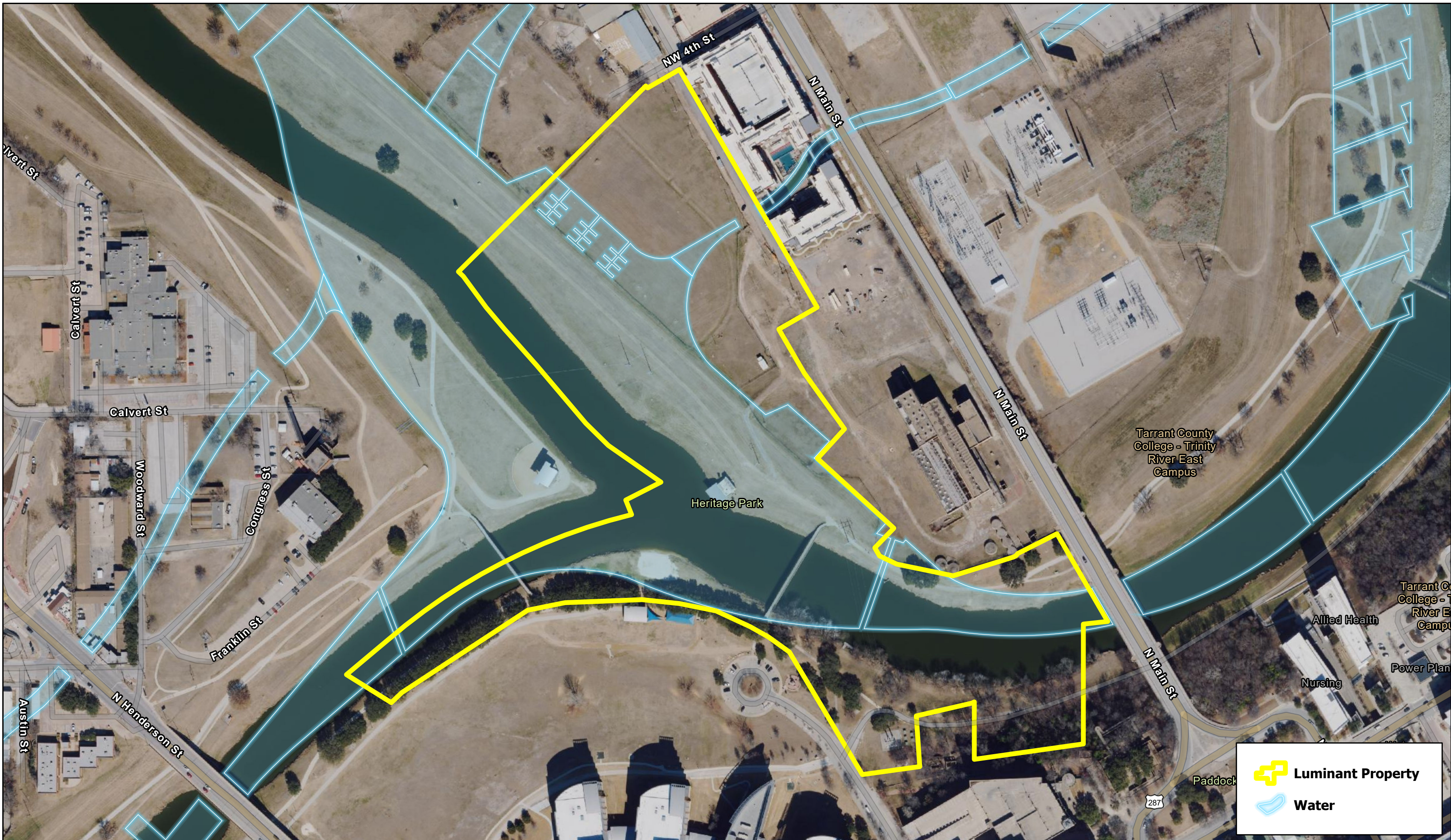
By: _____


Robert W. Chambers, PG
Principal/Vice President

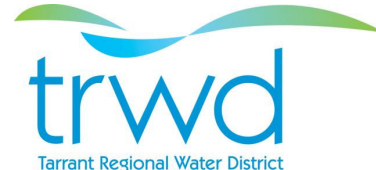
Print Name

Title: _____

Date: _____



 **Luminant Property**
 **Water**



Luminant Property

Disclaimer:
 This data is an approximation based upon the best information available at the time of printing. Information contained on this map is intended for general planning level use only and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents approximate relative locations. The Tarrant Regional Water District is not liable for misuse of this information or derivative products resulting from this map.

MAP PRODUCED ON 12/9/2022 10:06 AM BY TRWD



TARRANT REGIONAL WATER DISTRICT

AGENDA ITEM 10

DATE: December 13, 2022

SUBJECT: Consider Approval of Contract with HDR, Inc. for Engineering Services for Pipeline Design for the Cedar Creek Wetlands Project

FUNDING: Bond Fund

RECOMMENDATION:

Management recommends approval of a contract **in an amount not-to-exceed \$10,001,932** with HDR, Inc. for engineering services for Pipeline Design for the Cedar Creek Wetlands Project. These engineering services include preliminary design investigations, final design plans, specifications for the pipelines, balancing reservoir, energy dissipation structure, and outlet structure, and bid and construction phase services.

DISCUSSION:

The District recently completed an update to the District's 50 Year Water Demand Study, with findings used to determine when the next water supply project is needed (2025 to 2030). The Cedar Creek Wetlands Project will provide the District with an efficient, cost effective approach for treating reuse water from the Trinity River, while enhancing supply storage and yield of Cedar Creek Reservoir.

The Cedar Creek Wetlands is a complementary project to the existing Shannon Wetlands System, which has been in operation at Richland-Chambers Reservoir since 2013. The reuse water from the Trinity River is pumped into a wetland system for treatment prior to delivery into the reservoir.

The location of the proposed constructed wetlands is immediately east of the main stem of the Trinity River, approximately ten miles to the northwest of Cedar Creek Reservoir. Since 2014, the District has owned most of the real estate and permanent pipeline easements needed to construct the Cedar Creek Wetland Project.

The District's existing water rights permit authorizes delivery of 90,799 Ac-Ft of water from the Trinity River into the Cedar Creek Wetland System annually. The District is exploring additional reuse water sources that could further expand the system's capacity. The water supply from the wetlands to Cedar Creek Reservoir will be conveyed through the existing Cedar Creek lake pump station and pipeline system and the new Joint Cedar Creek Lake Pump Station 1 (JCC1) and Integrated Pipeline. The District's goal is to have the new Cedar Creek Wetland completed by 2032.

HDR's contract includes preliminary design investigations and design services for the pipeline systems, which will convey 176 million gallons per day during peak pumping capacity. Plummer Associates, Inc. is already under contract with the District to design the wetland system, including environmental permitting for the entire project. Also, Jacobs Engineering Group Inc. is under contract with the District to design the pump stations systems.

The Request for Statement of Qualifications was solicited per statute. The District received statements of qualifications from three engineering firms. Attached is the list of submitting firms that were evaluated. HDR was deemed to be the most qualified firm for this project. Staff recommends contracting with HDR for the Pipeline Design for the Cedar Creek Wetlands Project.

Basic & Special Services of \$9,501,932 are included for engineering services during design and construction to complete the raw and treated water pipelines, balancing reservoir, energy dissipation structure and outlet structure. Additional Services totaling \$500,000 are also included. The Engineer will not conduct any Additional Services without written authorization from the District.

These engineering services will take place over multiple years through completion of the project construction.

The overall diverse business proposed participation for this contract is 15%. The overall diverse business participation commitment for the Cedar Creek Wetlands program is currently at 23.5%.

This item was reviewed by the Construction and Operations Committee on December 9, 2022.

Submitted By:

Jason Gehrig, P.E.
Infrastructure Engineering Director



List of Submitting Firms

RFSOQ 22-140 Pipeline Design for the Cedar Creek Wetlands

Due Date and Time:	July 14, 2022 2:00 p.m. CST
---------------------------	-----------------------------

Name of Firm
Black & Veatch
CP&Y Inc.
HDR Engineering Inc.

Scope of Services
PIPE DESIGN FOR CEDAR CREEK WETLANDS
TRWD Project No.
Preliminary Design to Construction

BACKGROUND

Tarrant Regional Water District (DISTRRICT) is advancing the design of the Cedar Creek Wetland Project which is a constructed wetland located approximately 10 miles west of the Cedar Creek Reservoir adjacent to the Trinity River. Water will be pumped out of the Trinity River and flow through a 2-mile parallel Raw Water Pipeline where flow is split among sedimentation basins which serve as the head of the constructed wetlands. After specified detention time in the sedimentation basins, water is diverted through wetland trains where nutrients and suspended sediment are removed. After water flows through the wetland trains, it collects at the Relift Pump Station where it is pumped via an eight-mile Treated Water Pipeline (pressure) to a balancing reservoir serving as the high point in the pipeline profile. Water then flows by gravity approximately 2 miles through an energy dissipation structure before being released into the Cedar Creek Reservoir. Water released into the Cedar Creek Reservoir serves as an additional water supply for the DISTRRICT.

In 2013, Alan Plummer Associates, Inc (now Plummer Associates, Inc) completed a 30 percent design of the Cedar Creek wetlands, raw water pipeline, treated water pipeline, balancing reservoir, energy dissipation structure, and outfall based on a maximum flow of 101 million gallons per day (MGD). These design plans were used to identify the wetland footprint required for the project and select raw water and treated water pipeline routes. After the 30 percent design was completed, the DISTRRICT purchased property for the wetland and acquired easements for the pipeline and property for the balancing reservoir. The energy dissipation and outfall structures are located on property owned by the DISTRRICT. Geotechnical borings, geophysical data, and topographic survey were collected during the 30% design. The project design was shelved until water demands increased and supported the need for the project.

The 2013 30% design included the following:

- Approximately 2-mile parallel 60-inch and 36-inch raw water pipelines.
- Approximately 10-miles of 72-inch treated water pipeline (pressure and gravity).
- Single cell balancing reservoir located on a 15-acre site.
- Energy dissipation that includes four parallel pipeline trains and a building.
- Outfall structure into Cedar Creek Reservoir

Within the last few years, the DISTRRICT has been in negotiation with Trinity River Authority (TRA) to acquire additional water rights which would expand the capacity of the

wetland and conveyance infrastructure. The DISTRICT expects to acquire water rights expanding the peak flow to 176 MGD at the Trinity River Pump Station. With the increased water rights, the planned conveyance infrastructure from the 2013 design will increase in size including the raw and treated water pipelines, balancing reservoir, energy dissipation structure, and outfall. HDR Engineering, Inc. (HDR) has been retained by the DISTRICT to design the raw and treated water conveyance infrastructure for the Cedar Creek Wetland Project. Plummer Associates, Inc. (Plummer) is under contract to design the wetland and Jacobs, Inc. (Jacobs) has been selected by the DISTRICT to design the Trinity River and Relift Pump Stations. The project scope included in this contract will include designing and constructing the following based on a peak flow of 176 MGD at the Trinity River Pump Station and 176 MGD at the Relift Pump Station:

- Approximately 2-mile parallel 72-inch and 48-inch raw water pipelines sized for a peak flow of 176 MGD. This pipeline will connect the Trinity River Pump Station to the wetland sedimentation basins.
- Approximately 10-miles of 90-inch treated water pipeline sized for a peak flow of 176 MGD.
- Two-cell balancing reservoir
- Energy dissipation structure and building sized for flows up to 176 MGD.
- Outfall structure into Cedar Creek Reservoir.

Figure 1 shows the alignment of the proposed raw water pipeline and treated water pipeline and the locations of the balancing reservoir, energy dissipation, and outfall. It is estimated that detailed design will begin in January 2023 and construction will be completed for the entire project by June 2029.

PROJECT ASSUMPTIONS

In developing the scope of work and associated task budgets discussed in this proposal, HDR has made the assumptions outlined below:

- DISTRICT will provide front end Contract Specifications, technical specifications, and standard details. HDR will review the documents and make required changes based on the scope of this project. HDR will supplement with additional standard details and technical specifications as required for the project.
- HDR will provide construction administration services as noted in the detailed Scope of Work (does not include resident project representative services).
- City and county tree, grading, and development permits are not required.
- Scope includes:
 - Developing a design report.

- Revising the 30% design documents including plans, specification table of contents, and OPCC.
- Preparing 60% and 90% design submittals including plans, specifications, and OPCC.
- 100% sealed plans, specifications, and OPCC.
- Permitting services for TXDOT, ONCOR, Trinity Valley Electric Cooperative, utility crossings, Henderson County, and Kaufman County.
- Level A and B Subsurface Utility Engineering (SUE)
- Additional topographic survey and geotechnical borings to support the revised design.
- Bid and construction phase services are included.
- Transient analysis services provided by Jacobs for use in design by HDR.
- HDR will use DISTRICT's online web portal for document management and data coordination with other teams.
- DISTRICT will provide daily inspection services during construction.
- DISTRICT will conduct initial review of Contractor pay requests.
- Environmental and cultural resource permitting support services are not included.
- Deliverables, evaluations, and calculations will require internal QC reviews.
- HDR will review construction documents including submittals, requests for information, and field order requests received from the construction manager.
- Project will be bid as one design package using competitive sealed proposals (CSP). Participating or leading constructability reviews with contractors at design milestones are not included. Separating the projects into two or more design packages will be considered an additional service.

DESIGN ASSUMPTIONS

Design services will be included to support the following assumptions for each conveyance facility:

Raw Water Pipeline

- Peak design flow is 176 MGD.
- Welded steel 72-inch and 48-inch parallel pipelines from the Trinity River Pump Station to the interconnect.
- Interconnect will be required for operation and maintenance providing the ability to transfer flow between the two raw water pipelines to distribute flow to sedimentation basins. This will include direct bury valves with actuators in precast vaults.
- Pipelines will be extended from the interconnect structure to each sedimentation basin.
- Raw water pipe materials will be evaluated during design.

- Additional geotechnical services are included to evaluate soils within the previously mined area.
- Inlet structures to sedimentation basins will be designed by Plummer. HDR's pipelines will terminate outside the sedimentation basin embankments. HDR will coordinate the exact connection location outside each sedimentation basin with Plummer prior to submitting the 30% deliverable.
- Cathodic protection services are included for both parallel pipelines.
- Raw water pipelines will include air release valves, blow off valves, and manways.
- Access road along the raw water pipeline will be included.
- Isolation valves are anticipated on each branch to the sedimentation basins and within the interconnect.

