



# City of Denton

City Hall  
215 E. McKinney St.  
Denton, Texas 76201  
[www.cityofdenton.com](http://www.cityofdenton.com)

## Meeting Agenda Public Utilities Board

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Monday, May 22, 2023

9:00 AM

Council Work Session Room

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### **REGISTRATION GUIDELINES FOR ADDRESSING THE PUBLIC UTILITIES BOARD**

Citizens will be able to participate in the following way:

- eComment – The agenda was posted online at <https://tx-denton.civicplus.com/242/Public-Meetings-Agendas>. Once the agenda is posted, a link to make virtual comments using the eComment module will be made available next to the meeting listing on the Upcoming Events Calendar. Using eComment, Individuals may indicate support or opposition and submit a brief comment about a specific agenda item. eComments may be submitted up until the start of the meeting at which time the ability to make an eComment will be closed. eComments will be sent directly to members of the Public Utilities Board immediately upon submission and recorded by the Secretary into the Minutes of the Meeting.

After determining that a quorum is present, the Public Utilities Board of the City of Denton, Texas will convene in a Regular Meeting on Monday, May 22, 2023, at 9:00 a.m. in the Council Work Session Room at City Hall, 215 E. McKinney Street, Denton, Texas at which the following items will be considered:

### **REGULAR MEETING**

#### **1. PRESENTATIONS FROM MEMBERS OF THE PUBLIC**

This section of the agenda permits a person to make comments regarding public business on items as listed on the agenda. Each speaker will be allowed a maximum of four (4) minutes. Such person(s) shall have registered under the REGISTRATION GUIDELINES FOR ADDRESSING THE PUBLIC UTILITIES BOARD detailed at the beginning of this agenda. Registration is required prior to the time this agenda item is read into the record.

#### **2. CONSENT AGENDA**

Each of the items on the Consent Agenda is recommended by the Staff and approval thereof will be strictly on the basis of the Staff recommendations. Approval of the Consent Agenda authorizes the City Manager or designee to implement each item in accordance with the Staff recommendations. The Public Utilities Board has received background information and has had an opportunity to raise questions regarding these items prior to consideration.

Listed below are bids, purchase orders, contracts, and other items to be approved for payment or other action under the Consent Agenda (Agenda Items A - B). This listing is provided on the Consent Agenda to allow Public Utilities Board Members to discuss or withdraw an item prior to approval of the Consent Agenda. If no items are pulled, the Consent Agenda Items will be approved with one motion. If items are pulled for separate discussion, they may be considered as the first items following approval of the Consent Agenda.

- A. [PUB23-073](#) Consider recommending approval of a resolution of the City of Denton, Texas adopting

the City of Denton's Vegetation Management Program ("VMP") to provide rules and policies necessary to manage transmission system and distribution providers' vegetation management standards to provide a safe system environment for customers and the general public to minimize tree related outages caused during high wind, snow, and ice storms, and trees losing their branches from disease or old age; and providing an effective date.

Attachments:      [Exhibit 1: AIS-Vegetation Mgmt Resolution PUB](#)  
                              [Exhibit 2: Resolution \(signed\)\(5.18\)](#)

- B.    [PUB23-096](#)    Consider recommending adoption of an ordinance of the City of Denton, a Texas home-rule municipal corporation, authorizing the City Manager to execute a Professional Services Agreement with Kimley-Horn and Associates, Inc., to provide permitting assistance for two (2) new Wastewater Reclamation Facilities for the Water Utilities Department; providing for the expenditure of funds therefor; and providing an effective date (RFQ 7574-028 - Professional Services Agreement for design services awarded to Kimley-Horn and Associates, Inc., in the not-to-exceed amount of \$240,000.00).

Attachments:      [Exhibit 1 - Agenda Information Sheet](#)  
                              [Exhibit 2 - Ordinance and Contract](#)

### 3. ITEMS FOR INDIVIDUAL CONSIDERATION

- A.    [PUB23-099](#)    Consider approval of the May 8, 2023 minutes.

Attachments:      [5.8.23 PUB Minutes](#)

- B.    [PUB23-091](#)    Consider recommending adoption of an ordinance considering all matters incident and related to the issuance, sale and delivery of up to \$80,500,000 in principal amount of "City of Denton General Obligation refunding and improvement bonds, Series 2023"; authorizing the issuance of the bonds; delegating the authority to certain city officials to execute certain documents relating to the sale of the bonds; approving and authorizing instruments and procedures relating to said bonds; enacting other provisions relating to the subject; and providing an effective date.

Attachments:      [Exhibit 1. Agenda Information Sheet](#)  
                              [Exhibit 2. Preliminary Official Statement](#)  
                              [Exhibit 3. GO Ordinance](#)  
                              [Exhibit 4. Presentation](#)

- C.    [PUB23-092](#)    Consider recommending adoption of an ordinance considering all matters incident and related to the issuance, sale and delivery of up to \$158,500,000 in principal amount of "City of Denton Certificates of Obligation, Series 2023"; authorizing the issuance of the certificates; delegating the authority to certain city officials to execute certain documents relating to the sale of the certificates; approving and authorizing instruments and procedures relating to said certificates; enacting other provisions relating to the subject; and providing an effective date.

Attachments:      [Exhibit 1. Agenda Information Sheet](#)  
                              [Exhibit 2. Preliminary Official Statement](#)  
                              [Exhibit 3. CO Ordinance](#)  
                              [Exhibit 4. Presentation](#)

- D.    [PUB23-095](#)    Consider recommending adoption of an ordinance of the City of Denton, a Texas home-rule municipal corporation, authorizing the City Manager to execute a Professional Services Agreement with Kimley-Horn and Associates, Inc., to provide regulatory permitting/approval support, process evaluation, design services, bidding assistance, and construction phase services for the Pecan Creek Water Reclamation Plant (PCWRP) Expansion to 26MGD Project for the Wastewater Department; providing for the expenditure of funds therefor; and providing an effective date (RFQ 7574-027 - Professional Services Agreement for design services awarded to Kimley-Horn and Associates, Inc., in the not-to-exceed amount of \$14,952,000.00).

Attachments:      [Exhibit 1 - Agenda Information Sheet](#)  
                              [Exhibit 2 - Exhibit Scope Evaluation fee](#)  
                              [Exhibit 3 - Ordinance and Contract](#)  
                              [Exhibit 4 - Presentation](#)

- E.    [PUB23-097](#)    Consider recommending adoption of an ordinance of the City of Denton, a Texas home-rule municipal corporation, authorizing the City Manager to execute a contract with Alamo Transformer Supply Company, for the purchase of refurbished, rebuilt, and salvaged transformers and transformer disposal for Denton Municipal Electric as set forth in the contract; providing for the expenditure of funds therefor; and providing an effective date (RFQ 8192 - contract for transformers awarded to Alamo Transformer Supply Company, in the three (3) year not-to-exceed amount of \$10,000,000.00).

Attachments:      [Exhibit 1 - Agenda Information Sheet](#)  
                              [Exhibit 2 - Evaluation Sheet](#)  
                              [Exhibit 3 - Presentation](#)  
                              [Exhibit 4 - Ordinance and Contract](#)

- F.    [PUB23-098](#)    Consider recommending adoption of an ordinance of the City of Denton, a Texas home-rule municipal corporation, authorizing the City Manager to execute a contract with Pure Technologies US Inc., for the Transmission Mains Condition Assessment for the Water Utilities Department; providing for the expenditure of funds therefor; and providing an effective date (RFP 8181 - awarded to Pure Technologies US Inc., for three (3) years, with the option for two (2) additional one (1) year extensions, in the total five (5) year not-to-exceed amount of \$10,000,000.00).

Attachments:      [Exhibit 1 - Agenda Information Sheet](#)  
                              [Exhibit 2 - Presentation](#)  
                              [Exhibit 3 - Ordinance and Contract](#)

- G.    [PUB23-100](#)    Management Reports:  
                          1. Future Agenda Items

## 2. New Business Action Items

Attachments:      [1. Future Agenda Items](#)  
                              [2. New Business Action Items](#)

**6. CONCLUDING ITEMS**

A. Under Section 551.042 of the Texas Open Meetings Act, respond to inquiries from the Public Utilities Board or the public with specific factual information or recitation of policy, or accept a proposal to place the matter on the agenda for an upcoming meeting AND Under Section 551.0415 of the Texas Open Meetings Act, provide reports about items of community interest regarding which no action will be taken, to include: expressions of thanks, congratulations, or condolence; information regarding holiday schedules; an honorary or salutary recognition of a public official, public employee, or other citizen; a reminder about an upcoming event organized or sponsored by the governing body; information regarding a social, ceremonial, or community event organized or sponsored by an entity other than the governing body that was attended or is scheduled to be attended by a member of the governing body or an official or employee of the municipality; or an announcement involving an imminent threat to the public health and safety of people in the municipality that has arisen after the posting of the agenda.

Following the completion of the Regular Meeting, the Public Utilities Board will convene in a Work Session at which the following items will be considered:

**WORK SESSION**

- A. [PUB23-023](#) Receive a report, hold a discussion, and give staff direction regarding the FY 2023-24 Utility Budget Forecasts.

Attachments:      [Exhibit 1. Agenda Information Sheet](#)  
                              [Exhibit 2. Presentation](#)

- B. [PUB23-036](#) Receive a report, hold a discussion, and give staff direction regarding an update on the Wastewater Master Plan.

[Estimated Presentation/Discussion Time: 45 minutes]

Attachments:      [Exhibit 1 - Agenda Information Sheet](#)  
                              [Exhibit 2 - Presentation](#)

**CERTIFICATE**

I certify that the above notice of meeting was posted on the official website (<https://tx-denton.civicplus.com/242/Public-Meetings-Agendas>) and bulletin board at City Hall, 215 E. McKinney Street, Denton, Texas, on May 19, 2023, in advance of the 72-hour posting deadline, as applicable, and in accordance with Chapter 551 of the Texas Government Code.

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OFFICE OF THE CITY SECRETARY



NOTE: THE CITY OF DENTON'S DESIGNATED PUBLIC MEETING FACILITIES ARE ACCESSIBLE IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT. THE CITY WILL PROVIDE ACCOMMODATION, SUCH AS SIGN LANGUAGE INTERPRETERS FOR THE HEARING IMPAIRED, IF REQUESTED AT LEAST 48 HOURS IN ADVANCE OF THE SCHEDULED MEETING. PLEASE CALL THE CITY SECRETARY'S OFFICE AT 940-349-8309 OR USE TELECOMMUNICATIONS DEVICES FOR THE DEAF (TDD) BY CALLING 1-800-RELAY-TX SO THAT REASONABLE ACCOMMODATION CAN BE ARRANGED.



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## Legislation Text

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**File #:** PUB23-073, **Version:** 1

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### **AGENDA CAPTION**

Consider recommending approval of a resolution of the City of Denton, Texas adopting the City of Denton's Vegetation Management Program ("VMP") to provide rules and policies necessary to manage transmission system and distribution providers' vegetation management standards to provide a safe system environment for customers and the general public to minimize tree related outages caused during high wind, snow, and ice storms, and trees losing their branches from disease or old age; and providing an effective date.



## AGENDA INFORMATION SHEET

**DEPARTMENT:** Denton Municipal Electric

**GM:** Antonio Puente, Jr., DME General Manager

**DATE:** May 22, 2023

### **SUBJECT**

Consider recommending approval of a resolution of the City of Denton, Texas adopting the City of Denton's Vegetation Management Program ("VMP") to provide rules and policies necessary to manage transmission system and distribution providers' vegetation management standards to provide a safe system environment for customers and the general public to minimize tree related outages caused during high wind, snow, and ice storms, and trees losing their branches from disease or old age; and providing an effective date.

### **STRATEGIC ALIGNMENT**

This action supports Key Focus Area:  
Support Healthy and Safe Communities

### **INFORMATION/BACKGROUND**

Denton Municipal Electric (DME) established its vegetation management program on April 7, 2006, in order for the utility to be in compliance with NERC/ERCOT Standard FAC-003-1. Recent legislative actions may allow the Public Utility Commission of Texas to provide oversight of a utility's vegetation management program. Austin Energy's high-profile experience with significant (in number and duration) outages during Ice Storm Mara was attributed to unmanaged adjacent trees, heavily loaded with ice, failing, and bringing down distribution pole lines due to the tree's close proximity to electric conductor or telecommunication or fiber company cables. Many Austin Energy customers experienced days of outages before their electric service was fully restored. These items support the need for DME to properly manage vegetation, away from both DME and telecom and fiber assets, with standardized clearances. An effective vegetation management program has proven to be valuable to DME's reliability by minimizing outages by proactive identification of locations where trees, limbs, vines, and other vegetation could potentially cause an outage due to their proximity to DME's primary and secondary conductors.

DME documents, through its written VMP, the program's objectives; customer relation requirements; tree trimming practices, procedures, and definitions; and actual standards for clearances based on Institute of Electric and Electronic Engineers Standards, Occupational Safety & Health Association Tree Trimming Standards, American National Standards Institute Standards for Pruning, and applicable City of Denton Development Code and DME Electric Service Standards. DME's contractor for vegetation management is required to have a Certified Utility Arborist on staff. DME's vegetation management program has earned the Tree Line USA® designation for best practices in arboriculture as recognized by the Arbor Day Foundation. The VMP became effective August 25, 2021. The standards include language for clearance expectations for telecommunication and fiber companies.

To codify this Standard, DME is presenting to Council a resolution for adoption of DME's current VMP.

**PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)**

None

**RECOMMENDATION**

Staff recommends approval of the resolution.

**FISCAL INFORMATION**

These products and services will be funded through the using department's budget on an as-needed basis.

**EXHIBITS**

Exhibit 1: AIS-Vegetation Mgmt Resolution PUB

Exhibit 2: Resolution (signed)(5.18)

Respectfully submitted:  
Jerry Fielder, P.E. 940 349-7173  
Engineering Division Manager, DME

Legal point of contact: Benjamin Samples at 940-349-8312.

## RESOLUTION NO.

A RESOLUTION OF THE CITY OF DENTON, TEXAS, ADOPTING THE CITY OF DENTON'S VEGETATION MANAGEMENT PROGRAM ("VMP") TO PROVIDE RULES AND POLICIES NECESSARY TO MANAGE TRANSMISSION SYSTEM AND DISTRIBUTION PROVIDERS' VEGETATION MANAGEMENT STANDARDS TO PROVIDE A SAFE SYSTEM ENVIRONMENT FOR CUSTOMERS AND THE GENERAL PUBLIC TO MINIMIZE TREE RELATED OUTAGES CAUSED DURING HIGH WIND, SNOW AND ICE STORMS, AND TREES LOSING THEIR BRANCHES FROM DISEASE OR OLD AGE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, in 2006, Denton Municipal Electric (DME) established a vegetation management program that has functioned to protect DME transmission system and distribution right-of way and easements in compliance with North American Electric Reliability Corporation ("NERC"); and

WHEREAS, the City desires to adopt similar vegetation management program that will establish the program's objectives to apply to all transmission system and distribution providers operating without a compliance requirement, within the City of Denton; and

WHEREAS, the program objectives (i.e. customer relation requirements; tree trimming practices, procedures, and definitions) will adopt actual standards for clearances based on the Institute of Electric and Electronic Engineers Standards, Occupational Safety & Health Association Tree Trimming Standards, American National Standards Institute Standards for Pruning, and applicable City of Denton Development Code and Electric Service Standards; and

WHEREAS, the City Council desires to effect vegetation management standards upon all transmission system and distribution providers who utilize wood poles or other structures within the City of Denton; and

WHEREAS, the City Council finds that the implementation and adoption of the City of Denton Vegetation Management Program is in the best interests of the health, safety, and general welfare of the citizens of the City of Denton, Texas; NOW, THEREFORE,

THE CITY COUNCIL OF THE CITY OF DENTON, TEXAS HEREBY RESOLVES:

SECTION 1. The findings and recitals contained in the preamble to this resolution are hereby incorporated by reference into the body of this resolution as fully set forth herein.

SECTION 2. The City Council hereby adopts that the City of Denton Vegetation Management Program to establish and provide a comprehensive and consistent program for performing vegetation management within the transmission system and distribution rights-of-way and easements in compliance with North American Electric Reliability Corporation ("NERC") Standard FAC-003-1 within the territorial limits of the city of Denton.

SECTION 3. The Denton City Council adopts the City of Denton Vegetation

Management Program and its recommendations and implementation actions, as presented in Exhibit A, attached hereto and made a part hereof.

SECTION 4. If any provision of this resolution or the application thereof to any person or circumstance is held invalid by any court, such invalidity shall not affect the validity of the provisions or applications, and to this end the provisions of this ordinance are severable.

SECTION 5. This resolution shall become effective immediately upon its passage and approval.

The Motion to approve this resolution was made by \_\_\_\_\_  
and seconded by \_\_\_\_\_, the resolution  
was passed and approved by the following vote [ \_\_\_\_\_ - \_\_\_\_\_]:

	<b>Aye</b>	<b>Nay</b>	<b>Abstain</b>	<b>Absent</b>
Mayor Gerard Hudspeth:	_____	_____	_____	_____
Vicki Byrd, District 1:	_____	_____	_____	_____
Brian Beck, District 2:	_____	_____	_____	_____
Paul Meltzer, District 3:	_____	_____	_____	_____
Joe Holland, District 4:	_____	_____	_____	_____
Brandon Chase McGee, At Large Place 5:	_____	_____	_____	_____
Chris Watts, At Large Place 6:	_____	_____	_____	_____

PASSED AND APPROVED this the \_\_\_\_\_ day of \_\_\_\_\_, 2023.

\_\_\_\_\_  
GERARD HUDSPETH, MAYOR

ATTEST:

JESUS SALAZAR, INTERIM CITY SECRETARY

BY: \_\_\_\_\_

APPROVED AS TO LEGAL FORM:

MACK REINWAND, CITY ATTORNEY

BY: \_\_\_\_\_

# EXHIBIT A



## City of Denton Vegetation Management Program

### Vegetation Management Program Section Table of Contents

Section I – Objectives

Section II – Customer Relations

Section III - Trimming Practices, Procedures and Definitions

Section IV – Removal and Trimming Standards – Work Specifications

Section V – Document Control

#### **SECTION I Objectives**

- The objectives of the City of Denton (“City”) Transmission Vegetation Management Program (TMVP) are to provide a safe system environment for customers and the general public to minimize tree-related outages caused during high wind, snow and ice storms, and trees losing their branches from disease or old age. The objectives are to be achieved while maintaining positive relations and utilizing sound environmental practices.
- To establish a comprehensive and consistent program for performing vegetation management in the City of Denton transmission system and distribution right-of-ways and easements in compliance with North American Electric Reliability Corporation (“NERC”) Standard FAC-003-1. This program defines the responsibilities of Transmission and Fiber Companies personnel and contractors, identifies procedures to be followed by contractors performing all work and defines the clearance requirements between conductors and vegetation acceptable to the City for maintaining a reliable transmission and distribution service.

**NOTE:** This program will be reviewed annually for accuracy and revisions by the Vegetation Management Subject Matter Expert (SME)(Currently Brad Watts).

#### **SECTION II Customer Relations**

##### **Customer Contact Steps**

1. IVR (Interactive Voice Response) will make contact by telephone informing the customer when tree trimming will be done at their property and or neighborhood.
2. Door hangers are to be placed on all addresses affected by the tree trimming job.
3. All attempts shall be made to contact customers in person by a City employee or contractor working for the City before entering a customer property to trim trees.



### SETTLEMENT STRATEGY

- City will make direct contact with the land owner and or current resident. We will state the fact of the important need to access the land with the respect of the land owner and his property staying within the boundaries of transmission system and distribution right-of-ways and easements.
- City and its contractors will restore any property damage that occurs from the direct result of Citycrews back to its original state at which we entered the property.
- All other matters will be processed through the City Attorney's Office in a timely manner.

### SECTION III Trimming Practices, Procedures, and Definitions

Brush - a woody plant that is less than 3 inches diameter at breast height (dbh), that is not part of an existing tree, and that may reach the conductor at maturity.

Brush work – trimming, clearing brush and applying an herbicide to the cut stems, or only applying herbicide to brush.

Clearance 1 — The Transmission Operator (TO) shall determine and document appropriate clearance distances to be achieved at the time of transmission vegetation management work based upon local or regional conditions and the expected time frame in which the TO plans to return for future vegetation management work. Local or regional conditions may include, but are not limited to: operating voltage, appropriate vegetation management techniques, fire risk, reasonably anticipated tree and conductor movement, species types and growth rates, species failure characteristics, local climate and rainfall patterns, line terrain and elevation, location of the vegetation within the span, and worker approach distance requirements. Clearance 1 distances shall be greater than those defined by Clearance 2 below.

Clearance 2 — The TO shall determine and document specific radial clearances to be maintained between vegetation and conductors under all rated electrical operating conditions. These minimum clearance distances are necessary to prevent flashover between vegetation and conductors and will vary due to such factors as altitude and operating voltage. These TO- specific minimum clearance distances shall be no less than those set forth in the Institute of Electrical and Electronics Engineers (IEEE) Standard 516-2003 (*Guide for Maintenance Methods on Energized Power Lines*) and as specified in its Section 4.2.2.3, Minimum Air Insulation Distances Without Tools in the Air Gap.

- o Where transmission system transient overvoltage factors are not known, clearances shall be derived from Table 5, IEEE 516-2003, phase-to-ground distances, with appropriate altitude correction factors applied.
- o Where transmission system transient overvoltage factors are known, clearances shall be derived from Table 7, IEEE 516-2003, phase-to-phase voltages, with appropriate altitude correction factors applied.

Coniferous - any cone-bearing trees or shrubs, mostly evergreens.

Contractor Coordinator-

Danger tree - any dead, dying, weak, diseased, or leaning tree (on or off the right-of-way) that could fall onto the conductors.





Diameter at Breast Height (dbh) – the diameter of individual tree trunks or individual stems of brush measured at a point 4.5 feet above ground.

Deciduous - any perennial plant that sheds its leaves annually or at the end of a growing season

Demand tree trimming -trimming or removing the trees on a customer requested or emergency basis. Also may include tree work associated with line construction projects. This is typically required when trees have grown into the conductors, or are close to the conductors, and have created a potentially dangerous situation. This may also include special trimming or chipping work when requested by Denton Municipal Electric. Customer requested demand tree work should only be assigned by Denton Municipal Electric.

Directional trimming - a form of natural trimming (pruning) used to encourage tree re-growth away from the conductor. It is accomplished by removing limbs growing toward the conductors entirely at the branch collar near the trunk of the tree, or by pruning to lateral branches that are at least one-third the diameter of the limb being cut and are growing away from the conductor.

Drop-crotching - generally speaking, is a crown reduction technique in which a tree trimmer makes the proper pruning cuts at crotches, removing the larger limb and favoring the smaller. For electric line clearance, the trimmer would remove limbs growing toward the conductors and favor those growing away from the conductors. This usually results in a "V" shaped appearance of the tree crown and is frequently referred to as "V-trimming". See definition of "natural pruning" for further description.

Evergreen - any plant that retains its leaves/needles year-round.

Herbicide - a chemical pesticide used to control, suppress, or kill plants, will have a colored die for recognition. - BASAL SUMP MIX #1

E.P.A # 228-385

INGREDIENTS Tahoe 4E  
(Triclopyr).....20

%

Dye.....05%

Basal Oil.....79.5%

Natural pruning -a method by which branches are cut to the branch collar at a suitable parent limb, the trunk of the tree, or an appropriately sized lateral branch. This method of pruning is sometimes called "drop-crotching", "proper pruning", the "Shigo method" or "lateral trimming."

Preventative maintenance - trimming or removing vegetation on a systematic basis typically by, but not limited to, circuit or grid, and in a manner intended to achieve system reliability.

Pruning - the removal of dead, dying, diseased, interfering, objectionable, and/or weak branches of trees or shrubs using proper arboricultural techniques.

Removal - completely removing an entire tree as close as practical to ground level and applying herbicide to the cut stump.



Right-of-way - a transmission or distribution right-of-way, an easement, a utility easement, or any other corridor of land paralleling, on both sides, an overhead transmission or distribution line within the City of Denton territorial limits.

Safety zone work – removing all overhangs by cutting back limbs to a minimum clearance of 10 feet from energized conductor.

Selective herbicide - an herbicide that, when applied to a mixed population of plants, will control specific species without injury to others.

Shearing -the making of many small cuts so that a tree adjacent to the conductors is sheared in a uniform line. This is not a generally acceptable practice.

Side pruning - using natural pruning methods to cut back or removing side branches that are threatening the conductors; required where trees are growing adjacent to conductors.

Topping - cutting back the upper crown of a tree to a uniform horizontal line, leaving multiple stubs. This is an improper and unacceptable trimming technique.

Tree - a perennial plant with a woody trunk measuring at least four (3) inches (dbh), and having one set of annual rings at ground level or more than one set of annual rings not separated by included bark. Trees that grow adjacent to one another and share an apparent common base completely separated by "included bark" are considered to be distinct trees. "Included bark" is bark that is included within the wood of a tree, or between the woody stems of separate trees, creating a physical separation between the trees.

Tree crown - the upper portion of the tree, the branches or leaf area.

Trimming - cutting back tree branches or shrubs to shape or reduce the size of the tree or shrub.

V-trim - using natural pruning methods to cut back large portions of the upper crown of a tree. This is required when trees are located directly beneath a conductor. Also known as crown reduction pruning or drop crotching.

Vegetation - all the plant (flora) life in a particular region. A plant community, assemblage or aggregation with distinguishable characteristics.



## SECTION IV REMOVAL & TRIMMING STANDARDS – Work Specifications

### Native Trees for North Texas & Growth Rate

*Manual of Woody Landscape Plants, by Michael Dirr.*

Scientific Name Type	Common Name	Growth Rate
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<i>Pinus ponderosa</i>	Ponderosa Pine	Medium	Evergreen
<i>Pinus nigra</i>	Austrian Pine	Medium	Evergreen
<i>Carya illinoensis</i>	Pecan	Fast	Deciduous
<i>Quercus virginiana</i>	Live Oak	Medium	Evergreen
<i>Quercus marilandica</i>	Blackjack Oak	Slow	Deciduous
<i>Quercus stellata</i>	Post Oak	Slow	Deciduous
<i>Quercus alba</i>	White Oak	Slow	Deciduous
<i>Celtis laevigata</i>	Hackberry	Fast	Deciduous
<i>Ulmus americana</i>	American Elm	Fast	Deciduous
<i>Ulmus crassifolia</i>	Cedar Elm	Fast	Deciduous
<i>Prosopis glandulosa</i>	Mesquite	Medium	Deciduous
<i>Populus deltoides</i>	Cottonwood	Fast	Deciduous
<i>Juniperus ashei</i>	Texas cedar	Medium	Evergreen

\* “Rate of growth refers to the vertical increase in growth unless specified differently. Rate, as is true for size, is influenced by numerous variables such as soil, drainage, water, fertility, light, exposure, ad infinitum.

**Slow** – Tree can grow up to 12” per year.

**Medium** – Tree can grow from 13” to 24” per year.

**Fast** – Tree can grow 25” or more per year.



Type of tree refers to tree being Deciduous or Evergreen:

**Deciduous** trees are trees whose leaves lose their green coloring and turn orange, red or brown before they are shed at the end of the growing season, generally in autumn. **Evergreen** trees carry their leaves throughout the year. Evergreens do shed their leaves, but only a few at a time and over a long period, so there is never a noticeable change. For most evergreen trees, the leaves don't change color.

## **A. Distribution Clearance Work Specifications Based on Growth Chart for Native Trees in North Texas.**

### **1. General Guidelines**

Effective tree to conductor clearance is determined by: OSHA Tree Trimming Standards

[1910.269\(a\)\(1\)\(i\)\(E\)](#); [1910.269\(a\)\(2\)\(ii\)](#); [1910.269\(r\)](#)

American National Standards Institute A300 Pruning Standards

- a. Voltage, tree location, and importance of the individual line
- b. Ambient air temperature and the height of the poles and line
- c. The species and growth habit.
- d. The trimming cycle

### **2. Under and Side-clearance**

Any tree affecting or potentially affecting a primary distribution line

Shall be trimmed to prevent any involvement with the line (see table 1. “*DME Minimum Clearance Requirements*”).

*Note: (1) Where the amount to be removed in order to obtain adequate clearance will have an adverse impact on the overall long term health of the tree, the tree will be considered for removal; (2) The neutral wire has the potential to carry primary voltage, which contractor shall take into consideration when clearing primary lines; and (3) Open- Wire Secondary Conductor and neutral shall have a minimum 5' of clearance. All poles will have a minimum 5' of clearance around the bottom of the pole.*

### **3. Overhang Clearance**

When at all possible, overhangs shall be removed. When not removed, clearance shall be a minimum of 15 feet. Note: Overhang clearance shall be increased where circuits have experienced historical exposure to snow and ice.

### **4. Other Clearances**

Secondary Conductors, Service Drops, Streetlight Circuits, Fiber-optic and Guy Wires shall be cleared on a case by case basis as determined necessary by during field inspection, to free them from weight, strain, or displacement caused by contact with trees.

### **5. Vine Clearance:**

Unless otherwise instructed, vines ascending all poles and guy wires shall be Cut off at ground level.



Tree Trimming Clearances are established and based on the following

- IEEE Table 5 and Table 7, of 516-2003
- OSHA Tree Trimming Standards (1910.269)
- American National Standards Institute (ANSI) A300 Pruning Standards, which are industry trimming standards developed by the Tree care Industry Association (TCIA) and accepted by industry leaders, including the International Society of Arboriculture, the American Society of Consulting Arborist, the Utility Arborist Association, the US Forest Service and other tree care organizations. The standards include use of natural lateral or directional trimming methods that promote growth of the tree away from the electrical facilities. These trimming methods ideally allow a tree to retain as much of its natural form as possible while requiring less trimming in the future.
- a standard 75' R.O.W for transmission lines
- applicable City of Denton codes

<b>Clearance from vegetation</b>	<b>Conductor Type</b>	<b>0 to 480 V</b>	<b>2- 25 KV</b>	<b>69 KV</b>	<b>138 KV</b>
<b>SIDE</b>	<b>PRIMARY, TELECOM, &amp; FIBER</b>	<b>5 FEET</b>	<b>10 FEET</b>	<b>15 FEET</b>	<b>30 FEET</b>
<b>OVERHANG</b>	<b>PRIMARY, TELECOM, &amp; FIBER</b>	<b>5 FEET</b>	<b>15 FEET</b>	<b>NONE</b>	<b>NONE</b>

*\*All clearances are at the time of trimming.*

**Mitigation Measures** – if sufficient clearances cannot be achieved for the protection of transmission facilities due to various restrictions, then the TVMP SME shall notify Engineering and System Operations to create a plan to deal with the insufficient clearance.

## **B. Inspection Process – Approved Procedures**

1. All transmission circuits are trimmed on a five year trim cycle.
2. Upon completion of a trim, the Contractor Coordinator will inspect the circuit.
3. All transmission circuits are inspected on a Quarterly basis.
4. For IMMINENT THREAT of a transmission line outage due to vegetation:
  - a. inspector shall as soon as practical notify TVMP SME
  - b. SME will notify System Operations as soon as practical
  - c. An action plan shall be determined based on consultation with Engineering, System Operations, TVMP SME, and if necessary, outside entities such as neighboring entities or ERCOT



## C. Transmission Circuits and Types of Growth - Schedule

### Vegetation Management Maintained Transmission Circuits

Circuit and Circuit Location	K V	Length/Mile s	Growth Types/
Denton West to ONCOR Fly Tap	345	8.9	Native Trees/Quarterly
Denton West to Jim Christal	138	3.2	Native Trees/Quarterly
Denton West to RD Wells	138	4.47	Native Trees/Quarterly
Denton West to Fort Worth	138	4.06	Native Trees/Quarterly
Jim Christal to Masch Branch	138	2.95	Native Trees/Quarterly
Masch Branch to Denton North	138	4.38	Native Trees/Quarterly
Denton North to North Lakes	138	1.87	Native Trees/Quarterly
Denton North to Arco	138	5.9	Native Trees/Quarterly
Denton North to Kings Row	138	2.84	Native Trees/Quarterly
Kings Row to Cooper Creek	138	2.13	Native Trees/Quarterly
Arco to Cooper Creek	138	1.63	Native Trees/Quarterly
Cooper Creek to Mc Kinney	138	1.47	Native Trees/Quarterly
Cooper Creek to Brinker	138	2.28	Native Trees/Quarterly
McKinney to Brinker	138	0.89	Native Trees/Quarterly
Spencer Interchange to Pockrus	138	2.17	Native Trees/Quarterly
Pockrus to Corinth	138	1.37	Native Trees/Quarterly
Pockrus to Teasley	138	2.9	Native Trees/Quarterly
Teasley to Fort Worth	138	4.05	Native Trees/Quarterly
Locust to DME Node	138	1.68	Native Trees/Quarterly
Woodrow to DME Node	138	0.08	Native Trees/Quarterly
Spencer Interchange to DME Node	138	0.44	Native Trees/Quarterly
Brinker to Industrial	138	0.22	Native Trees/Quarterly
Brinker to Woodrow	138	0.47	Native Trees/Quarterly
Industrial to Spencer Interchange	138	0.33	Native Trees/Quarterly
RD Wells to Hickory	69 KV	1.73	Native Trees/Quarterly
Hickory to Bonnie Brae	69 KV	0.95	Native Trees/Quarterly
Bonnie Brae to North Lakes	69 KV	1.64	Native Trees/Quarterly
Spencer Interchange to Spencer Switch	69 KV	0.23	Native Trees/Quarterly
<b>Total Miles per KV</b>			
	345	8.9	
	138	51.78	
	69 KV	4.55	
<b>Total Miles Inspected</b>		65.2	



NOTE: the above schedule can be adjusted for changing conditions. The schedule is based on anticipated growth of vegetation and other environmental and operational factors. These may include operating voltage, appropriate vegetation management techniques, fire risk, reasonably anticipated tree and conductor movement, species types and growth rates, species failure characteristics, local climate and rainfall patterns, line terrain and elevation, location of the vegetation within the span, and worker approach distance requirements.

A schedule based on the above shall be created, with adjustments to the schedule documented as they occur. The schedule considers the amount of time needed to gain applicable permissions and permits.

The TVMP SME is responsible for ensuring that the vegetation management work has been completed according to the work schedule and work specifications.



## SECTION V Document Control

### Prepared by:

DME	12/18/2009
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### Change History:

*The change history below reflects changes to the Manual or its structure.*

Version	Description of change	Date
V 00.01	Initial version	12/18/2009
V00.01	Minor editorial corrections, formatting changes	3/10/2011
V00.02	<i>NOT USED</i>	N/A
V00.03	Clarified section titles	1/24/2013

### Review Log:

Reviewed By	Title	Date
Brad Watts	Operations Line Superintendent	11/15/2010
Brad Watts	Operations Line Superintendent	3/10/2011
Brad Watts	Operations Line Superintendent	2/24/2012
Brad Watts	Operations Line Superintendent	1/24/2013
Brad Watts	Operations Line Superintendent	12/17/2014
Brad Watts	Operations Line Division Manager	8/25/2021

Approved By	Title	Date
Chris Lutrick	Executive Manager of Operations	8/26/2021





# City of Denton

City Hall  
215 E. McKinney St.  
Denton, Texas 76201  
[www.cityofdenton.com](http://www.cityofdenton.com)

## Legislation Text

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**File #: PUB23-096, Version: 1**

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### **AGENDA CAPTION**

Consider recommending adoption of an ordinance of the City of Denton, a Texas home-rule municipal corporation, authorizing the City Manager to execute a Professional Services Agreement with Kimley-Horn and Associates, Inc., to provide permitting assistance for two (2) new Wastewater Reclamation Facilities for the Water Utilities Department; providing for the expenditure of funds therefor; and providing an effective date (RFQ 7574-028 - Professional Services Agreement for design services awarded to Kimley-Horn and Associates, Inc., in the not-to-exceed amount of \$240,000.00).



# City of Denton

City Hall  
215 E. McKinney Street  
Denton, Texas  
[www.cityofdenton.com](http://www.cityofdenton.com)

## AGENDA INFORMATION SHEET

**DEPARTMENT:** Procurement  
**ACM:** Cassey Ogden  
**DATE:** May 22, 2023

### **SUBJECT**

Consider recommending adoption of an ordinance of the City of Denton, a Texas home-rule municipal corporation, authorizing the City Manager to execute a Professional Services Agreement with Kimley-Horn and Associates, Inc., to provide permitting assistance for two (2) new Wastewater Reclamation Facilities for the Water Utilities Department; providing for the expenditure of funds therefor; and providing an effective date (RFQ 7574-028 – Professional Services Agreement for design services awarded to Kimley-Horn and Associates, Inc., in the not-to-exceed amount of \$240,000.00).

### **STRATEGIC ALIGNMENT**

This action supports Key Focus Area: Enhance Infrastructure and Mobility.

### **INFORMATION/BACKGROUND**

With the continued growth within the water and wastewater service area, Water Utilities has identified two locations to facilitate new Wastewater Reclamation Facilities (WRF). The City currently owns property along Hartlee Field Road within the Clear Creek Sewer Basin. This site currently has a Wastewater Discharge Permit (WWDP) issued by the Texas Commission on Environmental Quality (TCEQ) to discharge 0.95 Million Gallons per Day (MGD) average daily flow. The current discharge point is located on Clear Creek. Because of increased growth in the Northwest quadrant of the city, the wastewater masterplan recommends modifying the existing permit to fully leverage the available capacity in the Clear Creek sewer basin.

In addition, the City has recently purchased property within the Hickory Creek Sewer Basin with the intention of building a water reclamation facility. The location of this property is approximately 1.20 miles southwest of the intersection of U.S. 377 and Country Club Road in Denton, Texas. Water Utilities intends to prepare a WWDP application to TCEQ for the available capacity in the Hickory Creek sewer basin. Both proposed WWDPs are recommended in the Wastewater Master Plan.

The permit application process is the first step in moving forward with the design, construction, and operation of new Wastewater Treatment Facilities for the City of Denton. The new proposed WRFs will provide capacity for future growth and give support to the current Pecan Creek Reclamation Plant, providing safe wastewater treatment for the city and community.

The proposed contract is with Kimley-Horn and includes the following for both locations:

- Wastewater Discharge Permit Application
- TCEQ Permit Review Process Coordination
- Public Involvement

Request for Qualifications for professional engineering services for Water and Wastewater was solicited using the City's formal solicitation process. City Council approved a pre-qualified list of engineering firms on March 23, 2021 (Ordinance 21-546).

### **PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)**

On March 23, 2021, City Council approved RFQ 7574 for a prequalified list of professional engineering firms for Water and Wastewater (Ordinance 21-546).

### **RECOMMENDATION**

Award a contract with Kimley-Horn and Associates Inc., to provide permitting assistance for two (2) new Wastewater Reclamation Facilities for the Water Utilities Department, in a not-to-exceed amount of \$240,000.

### **PRINCIPAL PLACE OF BUSINESS**

Kimley-Horn and Associates, Inc.  
Raleigh, NC

### **SUSTAINABILITY MEASURES**

The application for a Wastewater Discharge Permit is the first step in the installation of new planned Wastewater Reclamation Facilities. The new additional facilities will increase capacity in the growing Northwest and Southwest quadrants of the City. The facilities are essential to the safe treatment and discharge of effluent to the sensitive accepting streams.

#### **Relationship to Sustainability Framework**

Focus Area: *Wastewater Treatment*

Goal: Protect the health, safety, and the environment by continued safe treatment and discharge of wastewater influent. The project addresses the need for Wastewater Discharge Permits as required by the Texas Commission on Environmental Quality.