Treated Water Pipeline

- Design scope is based on a single 90-inch pipeline from the Relift Pump Station to the balancing reservoir (pressure) and a 90-inch pipeline from the balancing reservoir to the outfall (gravity). Reducing the diameter of the 90-inch gravity pipeline will be evaluated during design.
- Cathodic protection design services are included for the pressure and gravity pipelines.
- Tunneling will be required at TXDOT Farm to Market (FM) 2613, FM 3396, and Highway 274 road crossings. County roads will be open cut. Tunneling design services are included.
- Traffic control plans will be developed at county road crossings.
- Utility permitting services are included for utilities crossing with the pipeline including gas pipelines and overhead electric powerlines. Relocating overhead electric powerlines are not expected. Permitting fees are not included.
- Treated water pipeline (pressure and gravity) will include air valves, blow off valves, and manways.
- Isolation valves are not anticipated.
- Peak design flow is 176 MGD.
- Level A and B SUE services are included.
- Additional survey services and geotechnical services are included.

Balancing Reservoir

- Access road will be required from HWY 274. Additional easement will not be required for the access road or power supply to the balancing reservoir.
- Permitting with the local utility provider to extend power from HWY 274 to the balancing reservoir is included. Permitting fees are not included.
- Electrical and instrumentation design services are included.
- Security fence included in design.

- Structural design services are included for the inlet and outlet structures.
- Additional geotechnical and survey services are included to support the design of a two-cell balancing reservoir.
- Balancing reservoir will be located on DISTRICT Property acquired in 2013. However, additional property may be required to expand from a one cell to two cell layouts. This will be evaluated by HDR during preliminary design. Right of way services are not included.
- Design of a standby generator at the balancing reservoir site is not included. The site plan will include a space for a future generator.

Energy Dissipation Structure

- Building will be located on DISTRICT owned property.
- Architectural services are included to design the building.
- Security fence included in design.
- A restroom and electrical room will be included in the building. Plumbing and HVAC design services are included.
- Water and wastewater services to the site will be required. HDR will evaluate location of water and wastewater services during preliminary design. The scope assumes wastewater will be served by an onsite septic tank and water service will be extended from HWY 274 or County Road (CR) 4042. The water service line design is included in this scope. Scope to design a water well for potable water service is not included. A performance specification is included in this scope for the septic system. The construction contractor will be responsible for providing a licensed sanitarian to design, install, and provide a 1-year contract to maintain the septic system. It is assumed that an anaerobic septic system will be required for this project.
- Site layout, parking, facility access, site grading, site horizontal control, and storm water pollution prevention plan is included.
- Drainage of the site will be limited to channelizing and routing storm water to the nearest adjacent low point where storm water will be allowed to flow naturally.
- As part of the drainage plan low impact development features such as a bio-retention pond or amended soils may be utilized to keep the stormwater flowing at pre-development conditions. No detention pond calculations or design is included with this project.
- Designing an access road from CR 4042 to the energy dissipation structure is included.
- Permitting with the local utility provider to extend power from HWY 274 or CR 4042 to the energy dissipation structure is included. Permitting fees are not included.
- Electrical and instrumentation design services are included.

- Energy dissipation structure will be designed using Autodesk Revit software for the structure and Autocad Civil 3D for the Site Civil design.
- Design of a diesel engine standby generator at the energy dissipation site is not included. The site plan will include a space for a future generator.

Outfall

- Structure will be located on DISTRICT owned property.
- Designing an access road from the energy dissipation structure to the outfall structure is included.
- Structure will be located above the spillway elevation of the reservoir.
- Potential erosion will be evaluated through outfall velocities, not a fully moveable bed sediment transport model.
- A numerical tracer will be used in the CFD model to understand the impact of the Outfall on reservoir water quality conditions.
- Qualitative relationships will be used in conjunction with CFD results to gain insights into aeration.
- One pole-mounted security camera will be installed at this site. It will be powered from the Energy Dissipation Structure by an underground branch circuit. Likewise, it will be connected via a fiber optic cable to the Energy Dissipation Structure controller. No individual power service point or PLC control cabinet will be installed at this site.

Envision Sustainability Design

Envision facilitation for the Cedar Creek Pipeline project and coordination of overall Envision verification submittal includes:

- Performing a preliminary Envision assessment for the Cedar Creek Pipeline project.
- Facilitating the Envision process for the Cedar Creek Pipeline project.
- Providing information for the engineer and contractor to be able to integrate Envision Sustainability Criteria into project design and construction documents.
- Coordinating with Plummer to provide information for the overall Envision verification submittal.
- Plummer will provide overall Envision workplan with anticipated levels of achievement (LOA) for each credit the project intends to pursue, which will be used as a basis for the Cedar Creek Pipeline preliminary Envision assessment.
- Plummer will register the project with the Institute for Sustainable Infrastructure (ISI).
- Envision v3 Pathway A would be used to verify the project.
- Electronic documentation shall be organized and stored to allow all parties assigned to credit development adequate access to relevant documentation.
- Documentation for the Design Review would be submitted at or after 95% design is completed.

Refer to the additional assumptions as delineated by task in the detailed scope herein.

SCOPE OF WORK

The Scope of Work that follows details the individual tasks and deliverables for the PROJECT.

BASIC SERVICES:

Basic services are as follows:

TASK 100 – PROJECT MANAGEMENT AND COORDINATION MEETINGS

Series 100 tasks include project management services through construction (June 2029) and coordination meetings through detailed design (2026).

Task 101- Project Set-up and Administration (through Construction Phase Services 72-months, beginning of 2023 to June 2029)

1. As part of project planning and set-up, HDR will develop the project management plan (PMP). The PMP will consist of the project scope, schedule, deliverables, safety plan, and list of members on the project team with addresses, telephone numbers, and email addresses. The PMP will be updated throughout the design phase of the project.
2. HDR will develop a GANTT project schedule to include tasks described in this scope. The project schedule will be monitored on a weekly basis and updated as required.
3. HDR's project manager will participate in up to 10 (ten) virtual meetings during detailed design with the DISTRICT, Jacob's project manager, and Plummer's project manager.
4. Throughout project execution, HDR will conduct monitoring and control activities to track project progress and develop monthly invoices with project activity reports for submittal to the DISTRICT. Activity reports will document activities completed in the previous period and planned activities for the following month.
5. Conduct internal team coordination meetings during design to discuss project updates, project schedule, deadlines, workflow, staffing, and other items related to internal team coordination and workflow.
6. HDR will provide a quality assurance/ quality control (QA/QC) plan, cash flow/ spending plan, and action item log.

Deliverables:

- Project Management Plan (digital copy)
- Project Schedule

- Monthly Invoices with Activity Report (including updated project schedule)
- QA/QC Plan
- Cash Flow/ Spending Plan
- Action Item Log

Task 102 Project Kickoff Meeting

Conduct a project kick-off meeting with the DISTRICT at the DISTRICT Office. The kick-off meeting is intended to introduce key Project personnel, define areas of responsibilities and communication protocols, review the scope of services and schedule for the Project, and review the timing and intent of project deliverables. The project manager, deputy project manager, and the pipeline, balancing reservoir, energy dissipation, and outfall design leads will attend the meeting in person. HDR will complete the following for the kickoff meeting:

1. Prepare a meeting agenda.
2. Prepare a presentation on the scope of work, project schedule, data requests, communication protocols, and work to be completed over the next month.
3. Prepare draft meeting notes and submit them to the DISTRICT for review within 3 days of the kickoff meeting.
4. After receiving DISTRICT comments, finalize meeting notes and post to DISTRICT's web portal.

Deliverables:

- Draft and Final Kickoff Meeting Minutes

Task 103- Monthly Progress Meetings

HDR will participate in monthly progress meetings with the DISTRICT, pump station design consultant (Jacobs), and wetland design consultant (Plummer) at the DISTRICT Office. Progress meetings will be led by the DISTRICT. The meeting agenda will be developed by others and HDR's project manager will review and provide input prior to the progress meetings. It is expected that design will begin in January 2023 and be completed by June of 2026 (40 months). A total of forty (40) monthly in-person progress meetings are budgeted for the project manager, deputy project manager, and pipeline lead. Energy dissipation, balancing reservoir, and outfall design leads will attend meetings virtually. A total of 6 in-person meetings is budgeted for the energy dissipation, balancing reservoir, and outfall design leads. HDR's project manager will be determined based on design needs when the energy dissipation, balancing reservoir, and outfall design leads will attend in-person. HDR will complete the following for each meeting:

1. Prepare for each meeting by developing a presentation on work completed to date, design decisions, and data needs.

2. Attend each meeting and coordinate with Jacobs and Plummer.
3. Prepare draft meeting notes and submit them to the DISTRICT for review within 3 days of the meeting.
4. After receiving DISTRICT comments, finalize meeting notes and post to DISTRICT's web portal.

Deliverables:

- Draft and Final Monthly Progress Meeting Minutes

Task 104- Project Manager Bi-Weekly Calls

HDR's Project Manager will attend bi-weekly (every two weeks) calls with the DISTRICT project manager during detailed design. A total of ninety (90) thirty-minute calls are budgeted. It is expected that design will be completed by June 2026 resulting in a 40-month design duration. HDR will develop a standard agenda for the first call that will be updated prior to each call. After each call, the HDR will summarize the discussion highlighting major discussion items and action items and submit to the DISTRICT Project Manager by email within 3 days after each call.

Deliverables:

- Project Manager bi-weekly call meeting summary (by email)

TASK 200 – CONVEYANCE EVALUATION AND DESIGN REPORT

Series 200 tasks include meeting with DISTRICT personnel, Site Visit, facility evaluation, developing technical memorandums (TMs), and a design report.

Task 201 Meeting with DISTRICT Engineering and Operation Staff

HDR will meet with Engineering and Operations staff after the kickoff meeting. The meeting will occur on the same day of the kickoff meeting to be efficient with DISTRICT staff's time and maintain the project schedule. The purpose of the meeting is to discuss the DISTRICT's design preferences prior to beginning the evaluation of conveyance facilities. HDR will complete the following:

1. Prepare a presentation summarizing the design topics to be discussed including pipe materials and mechanical, electrical, and instrumentation standards and preferences.
2. Prepare draft meeting notes and submit them to the DISTRICT for review within 3 days of the kickoff meeting.
3. After receiving DISTRICT comments, finalize meeting notes and post to DISTRICT's web portal.

4. Meeting notes will summarize the DISTRICT's mechanical, electrical, and instrumentation standards and preferences.

Deliverables:

- Draft and Final Meeting Notes

Task 202 Site Visit

The HDR design team will visit the raw water pipeline alignment, treated water pipeline alignment, balancing reservoir site, energy dissipation site, and outfall site. Although permanent easements for the treated water pipeline have been acquired, the DISTRICT will mail right of entry letters to notify landowners of the planned field work. Field work includes but is not limited to survey, subsurface utility engineering (SUE), geotechnical field work, and foot traffic. Confirmation that right of entry has been received by landowners will be coordinated with the DISTRICT prior to the site visit. HDR will call landowners prior to entry into their property within the DISTRICT permanent easement acquired after the 2013 design submittal.

Task 203 Conveyance Facility Evaluation

HDR will evaluate each conveyance facility to address changes in flow and design preferences from the 2013 30% design. The evaluation will include the following design services for each facility:

203.1 Raw Water Pipelines

HDR will evaluate the raw water pipelines to determine the updated pipe diameters based on increased flow and sedimentation basin sizes. Raw water parallel pipelines from the Trinity River Pump Station to the sedimentation basins were included in the 2013 30% design but did not extend to the proposed sedimentation basin locations developed by Plummer. The number of sedimentation basins, size, and exact location were not known at that time. It is expected that flow from the parallel pipelines will be distributed to up to three (3) sedimentation basins. The inlet structure where flow will discharge into the sedimentation basins will be designed by Plummer. HDR will coordinate the connection locations with Plummer during detailed design, but the connection will occur outside the sedimentation basins embankment. HDR will complete the following:

1. Create a steady state hydraulic model of the piping from the Trinity River Pump Station to the sedimentation basin locations to estimate head loss and distribution of flow. The model will be used to size the pipelines based on minimum flow provided by the DISTRICT and a peak flow of 176 MGD. Sedimentation basin locations and required flows to each basin will be determined by Plummer. Flow will be distributed by adjusting pipe sizes and/ or throttling valves. HDR will

- evaluate the appropriate location and type of valve to be throttled based on the operating conditions and flow distribution. If valves are required at the inlet to each sedimentation basin, then they will be designed by Plummer. Inline valves will be designed by HDR. Design of gate valves are not included. The hydraulic model will be developed based on expected flow rates (low, intermediate, and peak) provided by the DISTRICT.
2. Select pipeline diameters based on modeling results.
 3. Include a schematic of interconnect between the two parallel pipelines to allow flexibility in transferring flows between parallel pipelines prior to distributing flow among sedimentation basins.
 4. Evaluate pipeline materials for each pipeline. Pipe materials that will be evaluated include welded steel, ductile iron, bar-wrapped concrete pipe, high density polyethylene (HDPE), and fiberglass reinforced pipe (FRP). Evaluation criteria will consist of:
 - a. Diameter
 - b. Joint type
 - c. Thrust restraint
 - d. Buoyancy
 - e. Cost
 - f. Cathodic protection and corrosion resistance
 - g. Production availability
 5. Coordinate with Jacobs on pipeline sizing, pump station hydraulics, and pump selection.

Develop a presentation of the evaluation documenting the hydraulic model results, pipeline sizes, and pipeline material analysis and recommendation. This presentation will be combined with the Treated Water Pipeline in Section 203.2 and presented to the DISTRICT in one meeting.

Document the evaluation and recommendations for the raw water pipeline, including comments and outcomes of the meeting with the DISTRICT, in a technical memorandum (TM). Submit the Raw Water Pipeline TM to the DISTRICT for review. After receiving comments from the DISTRICT, HDR will incorporate comments and submit a final version with the design report (all TMs combined) discussed in Section 204.

Deliverables:

- Draft and Final presentations of the raw water pipeline evaluation
- DRAFT Raw Water Pipeline Technical Memorandum

203.2 Treated Water Pipeline

HDR will evaluate the treated water pipeline to determine the updated pipe diameters for the pressure and gravity sections based on increased flow of 176 MGD. Timing of when

all the water rights to achieve a peak flow of 176 MGD would be available is unknown at this time. There may be an extended period (up to 15-20 years) of when a flow less than 176 MGD from the Relift Pump Station to the outfall is the maximum water rights available supporting the need to evaluate parallel pipelines for the treated water pipeline. This may include constructing a smaller pipeline under this project and a second pipeline in the future. To understand pipeline sizing and materials, HDR will complete the following:

1. Coordinate with Jacobs on pipeline sizing, pump station hydraulics, and pump selection. HDR will provide the revised pipeline profile to Jacobs to assist in developing the pump station hydraulics.
2. Evaluate parallel and single pipeline sizes for the pressure pipeline from the Relift Pump Station to the Balancing Reservoir. This includes developing a cost/benefit model to support the evaluation. Consider non-cost factors such as pipeline hydraulics, environmental, traffic, operation and maintenance, construction schedule, tunnels, pipe materials, and cathodic protection requirements.
3. Evaluate size of gravity pipeline from the balancing reservoir to the outfall. Evaluation will balance reducing pipe diameter to increase head loss while meeting required flow capacity into the reservoir.
4. Evaluate pipe materials for the recommended pipe sizes based on the outcome of the cost/benefit analysis and gravity pipeline evaluation. Pipe materials include welded steel, prestressed concrete cylinder pipe (PCCP), and FRP.

Develop a presentation of the evaluation documenting the pipeline evaluation, pipeline sizes, and pipeline material analysis and recommendation. Combine this presentation with the raw water pipeline evaluation described in Section 203.1. Develop a meeting agenda and present the results to the DISTRICT in a meeting at the DISTRICT office.

Document the evaluation and recommendations for the treated water pipeline, including comments and outcomes of the meeting with the DISTRICT, in a technical memorandum (TM). Submit the Treated Water Pipeline TM to the DISTRICT for review. After receiving comments from the DISTRICT, HDR will incorporate comments and submit a final version with the design report (all TMs combined) discussed in Section 204.

Deliverables:

- Meeting agenda
- Draft and Final presentation of the raw water and treated water pipeline evaluation
- Draft and final meeting notes of the meeting
- DRAFT Treated Water Pipeline Technical Memorandum

203.3 Balancing Reservoir

The 2013 30% drawings included a single cell balancing reservoir. The DISTRICT has requested HDR evaluate a two-cell layout to support operation and maintenance. To

support a two-cell layout and expand on the 2013 design decisions, HDR will complete the following:

- Develop footprint for a two-cell layout
- Select aspect ratio for each cell
- Evaluate inlet and outlet structure designs.
- Evaluate flushing/cleaning alternatives
- Electrical and instrumentation design standards

Develop a presentation of the evaluation documenting the findings of the evaluation. This presentation will be combined with the energy dissipation and outfall in Sections 203.4 and 203.5 and presented to the DISTRICT in one meeting.

Document the evaluation and recommendations for the balancing reservoir, including comments and outcomes of the meeting with the DISTRICT, in a technical memorandum (TM). Submit the Balancing Reservoir TM to the DISTRICT for review. After receiving comments from the DISTRICT, HDR will incorporate comments and submit a final version with the design report (all TMs combined) discussed in Section 204.

Deliverables:

- Draft and Final presentation of the balancing reservoir evaluation
- DRAFT Balancing Reservoir Technical Memorandum

203.4 Energy Dissipation

The 2013 30% design of the energy dissipation structure included four pipe trains with butterfly valves, two orifice plates, and a building. The DISTRICT has requested HDR evaluate other types of energy dissipation. The DISTRICT currently uses MOV (multi orifice valves) in their other energy dissipation facilities. Furthermore, the structure and piping need to be updated to accommodate the increase flow of 176 MGD. To support the updated hydraulics and design changes, HDR will complete the following:

1. Evaluate valve types for energy dissipation that would be appropriate for this project and system hydraulics. This will include axial flow control valves, multi orifice valves, plunger valves, and sleeve valves.
2. Provide recommendation on valve type.
3. Evaluate constraints including cavitation and back pressure requirements and document recommended changes to the structure to accommodate these design elements. (Depth of structure, piping arrangement, number of trains, and pipe sizing).
4. Update pipe layout based on results of the evaluation above.
5. Vegetation from the wetland could be pumped to the balancing reservoir and be conveyed to the energy dissipation valves. HDR will coordinate with Jacobs and the design of the pump station intake screen selection. HDR will discuss how vegetation will be removed and addressed in the energy dissipation structure.

6. Evaluate location of water and wastewater services for a restroom in the energy dissipation building.

Develop a presentation of the evaluation documenting the findings of the evaluation. This presentation will be combined with the balancing reservoir and outfall in Sections 203.3 and 203.5 and presented to the DISTRICT in one meeting.

Document the evaluation and recommendations for the energy dissipation structure, including comments and outcomes of the meeting with the DISTRICT, in a technical memorandum (TM). Submit the Energy Dissipation Structure TM to the DISTRICT for review. After receiving comments from the DISTRICT, HDR will incorporate comments and submit a final version with the design report (all TMs combined) discussed in Section 204.

Deliverables:

- Draft and Final presentation of the energy dissipation evaluation
- DRAFT Energy Dissipation Structure Technical Memorandum

203.5 Outfall

The outfall structure was developed in the 2013 30% design will need to be updated to accommodate the increase in flow. 3-D modeling of the outfall was not completed in 2013 to understand the impacts the structure has on water quality and sediment transport within the Cedar Creek Reservoir. The outfall evaluation will consist of the following:

1. Update the size of the structure based on updated flow of 176 MGD.
2. Develop a 3D model of the 2013 30% outfall structure to evaluate flow patterns through and around the outfall including the ability to improve dissolved oxygen levels prior to releasing into the reservoir, the effect of outfall water quality on the receiving water, evaluating potential erosion sediment within the reservoir due to the outfall. There may be extended periods of time when the Treated Water Pipeline is not in use. Adjustments to the structure design may be considered based on operation and maintenance factors, water quality, and overall design approach.
3. Model two other outlet structures that consider the following factors:
 - a. Water velocity at the outlet to minimize sediment resuspension within the reservoir.
 - b. Reaerate water to improve dissolved oxygen content prior to release in Cedar Creek Reservoir.
 - c. Energy dissipation hydraulics and backpressure requirements.

Develop a presentation of the evaluation documenting the model results and structure design recommendations. Combine this presentation with the balancing reservoir described in Section 203.3 and energy dissipation presentations described in Section 203.4. Develop a meeting agenda and present the results to the DISTRICT in a meeting at the

DISTRICT office. HDR will document decisions in a meeting summary. The balancing reservoir, energy dissipation, and outfall structure evaluations and recommendations and DISTRICT comments will be included in each facility TM.

Document the evaluation and recommendations for the outfall, including comments and outcomes of the meeting with the DISTRICT, in a technical memorandum (TM). Submit the Outfall TM to the DISTRICT for review. After receiving comments from the DISTRICT, HDR will incorporate comments and submit a final version with the design report (all TMs combined) discussed in Section 204.

Deliverables:

- Meeting agenda
- Draft and Final presentation of the balancing reservoir, energy dissipation, and outfall evaluation
- Draft and final meeting notes of the meeting
- DRAFT Outfall Technical Memorandum

203.6 Opinion of Probable Construction Cost

Develop Class V OPCC in accordance with ACE International Class V guidelines (-30% to +50%) based on the results of the facilities evaluation, recommendations, and comments provided by the DISTRICT during meetings. The OPCC will be include in the design report described in Section 204.

Task 204 Design Report

HDR will address DISTRICT comments and combine the following TMs described above.

- Raw Water Pipeline
- Treated Water Pipeline
- Balancing Reservoir
- Energy Dissipation
- Outfall

HDR will combine the TMs and include an executive summary and OPCC into one document. HDR will submit the Final Design Report to the DISTRICT.

Deliverables:

- Final Design Report (electronic only and five (5) hard copies)

TASK 300- DETAILED DESIGN SERVICES

The following design tasks include 30%, 60%, 90%, and final design deliverables.

Task 301 – 30% Design Services

Upon confirmation and acceptance by DISTRICT of the design report, HDR will perform the following field work to support the 30% design:

- Topographic Surveying (as described in Special Services)
- Geotechnical Borings and Report (as described in Special Services)
- Level A and B Subsurface Underground Engineering Services (as described in Special Services)
- Collect soil data to support cathodic protection design as stated in Special Services.

HDR will perform the following to update the 2013 30% design:

- Schedule and attend a meeting with Henderson and Kaufman Counties to discuss haul routes. Haul route design will not be included until the 60% design deliverable. However, coordination meetings will be held during the 30% design phase to understand any limitations or restrictions that may be encountered during detailed design and impacts to the 30% design.
- Schedule and attend a meeting with TXDOT to discuss skewed crossing angles.
- Perform a preliminary Envision assessment of the Cedar Creek Pipeline project, based on existing information and understanding of planning and design decisions made up to the time of the assessment. The goals and tasks of the preliminary Envision assessment include:
 - Attend and lead an Envision Kick-off / Overview presentation of Envision.
 - Set sustainability and resiliency goals with the DISTRICT and Project Team (these may or may not be based on Envision); goals set for the overall project may be used for the Cedar Creek Pipeline project.
 - Determine applicability of each credit to the project (those that are deemed not applicable to the project are removed from the verification scoring calculation)
 - Provide initial assessment of the targeted level of achievement for each credit.
 - Perform preliminary Envision assessment of the Cedar Creek Pipeline project, based on existing information and understanding of planning and design decisions made up to the time of the assessment.
 - Note the likely source/owner and timing of needed documentation to support credits.
 - Coordinate with Plummer to provide information for the Sustainability Management Plan, as needed.
 - Coordinate with Plummer to perform a project resiliency review or provide related information, to align with Envision Climate & Resiliency credits.
 - Present a summary of the preliminary assessment findings during 30% review meeting with the DISTRICT.

- Develop permitting matrix that includes the permitting authority, limitations/restrictions, and process/schedule requirements. Contact utilities to understand permitting process, crossing requirements, and restrictions.
- Update 30% level drawings, specifications, and opinion of probable construction cost (OPCC) for DISTRICT review and comment.
- Evaluate slope stability, seepage control, embankment drain design, and borrow analysis of balancing reservoir. Preliminary design of interior liner section including under drainage system.
- Develop Class 4 OPCC in accordance with AACE International Class 4 guidelines.
- Specification submittal will include table of contents outlining the technical sections required for this project. Technical specifications will be provided in 60% submittal.
- 30% update will include the following sheets: The proposed drawing list is shown in **Table 1**.

Table 1 – Proposed Drawing List

Sheet	Drawing	No. Sheets	Title
General Sheets			
1	G-01	1	Title
2	G-02	1	Sheet Index
3	G-03	1	Location Map
4	G-04	1	Symbols and Abbreviations
5 to 7	G-05 to G-07	3	Sheet Layout
8 and 9	G-08 and G-09	2	Raw and Treated Water Pipeline HGLs
10 to 12	G-10 to G-12	3	Horizontal Control
13 to 15	G-13 to G-15	3	Geotechnical borings
16 to 18	G-16 to G-18	3	Landowner Map
19 and 20	G-19 and G-20	2	Easements
Raw Water Pipeline Plan and Profile Sheets			
21 to 30	PP-100 to PP-110	10	Plan and Profile Sheets @ 1"=40' Horizontal and 1"=4' Vertical on 11"x17" Sheets
Treated Water Pipeline Plan and Profile Sheets			
31 to 73	PP-200 to PP-242	42	Plan and Profile Sheets @ 1"=40' Horizontal and 1"=4' Vertical on 11"x17" Sheets
Balancing Reservoir			
74	C-100	1	Site Plan
75	C-101	1	Embankment typical sections including interior liners
76 and 77	C-102 and C-103	2	Access road
78 to 80	C-104 to C-106	3	Yard piping layout
81 and 82	C-107 and C-107	2	Preliminary power routing
83 to 85	C-108 to C-110	3	Inlet and outlet structure plan view and section
Energy Dissipation			
86	C-200	1	Site Horizontal control plan
87	C-201	1	Site grading plan
88	C-202	1	Yard piping plan
89	C-203	1	Process Mechanical plan
90	C-204	1	Process Mechanical section
91	C-205	1	Electrical single line diagram
92	C-206	1	Process and instrumentation diagram
93	C-207	1	Water and wastewater piping plan
Outfall			
94 to 95	C-300	2	Outfall Plan
96 to 97	C-300	2	Outfall Sections

Submit 30% submittal for DISTRICT review. HDR will conduct a 30% submittal review workshop at the DISTRICT office. Review comments will be compiled in a comments log.

Deliverables:

- 30% review comment and response log
- Five (5) hard copies and .pdf format of 30% design submittal which include plans, specification TOC, and OPCC (hard copies comprised of half-size drawings bound with the specifications)
- 30% design submittal review workshop
- 30% Progress Meeting agenda and summary including updated log with final DISTRICT review comments (.pdf format)
- Draft and Final Envision Assessment Summary Reports (.pdf)
- Copy of Envision workbook (.pdf)

Task 302 – 60% Design Services

Upon receipt of review comments from the DISTRICT for the 30% submittal, HDR will address comments and develop the 60% complete drawings, specifications, and AACE Class 2 OPCC for review. In addition to addressing 30% comments, the 60% plan deliverable will include the following:

1. Cathodic Protection (CP) - Develop cathodic protection plan sheets based on sacrificial anodes CP system. Coordinating and permitting power for rectifiers with an induced current CP system is not included.
2. Architectural Services- Develop schematics for the energy dissipation building.
3. Building mechanical (HVAC/Plumbing) design for the energy dissipation building.
4. Include standard details for the design.
5. Evaluate balancing reservoir overflow spillway design. Develop hydraulic model of spillway and downstream watershed. Perform probable maximum flood analysis of balancing reservoir for overflow spill design and dam safety compliance.
6. Develop haul route plan sheets based on meetings with the Henderson and Kaufman County. Identify road repair/replacement requirements and traffic control limitations.
7. Develop Class 2 OPCC in accordance with AACE International Class 2 guidelines.
8. Traffic Control Plans - Develop traffic control plan schematics for diverting traffic along county roads that are open cut.
9. Access roads- perform calculations to size culverts to be included in driveway permit with Henderson and Kaufman County and TXDOT.
10. Conduct fire and life safety review of the energy dissipation building. HDR will provide a technical code analysis and life safety drawings for the energy dissipation structure. Design of fire suppression and fire alarm systems will be considered an additional service.

11. Provide restrooms that are designed to TAS (Texas Accessibility Standards).
Submit documents for informal preliminary review with RAS (Registered Accessibility Specialist).