### **FISCAL INFORMATION**

These services will be funded from the Wastewater Utilities Accounts 640501545.1360.20100 and 640502545.1360.20100. Requisition #159782 has been entered into the Purchasing software system in the amount of \$240,000. The budgeted amount for this item is \$240,000.

### **EXHIBITS**

Exhibit 1: Agenda Information Sheet  
Exhibit 2: Ordinance and Contract

Respectfully submitted:  
Lori Hewell, 940-349-7100  
Purchasing Manager

For information concerning this acquisition, contact: David Brown, (940) 349-8480.

Legal point of contact: Marcella Lunn at 940-349-8333.

ORDINANCE NO. \_\_\_\_\_

AN ORDINANCE OF THE CITY OF DENTON, A TEXAS HOME-RULE MUNICIPAL CORPORATION, AUTHORIZING THE CITY MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH KIMLEY-HORN AND ASSOCIATES, INC., TO PROVIDE PERMITTING ASSISTANCE FOR TWO (2) NEW WASTEWATER RECLAMATION FACILITIES FOR THE WATER UTILITIES DEPARTMENT; PROVIDING FOR THE EXPENDITURE OF FUNDS THEREFOR; AND PROVIDING AN EFFECTIVE DATE (RFQ 7574-028 – PROFESSIONAL SERVICES AGREEMENT FOR DESIGN SERVICES AWARDED TO KIMLEY-HORN AND ASSOCIATES, INC., IN THE NOT-TO-EXCEED AMOUNT OF \$240,000.00).

WHEREAS, on March 23, 2021, the City Council approved a pre-qualified engineer list for Water and Wastewater (Ordinance 21-546), and the professional services provider (the “Provider”) mentioned in this ordinance is being selected as the most highly qualified on the basis of its demonstrated competence and qualifications to perform the proposed professional services; and

WHEREAS, this procurement was undertaken as part of the City’s governmental function; and

WHEREAS, the fees under the proposed contract are fair and reasonable and are consistent with, and not higher than, the recommended practices and fees published by the professional associations applicable to the Provider’s profession, and such fees do not exceed the maximum provided by law; NOW, THEREFORE,

THE COUNCIL OF THE CITY OF DENTON HEREBY ORDAINS:

SECTION 1. The City Manager, or their designee, is hereby authorized to enter into an agreement with Kimley-Horn and Associates, Inc., to provide permitting assistance for two (2) new Wastewater Reclamation Facilities for the Water Utilities Department, a copy of which is attached hereto and incorporated by reference herein.

SECTION 2. The City Manager, or their designee, is authorized to expend funds as required by the attached contract.

SECTION 3. The City Council of the City of Denton, hereby expressly delegates the authority to take any actions that may be required or permitted to be performed by the City of Denton under this ordinance to the City Manager of the City of Denton, or their designee.

SECTION 4. The findings in the preamble of this ordinance are incorporated herein by reference.

SECTION 5. This ordinance shall become effective immediately upon its passage and approval.

The motion to approve this ordinance was made by \_\_\_\_\_ and seconded by \_\_\_\_\_. This ordinance was passed and approved by the following vote [\_\_\_\_ - \_\_\_\_]:

	<b>Aye</b>	<b>Nay</b>	<b>Abstain</b>	<b>Absent</b>
Mayor Gerard Hudspeth:	_____	_____	_____	_____
Vicki Byrd, District 1:	_____	_____	_____	_____
Brian Beck, District 2:	_____	_____	_____	_____
Paul Meltzer, District 3:	_____	_____	_____	_____
Joe Holland, District 4:	_____	_____	_____	_____
Brandon Chase McGee, At Large Place 5:	_____	_____	_____	_____
Chris Watts, At Large Place 6:	_____	_____	_____	_____


PASSED AND APPROVED this the \_\_\_\_\_ day of \_\_\_\_\_, 2023.

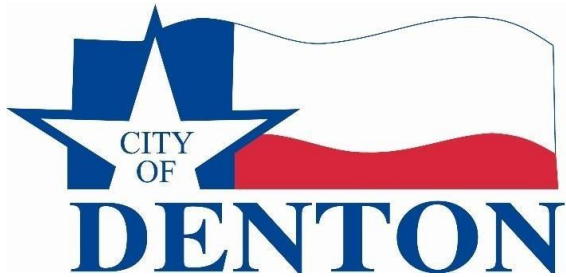
\_\_\_\_\_  
GERARD HUDSPETH, MAYOR

ATTEST:  
JESUS SALAZAR, INTERIM CITY SECRETARY

BY: \_\_\_\_\_

APPROVED AS TO LEGAL FORM:  
MACK REINWAND, CITY ATTORNEY

BY:  Digitally signed by Marcella Lunn  
DN: cn=Marcella Lunn, o=City  
of Denton,  
email=marcella.lunn@cityofdent-  
on.com, c=US  
Date: 2023.05.10 17:13:02 -05'00'



Docusign City Council Transmittal Coversheet

PSA	7574-028
File Name	CLEAR CREEK AND HICKORY CREEK WW DISCHARGE PERMIT
Purchasing Contact	Crystal westbrook
City Council Target Date	
Piggy Back Option	Not Applicable
Contract Expiration	
Ordinance	

## **CITY OF DENTON, TEXAS**

### **STANDARD AGREEMENT FOR ENGINEERING RELATED PROFESSIONAL SERVICES**

This AGREEMENT is between the City of Denton, a Texas home-rule municipality ("CITY"), and **KIMLEY-HORN AND ASSOCIATES, INC.**, with its corporate office at 421 Fayetteville Street, Suite 600, Raleigh, NC 27601 and authorized to do business in Texas, ("ENGINEER"), for a PROJECT generally described as: Clear Creek and Hickory Creek WW Discharge Permit Project (the "PROJECT").

#### **SECTION 1** **Scope of Services**

- A.** The CITY hereby agrees to retain the ENGINEER, and the ENGINEER hereby agrees to perform, professional engineering services set forth in the Scope of Services attached hereto as Exhibit A. These services shall be performed in connection with the PROJECT.
- B.** Additional services, if any, will be requested in writing by the CITY. CITY shall not pay for any work performed by ENGINEER or its consultants, subcontractors and/or suppliers that has not been ordered in advance and in writing. It is specifically agreed that ENGINEER shall not be compensated for any additional work resulting from oral orders of any person.

#### **SECTION 2** **Compensation and Term of Agreement**

- A.** The ENGINEER shall be compensated for all services provided pursuant to this AGREEMENT in an amount not to exceed \$240,000 in the manner and in accordance with the fee schedule as set forth in Exhibit A. Payment shall be considered full compensation for all labor, materials, supplies, and equipment necessary to complete the services described in Exhibit A.
- B.** Unless otherwise terminated pursuant to Section 6. D. herein, this AGREEMENT shall be for a term beginning upon the effective date, as described below, and shall continue for a period which may reasonably be required for the completion of the PROJECT, until the expiration of the funds, or completion of the PROJECT and acceptance by the CITY, whichever occurs first. ENGINEER shall proceed diligently with the PROJECT to completion as described in the PROJECT schedule as set forth in Exhibit A.

#### **SECTION 3** **Terms of Payment**

Payments to the ENGINEER will be made as follows:



## **A. Invoice and Payment**

- (1) The Engineer shall provide the City sufficient documentation, including but not limited to meeting the requirements set forth in the PROJECT schedule as set forth in Exhibit A to reasonably substantiate the invoices.
- (2) The ENGINEER will issue monthly invoices for all work performed under this AGREEMENT. Invoices for the uncontested performance of the particular services are due and payable within 30 days of receipt by City.
- (3) Upon completion of services enumerated in Section 1, the final payment of any balance for the uncontested performance of the services will be due within 30 days of receipt of the final invoice.
- (4) In the event of a disputed or contested billing, only that portion so contested will be withheld from payment, and the undisputed portion will be paid. The CITY will exercise reasonableness in contesting any bill or portion thereof. No interest will accrue on any contested portion of the billing until mutually resolved.
- (5) If the CITY fails to make payment in full to ENGINEER for billings contested in good faith within 60 days of the amount due, the ENGINEER may, after giving 7 days' written notice to CITY, suspend services under this AGREEMENT until paid in full. In the event of suspension of services, the ENGINEER shall have no liability to CITY for delays or damages caused the CITY because of such suspension of services.

## **SECTION 4 Obligations of the Engineer**

### **A. General**

The ENGINEER will serve as the CITY's professional engineering representative under this AGREEMENT, providing professional engineering consultation and advice and furnishing customary services incidental thereto.

### **B. Standard of Care**

The ENGINEER shall perform its services:

- (1) with the professional skill and care ordinarily provided by competent engineers practicing in the same or similar locality and under the same or similar circumstances and professional license; and
- (2) as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer.

### **C. Subsurface Investigations**

- (1) The ENGINEER shall advise the CITY with regard to the necessity for subcontract work such as special surveys, tests, test borings, or other subsurface investigations in connection with design and engineering work to be performed hereunder. The ENGINEER shall also advise the CITY concerning the results of same. Such surveys, tests, and investigations shall be furnished by the CITY, unless otherwise specified in Exhibit A.
- (2) In soils, foundation, groundwater, and other subsurface investigations, the actual characteristics may vary significantly between successive test points and sample intervals and at locations other than where observations, exploration, and investigations have been made. Because of the inherent uncertainties in subsurface evaluations, changed or unanticipated underground conditions may occur that could affect the total PROJECT cost and/or execution. These conditions and cost/execution effects are not the responsibility of the ENGINEER.

### **D. Preparation of Engineering Drawings**

The ENGINEER will provide to the CITY the original drawings of all plans in ink on reproducible mylar sheets and electronic files in .pdf format, or as otherwise approved by CITY, which shall become the property of the CITY. CITY may use such drawings in any manner it desires; provided, however, that the ENGINEER shall not be liable for the use of such drawings for any project other than the PROJECT described herein.

### **E. Engineer's Personnel at Construction Site**

- (1) The presence or duties of the ENGINEER's personnel at a construction site, whether as on-site representatives or otherwise, do not make the ENGINEER or its personnel in any way responsible for those duties that belong to the CITY and/or the CITY's construction contractors or other entities, and do not relieve the construction contractors or any other entity of their obligations, duties, and responsibilities, including, but not limited to, all construction methods, means, techniques, sequences, and procedures necessary for coordinating and completing all portions of the construction work in accordance with the AGREEMENT Documents and any health or safety precautions required by such construction work. The ENGINEER and its personnel have no authority to exercise any control over any construction contractor or other entity or their employees in connection with their work or any health or safety precautions.
- (2) Except to the extent of specific site visits expressly detailed and set forth in Exhibit A, the ENGINEER or its personnel shall have no obligation or responsibility to visit the construction site to become familiar with the progress or quality of the completed work on the PROJECT or to determine, in general, if

the work on the PROJECT is being performed in a manner indicating that the PROJECT, when completed, will be in accordance with the AGREEMENT Documents, nor shall anything in the AGREEMENT Documents or this AGREEMENT between CITY and ENGINEER be construed as requiring ENGINEER to make exhaustive or continuous on-site inspections to discover latent defects in the work or otherwise check the quality or quantity of the work on the PROJECT. If the ENGINEER makes on-site observation(s) of a deviation from the AGREEMENT Documents, the ENGINEER shall inform the CITY.

- (3) When professional certification of performance or characteristics of materials, systems or equipment is reasonably required to perform the services set forth in the Scope of Services, the ENGINEER shall be entitled to rely upon such certification to establish materials, systems or equipment and performance criteria to be required in the AGREEMENT Documents.

## **F. Opinions of Probable Cost, Financial Considerations, and Schedules**

- (1) The ENGINEER shall provide opinions of probable costs based on the current available information at the time of preparation, in accordance with Exhibit A.
- (2) In providing opinions of cost, financial analyses, economic feasibility projections, and schedules for the PROJECT, the ENGINEER has no control over cost or price of labor and materials; unknown or latent conditions of existing equipment or structures that may affect operation or maintenance costs; competitive bidding procedures and market conditions; time or quality of performance by third parties; quality, type, management, or direction of operating personnel; and other economic and operational factors that may materially affect the ultimate PROJECT cost or schedule. Therefore, the ENGINEER makes no warranty that the CITY's actual PROJECT costs, financial aspects, economic feasibility, or schedules will not vary from the ENGINEER's opinions, analyses, projections, or estimates.

## **G. Construction Progress Payments**

Recommendations by the ENGINEER to the CITY for periodic construction progress payments to the construction contractor will be based on the ENGINEER's knowledge, information, and belief from selective sampling and observation that the work has progressed to the point indicated. Such recommendations do not represent that continuous or detailed examinations have been made by the ENGINEER to ascertain that the construction contractor has completed the work in exact accordance with the AGREEMENT Documents; that the final work will be acceptable in all respects; that the ENGINEER has made an examination to ascertain how or for what purpose the construction contractor has used the moneys paid; that title to any of the work, materials, or equipment has passed to the CITY free and clear of liens, claims, security interests, or encumbrances; or that there are not other matters at issue between the CITY and the

construction contractor that affect the amount that should be paid.

## **H. Record Drawings**

Record drawings, if required, will be prepared, in part, on the basis of information compiled and furnished by others, and may not always represent the exact location, type of various components, or exact manner in which the PROJECT was finally constructed. The ENGINEER is not responsible for any errors or omissions in the information from others that is incorporated into the record drawings.

## **I. Right to Audit**

- (1) ENGINEER agrees that the CITY shall, until the expiration of five (5) years after final payment under this AGREEMENT, have access to and the right to examine and photocopy any directly pertinent books, documents, papers and records of the ENGINEER involving transactions relating to this AGREEMENT. ENGINEER agrees that the CITY shall have access during normal working hours to all necessary ENGINEER facilities and shall be provided adequate and appropriate work space in order to conduct audits in compliance with the provisions of this section. The CITY shall give ENGINEER reasonable advance notice of intended audits.
- (2) ENGINEER further agrees to include in all its subconsultant agreements hereunder a provision to the effect that the subconsultant agrees that the CITY shall, until the expiration of five (5) years after final payment under the subcontract, have access to and the right to examine and photocopy any directly pertinent books, documents, papers and records of such subconsultant, involving transactions to the subcontract, and further, that the CITY shall have access during normal working hours to all subconsultant facilities, and shall be provided adequate and appropriate work space, in order to conduct audits in compliance with the provisions of this section together with subsection (3) hereof. CITY shall give subconsultant reasonable advance notice of intended audits.
- (3) ENGINEER and subconsultant agree to photocopy such documents as may be requested by the CITY. The CITY agrees to reimburse ENGINEER for the cost of copies at the rate published in the Texas Administrative Code in effect as of the time copying is performed.

## J. INSURANCE

### (1) ENGINEER'S INSURANCE

- a. Commercial General Liability – the ENGINEER shall maintain commercial general liability (CGL) and, if necessary, commercial umbrella insurance with a limit of not less than \$1,000,000.00 per each occurrence with a \$2,000,000.00 aggregate. If such Commercial General Liability insurance contains a general aggregate limit, it shall apply separately to this PROJECT or location.
  - i. The CITY shall be included as an additional insured with all rights of defense under the CGL, using ISO additional insured endorsement or a substitute providing equivalent coverage, and under the commercial umbrella, if any. This insurance shall apply as primary insurance with respect to any other insurance or self-insurance programs afforded to the CITY. The Commercial General Liability insurance policy shall have no exclusions or endorsements that would alter or nullify: premises/operations, products/completed operations, contractual, personal injury, or advertising injury, which are normally contained within the policy, unless the CITY specifically approves such exclusions in writing.
  - ii. ENGINEER waives all rights against the CITY and its agents, officers, directors and employees for recovery of damages to the extent these damages are covered by the commercial general liability or commercial umbrella liability insurance maintained in accordance with this AGREEMENT.
- b. Business Auto – the ENGINEER shall maintain business auto liability and, if necessary, commercial umbrella liability insurance with a limit of not less than \$1,000,000 each accident. Such insurance shall cover liability arising out of “any auto”, including owned, hired, and non-owned autos, when said vehicle is used in the course of the PROJECT. If the engineer owns no vehicles, coverage for hired or non-owned is acceptable.
  - i. ENGINEER waives all rights against the CITY and its agents, officers, directors and employees for recovery of damages to the extent these damages are covered by the business auto liability or commercial umbrella liability insurance obtained by ENGINEER pursuant to this AGREEMENT or under any applicable auto physical damage coverage.
- c. Workers' Compensation – ENGINEER shall maintain workers compensation and employers liability insurance and, if necessary,

commercial umbrella liability insurance with a limit of not less than \$100,000.00 each accident for bodily injury by accident or \$100,000.00 each employee for bodily injury by disease, with \$500,000.00 policy limit.

- i. ENGINEER waives all rights against the CITY and its agents, officers, directors and employees for recovery of damages to the extent these damages are covered by workers compensation and employer's liability or commercial umbrella insurance obtained by ENGINEER pursuant to this AGREEMENT.
- d. Professional Liability – ENGINEER shall maintain professional liability, a claims-made policy, with a minimum of \$1,000,000.00 per claim and aggregate. The policy shall contain a retroactive date prior to the date of the AGREEMENT or the first date of services to be performed, whichever is earlier. Coverage shall be maintained for a period of 5 years following the completion of the AGREEMENT. An annual certificate of insurance specifically referencing this PROJECT shall be submitted to the CITY for each year following completion of the AGREEMENT.

## (2) GENERAL INSURANCE REQUIREMENTS

- a. Certificates of insurance evidencing that the ENGINEER has obtained all required insurance shall be attached to this AGREEMENT prior to its execution.
- b. Applicable policies shall be endorsed to name the CITY an Additional Insured thereon, subject to any defense provided by the policy, as its interests may appear. The term CITY shall include its employees, officers, officials, agents, and volunteers as respects the contracted services.
- c. Certificate(s) of insurance shall document that insurance coverage specified in this AGREEMENT are provided under applicable policies documented thereon.
- d. Any failure on part of the CITY to attach the required insurance documentation hereto shall not constitute a waiver of the insurance requirements.
- e. A minimum of thirty (30) days notice of cancellation or material change in coverage shall be provided to the CITY. A ten (10) days notice shall be acceptable in the event of non-payment of premium. Notice shall be sent to the respective Department Director (by name), City of Denton, 901 Texas Street, Denton, Texas 76209.
- f. Insurers for all policies must be authorized to do business in the State of

Texas and have a minimum rating of A:V or greater, in the current A.M. Best Key Rating Guide or have reasonably equivalent financial strength and solvency to the satisfaction of Risk Management.

- g. Any deductible or self insured retention in excess of \$25,000.00 that would change or alter the requirements herein is subject to approval by the CITY in writing, if coverage is not provided on a first-dollar basis. The CITY, at its sole discretion, may consent to alternative coverage maintained through insurance pools or risk retention groups. Dedicated financial resources or letters of credit may also be acceptable to the CITY.
- h. Applicable policies shall each be endorsed with a waiver of subrogation in favor of the CITY as respects the PROJECT.
- i. The CITY shall be entitled, upon its request and without incurring expense, to review the ENGINEER's insurance policies including endorsements thereto and, at the CITY's discretion; the ENGINEER may be required to provide proof of insurance premium payments.
- j. Lines of coverage, other than Professional Liability, underwritten on a claims-made basis, shall contain a retroactive date coincident with or prior to the date of the AGREEMENT. The certificate of insurance shall state both the retroactive date and that the coverage is claims-made.
- k. Coverages, whether written on an occurrence or claims-made basis, shall be maintained without interruption nor restrictive modification or changes from date of commencement of the PROJECT until final payment and termination of any coverage required to be maintained after final payments.
- l. The CITY shall not be responsible for the direct payment of any insurance premiums required by this AGREEMENT.
- m. Sub consultants and subcontractors to/of the ENGINEER shall be required by the ENGINEER to maintain the same or reasonably equivalent insurance coverage as required for the ENGINEER. When sub consultants/subcontractors maintain insurance coverage, ENGINEER shall provide CITY with documentation thereof on a certificate of insurance.

## **K. Independent Consultant**

The ENGINEER agrees to perform all services as an independent consultant and not as a subcontractor, agent, or employee of the CITY. The doctrine of *respondeat superior* shall not apply.

**L. Disclosure**

The ENGINEER acknowledges to the CITY that it has made full disclosure in writing of any existing conflicts of interest or potential conflicts of interest, including personal financial interest, direct or indirect, in property abutting the proposed PROJECT and business relationships with abutting property cities. The ENGINEER further acknowledges that it will make disclosure in writing of any conflicts of interest that develop subsequent to the signing of this AGREEMENT and prior to final payment under the AGREEMENT.

**M. Asbestos or Hazardous Substances**

- (1) If asbestos or hazardous substances in any form are encountered or suspected, the ENGINEER will stop its own work in the affected portions of the PROJECT to permit testing and evaluation.
- (2) If asbestos or other hazardous substances are suspected, the CITY may request the ENGINEER to assist in obtaining the services of a qualified subcontractor to manage the remediation activities of the PROJECT.

**N. Permitting Authorities - Design Changes**

If permitting authorities require design changes so as to comply with published design criteria and/or current engineering practice standards which the ENGINEER should have been aware of at the time this AGREEMENT was executed, the ENGINEER shall revise plans and specifications, as required, at its own cost and expense. However, if design changes are required due to the changes in the permitting authorities' published design criteria and/or practice standards criteria which are published after the date of this AGREEMENT which the ENGINEER could not have been reasonably aware of, the ENGINEER shall notify the CITY of such changes and an adjustment in compensation will be made through an amendment to this AGREEMENT.

**O. Schedule**

ENGINEER shall manage the PROJECT in accordance with the schedule developed per Exhibit A to this AGREEMENT.

**P. Equal Opportunity**

- (1) **Equal Employment Opportunity:** ENGINEER and ENGINEER's agents shall engage in any discriminatory employment practice. No person shall, on the grounds of race, sex, sexual orientation, age, disability, creed, color, genetic testing, or national origin, be refused the benefits of, or be otherwise subjected to discrimination under any activities resulting from this AGREEMENT.
- (2) **Americans with Disabilities Act (ADA) Compliance:** ENGINEER and



ENGINEER's agents shall not engage in any discriminatory employment practice against individuals with disabilities as defined in the ADA.

## **SECTION 5**

### **Obligations of the City**

#### **A. City-Furnished Data**

ENGINEER may rely upon the accuracy, timeliness, and completeness of the information provided by the CITY.

#### **B. Access to Facilities and Property**

The CITY will make its facilities accessible to the ENGINEER as required for the ENGINEER's performance of its services. The CITY will perform, at no cost to the ENGINEER, such tests of equipment, machinery, pipelines, and other components of the CITY's facilities as may be required in connection with the ENGINEER's services. The CITY will be responsible for all acts of the CITY's personnel.

#### **C. Advertisements, Permits, and Access**

Unless otherwise agreed to in the Scope of Services, the CITY will obtain, arrange, and pay for all advertisements for bids; permits and licenses required by local, state, or federal authorities; and land, easements, rights-of-way, and access necessary for the ENGINEER's services or PROJECT construction.

#### **D. Timely Review**

The CITY will examine the ENGINEER's studies, reports, sketches, drawings, specifications, proposals, and other documents; obtain advice of an attorney, insurance counselor, accountant, auditor, bond and financial advisors, and other consultants as the CITY deems appropriate; and render in writing decisions required by the CITY in a timely manner in accordance with the PROJECT schedule prepared in accordance with Exhibit A.

#### **E. Prompt Notice**

The CITY will give prompt written notice to the ENGINEER whenever CITY observes or becomes aware of any development that affects the scope or timing of the ENGINEER's services or of any defect in the work of the ENGINEER or construction contractors.

#### **F. Asbestos or Hazardous Substances Release.**

- (1) CITY acknowledges ENGINEER will perform part of the work at CITY's facilities that may contain hazardous materials, including asbestos containing materials, or conditions, and that ENGINEER had no prior role in the generation, treatment, storage, or disposition of such materials. In consideration of the associated risks that may give rise to claims by third parties or employees of City, City hereby releases ENGINEER from any damage or liability related to the presence of such materials.
- (2) The release required above shall not apply in the event the discharge, release or escape of hazardous substances, contaminants, or asbestos is a result of ENGINEER's negligence or if ENGINEER brings such hazardous substance, contaminant or asbestos onto the PROJECT.

### **G. Contractor Indemnification and Claims**

The CITY agrees to include in all construction contracts the provisions of Article IV.E. regarding the ENGINEER's Personnel at Construction Site, and provisions providing for contractor indemnification of the CITY and the ENGINEER for contractor's negligence.

### **H. Contractor Claims and Third-Party Beneficiaries**

- (1) The CITY agrees to include the following clause in all contracts with construction contractors and equipment or materials suppliers:
 

"Contractors, subcontractors and equipment and materials suppliers on the PROJECT, or their sureties, shall maintain no direct action against the ENGINEER, its officers, employees, and subcontractors, for any claim arising out of, in connection with, or resulting from the engineering services performed. Only the CITY will be the beneficiary of any undertaking by the ENGINEER."
- (2) This AGREEMENT gives no rights or benefits to anyone other than the CITY and the ENGINEER and there are no third-party beneficiaries.
- (3) The CITY will include in each agreement it enters into with any other entity or person regarding the PROJECT a provision that such entity or person shall have no third-party beneficiary rights under this AGREEMENT.
- (4) Nothing contained in this Section H. shall be construed as a waiver of any right the CITY has to bring a claim against ENGINEER.

### **I. CITY's Insurance**

- (1) The CITY may maintain property insurance on certain pre-existing structures associated with the PROJECT.

- (2) The CITY may secure Builders Risk/Installation insurance at the replacement cost value of the PROJECT. The CITY may provide ENGINEER a copy of the policy or documentation of such on a certificate of insurance.

#### **J. Litigation Assistance**

The Scope of Services does not include costs of the ENGINEER for required or requested assistance to support, prepare, document, bring, defend, or assist in litigation undertaken or defended by the CITY. In the event CITY requests such services of the ENGINEER, this AGREEMENT shall be amended or a separate agreement will be negotiated between the parties.

#### **K. Changes**

The CITY may make or approve changes within the general Scope of Services in this AGREEMENT. If such changes affect the ENGINEER's cost of or time required for performance of the services, an equitable adjustment will be made through an amendment to this AGREEMENT with appropriate CITY approval.

### **SECTION 6** **General Legal Provisions**

#### **A. Authorization to Proceed**

ENGINEER shall be authorized to proceed with this AGREEMENT upon receipt of a written Notice to Proceed from the CITY.

#### **B. Reuse of Project Documents**

All designs, drawings, specifications, documents, and other work products of the ENGINEER, whether in hard copy or in electronic form, are instruments of service for this PROJECT, whether the PROJECT is completed or not. Reuse, change, or alteration by the CITY or by others acting through or on behalf of the CITY of any such instruments of service without the written permission of the ENGINEER will be at the CITY's sole risk. The CITY shall own the final designs, drawings, specifications and documents.

#### **C. Force Majeure**

The ENGINEER is not responsible for damages or delay in performance caused by acts of God, strikes, lockouts, accidents, or other events beyond the control of the ENGINEER that prevent ENGINEER's performance of its obligations hereunder.

#### **D. Termination**

(1) This AGREEMENT may be terminated:

- a. by the City for its convenience upon 30 days' written notice to ENGINEER.
- b. by either the CITY or the ENGINEER for cause if either party fails substantially to perform through no fault of the other and the nonperforming party does not commence correction of such nonperformance within 5 days' written notice or thereafter fails to diligently complete the correction.

(2) If this AGREEMENT is terminated for the convenience of the City, the ENGINEER will be paid for termination expenses as follows:

- a. Cost of reproduction of partial or complete studies, plans, specifications or other forms of ENGINEER'S work product;
- b. Out-of-pocket expenses for purchasing electronic data files and other data storage supplies or services;
- c. The time requirements for the ENGINEER'S personnel to document the work underway at the time of the CITY'S termination for convenience so that the work effort is suitable for long time storage.

(3) Prior to proceeding with termination services, the ENGINEER will submit to the CITY an itemized statement of all termination expenses. The CITY'S approval will be obtained in writing prior to proceeding with termination services.

#### **E. Suspension, Delay, or Interruption to Work**

The CITY may suspend, delay, or interrupt the services of the ENGINEER for the convenience of the CITY. In the event of such suspension, delay, or interruption, an equitable adjustment in the PROJECT's schedule, commitment and cost of the ENGINEER's personnel and subcontractors, and ENGINEER's compensation will be made.

#### **F. Indemnification**

**IN ACCORDANCE WITH TEXAS LOCAL GOVERNMENT CODE SECTION 271.904, THE ENGINEER SHALL INDEMNIFY OR HOLD HARMLESS THE CITY AGAINST LIABILITY FOR ANY DAMAGE COMMITTED BY THE ENGINEER OR ENGINEER'S AGENT, CONSULTANT UNDER CONTRACT, OR ANOTHER ENTITY OVER WHICH THE ENGINEER EXERCISES CONTROL TO THE EXTENT THAT THE DAMAGE IS CAUSED BY OR RESULTING FROM AN ACT OF NEGLIGENCE, INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT, OR FAILURE TO PAY A SUBCONTRACTOR OR SUPPLIER. CITY IS ENTITLED TO RECOVER ITS**

## **REASONABLE ATTORNEY'S FEES IN PROPORTION TO THE ENGINEER'S LIABILITY.**

### **G. Assignment**

Neither party shall assign all or any part of this AGREEMENT without the prior written consent of the other party.

### **H. Jurisdiction**

The law of the State of Texas shall govern the validity of this AGREEMENT, its interpretation and performance, and any other claims related to it. The venue for any litigation related to this AGREEMENT shall be Denton County, Texas.

### **I. Severability and Survival**

If any of the provisions contained in this AGREEMENT are held for any reason to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability will not affect any other provision, and this AGREEMENT shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein. Sections 5.F., 6.B., 6.D., 6.F., 6.H., and 6.I. shall survive termination of this AGREEMENT for any cause.

### **J. Observe and Comply**

ENGINEER shall at all times observe and comply with all federal and State laws and regulations and with all City ordinances and regulations which in any way affect this AGREEMENT and the work hereunder, and shall observe and comply with all orders, laws ordinances and regulations which may exist or may be enacted later by governing bodies having jurisdiction or authority for such enactment. No plea of misunderstanding or ignorance thereof shall be considered. **ENGINEER AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS CITY AND ALL OF ITS OFFICERS, AGENTS AND EMPLOYEES FROM AND AGAINST ALL CLAIMS OR LIABILITY ARISING OUT OF THE VIOLATION OF ANY SUCH ORDER, LAW, ORDINANCE, OR REGULATION, WHETHER IT BE BY ITSELF OR ITS EMPLOYEES.**

### **K. Immigration Nationality Act**

ENGINEER shall verify the identity and employment eligibility of its employees who perform work under this AGREEMENT, including completing the Employment Eligibility Verification Form (I-9). Upon request by CITY, ENGINEER shall provide CITY with copies of all I-9 forms and supporting eligibility documentation for each employee who performs work under this AGREEMENT. ENGINEER shall adhere to all Federal and State laws as well as establish appropriate procedures and controls so that no services will be performed by any ENGINEER employee who is not legally eligible to perform such services. **ENGINEER SHALL INDEMNIFY CITY AND HOLD CITY HARMLESS FROM ANY PENALTIES, LIABILITIES, OR LOSSES DUE TO VIOLATIONS OF THIS**

**PARAGRAPH BY ENGINEER, ENGINEER'S EMPLOYEES, SUBCONTRACTORS, AGENTS, OR LICENSEES.** CITY, upon written notice to ENGINEER, shall have the right to immediately terminate this AGREEMENT for violations of this provision by ENGINEER.

#### **L. Prohibition On Contracts With Companies Boycotting Israel**

Engineer acknowledges that in accordance with Chapter 2271 of the Texas Government Code, City is prohibited from entering into a contract with a company for goods or services unless the contract contains a written verification from the company that it: (1) does not boycott Israel; and (2) will not boycott Israel during the term of the contract. The terms "boycott Israel" and "company" shall have the meanings ascribed to those terms in Section 808.001 of the Texas Government Code. ***By signing this agreement, Engineer certifies that Engineer's signature provides written verification to the City that Engineer: (1) does not boycott Israel; and (2) will not boycott Israel during the term of the agreement.*** Failure to meet or maintain the requirements under this provision will be considered a material breach.

#### **M. Prohibition On Contracts With Companies Doing Business with Iran, Sudan, or a Foreign Terrorist Organization**

Sections 2252 and 2270 of the Texas Government Code restricts CITY from contracting with companies that do business with Iran, Sudan, or a foreign terrorist organization. ***By signing this agreement, Engineer certifies that Engineer's signature provides written verification to the City that Engineer, pursuant to Chapters 2252 and 2270, is not ineligible to enter into this agreement and will not become ineligible to receive payments under this agreement by doing business with Iran, Sudan, or a foreign terrorist organization.*** Failure to meet or maintain the requirements under this provision will be considered a material breach.

#### **N. Prohibition on Contracts with Companies Boycotting Certain Energy Companies**

Engineer acknowledges that in accordance with Chapter 2274 of the Texas Government Code, City is prohibited from entering into a contract with a company for goods or services unless the contract contains written verification from the company that it (1) does not boycott energy companies; and (2) will not boycott energy companies during the term of the contract. The terms "boycott energy company" and "company" shall have the meanings ascribed to those terms in Section 809.001 of the Texas Government Code. ***By signing this agreement, Engineer certifies that Engineer's signature provides written verification to the City that Engineer: (1) does not boycott energy companies; and (2) will not boycott energy companies during the term of the agreement.*** Failure to meet or maintain the requirements under this provision will be considered a material breach.

## **O. Prohibition on Contracts with Companies Boycotting Certain Firearm Entities and Firearm Trade Associations**

Engineer acknowledges that in accordance with Chapter 2274 of the Texas Government Code, City is prohibited from entering into a contract with a company for goods or services unless the contract contains written verification from the company that it (1) does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association; and (2) will not discriminate during the term of the contract against a firearm entity or firearm trade association. The terms “discriminate against a firearm entity or firearm trade association,” “firearm entity” and “firearm trade association” shall have the meanings ascribed to those terms in Chapter 2274 of the Texas Government Code. ***By signing this agreement, Engineer certifies that Engineer’s signature provides written verification to the City that Engineer: (1) does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association; and (2) will not discriminate during the term of the contract against a firearm entity or firearm trade association.*** Failure to meet or maintain the requirements under this provision will be considered a material breach.

## **P. Termination Right for Contracts with Companies Doing Business with Certain Foreign-Owned Companies**

The City of Denton may terminate this Contract immediately without any further liability if the City of Denton determines, in its sole judgment, that this Contract meets the requirements under Chapter 2274, and Engineer is, or will be in the future, (i) owned by or the majority of stock or other ownership interest of the company is held or controlled by individuals who are citizens of China, Iran, North Korea, Russia, or other designated country (ii) directly controlled by the Government of China, Iran, North Korea, Russia, or other designated country, or (iii) is headquartered in China, Iran, North Korea, Russia, or other designated country.

## **Q. PROHIBITION AGAINST PERSONAL INTEREST IN CONTRACTS**

No officer, employee, independent consultant, or elected official of the City who is involved in the development, evaluation, or decision-making process of the performance of any solicitation shall have a financial interest, direct or indirect, in the Contract resulting from that solicitation as defined in the City’s Ethic Ordinance 18-757 and in the City Charter chapter 2 article XI(Ethics). Any willful violation of this section shall constitute impropriety in office, and any officer or employee guilty thereof shall be subject to disciplinary action up to and including dismissal. Any violation of this provision, with the knowledge, expressed or implied, of the Contractor shall render the Contract voidable by the City. The Contractor shall complete and submit the City’s Conflict of Interest Questionnaire.

## **R. Agreement Documents**

This AGREEMENT, including its attachments and schedules, constitutes the entire AGREEMENT, which supersedes all prior written or oral understandings, and may only be changed by a written amendment executed by both parties. This AGREEMENT may be executed in one or more counterparts and each counterpart shall, for all purposes, be deemed an original, but all such counterparts shall together constitute but one and the same instrument. The following attachments and schedules are hereby made a part of this AGREEMENT:

Exhibit A – Clear Creek Scope and Fee and Hickory Creek Scope and Fee

These documents make up the AGREEMENT documents and what is called for by one shall be as binding as if called for by all. In the event of an inconsistency or conflict in any of the provisions of the AGREEMENT documents, the inconsistency or conflict shall be resolved by giving precedence first to the written AGREEMENT then to the AGREEMENT documents in the order in which they are listed above.

The parties agree to transact business electronically. Any statutory requirements that certain terms be in writing will be satisfied using electronic documents and signing. Electronic signing of this document will be deemed an original for all legal purposes.


Duly executed by each party's designated representative to be effective on \_\_\_\_\_.

BY:  
CITY OF DENTON, TEXAS

\_\_\_\_\_  
Sara Hensley, City Manager

BY:  
ENGINEER  
KIMLEY-HORN AND ASSOCIATES,  
INC.

DocuSigned by:

  
D1B5A80061FF4E9

\_\_\_\_\_  
Scott Arnold  
Vice President

Date: 5/8/2023  
\_\_\_\_\_

2023-1017514

\_\_\_\_\_  
TEXAS ETHICS COMMISSION  
CERTIFICATE NUMBER



THIS AGREEMENT HAS BEEN  
BOTH REVIEWED AND APPROVED  
as to financial and operational  
obligations and business terms.

  
9EBFF5658E56492...

Signature

Director,

Title

Water Utilities

Department

Date Signed: 5/8/2023

ATTEST:  
JESUS SALAZAR, INTERIM CITY  
SECRETARY

BY: \_\_\_\_\_

APPROVED AS TO LEGAL FORM:  
MACK REINWAND, CITY ATTORNEY

  
DocuSigned by:  
4B070831B4AA438

BY: \_\_\_\_\_

**EXHIBIT A**

ATTACHMENT A  
ENGINEERING SERVICES FOR  
**CLEAR CREEK WATER RECLAMATION FACILITY WASTEWATER DISCHARGE PERMIT AMENDMENT**

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**ATTACHMENT “A”**

Scope for Engineering Related Services for:

**CLEAR CREEK WATER RECLAMATION FACILITY  
WASTEWATER DISCHARGE PERMIT AMENDMENT**

The ENGINEER will perform its services pursuant to the requirements delineated below. Services under this attachment include engineering services for the CLEAR CREEK WATER RECLAMATION FACILITY WASTEWATER DISCHARGE PERMIT AMENDMENT project.

**Project Understanding**

The CITY owns property along Hartlee Field Road within the Clear Creek Sewer Basin and holds an existing 0.95 MGD average daily flow Wastewater Discharge Permit (WWDP) for the future Clear Creek Water Reclamation Facility (WQ0014416001) with a discharge point located on Clear Creek. The CITY has requested ENGINEER to prepare an application to the Texas Commission on Environmental Quality (TCEQ) to amend the existing Clear Creek Water Reclamation Facility WWDP from 0.95 MGD to the maximum average daily flow TCEQ will allow on Clear Creek.

This WWDP amendment is consistent with the Wastewater Master Plan which identified the need for a Wastewater Reclamation Facility (WRF) to serve expected growth. The WWDP Amendment is the first step in moving forward with design, bidding, and construction of the WRF that is necessary to serve the planned growth with future wastewater treatment capacity.