12. Envision-

- Prepare an Envision/Sustainability Workplan to outline action items for credits that are relevant and feasible for the Cedar Creek Pipeline project, including a schedule for providing credit content and documentation to Plummer for the Design Review submittal.
- Managing and tracking development of credit narratives/narrative information and related supporting documentation, as needed for credits related to the Cedar Creek Pipeline project.
- Coordinate with Plummer to align project and contractor requirements for the Cedar Creek Pipeline project with the overall project.
- Coordinate with the project team to determine where sustainability and resiliency should be incorporated in technical specifications and providing recommendations to incorporate sustainability performance criteria and support the targeted level of achievement for pursued Envision credits, including Contractor Envision Action Plan.
- Draft credit cover sheet narratives related to activities on the Cedar Creek Pipeline project for up to 50 pursued credits, as identified during the Envision assessment, to contribute to the overall Envision design-phase review submittal. The narratives will be further advanced through and past the 90% milestone.
- Provide associated documentation to support credit cover sheet narratives for the Cedar Creek Pipeline project.

Submit 60% design documents to the DISTRICT for review. HDR will conduct a submittal review workshop (Progress Meeting No. 2) at the DISTRICT office. Review comments will be compiled in a comments log.

Deliverables:

- 60% review comment and response log
- Five (5) hard copies and .pdf format of 60% design submittal which include plans, specifications, and OPCC (hard copies comprised of half-size drawings bound with the specifications)
- 60% design submittal review workshop
- 60% Progress Meeting agenda and summary including updated log with any final DISTRICT review comments (.pdf format)
- Envision/Sustainability Workplan (.pdf)

Task 303 – 90% Design Services

Upon receipt of review comments from the DISTRICT for the 60% submittal, HDR will address comments and develop the 90% complete drawings, specifications, and AACE International Class I OPCC estimate for review. Update Envision workplan and coordinate with Plummer on Envision submittal.

Submit 90% design documents to the DISTRICT for review. HDR will conduct a submittal review workshop at the DISTRICT office. Review comments will be compiled in a comments log.

Submit restroom design sheets for review with a RAS (Registered Accessibility Specialist). Coordinate/Respond to RAS Review and implement revisions as needed.

Submit 90% design plans and specifications of balancing reservoir to TCEQ dam safety program for interim review.

Deliverables:

- 90% review comment and response log
- Five (5) hard copies and .pdf format of 90% design submittal which include plans, specifications, and OPCC (hard copies comprised of half-size drawings bound with the specifications)
- 90% design submittal review workshop
- 90% Progress Meeting agenda and summary including updated log with any final DISTRICT review comments (.pdf format)

Task 304 – 100% Design Services

Upon receipt of review comments from the DISTRICT for the 90% submittal, HDR will address comments and develop a 100% set of drawings, specifications, and OPCC.

Permits – After attending the 90% review meeting with the DISTRICT and incorporating DISTRICT comments, HDR will prepare for and submit the following permits.

1. TXDOT culvert permits at access roads
2. TXDOT crossing permit FM 2613, FM 3396, and Highway 274 road crossings
3. Kaufman County culvert permits at access roads
4. Kaufman County Road crossing permits
5. Henderson County culvert permits at access roads
6. Henderson County Road crossing permits
7. ONCOR crossing permit
8. Trinity Valley Electric Cooperative permits for extending power.
9. Gas line crossing permit

Submit 100% design documents to the DISTRICT for review. DISTRICT will review the 100% design documents prior to HDR sealing. DISTRICT will provide 100% review comments to HDR in writing. No formal 100% review meeting is included in the scope.

Deliverables:

- Five (5) hard copies and .pdf format of 100% plans, specification, and OPCC (hard copies comprised of half-size drawings bound with the specifications)
- Five (5) hard copies and .pdf format of sealed (bid ready) plans, specification, and OPCC (hard copies comprised of half-size drawings bound with the specifications)
- Permit forms and submittal to Kaufman County, Henderson County, ONCOR, Trinity Valley Electric Cooperative, TCEQ and TxDOT as outline above.

Task 305 – Bid Ready Documents

HDR will address DISTRICT comments for the 100% design submittal and develop the bid ready drawings and specifications for advertisement of the PROJECT.

Deliverables:

- Five (5) hard copies and .pdf format of bid ready documents

TASK 400 BID PHASE SERVICES

Series 400 tasks include bid phase services.

Task 401 – Bidding Assistance, Bid Opening and Tabulation

HDR will attend up to one (1) pre-bid meeting will be coordinated for plan holders at the office of the DISTRICT. HDR will prepare the meeting agenda and lead the meeting. Prepare addenda and answer questions from contractors as required during the bidding process.

Attend and assist the DISTRICT during one (1) bid opening; make preliminary tabulation of bids, and review questionnaires and bids for completeness.

Deliverables:

- Project description (.doc format)
- Pre-bid conference with agenda (.pdf format)
- Bidder inquiry log
- Addenda
- Log of contractor questions and responses
- Bid Tabulation

Task 402 – Bidder Qualifications Review

Review and evaluate the qualifications of the apparent successful bidder and the proposed major or specialty subcontractors when warranted. The review and evaluation will include such factors as previously constructed work, financial resources, technical experience, and responses from references.

Deliverables:

- Summary of successful bidder qualifications (completeness, questionnaire, qualifications)

Task 403 – Bid Tabulation and Recommendation of Award

Prepare and distribute formal bid tabulation sheets, evaluate bids, and make written recommendations to the DISTRICT concerning contract award.

Deliverables:

- Package containing:
 - Bid Tabulation
 - Evaluation Summary
 - Recommendation for Contract Award

Task 404 – Conformed Document Preparation and Distribution

Prepare and distribute conforming copies of the construction contract documents. These services will include review of contractor's bonds, furnishing the Contractor unsigned construction contract documents, and transmitting the construction contract documents to the DISTRICT for signature and distribution.

Deliverables:

- Two (2) full-size and two (2) half-size print of the unsigned “Conformed to Bid” construction contract documents to the successful bidder.
- One (1) full-size and five (5) half-size prints of the unsigned “Conformed to Bid” construction contract documents to the DISTRICT.
- Electronic versions of conformed documents in .pdf format will be provided to the DISTRICT.

TASK 500 CONSTRUCTION PHASE SERVICES

Scope of services for construction is based on a three-year (36 months) construction duration for the conveyance facilities identified in this scope of services. The overall construction duration may extend past the 36 months for the wetland and pump stations. Most of the construction will occur within a 30-month period and monthly construction

meetings and site visits were estimated based on this assumption. The other 6-month duration will include pre-construction meeting, submittal reviews, and substantial and final completion walk-throughs. HDR will perform project administration services during the construction phase of the project.

Task 501 – Pre-Construction Meeting

At a date and time selected by the DISTRICT and at a facility provided by the DISTRICT, attend the preconstruction conference and assist the DISTRICT during the conference. The preconstruction conference will include a discussion of the Contractor's tentative schedules, procedures for transmittal and review of the Contractor's submittals, processing payment applications, critical work sequencing, change orders, record documents, and the Contractor's responsibilities for safety and first aid. Pre-construction conference agenda and meeting notes will be provided by Construction Manager.

Task 502 – Construction Document Management

The construction manager will submit submittals, requests for information (RFIs), and field order requests to HDR for review. HDR will distribute the documents internally for review and submit responses to the construction manager.

Task 503 – Periodic Site Visits and Construction Meetings

HDR will perform periodic visits to the construction site to observe progress of the work and consult with the DISTRICT and the Contractor concerning progress of the work. The level of effort assumes up to a thirty (30) month construction schedule. Up to thirty (30) site visits and progress meetings will be attended. Site visits and progress meetings will be held concurrently. Meeting notes will be developed by the construction manager.

Additionally, up to twenty (20) additional meetings have been assumed to address construction related issues that may need immediate attention.

In addition to the monthly progress and additional meetings, corrosion protection system inspections will take place on a periodic basis. One (1) corrosion engineer will conduct inspections of the installed corrosion protection system as construction progresses. The level of effort assumes up to six (6) visits of 8 hours each for one corrosion representative.

Deliverables:

- Site visits with observation reports (.pdf format)

Task 504 – Submittal Review

Review schedules, drawings and other major equipment and structure data submitted by the Contractor as required by the construction contract documents. The level of effort assumes electronic transmittal of submittals. Scope is based on 250 submittals and 100 resubmittals. HDR will use the DISTRICT’s web-based file management system for submittals and RFIs.

Deliverables:

- Submittal review letters with disposition (.pdf format)
- Submittal Log

Task 505– Construction Document Interpretation

Interpret construction contract documents when requested by the DISTRICT. Scope includes reviewing and responding to 120 RFIs.

Deliverables:

- Response to RFIs, clarifications and requests for interpretation by the DISTRICT (.pdf format)

Task 506 – Change Order Review

Provide documentation and assist the DISTRICT in processing of change orders, including applications for extension of construction time. Evaluate the cost and scheduling aspects of all change orders. A total of 10 change orders are budgeted.

Task 507 – Substantial Completion Inspection and Envision Post Construction Submittal

Upon substantial completion, inspect the construction work, in the company of the DISTRICT’s representative. Prepare a punch-list of those items to be completed or corrected before final completion of the project. Submit results of the inspection to the DISTRICT. Write credit cover sheet narratives related to activities on the Cedar Creek Pipeline project for up to 10 pending credits, as identified during the Envision assessment, to contribute to the overall Envision post-construction submittal. RAS reviewer will provide inspection at the end of construction to confirm ADA compliance. Coordinate as required any issues resulting from the RAS inspection.

Deliverables:

- Substantial Completion inspection (3-day site visit)
- Summary of inspection observations with punch-list (.pdf format)
- Narratives for pending credits submitted to Plummer to include in overall submittal.

Task 508 – Final Completion and Payment Recommendations

Upon completion or correction of the items of work on the punch-list, conduct a final inspection, in the company of the DISTRICT's representative, to determine if the work is completed. Provide written recommendations concerning final payment to the DISTRICT, including a list of items, if any, to be completed prior to making such payment.

Deliverables:

- Final Completion inspection (3-day site visit)
- Written recommendation regarding final payment and list of outstanding items (.pdf format)

Task 509 – Record Drawings

Upon completion of the project, revise the construction contract drawings to conform to the construction records. Submit five (5) half-size prints and one electronic file, on an external hard drive in Adobe Acrobat pdf and AutoCad formats, of the record drawings to the DISTRICT.

Deliverables:

- Five (5) half-size prints and one (1) electronic file, on external hard drive (in Adobe Acrobat .pdf and AutoCAD formats)

Task 510 – Facility Operation and Maintenance Manual

HDR will develop paper operation and maintenance manuals for the raw and treated water pipeline noting valve locations and operation scenarios, balancing reservoir, energy dissipation structure, and outfall. HDR will submit the paper and electronic pdf. files to Plummer to be included in the overall O&M manual for the project.

TASK 600 – START-UP SERVICES

Series 600 tasks include start-up services.

Task 601 – Corrosion/Reservoir/ Energy Dissipation System Start-up, Testing and Commissioning

HDR will conduct up to three (3) eight-hour site visits with two corrosion professionals to observe corrosion protection system commissioning and witness continuity tests for the pipeline alignment prior to placing the pipeline corrosion protection system into service. HDR will conduct up to three (3) eight-hour site visits with energy dissipation lead during start up to observe operation of the system. HDR will conduct up to three (3) eight-hour site visits with reservoir lead during start up to observe operation of the system.

Deliverables:

- Inspection and observation reports (.pdf format)

SPECIAL SERVICES

Corrosion Field Services

1. Perform **Electromagnetic Conductivity** (Emag) testing within the 12-mile corridor for the raw and treated water pipelines. The advantage of EMAG testing is its efficiency because continuous soil resistivity data collection can be performed with a hand-held unit that does not require soil contact. It will be conducted at accessible locations along the alignment using a Geonics Limited EM-31 MK2 unit or equivalent instrument to an approximate depth of 20 feet at 10-foot intervals in accordance with ASTM D6639. Emag testing measures the average soil conductivity and is converted to soil resistivity, a more traditional unit of measure for determining soil corrosivity and presented in a graphical format. Because no soil contact is required, this rapid survey method can also be conducted in paved areas allowing for the evaluation the entire alignment to determine the most corrosive sections. Thus, areas identified for further study are readily apparent from the graphs.
2. Perform **Wenner 4-Pin** testing on within the 12-mile pipeline corridor. **Wenner 4-Pin** is used in combination with the Emag survey for further evaluation against industry accepted categories of corrosivity. Based on interpretation of the Emag survey data, up to 30 locations for Wenner 4-Pin testing may be selected. In areas where the Emag survey is not conducive for obtaining soil resistivity data, e.g., areas under or paralleling high voltage lines, congested utility corridors, etc., the frequency of 4-pin measurements will then be increased to compensate.
3. Soil sample testing will be conducted by the geotechnical engineer for soil resistivity, pH, chlorides, and sulfides.
4. Prepare cathodic protection details and specifications to be included in 60% design submittal.
5. Reconnaissance for oil and gas pipelines with impressed current and overhead electric will be evaluated during the field visit to identify areas of concern for special design.

Topographic Survey and Field Notes

Surveying will be conducted after successfully obtaining right-of-entry (ROE), survey scope of work will include the following tasks and assumptions:

1. Verify controls and monuments set during 2013 survey are present and accurate. Reestablish controls/monuments as required along the raw water pipeline, treated water pipeline, balancing reservoir, energy dissipation structure, and outfall. Scope includes replacing 5 monuments.
2. This scope will include additional topographic services needed to advance the survey from preliminary design phase completed in 2013. This includes a LIDAR

- survey of the treated water pipeline alignment and topographic survey in specific areas to provide detailed ground survey.
3. Perform LIDAR survey of the treated water pipeline alignment to obtain 1 ft contours and high-resolution aerials of the alignment. This includes survey of approximately 57,300 LF. The majority is 100 ft in width expanding in width to 130 ft between the balancing reservoir and State Highway 274. This also includes LIDAR survey of access road from CR 4042. Raw water survey is being completed under the wetland contract and is not included in this scope.
 4. Topographic survey will horizontally and vertically pick up surface features; drainage features; building locations; fences/retaining walls; trees and/or tree lines; roadways; railways; and city, county, and franchise utilities (as provided by Texas 811 utility locate request) within the project area to the following limits:
 - a. Up to 15 acres to support the design of the balancing reservoir.
 - b. Specific areas of the treated water pipeline alignment including creek crossings and heavily wooded areas. Alignment swaths will be approximately 100 feet wide with the area selected by the engineer. Survey will be up to 10,000 linear feet.
 5. The survey of trees will include caliper size trunks approximately 6-in and larger within the 10,000 linear foot of survey described above. Based on the judgment of the ENGINEER the edge (tree line) of groups of trees or shrubs may be substituted for the survey of all trees within heavily wooded areas. In such areas, the ENGINEER will survey trees that exceed 12-in caliper size. Identification of tree species beyond that provided under Basic Services will be provided as an Additional Service.
 6. Methods and precision. Survey coordinates will be reported on the Texas State Plane Coordinate System, NAD83 and converted to surface values with an appropriate combined scale factor. Horizontal and vertical control will be set using the TxDOT Table 3.6 GPS Positioning Specifications, Level 3 criteria. Data will be collected using VRS/RTK GPS and robotic total stations for most of the survey. Laser scanning methods may be used at state highway and railroad crossings for safety reasons.
 7. All survey data collected will also be submitted in GIS format per project spatial data management and procedures with appropriate ground to grid conversion
 8. SURVEYOR will prepare 7 metes and bounds description to support the expansion of the balancing reservoir site or realignments of the pipeline. Extra exhibits will be provided as an additional service.

Deliverables:

- Electronic AutoCAD 2018 topographic survey file.
- Up to 7 metes and bounds description with accompanying exhibit.
- One electronic executed PDF of the complete instrument for each parcel.
- Five (5) original hard copies of the complete instrument for each parcel.

Subsurface Utility Engineering Services (Level A and B)

Subsurface Utility Engineering will include the following:

1. Level B SUE will include locate all buried metallic, toneable, and gravity utilities within the 2-mile raw water pipeline easement, 10-mile treated water permanent easement, balancing reservoir site, energy dissipation site, and outfall site.
2. Level A SUE will include locating utilities in and outside of pavement as identified by HDR. Scope assumes the following depth and number of utilities:

Depth	Quantity Outside Pavement
0-4 ft	20
4-8 ft	12
8-12 ft	5
12-18 ft	3
Level "A" Totals	40

3. Upon completion of each test hole, provide test hole data form for each utility exposed including surveyed top of pipe elevation and pipe material. Two pictures will be taken, one of the utilities and one of the test hole board showing the depth.
4. Scope assumes use of non-destructive vacuum excavation equipment to excavate test holes at the required locations. Use of hydraulic excavation will be considered an additional service.
5. All test holes are non-paved areas and are accessible by truck-mounted equipment and routine traffic control (cones and free standing signage, etc.) will be required during the performance of the QL "A" SUE work.

Deliverables:

- Utility file in AutoCAD format of type and horizontal location of the designated utilities.
- Summary data sheet of each test hole with coordinate data and depth information.

Geotechnical Engineering

1. Geotechnical investigation will occur on parcels where ROE has been obtained at the selected sites. Soil borings will be advanced in selected locations based on surface conditions, pre-existing geotechnical data, and other factors. When possible, soil borings will be placed on public ROW. Samples will be acquired, and laboratory tests will be conducted to provide engineering data necessary for the design. Laboratory tests for each sample collected are anticipated to include:
 - Dry, saturated, buoyant and total unit weight
 - Cohesion
 - Particle size and gradation

- Atterburg's limits
 - Unified Soil Classification
 - Internal soil friction angle
 - Void ratio
 - Elastic modulus
 - Resistivity
 - pH
 - Oxidation-reduction potential
 - Chlorides
 - Sulfides
 - Moisture content
2. The geotechnical budget allowance is based on 36 soil borings up to a total depth (TD) of 1,550 ft. HDR will determine how the boring depths are divided among the 36 borings based on the 30% design. The borings will be backfilled using cuttings and bentonite chips. Borings within pavement are not anticipated. Actual work required will be refined as the PROJECT progresses. Billing will be based on actual work performed by the geotechnical subcontractor. Borings drilling through rock will be cored. Scope assumes 1,250 vertical feet of soil borings and 300 vertical feet of rock coring.
 3. Conduct cone penetrometer testing of geotechnical borings within the raw water pipeline alignment through previously mined area. It is estimated that four (4) borings will be drilled within the previously mined area. The soil testing results will be used to understand the soil material and compaction within the previously mined area.

Deliverables:

- Certified Laboratory Report Copies
- Draft Geotechnical Report
- Final Geotechnical Report

ADDITIONAL SERVICES

Additional Services are those services not included in the above scope of services which may be provided by HDR if so authorized by the DISTRICT. A budgetary allowance has been included in the fee table. Written authorization will be required by the DISTRICT. Potential examples of these services may include, but are not limited to:

- Transient Analysis
- Additional detailed design services that may include pipeline route study and design of an additional pipeline.
- Structural design services for raw water interconnect.

- Additional cost estimating beyond that stated in the Basic Services
- Additional design meetings beyond that are stated in Basic Services
- Environmental and cultural resource field work and permitting.
- Geophysical field work and report preparation
- Additional geotechnical borings and soil studies exceeding what is described in Special Services.
- Additional SUE beyond what is described in Special Services.
- Additional survey beyond what is described in Special Services.
- Additional submittal reviews beyond what is described in Construction Phase Services
- Additional RFI reviews beyond what is described in Construction Phase Services
- Additional Field Order reviews beyond what is described in Construction Phase Services
- Project will be designed as one package using CSP method. Using a different delivery method such as contractor manager at risk (CMAR) may result in additional design services. Additional design services will be based on the level of additional scope that exceeds the current contract for CSP.
- Separating design into multiple packages. (one package is budgeted)
- Designing a water well for potable water to the energy dissipation structure.
- Conduct fire flow test.
- Design of fire suppression and fire alarm systems.
- Third-Party Certification such as LEED.
- Energy modeling of any kind.
- Installing piezometers to assess ground water levels and anticipated ground water pumping rates.

If needed, these services will require written authorization from the DISTRICT. If needed, the additional funding will be billed the same rate as the Basic Services.

ATTACHMENT A: FEE SCHEDULE

The not-to-exceed fee schedule to perform Basic Services, Special Services, and Additional Services as described in this scope of work is as follows:

BASIC SERVICES (Tasks 100-600)	
Task 100 – Project Management and Coordination Meetings	\$1,085,081
Task 200- Conveyance Evaluation and Design Report	\$487,778
Task 300 DESIGN SERVICES	\$4,836,938
Task 301- 30% Design Services	\$718,742
Task 302- 60% Design Services	\$1,893,702
Task 303- 90% Design Services	\$1,588,706
Task 304- 100% Design Services	\$551,814
Task 305- Bid Ready Documents	\$83,974
Task 400- Bid Phase Services	\$102,300
Task 500- Construction Phase Services	\$2,093,513
Task 600- Start-Up Services	\$57,371
Total Basic Services	\$8,662,980
SPECIAL SERVICES	
Corrosion Field Services	\$50,755
Topographic Survey	\$297,337
Subsurface Utility Engineering Services	\$111,670
Geotechnical Services	\$379,190
Total Special Services	\$838,952
Additional Services	\$500,000
TOTAL FOR BASIC, SPECIAL, AND ADDITIONAL SERVICES	\$10,001,932

Basic Services will be billed on a salary cost as defined in the Compensation section of the contract times a 3.20 multiplier. Services for direct non-labor expenses and subcontract expenses provided by HDR shall be reimbursed at actual cost times a multiplier of 1.06.

SCHEDULE

The effort described in this scope of services assumes design begins in 2023 and construction is completed by 2029. **Figure 2** provides the preliminary project schedule.

Summary by Firm:

Firm	Discipline	Diverse Business	Basic and Special Services Total	Percentage	Total (Basic, Special, and Additional Services)	Percentage
HDR	Prime	No	\$7,670,910	80.7%	\$8,170,910	81.7%
Gupta	Electrical	Yes	\$315,950	3.3%	\$315,950	3.2%
JQ	Structural	Yes	\$324,332	3.4%	\$324,332	3.2%
Plus Six Engineering	Permitting, Haul Routes, Permitting, Constructability Reviews	Yes	\$472,280	5.0%	\$472,280	4.7%
Terracon	Geotechnical	No	\$348,085	3.7%	\$348,085	3.5%
Spooner and Associates	Survey	Yes	\$271,475	2.9%	\$271,475	2.7%
TRG	SUE	Yes	\$98,900	1.0%	\$98,900	1.0%
Diverse Business Total	-	-	-	15.6%	-	14.8%

Figure 1
Alignment of The Proposed Raw Water Pipeline and Treated Water Pipeline

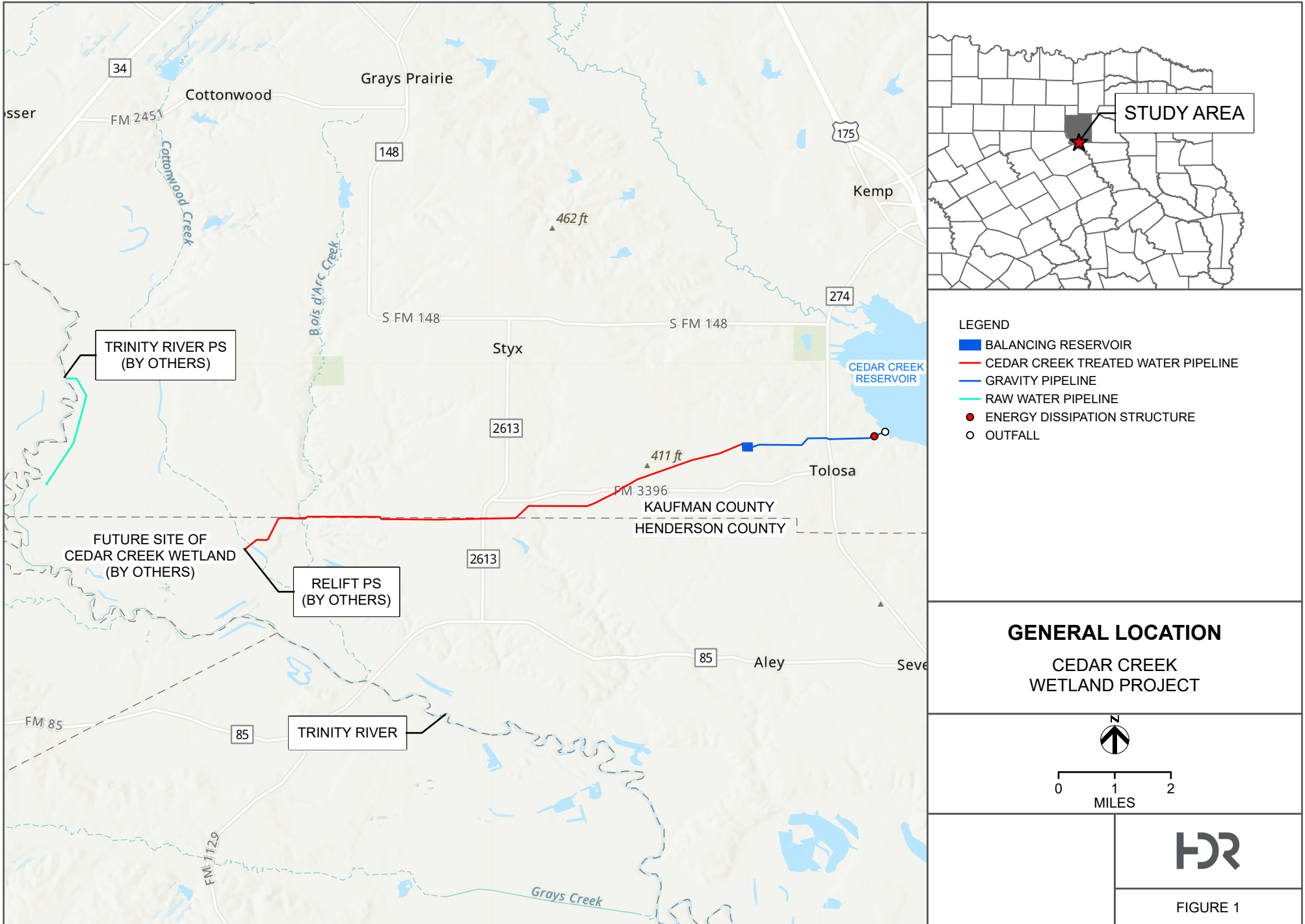
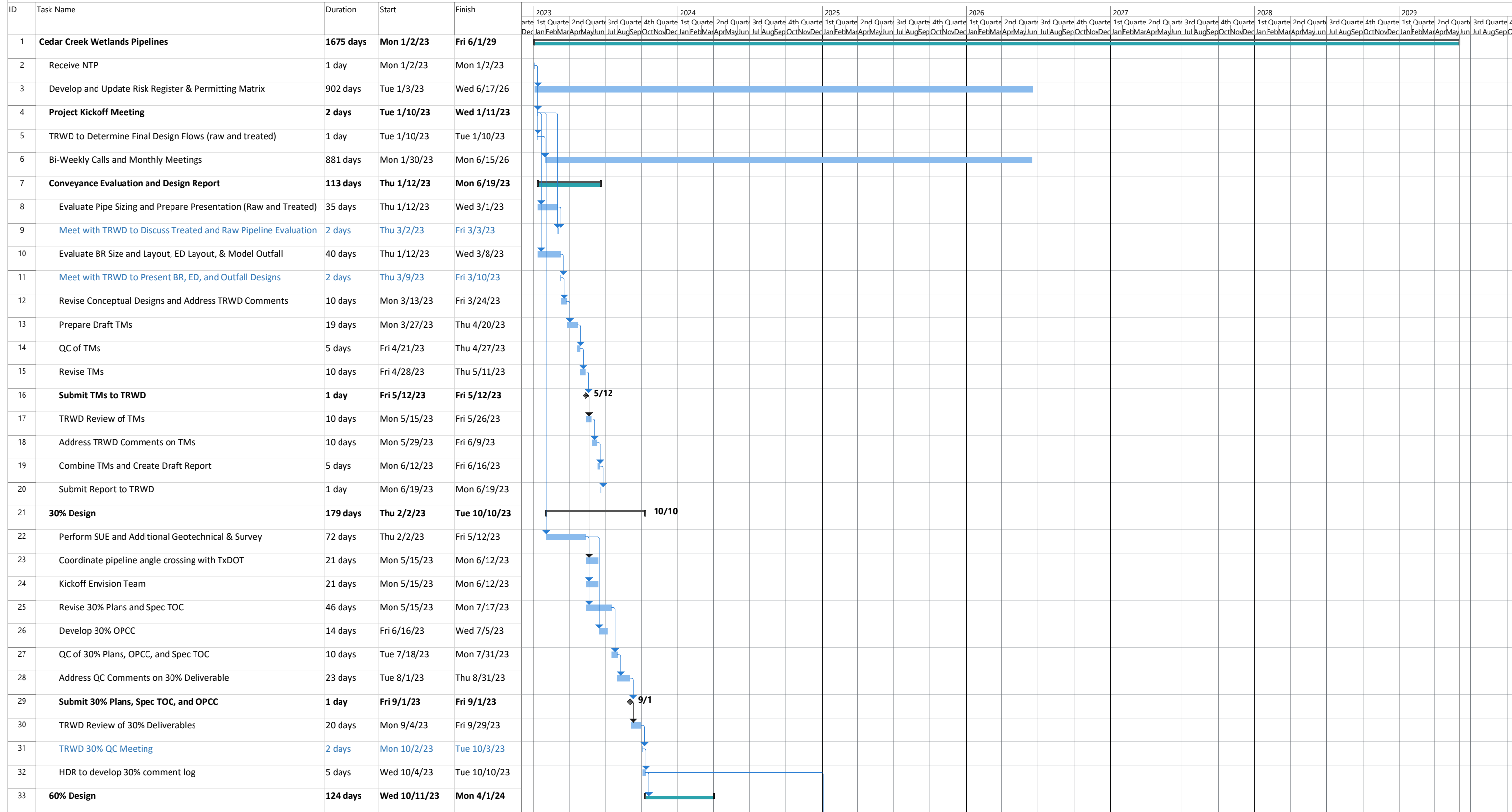