ENGINEER will provide professional services for the following tasks:

- Task 1 – Wastewater Discharge Permit Major Amendment Application
- Task 2 – TCEQ Permit Review Process Coordination
- Task 3 – Public Involvement

## **Task 1 – WASTEWATER DISCHARGE PERMIT MAJOR AMENDMENT APPLICATION**

### **A. Determine Effluent Discharge Location(s) and Flow**

1. Evaluate topography and proposed infrastructure for the WRF.
2. Coordinate with the CITY to establish a wastewater treatment plant location and confirm discharge point(s) is identified in the existing WWDP.
3. Size each treatment unit based off projected wastewater flows from ongoing wastewater masterplan project.

### **B. Local Coordination**

1. Attend up to three (3) meetings with CITY and adjacent landowners and other potential stakeholders near the proposed discharge location.

### **C. Preliminary Treatment Plant Analysis**

1. Based on input from equipment vendors, various stakeholders, input from the CITY, and the TCEQ, Prepare a preliminary wastewater analysis for the proposed development. ENGINEER will perform the following tasks:
  - a. Coordinate with the CITY to establish general preferences on the following aspects of the proposed WRF:
    - i. WRF general site layout.
    - ii. Paving and parking.
    - iii. Odor control.
    - iv. Facilities (buildings, laboratories, etc.).
    - v. Solids management
    - vi. Operations
2. Evaluate up to two (2) treatment process options for treating the wastewater. Coordinate with treatment equipment vendors to obtain equipment cost on treatment processes.
3. Prepare preliminary calculations for the sizing of the WRF components for each treatment option.

### **D. Phasing Plan**

1. Preliminarily size units and evaluate up to three (3) conceptual layouts for expansion of the WRF to buildout flows determined by the ongoing wastewater masterplan project.
2. Identify a phased approach to the WRF expansions.

### **E. Technical Memorandum**

1. Prepare a memorandum to the CITY summarizing the analyses performed and provide recommendations for the proposed WRF. The letter shall consist of a technical summary, preliminary site exhibit, buildout site exhibit, and phasing exhibit.

### **F. Preparation of Permit Application**

1. Following approval by the CITY of the Technical Memorandum, the ENGINEER shall prepare and submit a WWDP Major Amendment Application with the TCEQ. For the purposes of this scope, it is assumed that the application shall be prepared as a Texas Pollution Discharge Elimination System (TPDES) application for the discharge of the treated effluent into Clear Creek. The consultation shall prepare the following tasks in support of a WWDP Major Amendment Application:
  - a. Prepare a TCEQ WWDP Major Amendment Application for the Project. For the purposes of this scope, it is assumed that the following application components will be required:
    - i. Domestic Administrative Report 1.0.
    - ii. Domestic Administrative Report 1.1.
    - iii. Supplemental Permit Information Form (SPIF).
    - iv. Domestic Technical Report 1.0.
    - v. Domestic Technical Report 1.1.
    - vi. Receiving Waters Worksheet 2.0.
    - vii. Stream Physical Characteristics Worksheet 2.1.
    - viii. Pollutant Analyses Requirements Worksheet 4.0.
    - ix. Toxicity Testing Requirements Worksheet 5.0.
    - x. Industrial Waste Contribution Worksheet 6.0.
  - b. Prepare supporting documents required for the WWDP Major Amendment Application, including the following:
    - i. Schematic site plan with buffer zone and floodplain requirements incorporated.
    - ii. Affected Landowner Map.
    - iii. Landowner Disc or Labels.
    - iv. Original USGS Map.
    - v. Treatment Process Flow Diagram.
    - vi. Treatment Unit Dimensions Summary.
    - vii. Design Calculations.
    - viii. Solids Management Plan.
    - ix. Original Photographs.
    - x. Public Involvement Plan

For the purposes of this scope, it is assumed that the floodplain determination will be made by existing Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps.

2. A Sewage Sludge Technical Report will be developed to document the quantities of sludge anticipated in the treatment process and the ultimate disposal of the sludge. If final treatment is to be by contract offsite, formal commitment and treatment capability will be obtained by the CITY from the received treatment provider and document to the TCEQ.
3. Visit the proposed WRF site to gather site data, such as photographs of the proposed WRF site and discharge route, as required for the proposed WWDP Application.
4. Following review of the Draft Permit Application packet by the CITY, incorporate any CITY comments and submit the Application packet to the TCEQ.

### **Meetings:**

- a. Prepare for and attend (1) project kickoff meeting.
- b. Prepare for and attend (1) Technical Memorandum review meeting.
- c. Prepare for and attend (1) Draft Permit Major Amendment Application review meeting.

**Deliverables:**

- a. Technical Memorandum in electronic form.
- b. Draft Permit Major Amendment Application in electronic form.
- c. WWDP Major Amendment Application in electronic form.

**Services/Deliverables provided by the CITY:**

- a. Participate in project kickoff meeting, Technical Memorandum, and Draft Permit Major Amendment Application review meetings.
- b. Background data required for the preparation of the WWDP Major Amendment Application, including but not limited to CITY contact information, CITY tax information, TCEQ enforcement information, and plant operator information.
- c. Attend proposed Clear Creek WRF site visit.

**Task 2 – TCEQ PERMIT REVIEW PROCESS COORDINATION**

- A. Respond to comments from the TCEQ to assist in a TCEQ determination that the Application is administratively complete. When notified by the TCEQ, publish a Notice of Receipt of Application and Intent to Obtain a Water Quality Permit (NORI) in minimum one (1) local newspaper and submit documentation to the TCEQ clerk. Distribute copies of the WWDP Major Amendment Application in a public location determined by the CITY.
- B. Respond to technical questions raised by the TCEQ in review of the WWDP Major Amendment Application. For the purposes of this scope, it is assumed that there will be no more than two (2) rounds of technical comments from the TCEQ.
- C. Review TCEQ issued Draft Discharge Permit and offer corrections or suggestions for Permit conditions. Coordinate review and comment input from the CITY and system operators.
- D. ENGINEER will prepare and submit publication for public notice requirements for the TCEQ Permit. ENGINEER will complete the Public Notice Verification Form required by the TCEQ and submit the Public Notice Verification Form, proof of publication, and publisher's affidavit to the TCEQ. ENGINEER will coordinate the posting of the permit application and preliminary decision in a public place determined by the CITY for viewing.
- E. Once authorized by the TCEQ, ENGINEER will publish Notice of Application and Preliminary Decision in minimum one (1) local newspaper and monitor request for public hearings or inquiries from interested parties and respond to questions. For this scope, it is assumed that responses will be required from the ENGINEER for up to five (5) inquiries.

**Services/Deliverables provided by the CITY:**

- a. Participate in review of TCEQ issued Draft Discharge Permit.
- b. Provide public location for required documentation to be posted.

**Task 3 – PUBLIC INVOLVEMENT**

This task will be performed on an as-needed basis only. The ENGINEER will not provide these services without prior written authorization from the CITY.

**A. Public Meetings**

The ENGINEER will prepare materials, attend, and document as needed for up to one (1) public meeting. The CITY will be responsible for selecting and scheduling meeting location and distributing notifications to the public either through mailers, social media, or email.

**B. Project Informational Materials**

The ENGINEER will assist the CITY with updated project information and materials to be used in council meetings and for a project website, if requested.

**Deliverables:**

- a. Public meeting materials and meeting notes
- b. Project informational materials

**Services/Deliverables provided by the CITY:**

- a. Participate in Public Meeting
- b. Provide location, date, and time for Public Meeting

## **ADDITIONAL SERVICES NOT INCLUDED IN THE EXISTING SCOPE OF SERVICES**

City and ENGINEER agree that the following services are beyond the Scope of Services described in the tasks above. However, ENGINEER can provide these services, if needed, upon the City's written request. Any additional amounts paid to ENGINEER because of any material change to the Scope of the Project shall be agreed upon in writing by both parties before the services are performed. These additional services include, but are not limited to the following:

- Attending meeting with or on behalf of the CITY not identified in the scope.
- Services associated with the permit application being challenged by a third party.
- Evaluation of any temporary sanitary sewer options for service prior to a constructed WRF.
- Design of the onsite sanitary sewer collection system.
- Evaluation of any additional potential WRF locations.
- Services associated with the procurement of a treatment plant operator.
- Permitting related to industrial wastewater generated by the CITY.
- Preparation for or attendance of a public meeting for the WWDP.
- Preparation for or attendance of mediation between the CITY and other parties.
- Evaluation of treatment process that would require preparation of additional WWDP Applications.
- Application worksheets or supporting documents not identified in the Scope of Services.
- Topographic surveys.
- Franchise utility coordination.
- Flood study / Downstream assessment.
- Construction administration.
- Tree survey.
- TXDOT Permit or ROW Research.
- Any services not listed in the Scope of Services

## ATTACHMENT "B"

Compensation for Engineering Related Services for:

### **CLEAR CREEK WASTEWATER RECLAMATION PLANT TREATMENT FACILITY WASTEWATER DISCHARGE PERMIT AMENDMENT**

Total compensation for the ENGINEER contemplated under the terms of this agreement **shall be a total not-to-exceed \$110,000** for all services including reimbursable expenses. The CITY shall compensate the ENGINEER as follows:

For Tasks 1-3 the total compensation shall be on a lump sum basis and not to exceed **\$110,000**.

Progress payments for shall be paid monthly based on the actual work satisfactorily completed per month in each phase, with the following amounts of the total compensation for each phase of the Project:

• Task 1 – Wastewater Discharge Permit Major Amendment Application	\$ 60,000
• Task 2 – TCEQ Permit Review Process Coordination	\$ 40,000
• Task 3 – Public Involvement	\$ 10,000
<b>Grand Total</b>	<b>\$ 110,000</b>

ENGINEER will not exceed the total maximum fee shown without authorization from the CITY. Individual task amounts are provided for budgeting purposes only. ENGINEER reserves the right to reallocate amounts among tasks as necessary.

All permitting, application, and similar project fees will be paid directly by the CITY.

**Non-Labor Expenses:** Non-labor expenses for reimbursable tasks shall be reimbursed as Direct Expenses at invoice or internal office cost. 4.6% will be added to each invoice to cover certain other internal office cost expenses as to these tasks, such as in-house duplicating, local mileage, telephone calls, facsimiles, postage, and word processing.

**Direct Expenses** (non-labor) for reimbursable tasks include, but are not limited to, mileage, travel and lodging expenses, mail, supplies, printing and reproduction services, other direct expenses associated with delivery of the work; plus applicable sales, use, value added, business transfer, gross receipts, or other similar taxes. Direct reimbursable expenses such as express delivery services, fees, travel, and other direct expenses will be billed at 1.10 times the cost.

Payment will be due within 25 days of your receipt of the invoice and should include the invoice number and Kimley-Horn project number.



## ATTACHMENT “A”

Scope for Engineering Related Services for:

### **HICKORY CREEK WATER RECLAMATION FACILITY WASTEWATER DISCHARGE PERMIT**

The ENGINEER will perform its services pursuant to the requirements delineated below. Services under this attachment include engineering services for the HICKORY CREEK WATER RECLAMATION FACILITY WASTEWATER DISCHARGE PERMIT project.

#### **Project Understanding**

The CITY is purchasing property within the Hickory Creek Sewer Basin. The CITY has requested ENGINEER to prepare an application to the Texas Commission on Environmental Quality (TCEQ) for the maximum average daily flow Wastewater Discharge Permit (WWDP) that TCEQ will allow on Hickory Creek. The identified location of the Water Reclamation Facility (WRF) is located approximately 1.20 miles southwest of the intersection of U.S. 377 and Country Club Road in Denton, Texas.

This WWDP is consistent with the Wastewater Master Plan which identified the need for a Water Reclamation Facility (WRF) to serve expected growth. The WWDP is the first step in moving forward with design, bidding, and construction of the WRF that is necessary to serve the planned growth with future wastewater treatment capacity.

ENGINEER will provide professional services for the following tasks:

- Task 1 – Wastewater Discharge Permit Application
- Task 2 – TCEQ Permit Review Process Coordination
- Task 3 – Public Involvement

## **Task 1 – WASTEWATER DISCHARGE PERMIT APPLICATION**

### **A. Determine Effluent Discharge Location(s) and Flow**

1. Evaluate topography and proposed infrastructure for the WRF.
2. Coordinate with the CITY to establish a wastewater treatment plant location and discharge point(s) that will be identified in the permit application.
3. Size each treatment unit based off projected wastewater flows from ongoing wastewater masterplan project.

### **B. Local Coordination**

1. Attend up to three (3) meetings with CITY and adjacent landowners and other potential stakeholders near the proposed discharge location.

### **C. Preliminary Treatment Plant Analysis**

1. Based on input from equipment vendors, various stakeholders, input from the CITY, and the TCEQ, Prepare a preliminary wastewater analysis for the proposed development. ENGINEER will perform the following tasks:
  - a. Coordinate with the CITY to establish general preferences on the following aspects of the proposed WRF:
    - i. WRF general site layout.
    - ii. Paving and parking.
    - iii. Odor control.
    - iv. Facilities (buildings, laboratories, etc.).
    - v. Solids management
    - vi. Operations
2. Evaluate up to two (2) treatment process options for treating the wastewater. Coordinate with treatment equipment vendors to obtain equipment cost on treatment processes.
3. Prepare preliminary calculations for the sizing of the WRF components for each treatment option.

### **D. Phasing Plan**

1. Preliminarily size units and evaluate up to three (3) conceptual layouts for expansion of the WRF to buildout flows determined by the ongoing wastewater masterplan project.
2. Identify a phased approach to the WRF expansions.

### **E. Technical Memorandum**

1. Prepare a memorandum to the CITY summarizing the analyses performed and provide recommendations for the proposed WRF. The letter shall consist of a technical summary, preliminary site exhibit, buildout site exhibit, and phasing exhibit.

### **F. Preparation of Permit Application**

1. Following approval by the CITY of the Technical Memorandum, the ENGINEER shall prepare and submit a WWDP Application with the TCEQ. For the purposes of this scope, it is assumed that the application shall be prepared as a Texas Pollution

Discharge Elimination System (TPDES) application for the discharge of the treated effluent into Hickory Creek. The consultation shall prepare the following tasks in support of a WWDP Application:

- a. Prepare a TCEQ WWDP Application for the Project. For the purposes of this scope, it is assumed that the following application components will be required:
  - i. Domestic Administrative Report 1.0.
  - ii. Domestic Administrative Report 1.1.
  - iii. Supplemental Permit Information Form (SPIF).
  - iv. Domestic Technical Report 1.0.
  - v. Domestic Technical Report 1.1.
  - vi. Receiving Waters Worksheet 2.0.
  - vii. Stream Physical Characteristics Worksheet 2.1.
  - viii. Pollutant Analyses Requirements Worksheet 4.0.
  - ix. Toxicity Testing Requirements Worksheet 5.0.
  - x. Industrial Waste Contribution Worksheet 6.0.
- b. Prepare supporting documents required for the WWDP Application, including the following:
  - i. Schematic site plan with buffer zone and floodplain requirements incorporated.
  - ii. Affected Landowner Map.
  - iii. Landowner Disc or Labels.
  - iv. Original USGS Map.
  - v. Treatment Process Flow Diagram.
  - vi. Treatment Unit Dimensions Summary.
  - vii. Design Calculations.
  - viii. Solids Management Plan.
  - ix. Original Photographs.
  - x. Public Involvement Plan

For the purposes of this scope, it is assumed that the floodplain determination will be made by existing Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps.

2. A Sewage Sludge Technical Report will be developed to document the quantities of sludge anticipated in the treatment process and the ultimate disposal of the sludge. If final treatment is to be by contract offsite, formal commitment and treatment capability will be obtained by the CITY from the received treatment provider and document to the TCEQ.
3. Visit the proposed WRF site to gather site data, such as photographs of the proposed WRF site and discharge route, as required for the proposed WWDP Application.
4. Following review of the Draft Permit Application packet by the CITY, incorporate any CITY comments and submit the Application packet to the TCEQ.

#### **Meetings:**

- a. Prepare for and attend (1) project kickoff meeting.
- b. Prepare for and attend (1) Technical Memorandum review meeting.
- c. Prepare for and attend (1) Draft Permit Application review meeting.

**Deliverables:**

- a. Technical Memorandum in electronic form.
- b. Draft Permit Application in electronic form.
- c. WWDP Application in electronic form.

**Services/Deliverables provided by the CITY:**

- a. Participate in project kickoff meeting, Technical Memorandum, and Draft Permit Application review meetings.
- b. Background data required for the preparation of the WWDP Application, including but not limited to CITY contact information, CITY tax information, TCEQ enforcement information, and plant operator information.
- c. Attend proposed Hickory Creek WRF site visit.

**Task 2 – TCEQ PERMIT REVIEW PROCESS COORDINATION**

- A. Respond to comments from the TCEQ to assist in a TCEQ determination that the application is administratively complete. When notified by the TCEQ, publish a Notice of Receipt of Application and Intent to Obtain a Water Quality Permit (NORI) in minimum one (1) local newspaper and submit documentation to the TCEQ clerk. Distribute copies of the WWDP Application in a public location determined by the CITY.
- B. Respond to technical questions raised by the TCEQ in review of the WWDP Application. For the purposes of this scope, it is assumed that there will be no more than two (2) rounds of technical comments from the TCEQ.
- C. Review TCEQ issued Draft Discharge Permit and offer corrections or suggestions for Permit conditions. Coordinate review and comment input from the CITY and system operators.
- D. ENGINEER will prepare and submit publication for public notice requirements for the TCEQ Permit. ENGINEER will complete the Public Notice Verification Form required by the TCEQ and submit the Public Notice Verification Form, proof of publication, and publisher's affidavit to the TCEQ. ENGINEER will coordinate the posting of the permit application and preliminary decision in a public place determined by the CITY for viewing.
- E. Once authorized by the TCEQ, ENGINEER will publish Notice of Application and Preliminary Decision in minimum one (1) local newspaper and monitor request for public hearings or inquiries from interested parties and respond to questions. For this scope, it is assumed that responses will be required from the ENGINEER for up to five (5) inquiries.

**Services/Deliverables provided by the CITY:**

- a. Participate in review of TCEQ issued Draft Discharge Permit.
- b. Provide public location for required documentation to be posted.

### **Task 3 – PUBLIC INVOLVEMENT**

This task will be performed on an as-needed basis only. The ENGINEER will not provide these services without prior written authorization from the CITY.

#### **A. Public Meetings**

The ENGINEER will prepare materials, attend, and document as needed for up to one (1) public meeting. The CITY will be responsible for selecting and scheduling meeting location and distributing notifications to the public either through mailers, social media, or email.

#### **B. Project Informational Materials**

The ENGINEER will assist the CITY with updated project information and materials to be used in council meetings and for a project website, if requested.

#### **Deliverables:**

- a. Public meeting materials and meeting notes
- b. Project informational materials

#### **Services/Deliverables provided by the CITY:**

- a. Participate in Public Meeting
- b. Provide location, date, and time for Public Meeting

## **ADDITIONAL SERVICES NOT INCLUDED IN THE EXISTING SCOPE OF SERVICES**

City and ENGINEER agree that the following services are beyond the Scope of Services described in the tasks above. However, ENGINEER can provide these services, if needed, upon the City's written request. Any additional amounts paid to ENGINEER because of any material change to the Scope of the Project shall be agreed upon in writing by both parties before the services are performed. These additional services include, but are not limited to the following:

- Attending meeting with or on behalf of the CITY not identified in the scope.
- Services associated with the permit application being challenged by a third party.
- Evaluation of any temporary sanitary sewer options for service prior to a constructed WRF.
- Design of the onsite sanitary sewer collection system.
- Evaluation of any additional potential WRF locations.
- Services associated with the procurement of a treatment plant operator.
- Permitting related to industrial wastewater generated by the CITY.
- Preparation for or attendance of a public meeting for the WWDP.
- Preparation for or attendance of mediation between the CITY and other parties.
- Evaluation of treatment process that would require preparation of additional WWDP Applications.
- Application worksheets or supporting documents not identified in the Scope of Services.
- Topographic surveys.
- Franchise utility coordination.
- Flood study / Downstream assessment.
- Construction administration.
- Tree survey.
- TXDOT Permit or ROW Research.
- Any services not listed in the Scope of Services

## ATTACHMENT "B"

Compensation for Engineering Related Services for:

### HICKORY CREEK WASTEWATER RECLAMATION FACILITY WASTEWATER DISCHARGE PERMIT

Total compensation for the ENGINEER contemplated under the terms of this agreement **shall be a total not-to-exceed \$130,000** for all services including reimbursable expenses. The CITY shall compensate the ENGINEER as follows:

For Tasks 1-3 the total compensation shall be on a lump sum basis and not to exceed **\$130,000**.

Progress payments shall be paid monthly based on the actual work satisfactorily completed per month in each phase, with the following amounts of the total compensation for each phase of the Project:

• Task 1 – Wastewater Discharge Permit Application	\$ 80,000
• Task 2 – TCEQ Permit Review Process Coordination	\$ 40,000
• Task 3 – Public Involvement	\$ 10,000
<b>Grand Total</b>	<b>\$ 130,000</b>

ENGINEER will not exceed the total maximum fee shown without authorization from the CITY. Individual task amounts are provided for budgeting purposes only. ENGINEER reserves the right to reallocate amounts among tasks as necessary.

All permitting, application, and similar project fees will be paid directly by the CITY.

**Non-Labor Expenses:** Non-labor expenses for reimbursable tasks shall be reimbursed as Direct Expenses at invoice or internal office cost. 4.6% will be added to each invoice to cover certain other internal office cost expenses as to these tasks, such as in-house duplicating, local mileage, telephone calls, facsimiles, postage, and word processing.

**Direct Expenses** (non-labor) for reimbursable tasks include, but are not limited to, mileage, travel and lodging expenses, mail, supplies, printing and reproduction services, other direct expenses associated with delivery of the work; plus applicable sales, use, value added, business transfer, gross receipts, or other similar taxes. Direct reimbursable expenses such as express delivery services, fees, travel, and other direct expenses will be billed at 1.10 times the cost.

Payment will be due within 25 days of your receipt of the invoice and should include the invoice number and Kimley-Horn project number.

**CONFLICT OF INTEREST QUESTIONNAIRE -****FORM CIQ****For vendor or other person doing business with local governmental entity****This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.**

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a) and by City of Denton Ethics Code, Ordinance 18-757.

By law this questionnaire must be filed with the records administrator of the local government entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

**1 Name of vendor who has a business relationship with local governmental entity.**

KIMLEY-HORN AND ASSOCIATES, INC.

**2 ☐ Check this box if you are filing an update to a previously filed questionnaire.**

(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7<sup>th</sup> business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

**3 Name of local government officer about whom the information in this section is being disclosed.**

n/a

Name of Officer

Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. This section, (item 3 including subparts A, B, C & D), must be completed for each officer with whom the vendor has an employment or other business relationship as defined by Section 176.001(1-a), Local Government Code. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer named in this section receiving or likely to receive taxable income, other than investment income, from the vendor?

☐

Yes

☐

No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer named in this section AND the taxable income is not received from the local governmental entity?

☐

Yes

☐

No

C. Is the filer of this questionnaire employed by a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership of one percent or more?


☐

Yes

☐

No

D. Describe each employment or business and family relationship with the local government officer named in this section.

**4 ☒ I have no Conflict of Interest to disclose.****5 DocuSigned by:**

5/8/2023

Signature of vendor doing business with the governmental entity

Date



## CONFLICT OF INTEREST QUESTIONNAIRE

### For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at [http://www.statutes.legis.state.tx.us/ Docs/LG/htm/LG.176.htm](http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm). For easy reference, below are some of the sections cited on this form.

**Local Government Code § 176.001(1-a):** "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

- (A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;
- (B) a transaction conducted at a price and subject to terms available to the public; or
- (C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

**Local Government Code § 176.003(a)(2)(A) and (B):**

(A) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

(2) the vendor:

- (A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds \$2,500 during the 12-month period preceding the date that the officer becomes aware that
  - (i) a contract between the local governmental entity and vendor has been executed; or
  - (ii) the local governmental entity is considering entering into a contract with the vendor;
- (B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than \$100 in the 12-month period preceding the date the officer becomes aware that:
  - (i) a contract between the local governmental entity and vendor has been executed; or
  - (ii) the local governmental entity is considering entering into a contract with the vendor.

**Local Government Code § 176.006(a) and (a-1)**

- (a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:
  - (1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);
  - (2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or
  - (3) has a family relationship with a local government officer of that local governmental entity.
- (a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:
  - (1) the date that the vendor:
    - (A) begins discussions or negotiations to enter into a contract with the local governmental entity; or
    - (B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or
  - (2) the date the vendor becomes aware:
    - (A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);
    - (B) that the vendor has given one or more gifts described by Subsection (a); or
    - (C) of a family relationship with a local government officer.

### **City of Denton Ethics Code Ordinance Number 18-757**

#### **Definitions:**

**Relative:** a family member related to a City Official within the third 3<sup>rd</sup> degree of affinity (marriage) or consanguinity (blood or adoption)

**City Official:** for purpose of this article, the term consists of the Council Members, Department Heads, or member of the Board of Ethics, Planning and zoning Commission Members, Board of Adjustment, Historic Landmark Commission, or Public Utilities Board

**Vendor:** a person who provides or seeks to provide goods, services, and/or real property to the City in exchange for compensation. This definition does not include those property owners from whom the City acquires public right-of-way or other real property interests for public use.

Per the City of Denton Ethics Code, Section 2-273. – Prohibitions

- (3) It shall be a violation of this Article for a Vendor to offer or give a Gift to City Official exceeding fifty dollars (\$50.00) per gift, or multiple gifts cumulatively valued at more than two hundred dollars (\$200.00) per a single fiscal year.

Per the City of Denton Ethics Code, Section 2-282. – Disposition (b), (5) Ineligibility

If the Board of Ethics finds that a Vendor has violated this Article, the Board may recommend to the City Manager that the Vendor be deemed ineligible to enter into a City contract or other arrangement for goods, services, or real property, for a period of one (1) year.

**Certificate Of Completion**

Envelope Id: 39419AA84F7B4B32AAFAA44AA481F732

Status: Sent

Subject: Please DocuSign: City Council Contract 7574-028 Clear Creek and Hickory Creek WW Discharge Permit

Source Envelope:

Document Pages: 35

Signatures: 4

Envelope Originator:

Certificate Pages: 6

Initials: 1

Crystal Westbrook

AutoNav: Enabled

901B Texas Street

Enveloped Stamping: Enabled

Denton, TX 76209

Time Zone: (UTC-06:00) Central Time (US &amp; Canada)

crystal.westbrook@cityofdenton.com

IP Address: 198.49.140.10

**Record Tracking**

Status: Original

Holder: Crystal Westbrook

Location: DocuSign

4/28/2023 3:59:14 PM

crystal.westbrook@cityofdenton.com

**Signer Events****Signature****Timestamp**

Crystal Westbrook

**Completed**

Sent: 4/28/2023 4:03:32 PM

crystal.westbrook@cityofdenton.com

Viewed: 4/28/2023 4:03:43 PM

Senior Buyer

Signed: 4/28/2023 4:04:37 PM

City of Denton

Using IP Address: 198.49.140.10

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(None)**Electronic Record and Signature Disclosure:**

Not Offered via DocuSign

Lori Hewell



Sent: 4/28/2023 4:04:40 PM

lori.hewell@cityofdenton.com

Viewed: 5/1/2023 8:46:57 AM

Purchasing Manager

Signed: 5/1/2023 8:47:23 AM

City of Denton

Signature Adoption: Pre-selected Style

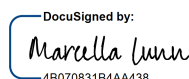
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(None)

Using IP Address: 198.49.140.10

**Electronic Record and Signature Disclosure:**

Not Offered via DocuSign

Marcella Lunn



Sent: 5/1/2023 8:47:26 AM

marcella.lunn@cityofdenton.com

Viewed: 5/5/2023 5:45:37 PM

Mack Reinwand City Attorney

Signed: 5/5/2023 5:47:35 PM

City of Denton

Signature Adoption: Pre-selected Style

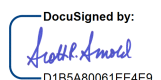
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**Electronic Record and Signature Disclosure:**

Not Offered via DocuSign

Scott Arnold



Sent: 5/5/2023 5:47:38 PM

scott.arnold@kimley-horn.com

Viewed: 5/8/2023 7:27:33 AM

Vice President

Signed: 5/8/2023 2:05:10 PM

Kimley-Horn and Associates, Inc.

Signature Adoption: Uploaded Signature Image

Security Level: Email, Account Authentication  
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Signer Events	Signature	Timestamp
Stephen D. Gay stephen.gay@cityofdenton.com Director, Security Level: Email, Account Authentication (None)	DocuSigned by:  9EBFF5658E56492...  Signature Adoption: Pre-selected Style Using IP Address: 198.49.140.10	Sent: 5/8/2023 2:05:13 PM Viewed: 5/8/2023 2:33:02 PM Signed: 5/8/2023 2:33:40 PM

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Cheyenne Defee  
cheyenne.defee@cityofdenton.com  
Procurement Administration Supervisor  
City of Denton  
Security Level: Email, Account Authentication (None)

Sent: 5/8/2023 2:33:43 PM

**Electronic Record and Signature Disclosure:**  
Not Offered via DocuSign

Sara Hensley  
sara.hensley@cityofdenton.com  
Security Level: Email, Account Authentication (None)

**Electronic Record and Signature Disclosure:**  
Not Offered via DocuSign

Jesus Salazar  
jesus.salazar@cityofdenton.com  
Security Level: Email, Account Authentication (None)

**Electronic Record and Signature Disclosure:**  
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ID: 05778190-ddf5-4769-9e02-141f24d5bb62

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Editor Delivery Events	Status	Timestamp
Agent Delivery Events	Status	Timestamp
Intermediary Delivery Events	Status	Timestamp
Certified Delivery Events	Status	Timestamp
Carbon Copy Events	Status	Timestamp

Cheyenne Defee  
cheyenne.defee@cityofdenton.com  
Procurement Administration Supervisor  
City of Denton  
Security Level: Email, Account Authentication (None)

**Electronic Record and Signature Disclosure:**  
Not Offered via DocuSign

**COPIED**

Sent: 4/28/2023 4:04:40 PM

Carbon Copy Events	Status	Timestamp
Gretna Jones gretna.jones@cityofdenton.com Legal Secretary City of Denton Security Level: Email, Account Authentication (None) <b>Electronic Record and Signature Disclosure:</b> Not Offered via DocuSign  City Secretary Office citysecretary@cityofdenton.com Security Level: Email, Account Authentication (None) <b>Electronic Record and Signature Disclosure:</b> Not Offered via DocuSign  David Brown david.brown@cityofdenton.com Security Level: Email, Account Authentication (None) <b>Electronic Record and Signature Disclosure:</b> Accepted: 4/10/2019 2:54:36 PM ID: 20238ddf-ccd6-4d52-988f-8c9f3436055e  Jewel Lanning jewel.lanning@cityofdenton.com Security Level: Email, Account Authentication (None) <b>Electronic Record and Signature Disclosure:</b> Not Offered via DocuSign	<div>COPIED</div>	Sent: 5/8/2023 2:33:43 PM Viewed: 5/8/2023 2:58:21 PM
Witness Events	Signature	Timestamp
Notary Events	Signature	Timestamp
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Payment Events	Status	Timestamps
Electronic Record and Signature Disclosure		

## **ELECTRONIC RECORD AND SIGNATURE DISCLOSURE**

From time to time, City of Denton (we, us or Company) may be required by law to provide to you certain written notices or disclosures. Described below are the terms and conditions for providing to you such notices and disclosures electronically through your DocuSign, Inc. (DocuSign) Express user account. Please read the information below carefully and thoroughly, and if you can access this information electronically to your satisfaction and agree to these terms and conditions, please confirm your agreement by clicking the 'I agree' button at the bottom of this document.

### **Getting paper copies**

At any time, you may request from us a paper copy of any record provided or made available electronically to you by us. For such copies, as long as you are an authorized user of the DocuSign system you will have the ability to download and print any documents we send to you through your DocuSign user account for a limited period of time (usually 30 days) after such documents are first sent to you. After such time, if you wish for us to send you paper copies of any such documents from our office to you, you will be charged a \$0.00 per-page fee. You may request delivery of such paper copies from us by following the procedure described below.

### **Withdrawing your consent**

If you decide to receive notices and disclosures from us electronically, you may at any time change your mind and tell us that thereafter you want to receive required notices and disclosures only in paper format. How you must inform us of your decision to receive future notices and disclosure in paper format and withdraw your consent to receive notices and disclosures electronically is described below.

### **Consequences of changing your mind**

If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. To indicate to us that you are changing your mind, you must withdraw your consent using the DocuSign 'Withdraw Consent' form on the signing page of your DocuSign account. This will indicate to us that you have withdrawn your consent to receive required notices and disclosures electronically from us and you will no longer be able to use your DocuSign Express user account to receive required notices and consents electronically from us or to sign electronically documents from us.

### **All notices and disclosures will be sent to you electronically**

Unless you tell us otherwise in accordance with the procedures described herein, we will provide electronically to you through your DocuSign user account all required notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you during the course of our relationship with you. To reduce the chance of you inadvertently not receiving any notice or disclosure, we prefer to provide all of the required notices and disclosures to you by the same method and to the same address that you have given us. Thus, you can receive all the disclosures and notices electronically or in paper format through the paper mail delivery system. If you do not agree with this process, please let us know as described below. Please also see the paragraph immediately above that describes the consequences of your electing not to receive delivery of the notices and disclosures electronically from us.

**How to contact City of Denton:**

You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:

To contact us by email send messages to: [purchasing@cityofdenton.com](mailto:purchasing@cityofdenton.com)

**To advise City of Denton of your new e-mail address**

To let us know of a change in your e-mail address where we should send notices and disclosures electronically to you, you must send an email message to us at [melissa.kraft@cityofdenton.com](mailto:melissa.kraft@cityofdenton.com) and in the body of such request you must state: your previous e-mail address, your new e-mail address. We do not require any other information from you to change your email address..

In addition, you must notify DocuSign, Inc to arrange for your new email address to be reflected in your DocuSign account by following the process for changing e-mail in DocuSign.

**To request paper copies from City of Denton**

To request delivery from us of paper copies of the notices and disclosures previously provided by us to you electronically, you must send us an e-mail to [purchasing@cityofdenton.com](mailto:purchasing@cityofdenton.com) and in the body of such request you must state your e-mail address, full name, US Postal address, and telephone number. We will bill you for any fees at that time, if any.

**To withdraw your consent with City of Denton**

To inform us that you no longer want to receive future notices and disclosures in electronic format you may:

- i. decline to sign a document from within your DocuSign account, and on the subsequent page, select the check-box indicating you wish to withdraw your consent, or you may;
- ii. send us an e-mail to [purchasing@cityofdenton.com](mailto:purchasing@cityofdenton.com) and in the body of such request you must state your e-mail, full name, US Postal Address, telephone number, and account number. We do not need any other information from you to withdraw consent.. The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process..

**Required hardware and software**

Operating Systems:	Windows2000? or WindowsXP?
Browsers (for SENDERS):	Internet Explorer 6.0? or above
Browsers (for SIGNERS):	Internet Explorer 6.0?, Mozilla FireFox 1.0, NetScape 7.2 (or above)
Email:	Access to a valid email account
Screen Resolution:	800 x 600 minimum
Enabled Security Settings:	<ul style="list-style-type: none"><li>•Allow per session cookies</li><li>•Users accessing the internet behind a Proxy Server must enable HTTP 1.1 settings via proxy connection</li></ul>

\*\* These minimum requirements are subject to change. If these requirements change, we will provide you with an email message at the email address we have on file for you at that time providing you with the revised hardware and software requirements, at which time you will have the right to withdraw your consent.

**Acknowledging your access and consent to receive materials electronically**

To confirm to us that you can access this information electronically, which will be similar to other electronic notices and disclosures that we will provide to you, please verify that you were able to read this electronic disclosure and that you also were able to print on paper or electronically save this page for your future reference and access or that you were able to e-mail this disclosure and consent to an address where you will be able to print on paper or save it for your future reference and access. Further, if you consent to receiving notices and disclosures exclusively in electronic format on the terms and conditions described above, please let us know by clicking the 'I agree' button below.

By checking the 'I Agree' box, I confirm that:

- I can access and read this Electronic CONSENT TO ELECTRONIC RECEIPT OF ELECTRONIC RECORD AND SIGNATURE DISCLOSURES document; and
- I can print on paper the disclosure or save or send the disclosure to a place where I can print it, for future reference and access; and
- Until or unless I notify City of Denton as described above, I consent to receive from exclusively through electronic means all notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to me by City of Denton during the course of my relationship with you.



# City of Denton

City Hall  
215 E. McKinney St.  
Denton, Texas 76201  
[www.cityofdenton.com](http://www.cityofdenton.com)

## Legislation Text

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**File #:** PUB23-099, **Version:** 1

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### **AGENDA CAPTION**

Consider approval of the May 8, 2023 minutes.



**CITY OF DENTON PUBLIC UTILITIES BOARD MINUTES**  
**May 8, 2023**

After determining that a quorum was present of the Public Utilities Board of the City of Denton, convened in a Regular Meeting on Monday, May 8, 2023, at 9:01 a.m. in the Council Work Session Room at City Hall, 215 E. McKinney Street, Denton, Texas.

PRESENT: Vice Chair Billy Cheek, Barbara Russell, Devin Taylor, and Lee Riback

Also present: General Manager Antonio Puente and Deputy City Attorney Marcella Lunn

Absent: Chair Susan Parker, Larry Beck, and Thomas Plock

**REGULAR MEETING**

**1. PRESENTATIONS FROM MEMBERS OF THE PUBLIC**

There were no public comments.

**2. CONSENT AGENDA**

The Consent Agenda consisted of Items 2 A-D.

**Board Member Taylor moved to recommend adoption of agenda items 2 B-D. Motion seconded by Board Member Riback; motion carried.**

**YES (4):** Vice Chair Billy Cheek, Barbara Russell, Devin Taylor, and Lee Riback

**NO (0):**

**A. PUB23-087** Consider recommending adoption of an ordinance of the City of Denton, a Texas home-rule municipal corporation, authorizing the City Manager to execute a contract extension between the City of Denton and John Hoggard dba Utility Planning Network (UPN) through June 10, 2024, to continue to provide 311/CRM Consulting Services for Customer Service and Public Affairs; and declaring an effective date (RFQ 7485 - extending a contract with John Hoggard dba Utility Planning Network (UPN), to June 10, 2024).

This item was pulled by Board Member Riback for questions. Tiffany Thompson was present to answer.

**Board Member Riback moved to recommend adoption of agenda items 2 A. Motion seconded by Board Member Russell; motion carried.**

**YES (4):** Vice Chair Billy Cheek, Barbara Russell, Devin Taylor, and Lee Riback

**NO (0):**

**B. PUB23-088** Consider recommending adoption of an ordinance of the City of Denton, a Texas

home-rule municipal corporation, authorizing the approval of a first amendment to a Professional Services Agreement between the City of Denton and Kimley-Horn and Associates Inc., amending the contract approved by the City Council on November 16, 2021, in the not-to-exceed amount of \$159,300.00; said first amendment to provide approximately 1,500 linear feet of 12-inch sanitary sewer line for the Water Utilities Divisions for the Granada Lift Station Replacement Project; providing for the expenditure of funds therefor; and providing an effective date (RFQ 7574-008 - providing for an additional first amendment expenditure amount not-to-exceed \$204,500.00, with the total contract amount not-to-exceed \$363,800.00).

**C. PUB23-089** Consider recommending adoption of an ordinance of the City of Denton, a Texas home-rule municipal corporation, authorizing the City Manager to execute a Professional Services Agreement with Burns & McDonnell Engineering Company, Inc., to provide Owner Engineer services on several ongoing initiatives for the Denton Municipal Electric Department; providing for the expenditure of funds therefor; and providing an effective date (RFQ 7804-009 - Professional Services Agreement for professional services awarded to Burns & McDonnell Engineering Company, Inc., in the not-to-exceed amount of \$763,641.00).

**D. PUB23-090** Consider recommending adoption of an ordinance of the City of Denton, a Texas home-rule municipal corporation, authorizing the City Manager to execute a Professional Services Agreement with Black & Veatch Corporation, for substation design and capital improvement projects requiring professional engineering services for Denton Municipal Electric; providing for the expenditure of funds therefor; and providing an effective date (RFQ 8031-001 - professional services agreement for engineering services awarded to Black & Veatch Corporation, in the not-to-exceed amount of \$4,244,870.84).

### **3. ITEMS FOR INDIVIDUAL CONSIDERATION**

**A. PUB23-093** Consider approval of the April 24, 2023, minutes.

**Board Member Russell moved to recommend approval of agenda item 3A. Motion seconded by Board Member Taylor; motion carried.**

**YES (4):** Vice Chair Billy Cheek, Barbara Russell, Devin Taylor, and Lee Riback

**NO (0):**

#### **B. PUB23-094 - Management Reports**

1. Utilities Debt Service History
2. Future Agenda Items
3. New Business Action Items

### **4. CONCLUDING ITEMS**

Vice Chair Cheek would like an update on Winter Storm Uri.

## **CLOSED MEETING**

- A. **PUB23-070** - Deliberations Regarding Certain Public Power Utilities: Competitive Matters - Under Texas Government Code Section 551.086; Consultation with Attorneys - Under Texas Government Code Section 551.071.

Receive information from staff regarding an update on the Core Scientific Power Purchase Agreement and Lease that includes data stemming from public power utility competitive data; discuss, deliberate, and provide direction to staff regarding same. Consultation with City's attorney regarding legal issues associated with the above matter where a public discussion of these legal matters would conflict with the duty of the City's attorneys to the City of Denton and the Denton City Council under Texas Disciplinary Rule of Professional Conduct of State Bar of Texas, or would jeopardize the City's legal position in any administrative proceeding or potential litigation.

With no further business, the meeting was adjourned at 9:34 AM.

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**BILLY CHEEK**  
**VICE CHAIR**  
**CITY OF DENTON, TEXAS**

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**KIM MANKIN**  
**UTILITIES ADMIN MANAGER**  
**CITY OF DENTON, TEXAS**

Minutes approved on: May 22, 2023.



# City of Denton

City Hall  
215 E. McKinney St.  
Denton, Texas 76201  
[www.cityofdenton.com](http://www.cityofdenton.com)

## Legislation Text

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**File #:** PUB23-091, **Version:** 1

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### **AGENDA CAPTION**

Consider recommending adoption of an ordinance considering all matters incident and related to the issuance, sale and delivery of up to \$80,500,000 in principal amount of "City of Denton General Obligation refunding and improvement bonds, Series 2023"; authorizing the issuance of the bonds; delegating the authority to certain city officials to execute certain documents relating to the sale of the bonds; approving and authorizing instruments and procedures relating to said bonds; enacting other provisions relating to the subject; and providing an effective date.



# City of Denton

City Hall  
215 E. McKinney Street  
Denton, Texas  
www.cityofdenton.com

## AGENDA INFORMATION SHEET

**DEPARTMENT:** Finance

**ACM:** Cassey Ogden

**DATE:** May 22, 2023

### **SUBJECT**

Consider recommending adoption of an ordinance considering all matters incident and related to the issuance, sale and delivery of up to \$80,500,000 in principal amount of "City of Denton General Obligation refunding and improvement bonds, Series 2023"; authorizing the issuance of the bonds; delegating the authority to certain city officials to execute certain documents relating to the sale of the bonds; approving and authorizing instruments and procedures relating to said bonds; enacting other provisions relating to the subject; and providing an effective date.

### **BACKGROUND**

This bond sale includes a refunding opportunity identified by the City's Financial Advisors, Hilltop Securities. By state law, Certificates of Obligation are refunded as General Obligation Bonds. This year's refunding consists of Certificates of Obligation, Series 2012 and 2013 and General Obligation Refunding and Improvement Bonds, Series 2012 and 2013. The total outstanding amount is \$45,560,000 and includes General Government, Water, Wastewater, Electric, Solid Waste and Airport debt. The projected savings is approximately \$1.446 million based on current market conditions. The below table summarizes the 2023 GO issuance.

General Fund	\$ 34,355,000
Refunding (Including Utilities)	\$ 45,560,000
Issuance Cost	\$ 585,000
Total	\$ 80,500,000

### **RECOMMENDATION**

Staff recommends adoption of the ordinance.

### **EXHIBITS**

1. Agenda Information Sheet
2. Preliminary Official Statement
3. GO Ordinance
4. Presentation

Respectfully submitted:  
Aimee Kaslik  
Interim Director of Finance

Prepared by:  
Ranee Klingele  
Treasury Manager

Dated May 15, 2023

Ratings:  
Fitch: "BBB"  
S&P: "BBB"  
(See "Other Information -  
Ratings" herein)

**NEW ISSUE - Book-Entry-Only**

In the opinion of Bond Counsel, interest on the Certificates will be excludable from gross income for federal income tax purposes under statutes, regulations, published rulings and court decisions existing on the date thereof, subject to the matters described under "Tax Matters" herein, including the alternative minimum tax on certain corporations.

**THE CERTIFICATES WILL NOT BE DESIGNATED AS "QUALIFIED TAX-EXEMPT OBLIGATIONS" FOR FINANCIAL INSTITUTIONS.**



**\$146,795,000\***  
**CITY OF DENTON, TEXAS**  
**(Denton County)**  
**CERTIFICATES OF OBLIGATION, SERIES 2023**

**Dated Date: June 15, 2023**

**Interest Accrues from Delivery Date**

**Due: February 15, as shown on page 2**

**PAYMENT TERMS** . . . Interest on the \$146,795,000\* City of Denton, Texas Certificates of Obligation, Series 2023 (the "Certificates") will accrue from the delivery date (the "Delivery Date"), will be payable February 15 and August 15 of each year, commencing February 15, 2024, until maturity or prior redemption, and will be calculated on the basis of a 360-day year consisting of twelve 30-day months. The definitive Certificates will be initially registered and delivered only to Cede & Co., the nominee of The Depository Trust Company ("DTC") pursuant to the Book-Entry-Only System described herein. Beneficial ownership of the Certificates may be acquired in denominations of \$5,000 or integral multiples thereof within a maturity. **No physical delivery of the Certificates will be made to the beneficial owners thereof.** Principal of, premium, if any, and interest on the Certificates will be payable by the Paying Agent/Registrar to Cede & Co., which will make distribution of the amounts so paid to the participating members of DTC for subsequent payment to the beneficial owners of the Certificates. See "The Obligations - Book-Entry-Only System" herein. The initial Paying Agent/Registrar is BOKF, NA, Dallas, Texas (see "The Obligations - Paying Agent/Registrar").

**AUTHORITY FOR ISSUANCE** . . . The Certificates are issued pursuant to the Constitution and general laws of the State of Texas, (the "State") particularly Subchapter C of Chapter 271, Texas Local Government Code (the Certificate of Obligation Act of 1971), as amended, and Texas Government Code, Chapter 1371, as amended, and constitute direct obligations of the City of Denton, Texas (the "City"), payable from a combination of (i) the levy and collection of a direct annual ad valorem tax, within the limits prescribed by law, on all taxable property within the City, and (ii) a limited pledge of surplus net revenues of the City's Utility System not in excess of \$1,000, as provided in the Certificate Ordinance (defined herein) authorizing the Certificates (see "The Obligations - Authority for Issuance").

**PURPOSE** . . . Proceeds from the sale of the Certificates will be used for the purchase, construction and acquisition of certain real and personal property, to wit: (a) acquiring, constructing, installing and equipping fire stations; (b) acquisition of vehicles and equipment for the fire, police, building inspections, community improvement services, animal services, streets and traffic control, facilities management, airport, technology services, fleet management, warehouse management, and parks and recreation departments; (c) renovations to, and equipping of, existing municipal buildings, including the acquisition and installation of replacement heating, venting and air conditioning equipment, roofing and flooring; (d) acquiring, constructing, installing and equipping police stations; (e) acquiring, constructing and installing building security systems, including security system technology equipment and software, for municipal buildings; (f) constructing, reconstructing, renovating, installing and equipping municipal parks; (g) renovations to, expansion of, and equipping existing municipal vehicle maintenance facility; (h) acquisition and installation of technology equipment, including radio equipment, computer equipment and software, for various municipal departments; (i) constructing and improving streets, including traffic signalization, landscaping, drainage, utility line relocations and the acquisition of land and rights-of-way therefor; (j) constructing, reconstructing and renovating runways and taxiways at the municipal airport; (k) acquisition of vehicles and equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the City's solid waste disposal system; (l) acquisition of equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the City's waterworks and wastewater system; and (m) acquisition of equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the City's electric light and power system, and also for the purpose of paying all or a portion of the City's contractual obligations for professional services, including engineers, architects, attorneys, map makers, auditors, and financial advisors, in connection with said projects and the Certificates (see "Plan of Financing").

**MATURITY SCHEDULE**

**See page 2**

**SEPARATE ISSUES** . . . The Certificates are being offered by the City concurrently with the "City of Denton, Texas General Obligation Refunding and Improvement Bonds, Series 2023" (the "Bonds") under a common official statement, and the Certificates and Bonds are hereinafter sometimes referred to collectively as the "Obligations." The Certificates and Bonds are separate and distinct securities offerings being issued and sold independently except for the common Official Statement, and, while the Obligations share certain common attributes, each issue is separate from the other and should be reviewed and analyzed independently, including the type of obligation being offered, its terms for payment, the security for its payment, the rights of the holders, the federal, state or local tax consequences of the purchase, ownership or disposition of the Obligations and other features.

**LEGALITY** . . . The Certificates are offered for delivery when, as and if issued and received by the Initial Purchaser subject to the approving opinion of the Attorney General of Texas and the opinion of McCall, Parkhurst & Horton L.L.P., Bond Counsel, Dallas, Texas (see Appendix C, "Forms of Bond Counsel's Opinions").

**DELIVERY** . . . It is expected that the Certificates will be available for delivery through The Depository Trust Company on July 26, 2023.

**SEALED BIDS DUE JUNE 21, 2023, AT 9:45 AM, CDT\*\***

\* Preliminary, subject to change. See "Adjustment of Principal Amount and/or Types of Bids" in the Notice of Sale for the Certificates.

\*\* Place and Time of Bid Opening . . . The City will accept bids for the sale of the Certificates on a day during the period beginning June 21, 2023 and initially ending July 5, 2023. At least 12 hours prior to the sale of the Certificates, Hilltop Securities Inc., as Financial Advisor to the City, will communicate, through Parity and Bloomberg, the date and time for submission of bids. The Financial Advisor, acting on behalf of the City, shall accept bids up to the time specified in the notice as hereinbefore described..

**MATURITY SCHEDULE\***

**CUSIP Prefix: 248867<sup>(1)</sup>**

<u>Principal Amount</u>	<u>15-Feb Maturity</u>	<u>Interest Rate</u>	<u>Yield</u>	<u>CUSIP Suffix<sup>(1)</sup></u>	<u>Principal Amount</u>	<u>15-Feb Maturity</u>	<u>Interest Rate</u>	<u>Yield</u>	<u>CUSIP Suffix<sup>(1)</sup></u>
\$ 4,285,000	2024				\$ 6,525,000	2039			
4,875,000	2025				6,825,000	2040			
5,120,000	2026				7,100,000	2041			
5,375,000	2027				7,385,000	2042			
5,655,000	2028				7,690,000	2043			
4,535,000	2029				2,715,000	2044			
4,765,000	2030				2,825,000	2045			
5,020,000	2031				2,940,000	2046			
5,265,000	2032				3,060,000	2047			
5,545,000	2033				3,185,000	2048			
5,080,000	2034				3,315,000	2049			
5,335,000	2035				3,450,000	2050			
5,610,000	2036				3,595,000	2051			
5,890,000	2037				3,740,000	2052			
6,195,000	2038				3,895,000	2053			

(1) CUSIP is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services, managed on behalf of the American Bankers Association by FactSet Research Systems Inc. This data is not intended to create a database and does not serve in any way as a substitute for the CUSIP services. None of the City, the Financial Advisor or the Initial Purchaser shall be responsible for the selection or correctness of the CUSIP numbers set forth herein.

**REDEMPTION . . .** The City reserves the right, at its option, to redeem Certificates having stated maturities on and after February 15, 2033, in whole or in part in principal amounts of \$5,000 or any integral multiple thereof, on February 15, 2032, or any date thereafter, at the par value thereof plus accrued interest to the date of redemption (see "The Obligations – Optional Redemption").

\* Preliminary, subject to change. See "Adjustment of Principal Amount and/or Types of Bids" in the Notice of Sale for the Certificates.



Dated May 11, 2023

Ratings:  
Fitch: "BBB"  
S&P: "BBB"  
(See "Other Information -  
Ratings" herein)

## NEW ISSUE - Book-Entry-Only

In the opinion of Bond Counsel, interest on the Bonds will be excludable from gross income for federal income tax purposes under statutes, regulations, published rulings and court decisions existing on the date thereof, subject to the matters described under "Tax Matters" herein, including the alternative minimum tax on certain corporations.

**THE BONDS WILL NOT BE DESIGNATED AS "QUALIFIED TAX-EXEMPT OBLIGATIONS" FOR FINANCIAL INSTITUTIONS.**



**\$71,845,000\***  
**CITY OF DENTON, TEXAS**  
**(Denton County)**  
**GENERAL OBLIGATION REFUNDING AND IMPROVEMENT BONDS,**  
**SERIES 2023**

**Dated Date: June 15, 2023**

**Due: February 15, as shown on page 4**

**Interest Accrues from Delivery Date**

**PAYMENT TERMS** . . . Interest on the \$71,845,000\* City of Denton, Texas General Obligation Refunding and Improvement Bonds, Series 2023 (the "Bonds") will accrue from the delivery date (the "Delivery Date"), will be payable February 15 and August 15 of each year, commencing February 15, 2024, until maturity or prior redemption, and will be calculated on the basis of a 360-day year consisting of twelve 30-day months. The definitive Bonds will be initially registered and delivered only to Cede & Co., the nominee of The Depository Trust Company ("DTC") pursuant to the Book-Entry-Only System described herein. Beneficial ownership of the Bonds may be acquired in denominations of \$5,000 or integral multiples thereof within a maturity. **No physical delivery of the Bonds will be made to the beneficial owners thereof.** Principal of, premium, if any, and interest on the Bonds will be payable by the Paying Agent/Registrar to Cede & Co., which will make distribution of the amounts so paid to the participating members of DTC for subsequent payment to the beneficial owners of the Bonds. See "The Obligations - Book-Entry-Only System" herein. The initial Paying Agent/Registrar is BOKF, NA, Dallas, Texas (see "The Obligations - Paying Agent/Registrar").

**AUTHORITY FOR ISSUANCE** . . . The Bonds are issued pursuant to the Constitution and general laws of the State of Texas, (the "State") including particularly Texas Government Code, Chapters 1207, 1371 and 1331, as amended, and are direct obligations of the City of Denton, Texas (the "City"), payable from an annual ad valorem tax levied, within the limits prescribed by law, on all taxable property within the City, as provided in the Bond Ordinance (defined herein) authorizing the Bonds (see "The Obligations - Authority for Issuance" and "The Obligations - Security and Source of Payment").

**PURPOSE** . . . Proceeds of the Bonds are expected to be used for (i) , (ii) , (iii) , (iv) refunding the obligations described in Schedule I - Schedule of Refunded Obligations (the "Refunded Obligations") for debt service savings, and (v) to pay the costs associated with the issuance of the Bonds (see "Plan of Financing").

## MATURITY SCHEDULE

See page 4

**SEPARATE ISSUES** . . . The Bonds are being offered by the City concurrently with the "City of Denton, Texas Certificates of Obligation, Series 2023" (the "Certificates"), under a common Official Statement, and the Bonds and Certificates are hereinafter sometimes referred to collectively as the "Obligations." The Bonds and Certificates are separate and distinct securities offerings being issued and sold independently except for the common Official Statement, and, while the Obligations share certain common attributes, each issue is separate from the other and should be reviewed and analyzed independently, including the type of obligation being offered, its terms for payment, the security for its payment, the rights of the holders, the federal, state or local tax consequences of the purchase, ownership or disposition of the Obligations and other features.

**LEGALITY** . . . The Bonds are offered for delivery when, as and if issued and received by the Initial Purchaser subject to the approving opinion of the Attorney General of Texas and the opinion of McCall, Parkhurst & Horton L.L.P., Bond Counsel, Dallas, Texas (see Appendix C, "Forms of Bond Counsel's Opinions").

**DELIVERY** . . . It is expected that the Bonds will be available for delivery through The Depository Trust Company on July 26, 2023.

## SEALED BIDS DUE JUNE 21, 2023, AT 10:15 AM, CDT\*\*

\* Preliminary, subject to change. See "Adjustment of Principal Amount and/or Types of Bids" in the Notice of Sale for the Bonds.

\*\* Place and Time of Bid Opening . . . The City will accept bids for the sale of the Bonds on a day during the period beginning June 21, 2023 and initially ending July 5, 2023. At least 12 hours prior to the sale of the Bonds, Hilltop Securities Inc., as Financial Advisor to the City, will communicate, through Parity and Bloomberg, the date and time for submission of bids. The Financial Advisor, acting on behalf of the City, shall accept bids up to the time specified in the notice as hereinbefore described.

**MATURITY SCHEDULE\*****CUSIP Prefix: 248867<sup>(1)</sup>**

<u>Principal Amount</u>	<u>15-Feb Maturity</u>	<u>Interest Rate</u>	<u>Yield</u>	<u>CUSIP Suffix<sup>(1)</sup></u>	<u>Principal Amount</u>	<u>15-Feb Maturity</u>	<u>Interest Rate</u>	<u>Yield</u>	<u>CUSIP Suffix<sup>(1)</sup></u>
\$ 3,635,000	2024				\$ 1,545,000	2034			
6,085,000	2025				1,620,000	2035			
5,685,000	2026				1,705,000	2036			
5,955,000	2027				1,795,000	2037			
4,150,000	2028				1,885,000	2038			
4,390,000	2029				1,980,000	2039			
4,650,000	2030				2,070,000	2040			
4,915,000	2031				2,155,000	2041			
7,760,000	2032				2,245,000	2042			
5,285,000	2033				2,335,000	2043			

(1) CUSIP is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services, managed on behalf of the American Bankers Association by FactSet Research Systems Inc. This data is not intended to create a database and does not serve in any way as a substitute for the CUSIP services. None of the City, the Financial Advisor or the Initial Purchaser shall be responsible for the selection or correctness of the CUSIP numbers set forth herein.

**REDEMPTION . . .** The City reserves the right, at its option, to redeem Bonds having stated maturities on and after February 15, 2033, in whole or in part in principal amounts of \$5,000 or any integral multiple thereof, on February 15, 2032, or any date thereafter, at the par value thereof plus accrued interest to the date of redemption (see "The Obligations – Optional Redemption").

\* Preliminary, subject to change. See "Adjustment of Principal Amount and/or Types of Bids" in the Notice of Sale for the Bonds.

*This Official Statement, which includes the cover pages, the Schedule and the Appendices hereto, does not constitute an offer to sell or the solicitation of an offer to buy in any jurisdiction to any person to whom it is unlawful to make such offer, solicitation, or sale.*

*No dealer, broker, salesperson, or other person has been authorized to give information or to make any representation other than those contained in this Official Statement, and, if given or made, such other information or representations must not be relied upon.*

*For purposes of compliance with Rule 15c 2-12 of the Securities and Exchange Commission (the "Rule"), this document constitutes an Official Statement of the City with respect to the Obligations that has been "deemed final" by the City as of its date except for the omission of no more than the information permitted by the Rule.*

*The information set forth herein has been obtained from the City and other sources believed to be reliable, but such information is not guaranteed as to accuracy or completeness and is not to be construed as the representation, promise, or guarantee of the Financial Advisor. Any information and expressions of opinion herein contained are subject to change without notice, and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the City or other matters described herein since the date hereof. See "Other Information - Continuing Disclosure of Information" for a description of the City's undertaking to provide certain information on a continuing basis.*

*Neither the City nor its Financial Advisor make any representation as to the accuracy, completeness, or adequacy of the information supplied by The Depository Trust Company for use in this Official Statement.*

*THIS OFFICIAL STATEMENT CONTAINS "FORWARD-LOOKING" STATEMENTS WITHIN THE MEANING OF SECTION 21E OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED. SUCH STATEMENTS MAY INVOLVE KNOWN AND UNKNOWN RISKS, UNCERTAINTIES, AND OTHER FACTORS WHICH MAY CAUSE THE ACTUAL RESULTS, PERFORMANCE, AND ACHIEVEMENTS TO BE DIFFERENT FROM FUTURE RESULTS, PERFORMANCE, AND ACHIEVEMENTS EXPRESSED OR IMPLIED BY SUCH FORWARD-LOOKING STATEMENTS. INVESTORS ARE CAUTIONED THAT THE ACTUAL RESULTS COULD DIFFER MATERIALLY FROM THOSE SET FORTH IN THE FORWARD-LOOKING STATEMENTS.*

*THE OBLIGATIONS ARE EXEMPT FROM REGISTRATION WITH THE SECURITIES AND EXCHANGE COMMISSION AND CONSEQUENTLY HAVE NOT BEEN REGISTERED THEREWITH. THE REGISTRATION, QUALIFICATION, OR EXEMPTION OF THE OBLIGATIONS IN ACCORDANCE WITH APPLICABLE SECURITIES LAW PROVISIONS OF THE JURISDICTION IN WHICH THE OBLIGATIONS HAVE BEEN REGISTERED, QUALIFIED OR EXEMPTED SHOULD NOT BE REGARDED AS A RECOMMENDATION THEREOF.*

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The cover pages hereof, this page and the appendices included herein and any addenda, supplement or amendment hereto, are part of the Preliminary Official Statement.

## PRELIMINARY OFFICIAL STATEMENT SUMMARY

This summary is subject in all respects to the more complete information and definitions contained or incorporated in this Preliminary Official Statement. The offering of the Bonds and Certificates to potential investors is made only by means of this entire Preliminary Official Statement. No person is authorized to detach this summary from this Preliminary Official Statement or to otherwise use it without the entire Preliminary Official Statement.

<b>THE CITY</b> .....	The City of Denton (the "City") is a political subdivision and municipal corporation of the State of Texas (the "State"), located in Denton County, Texas. The City covers approximately 97.411 square miles (see "Introduction - Description of the City").
<b>THE BONDS</b> .....	The City's \$71,845,000* General Obligation Refunding and Improvement Bonds, Series 2023 are to mature on February 15 in the years 2024 through 2043 (see "The Obligations - Description of the Obligations").
<b>THE CERTIFICATES</b> .....	The City's \$146,795,000* Certificates of Obligation, Series 2023 are to mature on February 15 in the years 2024 through 2053 (see "The Obligations - Description of the Obligations").
<b>PAYMENT OF INTEREST</b> .....	Interest on the Obligations accrues from the Delivery Date (defined herein) and is payable February 15, 2024 and each August 15 and February 15 thereafter until maturity or prior redemption (see "The Obligations - Description of the Obligations" and "The Obligations - Optional Redemption").
<b>AUTHORITY FOR ISSUANCE</b> .....	<p>The Certificates are issued pursuant to the Constitution and general laws of the State, particularly Subchapter C of Chapter 271, Texas Local Government Code, as amended, and Texas Government Code, Chapter 1371, as amended, and an ordinance (the "Authorizing Certificate Ordinance") of the City in which the City Council delegated to each of the Assistant City Manager and Chief Financial Officer authority to complete the sale of the Certificates. The terms of the sale will be included in a "Pricing Certificate," which will complete the sale of the Certificates (the Authorizing Certificate Ordinance and the Pricing Certificate for the Certificates are jointly referred to as the "Certificate Ordinance") (see "The Obligations - Authority for Issuance").</p> <p>The Bonds are issued pursuant to the Constitution and general laws of the State, including particularly Texas Government Code, Chapters 1207, 1371 and 1331, as amended, and an ordinance (the "Authorizing Bond Ordinance") of the City in which the City Council delegated to each Assistant City Manager and Chief Financial Officer authority to complete the sale of the Bonds. The terms of the sale will be included in a "Pricing Certificate," which will complete the sale of the Bonds (the Authorizing Bond Ordinance and the Pricing Certificate for the Bonds are jointly referred to as the "Bond Ordinance") (see "The Obligations - Authority for Issuance").</p>
<b>SECURITY FOR THE CERTIFICATES</b> .....	The Certificates constitute direct obligations of the City, payable from a combination of (i) a direct annual ad valorem tax levied, within the limits prescribed by law, on all taxable property within the City, and (ii) a limited pledge (not to exceed \$1,000) of surplus net revenues of the City's Utility System (see "The Obligations - Security and Source of Payment").
<b>SECURITY FOR THE BONDS</b> .....	The Bonds constitute direct obligations of the City, payable from a direct annual ad valorem tax levied, within the limits prescribed by law, on all taxable property located within the City (see "The Obligations - Security and Source of Payment").
<b>REDEMPTION</b> .....	The City reserves the right, at its option, to redeem Bonds and Certificates, as the case may be, having stated maturities on and after February 15, 2033, in whole or in part in principal amounts of \$5,000 or any integral multiple thereof, on February 15, 2032, or any date thereafter, at the par value thereof plus accrued interest to the date of redemption (see "The Obligations - Optional Redemption").
<b>TAX EXEMPTION</b> .....	In the opinion of Bond Counsel, the interest on the Obligations will be excludable from gross income for federal income tax purposes under existing law, subject to the matters described under "Tax Matters" herein.

\* Preliminary, subject to change.

**USE OF PROCEEDS** ..... Proceeds from the sale of the Certificates will be used for the purchase, construction and acquisition of certain real and personal property, to wit: (a) acquiring, constructing, installing and equipping fire stations; (b) acquisition of vehicles and equipment for the fire, police, building inspections, community improvement services, animal services, streets and traffic control, facilities management, airport, technology services, fleet management, warehouse management, and parks and recreation departments; (c) renovations to, and equipping of, existing municipal buildings, including the acquisition and installation of replacement heating, venting and air conditioning equipment, roofing and flooring; (d) acquiring, constructing, installing and equipping police stations; (e) acquiring, constructing and installing building security systems, including security system technology equipment and software, for municipal buildings; (f) constructing, reconstructing, renovating, installing and equipping municipal parks; (g) renovations to, expansion of, and equipping existing municipal vehicle maintenance facility; (h) acquisition and installation of technology equipment, including radio equipment, computer equipment and software, for various municipal departments; (i) constructing and improving streets, including traffic signalization, landscaping, drainage, utility line relocations and the acquisition of land and rights-of-way therefor; (j) constructing, reconstructing and renovating runways and taxiways at the municipal airport; (k) acquisition of vehicles and equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the City's solid waste disposal system; (l) acquisition of equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the City's waterworks and wastewater system; and (m) acquisition of equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the City's electric light and power system, and also for the purpose of paying all or a portion of the City's contractual obligations for professional services, including engineers, architects, attorneys, map makers, auditors, and financial advisors, in connection with said projects and the Certificates (see "Plan of Financing").

Proceeds of the Bonds are expected to be used for (i) \_\_\_\_\_, (ii) \_\_\_\_\_, (iii) \_\_\_\_\_, (iv) refunding the obligations described in Schedule I – Schedule of Refunded Obligations (the “Refunded Obligations”) for debt service savings and (v) to pay the costs associated with the issuance of the Bonds (see "Plan of Financing").

**RATINGS**..... The Obligations and the presently outstanding general obligation debt of the City are rated "\_\_\_\_\_" by Fitch Ratings ("Fitch") and "\_\_\_\_\_" by S&P Global Ratings ("S&P"), a division of S&P Global Inc. See "Other Information – Ratings" herein.

**BOOK-ENTRY-ONLY SYSTEM**..... The definitive Obligations will be initially registered and delivered only to Cede & Co., the nominee of DTC pursuant to the Book-Entry-Only System described herein. Beneficial ownership of the Obligations may be acquired in denominations of \$5,000 or integral multiples thereof within a maturity. No physical delivery of the Obligations will be made to the beneficial owners thereof. Principal of, premium, if any, and interest on the Obligations will be payable by the Paying Agent/Registrar to Cede & Co., which will make distribution of the amounts so paid to the participating members of DTC for subsequent payment to the beneficial owners of the Obligations (see "The Obligations - Book-Entry-Only System").

**PAYMENT RECORD**..... The City has never defaulted on the payment of its tax-supported indebtedness.

#### SELECTED FINANCIAL INFORMATION

Fiscal Year Ended	Estimated Population <sup>(1)</sup>	Net Taxable Assessed Valuation <sup>(2)</sup>	Net Taxable Assessed Valuation Per Capita	Net Tax Debt Outstanding at End of Fiscal Year <sup>(8)</sup>	Per Capita Net Funded Tax Debt	Ratio Net Tax Debt to Net Taxable Assessed Valuation	% of Total Tax Collections
9/30							
2019	136,927	\$ 11,316,934,296 <sup>(3)</sup>	82,649	\$ 191,662,956	1,400	1.69%	99.82%
2020	140,956	12,620,560,528 <sup>(4)</sup>	89,535	249,482,532	1,770	1.98%	99.80%
2021	143,775	13,581,648,271 <sup>(5)</sup>	94,465	308,521,854	2,146	2.27%	99.74%
2022	146,950	14,403,105,063 <sup>(6)</sup>	98,014	354,343,240	2,411	2.46%	99.60%
2023	150,624	16,721,123,624 <sup>(7)</sup>	111,012	391,845,000 <sup>(9)</sup>	2,601	2.34%	98.12% <sup>(10)</sup>

(1) Source: City Officials.

(2) Valuations shown are certified taxable assessed values reported by the Denton Central Appraisal District to the State Comptroller of Public Accounts. Certified values are subject to change throughout the year as contested values are resolved and the Appraisal District updates records. Source: Denton Central Appraisal District as of September 12, 2022.

(3) Includes tax incremental value of approximately \$110,633,617 that is not available for the City's general obligations and debt of City.

(4) Includes tax incremental value of approximately \$168,826,531 that is not available for the City's general obligations and debt of City.

(5) Includes tax incremental value of approximately \$198,541,948 that is not available for the City's general obligations and debt of City.

(6) Includes tax incremental value of approximately \$236,666,283 that is not available for the City's general obligations and debt of City.

(7) Includes tax incremental value of approximately \$260,921,114 that is not available for the City's general obligations and debt of City.

(8) Excludes self-supported general obligation debt.

(9) Projected. Includes a portion of the Obligations. Excludes the Refunded Obligations. Preliminary, subject to change.

(10) Collections for part year only, through April 1, 2023.

## CITY OFFICIALS, STAFF AND CONSULTANTS

### ELECTED OFFICIALS

<u>City Council</u>	<u>Term Expires</u>
Gerard Hudspeth Mayor	May, 2024
Vicki Byrd Councilmember, District 1	May, 2025
Brian Beck Mayor Pro Tem Councilmember, District 2	May, 2025
Paul Meltzer Councilmember, District 3	May, 2025
Joe Holland Councilmember, District 4	May, 2025
Brandon Chase McGee Councilmember, At Large Place 5	May, 2024
Chris Watts Councilmember, At Large Place 6	May, 2024

### SELECTED ADMINISTRATIVE STAFF

<u>Name</u>	<u>Position</u>
Sara Hensley	City Manager
Frank Dixon	Assistant City Manager
Christine Taylor	Assistant City Manager
Cassandra Ogden	Assistant City Manager
Aimee Kaslik	Interim Director of Finance
Vis Bouaphanthavong	Controller
Jesus Salazar	Interim City Secretary
Mack Reinwand	City Attorney

### CONSULTANTS AND ADVISORS

Auditors ..... Weaver and Tidwell, L.L.P.  
Dallas, Texas

Bond Counsel ..... McCall, Parkhurst & Horton L.L.P.  
Dallas, Texas

Financial Advisor.....Hilltop Securities Inc.  
Fort Worth, Texas

For additional information regarding the City, please contact:

Cassandra Ogden-Assistant City Manager  
Mack Reinwand-City Attorney  
City of Denton  
215 E. McKinney Street  
Denton, Texas 76201  
(940) 349-7195

Laura Alexander  
Hilltop Securities Inc.  
777 Main Street, Suite 1525  
Fort Worth, Texas 76102  
or (817) 332-9710

## PRELIMINARY OFFICIAL STATEMENT

### RELATING TO

### CITY OF DENTON, TEXAS

**\$146,795,000\***

**CERTIFICATES OF OBLIGATION, SERIES 2023**

**\$71,845,000\***

**GENERAL OBLIGATION REFUNDING AND  
IMPROVEMENT BONDS, SERIES 2023**

### INTRODUCTION

This Preliminary Official Statement, which includes the Schedule and Appendices hereto, provides certain information regarding the issuance of \$146,795,000\* City of Denton, Texas Certificates of Obligation, Series 2023 (the "Certificates") and \$71,845,000\* City of Denton, Texas General Obligation Refunding and Improvement Bonds, Series 2023 (the "Bonds"). The Bonds and the Certificates (collectively the "Obligations") are separate and distinct securities offerings being authorized for issuance under separate ordinances (the "Bond Ordinance" and the "Certificate Ordinance", respectively, each as defined below, and collectively the "Ordinances") adopted by the City Council of the City, but are being offered and sold pursuant to a common Official Statement, and while the Bonds and Certificates share certain common attributes, each issue is separate and apart from the other and should be reviewed and analyzed independently, including the kind and type of obligation being issued, its terms of payment, the security for its payment, the rights of the holders, the federal, state or local tax consequences of the purchase, ownership or disposition of the Obligations and the covenants and agreements made with respect thereto. The City Council is expected to adopt an ordinance on June 6, 2023 authorizing the issuance of the Bonds (the "Authorizing Bond Ordinance"). In the Authorizing Bond Ordinance, as permitted by the provisions of Chapter 1371, Texas Government Code, as amended, the City Council delegated the authority to each of the Assistant City Manager and Chief Financial Officer to establish the terms and details of the Bonds and to effect the sale of the Bonds pursuant to a "Pricing Certificate" (the Authorizing Bond Ordinance and the Pricing Certificate for the Bonds are jointly referred to as the "Bond Ordinance"). The City Council is expected to adopt an ordinance on June 6, 2023 authorizing the issuance of the Certificates (the "Authorizing Certificate Ordinance"). In the Authorizing Certificate Ordinance, as permitted by the provisions of Chapters 1371, Texas Government Code, as amended, the City Council delegated the authority to each of the Assistant City Manager and Chief Financial Officer to establish the terms and details of the Certificates and to effect the sale of the Certificates pursuant to a "Pricing Certificate" (the Authorizing Certificate Ordinance and the Pricing Certificate for the Certificates are jointly referred to as the "Certificate Ordinance"). Capitalized terms used in this Preliminary Official Statement have the same meanings assigned to such terms in each respective Ordinance, except as otherwise indicated herein.

There follows in this Preliminary Official Statement descriptions of the Obligations and certain information regarding the City and its finances. All descriptions of documents contained herein are only summaries and are qualified in their entirety by reference to each such document. Copies of such documents may be obtained from the City's Financial Advisor, Hilltop Securities Inc., Fort Worth, Texas.

**DESCRIPTION OF THE CITY . . .** The City of Denton, Texas (the "City") is a political subdivision located in Denton County operating as a home-rule city under the laws of the State of Texas (the "State") and a charter approved by the voters in 1959. The City operates under the Council/Manager form of government where the Mayor and six Councilmembers are elected for staggered two-year terms. The City Council formulates operating policy for the City while the City Manager is the chief administrative officer. The City is approximately 97.411 square miles in area.

### PLAN OF FINANCING

**PURPOSE . . .** Proceeds from the sale of the Certificates will be used for the purchase, construction and acquisition of certain real and personal property, to wit: (a) acquiring, constructing, installing and equipping fire stations; (b) acquisition of vehicles and equipment for the fire, police, building inspections, community improvement services, animal services, streets and traffic control, facilities management, airport, technology services, fleet management, warehouse management, and parks and recreation departments; (c) renovations to, and equipping of, existing municipal buildings, including the acquisition and installation of replacement heating, venting and air conditioning equipment, roofing and flooring; (d) acquiring, constructing, installing and equipping police stations; (e) acquiring, constructing and installing building security systems, including security system technology equipment and software, for municipal buildings; (f) constructing, reconstructing, renovating, installing and equipping municipal parks; (g) renovations to, expansion of, and equipping existing municipal vehicle maintenance facility; (h) acquisition and installation of technology equipment, including radio equipment, computer equipment and software, for various municipal departments; (i) constructing and improving streets, including traffic signalization, landscaping, drainage, utility line relocations and the acquisition of land and rights-of-way therefor; (j) constructing, reconstructing and renovating runways and taxiways at the municipal airport; (k) acquisition of vehicles and equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the City's solid waste disposal system; (l) acquisition of equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the City's waterworks and wastewater system; and (m) acquisition of equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the City's electric light and power system, and also for the purpose of paying all or a portion of the City's contractual obligations for professional services, including engineers, architects, attorneys, map makers, auditors, and financial advisors, in connection with said projects and the Certificates.

Proceeds of the Bonds are expected to be used for (i) \_\_\_\_\_, (ii) \_\_\_\_\_, (iii) \_\_\_\_\_, (iv) refunding the obligations described in Schedule I – Schedule of Refunded Obligations (the "Refunded Obligations") for debt service savings, and (v) to pay the costs associated with the issuance of the Bonds.

\* Preliminary, subject to change.

**REFUNDED OBLIGATIONS** . . . A description and identification of the Refunded Obligations appears on Schedule I attached hereto. The Refunded Obligations are being called for redemption on [REDACTED] (the "Redemption Date"). The principal and interest due on the Refunded Obligations are to be paid on the Redemption Date from funds to be deposited with the paying agent/registrars for the Refunded Obligations (the "Refunded Obligations Paying Agent"). The Ordinance will provide that with respect to the Refunded Obligations, a portion of the proceeds from the sale of the Bonds, will be irrevocably deposited with the Refunded Obligations Paying Agent on the Redemption Date. The Bank of New York Mellon Trust Company, in its capacity as the Refunded Obligation Paying Agent, will certify as to the sufficiency of the amounts initially deposited with the Refunded Obligations Paying Agent to pay the principal of and interest on the Refunded Obligations when due at the Redemption Date of redemption. Such funds will be held uninvested by the Refunded Obligations Paying Agent in a trust clearing account pending their disbursement to redeem the Refunded Obligations on the Redemption Date. By the deposit with the Refunded Obligations Paying Agent in such trust clearing account, the City will have effected the defeasance of all the Refunded Obligations in accordance with the applicable law.

*THE REMAINDER OF THIS PAGE LEFT BLANK INTENTIONALLY*



## THE OBLIGATIONS

**DESCRIPTION OF THE OBLIGATIONS . . .** The Obligations are dated June 15, 2023, and mature on February 15 in each of the years and in the amounts shown on page 2 and page 4 hereof. Interest will accrue from the date of initial delivery thereof (the "Delivery Date"), will be computed on the basis of a 360-day year of twelve 30-day months, and will be payable on February 15 and August 15 of each year, commencing February 15, 2024 until maturity or prior redemption. The definitive Obligations will be issued only in fully registered form in any integral multiple of \$5,000 for any one maturity and will be initially registered and delivered only to Cede & Co., the nominee of The Depository Trust Company ("DTC") pursuant to the Book-Entry-Only System described herein. **No physical delivery of the Obligations will be made to the beneficial owners thereof.** Principal of, premium, if any, and interest on the Obligations will be payable by the Paying Agent/Registrar to Cede & Co., which will make distribution of the amounts so paid to the participating members of DTC for subsequent payment to the beneficial owners of the Obligations. See "The Obligations - Book-Entry-Only System" herein.