Figure 2
Preliminary Project Schedule

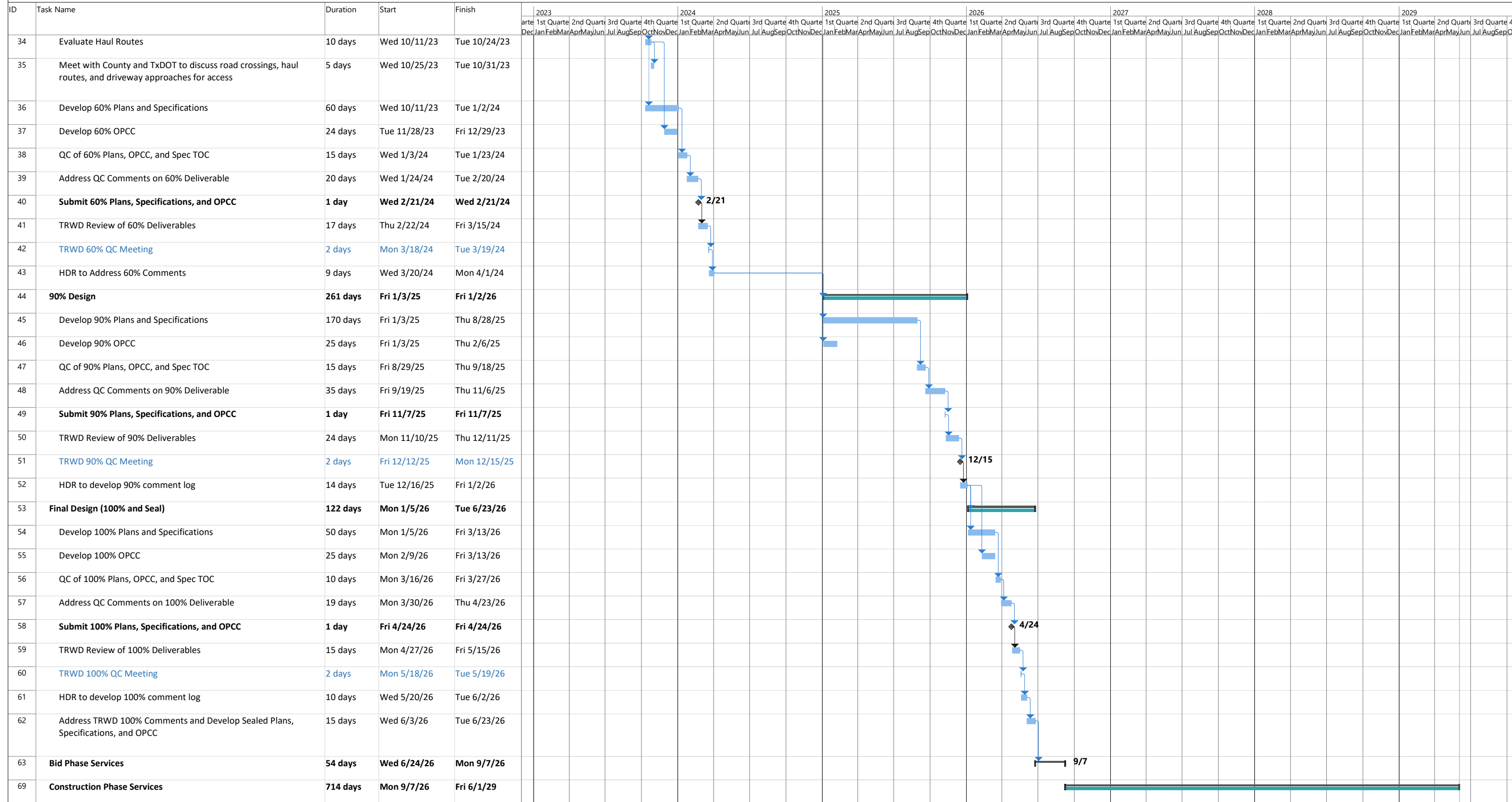
Tarrant Regional Water District
Pipe Design for Cedar Creek Wetlands
Project Schedule Mon 11/28/22



Project: Cedar Creek Pipeline Pr
Date: Mon 11/28/22

Task		Summary		Inactive Milestone		Duration-only		Start-only		External Milestone		Manual Progress	
Split		Project Summary		Inactive Summary		Manual Summary Rollup		Finish-only		Deadline			
Milestone		Inactive Task		Manual Task		Manual Summary		External Tasks		Progress			

Tarrant Regional Water District
 Pipe Design for Cedar Creek Wetlands
 Project Schedule Mon 11/28/22



Project: Cedar Creek Pipeline Pr
 Date: Mon 11/28/22

Task		Summary		Inactive Milestone		Milestone
Split		Project Summary		Inactive Summary		Manual Summary Rollup
Milestone		Inactive Task		Manual Task		Manual Summary
				Duration-only		Start-only
				Manual Summary		Finish-only
				Manual Summary		External Tasks
				Manual Summary		External Milestone
				Manual Summary		Deadline
				Manual Summary		Progress
				Manual Summary		Manual Progress

TARRANT REGIONAL WATER DISTRICT

AGENDA ITEM 11

DATE: December 13, 2022

SUBJECT: Consider Approval of Second Amendment to the Handley Generating Station 1971 Water Supply Contract with Constellation Handley Power, LLC

FUNDING: N/A

RECOMMENDATION:

Management recommends approval of the second amendment to the Handley Generating Station 1971 Contract ("Second Amendment" to "1971 Contract") **in the annual amount of \$529,773** with Constellation Handley Power, LLC ("Constellation"). The Second Amendment will, in addition to a few other minor changes, revise the payment terms to reflect the revised annual Fixed Payment Base Fee of \$529,773. This is a reduction from the previous Fixed Payment Base Fee of \$631,431.

DISCUSSION:

The Handley Generating Station is located on Lake Arlington and uses water from the lake for cooling purposes within the station. The 1971 Contract between TRWD and Constellation (then Texas Electric Services Company) was executed on July 27, 1971, and established a water supply agreement between the two entities. One of the stipulations of the 1971 Contract is that the District will maintain minimum lake elevations in Lake Arlington, which vary based on the time of year. In return, Constellation pays to the District an annual Fixed Payment Base Fee to compensate for the additional system costs incurred in order to maintain the minimum lake elevations.

On October 25, 2009, Constellation (then ExTex La Porte, L.P.) and the District executed an amendment to the 1971 Contract ("First Amendment"). Among other items, this First Amendment established a new Fixed Payment Base Fee of \$631,431 that was determined based on updated system modeling and energy cost modeling methodologies that were mutually agreed upon by the District and Constellation. The First Amendment also contained a provision that the Fixed Payment Base Fee may be reviewed and revised by the District and Constellation every ten (10) years.

The District completed an updated analysis of system operations and energy costs in 2021, and provided a technical memorandum to Constellation on February 18, 2022, outlining the methodology used to calculate the revised Fixed Payment Base Fee of \$529,773. Constellation accepted the revised Fixed Payment Base Fee in a letter dated April 26, 2022. The Second Amendment will, in addition to a few other minor changes,

revise the payment terms to reflect the revised annual Fixed Payment Base Fee of \$529,773.

This item was reviewed by the Construction and Operations Committee on December 9, 2022.

Submitted By:

Zachary Huff, P.E.
Water Resources Engineering Director

TARRANT REGIONAL WATER DISTRICT

BOARD OF DIRECTORS:
Leah M. King, President
James Hill, Vice President
Jim Lane, Secretary
Marty Leonard
Mary Kelleher



**Dan Buhman,
General Manager**

800 E. Northside Drive
Fort Worth, Texas 76102
Telephone 817-335-2491
Fax 817-877-5137

November 29, 2022

Derrick Bryant
Plant Manager
Constellation Handley Power, LLC
6604 East Rosedale Street
Fort Worth, Texas 76112

RE: Second Amendment to the Handley Generating Station 1971 Water Supply Contract

Dear Mr. Bryant,

The undersigned parties (the "Parties") hereby agree to the following amendment to that certain water supply agreement involving water supply out of Lake Arlington for the Handley Generating Station, more specifically being the Contract and Agreement dated July 27, 1971 ("1971 Contract") executed by the Parties or their predecessors. On October 25, 2009, ExTex La Porte, L.P., the then owner and operator of Handley Generating Station, and Tarrant Regional Water District ("TRWD") executed an amendment to the 1971 Contract ("First Amendment"). Constellation Handley Power, LLC (hereinafter referred to as "Constellation") has since taken over as owner and operator of Handley Generating Station and has assumed the rights and obligations of the 1971 Contract, as amended.

The First Amendment, among other matters, established new payment terms for TRWD to maintain Lake Arlington minimum lake level elevations, consistent with the levels set forth in the 1971 Contract. The subject payment terms were agreed to be reviewed and revised by the Parties every ten (10) years. In the June 11, 2021, letter from Constellation (then Exelon) to TRWD, Constellation requested that the Fixed Payment Base Fee of \$631,431 per year remain unchanged for the next ten (10) year period. This prompted TRWD to revisit the calculation of the Fixed Payment Base Fee based on updated energy cost and modeling data. TRWD provided a technical memorandum to Constellation on February 18, 2022, which outlined the methodology used to calculate the revised Fixed Payment Base Fee of \$529,773. Constellation accepted the revised Fixed Payment Base Fee in a letter dated April 26, 2022.

Based on the above, the Parties agree to the following terms for the Second Amendment to the 1971 Contract:

- 1) The Payment terms as agreed to under the First Amendment shall remain unchanged, except for i) Exhibit "A" which is updated as presented in the attachment hereto, and ii) the Fixed Payment terms in Section 2(a) of the First Amendment, which shall be changed to read in full as follows:
 - a. Fixed Payment - Constellation will pay a base fee of \$529,773 per year for a period of ten years. The first payment will be due in March 2023 for the calendar year 2022.

**Constellation – 1971 Contract – Second Amendment
November 29, 2022**

Fixed Payments shall be subject to review and revision by TRWD and Constellation every 10 years to determine mutually agreeable updates to the Fixed Payment. Updates to the base fee shall be agreed to prior to the conclusion of each successive 10-year period until the expiration of the 1971 Contract on June 29, 2055. The base fee shall be updated utilizing same or similar methodology as referenced on page 1, paragraph 1 of the First Amendment. This review shall consider updated costs by TRWD (electricity, fees, tariffs, etc.) to maintain the contracted lake levels and updates by Constellation on required lake levels.

- 2) Article II of the 1971 Contract shall be amended with the addition of the following text at the end of the current paragraph:

“Should Company choose to cancel District’s obligation to maintain lake levels as described above, Company will then have one opportunity to subsequently reinstate the District’s obligation with 36 months’ notice. Company will be required to pay the lake level maintenance fee during the entire 36-month period, beginning at the time that notice is given to reinstate the lake level maintenance. District reserves the right to reevaluate and possibly modify the lake level maintenance annual fee, based upon updates to the District’s energy costs and using modeling as mutually agreed by the District and Company, at the time the reinstatement is requested.”

Except as modified hereby, the terms of the 1971 Contract, as amended, continue in full force and effect and the Parties hereby expressly acknowledge and reaffirm the terms of the 1971 Contract, as amended.

This Second Amendment may be executed in a number of identical counterparts, each of which shall be deemed an original for all purposes.

It is acknowledged and agreed that Constellation has certain rights under Certificate of Adjudication No. 08-3391, which Certificate is in the process of being amended to add municipal use to Constellation’s industrial diversion right for the benefit of TRWD, but such rights do not affect or modify the obligations of the Parties under the 1971 Contract, as amended.

The terms set forth herein remain subject to and are not binding unless both approved by the TRWD Board of Directors and fully executed by both Parties. It is anticipated the proposed terms will be presented to the TRWD Board of Directors for consideration in December 2022.

IN WITNESS WHEREOF, the Parties have agreed to and accepted the terms of this Second Amendment and caused this Second Amendment executed to be effective on the date signed by TRWD.

Dan Buhman
Bryan Bennett, Vice President
Constellation Handley Power, LLC

Tarrant Regional Water District

Date: _____

Date: _____

xc: Alan Thomas
Sandy Newby
Stephen Tatum
Rachel Ickert

**Constellation – 1971 Contract – Second Amendment
November 29, 2022**

Sample Calculation of Constellation Surplus Credit

EXHIBIT A

Sample Year 2021

Exelon Water Rights	711,750,000
Consumptive Use - Fiscal Year	482,850,273
Surplus/(Shortage)	<u>228,899,727</u>
Fort Worth Rate FY 21	<u>1.14219</u>

	Expenses	Percent
Debt Service	\$ 76,157,954	53.59%
Operation & Maintenance Costs	\$ 65,942,622	46.41%
Total System Expenses	<u>\$ 142,100,576</u>	<u>100.00%</u>

Calculation of Surplus Credit

Fort Worth Rate	1.14219
Operation & Maintenance Costs Percentage	46.40560%
Surplus Reduction Rate	<u>0.53004</u>

Surplus/(Shortage) 228,899,727

Surplus Credit * \$ (121,326)

Initial Fixed Payment (per Revised Terms) \$ 529,773

Sample amount due for 2021 \$ 408,447

* The maximum surplus credit allowed for unused water is \$250,000.

TARRANT REGIONAL WATER DISTRICT

AGENDA ITEM 12

DATE: December 13, 2022

SUBJECT: Consider Approval of Contract with Plummer Associates, Inc. for CE-QUAL-W2 Reservoir Model Development for Eagle Mountain Lake

FUNDING: Fiscal Year 2023 Revenue Fund Budget - \$119,776

RECOMMENDATION:

Management recommends approval of a contract **in the amount of \$119,776** with Plummer Associates, Inc. for consulting services for CE-QUAL-W2 Reservoir Model Development for Eagle Mountain Lake.