**AUTHORITY FOR ISSUANCE . . .** The Certificates are being issued pursuant to the Constitution and general laws of the State, particularly Subchapter C of Chapter 271, Texas Local Government Code, as amended, and Texas Government Code, Chapter 1371, as amended, and the Certificate Ordinance.

The Bonds are being issued pursuant to the Constitution and general laws of the State, particularly Chapters 1207, 1371 and 1331, Texas Government Code, as amended, and the Bond Ordinance.

### SECURITY AND SOURCE OF PAYMENT . . .

*The Certificates . . .* The Certificates constitute direct obligations of the City, payable from a combination of (i) a direct annual ad valorem tax levied, within the limits prescribed by law, on all taxable property within the City, and (ii) a limited pledge (not to exceed \$1,000) of surplus net revenues of the City's Utility System (consisting of the electric system and the waterworks and sewer system).

*The Bonds . . .* The Bonds constitute direct obligations of the City and the principal thereof and interest thereon are payable from an annual ad valorem tax levied by the City, within the limits prescribed by law, upon all taxable property in the City, as provided in the Bond Ordinance.

**TAX RATE LIMITATION . . .** All taxable property within the City is subject to the assessment, levy and collection by the City of a continuing, direct annual ad valorem tax sufficient to provide for the payment of principal of and interest on all ad valorem tax debt, including the Obligations, within the limits prescribed by law. Article XI, Section 5, of the Texas Constitution is applicable to the City, and limits its maximum ad valorem tax rate to \$2.50 per \$100 Taxable Assessed Valuation for all City purposes. The Home Rule Charter of the City adopts the constitutionally authorized maximum tax rate of \$2.50 per \$100 Taxable Assessed Valuation. Administratively, the Attorney General of the State will permit allocation of \$1.50 of the \$2.50 maximum tax rate for all general obligation debt, as calculated at the time of issuance and based on 90% tax collection factor.

**OPTIONAL REDEMPTION . . .** The City reserves the right, at its option, to redeem the Obligations having stated maturities on and after February 15, 2033 in whole or in part in principal amounts of \$5,000 or any integral multiple thereof, on February 15, 2032 or any date thereafter, at the par value thereof plus accrued interest to the date of redemption. If less than all of the Bonds or Certificates are to be redeemed, the City may select the maturities of Bonds or Certificates, as the case may be, to be redeemed. If less than all the Bonds or Certificates of any maturity are to be redeemed, the Paying Agent/Registrar (or DTC while the Bonds or Certificates, as the case may be, are in Book-Entry-Only form) shall determine by lot the Bonds or Certificates, or portions thereof, within such maturity to be redeemed. If a Bond or Certificate (or any portion of the principal sum thereof) shall have been called for redemption and notice of such redemption shall have been given, such Bond or Certificate (or the principal amount thereof to be redeemed) shall become due and payable on such redemption date and interest thereon shall cease to accrue from and after the redemption date, provided funds for the payment of the redemption price and accrued interest thereon are held by the Paying Agent/Registrar on the redemption date.

With respect to any optional redemption of the Bonds or Certificates, as the case may be, unless certain prerequisites to such redemption required by the respective Ordinance have been met and money sufficient to pay the principal of and premium, if any, and interest on the Bonds or Certificates, as the case may be, to be redeemed will have been received by the Paying Agent/Registrar prior to the giving of such notice of redemption, such notice may state that said redemption will, at the option of the City, be conditional upon the satisfaction of such prerequisites and receipt of such money by the Paying Agent/Registrar on or prior to the date fixed for such redemption or upon any prerequisite set forth in such notice of redemption. If a conditional notice of redemption is given and such prerequisites to the redemption are not fulfilled, such notice will be of no force and effect, the City will not redeem such Bonds or Certificates, as the case may be, and the Paying Agent/Registrar will give notice in the manner in which the notice of redemption was given, to the effect that the Bonds or Certificates, as the case may be, have not been redeemed.

**NOTICE OF REDEMPTION . . .** Not less than 30 days prior to a redemption date for the Obligations, the City shall cause a notice of redemption to be sent by United States mail, first class, postage prepaid, to the registered owners of the Obligations to be redeemed, in whole or in part, at the address of the registered owner appearing on the registration books of the Paying Agent/Registrar at the close of business on the business day next preceding the date of mailing such notice. ANY NOTICE SO MAILED SHALL BE CONCLUSIVELY PRESUMED TO HAVE BEEN DULY GIVEN WHETHER OR NOT THE REGISTERED OWNER RECEIVES SUCH NOTICE. IF AN OBLIGATION (OR ANY PORTION OF ITS PRINCIPAL SUM) SHALL HAVE BEEN DULY CALLED FOR REDEMPTION AND NOTICE OF SUCH REDEMPTION DULY GIVEN, THEN UPON THE REDEMPTION DATE SUCH OBLIGATION (OR THE PORTION OF ITS PRINCIPAL SUM TO BE REDEEMED) SHALL BECOME DUE AND PAYABLE, AND, IF MONIES FOR THE PAYMENT OF THE REDEMPTION PRICE ARE HELD FOR THE PURPOSE OF SUCH PAYMENT BY THE PAYING AGENT/REGISTRAR AND ALL OTHER CONDITIONS TO REDEMPTION ARE SATISFIED, INTEREST SHALL CEASE TO ACCRUE AND BE PAYABLE FROM AND AFTER THE REDEMPTION DATE ON THE PRINCIPAL AMOUNT REDEEMED.

**DEFEASANCE . . .** The Ordinances provide that any Obligation and the interest thereon shall be deemed to be paid, retired, and no longer outstanding (a "Defeased Obligation") within the meaning of such Ordinance when payment of the principal of such Obligation, plus interest thereon to the due date either (i) shall have been made or caused to be made in accordance with the terms thereof, or (ii) shall have been provided for on or before such due date by irrevocably depositing with or making available to the Paying Agent/Registrar for such payment (1) lawful money of the United States of America sufficient to make such payment or (2) Government Obligations which mature as to principal and interest in such amounts and at such times as will insure the availability, without reinvestment, of sufficient money to provide for such payment, and when proper arrangements have been made by the City with the Paying Agent/Registrar for the payment of its services until all Defeased Obligations shall have become due and payable, and thereafter the City will have no further responsibility with respect to amounts available to such paying agent (or other financial institution permitted by applicable law) for the payment of such defeased bonds, including any insufficiency therein caused by the failure of such paying agent (or other financial institution permitted by applicable law) to receive payment when due on the Government Obligations. At such time as an Obligation shall be deemed to be a Defeased Obligation hereunder, as aforesaid, such Obligation and the interest thereon shall no longer be secured by, payable from, or entitled to the benefits of, the ad valorem taxes herein levied and pledged as provided in the Ordinance, and such principal and interest shall be payable solely from such money or Government Obligations.

Any moneys so deposited with the Paying Agent/Registrar may at the written direction of the City also be invested in Government Obligations, maturing in the amounts and times as hereinbefore set forth, and all income from such Government Obligations received by the Paying Agent/Registrar which is not required for the payment of the Obligations and interest thereon, with respect to which such money has been so deposited, shall be turned over to the City, or deposited as directed in writing to the City. The Ordinances provide that "Government Obligations" means (a) direct, noncallable obligations of the United States of America including obligations that are unconditionally guaranteed by the United States of America and (b) noncallable obligations of an agency or instrumentality of the United States of America, including obligations that are unconditionally guaranteed or insured by the agency or instrumentality and that, on the date the City Council approves such defeasance, are rated as to investment quality by a nationally recognized investment rating firm not less than AAA or its equivalent.

Upon such deposit as described above, such Defeased Obligations shall no longer be regarded to be outstanding obligations payable from ad valorem taxes levied by the City or from the other revenues pledged to their payment in the Ordinances, but will be payable only from the funds and Government Obligations deposited in escrow and will not be considered debt of the City for any purpose. After firm banking and financial arrangements for the discharge and final payment or redemption of the Obligations have been made as described above, all rights of the City to initiate proceedings to call the Obligations for redemption or take any other action amending the terms of the Obligations are extinguished; provided, however, that the right to call the Obligations for redemption is not extinguished if the City: (i) in the proceedings providing for the firm banking and financial arrangements, expressly reserves the right to call the Obligations for redemption; and (ii) gives notice of the reservation of that right to the owners of the Obligations immediately following the making of the firm banking and financial arrangements; (iii) directs that notice of the reservation be included in any redemption notices that it authorizes.

**BOOK-ENTRY-ONLY SYSTEM . . .** *This section describes how ownership of the Obligations is to be transferred and how the principal of, premium, if any, and interest on the Obligations are to be paid to and accredited by DTC while the Obligations are registered in its nominee name. The information in this section concerning DTC and the Book-Entry-Only System has been provided by DTC for use in disclosure documents such as this Official Statement. The City believes the source of such information to be reliable, but takes no responsibility for the accuracy or completeness thereof.*

*The City cannot and does not give any assurance that (1) DTC will distribute payments of debt service on the Obligations, or redemption or other notices, to DTC Participants, (2) DTC Participants or others will distribute debt service payments paid to DTC or its nominee (as the registered owner of the Obligations), or redemption or other notices, to the Beneficial Owners, or that they will do so on a timely basis, or (3) DTC will serve and act in the manner described in this Official Statement. The current rules applicable to DTC are on file with the Securities and Exchange Commission, and the current procedures of DTC to be followed in dealing with DTC Participants are on file with DTC.*

DTC will act as securities depository for the Obligations. The Obligations will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered security certificate will be issued for each maturity of the Obligations in the aggregate principal amount thereof and will be deposited with DTC.

DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a Standard & Poor's rating of "AA+". The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at [www.dtcc.com](http://www.dtcc.com) and [www.dtc.org](http://www.dtc.org).

Purchases of Obligations under the DTC system must be made by or through Direct Participants, which will receive a credit for the Obligations on DTC's records. The ownership interest of each actual purchaser of each Obligation ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase, but Beneficial Owners are expected to receive written confirmations providing details of the transactions, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owners entered into the transaction. Transfers of ownership interest in the Obligations are to be accomplished by entries made on the books of Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in the Obligations, except in the event that use of the book-entry system for the Obligations is discontinued.

To facilitate subsequent transfers, all Obligations deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Obligations with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Obligations; DTC's records reflect only the identity of the Direct Participant to whose account such Obligations are credited, which may or may not be the Beneficial Owners. The Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of Obligations may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Obligations, such as redemptions, tenders, defaults, and proposed amendments to the Obligation documents. For example, Beneficial Owners of Obligations may wish to ascertain that the nominee holding the Obligations for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the Obligations within a maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

Neither DTC nor Cede & Co. will consent or vote with respect to the Obligations unless authorized by a Direct Participant in accordance with DTC's procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the City as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Obligations are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Payments on the Obligations will be made to DTC. DTC's practice is to credit Direct Participants' accounts, upon DTC's receipt of funds and corresponding detail information from the City or the Paying Agent/Registrar on payable dates in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as in the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Paying Agent/Registrar or the City, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment to DTC is the responsibility of the City, disbursement of such payments to Direct Participants shall be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners shall be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as securities depository with respect to the Obligations at any time by giving reasonable notice to the City and the Paying Agent/Registrar. Under such circumstances, in the event that a successor securities depository is not obtained, Obligation certificates are required to be printed and delivered.

The City may decide to discontinue use of the system of book-entry transfers through DTC (or a successor securities depository). In that event, Obligations will be printed and delivered.

*Use of Certain Terms in Other Sections of this Official Statement.* In reading this Official Statement it should be understood that while the Obligations are in the Book-Entry-Only System, references in other sections of this Official Statement to registered owners should be read to include the person for which the Participant acquires an interest in the Obligations, but (i) all rights of ownership must be exercised through DTC and the Book-Entry-Only System, and (ii) except as described above, notices that are to be given to registered owners under the Ordinances will be given only to DTC.

Information concerning DTC and the Book-Entry-Only System has been obtained from DTC and is not guaranteed as to accuracy or completeness by, and is not to be construed as a representation by the City, the Financial Advisor or the Initial Purchasers.

**EFFECT OF TERMINATION OF BOOK-ENTRY-ONLY SYSTEM . . .** In the event that the Book-Entry-Only System is discontinued by DTC or the use of the Book-Entry-Only System is discontinued by the City, printed Obligations will be issued to the holders and the Obligations will be subject to transfer, exchange and registration provisions as set forth in the Ordinances and summarized under "The Obligations - Transfer, Exchange and Registration" below.

**PAYING AGENT/REGISTRAR . . .** The initial Paying Agent/Registrar for the Bonds and the Certificates is BOKF, NA, Dallas, Texas. In the Ordinances, the City retains the right to replace the Paying Agent/Registrar. The City covenants to maintain and provide a Paying Agent/Registrar at all times until the Bonds and Certificates are duly paid and any successor Paying Agent/Registrar shall be a commercial bank, trust company, financial institution or other entity duly qualified and legally authorized to serve as and perform the duties and services of Paying Agent/Registrar for the Bonds and Certificates. Upon any change in the Paying Agent/Registrar for the Bonds and Certificates, the City agrees to promptly cause a written notice thereof to be sent to each registered owner of the Bonds and Certificates, as applicable, by United States mail, first class, postage prepaid, which notice shall also give the address of the new Paying Agent/Registrar.

In the event the use of the Book-Entry-Only system is discontinued, principal of the Bonds and Certificates is payable to the registered holder appearing on the registration books of the Paying Agent/Registrar (the "Registered Owner") at the designated corporate trust office of the Paying Agent/Registrar upon surrender of the Bonds and Certificates for payment; provided, however, that so long as Cede & Co. (or other DTC nominee) is the registered owner of the Obligations, all payments will be made as described under "The Obligations - Book-Entry-Only System" herein. Interest on the Bonds and Certificates is payable to the Registered Owners appearing on the registration books of the Paying Agent/Registrar at the close of business on the Record Date (identified below) and such interest shall be paid by the Paying Agent/Registrar by check mailed, first class postage prepaid, to the Registered Owner or by such other arrangement, acceptable to the Paying Agent/Registrar, requested by and at the risk and expense of the Registered Owner. If the date for the payment of the principal of or interest on the Bonds and Certificates shall be a Saturday, Sunday, a legal holiday, or a day when banking institutions in the city where the designated corporate office of the Paying Agent/Registrar is located is authorized by law or executive order to close, then the date for such payment shall be the next succeeding day which is not such a Saturday, Sunday, legal holiday, or day when banking institutions are authorized to close; and payment on such date shall have the same force and effect as if made on the original date payment was due.

**TRANSFER, EXCHANGE AND REGISTRATION . . .** In the event the Book-Entry-Only System should be discontinued, printed Obligations will be delivered to the Registered Owners and thereafter the Obligations may be transferred and exchanged on the registration books of the Paying Agent/Registrar only upon presentation and surrender of such printed Obligations to the Paying Agent/Registrar and such transfer or exchange shall be without expense or service charge to the Registered Owner, except for any tax or other governmental charges required to be paid with respect to such registration, exchange and transfer. Obligations may be assigned by the execution of an assignment form on the Obligations or by other instrument of transfer and assignment acceptable to the Paying Agent/Registrar. New Obligations will be delivered by the Paying Agent/Registrar, in lieu of the Obligations being transferred or exchanged, at the designated office of the Paying Agent/Registrar, or sent by United States mail, first class, postage prepaid, to the new Registered Owner or his designee. To the extent possible, new Obligations issued in an exchange or transfer of Obligations will be delivered to the Registered Owner or assignee of the Registered Owner in not more than three business days after the receipt of the Obligations to be canceled, and the written instrument of transfer or request for exchange duly executed by the Registered Owner or his duly authorized agent, in form satisfactory to the Paying Agent/Registrar. New Obligations registered and delivered in an exchange or transfer shall be in any integral multiple of \$5,000 for any one maturity and for a like aggregate principal amount as the Obligations surrendered for exchange or transfer. See "The Obligations—Book-Entry-Only System" herein for a description of the system to be utilized initially in regard to ownership and transferability of the Obligations. Neither the City nor the Paying Agent/Registrar shall be required to transfer or exchange any Obligation called for redemption, in whole or in part, within 45 days of the date fixed for redemption; provided, however, such limitation of transfer shall not be applicable to an exchange by the Registered Owner of the uncalled balance of an Obligation.

**RECORD DATE FOR INTEREST PAYMENT . . .** The record date ("Record Date") for the interest payable on the Bonds and Certificates on any interest payment date means the close of business on the last business day of the month next preceding such interest payment date.

In the event of a non-payment of interest on a scheduled payment date, and for 30 days thereafter, a new record date for such interest payment (a "Special Record Date") will be established by the Paying Agent/Registrar, if and when funds for the payment of such interest have been received from the City. Notice of the Special Record Date and of the scheduled payment date of the past due interest ("Special Payment Date", which shall be 15 days after the Special Record Date) shall be sent at least five business days prior to the Special Record Date by United States mail, first class postage prepaid, to the address of each Registered Owner of a Bond and Certificate appearing on the registration books of the Paying Agent/Registrar at the close of business on the last business day next preceding the date of mailing of such notice.

**AMENDMENTS . . .** In each Ordinance, the City has reserved the right to amend the Ordinance without the consent of any holder of the respective Obligation for the purpose of amending or supplementing the Ordinance to (i) cure any ambiguity, defect or omission therein that does not materially adversely affect the interests of the holders, (ii) grant additional rights or security for the benefit of the holders, (iii) add events of default as shall not be inconsistent with the provisions of the Ordinance that do not materially adversely affect the interests of the holders, (iv) qualify the Ordinance under the Trust Indenture Act of 1939, as amended, or corresponding provisions of federal laws from time to time in effect or (v) make such other provisions in regard to matters or questions arising under the Ordinance that are not inconsistent with the provisions thereof and which, in the opinion of Bond Counsel for the City, do not materially adversely affect the interests of the holders.

Each Ordinance further provides that the holders of the Bonds or Certificates, as applicable, aggregating in principal amount a majority of the outstanding Bonds or Certificates, as the case may be, shall have the right from time to time to approve any amendment not described above to the applicable Ordinance if it is deemed necessary or desirable by the City; provided, however, that without the consent of 100% of the holders in original principal amount of the then outstanding Bonds or Certificates so affected, no amendment may be made for the purpose of: (i) making any change in the maturity of any of the outstanding Bonds or Certificates; (ii) reducing the rate of interest borne by any of the outstanding Bonds or Certificates; (iii) reducing the amount of the principal of, or redemption premium, if any, payable on any outstanding Bonds or Certificates; (iv) modifying the terms of payment of principal or of interest or redemption premium on outstanding Bonds or Certificates, or imposing any condition with respect to such payment; or (v) changing the minimum percentage of the principal amount of the Bonds or Certificates necessary for consent to such amendment. Reference is made to the Ordinances for further provisions relating to the amendment thereof.

**REMEDIES . . .** Each Ordinance establishes specific events of default with respect to the respective series of Obligations. If the City defaults in the payment of the principal of or interest on the Bonds or Certificates when due or the City defaults in the observance or performance of any of the covenants, conditions, or obligations of the City, the failure to perform which materially, adversely affects the rights of the owners thereof, including but not limited to, their prospect or ability to be repaid in accordance with the respective Ordinance, and the continuation thereof for a period of 60 days after notice of such default is given by any owner to the City, each Ordinance provides that any registered owner of a respective Obligation is entitled to seek a writ of mandamus from a court of proper jurisdiction requiring the City to make such payment or observe and perform such covenants, obligations, or conditions. The issuance of a writ of mandamus may be sought if there is no other available remedy at law to compel performance of the respective Obligations or Ordinance and the City's obligations are not uncertain or disputed. The remedy of mandamus is controlled by equitable principles, so rests with the discretion of the court, but may not be arbitrarily refused. There is no acceleration of maturity of the Obligations in the event of default and, consequently, the remedy of mandamus may have to be relied upon from year to year. The Ordinances do not provide for the appointment of a trustee to represent the interest of the owners of the respective Obligations upon any failure of the City to perform in accordance with the terms of the Ordinances, or upon any other condition and accordingly all legal actions to enforce such remedies would have to be undertaken at the initiative of, and be financed by, the Registered Owners. The Texas Supreme Court has ruled in *Tooke v. City of Mexia* 197 S.W.3d 325 (Tex. 2006) that a waiver of sovereign immunity in a contractual dispute must be provided for by statute in "clear and unambiguous" language. Furthermore, *Tooke*, and subsequent jurisprudence, held that a municipality is not immune from suit for torts committed in the performance of its proprietary functions, as it is for torts committed in the performance of its governmental functions (the "Proprietary-Governmental Dichotomy"). Governmental functions are those that are enjoined on a municipality by law and are given by the State as a part of the State's sovereignty, to be exercised by the municipality in the interest of the general public, while proprietary functions are those that a municipality may, in its discretion, perform in the interest of the inhabitants of municipality. In *Wasson Interests, Ltd., V. City of Jacksonville*, No. 489 S.W.3d 427 (Tex. 2016), ("Wasson") the Texas Supreme Court (the "Court") addressed whether the distinction between governmental and proprietary acts (as found in tort-based causes of action) applies to the breach of contract claims against municipalities. The Court analyzed the rationale behind the Proprietary-Governmental Dichotomy to determine that "a city's proprietary functions are not done pursuant to the 'will of the people' and protecting such municipalities 'via the State's immunity is not an efficient way to ensure efficient allocation of State resources'". While the Court recognized that the distinction between government and proprietary functions is not clear, the Wasson opinion held the Proprietary-Governmental Dichotomy applies in contract-claims context. Therefore, in regard to municipal contract cases (as in tort claims), it is incumbent on the courts to determine whether a function is proprietary or governmental based upon the statutory guidance and definitions found in the Texas Civil Practice and Remedies Code. Notwithstanding the foregoing new case law issued by the Court, such sovereign immunity issues have not been adjudicated in relation to bond matters (specifically, in regard to the issuance of municipal debt). Each situation will be prospectively evaluated based on the facts and circumstances surrounding the contract in question to determine if a suit, and subsequently, a judgment, is justiciable against a municipality. Because it is unclear whether the Texas legislature has effectively waived the City's sovereign immunity from a suit for money damages, owners of Obligations may not be able to bring such a suit against the City for breach of the Obligations or Ordinance covenants in the absence of City action. Chapter 1371, Texas Government Code ("Chapter 1371"), which pertains to the issuance of public securities by issuers such as the City, permits the

City to waive sovereign immunity in the proceedings authorizing its debt, but in connection with the issuance of the Obligations, the City has not waived sovereign immunity. Even if a judgment against the City could be obtained, it could not be enforced by direct levy and execution against the City's property. Further, the Registered Owners cannot themselves foreclose on property within the City or sell property within the City to enforce the tax lien on taxable property to pay the principal of and interest on the Bonds or the Certificates. Furthermore, the City is eligible to seek relief from its creditors under Chapter 9 of the U.S. Bankruptcy Code ("Chapter 9"). Although Chapter 9 provides for the recognition of a security interest represented by a specifically pledged source of revenues, the pledge of ad valorem taxes in support of a general obligation of a bankrupt entity is not specifically recognized as a security interest under Chapter 9. Chapter 9 also includes an automatic stay provision that would prohibit, without Bankruptcy Court approval, the prosecution of any other legal action by creditors or Obligationholders of an entity which has sought protection under Chapter 9. Therefore, should the City avail itself of Chapter 9 protection from creditors, the ability to enforce would be subject to the approval of the Bankruptcy Court (which could require that the action be heard in Bankruptcy Court instead of other federal or state court); and the Bankruptcy Code provides for broad discretionary powers of a Bankruptcy Court in administering any proceeding brought before it. The opinions of Bond Counsel will note that all opinions relative to the enforceability of the Obligations are qualified with respect to the customary rights of debtors relative to their creditors, by principles of governmental immunity, and by general principles of equity which permit the exercise of judicial discretion.

Initially, the only Registered Owner of the Bonds and Certificates will be Cede & Co., as DTC's nominee. See "The Obligations - Book-Entry-Only System" herein for a description of the duties of DTC with regard to ownership of the Bonds and Certificates.

### **TAX INFORMATION**

**AD VALOREM TAX LAW . . .** The appraisal of property within the City is the responsibility of the Denton Central Appraisal District (the "Appraisal District"). Excluding agricultural and open-space land, which may be taxed on the basis of productive capacity, the Appraisal District is required under V.T.C.A., Title I, Tax Code, as amended (the "Property Tax Code") to appraise all property within the Appraisal District on the basis of 100% of its market value and is prohibited from applying any assessment ratios. In determining the market value of property, different methods of appraisal may be used, including the cost method of appraisal, the income method of appraisal and the market data comparison method of appraisal, and the method considered most appropriate by the chief appraiser is to be used. State law requires the appraised value of a residence homestead to be based solely on the property's value as a residence homestead, regardless of whether residential use is considered to be the highest and best use of the property. State law further limits the appraised value of a residence homestead for a tax year to an amount that would not exceed the lesser of (1) the market value of the property for the most recent tax year that the market value was determined by the appraisal office or (2) the sum of (a) 10% of the property's appraised value in the preceding tax year, plus (b) the property's appraised value in the preceding tax year, plus (c) the market value of all new improvements to the property. The value placed upon property within the Appraisal District is subject to review by an Appraisal Review Board, consisting of members appointed by the Board of Directors of the Appraisal District. The Appraisal District is required to review the value of property within the Appraisal District at least every three years. The City may require annual review at its own expense, and is entitled to challenge the determination of appraised value of property within the City by petition filed with the Appraisal Review Board.

Reference is made to the Property Tax Code, for identification of property subject to taxation; property exempt or which may be exempted from taxation, if claimed; the appraisal of property for ad valorem taxation purposes; and the procedures and limitations applicable to the levy and collection of ad valorem taxes.

Article VIII of the State Constitution ("Article VIII") and State law provide for certain exemptions from property taxes, the valuation of agricultural and open-space lands at productivity value, and the exemption of certain personal property from ad valorem taxation.

Under Section 1-b, Article VIII, and State law, the governing body of a political subdivision, at its option, may grant an exemption of not less than \$3,000 of the market value of the residence homestead of persons 65 years of age or older and the disabled from all ad valorem taxes thereafter levied by the political subdivision. Once authorized, such exemption may be repealed or decreased or increased in amount (i) by the governing body of the political subdivision or (ii) by a favorable vote of a majority of the qualified voters at an election called by the governing body of the political subdivision, which election must be called upon receipt of a petition signed by at least 20% of the number of qualified voters who voted in the preceding election of the political subdivision. In the case of a decrease, the amount of the exemption may not be reduced to less than \$3,000 of the market value.

The surviving spouse of an individual who qualifies for the foregoing exemption for the residence homestead of a person 65 or older (but not the disabled) is entitled to an exemption for the same property in an amount equal to that of the exemption for which the deceased spouse qualified if (i) the deceased spouse died in a year in which the deceased spouse qualified for the exemption, (ii) the surviving spouse was at least 55 years of age at the time of the death of the individual's spouse and (iii) the property was the residence homestead of the surviving spouse when the deceased spouse died and remains the residence homestead of the surviving spouse.

In addition to any other exemptions provided by the Property Tax Code, the governing body of a political subdivision, at its option, may grant an exemption of up to 20% of the market value of residence homesteads, with a minimum exemption of \$5,000.

In the case of residence homestead exemptions granted under Section 1-b, Article VIII, ad valorem taxes may continue to be levied against the value of homesteads exempted where ad valorem taxes have previously been pledged for the payment of debt if cessation of the levy would impair the obligation of the contract by which the debt was created.

Under Article VIII and State law, the governing body of a county, municipality or junior college district may provide for a freeze on total amount of ad valorem taxes levied on the residence homestead of a disabled person or persons 65 years of age or older above the amount of tax imposed in the year such residence qualified for such exemption. Also, upon receipt of a petition signed by five percent of the registered voters of the county, municipality or junior college district, an election must be held to determine by majority vote whether to establish such a limitation on taxes paid on residence homesteads of persons 65 years of age or who are disabled. Upon providing for such exemption, the total amount of taxes imposed on such homestead cannot be increased except for improvements (other than maintenance, repairs or improvements required to comply with governmental requirements) and such freeze is transferable to a different residence homestead. Also, a surviving spouse of a taxpayer who qualifies for the freeze on ad valorem taxes is entitled to the same exemption so long as the property was the residence homestead of the surviving spouse when the deceased spouse died and remains the residence homestead of the surviving spouse and the spouse was at least 55 years of age at the time of the death of the individual's spouse. Once established such freeze cannot be repealed or rescinded.

State law and Section 2, Article VIII, mandate an additional property tax exemption for disabled veterans or the surviving spouse or children of a deceased veteran who died while on active duty in the armed forces; the exemption applies to either real or personal property with the amount of assessed valuation exempted ranging from \$5,000 to a maximum of \$12,000, dependent upon the degree of disability or whether the exemption is applicable to a surviving spouse or children; provided, however, that beginning in the 2009 tax year, a disabled veteran who receives from the United States Department of Veterans Affairs or its successor 100 percent disability compensation due to a service-connected disability and a rating of 100 percent disabled or of individual unemployability is entitled to an exemption from taxation of the total appraised value of the veteran's residence homestead. In addition, effective January 1, 2012, and subject to certain conditions, surviving spouses of a deceased veteran who had received a disability rating of 100% will be entitled to receive a residential homestead exemption equal to the exemption received by the deceased spouse until such surviving spouse remarries.

Article VIII provides that eligible owners of both agricultural land (Section 1-d) and open-space land (Section 1-d-1), including open-space land devoted to farm or ranch purposes or open-space land devoted to timber production, may elect to have such property appraised for property taxation on the basis of its productive capacity. The same land may not be qualified under both Section 1-d and 1-d-1.

Nonbusiness personal property, such as automobiles or light trucks, are exempt from ad valorem taxation unless the governing body of a political subdivision elects to tax this property. Boats owned as nonbusiness property are exempt from ad valorem taxation.

Article VIII, Section 1-j, provides for "freeport property" to be exempted from ad valorem taxation. Freeport property is defined as goods detained in Texas for 175 days or less for the purpose of assembly, storage, manufacturing, processing or fabrication. Notwithstanding such exemption, counties, school districts, junior college districts and cities may tax such tangible personal property provided official action to tax the same was taken before April 1, 1990. Decisions to continue to tax may be reversed in the future; decisions to exempt freeport property are not subject to reversal.

Article VIII, Section 1-n of the Texas Constitution provides for the exemption from taxation of "goods-in-transit." "Goods-in-transit" is defined by Section 11.253 of the Property Tax Code, as personal property acquired or imported into Texas and transported to another location in the State or outside of the State within 175 days of the date the property was acquired or imported into Texas. The exemption excludes oil, natural gas, petroleum products, aircraft and special inventory, including motor vehicle, vessel and out-board motor, heavy equipment and manufactured housing inventory. Section 11.253 permits local governmental entities, on a local option basis, to take official action by January 1 of the year preceding a tax year, after holding a public hearing, to tax "goods-in-transit" during the following tax year. After taking such official action, the goods-in-transit remain subject to taxation by the local governmental entity until the governing body of the governmental entity rescinds or repeals its previous actions to tax goods-in-transit. A taxpayer may only receive either the freeport exemption or the "goods-in-transit" exemption for items of personal property.

The City or Denton County may create one or more tax increment financing districts ("TIF") within the City or Denton County, as applicable, and freeze the taxable values of property in the TIF at the value at the time of its creation. Other overlapping taxing units levying taxes in the TIF may agree to contribute all or part of future ad valorem taxes levied and collected against the value of property in the TIF in excess of the "frozen values" to pay or finance the costs of certain public improvements in the TIF. Taxes levied by the City against the values of real property in the TIF in excess of the "frozen" value are not available for general city use but are restricted to paying or financing "project costs" within the TIF. The City also may enter into tax abatement agreements to encourage economic development. Under the agreements, a property owner agrees to construct certain improvements on its property. The City in turn agrees not to levy a tax on all or part of the increased value attributable to the improvements until the expiration of the agreement. The abatement agreement could last for a period of up to 10 years. The City has active reinvestment zones for tax abatements and tax increment financing zones for tax increment financing purposes. See "Tax Information - Tax Incentive Policy, – Property Tax Abatement" and "- Tax Increment Financing and Public Improvement District" and "Table 1 - Valuation, Exemptions and General Obligation Debt".

The City is also authorized, pursuant to Chapter 380, Texas Local Government Code, as amended ("Chapter 380"), to establish programs to promote state or local economic development and to stimulate business and commercial activity in the City. In accordance with a program established pursuant to Chapter 380, the City may make loans or grants of public funds such as ad valorem taxes or sales taxes for economic development purposes, however no obligations secured by ad valorem taxes may be issued for such purposes unless approved by voters of the City. The City has entered into several Chapter 380 Agreements. See "Tax Information - Chapter 380 Agreements".

**NO-NEW-REVENUE TAX RATE AND VOTER-APPROVAL TAX RATE . . .** The Following terms as used in this section have the meanings provided below:

"adjusted" means lost values are not included in the calculation of the prior year's taxes and new values are not included in the current year's taxable values.

"de minimis rate" means the maintenance and operations tax rate that will produce the prior year's total maintenance and operations tax levy (adjusted) from the current year's values (adjusted), plus the rate that produces an additional \$500,000 in tax revenue when applied to the current year's taxable value, plus the debt service tax rate.

"no-new-revenue tax rate" means the combined maintenance and operations tax rate and debt service tax rate that will produce the prior year's total tax levy (adjusted) from the current year's total taxable values (adjusted).

"special taxing unit" means a city for which the maintenance and operations tax rate proposed for the current tax year is 2.5 cents or less per \$100 of taxable value.

"unused increment rate" means the cumulative difference between a city's voter-approval tax rate and its actual tax rate for each of the tax years 2020 through 2022, which may be applied to a city's tax rate in tax years 2021 through 2023 without impacting the voter-approval tax rate.

"voter-approval tax rate" mean the maintenance and operations tax rate that will produce the prior year's total maintenance and operations tax levy (adjusted) from the current year's values (adjusted) multiplied by 1.035, plus the debt service tax rate, plus the "unused increment rate".

The City's tax rate consists of two components: (1) a rate for funding of maintenance and operations expenditures in the current year (the "maintenance and operations tax rate"), and (2) a rate for funding debt service in the current year (the "debt service tax rate"). Under State law, the assessor for the City must submit an appraisal roll showing the total appraised, assessed, and taxable values for all property in the City to the City Council by August 1 of each year, or as soon as practicable thereafter.

A city must annually calculate its "voter-approval tax rate" and "no-new-revenue tax rate" (as such terms are defined above) in accordance with forms prescribed by the State Comptroller and provide notice of such rates to each owner of taxable property within the city and the county tax assessor-collector for each county in which all or part of the city is located. A city must adopt a tax rate before the later of September 30 or the 60th day after receipt of the certified appraisal roll, except that a tax rate that exceeds the voter-approval tax rate must be adopted not later than the 71st day before the next occurring November uniform election date. If a city fails to timely adopt a tax rate, the tax rate is statutorily set as the lower of the no-new-revenue tax rate for the current tax year or the tax rate adopted by the city for the preceding tax year.

As described below, the Property Tax Code provides that if a city adopts a tax rate that exceeds its voter-approval tax rate or, in certain cases, its "de minimis rate", an election must be held to determine whether or not to reduce the adopted tax rate to the voter-approval tax rate.

A city may not adopt a tax rate that exceeds the lower of the voter-approval tax rate or the no-new-revenue tax rate until each appraisal district in which such city participates has delivered notice to each taxpayer of the estimated total amount of property taxes owed and the city has held a public hearing on the proposed tax increase.

For cities with a population of 30,000 or more as of the most recent federal decennial census, if the adopted tax rate for any tax year exceeds the voter-approval tax rate, that city must conduct an election on the next occurring November uniform election date to determine whether or not to reduce the adopted tax rate to the voter-approval tax rate.



For cities with a population less than 30,000 as of the most recent federal decennial census, if the adopted tax rate for any tax year exceeds the greater of (i) the voter-approval tax rate or (ii) the de minimis rate, the city must conduct an election on the next occurring November uniform election date to determine whether or not to reduce the adopted tax rate to the voter-approval tax rate. However, for any tax year during which a city has a population of less than 30,000 as of the most recent federal decennial census and does not qualify as a special taxing unit, if a city's adopted tax rate is equal to or less than the de minimis rate but greater than both (a) the no-new-revenue tax rate, multiplied by 1.08, plus the debt service tax rate or (b) the city's voter-approval tax rate, then a valid petition signed by at least three percent of the registered voters in the city would require that an election be held to determine whether or not to reduce the adopted tax rate to the voter-approval tax rate.

Any city located at least partly within an area declared a disaster area by the Governor of the State or the President of the United States during the current year may calculate its "voter-approval tax rate" using a 1.08 multiplier, instead of 1.035, until the earlier of (i) the second tax year in which such city's total taxable appraised value exceeds the taxable appraised value on January 1 of the year the disaster occurred, or (ii) the third tax year after the tax year in which the disaster occurred.

State law provides cities and counties in the State the option of assessing a maximum one-half percent (1/2%) sales and use tax on retail sales of taxable items for the purpose of reducing its ad valorem taxes, if approved by a majority of the voters in a local option election. If the additional sales and use tax for ad valorem tax reduction is approved and levied, the no-new-revenue tax rate and voter-approval tax rate must be reduced by the amount of the estimated sales tax revenues to be generated in the current tax year.

The calculations of the no-new-revenue tax rate and voter-approval tax rate do not limit or impact the City's ability to set a debt service tax rate in each year sufficient to pay debt service on all of the City's tax-supported debt obligations, including the Obligations.

Reference is made to the Property Tax Code for definitive requirements for the levy and collection of ad valorem taxes and the calculation of the various defined tax rates.

**PROPERTY ASSESSMENT AND TAX PAYMENT . . .** Property within the City is generally assessed as of January 1 of each year. Business inventory may, at the option of the taxpayer, be assessed as of September 1. Oil and gas reserves are assessed on the basis of a valuation process that uses pricing information contained in the most recently published Early Release Overview of the Annual Energy Outlook published by the United States Energy Information Administration, as well as appraisal formulas developed by the State Comptroller of Public Accounts. Taxes become due October 1 of the same year, and become delinquent on February 1 of the following year. Taxpayers 65 years old or older are permitted by State law to pay taxes on homesteads in four installments with the first due on February 1 of each year and the final installment due on August 1.

**PENALTIES AND INTEREST . . .** Charges for penalty and interest on the unpaid balance of delinquent taxes are made as follows:

Month	Cumulative Penalty	Cumulative Interest	Total
February	6%	1%	7%
March	7	2	9
April	8	3	11
May	9	4	13
June	10	5	15
July	12	6	18

After July, the penalty remains at 12%, and interest accrues at a rate of one percent (1%) for each month or portion of a month the tax remains unpaid. A delinquent tax continues to incur the penalty interest as long as the tax remains unpaid, regardless of whether a judgment for the delinquent tax has been rendered. The purpose of imposing such interest is to compensate the taxing unit for revenue lost because of the delinquency. In addition, if an account is delinquent in July, an attorney's collection fee of up to 20% may be added to the total tax penalty and interest charge. Under certain circumstances, taxes which become delinquent on the homestead of a taxpayer 65 years old or older incur a penalty of 8% per annum with no additional penalties or interest assessed. In general, property subject to the City's lien may be sold, in whole or in parcels, pursuant to court order to collect the amounts due. Federal law does not allow for the collection of penalty and interest against an estate in bankruptcy. Federal bankruptcy law provides that an automatic stay of action by creditors and other entities, including governmental units, goes into effect with the filing of any petition in bankruptcy. The automatic stay prevents governmental units from foreclosing on property and prevents liens for post-petition taxes from attaching to property and obtaining secured creditor status unless, in either case, an order lifting the stay is obtained from the bankruptcy court. In many cases post-petition taxes are paid as an administrative expense of the estate in bankruptcy or by order of the bankruptcy court.

**CITY APPLICATION OF TAX CODE . . .** The City grants an exemption to the market value of the residence homestead of persons 65 years of age or older of \$50,000. Disabled taxpayers also receive a \$50,000 exemption.

The City grants an additional one-half of one percent, or a minimum of \$5,000 exemption of the market value of residence homesteads.

See Table 1 for a listing of the amounts of the exemptions described above.

Ad valorem taxes are not levied by the City against the exempt value of residence homesteads for the payment of debt. The City does not tax nonbusiness personal property.

Denton County began collecting taxes for the City during the fiscal year 2006-07.

The City does not allow split payments, and discounts are not allowed.

The City does not tax freeport property.

The City collects the additional one-half cent sales tax for reduction of ad valorem taxes.

The City does tax "goods-in-transit".

The City has adopted the tax freeze (limitation) for citizens who are disabled or are 65 years of age or older.

The City has adopted a tax abatement policy.

The City participates in two tax increment reinvestment zones, which were created in 2010 and 2012.

**TAX INCREMENT FINANCING AND PUBLIC IMPROVEMENT DISTRICT . . .** The City participates in two tax increment reinvestment zones, which were created in 2010 and 2012. And the City created Rayzor Ranch Public Improvement District No. 1 (the "District") in 2014 for the undertaking and financing of public improvements authorized by Chapter 372 of the Texas Local Government Code. Additional information on the tax increment reinvestment zones and the District can be found in the Annual Comprehensive Financial Report, Notes to Basic Financial Statements, IV. Detailed Notes on All Funds, B. Property Tax Revenue.

**TAX INCENTIVE POLICY . . .** The City enters into economic development incentive agreements consisting of property tax abatement agreements and Chapter 380 agreements with entities to promote development and redevelopment within the City, stimulate commercial activity, generate additional sales tax, and enhance the property tax base and economic vitality of the City. A summary of newly initiated agreements and terminated agreements follows.

**PROPERTY TAX ABATEMENTS . . .** No new property tax abatements were approved, initiated, or terminated in 2023.

**CHAPTER 380 AGREEMENTS . . .** No new Chapter 380 Agreements were approved in 2023. Two agreements for Ranchland Foods and United States Cold Storage were terminated. From the Future will initiate in 2023. Payments continue to be made to Buc-ee's Travel Center, Unicorn Lake, Rayzor Ranch Marketplace and Town Center, Golden Triangle Mall, and O'Reilly Hotel and Convention Center for sales tax, and Mayday Manufacturing, Westgate Business Park, WinCo Distribution Center, and O'Reilly Hotel and Convention Center for ad valorem rebates. Safran and TeamOfDefenders received job-based grant and expansion grant payments, respectively. O'Reilly Hotel and Convention Center also receives hotel occupancy tax payments.

Additional information on all of the tax abatement and Chapter 380 agreements may be found in Appendix B – Excerpts from the City of Denton, Texas Annual Comprehensive Financial Report, Notes to Basic Financial Statements, V. Other Information, F Tax Abatements.

**RECENT FINANCIAL DEVELOPMENTS – INFECTIOUS DISEASE OUTBREAK – COVID-19 . . .** The outbreak of COVID-19, a respiratory disease caused by a new strain of coronavirus, has been characterized as a pandemic (the "Pandemic") by the World Health Organization and is currently affecting many parts of the world, including the United States and Texas. On January 31, 2020, the Secretary of the United States Health and Human Services Department declared a public health emergency for the United States and on March 13, 2020, the President of the United States declared the outbreak of COVID-19 in the United States a national emergency. Subsequently, the President's Coronavirus Guidelines for America and the United States Centers for Disease Control and Prevention called upon Americans to take actions to slow the spread of COVID-19 in the United States.

On March 13, 2020, the Governor of Texas (the "Governor") declared a state of disaster for all counties in Texas in response to the Pandemic. Pursuant to Chapter 418 of the Texas Government Code, the Governor has broad authority to respond to disasters, including suspending any regulatory statute prescribing the procedures for conducting state business or any order or rule of a state agency that would in any way prevent, hinder, or delay necessary action in coping with the disaster, and issuing executive orders that have the force and effect of law. The Governor issued a number of executive orders relating to COVID-19 preparedness and mitigation, which restricted or halted business activity, restricted the number of people that can congregate in a

public setting, and limited the movement of many citizens to only essential activities. Under executive orders in effect as of the date of this Official Statement, there are no COVID-19 related operating limits for any business or other establishment. The Governor retains the right to impose new restrictions on activities. Additional information regarding executive orders issued by the Governor is accessible on the website of the Governor at <https://gov.texas.gov/>. Neither the information on (nor accessed through) such website of the Governor is incorporated by reference, either expressly or by implication, into this Official Statement.

The Pandemic has negatively affected travel, commerce, and financial markets globally, and is widely expected to continue negatively affecting economic growth and financial markets worldwide. These negative impacts may reduce or negatively affect property values and/or the collection of sales tax revenues, ad valorem tax revenues and other revenues within the City, including utility system revenues. See "TAX INFORMATION" and "FINANCIAL INFORMATION – Table 13 – Municipal Sales Tax History." The Obligations are secured by an ad valorem tax (within the limits prescribed by law), and a reduction in the receipt of such revenues or in the property values within the City may require an increase in the ad valorem tax rate required to pay the Obligations as well as the City's operations and maintenance expenses. See "TAX INFORMATION - No-New-Revenue Tax Rate and Voter Approval Tax Rate" and "THE OBLIGATIONS – Tax Rate Limitation." Additionally, the City collects a sales and use tax on all taxable transactions within the City's boundaries. A reduction in the collection of sales tax revenues may negatively impact the City's operating budget and overall financial condition. The City did not see a negative impact on property tax revenues in fiscal year 2020 or 2021. The City's certified values increased in each of the fiscal years 2020 or 2021 as compared to the respective prior year. See "TAX INFORMATION – Table 2 – Taxable Assessed Valuation by Category." Also, the City's sales tax revenue increased in each of fiscal years 2020 and 2021 as compared to the respective prior year. See "FINANCIAL INFORMATION – Table 13 – Municipal Sales Tax History."

#### **RECENT EVENTS AFFECTING THE ELECTRIC INDUSTRY IN TEXAS AND THE CITY OF DENTON**

##### *General*

The State experienced unprecedented freezing temperatures that put pressure on the availability of electric power within the State during the period beginning on Saturday, February 13, 2021 through Friday, February 19, 2021 (the "Weather Event"). On February 12, 2021, in anticipation of the winter weather event known as Winter Storm Uri, the Governor declared a state of disaster for all counties in Texas, including Denton County in which the City of Denton is located. On February 14, 2021, the President of the United States made an emergency declaration for the State of Texas, and on February 15, 2021, the Mayor of Denton made a declaration of emergency for the City of Denton. The President subsequently made a major disaster declaration for 126 of the 254 counties in Texas, including Denton County.

Due to the prolonged freezing temperatures, energy demand far exceeded the generation available across the State. Additionally, the cold weather also caused some of the electric producing facilities in the Electric Reliability Council of Texas ("ERCOT") service area, located entirely within Texas, to experience mechanical failures of the equipment needed to provide and distribute the electricity. As the Weather Event covered the State, ERCOT, the independent system operator for all the transmission and generation facilities with the boundaries of ERCOT, implemented mandatory load shed orders to all ERCOT load serving entities. The load shed event was initially expected to be rolling blackouts to conserve electricity and address energy needs across the entirety of the State; however, due to the severity of the Weather Event and the corresponding increase in demand on the State electric grid, combined with limited availability of generation, widespread and prolonged power outages began at 1:00 a.m., Central time, on Monday, February 15, 2021, and continued throughout the week. Ultimately, approximately 4,000,000 Texas residents were without power for significant stretches of the week.

##### *Impact on the City*

The power outages affected many municipally owned and privately-owned utilities in the State, including the City's electric utility system, Denton Municipal Electric ("DME" or the "Electric System"). Due to the high demand for power and the limited availability of the power across the entire ERCOT market, the purchase price for power increased dramatically during the period of the Weather Event. These energy price increases coupled with unexpected fuel supply issues to electric generating plants, resulted in utilities, including DME, needing to access their financial reserves in order to provide required collateral and to make payments to ERCOT for the power purchased necessary to service their customers.

Over the period from February 16 to March 1, 2021, the City paid \$209.8 million in storm-related charges to ERCOT for electric power, and \$28.2 million in fuel and power purchase agreement expenses related to the City's electric generating facilities. The City received from ERCOT payments for electric power generated by the City and other credits of approximately \$97.8 million, for a net expenditure of approximately \$140.2 million during this period. These power purchases are unparalleled for the City, and the net expenditures incurred during the storm far exceeds typical costs for an entire year for the City. As a comparison, in fiscal year 2019, electric power purchase expenses for the City were \$97,075,122, and \$63,764,110 in fiscal year 2020. In addition, the price of natural gas, which is used as fuel for the City's electric generating facilities, increased dramatically during the period of the Weather Event. In fiscal year 2019, natural gas fuel expenses for the City were \$6,954,969 million, and \$3,599,350 million in fiscal year 2020.

As of February 14, 2021, the City's Electric System Fund balance was approximately \$105 million. Prior to the Weather Event, the Electric System Fund was considered fully funded in accordance with the then applicable City fund balance policy, which provided for a minimum fund balance of \$48.5 million to meet unforeseen operational needs. Since the beginning of the Weather Event, the City evaluated all options to make available the cash necessary for power expenses. To meet immediate cash flow needs for electric power purchases, the City utilized cash in the Electric System Fund and issued \$100 million of utility system revenue commercial paper notes ("Utility ECP Notes") on Friday, February 19, 2021, through the City's Utility System Revenue Extendable Commercial Paper Financing Program established by the City on February 2, 2021 (the "Utility ECP Program"). After use of the proceeds of the \$100 million of the Utility ECP Notes to pay a portion of the electric power purchases resulting from the Weather Event and expenditures from the Electric System Fund for electric power and fuel purchases, the Electric System Fund balance was approximately \$63 million. The City also amended the Utility ECP Program on February 23, 2021 to increase the maximum principal amount of Utility ECP Notes that may be outstanding from time to time from \$100 million to \$300 million to provide additional capacity for additional electric power purchases, replenishing reserves used for power purchases and for other authorized purposes under the Utility ECP Program. Utility ECP Notes may be "rolled" by the City from time to time with new Utility ECP Notes issued under the program, or the City may refund the Utility ECP Notes with long-term bonds, allowing the costs to be recovered over multiple years instead of realizing the substantial cost in the short term, if the City determines that would be in its best interests. On May 20, 2021, the City issued an additional \$40 million of Utility ECP Notes to cover expenses incurred as a result of the Weather Event.

The extreme electric power prices during the Weather Event caused numerous retail electric provider market participants located in the ERCOT market to be unable to pay the amounts owed to ERCOT for that power. The City received notice from ERCOT that if ERCOT market participants "short-pay" amounts due for power purchases, then, because of unavailability of adequate funds to fully pay generation market participants, amounts due to generators, including the City, would in turn be short paid their proportionate share of the amounts of the short pays by load serving entities. Effective April 20, 2022, the City is still owed approximately \$6.2 million from ERCOT due to the unresolved short pays during the Winter Event. In the event that ERCOT and the short paying entities are unable to resolve their disputes, all other market participants, including the City, will be required to pay their proportionate share of the amounts owed by the defaulting party or parties through a mechanism in the ERCOT protocols known as "uplift." Because at the time of the short pays and the uncertainty of the number and financial consequences to the City, the City filed a lawsuit against ERCOT on February 25, 2021, in the District Court of Denton County, Texas, asking for temporary and permanent injunctions on payment by the City for short-pay amounts by others. The court granted a temporary restraining order ("TRO") on that date in favor of the City. Subsequently, the parties agreed to transfer venue to Travis County, Texas, and extend the TRO to June 1, 2021. ERCOT filed pleas in April 2021 arguing that the district court does not have jurisdiction over the case, or that if it does, the City should be required to join other parties before further consideration on the merits. A hearing on ERCOT's pleas was held on May 10, 2021. On June 4, 2021, the district court granted ERCOT's plea to jurisdiction, opining that the City did not exhaust its administrative remedies before the Public Utility Commission of Texas ("PUCT") before filing the lawsuit. Based on information provided to the City to date by ERCOT, the City estimates its potential liability under the uplift mechanism, based upon currently known and unresolved short pays and defaults could be up to \$6.2 million, however, the City cannot determine with certainty the scope or magnitude of its potential uplift liability which depends on the outcome of pending bankruptcy litigation and other pending litigation against ERCOT. The City believes that under certain outcomes in pending litigation against ERCOT by parties other than the City, other market participants may also file claims against ERCOT, including the City, which could substantially increase the potential uplift liability to the City. The City cannot predict the likelihood of success of the litigation against ERCOT or future litigation that may result from the pending litigation.

After the Weather Event, the City received several claims and subrogation notices from various insurance companies for property damage as a result of the storm. The City is analyzing its potential exposure in these matters. The City has opted into three lawsuits in the Winter Storm Uri Multi-District Litigation Court pending before the 164<sup>th</sup> Judicial District in Harris County, Texas. On May 17, 2022, in each of these three cases, the City filed a plea to the jurisdiction and moved to dismiss the Plaintiffs' cases with prejudice for lack of subject-matter jurisdiction. The City's exposure under these lawsuits is limited because the Electric Service Standards enacted by DME specifically disclaim all liability for damages arising from service interruptions due to (i) a wholesale power supplier's failure to deliver sufficient energy to DME, (ii) orders by ERCOT, and (iii) failure of the transmission grid of the State. Additionally, the City has not been named in any lawsuits or received any new claims related to the Weather Event in about a year.

The City continues to review the impact that the Weather Event has had on its combined Electric System, waterworks system, wastewater system, and drainage system (together, the "Utility System"), and its financial condition, as well as options to address and manage the financial impact of the Weather Event.

The City issued Utility System revenue bonds to refund the \$140 million of the Utility ECP Notes on a long-term basis on September 21, 2021. In light of the financial risks that were made evident by the Winter Event, the City revised its Electric System fund balance policy on September 3, 2021, and now has a target level of 46% to 69% of annual electric fund expenses. Fiscal year 2020-2021 annual Electric Fund expenses were \$335,524,613. The Electric System fund balance as of April 30, 2022, was \$130,069,410 million which is 39% of FY 21 expenses.

At the direction of the Texas Legislature pursuant to Senate Bill 3 passed during the 87th session, the PUCT has directed ERCOT to evaluate and adopt market protocol changes that are intended to increase the reliability of the ERCOT transmission system and to incentivize new dispatchable generation. Protocol changes that have already been implemented to achieve conservative market operations have changed the price formation in the ERCOT market and will continue to impact both real-time market prices and future energy and ancillary service prices. Additional protocol changes are under consideration by ERCOT at the direction of the PUCT that also have the potential to impact price formation. Phase II market design changes are also being debated by the PUCT and ERCOT with the intent of increasing the reliability of the ERCOT grid and to incentivize construction of new dispatchable generation. These Phase II initiatives will impact the market in several years and the City cannot make predictions concerning its future operating results as the outcome is dependent on circumstances over which the City does not control.

#### **Rating Agency Actions**

On May 28, 2021, Fitch affirmed its "AA+" rating on outstanding GO and CO debt while assigning the same rating of "AA+" to the 2021 Series bonds. The outlook is Stable.

On June 2, 2021, S&P affirmed its "AA+" rating on the outstanding GO debt and assigned the same "AA+" rating to the 2021 Series bonds. The outlook is Stable.

On July 22, 2021, S&P affirmed its "a-1" short-term rating and its "A+" long-term rating on the City's outstanding Utility System Revenue Bonds, removing them from CreditWatch. At the same time, S&P also assigned its "A+" long term rating to the Taxable 2021 Utility System Revenue Bonds. The outlook is Negative.

On August 16, 2021, Fitch downgraded the City's outstanding long-term Utility System Revenue Bonds from "A+" (Rating Watch Negative) to an "A" rating. This rating includes Series 2017 and 2021 bonds. The outlook is Negative for both. Fitch does not provide a rating on the Utility ECP Notes.

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**TABLE 1 - VALUATION, EXEMPTIONS AND GENERAL OBLIGATION DEBT**

2022/23 Market Valuation Established by Denton Central Appraisal District		\$ 19,159,235,108
Less Exemptions/Reductions at 100% Market Value:		
Residence Homestead Exemptions	\$ 103,219,630	
Over 65 Exemptions	430,946,619	
Disabled Persons Exemptions	11,464,443	
Disabled Veterans Exemptions	135,558,399	
Agricultural Land Use Productivity	421,855,576	
Historical/Other Exemptions	4,730,025	
Freeport Exemptions	279,969,998	
Abatement Exemptions	11,277,270	
Pollution Exemptions	25,712,762	
Homestead Cap Adjustment	<u>752,455,648</u>	<u>2,177,190,370</u>
2022/23 Taxable Assessed Valuation (as of 9-12-2022)		\$ 16,982,044,738
2022/23 Incremental Taxable Assessed Value of Real Property within Reinvestment Zones		<u>(260,921,114)</u>
2022/23 Net Taxable Assessed Valuation available for General Obligations and Debt of City (as of 9-12-2022)		<u><u>\$ 16,721,123,624</u></u>
City Funded Debt Payable from Ad Valorem Taxes <sup>(1)</sup>		
General Obligation Bonds (as of 4-1-23)	\$ 297,280,000 <sup>(2)</sup>	
Certificates of Obligation (as of 4-1-23)	558,775,000 <sup>(2)</sup>	
The Bonds	71,845,000 <sup>(3)</sup>	
The Certificates	<u>146,795,000 <sup>(3)</sup></u>	
Funded Debt Payable from Ad Valorem Taxes		\$ 1,074,695,000
Less Self-Supporting General Obligation Debt <sup>(4)</sup>		
Solid Waste System General Obligation Debt	\$ 39,270,000 <sup>(5)</sup>	
Utility System General Obligation Debt	<u>643,580,000 <sup>(5)</sup></u>	<u>682,850,000</u>
Net Tax Supported Debt Payable from Ad Valorem Taxes		<u><u>\$ 391,845,000</u></u>
Interest and Sinking Fund as of 4-1-23 (estimated)		\$ 9,012,739
Ratio Total Funded Debt to Net Taxable Assessed Valuation .....		6.43%
Ratio Net Funded Debt to Net Taxable Assessed Valuation .....		2.34%
2023 Estimated Population - 146,950		
Per Capita Net Taxable Assessed Valuation - \$113,788		
Per Capita Total Funded Debt - \$7,313		

(1) The above statement of indebtedness does not include \$182,160,000 Utility System Revenue Bonds, \$138,360,000 Utility System Revenue Refunding Bonds or \$100,000,000 Utility System Revenue Extendable Commercial Paper Notes, Series A as these bonds and notes are payable solely from the net revenues of the Utility System (the "System"), as defined in the ordinances authorizing such bonds and notes.

(2) Excludes the Refunded Obligations. Preliminary, subject to change.

(3) Preliminary, subject to change.

(4) As a matter of policy, the City pays debt service on its general obligation debt issued to fund improvements to its Utility System and Solid Waste System from surplus revenues of these Systems (see "Table 7 – General Obligation Debt Service Requirements" and "Table 9 – Computation of Self-Supporting Debt"). This policy may be subject to change in the future.

The City's Utility System is comprised of the City's entire existing electric, light and power system and the waterworks and sewer system. Drainage is managed under the waterworks and wastewater system. The City's Utility System General Obligation Debt has been issued to finance or refinance Utility System improvements and contractual obligations and is paid, or is expected to be paid, from Utility System revenues. In addition, the City has \$182,160,000 Utility System Revenue Bonds, \$138,360,000 Utility System Revenue Refunding Bonds outstanding payable from a pledge of Utility System revenues.

The City's Solid Waste System General Obligation Debt has been issued to finance or refinance Solid Waste System improvements and is paid, or is expected to be paid, from Solid Waste System revenues. The City has no outstanding Solid Waste System Revenue Bonds.

(5) Includes a portion of the Obligations. Preliminary, subject to change.

**TABLE 2 - TAXABLE ASSESSED VALUATIONS BY CATEGORY <sup>(1)</sup>**

Category	Taxable Appraised Value for Fiscal Year Ended September 30,					
	2023		2022		2021	
	Amount	% of Total	Amount	% of Total	Amount	% of Total
Real, Residential, Single Family	\$ 10,290,861,945	53.71%	\$ 8,179,274,977	51.07%	\$ 7,448,956,811	49.84%
Real, Residential, Multi-Family	2,581,359,659	13.47%	2,192,401,019	13.69%	2,079,085,736	13.91%
Real, Vacant Lots/Tracts	423,344,124	2.21%	314,300,099	1.96%	281,625,453	1.88%
Real, Acreage (Land Only)	429,021,486	2.24%	361,523,875	2.26%	365,649,752	2.45%
Real, Farm and Ranch Improvements	182,206,679	0.95%	157,873,244	0.99%	119,135,103	0.80%
Real, Commercial and Industrial	3,299,538,286	17.22%	3,032,461,538	18.93%	2,965,114,413	19.84%
Real, Oil, Gas, and Other Mineral Reserves	87,640,017	0.46%	48,516,939	0.30%	32,916,830	0.22%
Real and Tangible Personal, Utilities	152,340,178	0.80%	142,991,907	0.89%	133,632,949	0.89%
Tangible Personal, Commercial and Industrial	1,507,941,787	7.87%	1,425,520,232	8.90%	1,393,035,792	9.32%
Tangible Personal, Other	23,831,628	0.12%	23,969,949	0.15%	24,210,105	0.16%
Real and Special Property, Inventory	181,149,319	0.95%	137,388,170	0.86%	101,288,806	0.68%
Total Appraised Value Before Exemptions	\$ 19,159,235,108	100.00%	\$ 16,016,221,949	100.00%	\$ 14,944,651,750	100.00%
Less: Total Exemptions/Reductions	(2,177,190,370)		(1,376,450,603)		(1,377,732,859)	
Less: Tax Increment Value	(260,921,114)		(236,666,283)		14,729,380	
Net Taxable Assessed Value	<u>\$ 16,721,123,624</u>		<u>\$ 14,403,105,063</u>		<u>\$ 13,581,648,271</u>	

Category	Taxable Appraised Value for Fiscal Year Ended September 30,			
	2020		2019	
	Amount	% of Total	Amount	% of Total
Real, Residential, Single Family	\$ 7,010,158,815	49.41%	\$ 6,381,144,639	39.84%
Real, Residential, Multi-Family	1,778,847,172	12.54%	1,572,513,883	9.82%
Real, Vacant Lots/Tracts	263,786,761	1.86%	226,805,770	1.42%
Real, Acreage (Land Only)	374,863,507	2.64%	372,583,109	2.33%
Real, Farm and Ranch Improvements	123,803,396	0.87%	122,273,681	0.76%
Real, Commercial and Industrial	2,780,957,817	19.60%	2,518,745,519	15.73%
Real, Oil, Gas, and Other Mineral Reserves	70,254,568	0.50%	74,198,617	0.46%
Real and Tangible Personal, Utilities	124,940,388	0.88%	106,362,242	0.66%
Tangible Personal, Commercial and Industrial	1,519,412,977	10.71%	1,117,006,842	6.97%
Tangible Personal, Other	24,514,962	0.17%	24,430,946	0.15%
Real Property, Inventory	115,151,665	0.81%	131,986,240	0.82%
Total Appraised Value Before Exemptions	\$ 14,186,692,028	100.00%	\$ 12,648,051,488	78.97%
Less: Total Exemptions/Reductions	(1,397,304,969)		(1,220,483,575)	
Less: Tax Increment Value	(168,826,531)		(110,633,617)	
Net Taxable Assessed Value	<u>\$ 12,620,560,528</u>		<u>\$ 11,316,934,296</u>	

(1) Valuations shown are certified taxable assessed values reported by the Denton Central Appraisal District to the State Comptroller of Public Accounts. Certified values are subject to change throughout the year as contested values are resolved and the Appraisal District updates records. For the Fiscal Year ended 2023, the values were reported on September 12, 2022 based on information as of January 1, 2022.

**TABLE 3 - VALUATION AND GENERAL OBLIGATION DEBT HISTORY**

Fiscal Year Ended	Estimated Population <sup>(1)</sup>	Net Taxable Assessed Valuation <sup>(2)</sup>	Net Taxable Assessed Valuation Per Capita	Net Tax Debt Outstanding at End of Year <sup>(8)</sup>	Ratio Net Tax Debt to Net Taxable Assessed Valuation	Net Funded Tax Debt Per Capita
9/30						
2019	136,927	\$ 11,316,934,296 <sup>(3)</sup>	\$ 82,649	\$ 191,662,956	1.69%	\$ 1,400
2020	140,956	12,620,560,528 <sup>(4)</sup>	89,535	249,482,532	1.98%	1,770
2021	143,775	13,581,648,271 <sup>(5)</sup>	94,465	308,521,854	2.27%	2,146
2022	146,950	14,403,105,063 <sup>(6)</sup>	98,014	354,343,240	2.46%	2,411
2023	150,624	16,721,123,624 <sup>(7)</sup>	111,012	391,845,000 <sup>(9)</sup>	2.34%	2,601

(1) Source: City Officials.

(2) Valuations shown are certified taxable assessed values reported by the Denton Central Appraisal District to the State Comptroller of Public Accounts. Certified values are subject to change throughout the year as contested values are resolved and the Appraisal District updates records. Source: Denton Central Appraisal District as of September 12, 2022.

(3) Excludes tax incremental value of approximately \$110,633,617 that is not available for the City's general obligations and debt of City.

(4) Excludes tax incremental value of approximately \$168,826,531 that is not available for the City's general obligations and debt of City.

(5) Excludes tax incremental value of approximately \$198,541,948 that is not available for the City's general obligations and debt of City.

(6) Excludes tax incremental value of approximately \$236,666,283 that is not available for the City's general obligations and debt of City.

(7) Excludes tax incremental value of approximately \$260,921,114 that is not available for the City's general obligations and debt of City.

(8) Excludes self-supported general obligation debt.

(9) Projected. Includes a portion of the Obligations. Excludes the Refunded Obligations. Preliminary, subject to change.

**TABLE 4 - TAX RATE, LEVY AND COLLECTION HISTORY**

Fiscal Year Ended	Tax Rate	Distribution		Tax Levy <sup>(1)</sup>	% Current Collections	% Total Collections
9/30		General Fund	Interest and Sinking Fund			
2019	\$ 0.62048	\$ 0.40543	\$ 0.21505	\$ 70,786,144	99.35%	99.82%
2020	0.59045	0.38536	0.20509	75,040,101	99.78%	99.80%
2021	0.59045	0.38036	0.21009	77,955,806	99.72%	99.74%
2022	0.56582	0.35044	0.21538	79,440,823	99.60%	99.60%
2023	0.56068	0.35643	0.20425	92,092,863	98.12% <sup>(2)</sup>	98.12% <sup>(2)</sup>

(1) Tax levy for the year 2023 is based on the adjusted certified value. Prior years represent adjusted values that include all supplements through September 12, 2022. Includes tax incremental reinvestment zone revenues.

(2) Collections through April 1, 2023 (partial year).

**TABLE 5 - TEN LARGEST TAXPAYERS <sup>(1)</sup>**

Name of Taxpayer	Nature of Property	2022/23 Taxable Assessed Valuation	% of Total Taxable Assessed Valuation
Southwire Company, LLC	Manufacturing	\$110,244,449	0.65%
Columbia Medical Center of Denton	Hospital/Professional Building	86,992,602	0.51%
Paccar Inc.	Diesel Truck Manufacturing	80,971,836	0.48%
TRDWind Timberlinks Borrower LLC	Apartments	65,030,537	0.38%
NREA Gardens, DST	Retail	64,800,000	0.38%
Razor Ranch Marketplace Associates LLC	Retail	64,765,228	0.38%
Winco Foods LLC	Food Distribution	63,500,000	0.37%
RR Town Center Associates LLC	Retail	61,901,818	0.36%
Village at Razor Ranch LLC	Apartments	60,212,732	0.35%
Westdale Carriage Square Ltd	Apartments	59,705,000	0.35%
		<u>\$ 718,124,202</u>	<u>4.23%</u>

(1) Source: Denton Central Appraisal District.



**GENERAL OBLIGATION DEBT LIMITATION . . .** No general obligation debt limitation is imposed on the City under current State law or the City's Home Rule Charter (see "The Obligations – Tax Rate Limitation" for a description of the limitations on ad valorem tax rates).

**TABLE 6 - ESTIMATED OVERLAPPING TAX DEBT**

Expenditures of the various taxing entities within the territory of the City are paid out of ad valorem taxes levied by such entities on properties within the City. Such entities are independent of the City and may incur borrowings to finance their expenditures. This statement of direct and estimated overlapping ad valorem tax debt ("Tax Debt") was developed from information contained in "Texas Municipal Reports" published by the Municipal Advisory Council of Texas. Except for the amounts relating to the City, the City has not independently verified the accuracy or completeness of such information, and no person should rely upon such information as being accurate or complete. Furthermore, certain entities listed may have issued additional Tax Debt since the date hereof, and such entities may have programs requiring the issuance of substantial amounts of additional Tax Debt, the amount of which cannot be determined. The following table reflects the estimated share of overlapping Tax Debt of the City.

Taxing Jurisdiction	2022/23 Taxable Assessed Value	2022/23 Tax Rate	Total Funded Debt	Estimated % Applicable	City's Overlapping Funded Debt As of 4-1-23	Authorized But Unissued Debt As Of 4-1-23
City of Denton	\$ 16,721,123,624 <sup>(1)</sup>	\$ 0.56582	\$ 391,845,000 <sup>(2)</sup>	100.00%	\$ 391,845,000 <sup>(2)</sup>	\$ 54,500,000 <sup>(3)</sup>
Denton Independent School District	24,853,496,991		1,237,690,283	58.75%	727,143,041	-
Denton County	149,854,372,945		559,930,000	11.89%	66,575,677	659,690,625
Argyle Independent School District	4,020,293,871		324,967,774	7.03%	22,845,235	150,500,000
Aubrey Independent School District	2,012,008,073		283,193,983	0.12%	339,833	187,330,000
Krum Independent School District	1,496,797,598		50,940,189	6.65%	3,387,523	224,700,000
Lake Dallas Independent School District	2,933,068,988		176,388,624	0.01%	17,639	-
Pilot Point Independent School District	1,117,832,936		46,340,000	0.25%	115,850	-
Ponder Independent School District	968,459,432		71,135,000	3.77%	2,681,790	-
Sanger Independent School District	1,884,201,976		142,197,917	0.45%	639,891	-
Total Direct and Overlapping Funded Debt					<u>\$ 1,215,591,477</u>	
Ratio of Direct and Overlapping Funded Debt to Taxable Assessed Valuation.....					7.27%	
Per Capita Overlapping Funded Debt.....					\$ 5,738.76	

- (1) Excludes tax incremental value of approximately \$260,921,114 that is not available for the City's general obligations and debt of City.
- (2) Includes a portion of the Obligations. Excludes self-supporting. See Tables 1 and 9 herein for more detailed information on the City's general obligation self-supporting debt. Preliminary, subject to change.
- (3) Reflects remaining authorization after the issuance of the Bonds. Preliminary, subject to change.

**TABLE 7 – PRO FORMA GENERAL OBLIGATION DEBT SERVICE REQUIREMENTS**

Fiscal Year Ended	Outstanding Debt Service <sup>(1)</sup>			The Bonds <sup>(2)</sup>		The Certificates <sup>(3)</sup>		Total Outstanding Debt	Less: Self- Supporting Solid Waste Debt Service <sup>(4)</sup>	Less: Self- Supporting Utility Debt Service <sup>(4)</sup>	Total Debt Service Requirements
9/30	Principal	Interest	Total	Principal	Interest	Principal	Interest				
2023	\$ 59,375,000	\$ 36,411,934	\$ 95,786,934	\$ -	\$ -	\$ -	\$ -	\$ 95,786,934	\$ 3,853,331	\$ 55,653,741	\$ 36,279,862
2024	54,885,000	32,538,663	87,423,663	3,635,000	3,598,269	4,285,000	6,970,226	105,912,158	4,783,493	60,357,580	40,771,084
2025	50,520,000	30,167,800	80,687,800	6,085,000	3,170,325	4,875,000	6,386,425	101,204,550	4,646,538	57,771,513	38,786,500
2026	44,750,000	28,042,163	72,792,163	5,685,000	2,876,075	5,120,000	6,136,550	92,609,788	4,422,288	49,861,638	38,325,862
2027	44,620,000	26,029,888	70,649,888	5,955,000	2,585,075	5,375,000	5,874,175	90,439,138	4,042,788	49,723,838	36,672,512
2028	44,090,000	23,971,750	68,061,750	4,150,000	2,332,450	5,655,000	5,598,425	85,797,625	3,532,269	48,550,306	33,715,050
2029	43,015,000	21,945,684	64,960,684	4,390,000	2,118,950	4,535,000	5,343,675	81,348,309	3,224,763	47,421,325	30,702,222
2030	44,950,000	19,936,475	64,886,475	4,650,000	1,892,950	4,765,000	5,111,175	81,305,600	3,229,100	47,627,813	30,448,687
2031	41,045,000	18,072,091	59,117,091	4,915,000	1,653,825	5,020,000	4,866,550	75,572,466	3,031,056	42,530,275	30,011,134
2032	38,490,000	16,474,819	54,964,819	7,760,000	1,336,950	5,265,000	4,609,425	73,936,194	2,814,438	41,590,900	29,530,856
2033	39,745,000	14,956,928	54,701,928	5,285,000	1,010,825	5,545,000	4,339,175	70,881,928	2,777,738	39,253,300	28,850,891
2034	41,260,000	13,441,022	54,701,022	1,545,000	840,075	5,080,000	4,073,550	66,239,647	2,659,956	36,376,669	27,203,022
2035	40,505,000	12,012,391	52,517,391	1,620,000	760,950	5,335,000	3,813,175	64,046,516	2,316,925	35,304,000	26,425,591
2036	39,160,000	10,651,659	49,811,659	1,705,000	677,825	5,610,000	3,539,550	61,344,034	2,066,775	34,657,413	24,619,847
2037	38,010,000	9,318,641	47,328,641	1,795,000	590,325	5,890,000	3,252,050	58,856,016	1,600,300	33,955,475	23,300,241
2038	37,580,000	8,002,941	45,582,941	1,885,000	498,325	6,195,000	2,949,925	57,111,191	1,529,125	34,000,709	21,581,356
2039	35,320,000	6,758,347	42,078,347	1,980,000	401,700	6,525,000	2,631,925	53,616,972	1,531,250	34,020,397	18,065,325
2040	34,140,000	5,622,203	39,762,203	2,070,000	310,800	6,825,000	2,332,300	51,300,303	1,532,000	33,204,694	16,563,609
2041	31,650,000	4,540,963	36,190,963	2,155,000	226,300	7,100,000	2,053,800	47,726,063	1,531,900	32,633,094	13,561,069
2042	25,530,000	3,506,422	29,036,422	2,245,000	138,300	7,385,000	1,764,100	40,568,822	1,534,500	30,389,422	8,644,900
2043	16,455,000	2,695,300	19,150,300	2,335,000	46,700	7,690,000	1,462,600	30,684,600	1,025,100	25,747,800	3,911,700
2044	17,065,000	2,079,316	19,144,316	-	-	2,715,000	1,254,500	23,113,816	-	23,113,816	-
2045	14,255,000	1,525,903	15,780,903	-	-	2,825,000	1,143,700	19,749,603	-	19,749,603	-
2046	10,810,000	1,098,497	11,908,497	-	-	2,940,000	1,028,400	15,876,897	-	15,876,897	-
2047	8,130,000	781,097	8,911,097	-	-	3,060,000	908,400	12,879,497	-	12,879,497	-
2048	4,800,000	571,084	5,371,084	-	-	3,185,000	783,500	9,339,584	-	9,339,584	-
2049	4,945,000	424,781	5,369,781	-	-	3,315,000	653,500	9,338,281	-	9,338,281	-
2050	4,710,000	278,369	4,988,369	-	-	3,450,000	518,200	8,956,569	-	8,956,569	-
2051	3,685,000	144,531	3,829,531	-	-	3,595,000	377,300	7,801,831	-	7,801,831	-
2052	1,935,000	41,119	1,976,119	-	-	3,740,000	230,600	5,946,719	-	5,946,719	-
2053	-	-	-	-	-	3,895,000	77,900	3,972,900	-	3,972,900	-
	<u>\$915,430,000</u>	<u>\$352,042,778</u>	<u>\$1,267,472,778</u>	<u>\$71,845,000</u>	<u>\$27,066,994</u>	<u>\$146,795,000</u>	<u>\$ 90,084,776</u>	<u>\$1,603,264,547</u>	<u>\$57,685,630</u>	<u>\$ 987,607,597</u>	<u>\$ 557,971,321</u>

- (1) "Outstanding Debt" does not include lease/purchase obligations, however, it does include self-supporting debt. Preliminary, subject to change.  
(2) Average life of the issue - 7.979 years. Interest on the Bonds has been calculated at the rate of 3.04% for purposes of illustration. Preliminary, subject to change.  
(3) Average life of the issue - 14.120 years. Interest on the Certificates has been calculated at the rate of 3.65% for purposes of illustration. Preliminary, subject to change.  
(4) Includes a portion of the Obligations. Excludes the Refunded Obligations Preliminary, subject to change.

**TABLE 8 - INTEREST AND SINKING FUND BUDGET PROJECTION <sup>(1)</sup>**

Budgeted Tax Supported Debt Service Requirements and Fiscal Charges, Fiscal Year Ending 9/30/2023 . . . . .	\$ 93,815,225	
Interest and Sinking Fund Balance as of 9/30/22 . . . . .	\$ 2,411,532	
Interest and Sinking Fund Tax Levy . . . . .	32,605,476	
From Revenue Supported Sources . . . . .	61,829,824	
Interest Income . . . . .	100,000	96,946,832
Estimated Balance, 9/30/23 . . . . .		<u>\$ 3,131,607</u>

(1) Source: City's Annual Budget for Fiscal Year 2022/23.

**TABLE 9 - COMPUTATION OF SELF-SUPPORTING DEBT**

Net Revenue from Solid Waste System, Fiscal Year Ended 9-30-22 . . . . .	\$ 17,315,395 <sup>(1)</sup>
Less: Solid Waste System Revenue Bond Requirements, 2023 Fiscal Year . . . . .	-
Balance Available for Other Purposes . . . . .	\$ 17,315,395
Solid Waste System General Obligation Bond Requirements, 2023 Fiscal Year . . . . .	(3,853,331)
Balance . . . . .	<u>\$ 13,462,064</u>
Net Revenue from Utility System, Fiscal Year Ended 9-30-22 . . . . .	\$ 156,926,668 <sup>(1)</sup>
Less: Utility System Revenue Bond Requirements, 2023 Fiscal Year . . . . .	(25,295,259)
Balance Available for Other Purposes . . . . .	\$ 131,631,409
Utility System General Obligation Bond Requirements, 2023 Fiscal Year . . . . .	(55,653,741)
Balance . . . . .	<u>\$ 75,977,668</u>

(1) Does not deduct franchise fees and/or return on investment paid to the General Fund.