DISCUSSION:

The District has used multiple computer models over the last 30 years to simulate our reservoirs and evaluate changes that might affect water quality. These changes include additional flows from wastewater plants, water transfers, wetland inflows, weather and dynamic weather scenarios. For the bulk of this time staff developed and has primarily utilized a reservoir model for each reservoir called WASP to run these simulations. Although it has been a useful tool, it is limited in its ability to predict changes on smaller scales in the reservoirs and is cumbersome and costly to modify as new scenarios arise.

In 2020 the Board of Directors authorized a contract with West Consultants to develop a more robust model for use at Cedar Creek, that model being CE-QUAL-W2. That new model has been used to evaluate our future wetland discharges, additional wastewater/reuse proposals, water supply diversions and has provided a better understanding of how the reservoir reacts and functions.

Based on the success and usefulness of that project, this proposed contract authorizes Plummer Associates Inc. to develop a comparable CE-QUAL-W2 model for Eagle Mountain Lake. Plummer will be tasked with developing the first portion of the model that simulates the internal conditions and processes of the reservoir. Once the consultant can demonstrate that the physical components of the model are sound, the District's staff will add the chemical (water quality) components to the model.

Plummer was selected because of their experience with this model and their local application of this model on other area reservoirs.

Plummer will subcontract a portion of the contract to Watearth, an MWBE firm, resulting in an overall Diverse Business participation commitment of 10%.

This item was reviewed by the Construction and Operations Committee on December 9, 2022.

Submitted By:

Darrel Andrews
Environmental Division Assistant Director

Exhibit A

EAGLE MOUNTAIN CE-QUAL-W2 MODEL DEVELOPMENT

Scope of Work and Schedule

Plummer Associates, Inc., (“ENGINEER”) is assisting Tarrant Regional Water District (“CLIENT”) in developing a water quality model of Eagle Mountain Lake (EM) using the CE-QUAL-W2 software platform. The focus of this project is on setting up and calibrating the hydrodynamic component of the EM model. The EM model will then be provided to the CLIENT for development of the water quality component. A detailed modeling report and on-site presentation will be delivered to the CLIENT at the end of the project.

A total of seven tasks have been identified to achieve the objectives of this project. They are listed as follows:

1. Project Management and Progress Reporting
2. Develop Model Segmentation
3. Develop Initial CE-QUAL-W2 Input Files
4. Mid-Point Presentation
5. Evaporation Calibration
6. Water level and temperature calibration
7. Reporting and Final Deliverables

The project is anticipated to be completed in Fiscal Year (FY) 2023). Detailed descriptions of Tasks 1 through 7 are provided in the following sections.

BASIC SERVICES FOR FY 2023

Task 1. Project Management and Organization

At the beginning of the project, ENGINEER will organize an on-site meeting with the client to kick-off the project. ENGINEER will schedule up to six (6) progress meetings within FY 2023 to review progress and troubleshoot any issues.

Task 2. Develop Model Segmentation

ENGINEER will develop model segmentation from TWDB hydrographic survey data of EM. Using the segmentation, ENGINEER will set up an initial, executable, CE-QUAL-W2 model (“skeleton” model). For testing purposes, the skeleton model can be set up to simulate EM draining from conservation pool to a historical low water surface elevation. The model segmentation of the skeleton model will be fine-tuned to ensure the following:

- model execution times are acceptable;
- model reservoir volume rating curve match that in the TRWD water balance spreadsheet;
- model reservoir area rating curve match that in the TRWD water balance spreadsheet;
- and,
- the range of reservoir elevations experienced during the modeled hydrologic period of 2010-2021 do not cause significant wetting and drying issues.

The milestone from this task is a skeleton CE-QUAL-W2 model that executes properly and has segmentation that adequately represents the geometry of EM.

Task 3. Develop Initial CE-QUAL-W2 Uncalibrated Model

ENGINEER will develop meteorological, inflow and withdrawal files for 12-year (2010-2021) hydrological period. This includes:

- Meteorological input files from airport data
- Inflow files for tributaries
- Inflow files from wastewater dischargers
- Withdrawal files to WTPs
- Withdrawal files from EM dam/spillway

For each of the inflow files, ENGINEER will develop temperature input files for 2010-2021. Because of the sparseness of water temperature data (typically collected less than once monthly), ENGINEER will develop air temperature/water temperature regressions to create daily water temperatures inputs to the model. ENGINEER will incorporate all the initial input files into the skeleton CE-QUAL-W2 model. The milestone from this task is a preliminary uncalibrated CE-QUAL-W2 model with initial flow estimates.

Task 4. Mid-Point Presentation

ENGINEER will conduct a virtual mid-point presentation on the model segmentation and initial inputs. The purpose is to review the uncalibrated model before commencing calibration activities.

Task 5. Evaporation Calibration

ENGINEER will calibrate parameters associated with internal calculation of evaporation. The purpose is to match the evaporation in the water balance and minimize error residuals that need to be distributed to tributary flows. The milestone from this task is a preliminary CE-QUAL-W2 model with evaporation calibrated.

Task 6. Water Level and Temperature Calibration

ENGINEER will refine inflows and withdrawals to achieve water level match. ENGINEER will calibrate parameters associated with temperature/heat transfer to match EM data collected by the CLIENT. The milestone from this task is a preliminary CE-QUAL-W2 model calibrated to water level and temperature.

Task 7. Final Reporting

ENGINEER will prepare a draft final report and deliver an on-site presentation of the model results. After receiving comments from CLIENT, ENGINEER will finalize the report and submit the final modeling files to TRWD.

ADDITIONAL SERVICES

ADDITIONAL Services are services that are not included in the BASIC Services scope. If ADDITIONAL Services are requested, ENGINEER will prepare a scope and budget for such services and will not perform Additional Services unless authorized to do so by the CLIENT.

BUDGET AND SCHEDULE

Task budget and schedule are summarized in Table 1. Compensation by the CLIENT to the ENGINEER will be on a time-and-materials not-to-exceed basis. The total project cost is \$119,776.

Eagle Mountain CE-QUAL-W2 Model Development
 Plummer Proposal 0307-060-O1210

Table 1. Task budget and Schedule Summary for FY 2023.

Type of Service	Task	Description	Start Month	End Month	Plummer Labor Hours	Costs
BASIC	1	Project Management and Progress Reporting	Dec 2022	Sep 2023	31	\$ 7,510
BASIC	2	Develop Model Segmentation	Dec 2022	Feb 2023	130	\$ 21,162
BASIC	3	Develop Initial CE-QUAL-W2 Uncalibrated Model (FY 2023)	Dec 2022	Mar 2023	94	\$ 17,498
BASIC	4	Mid-Point Presentation	Mar 2023	Apr 2023	17	\$ 3,906
BASIC	5	Evaporation Calibration	May 2023	Jun 2023	50	\$ 8,596
BASIC	6	Water level and temperature calibration	Jun 2023	Jul 2023	128	\$ 20,726
BASIC	7	Reporting and Final Deliverable	July 2023	Sep 2023	104	\$ 20,798
Total Labor Amount					554	\$ 100,196
Total Subconsultants (Watearth and Dr. Wells)						\$ 18,700
Total Reimbursables						\$ 880
Total Budget (FY2023)						\$ 119,776

TARRANT REGIONAL WATER DISTRICT

AGENDA ITEM 13

DATE: December 13, 2022

SUBJECT: Consider Approval of Purchase from Thompson Group for Replacement Pipe Segments for the Richland-Chambers Pipeline

FUNDING: Fiscal Year 2023 Revenue Fund Budget - \$850,000

RECOMMENDATION:

Management recommends approval of a purchase **in the amount of \$477,445.71** from Thompson Group for 90" E-301 pipe to replace 15 damaged pipe segments of the Richland-Chambers Pipeline.

DISCUSSION:

This project is the annual predictive maintenance pipe replacement, consisting of replacing 15 damaged segments of the 90" Richland-Chambers Pipeline during Fiscal Year 2024. The targeted segments have been identified through the District's Pipeline Integrity Program. The lead time for pipe delivery necessitates budgeting and purchasing in FY 2023. The damaged segments are in Section V located between the Ennis Booster station and the Richland-Chambers lake station.

Determination of the specific targeted segments is decided after the budget is assembled. For that reason certain assumptions are made to determine budget. For 2023, \$850,000 was budgeted and then the following were selected: seven (7) closure segments, eight (8) standard segments for a total of \$477,445.71.

Thompson Group, previously known as Forterra and originally as Hanson, made the pipe for original construction. The District requested proposals for the original option constructed and 4 additional option alternatives. Evaluation for each option included items such as the pipe price provided, installation costs, additional material costs and schedule impacts. Upon evaluation, replacing the damaged segments of pipeline with the original option constructed was the most cost effective solution.

This item was reviewed by the Construction and Operations Committee on December 9, 2022.

Submitted By:

Darrell Beason
Chief Operations Officer

00301 PROPOSAL - EXHIBIT A.1

2024 RC Pipe Replacement
 Tarrant Regional Water District
 RFP 23-025 - 2024 RC Pipe Replacement - Addendum 2

PROPOSALS FOR PIPE ALTERNATES

Refer to Exhibit A.2 for reference and for information not shown on this Exhibit.

Offeror may choose to make an offer on one or more, or all of Bid Options A - E. If no bid is being offered for a Bid Option, write "NO BID" in the space for the Total Amount for that Bid Option.

TRWD's evaluation for each option will include the pipe price provided by Offerors, installation costs, additional material costs, schedule impacts, and other factors, in determining which, if any, option to award.

Option A - PCCP												
Item No.	Item Description								Unit	Unit Quantity	Unit Price	Extended Amount
Option-Location.Segment	Diameter (in)	Length (ft)	Pressure Class (PSI)	Initial Cover (ft)	Access	Notes	Downstream Joint	Upstream Joint				
A-1.1	90	20	175	8	None	None	Exist PCCP	New PCCP	EA	1	\$ 18,271.43	\$ 18,271.43
A-1.2	90	20	175	8	None	None	New PCCP	New PCCP Closure	EA	1	\$ 18,271.43	\$ 18,271.43
A-1.3	90	20	175	8	Flanged 24" Manway	2-Piece Closure with Butt Strap	New PCCP	New PCCP	EA	1	\$ 50,008.57	\$ 50,008.57
A-1.4	90	20	175	8	None	None	New PCCP Closure	New PCCP	EA	1	\$ 18,271.43	\$ 18,271.43
A-1.5	90	20	175	8	None	None	New PCCP	Exist PCCP	EA	1	\$ 18,271.43	\$ 18,271.43
A-2.1	90	20	175	8	Flanged 24" Manway	2-Piece Closure with Butt Strap	Exist PCCP	Exist PCCP	EA	1	\$ 50,008.57	\$ 50,008.57
A-3.1	90	20	175	8	24" Opening & Cover Plate	2-Piece Closure with Butt Strap	Exist PCCP	Exist PCCP	EA	1	\$ 45,181.43	\$ 45,181.43
A-4.1	90	20	175	10	None	None	Exist PCCP	New PCCP Closure	EA	1	\$ 18,532.86	\$ 18,532.86
A-4.2	90	20	175	10	24" Opening & Cover Plate	2-Piece Closure with Butt Strap	New PCCP	Exist PCCP	EA	1	\$ 45,442.86	\$ 45,442.86
A-5.1	90	20	175	8	None	None	Exist PCCP	New PCCP	EA	1	\$ 18,271.43	\$ 18,271.43
A-5.2	90	20	175	8	None	None	New PCCP	New PCCP Closure	EA	1	\$ 18,271.43	\$ 18,271.43
A-5.3	90	20	175	8	24" Opening & Cover Plate	2-Piece Closure with Butt Strap	New PCCP	Exist PCCP	EA	1	\$ 45,181.43	\$ 45,181.43
A-6.1	90	20	175	8	None	None	Exist PCCP	New PCCP Closure	EA	1	\$ 18,271.43	\$ 18,271.43
A-6.2	90	20	175	8	24" Opening & Cover Plate	2-Piece Closure with Butt Strap	New PCCP	Exist PCCP	EA	1	\$ 45,181.43	\$ 45,181.43
A-7.1	90	20	175	8	Flanged 24" Manway	2-Piece Closure with Butt Strap	Exist PCCP	Exist PCCP	EA	1	\$ 50,008.57	\$ 50,008.57
Option A Total												\$ 477,445.71

Option B - Steel Pipe, Cement Mortar Lined and Coated with Carnegie Joint Rings at Steel/PCCP Connections

Item No.	Item Description								Unit	Unit Quantity	Unit Price	Extended Amount
Option-Location.Segment	Diameter (In)	Length (ft)	Pressure Class (PSI)	Initial Cover (ft)	Access	Notes	Downstream Joint	Upstream Joint				
B-1.1	90	20	175	8	None	None	Exist PCCP	New Steel	EA	1	\$ 30,246.40	\$ 30,246.40
B-1.2	90	20	175	8	None	None	New Steel	New Steel Butt Strap	EA	1	\$ 30,522.40	\$ 30,522.40
B-1.3	90	20	175	8	Flanged 24" Manway	None	New Steel Butt Strap	New Steel	EA	1	\$ 36,139.73	\$ 36,139.73
B-1.4	90	20	175	8	None	None	New Steel	New Steel	EA	1	\$ 28,863.73	\$ 28,863.73
B-1.5	90	20	175	8	None	None	New Steel	Exist PCCP	EA	1	\$ 30,246.40	\$ 30,246.40
B-2.1	90	20	175	8	Flanged 24" Manway	2-Piece Closure with Butt Strap	Exist PCCP	Exist PCCP	EA	1	\$ 38,905.07	\$ 38,905.07
B-3.1	90	20	175	8	24" Opening & Cover Plate	2-Piece Closure with Butt Strap	Exist PCCP	Exist PCCP	EA	1	\$ 34,414.40	\$ 34,414.40
B-4.1	90	20	175	10	None	None	Exist PCCP	New Steel Butt Strap	EA	1	\$ 31,905.07	\$ 31,905.07
B-4.2	90	20	175	10	24" Opening & Cover Plate	None	New Steel Butt Strap	Exist PCCP	EA	1	\$ 33,031.73	\$ 33,031.73
B-5.1	90	20	175	8	None	None	Exist PCCP	New Steel	EA	1	\$ 30,246.40	\$ 30,246.40
B-5.2	90	20	175	8	None	None	New Steel	New Steel Butt Strap	EA	1	\$ 30,522.40	\$ 30,522.40
B-5.3	90	20	175	8	24" Opening & Cover Plate	None	New Steel Butt Strap	Exist PCCP	EA	1	\$ 33,031.73	\$ 33,031.73
B-6.1	90	20	175	8	None	None	Exist PCCP	New Steel Butt Strap	EA	1	\$ 31,905.07	\$ 31,905.07
B-6.2	90	20	175	8	24" Opening & Cover Plate	None	New Steel Butt Strap	Exist PCCP	EA	1	\$ 33,031.73	\$ 33,031.73
B-7.1	90	20	175	8	Flanged 24" Manway	2-Piece Closure with Butt Strap	Exist PCCP	Exist PCCP	EA	1	\$ 38,905.07	\$ 38,905.07
Option B Total												\$ 491,917.33

Option C - Steel Pipe, Cement Mortar Lined and Coated With Butt Straps at Steel/PCCP Connections												
Item No.	Item Description								Unit	Unit Quantity	Unit Price	Extended Amount
Option-Location.Segment	Diameter (In)	Length (ft)	Pressure Class (PSI)	Initial Cover (ft)	Access	Notes	Downstream Joint	Upstream Joint				
C-1.1	90	20	175	8	None	None	Exist PCCP	New Steel	EA	1	\$ 30,246.40	\$ 30,246.40
C-1.2	90	20	175	8	None	None	New Steel	New Steel Butt Strap	EA	1	\$ 30,522.40	\$ 30,522.40
C-1.3	90	20	175	8	Flanged 24" Manway	None	New Steel Butt Strap	New Steel	EA	1	\$ 36,139.73	\$ 36,139.73
C-1.4	90	20	175	8	None	None	New Steel	New Steel	EA	1	\$ 28,863.73	\$ 28,863.73
C-1.5	90	20	175	8	None	None	New Steel	Exist PCCP	EA	1	\$ 30,246.40	\$ 30,246.40
C-2.1	90	20	175	8	Flanged 24" Manway	2-Piece Closure with Butt Strap	Exist PCCP	Exist PCCP	EA	1	\$ 38,905.07	\$ 38,905.07
C-3.1	90	20	175	8	24" Opening & Cover Plate	2-Piece Closure with Butt Strap	Exist PCCP	Exist PCCP	EA	1	\$ 34,414.40	\$ 34,414.40
C-4.1	90	20	175	10	None	None	Exist PCCP	New Steel Butt Strap	EA	1	\$ 31,905.07	\$ 31,905.07
C-4.2	90	20	175	10	24" Opening & Cover Plate	None	New Steel Butt Strap	Exist PCCP	EA	1	\$ 33,031.73	\$ 33,031.73
C-5.1	90	20	175	8	None	None	Exist PCCP	New Steel	EA	1	\$ 30,246.40	\$ 30,246.40
C-5.2	90	20	175	8	None	None	New Steel	New Steel Butt Strap	EA	1	\$ 30,522.40	\$ 30,522.40
C-5.3	90	20	175	8	24" Opening & Cover Plate	None	New Steel Butt Strap	Exist PCCP	EA	1	\$ 33,031.73	\$ 33,031.73
C-6.1	90	20	175	8	None	None	Exist PCCP	New Steel Butt Strap	EA	1	\$ 31,905.07	\$ 31,905.07
C-6.2	90	20	175	8	24" Opening & Cover Plate	None	New Steel Butt Strap	Exist PCCP	EA	1	\$ 33,031.73	\$ 33,031.73
C-7.1	90	20	175	8	Flanged 24" Manway	2-Piece Closure with Butt Strap	Exist PCCP	Exist PCCP	EA	1	\$ 38,905.07	\$ 38,905.07
Option C Total												\$ 491,917.33

Option D - Steel Pipe, Cement Mortar Lined and Polyurethane Coated With Carnegie Joint Rings at Steel/PCCP Connections												
Item No.	Item Description								Unit	Unit Quantity	Unit Price	Extended Amount
Option-Location.Segment	Diameter (In)	Length (ft)	Pressure Class (PSI)	Initial Cover (ft)	Access	Notes	Downstream Joint	Upstream Joint				

D-1.1	90	20	175	8	None	None	Exist PCCP	New Steel	EA	1	\$ 30,854.40	\$ 30,854.40
D-1.2	90	20	175	8	None	None	New Steel	New Steel Butt Strap	EA	1	\$ 31,262.40	\$ 31,262.40
D-1.3	90	20	175	8	Flanged 24" Manway	None	New Steel Butt Strap	New Steel	EA	1	\$ 36,895.73	\$ 36,895.73
D-1.4	90	20	175	8	None	None	New Steel	New Steel	EA	1	\$ 29,471.73	\$ 29,471.73
D-1.5	90	20	175	8	None	None	New Steel	Exist PCCP	EA	1	\$ 30,854.40	\$ 30,854.40
D-2.1	90	20	175	8	Flanged 24" Manway	2-Piece Closure with Butt Strap	Exist PCCP	Exist PCCP	EA	1	\$ 39,661.07	\$ 39,661.07
D-3.1	90	20	175	8	24" Opening & Cover Plate	2-Piece Closure with Butt Strap	Exist PCCP	Exist PCCP	EA	1	\$ 35,154.40	\$ 35,154.40
D-4.1	90	20	175	10	None	None	Exist PCCP	New Steel Butt Strap	EA	1	\$ 32,645.07	\$ 32,645.07
D-4.2	90	20	175	10	24" Opening & Cover Plate	None	New Steel Butt Strap	Exist PCCP	EA	1	\$ 33,771.73	\$ 33,771.73
D-5.1	90	20	175	8	None	None	Exist PCCP	New Steel	EA	1	\$ 30,854.40	\$ 30,854.40
D-5.2	90	20	175	8	None	None	New Steel	New Steel Butt Strap	EA	1	\$ 31,262.40	\$ 31,262.40
D-5.3	90	20	175	8	24" Opening & Cover Plate	None	New Steel Butt Strap	Exist PCCP	EA	1	\$ 33,771.73	\$ 33,771.73
D-6.1	90	20	175	8	None	None	Exist PCCP	New Steel Butt Strap	EA	1	\$ 32,645.07	\$ 32,645.07
D-6.2	90	20	175	8	24" Opening & Cover Plate	None	New Steel Butt Strap	Exist PCCP	EA	1	\$ 33,771.73	\$ 33,771.73
D-7.1	90	20	175	8	Flanged 24" Manway	2-Piece Closure with Butt Strap	Exist PCCP	Exist PCCP	EA	1	\$ 39,661.07	\$ 39,661.07
Option D Total											\$ 502,537.33	

Option E - Steel Pipe, Cement Mortar Lined and Polyurethane Coated With Butt Straps at Steel/PCCP Connections

Item No.	Item Description								Unit	Unit Quantity	Unit Price	Extended Amount
Option-Location.Segment	Diameter (In)	Length (ft)	Pressure Class (PSI)	Initial Cover (ft)	Access	Notes	Downstream Joint	Upstream Joint				
E-1.1	90	20	175	8	None	None	Exist PCCP	New Steel	EA	1	\$ 30,854.40	\$ 30,854.40
E-1.2	90	20	175	8	None	None	New Steel	New Steel Butt Strap	EA	1	\$ 31,262.40	\$ 31,262.40
E-1.3	90	20	175	8	Flanged 24" Manway	None	New Steel Butt Strap	New Steel	EA	1	\$ 36,895.73	\$ 36,895.73
E-1.4	90	20	175	8	None	None	New Steel	New Steel	EA	1	\$ 29,471.73	\$ 29,471.73
E-1.5	90	20	175	8	None	None	New Steel	Exist PCCP	EA	1	\$ 30,854.40	\$ 30,854.40
E-2.1	90	20	175	8	Flanged 24" Manway	2-Piece Closure with Butt Strap	Exist PCCP	Exist PCCP	EA	1	\$ 39,661.07	\$ 39,661.07
E-3.1	90	20	175	8	24" Opening & Cover Plate	2-Piece Closure with Butt Strap	Exist PCCP	Exist PCCP	EA	1	\$ 35,154.40	\$ 35,154.40
E-4.1	90	20	175	10	None	None	Exist PCCP	New Steel Butt Strap	EA	1	\$ 32,645.07	\$ 32,645.07
E-4.2	90	20	175	10	24" Opening & Cover Plate	None	New Steel Butt Strap	Exist PCCP	EA	1	\$ 33,771.73	\$ 33,771.73
E-5.1	90	20	175	8	None	None	Exist PCCP	New Steel	EA	1	\$ 30,854.40	\$ 30,854.40
E-5.2	90	20	175	8	None	None	New Steel	New Steel Butt Strap	EA	1	\$ 31,262.40	\$ 31,262.40
E-5.3	90	20	175	8	24" Opening & Cover Plate	None	New Steel Butt Strap	Exist PCCP	EA	1	\$ 33,771.73	\$ 33,771.73
E-6.1	90	20	175	8	None	None	Exist PCCP	New Steel Butt Strap	EA	1	\$ 32,645.07	\$ 32,645.07
E-6.2	90	20	175	8	24" Opening & Cover Plate	None	New Steel Butt Strap	Exist PCCP	EA	1	\$ 33,771.73	\$ 33,771.73
E-7.1	90	20	175	8	Flanged 24" Manway	2-Piece Closure with Butt Strap	Exist PCCP	Exist PCCP	EA	1	\$ 39,661.07	\$ 39,661.07
Option E Total											\$ 502,537.33	

Delivery Times. Write in a Date Even if Defaulting to the Last Date Allowed.

Offeror agrees to Deliver Pipe for indicated options:								A	180	Days from the Date of the Notice to Proceed
							B	180	Days from the Date of the Notice to Proceed	
							C	180	Days from the Date of the Notice to Proceed	
							D	180	Days from the Date of the Notice to Proceed	
							E	180	Days from the Date of the Notice to Proceed	

PROPOSAL SUBMITTED BY:

Signature:



Printed Name:

Detlev Schlorke

Title:

President

Date:

11/14/2022

JPF Pressure Inc
dba Thompson Pipe Group Pressure

TARRANT REGIONAL WATER DISTRICT

AGENDA ITEM 14

DATE: December 13, 2022

SUBJECT: Consider Approval of Contract with United Site Services for Portable Restrooms

FUNDING: Fiscal Year 2023 Recreation Fund Budget - \$45,000

RECOMMENDATION:

Management recommends approval of an annual contract **in the amount of \$32,700 for the first 10-month period and \$39,240 for four (4) additional one-year periods** with United Site Services for the rental and service of portable restrooms in nine different trailhead locations across the Fort Worth Trinity Trails, Marine Lake and Eagle Mountain Lake.

DISCUSSION:

The District solicited proposals from portable restroom companies in support of Fort Worth and Eagle Mountain Recreation Facilities. Each unit is to be serviced three times a week during each monthly rental.

The Request for Proposal was advertised per statute and one compliant proposal was received.

The proposed contract would commence on 1/1/2023 and terminate on 9/30/2023 with an option to renew for four (4) additional one-year periods with acceptable performance.

This item was reviewed by the Construction and Operations Committee on December 9, 2022.

Submitted By:

Darrell Beason
Chief Operations Officer



Bid Tabulation

ITB No. 23-021
Description Portable Restrooms for Fort Worth Floodway
Due Date and Time NOVEMBER 3, 2022 AT 2:00 PM

Company Name	Bid Amount for Floodway Locations	Bid Amount for Eagle Mountain Park Location	Bid Amount for All Locations
United Site Services of Texas, Inc.	\$21,700.00	\$11,000.00	\$32,700.00

TARRANT REGIONAL WATER DISTRICT

AGENDA ITEM 16

DATE: December 13, 2022

SUBJECT: Executive Session

FUNDING: N/A

RECOMMENDATION:

Section 551.071 of the Texas Government Code, for Private Consultation with its Attorney about Pending or Contemplated Litigation or on a Matter in which the Duty of the Attorney to the Governmental Body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas Clearly Conflicts with this Chapter, Including Discussion of Legal Aspects of Board Vacancy; and

Section 551.074 of the Texas Government Code Regarding Personnel Matters related to Board Vacancy

DISCUSSION:

- Conflict of duty of counsel
- Pending litigation
- Real property issues

Submitted By:

Alan Thomas
Deputy General Manager

TARRANT REGIONAL WATER DISTRICT

AGENDA ITEM 17

DATE: December 13, 2022

SUBJECT: Discussion of Mid-Term Vacancy on TRWD Board of Directors and Potential Action to Address Same

FUNDING: N/A

RECOMMENDATION:

Management recommends a discussion in open session about the process for filling a mid-term vacancy on the TRWD Board of Directors as provided under Texas law.

DISCUSSION:

TRWD Director Jim Lane passed away on November 27, 2022, creating a vacancy on the District's five member board of directors. Chapter 49 of the Texas Water Code contains certain provisions that govern how water districts like TRWD fill such vacancies. Specifically, section 49.105 requires the Board to fill the vacancy by appointing a new Director to serve for the remainder of the unexpired term. But the statute is silent about how that process is supposed to occur within the policies and procedures of TRWD. Therefore, the Board and the public would benefit from an open discussion - led by the District's General Counsel - about how, exactly, the Board should execute the statutory process for filling a mid-term vacancy on the TRWD Board of Directors.

This item was reviewed by the Administration and Policy Committee on December 8, 2022.

Submitted By:

Stephen Tatum
General Counsel

TARRANT REGIONAL WATER DISTRICT

AGENDA ITEM 18

DATE: December 13, 2022

SUBJECT: Consider Election of New Board Secretary

FUNDING: N/A

RECOMMENDATION:

Management recommends the Board elect a new Board Secretary from amongst current Board membership to fill officer vacancy created by the passing of Director Jim Lane.

DISCUSSION:

Director Jim Lane, who passed away on November 27, 2022, served as TRWD Board Secretary. With his passing, that officer position is now vacant and should be filled from current Board membership. TRWD Board Governance Policy 3.6 states that individual officer vacancies in the midst of a term may be filled by vote of the Board at the next regularly-scheduled Board meeting or at a special or called Board meeting.

Nominations for officers may be taken from the floor at the Board meeting prior to the vote. After nominations have been closed, Board members shall cast their vote. When there is only one nominee for an office, the President can declare that the nominee is elected, effecting the election by unanimous consent or acclamation. An election to an office shall become final immediately.

This item was reviewed by the Administration and Policy Committee on December 8, 2022.

Submitted By:

Stephen Tatum
General Counsel

Next Scheduled Board Meeting

January 17, 2023 at 9:00 AM