**TABLE 10 - AUTHORIZED BUT UNISSUED GENERAL OBLIGATION REFUNDING AND IMPROVEMENT BONDS**

Purpose	Authorized	Authorized	Issued	Issued <sup>(1)</sup>	Balance
Street & Drainage	11/5/2019	\$ 154,000,000	\$ 65,145,000	\$ 34,355,000	\$ 54,500,000
Police Public Safety Facilities	11/5/2019	61,900,000	61,900,000	-	-
Parks	11/5/2019	5,000,000	5,000,000	-	-
		<u>\$ 220,900,000</u>	<u>\$ 132,045,000</u>	<u>\$ 34,355,000</u>	<u>\$ 54,500,000</u>

(1) Includes premium on the Bonds. Preliminary, subject to change.

**ANTICIPATED ISSUANCE OF ADDITIONAL GENERAL OBLIGATION DEBT . . .** As shown in Table 10 above, after the issuance of the Bonds, the City will have \$54,500,000 voted but unissued debt remaining from the November 5, 2019 authorization. In June of 2020, the City established a commercial paper note program which allows for the issuance, at one time, or from time to time, of up to \$100,000,000 aggregate principal amount of commercial paper notes (the "CP Notes") in order to finance public improvements authorized in the November 5, 2019 bond election. The CP Notes are secured by ad valorem taxes and proceeds from "rolls" of CP Notes and from bonds issued under the November 5, 2019 authorization. As of April 1, 2023, no CP Notes are outstanding. The City may also issue tax-supported debt other than voter approved general obligation bonds to fund public improvements, such as certificates of obligation or tax anticipation notes, without submitting a measure to the voters, but in certain instances, subject to voter petition rights for a referendum. Further, the City may issue tax-supported debt other than voter approved general obligation bonds to refund bonds or other obligations not currently payable from or supported by ad valorem taxes, such as the City's Utility System revenue bonds. **The City anticipates the issuance of approximately \$ \_\_\_ million in tax supported debt in fiscal year 2024.**

## TABLE 11 - OTHER OBLIGATIONS

As of September 30, 2022, the City does not have any other obligations outstanding.

**PENSION FUND . . .** The City of Denton participates as one of 901 plans in the defined benefit cash-balance plan administered by the Texas Municipal Retirement System (TMRS). TMRS is statewide public retirement plan created by the State of Texas and administered in accordance with the TMRS Act, Subtitle G, Title 8, Texas Government Code (the TMRS Act) as an agent multiple-employer retirement system for employees of Texas participating cities. The TMRS Act places the general administration and management of the System with a six-member, Governor-appointed board of trustees; however, TMRS is not fiscally dependent on the State of Texas. TMRS issues a publicly-available annual comprehensive financial report obtainable at [www.tmrs.com](http://www.tmrs.com).

All eligible employees of the city are required to participate in TMRS.

*Benefits Provided . . .* TMRS provides retirement, disability, and death benefits. Benefit provisions are adopted by the governing body of the City, within the options available in the state statutes governing TMRS.

At retirement, the employee's benefit is calculated based on the sum of the employee's contributions with interest, and the city-financed monetary credits with interest. Employees may choose to receive their retirement benefit in one of seven payments options. Employees may also choose to receive a portion of their benefit as a Partial Lump Sum Distribution in an amount equal to 12, 24, or 36 monthly payments, which cannot exceed 75% of the employee's deposits and interest.

Upon retirement, the employee's retirement benefits are calculated based on the sum of the employee's contributions, with interest, and the City-financed monetary credits, with interest. City-financed monetary credits are composed of three sources: prior service credits, current service credits, and updated service credits.

- Prior service credit, granted by each city joining TMRS, is a monetary credit equal to the accumulated value of the percentage of prior service credit selected by the City, multiplied by an employee's contributions that would have been made, based on the average salary prior to TMRS participation, for the number of months the employee was employed by the City before joining TMRS, accruing 3% annual interest and including the matching ratio adopted by the City.
- Current Service Credit is a monetary credit for service performed by an employee after the City joined TMRS and is based on a percent (200%) of the employee's total contributions and interest credits (commonly referred to as the City's matching ratio). Each participating city designates the rate the employee contributions (7% for the City) and interest is credited on contribution balances annually at a guaranteed minimum 5% rate. Any change in the matching ratio would be applied prospectively.
- Updated Service Credits (USC) is an optional monetary credit granted on an annually repeated basis by the City, and it may increase an employee's monthly retirement benefit. In calculating USC, TMRS looks at the changes in the employee's salary over their career and any changes the City has made to its TMRS plan, such as the employee contribution rate or the City's matching ratio. Although USC may increase the employee's retirement benefit, USC does not affect the amount of contributions in an employee's account or the amount an employee will receive if they refund.

The plan provisions also include an annually repeating basis cost of living adjustments for retirees equal to 70% of the change in the consumer price index. If an employee terminates employment and refunds their account, the employee will receive their total contributions, plus credited interest. The employee will not receive any of the city-financed monetary credits. An employee can retire at ages 60 and above with 5 or more years of service or with 20 years of service regardless of age. A member is vested after five years.

*Employees covered by benefit terms . . .* At the December 31, 2021 valuation and measurement date, the following employees were covered by the benefit terms:

Inactive Employees or Beneficiaries Currently Receiving Benefits	839
Inactive Employees Entitled to But Not Yet Receiving Benefits	745
Active Employees	<u>1,323</u>
	2,907

*Contributions . . .* The contribution rates for employees in TMRS are either 5%, 6%, or 7% of employee gross earnings, and the city matching percentages are either 100%, 150%, or 200%, both as adopted by the City Council. Under the state law governing TMRS, the contribution rate for each city is determined annually by the actuary, using the Entry Age Normal (EAN) actuarial cost method. The City's contribution rate is based on the liabilities created from the benefit plan options selected by the City and any changes in benefits or actual experience over time.

Employees for the City were required to contribute 7% of their annual gross earnings during the fiscal year. The contribution rates for the City were 17.61% and 17.47% in calendar years 2021 and 2022, respectively.

The City's contributions to TMRS for the year ended September 30, 2022 were \$18,471,103 and were equal to the required contributions.

*Net Pension Liability* . . . The City's Net Pension Liability ("NPL") was measured as of December 31, 2021, and the Total Pension Liability ("TPL") used to calculate the NPL was determined by an actuarial valuation as of that date.

*Actuarial Assumptions* . . . The TPL in the December 31, 2020 actuarial valuation was determined using the following actuarial assumptions:

Inflation	2.50% per year
Overall payroll growth	2.75% per year
Investment Rate of Return	6.75%, net of pension plan investment expense, including inflation

Salary increases were based on a service-related table. Mortality rates for active members are based on the PUB(10) mortality tables with the Public Safety table used for males and the General Employee table used for females. Mortality rates for healthy retirees and beneficiaries are based on the gender-distinct 2019 Municipal Retirees of Texas mortality tables. The rates for actives, healthy retirees and beneficiaries are projected on a fully generational basis by Scale UMP to account for future mortality improvements. For disabled annuitants, the same mortality tables for healthy retirees are used with a 4-year set-forward for males and a 3-year set-forward for females. In addition, a 3.5% and 3.0% minimum mortality rate is applied, for males and females respectively, to reflect the impairment for younger members who become disabled. The rates are projected on a fully generational basis by Scale UMP to account for future mortality improvements subject to the floor.

The actuarial assumptions were developed primarily from the actuarial investigation of the experience of TMRS over the four-year period from December 31, 2014 to December 31, 2018. They were adopted in 2019 and first used in the December 31, 2019 actuarial valuation. The post-retirement mortality assumption for healthy annuitants and Annuity Purchase Rate (APRs) are based on the Mortality Experience Investigation Study covering 2009 through 2011 and dated December 31, 2013. Plan assets are managed on a total return basis with an emphasis on both capital appreciation as well as the production of income in order to satisfy the short-term and long-term funding needs of TMRS.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of real rates of return for each major asset class in fiscal year 2022 are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return (Arithmetic)
Global Equity	30.0%	5.30%
Core Fixed Income	10.0%	1.25%
None-Core Fixed Income	20.0%	4.14%
Real Return	10.0%	3.85%
Real Estate	10.0%	4.00%
Absolute Return	10.0%	3.48%
Private Equity	10.0%	7.75%
Total	100.0%	

*Discount Rate* . . . The discount rate used to measure the Total Pension Liability was 6.75%. The projection of cash flows used to determine the discount rate assumed that employee and employer contributions will be made at the rates specified in statute. Based on that assumption, the pension plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

## Changes in the Net Pension Liability

	Increase (Decrease)		
	Total	Plan	Net
	Pension Liability (a)	Fiduciary Net Position (b)	Pension Liability (a) - (b)
Balance at 12/31/2020	\$ 560,470,110	\$ 494,893,606	\$ 65,576,504
Changes for the year:			
Service cost	17,667,234	-	17,667,234
Interest	37,617,145	-	37,617,145
Difference between expected and actual experience	8,560,080	-	8,560,080
Changes of assumptions	-	-	-
Contributions - employer	-	17,849,684	(17,849,684)
Contributions - employee	-	7,095,275	(7,095,275)
Net investment income	-	64,564,009	(64,564,009)
Benefit payments, including refunds of employee contributions	(24,025,384)	(24,025,384)	-
Administrative expense	-	(298,515)	298,515
Other changes	-	2,043	(2,043)
Net changes	39,819,075	65,187,112	(25,368,037)
Balance at 12/31/2021	\$ 600,289,185	\$ 560,080,718	\$ 40,208,467

*Sensitivity of the Net Pension Liability to changes in the Discount Rate . . .* The following presents the net pension liability of the City, calculated using the discount rate of 6.75%, as well as what the City's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (5.75%) or 1-percentage-point higher (7.75%) than the current rate:

	1% Decrease in Discount Rate (5.75%)	Current Discount Rate (6.75%)	1% Increase in Discount Rate (7.75%)
City's Net Pension Liability	\$128,986,586	\$ 40,208,467	\$(32,147,421)

*Pension Plan Fiduciary Net Position . . .* Detailed information about the pension plan's Fiduciary Net Position is available in a separately-issued TMRS financial report. That report may be obtained on the Internet at [www.tmrs.com](http://www.tmrs.com).

*Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions . . .* For the year ended September 30, 2022, the City recognized pension expense of \$7,836,233. This amount is included as part of personal services expenses.

At September 30, 2022, the City reported deferred outflows of resources and deferred inflows of resources related to TMRS pension from the following sources:

	Deferred Outflow of Resources	Deferred Inflows of Resources
Differences between projected and actual investment earnings	\$ -	\$ (33,191,633)
Contributions subsequent to the measurement date	13,454,404	-
Differences between expected and actual economic experience	9,068,338	-
Difference in assumption changes	498,406	-
Total	\$ 23,021,148	\$ (33,191,633)

\$13,454,404 reported as deferred outflows of resources related to pensions resulting from contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability for the City's fiscal year ending September 30, 2023. Other amounts reported as deferred outflows and inflows of resources related to pensions will be recognized in pension expense as follows:

For the Year Ended September 30,	
2023	\$ (2,581,969)
2024	(11,021,823)
2025	(4,740,479)
2026	(5,280,618)
2027	-
Total	<u>\$ (23,624,889)</u>

#### **FIREMEN'S RELIEF AND RETIREMENT FUND**

*Plan Description* . . . The City contributes to the retirement plan for firefighters in the Denton Fire Department known as the Denton Firemen's Relief and Retirement Fund (the Fund). The Fund is a single employer, contributory, defined benefit plan. The benefit provisions of the Fund are authorized by the Texas Local Fire Fighters' Retirement Act (TLFFRA). TLFFRA provides the authority and procedure to amend benefit provisions. The plan is administered by the Board of Trustees of the Denton Firemen's Relief and Retirement Fund. The City does not have access to nor can it utilize assets within the retirement plan trust. The Fund issues a stand-alone report pursuant to GASB Statement No. 67, which may be obtained by writing the Denton Firemen's Relief and Retirement Fund at P.O. Box 2375, Denton, Texas 76202. See that report for all information about the plan fiduciary net position.

*Benefits Provided* . . . Firefighters in the Denton Fire Department are covered by the Denton Firemen's Relief and Retirement Fund

which provides service retirement, death, disability, and withdrawal benefits. These benefits fully vest after 20 years of credited service. Firefighters may retire at age 50 with 20 years of service. A partially-vested benefit is provided for firefighters who terminate employment with at least 10 but less than 20 years of service. If a terminated firefighter has a partially vested benefit, the firefighter may retire starting on the date they would have both completed 20 years of service if they had remained a Denton firefighter and attained age 50. The present plan provides a monthly normal service retirement benefit, payable in a Joint and Two- Thirds to Spouse form of annuity, equal to 2.59% of Highest 36-Month Average Salary for each year of service.

A retiring firefighter who is at least age 52 with at least 22 years of service has the option to elect the Retroactive Deferred Retirement Option Plan (RETRO DROP) which will provide a lump sum benefit and a reduced monthly benefit. The reduced monthly benefit is based on the service and Highest 36-Month Average Salary as if the firefighter had terminated employment on their selected RETRO DROP benefit calculation date, which is no earlier than the later of the date the firefighter meets the age 52 and 22 years of service requirements and the date four years prior to the date the firefighter actually retires. Upon retirement, the employee will receive, in addition to the monthly retirement benefit, a lump sum equal to the sum of (1) the amount of monthly contributions the member has made to the Fund after the RETRO DROP benefit calculation date plus (2) the total of the monthly retirement benefits the member would have received between the RETRO DROP benefit calculation date and the date retired under the plan. There are no account balances. The lump sum is calculated at the time of retirement and distributed as soon as administratively possible.

There is no provision for automatic postretirement benefit increases. The Fund has the authority to provide, and has periodically in the past provided, ad hoc postretirement benefit increases. The December 31, 2021 actuarial valuation reflects tiered ad hoc postretirement benefit increases effective July 1, 2022 of 4% for those retired 15 or more years, 3% for those retired for 10 to 15 years, and 2% for those retired five to ten years.

*Employees Covered by Benefit Terms* . . . In the December 31, 2021 actuarial valuation, the following numbers of members were covered by the Fund:

Inactive Employees or Beneficiaries Currently Receiving Benefits	92
Inactive Employees Entitled to But Not Yet Receiving Benefits	7
Active Employees	<u>211</u>
	310

*Contributions* . . . The contribution provisions of the Fund are authorized by TLFFRA. TLFFRA provides the authority and procedure to change the amount of contributions determined as a percentage of pay by each firefighter and a percentage of payroll by the City.

The contribution policy of the Denton Firemen's Relief and Retirement Fund requires contributions equal to 12.6% of pay by the firefighters, the rate elected by the firefighters according to TLFFRA. The City began contributing in December 2017 according to a new City funding policy. The ordinance defining it includes an actuarially determined contribution rate over a closed 25-year amortization period, a contribution rate of 18.5% for several years, a minimum rate standard, and City review and approval of each actuarial valuation. The December 31, 2021 actuarial valuation includes the assumption the City contribution rate will be 18.5% over the unfunded liability amortization period. The costs of administering the plan are paid from the Fund assets. The City's contributions to the Fund for the year ended September 30, 2022 were \$4,440,025.

Ultimately, the funding policy also depends upon the total return of the Fund's assets, which varies from year to year. Investment policy decisions are established and maintained by the board of trustees. For the calendar year ending December 31, 2021, the money-weighted rate of return on pension plan investments was 17.93%. This measurement of the investment performance is net of investment-related expenses, reflecting the effect of the timing of the contributions received and the benefits paid during the year.

While the contribution requirements are not actuarially determined, state law requires that each change in plan benefits adopted by the Fund must first be approved by an eligible actuary, certifying the contribution commitment by the firefighters and the assumed city contribution rate together provide an adequate contribution arrangement. Using the entry age actuarial cost method, the plan's normal cost contribution rate is determined as a percentage of payroll. The excess of the total contribution rate over the normal cost contribution rate is used to amortize the plan's unfunded actuarial accrued liability (UAAL). The number of years needed to amortize the plan's UAAL is actuarially determined using an open, level percentage of payroll method.

*Net Pension Liability* . . . The City of Denton's net pension liability was measured as of December 31, 2021, and the total pension liability used to calculate the net pension liability was determined based on the actuarial valuation as of December 31, 2021..

Total Pension Liability	\$ 142,439,646
Plan fiduciary net position	<u>140,537,577</u>
City's net pension liability	1,902,069
Plan fiduciary net position as a percentage of the total pension liability	98.7%

*Actuarial Assumptions* . . . The total pension liability in the December 31, 2021 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.50% per year
Overall payroll growth	3.00% per year, plus promotion, step and longevity increases that vary by service
Investment Rate of Return	6.75%, net of pension plan investment expense, including inflation

Mortality rates were based on the PubS-2010 (public safety) total dataset mortality tables employees and for retirees (sex distinct), projected for mortality improvement generationally using the projection scale MP-2019.

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The long-term expected rate of return on pension plan investments is reviewed for each biennial actuarial valuation and was determined using a building-block method in which expected future net real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These components are combined to produce the long-term expected rate of return by weighting the expected future net real rates of return by the target asset allocation percentage (currently resulting in 4.96%) and by adding expected inflation (2.5%). In addition, the final 6.75% assumption was selected by “rounding down” and thereby reflects a reduction of 0.71% for adverse deviation. The target allocation and expected arithmetic net real rates of return for each major asset class are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return (Arithmetic)
Equities		
Large Cap Domestic	40.0%	6.00%
Small/Mid Cap Domestic	10.0%	6.50%
International Developed	10.0%	6.50%
Alternatives		
Master Limited Partnerships	8.0%	6.50%
Real Estate	15.0%	4.50%
Fixed Income	10.0%	1.00%
Cash	2.0%	0.00%
Total	95.0%	
Weighted Average		4.96%

*Discount Rate* . . . The discount rate used to measure the total pension liability was 6.75%. No projection of cash flows was used to determine the discount rate because the December 31, 2021 actuarial valuation showed expected contributions would pay the normal cost and amortize the unfunded actuarial accrued liability (UAAL) in nine years. Because of the nine-year amortization period of the UAAL, the pension plan’s fiduciary net position is expected to be available to make all projected future benefit payments of current active and inactive members. Therefore, the long-term expected rate of return on pension plan investments of 6.75% was applied to all periods of projected benefit payments as the discount rate to determine the total pension liability.

*Changes in Net Pension Liability*

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
Balance at 12/31/2020	\$ 128,332,828	\$ 117,198,139	\$ 11,134,689
Changes for the year:			
Service cost	4,380,049	-	4,380,049
Interest	8,791,959	-	8,791,959
Contributions - employer	-	4,249,769	(4,249,769)
Contributions - employee	-	2,894,437	(2,894,437)
Net investment income	-	21,206,371	(21,206,371)
Benefit payments, including refunds of employee contributions	(4,923,273)	(4,923,273)	-
Administrative expense	-	(87,866)	87,866
Net changes	14,106,818	23,339,438	(9,232,620)
Balance at 12/31/2021	\$ 142,439,646	\$ 140,537,577	\$ 1,902,069

*Sensitivity of the Net Pension Liability to Changes in the Discount Rate . . .* The following presents the net pension liability of the City of Denton, calculated using the discount rate of 6.75%, as well as what the city's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (5.75%) or 1-percentage-point higher (7.75%) than the current rate:

	1% Decrease in Discount Rate (5.75%)	Current Discount Rate (6.75%)	1% Increase in Discount Rate (7.75%)
City's Net Pension Liability	\$20,586,807	\$ 1,902,069	\$(13,710,288)

*Pension Plan Fiduciary Net Position . . .* The plan fiduciary net position reported above is the same as reported by the Fund. Detailed information about the plan fiduciary net position is available in the Fund's separately issued audited financial statements, which are reported using the economic resources measurement focus and the accrual basis of accounting in conformity with accounting principles generally accepted in the United States of America. Revenues are recorded when earned, and expenses are recorded when a liability is incurred, regardless of the timing of the related cash flows. Investments are reported at fair value, the price that would be recognized to sell an asset in an orderly transaction between market participants at the measurement date.

*Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions . . .* For the year ended September 30, 2022, the City recognized pension expense of \$338,204. Amounts recognized in the fiscal year represent changes between the current and prior year measurement dates. This amount is included as part of personnel services expenses.

At September 30, 2022, the City reported deferred outflows of resources and deferred inflows of resources related to the Fund from the following sources:

	Deferred Outflow of Resources	Deferred Inflows of Resources
Differences between projected and actual investment earnings	\$ -	\$(16,227,774)
Contributions subsequent to the measurement date	3,248,454	-
Differences between expected and actual economic experience	6,297,607.00	(586,533)
Difference in assumption changes	3,019,507	-
Total	\$ 12,565,568	\$(16,814,307)

Deferred outflows of resources related to pensions resulting from contributions subsequent to the measurement date of \$3,248,454 will be recognized as a reduction of the net pension liability for the measurement year ending December 31, 2022 and the City's fiscal year ending September 30, 2023. Other amounts reported as deferred outflows and inflows of resources related to pensions will be recognized in pension expense (income) as follows:

For the Year Ended September 30,	
2023	\$(3,061,592)
2024	(4,261,959)
2025	(2,424,421)
2026	(1,391,775)
2027	1,187,642
Thereafter	2,454,912
Total	\$(7,497,193)

**OTHER POST EMPLOYMENT BENEFITS . . .** The City of Denton provides for two post-employment benefit (OPEB) plans; one provides for postemployment medical care through a single-employer defined benefit medical plan (Medical OPEB), and the other is the Texas Municipal Retirement System Supplemental Death Benefits Fund (TMRS SDBF), a singleemployer defined benefit OPEB plan. Both plans are described in detail following.

Aggregate amounts for the two OPEB plans are as follows:

	<u>Medical OPEB</u>	<u>TMRS SDBF</u>	<u>Total</u>
Total OPEB Liability	\$ 49,266,518	\$ 5,376,347	\$ 54,642,865
Deferred outflows of resources	\$ 6,322,148	\$ 1,204,610	7,526,758
Deferred inflows of resources	4,135,547	378,134	4,513,681
OPEB expense	4,744,360	548,705	5,293,065

*Plan Description . . .* The City of Denton provides post-employment medical care (OPEB) for retired employees through a singleemployer defined benefit medical plan. The plan provides medical benefits for eligible retirees, their spouses and dependents through the City's group health insurance plans, which covers both active and retired members. The benefits, benefit levels, and contribution rates are recommended annually by the City management as part of the budget process. Any changes in rate subsidies for retirees are approved by the City Council. Since an irrevocable trust has not been established, the plan is not accounted for as a trust fund. The plan does not issue a separate financial report.

*Benefits Provided . . .* The City provides post-employment medical, dental, and vision care benefits to its retirees. To be eligible for benefits, an employee must qualify for retirement under the Texas Municipal Retirement System or the Denton Firemen's Relief and Retirement Plan. Retirees must make a one-time irrevocable decision to choose benefits at the time of retirement, after that their eligibility for the benefits ceases. However, retirees can move between plans and can add and drop dependents based on qualifying events.

All medical care benefits are provided through the City's self-insured health plan. The benefit levels are the same as those afforded to active employees.

In the December 31, 2021 actuarial valuation, the following number of employees were covered by the benefit terms:

Inactive Employees or Beneficiaries Currently Receiving Benefits	249
Active Employees	<u>1,540</u>
	1,789

*Funding Policy . . .* The plan premium rates are recommended annually by City management and approved by the City Council as part of the annual budget. The retiree's contribution is the full amount of the actuarially determined blended premium rate less a subsidy dependent upon years of service at retirement. By providing retirees with access to the City's healthcare plans based on the same rates it charges to active employees, the City is in effect providing a subsidy to retirees. This implied subsidy exists because, on average, retiree health care costs are higher than active employee healthcare costs. By the City not contributing anything toward this plan in advance, the City employs a pay-as-you-go method through paying the higher rate for active employees each year. The City contributes \$40 per month for each five-year increment of service, up to \$200 per month, toward the cost of retiree coverage. The full cost for dental and vision is paid by the retiree. Retirees are required to enroll in Medicare Part B once eligible (age 65) and are moved into a fully-insured Medicare Supplement plan at that time. The same City contribution level applies to the supplement.

*Medical OPEB Liability. . .* The City's medical OPEB liability of \$49,266,518 was measured as of December 31, 2021, the same date as the actuarial valuation.

The medical OPEB liability in the December 31, 2021 actuarial valuation was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified.

Significant method and assumptions used for this fiscal year valuation were as follows:

Valuation Date	December 31, 2021
Actuarial cost method	Individual Entry-Age Normal Method
Discount Rate	2.75% as of December 31, 2019 2.00% as of December 31, 2020 1.84% as of December 31, 2021
Inflation Rate	2.50% per annum
Projected salary increases	3.50% to 11.50% for TMRS, including inflation 3.00% to 9.18% for Fire, including inflation
Healthcare trend rates	Initial rate of 7.00% declining to an ultimate rate of 4.15% after 15 years
Mortality	<b>TMRS:</b> For healthy retirees, the gender-distinct 2019 Municipal Retirees of Texas mortality tables are used. The rates are projected on a fully generational basis using the ultimate mortality improvement rates in the MP tables to account for future mortality improvements. <b>Firefighters:</b> The gender-distinct PubS-2010 (safety employees) total data set mortality are used. The rates are projected on a fully generational basis using the projection scale of MP-2019.
Participation Rates	60% for employees retiring at age 65 or older; 45% for employees retiring between the ages 50 and 64; 5% for employees retiring between the ages of 45 and 49; 0% for retirees under the age 50 at retirement

*Changes in the Medical OPEB Liability*

	Total Medical OPEB Liability
Balance at 12/31/2020	\$ 48,918,032
Changes for the year:	
Service cost	3,554,317
Interest	995,640
Difference between expected and actual experience	(1,283,436)
Changes of assumptions	(1,091,668)
Benefit payments	(1,826,367)
Net Changes	348,486
Balance at 12/31/2021	\$ 49,266,518

Total OPEB liability as a percentage of covered payroll was 38.92%.

*Sensitivity of the Medical OPEB Liability to Changes in the Discount Rate*

The following schedule shows the impact of the medical OPEB liability if the discount rate used was 1% less than (1.00%) and 1% greater than (3.00%) the discount rate that was used (2.00%) in measuring the medical OPEB liability:

	1% Decrease (1.00%)	Current Discount Rate (2.00%)	1% Increase (3.00%)
Total medical OPEB Liability	\$54,844,998	\$ 49,266,518	\$44,418,232

*Sensitivity of the Medical OPEB Liability to Changes in the Healthcare Cost Trend Rate Assumption*

The following schedule shows the impact of the medical OPEB liability if the healthcare trend cost rate used was 1% less than (6.00%) and 1% more than (8.00%) the healthcare cost trend rate that was used (7.00%) in measuring the medical OPEB liability:

	1% Decrease (6.00%)	Current Healthcare Cost Trend Rate (7.00%)	1% Increase (8.00%)
Total medical OPEB Liability	\$45,370,854	\$ 49,266,518	\$53,902,870

*Medical OPEB Expense and Deferred outflows of Resources and Deferred Inflows of Resources Related to Medical OPEB*

For the year ended September 30, 2022, the City recognized medical OPEB expense of \$4,744,360. At September 30, 2022, the City reported deferred outflows of resources and deferred inflows of resources related to medical OPEB from the following

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual economic experience	\$ 254,892	\$ 2,212,338
Changes in actuarial assumptions	4,700,449	1,923,209
Contribution subsequent to the measurement date	1,366,807	-
Totals	<u>\$ 6,322,148</u>	<u>\$ 4,135,547</u>

Deferred outflows of resources related to OPEB contributions subsequent to the measurement date of \$1,366,807 will be recognized as a reduction of the medical OPEB liability for the City's fiscal year ending September 30, 2023. Other amounts reported as deferred outflows of resources related to the medical OPEB will be recognized in OPEB expense as follows:

Year Ending September 30,	
2023	\$ 194,403
2024	194,403
2025	194,403
2026	186,610
2027	(29,140)
Thereafter	<u>79,115</u>
Total	\$ 819,794

*Supplemental Death Benefit Fund* . . . The City of Denton voluntarily participates in the Texas Municipal Retirement System Supplemental Death Benefits Fund (TMRS SDBF). The SDBF is a defined benefit group-term life insurance Other Postemployment Benefit (OPEB) plan as defined by GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. No assets are accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement No. 75. It is established and administered in accordance with the TMRS Act identically to the City's pension plan.

*Benefits provided* . . . The SDBF provides group-term life insurance to City employees who are active members in TMRS, including or not including retirees. The City Council opted into this system via an ordinance, and may terminate coverage under, and discontinue participation in, the SDBF by adopting an ordinance before November 1st of any year to be effective the following January 1st.

Payments from this fund are similar to group-term life insurance benefits and are paid to the designated beneficiaries upon the receipt of an approved application for payment. The death benefit for active employees provides a lump-sum payment approximately equal to the employee's annual salary (calculated based on the employee's actual earnings for the 12-month period preceding the month of death). The death benefit for retirees is considered an "other postemployment benefit" (OPEB) and is a fixed amount of \$7,500. As the SDBF covers both active and retiree participants with no segregation of assets, the SDBF is considered to be an unfunded OPEB plan.

In the December 31, 2021 actuarial valuation, the following number of employees were covered by the benefit terms:

Inactive Employees or Beneficiaries Currently Receiving Benefits	647
Inactive Employees entitled to but not yet receiving benefits	217
Active Employees	<u>1,323</u>
	2,187

The City contributes to the SDBF at a contractually required rate as determined by an annual actuarial valuation, which was 0.18% for 2022 and 0.18% for 2021, of which 0.09% for 2022 and 0.08% for 2021, represented the retiree-only portion for each year, as a percentage of annual covered payroll. The rate is equal to the cost of providing one-year term life insurance. The funding policy for the SDBF program is to assure that adequate resources are available to meet all the death benefit payments for the upcoming year; the intent is not to prefund retiree term life insurance during employees' entire careers. The City's contribution to the SDBF for two years ended September 30, 2022 and 2021 were \$190,063 and \$179,918 respectively, year.

## FINANCIAL INFORMATION

**TABLE 12 - CHANGES IN NET POSITION OF GOVERNMENTAL ACTIVITIES**

	Fiscal Year Ended September 30,				
<u>Revenues:</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>
Program Revenue:					
Charges for Services	\$ 25,203,727	\$ 18,751,972	\$ 17,442,268	\$ 20,276,028	\$ 20,212,367
Operating Grants and Contributions	9,545,392	8,607,304	8,991,320	4,092,532	3,697,696
Capital Grants and Contributions	34,406,757	23,945,640	34,911,879	28,085,591	33,991,306
General Revenue:					
Property Tax	79,552,638	78,243,553	75,431,860	71,351,314	67,185,610
Sales Tax	53,264,724	45,404,857	39,337,834	38,330,825	38,270,026
Other Taxes/Fees	42,503,178	35,648,023	32,100,345	29,873,654	29,384,183
Miscellaneous	7,125,797	5,876,421	7,111,569	10,119,145	6,827,003
Total Revenue	<u>\$ 251,602,213</u>	<u>\$ 216,477,770</u>	<u>\$ 215,327,075</u>	<u>\$ 202,129,089</u>	<u>\$ 199,568,191</u>
<u>Expenditures:</u>					
General Government	\$ 40,369,454	\$ 37,401,990	\$ 37,921,928	\$ 39,051,942	\$ 37,968,945
Public Safety	87,970,791	93,415,418	82,119,480	77,883,435	71,945,219
Public Works	25,489,369	14,063,366	26,049,847	24,502,864	25,683,779
Parks and Recreation	22,787,282	19,295,206	15,759,371	17,710,634	17,422,273
Interest on Long-Term Debt	8,571,877	7,380,293	6,757,736	6,750,917	5,379,149
Total Expenses	<u>\$ 185,188,773</u>	<u>\$ 171,556,273</u>	<u>\$ 168,608,362</u>	<u>\$ 165,899,792</u>	<u>\$ 158,399,365</u>
Increase in Net Position before Transfers	\$ 66,413,440	\$ 44,921,497	\$ 46,718,713	\$ 36,229,297	\$ 41,168,826
Transfers	2,913,731	1,975,432	1,296,624	1,018,664	(1,104,290)
Increase (Decrease) in Net Position	\$ 69,327,171	\$ 46,896,929	\$ 48,015,337	\$ 37,247,961	\$ 40,064,536
Prior Period Adjustment	9,072,792 <sup>(3)</sup>	-	-	-	(16,960,959) <sup>(2)</sup>
Net Position at Beginning of Year	328,693,298	281,796,369	233,781,032	196,533,071	173,429,494
Net Position at End of Year	<u>\$ 407,093,261 <sup>(1)</sup></u>	<u>\$ 328,693,298</u>	<u>\$ 281,796,369</u>	<u>\$ 233,781,032</u>	<u>\$ 196,533,071</u>

(1) Unrestricted net position, that part of the net position that may be used to meet the City's ongoing obligations, was (\$2,815,218) as of September 30, 2022. This table refers to governmental activities only and does not include enterprise funds such as solid waste or utility activities.

(2) Represents a net adjustment due to GASB 75 "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions".

(3) An adjustment has been recorded to account for the recognition of intergovernmental revenues received in advance and held as an unearned revenue liability.

**TABLE 12A - GENERAL FUND REVENUES AND EXPENDITURE HISTORY**

	Fiscal Year Ended September 30,				
<u>Revenues:</u>	2022	2021	2020	2019	2018
Taxes	\$ 102,491,584	\$ 95,276,289	\$ 88,273,338	\$ 85,149,284	\$ 83,621,197
Licenses and Permits	9,058,717	5,939,320	5,225,128	3,889,820	3,739,691
Franchise Fee	19,910,133	17,961,984	16,196,987	13,443,408	13,263,247
Fines and Forfeitures	1,875,399	1,572,587	2,279,771	3,651,697	3,523,068
Fees for Service	9,630,662	9,354,890	6,803,459	6,981,182	7,223,541
Interest Revenue	(127,267)	160,094	793,413	1,114,348	514,938
Intergovernmental	2,508,006	4,166,856	5,075,506	1,339,188	1,005,259
Miscellaneous	322,173	385,998	313,541	470,502	432,820
Total Revenues	<u>\$ 145,669,407</u>	<u>\$ 134,818,018</u>	<u>\$ 124,961,143</u>	<u>\$ 116,039,429</u>	<u>\$ 113,323,761</u>
<u>Expenditures:</u>					
General Government	\$ 26,563,210	\$ 26,460,924	\$ 26,969,064	\$ 29,967,473	\$ 27,725,208
Public Safety	86,682,395	80,847,727	75,985,961	68,174,782	63,268,420
Public Works	2,956,465	2,919,114	3,021,395	3,035,748	3,077,807
Parks and Recreation	13,308,304	11,259,612	8,872,556	9,786,783	12,332,725
Capital Outlay	540,289	476,296	442,932	737,271	623,931
Debt Service: Principal Retirement	-	-	-	4,171	50,052
Total Expenditures	<u>\$ 130,050,663</u>	<u>\$ 121,963,673</u>	<u>\$ 115,291,908</u>	<u>\$ 111,706,228</u>	<u>\$ 107,078,143</u>
Excess (Deficiency) of Revenues Over Expenditures	\$ 15,618,744	\$ 12,854,345	\$ 9,669,235	\$ 4,333,201	\$ 6,245,618
<u>Other Financing Sources (Uses):</u>					
Transfers In	\$ 2,728	\$ 33,964	\$ -	\$ -	\$ -
Sale of Capital Assets	568,128	326,682	112,824	17,033	111,674
Transfers (Out)	(9,230,186)	(8,497,210)	(6,738,692)	(3,928,775)	(7,810,680)
Total Other Financing Sources (Uses)	<u>\$ (8,659,330)</u>	<u>\$ (8,136,564)</u>	<u>\$ (6,625,868)</u>	<u>\$ (3,911,742)</u>	<u>\$ (7,699,006)</u>
Net Changes in Fund Balance	\$ 6,959,414	\$ 4,717,781	\$ 3,043,367	\$ 421,459	\$ (1,453,388)
Fund Balance at Beginning of Year	<u>38,499,992</u>	<u>33,782,211</u>	<u>30,738,844</u>	<u>30,317,385</u>	<u>31,770,773</u>
Fund Balance at End of Year	<u>\$ 45,459,406</u>	<u>\$ 38,499,992</u>	<u>\$ 33,782,211</u>	<u>\$ 30,738,844</u>	<u>\$ 30,317,385</u>

**TABLE 13 - MUNICIPAL SALES TAX HISTORY**

The City has adopted the Municipal Sales and Use Tax Act, Texas Tax Code, Chapter 321, which grants the City the power to impose and levy a 1% Local Sales and Use Tax within the City; the proceeds are credited to the General Fund and are not pledged to the payment of the Obligations. Collections and enforcements are effected through the offices of the Comptroller of Public Accounts, State of Texas, who remits the proceeds of the tax, after deduction of a 2% service fee, to the City monthly. In January 1994, the voters of the City approved the imposition of an additional one-half of one percent ( $\frac{1}{2}$  of 1%) for property tax reduction. In September 2003, the voters of the City approved the imposition of an additional one-half of one percent ( $\frac{1}{2}$  of 1%) for the Denton County Transportation Authority. The implementation of this tax began January 2004, and is allocated directly to the Denton County Transportation Authority.

Fiscal Year Ended 9/30	Total Collected <sup>(1)</sup>	% of Ad Valorem Tax Levy	Equivalent of Ad Valorem Tax Rate	Per Capita
2019	\$ 38,330,825	54.15%	\$ 0.3387	\$ 280
2020	39,337,834	52.42%	0.3117	279
2021	45,404,857	58.24%	0.3343	316
2022	53,264,724	67.05%	0.3698	362
2023 <sup>(2)</sup>	22,357,725	24.28%	0.1337	148

(1) Source: City of Denton Annual Program of Services.

(2) Collections through April 1, 2023.

The sales tax breakdown for the City is as follows:

Property Tax Relief	0.50¢
Denton County Transportation Authority	0.50¢
City Sales & Use Tax	1.00¢
State Sales & Use Tax	<u>6.25¢</u>
Total	8.25¢

## FINANCIAL POLICIES

*Basis of Accounting* . . . The accounting policies of the City conform to generally accepted accounting principles of the Governmental Accounting Standards Board and program standards adopted by the Government Finance Officers Association of the United States and Canada. The GFOA has awarded a Certificate of Achievement for Excellence in Financial Reporting to the City of Denton for each fiscal year since 1983. The City's current report will be submitted to GFOA to determine its eligibility for another Certificate.

The City has also received the GFOA's award for Distinguished Budget Presentation each year since 1986.

The measurement focuses for the Enterprise Funds, Internal Service Funds and Nonexpendable Trust Funds are income determination and cost of service, respectively. Accordingly, the accrual basis, whereby revenues and expenses are identified in the accounting period in which they are earned and incurred and net income, is utilized for these funds. The modified accrual basis, whereby revenues are recognized when they become both measurable and available for use during the year and expenditures are recognized when the related fund liability is incurred, is used for all other funds.

*Fund Balance Policy* . . . The City strives to achieve and maintain an unassigned fund balance in the General Fund equal to 20% of budgeted expenditures. An additional 5% resiliency reserve (25% combined total) may be maintained to safeguard against unusual financial circumstances or economic downturns.

*Budgetary Procedures* . . . As prescribed by City Charter, the City Manager, within the time period required by law, submits to the City Council a proposed budget for the fiscal year beginning the following October 1. The budget includes proposed expenditures and revenues required to fund the expenditures. Following Council considerations, amendments and refinements, a public hearing is ordered and conducted for the purpose of obtaining taxpayer comments. The budget is finally approved and adopted by passage of an ordinance by the City Council prior to the beginning of the fiscal year. The budget is adopted on a basis consistent with generally accepted accounting principles. It is the goal of the City to achieve and maintain an unassigned fund balance in the general fund equal to 20% of budgeted expenditures. An additional 5% resiliency reserve (25% combined total) may be maintained to safeguard against unusual financial circumstances and/or economic downturns.



## INVESTMENTS

The City invests its investable funds in investments authorized by Texas law in accordance with investment policies approved by the City Council. Both Texas law and the City's investment policies are subject to change.

**LEGAL INVESTMENTS** . . . Under State law, the City is authorized to invest in: (1) obligations, including letters of credit, of the United States or its agencies and instrumentalities, including the Federal Home Loan Banks; (2) direct obligations of the State or its agencies and instrumentalities; (3) collateralized mortgage obligations issued by a federal agency or instrumentality of the United States, the underlying security for which is guaranteed by an agency or instrumentality of the United States; (4) other obligations, the principal and interest of which are unconditionally guaranteed or insured by, or backed by the full faith and credit of, the State or the United States or their respective agencies and instrumentalities, including obligations that are fully guaranteed or insured by the Federal Deposit Insurance Corporation (the "FDIC") or by the explicit full faith and credit of the United States; (5) obligations of states, agencies, counties, cities, and other political subdivisions of any state rated as to investment quality by a nationally recognized investment rating firm not less than A or its equivalent; (6) bonds issued, assumed, or guaranteed by the State of Israel; (7) interest-bearing banking deposits that are guaranteed or insured by the FDIC or the National Credit Union Share Insurance Fund (the "NCUSIF") or their respective successors; (8) interest-bearing banking deposits, other than those described in clause (7), that (i) are invested through a broker or institution with a main office or branch office in this state and selected by the City in compliance with the PFIA, (ii) the broker or institution arranges for the deposit of the funds in one or more federally insured depository institutions, wherever located, for the City's account, (iii) the full amount of the principal and accrued interest of the banking deposits is insured by the United States or an instrumentality of the United States, and (iv) the City appoints as its custodian of the banking deposits, in compliance with the PFIA, the institution in clause (8)(i) above, a bank, or a broker-dealer; (9) certificates of deposit and share certificates meeting the requirements of the PFIA (i) that are issued by an institution that has its main office or a branch office in the State and are guaranteed or insured by the FDIC or the NCUSIF, or their respective successors, or are secured as to principal by obligations described in clauses (1) through (8), above, or secured in accordance with Chapter 2257, Texas Government Code, or in any other manner and amount provided by law for City deposits, or (ii) where (a) the funds are invested by the City through a broker or institution that has a main office or branch office in the State and selected by the City in compliance with the PFIA, (b) the broker or institution arranges for the deposit of the funds in one or more federally insured depository institutions, wherever located, for the account of the City, (c) the full amount of the principal and accrued interest of each of the certificates of deposit is insured by the United States or an instrumentality of the United States; and (d) the City appoints, in compliance with the PFIA, the institution in clause (9)(ii)(a) above, a bank, or broker-dealer as custodian for the City with respect to the certificates of deposit; (10) fully collateralized repurchase agreements that have a defined termination date, are secured by a combination of cash and obligations described by clauses (1) or (12), which are pledged to the City, held in the City's name, and deposited at the time the investment is made with the City or with a third party selected and approved by the City, and are placed through a primary government securities dealer, as defined by the Federal Reserve, or a financial institution doing business in the State; (11) certain bankers' acceptances with a stated maturity of 270 days or less, if the short-term obligations of the accepting bank, or of the holding company of which the bank is the largest subsidiary, are rated not less than A-1 or P-1 or the equivalent by at least one nationally recognized credit rating agency; (12) commercial paper with a stated maturity of 365 days or less that is rated at least A-1 or P-1 or an equivalent by either (i) two nationally recognized credit rating agencies, or (ii) one nationally recognized credit rating agency if the commercial paper is fully secured by an irrevocable letter of credit issued by a United States or state bank; (13) no-load money market mutual funds registered with and regulated by the Securities and Exchange Commission and complies with Securities and Exchange Commission Rule 2a-7; (14) no-load mutual funds that are registered and regulated by the Securities and Exchange Commission that have a weighted maturity of less than two years and either (i) have a duration of one year or more and are invested exclusively in obligations approved in this paragraph, or (ii) have a duration of less than one year and the investment portfolio is limited to investment grade securities, excluding asset backed securities; (15) guaranteed investment contracts that have a defined termination date and are secured by obligations described in clause (1), excluding obligations which the City is explicitly prohibited from investing in, and in an amount at least equal to the amount of bond proceeds invested under such contract; and (16) securities lending programs if (i) the securities loaned under the program are 100% collateralized, including accrued income, (ii) a loan made under the program allows for termination at any time, (iii) a loan made under the program is either secured by (a) obligations described in clauses (1) through (8) above, (b) irrevocable letters of credit issued by a state or national bank that is continuously rated by a nationally recognized investment rating firm at not less than A or its equivalent, or (c) cash invested in obligations described in clauses (1) through (8) above, clauses (12) through (14) above, or an authorized investment pool, (iv) the terms of a loan made under the program require that the securities being held as collateral be pledged to the City, held in the City's name, and deposited at the time the investment is made with the City or with a third party designated by the City, (v) a loan made under the program is placed through either a primary government securities dealer or a financial institution doing business in the State, and (vi) the agreement to lend securities has a term of one year or less.

The City may invest in such obligations directly or through government investment pools that invest solely in such obligations provided that the pools are rated no lower than "AAA" or "AAA-m" or an equivalent by at least one nationally recognized rating service. The City may also contract with an investment management firm registered under the Investment Advisers Act of 1940 (15 U.S.C. Section 80b-1 et seq.) or with the State Securities Board to provide for the investment and management of its public funds or other funds under its control for a term up to two years, but the City retains ultimate responsibility as fiduciary of its assets. In order to renew or extend such a contract, the City must do so by order, ordinance, or resolution.

The City is specifically prohibited from investing in (1) obligations whose payment represents the coupon payments on the outstanding principal balance of the underlying mortgage-backed security collateral and pays no principal (2) obligations whose payment represents the principal stream of cash flow from the underlying mortgage-backed security and bears no interest (3) collateralized mortgage obligations that have a stated final maturity of greater than 10 years and (4) collateralized mortgage obligations the interest rate of which is determined by an index that adjusts opposite to the changes in a market index.

**INVESTMENT POLICIES . . .** Under Texas law, the City is required to invest its funds under written investment policies that primarily emphasize safety of principal and liquidity; that address investment diversification, yield, maturity, and the quality and capability of investment management; and that includes a list of authorized investments for City funds, maximum allowable stated maturity of any individual investment, the maximum average dollar-weighted maturity allowed for pooled fund groups, methods to monitor the market price of investments acquired with public funds, a requirement for settlement of all transactions, except investment pool funds and mutual funds, on a delivery versus payment basis, and procedures to monitor rating changes in investments acquired with public funds and the liquidation of such investments consistent with the Public Funds Investment Act. All City funds must be invested consistent with a formally adopted "Investment Strategy Statement" that specifically addresses each fund's investment. Each Investment Strategy Statement will describe its objectives concerning: (1) suitability of investment type, (2) preservation and safety of principal, (3) liquidity, (4) marketability of each investment, (5) diversification of the portfolio, and (6) yield.

Under Texas law, City investments must be made "with judgment and care, under prevailing circumstances, that a person of prudence, discretion, and intelligence would exercise in the management of the person's own affairs, not for speculation, but for investment, considering the probable safety of capital and the probable income to be derived." At least quarterly the investment officers of the City shall submit an investment report detailing: (1) the investment position of the City, (2) that all investment officers jointly prepared and signed the report, (3) the beginning market value, the ending market value and the fully accrued interest during the reporting period of each pooled fund group, (4) the book value and market value of each separately listed asset at the end of the reporting period, (5) the maturity date of each separately invested asset, (6) the account or fund or pooled fund group for which each individual investment was acquired, and (7) the compliance of the investment portfolio as it relates to: (a) adopted investment strategy statements and (b) state law. No person may invest City funds without express written authority from the City Council.

Effective September 1, 2019, the investment officer of a local government is allowed to invest bond proceeds or pledged revenue only to the extent permitted by the PFIA and in accordance with (i) statutory provisions governing the debt issuance (or lease, installment sale, or other agreement) and (ii) the local government's investment policy regarding the debt issuance or the agreement.

**ADDITIONAL PROVISIONS . . .** Under Texas law the City is additionally required to: (1) annually review its adopted policies and strategies; (2) adopt a rule, order, ordinance or resolution stating that it has reviewed its investment policy and investment strategies and records any changes made to either its investment policy or investment strategy in the respective rule, order, ordinance or resolution; (3) require any investment officers with personal business relationships or relatives with firms seeking to sell securities to the City to disclose the relationship and file a statement with the Texas Ethics Commission and the City Council; (4) require the registered principal of firms seeking to sell securities to the City to: (a) receive and review the City's investment policy, (b) acknowledge that reasonable controls and procedures have been implemented to preclude investment transactions conducted between the City and the business organization that are not authorized by the City's investment policy (except to the extent that this authorization is dependent on an analysis of the makeup of the City's entire portfolio or requires an interpretation of subjective investment standards), and (c) deliver a written statement attesting to these requirements; (5) perform an annual audit of the management controls on investments and adherence to the City's investment policy; (6) provide specific investment training for the Treasurer, Chief Financial Officer and investment officers; (7) restrict reverse repurchase agreements to not more than 90 days and restrict the investment of reverse repurchase agreement funds to no greater than the term of the reverse repurchase agreement; (8) restrict the investment in no-load mutual funds in the aggregate to no more than 15% of the entity's monthly average fund balance, excluding bond proceeds and reserves and other funds held for debt service; (9) require local government investment pools to conform to the new disclosure, rating, net asset value, yield calculation, and advisory board requirements; and (10) at least annually review, revise, and adopt a list of qualified brokers that are authorized to engage in investment transactions with the City.

**TABLE 14- CURRENT INVESTMENTS <sup>(1)</sup>**

As of April 1, 2023, the City's available funds were invested as follows:

Description	Market Value Percent	Market Value	Book Value
Treasury Securities	34.96%	\$ 260,480,645	\$ 262,589,489
Federal Agency Issues - Coupon	26.23%	195,419,362	196,581,287
Federal Agency Issues - Amortizing	1.34%	9,982,484	9,981,458
Federal Agency Issues - Step-Up	1.34%	9,974,011	10,000,000
Commercial Paper	13.52%	100,717,660	100,776,333
Local Government Inv. Pool- TexSTAR	1.34%	10,000,000	10,000,000
Local Government Inv. Pool- TexPool	17.45%	130,000,000	130,000,000
Demand Deposits/Wells Fargo <sup>(2)</sup>	3.82%	28,439,762	28,439,762
	<u>100.00%</u>	<u>\$ 745,013,924</u>	<u>\$ 748,368,329</u>

(1) There are no City funds invested in derivative securities, i.e., securities whose rate of return is determined by reference to some other instrument, index or commodity.

(2) Insured up to the FDIC limit with uninsured amounts collateralized by U.S. federal agency securities at a minimum of 102% of principal plus accrued interest.

TexSTAR is a local government investment pool for whom Hilltop Securities Asset Management, Inc. provides customer service and marketing for the pool. TexSTAR currently maintains a "AAAm" rating from Standard & Poor's and has an investment objective of achieving and maintaining a stable net asset value of \$1.00 per share. Daily investments or redemptions of funds is allowed by the participants.

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## TAX MATTERS

### OPINIONS

The Certificates . . . On the date of initial delivery of the Certificates, McCall, Parkhurst and Horton L.L.P., Dallas, Texas, Bond Counsel to the City, will render its opinion that, in accordance with Existing Law, (1) interest on the Certificates for federal income tax purposes will be excludable from the "gross income" of the holders thereof and (2) the Certificates will not be treated as "specified private activity bonds" the interest on which would be included as an alternative minimum tax preference item under section 57(a)(5) of the Code. Except as stated above, Bond Counsel to the City will express no opinion as to any other federal, state or local tax consequences of the purchase, ownership or disposition of the Certificates. See Appendix C – Forms of Bond Counsel's Opinions.

The Bonds . . . On the date of initial delivery of the Bonds, Bond Counsel to the City, will render its opinion that, in accordance with statutes, regulations, published rulings and court decisions existing on the date thereof ("Existing Law"), (1) interest on the Bonds for federal income tax purposes will be excludable from the "gross income" of the holders thereof and (2) the Bonds will not be treated as "specified private activity bonds" the interest on which would be included as an alternative minimum tax preference item under section 57(a)(5) of the Internal Revenue Code of 1986 (the "Code"). Except as stated above, Bond Counsel to the City will express no opinion as to any other federal, state or local tax consequences of the purchase, ownership or disposition of the Bonds. See Appendix C – Forms of Bond Counsel's Opinions.

In rendering each of the foregoing opinions, Bond Counsel to the City will rely upon (a) certain information and representations of the City, including information and representations contained in the City's federal tax certificate with respect to each Obligation issue, and (b) covenants of the City contained in the Obligation documents relating to certain matters, including arbitrage and the use of the proceeds of the Obligations and the property financed or refinanced therewith. Failure by the City to observe the aforementioned representations or covenants could cause the interest on the Obligations to become taxable retroactively to the date of issuance.

The Code and the regulations promulgated thereunder contain a number of requirements that must be satisfied subsequent to the issuance of the Obligations in order for interest on the Obligations to be, and to remain, excludable from gross income for federal income tax purposes. Failure to comply with such requirements may cause interest on the Obligations to be included in gross income retroactively to the date of issuance of the Obligations. The opinion of Bond Counsel to the City is conditioned on compliance by the City with the covenants and other requirements described in the preceding paragraph, and Bond Counsel to the City has not been retained to monitor compliance with these requirements subsequent to the issuance of the Obligations.

Bond Counsel's opinion represents its legal judgment based upon its review of Existing Law and the reliance on the aforementioned information, representations and covenants. Bond Counsel's opinion is not a guarantee of a result. The Existing Law is subject to change by the Congress and to subsequent judicial and administrative interpretation by the courts and the Department of the Treasury. There can be no assurance that such Existing Law or the interpretation thereof will not be changed in a manner which would adversely affect the tax treatment of the purchase, ownership or disposition of the Obligations.

A ruling was not sought from the Internal Revenue Service by the City with respect to the Obligations or the projects being financed or refinanced therewith. Bond Counsel's opinion represents its legal judgment based upon its review of Existing Law and the representations of the City that it deems relevant to render such opinion and is not a guarantee of a result. No assurances can be given as to whether or not the Internal Revenue Service will commence an audit of the Obligations, or as to whether the Internal Revenue Service would agree with the opinion of Bond Counsel. If an audit is commenced, under current procedures the Internal Revenue Service is likely to treat the City as the taxpayer and the holders of the Obligations may have no right to participate in such procedure. No additional interest will be paid upon any determination of taxability.

### FEDERAL INCOME TAX ACCOUNTING TREATMENT OF ORIGINAL ISSUE DISCOUNT

The initial public offering price to be paid for one or more maturities of the Obligations may be less than the principal amount thereof or one or more periods for the payment of interest on the Obligations may not be equal to the accrual period or be in excess of one year (the "Original Issue Discount Bonds"). In such event, the difference between (i) the "stated redemption price at maturity" of each Original Issue Discount Bond, and (ii) the initial offering price to the public of such Original Issue Discount Bond would constitute original issue discount. The "stated redemption price at maturity" means the sum of all payments to be made on the Obligations less the amount of all periodic interest payments. Periodic interest payments are payments which are made during equal accrual periods (or during any unequal period if it is the initial or final period) and which are made during accrual periods which do not exceed one year.

Under Existing Law, any owner who has purchased such Original Issue Discount Bond in the initial public offering is entitled to exclude from gross income (as defined in section 61 of the Code) an amount of income with respect to such Original Issue Discount Bond equal to that portion of the amount of such original issue discount allocable to the accrual period. For a discussion of certain collateral federal tax consequences, see discussion set forth below.

In the event of the redemption, sale or other taxable disposition of such Original Issue Discount Bond prior to stated maturity, however, the amount realized by such owner in excess of the basis of such Original Issue Discount Bond in the hands of such owner (adjusted upward by the portion of the original issue discount allocable to the period for which such Original Issue Discount Bond was held by such initial owner) is includable in gross income.

Under Existing Law, the original issue discount on each Original Issue Discount Bond is accrued daily to the stated maturity thereof (in amounts calculated as described below for each six-month period ending on the date before the semiannual anniversary dates of the date of the Obligations and ratably within each such six-month period) and the accrued amount is added to an initial owner's basis for such Original Issue Discount Bond for purposes of determining the amount of gain or loss recognized by such owner upon the redemption, sale or other disposition thereof. The amount to be added to basis for each accrual period is equal to (a) the sum of the issue price and the amount of original issue discount accrued in prior periods multiplied by the yield to stated maturity (determined on the basis of compounding at the close of each accrual period and properly adjusted for the length of the accrual period) less (b) the amounts payable as current interest during such accrual period on such Original Issue Discount Bond.

The federal income tax consequences of the purchase, ownership, redemption, sale or other disposition of Original Issue Discount Bonds which are not purchased in the initial offering at the initial offering price may be determined according to rules which differ from those described above. All owners of Original Issue Discount Bonds should consult their own tax advisors with respect to the determination for federal, state and local income tax purposes of the treatment of interest accrued upon redemption, sale or other disposition of such Original Issue Discount Bonds and with respect to the federal, state, local and foreign tax consequences of the purchase, ownership, redemption, sale or other disposition of such Original Issue Discount Bonds.

#### **COLLATERAL FEDERAL INCOME TAX CONSEQUENCES**

The following discussion is a summary of certain collateral federal income tax consequences resulting from the purchase, ownership or disposition of the Obligations. This discussion is based on Existing Law, all of which are subject to change or modification, retroactively.

The following discussion is applicable to investors, other than those who are subject to special provisions of the Code, such as financial institutions, property and casualty insurance companies, life insurance companies, individual recipients of Social Security or Railroad Retirement benefits, individuals allowed an earned income credit, certain S corporations with subchapter C earnings and profits, foreign corporations subject to the branch profits tax, taxpayers qualifying for the health insurance premium assistance credit, and taxpayers who may be deemed to have incurred or continued indebtedness to purchase tax-exempt obligations.

THE DISCUSSION CONTAINED HEREIN MAY NOT BE EXHAUSTIVE. INVESTORS, INCLUDING THOSE WHO ARE SUBJECT TO SPECIAL PROVISIONS OF THE CODE, SHOULD CONSULT THEIR OWN TAX ADVISORS AS TO THE TAX TREATMENT WHICH MAY BE ANTICIPATED TO RESULT FROM THE PURCHASE, OWNERSHIP AND DISPOSITION OF TAX-EXEMPT OBLIGATIONS BEFORE DETERMINING WHETHER TO PURCHASE THE OBLIGATIONS.

Interest on the Obligations may be includable in certain corporation's "adjusted financial statement income" determined under section 56A of the Code to calculate the alternative minimum tax imposed by section 55 of the Code.

Under section 6012 of the Code, holders of tax-exempt obligations, such as the Obligations, may be required to disclose interest received or accrued during each taxable year on their returns of federal income taxation.

Section 1276 of the Code provides for ordinary income tax treatment of gain recognized upon the disposition of a tax-exempt obligation, such as the Obligations, if such obligation was acquired at a "market discount" and if the fixed maturity of such obligation is equal to, or exceeds, one year from the date of issue. Such treatment applies to "market discount bonds" to the extent such gain does not exceed the accrued market discount of such bonds; although for this purpose, a de minimis amount of market discount is ignored. A "market discount bond" is one which is acquired by the holder at a purchase price which is less than the stated redemption price at maturity or, in the case of a bond issued at an original issue discount, the "revised issue price" (i.e., the issue price plus accrued original issue discount). The "accrued market discount" is the amount which bears the same ratio to the market discount as the number of days during which the holder holds the obligation bears to the number of days between the acquisition date and the final maturity date.

#### **STATE, LOCAL AND FOREIGN TAXES**

Investors should consult their own tax advisors concerning the tax implications of the purchase, ownership or disposition of the Obligations under applicable state or local laws. Foreign investors should also consult their own tax advisors regarding the tax consequences unique to investors who are not United States persons.

## INFORMATION REPORTING AND BACKUP WITHHOLDING

Subject to certain exceptions, information reports describing interest income, including original issue discount, with respect to the Obligations will be sent to each registered holder and to the Internal Revenue Service. Payments of interest and principal may be subject to backup withholding under section 3406 of the Code if a recipient of the payments fails to furnish to the payor such owner's social security number or other taxpayer identification number ("TIN"), furnishes an incorrect TIN, or otherwise fails to establish an exemption from the backup withholding tax. Any amounts so withheld would be allowed as a credit against the recipient's federal income tax. Special rules apply to partnerships, estates and trusts, and in certain circumstances, and in respect of Non-U.S. Holders, certifications as to foreign status and other matters may be required to be provided by partners and beneficiaries thereof.

## FUTURE AND PROPOSED LEGISLATION

Tax legislation, administrative actions taken by tax authorities, or court decisions, whether at the Federal or state level, may adversely affect the tax-exempt status of interest on the Obligations under Federal or state law and could affect the market price or marketability of the Obligations. Any such proposal could limit the value of certain deductions and exclusions, including the exclusion for tax-exempt interest. The likelihood of any such proposal being enacted cannot be predicted. Prospective purchasers of the Obligations should consult their own tax advisors regarding the foregoing matters.

## CONTINUING DISCLOSURE OF INFORMATION

In each of the Ordinances, the City has made the following agreement for the benefit of the holders and beneficial owners of the respective series of Obligations. The City is required to observe each agreement while it remains obligated to advance funds to pay such Obligations. Under each agreement, the City will be obligated to provide certain updated financial information and operating data annually, and the timely notice of specified events to the Municipal Securities Rulemaking Board ("MSRB"). This information will be available free of charge from the MSRB via the Electronic Municipal Market Access ("EMMA") system at [www.emma.msrb.org](http://www.emma.msrb.org).

**ANNUAL REPORTS . . .** The City shall provide annually to the MSRB, in the electronic format prescribed by the MSRB, financial information and operating data (the "Annual Operating Report") with respect to the City of the general type included in this Official Statement under Tables numbered 1 through 5 and 7 through 14. The City will additionally provide financial statements of the City (the "Financial Statements"), that will be (i) prepared in accordance with the accounting principles described in the City's annual audited financial statements or such other accounting principles as the City may be required to employ from time to time pursuant to State law or regulation and shall be in substantially the form included in this Official Statement and (ii) audited, if the City commissions an audit of such Financial Statements and the audit is completed within the period during which they must be provided. The City will update and provide the Annual Operating Report within six months after the end of each fiscal year and the Financial Statements within 12 months of the end of each fiscal year, in each case beginning with the fiscal year ending in and after 2023. The City may provide the Financial Statements earlier, including at the time it provides its Annual Operating Report, but if the audit of such Financial Statements is not complete within 12 months after any such fiscal year end, then the City shall file unaudited Financial Statements within such 12-month period and audited Financial Statements for the applicable fiscal year, when and if the audit report on such Financial Statements becomes available.

The financial information and operating data to be provided may be set forth in full in one or more documents or may be included by specific reference to any document available to the public on the MSRB's Internet Web site or filed with the United States Securities and Exchange Commission (the "SEC"), as permitted by SEC Rule 15c2-12 (the "Rule").

The City's current fiscal year end is September 30. Accordingly, it must provide the Annual Operating Report by March 31 in each year, unless the City changes its fiscal year. If the City changes its fiscal year, it will notify the MSRB of the change.

**NOTICE OF CERTAIN EVENTS . . .** The City will also provide timely notices of certain events to the MSRB. The City will provide notice of any of the following events with respect to the Obligations to the MSRB in a timely manner (but not in excess of ten business days after the occurrence of the event): (1) principal and interest payment delinquencies; (2) non-payment related defaults, if material; (3) unscheduled draws on debt service reserves reflecting financial difficulties; (4) unscheduled draws on credit enhancements reflecting financial difficulties; (5) substitution of credit or liquidity providers, or their failure to perform; (6) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB), or other material notices or determinations with respect to the tax status of the Obligations, or other material events affecting the tax status of the Obligations; (7) modifications to rights of holders of the Obligations, if material; (8) Obligation calls, if material, and tender offers; (9) defeasances; (10) release, substitution, or sale of property securing repayment of the Obligations, if material; (11) rating changes; (12) bankruptcy, insolvency, receivership, or similar event of the City, which shall occur as described below; (13) the consummation of a merger, consolidation, or acquisition involving the City or the sale of all or substantially all of its assets, other than in the ordinary course of business, the entry into of a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; (14) appointment of a successor or additional trustee or the change of name of a trustee, if material; (15) incurrence of a Financial Obligation, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of any Financial Obligation of the City, any of which affect security holders, if material; and (16) default, event of acceleration, termination event, modification of terms, or other similar events under the terms of any Financial

Obligation of the City, any of which reflect financial difficulties. In addition, the City will provide timely notice of any failure by the City to provide annual financial information in accordance with their agreement described above under "Annual Reports". For purposes of clauses (15) and (16) above, "Financial Obligation" means (i) a debt obligation, (ii) a derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation, or (iii) guarantee of (i) or (ii). The term Financial Obligation shall not include municipal securities as to which a final official statement has been provided to the MSRB consistent with the Rule.

For these purposes, any event described in (12) in the immediately preceding paragraph is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent, or similar officer for the City in a proceeding under the United States Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the City, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement, or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the City.

**LIMITATIONS AND AMENDMENTS . . .** The City has agreed to update information and to provide notices of specified events only as described above. The City has not agreed to provide other information that may be relevant or material to a complete presentation of its financial results of operations, condition, or prospects or agreed to update any information that is provided, except as described above. The City makes no representation or warranty concerning such information or concerning its usefulness to a decision to invest in or sell Obligations at any future date. The City disclaims any contractual or tort liability for damages resulting in whole or in part from any breach of its continuing disclosure agreement or from any statement made pursuant to its agreement, although holders of Obligations may seek a writ of mandamus to compel the City to comply with its agreement.

The City may amend its continuing disclosure agreement for either or both of the Bonds and Certificates from time to time to adapt to changed circumstances that arise from a change in legal requirements, a change in law, or a change in the identity, nature, status, or type of operations of the City, if (i) the agreement, as amended, would have permitted an underwriter to purchase or sell Bonds or Certificates, as the case may be, in the offering described herein in compliance with the Rule, taking into account any amendments or interpretations of the Rule to the date of such amendment, as well as such changed circumstances, and (ii) either (a) the holders of a majority in aggregate principal amount of the outstanding Bonds or Certificates, as the case may be, consent to the amendment or (b) any person unaffiliated with the City (such as nationally recognized bond counsel) determines that the amendment will not materially impair the interests of the holders and beneficial owners of the Bonds or Certificates, as the case may be. The City may also amend or repeal the provisions of this continuing disclosure agreement if the SEC amends or repeals the applicable provisions of the Rule or a court of final jurisdiction enters judgment that such provisions of the Rule are invalid, but only if and to the extent that the provisions of this sentence would not prevent an underwriter from lawfully purchasing or selling Obligations in the primary offering of the Obligations. If the City so amends the agreement, it has agreed to include with the next financial information and operating data provided in accordance with its agreement described above under "Annual Reports" an explanation, in narrative form, of the reasons for the amendment and of the impact of any change in the type of financial information and operating data so provided.

**COMPLIANCE WITH PRIOR UNDERTAKINGS . . .** During the last five years, the City believes it has complied in all material respects with all continuing disclosure agreements made by it in accordance with SEC Rule 15c2-12.

## **OTHER INFORMATION**

### **RATINGS**

The Obligations and the presently outstanding tax supported debt of the City are rated "BBB" by Fitch and "BBB" by S&P. An explanation of the significance of such ratings may be obtained from the company furnishing the rating. The ratings reflect only the respective views of such organizations and the City makes no representation as to the appropriateness of the ratings. There is no assurance that such ratings will continue for any given period of time or that they will not be revised downward or withdrawn entirely by either or both of such rating companies, if in the judgment of either or both companies, circumstances so warrant. Any such downward revision or withdrawal of such ratings, or either of them, may have an adverse effect on the market price of the Obligations.

### **LITIGATION**

Various claims and lawsuits are pending against the City. In accordance with Generally Accepted Accounting Principles, those judgments considered "probable" are accrued by the City, while those claims and judgments considered "reasonably possible" are disclosed but not accrued. In the opinion of City management and the City Attorney, the maximum amount of all significant claims considered reasonably possible, excluding condemnation proceedings, is approximately \$500,000 as of the date of this Official Statement. It is the opinion of the City Attorney and City management that potential losses after insurance coverage on all probable claims and lawsuits will not have a material adverse financial impact upon the City or its operations, see Appendix B, Notes to Basic Financial Statements G., page 85.

At the time of the initial delivery of the Bonds, the City will provide the Initial Purchasers with a certificate to the effect that, except as disclosed herein, no litigation of any nature has been filed or is then pending challenging the issuance of the Bonds or that affects the payment and security of the Bonds or in any other manner questioning the issuance, sale or delivery of the Bonds.

#### **REGISTRATION AND QUALIFICATION OF OBLIGATIONS FOR SALE**

The sale of the Obligations has not been registered under the Federal Securities Act of 1933, as amended, in reliance upon the exemption provided thereunder by Section 3(a)(2); and the Obligations have not been qualified under the Securities Act of Texas in reliance upon various exemptions contained therein; nor have the Bonds or Certificates been qualified under the securities acts of any jurisdiction. The City assumes no responsibility for qualification of the Bonds or Certificates under the securities laws of any jurisdiction in which the Obligations may be sold, assigned, pledged, hypothecated or otherwise transferred. This disclaimer of responsibility for qualification for sale or other disposition of the Obligations shall not be construed as an interpretation of any kind with regard to the availability of any exemption from securities registration provisions.

#### **LEGAL INVESTMENTS AND ELIGIBILITY TO SECURE PUBLIC FUNDS IN TEXAS**

**The Obligations.** Section 1201.041 of the Public Security Procedures Act (Chapter 1201, Texas Government Code) provides that the Obligations are negotiable instruments, investment securities governed by Chapter 8, Texas Business and Commerce Code, and are legal and authorized investments for insurance companies, fiduciaries, and trustees, and for the sinking funds of municipalities or other political subdivisions or public agencies of the State of Texas. In addition, various provisions of the Texas Finance Code provide that, subject to a prudent investor standard, the Obligations are legal investments for state banks, savings banks, trust companies with at least \$1 million of capital, and savings and loan associations.

**The Certificates.** Section 271.051, Texas Local Government Code, provides that the Certificates are legal and authorized investments for banks, savings banks, trust companies, savings and loan associations, insurance companies, fiduciaries, trustees and guardians, and for the sinking funds of municipalities, school districts, and other political subdivisions or public agencies of the State of Texas. The Certificates are eligible to secure deposits of any public funds of the State, municipalities, school districts, and other political subdivisions of the State, and are legal security for those deposits to the extent of their market value.

**General Considerations.** For political subdivisions in Texas that have adopted investment policies and guidelines in accordance with the Public Funds Investment Act (Texas Government Code, Chapter 2256), the Obligations may have to be assigned a rating of at least "A" or its equivalent as to investment quality by a national rating agency before such obligations are eligible investments for sinking funds and other public funds. The City has made no investigation of other laws, rules, regulations, or investment criteria which might apply to such institutions or entities or which might limit the suitability of the Obligations for any of the foregoing purposes or limit the authority of such institutions or entities to purchase or invest in the Obligations for such purposes. The City has made no review of laws in other states to determine whether the Obligations are legal investments for various institutions in those states.

#### **LEGAL OPINIONS AND NO-LITIGATION CERTIFICATE**

The City will furnish a complete transcript of proceedings had incident to the authorization and issuance of the Bonds and of the Certificates, including the unqualified approving legal opinions of the Attorney General of Texas approving the Initial Bond and the Initial Certificate and to the effect that the Bonds and the Certificates are valid and legally binding obligations of the City, and based upon examination of such transcript of proceedings, the approving legal opinions of Bond Counsel, to like effect and to the effect that the interest on the Bonds and the Certificates will be excludable from gross income for federal income tax purposes under Section 103(a) of the Code, subject to the matters described under "Tax Matters" herein. The customary closing papers, including a certificate to the effect that no litigation of any nature has been filed or is then pending to restrain the issuance and delivery of the Obligations, or which would affect the provision made for their payment or security or in any manner questioning the validity of said Obligations will also be furnished. Though it represents the Financial Advisor and purchasers of debt from governmental issuers from time to time in matters unrelated to the issuance of the Obligations, Bond Counsel has been engaged by and only represents the City in connection with the issuance of the Obligations. Bond Counsel was not requested to participate, and did not take part, in the preparation of the Notice of Sale and Bidding Instructions, the Official Bid Form and the Official Statement, and such firm has not assumed any responsibility with respect thereto or undertaken independently to verify any of the information contained therein, except that, in its capacity as Bond Counsel, such firm has reviewed the information describing the Obligations in the Official Statement to verify that such description conforms to the provisions of the Bond Ordinance and the Certificate Ordinance. The legal fee to be paid Bond Counsel for services rendered in connection with the issuance of the Obligations is contingent on the sale and delivery of the Obligations. The legal opinion will accompany the Obligations deposited with DTC or will be printed on the Obligations in the event of the discontinuance of the Book-Entry-Only System.



The legal opinions to be delivered concurrently with the delivery of the Obligations express the professional judgment of the attorneys rendering the opinions as to the legal issues explicitly addressed therein. In rendering a legal opinion, the attorney does not become an insurer or guarantor of that expression of professional judgment, of the transaction opined upon, or of the future performance of the parties to the transaction. Nor does the rendering of an opinion guarantee the outcome of any legal dispute that may arise out of the transaction.

#### **AUTHENTICITY OF FINANCIAL DATA AND OTHER INFORMATION**

The financial data and other information contained herein have been obtained from City records, audited financial statements, and other sources which are believed to be reliable. There is no guarantee that any of the assumptions or estimates contained herein will be realized. All of the summaries of the statutes, documents, and ordinances contained in this Official Statement are made subject to all of the provisions of such statutes, documents, and ordinances. These summaries do not purport to be complete statements of such provisions and reference is made to such documents for further information. Reference is made to original documents in all respects.

#### **FINANCIAL ADVISOR**

Hilltop Securities Inc., ("HilltopSecurities") is employed as Financial Advisor to the City in connection with the issuance of the Obligations. The Financial Advisor's fee for services rendered with respect to the sale of the Obligations is contingent upon the issuance and delivery of the Obligations. HilltopSecurities, in its capacity as Financial Advisor, has relied on the opinion of Bond Counsel and has not verified and does not assume any responsibility for the information, covenants, and representations contained in any of the legal documents with respect to the federal income tax status of the Obligations, or the possible impact of any present, pending, or future actions taken by any legislative or judicial bodies.

The Financial Advisor to the City has provided the following sentence for inclusion in this Official Statement. The Financial Advisor has reviewed the information in this Official Statement in accordance with, and as part of, its responsibilities to the City and, as applicable, to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Financial Advisor does not guarantee the accuracy or completeness of such information.

#### **INITIAL PURCHASER OF THE CERTIFICATES**

After requesting competitive bids for the Certificates, the City accepted the bid of \_\_\_\_\_ (the "Initial Purchaser of the Certificates") to purchase the Certificates at the interest rates shown on page 2 of the Official Statement at a price of par plus a cash premium of \$ \_\_\_\_\_. The Initial Purchaser of the Certificates can give no assurance that any trading market will be developed for the Certificates after their sale by the City to the Initial Purchaser of the Certificates. The City has no control over the price at which the Certificates are subsequently sold and the initial yield at which the Certificates will be priced and reoffered will be established by and will be the sole responsibility of the Initial Purchaser of the Certificates.

#### **INITIAL PURCHASER OF THE BONDS**

After requesting competitive bids for the Bonds, the City accepted the bid of \_\_\_\_\_ (the "Initial Purchaser of the Bonds") to purchase the Bonds at the interest rates shown on page 4 of the Official Statement at a price of par plus a cash premium of \$ \_\_\_\_\_. The Initial Purchaser of the Bonds can give no assurance that any trading market will be developed for the Bonds after their sale by the City to the Initial Purchaser of the Bonds. The City has no control over the price at which the Bonds are subsequently sold and the initial yield at which the Bonds will be priced and reoffered will be established by and will be the sole responsibility of the Initial Purchaser of the Bonds.

The Initial Purchaser of the Bonds and the Initial Purchaser of the Certificates are herein collectively referred to as the "Initial Purchasers".

#### **CERTIFICATION OF THE OFFICIAL STATEMENT**

At the time of payment for and delivery of the Obligations, the City will furnish to the Initial Purchasers a certificate, executed by a proper City officer, acting in such officer's official capacity, to the effect that to the best of such officer's knowledge and belief: (a) the descriptions and statements of or pertaining to the City contained in the Official Statement, and any addenda, supplement, or amendment thereto, on the date of the Official Statement, on the date of sale of the Obligations, and the acceptance of the best bid therefor, and on the date of the delivery, were and are true and correct in all material respects; (b) insofar as the City and its affairs, including its financial affairs, are concerned, the Official Statement did not and does not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading; (c) insofar as the descriptions and statements, including financial data, of or pertaining to entities, other than the City, and their activities contained in the Official Statement are concerned, such statements and data have been obtained from sources which the City believes to be reliable and the City has no reason to believe that they are untrue in any material respect; and (d) there has been no material adverse change in the financial condition of the City since the date of the last audited financial statements of the City.

## **CYBERSECURITY**

The unauthorized access, use, disclosure, disruption, modification, or destruction of the City's Information or information systems could negatively impact the operations of the city and its ability to provide services to its citizens. The City uses a risk-based approach and "best practices" to protect the confidentiality, integrity and availability of the information and information systems that it is entrusted with. Employees are required to take annual security training which is re-enforced with continuous phishing email tests. The City uses the NIST-CSF framework to assure compliance with multiple standards, regulations, and other obligations. In addition, to help protect the City against claims and expenses due to a cybersecurity incident, the City maintains cyber insurance.

## **FORWARD LOOKING STATEMENTS DISCLAIMER**

The statements contained in this Official Statement, and in any other information provided by the City, that are not purely historical, are forward-looking statements, including statements regarding the City's expectations, hopes, intentions, or strategies regarding the future. Readers should not place undue reliance on forward-looking statements. All forward-looking statements included in this Official Statement are based on information available to the City on the date hereof, and the City assumes no obligation to update any such forward-looking statements. The City's actual results could differ materially from those discussed in such forward-looking statements.

The forward-looking statements included herein are necessarily based on various assumptions and estimates and are inherently subject to various risks and uncertainties, including risks and uncertainties relating to the possible invalidity of the underlying assumptions and estimates and possible changes or developments in social, economic, business, industry, market, legal, and regulatory circumstances and conditions and actions taken or omitted to be taken by third parties, including customers, suppliers, business partners and competitors, and legislative, judicial, and other governmental authorities and officials. Assumptions related to the foregoing involve judgments with respect to, among other things, future economic, competitive, and market conditions and future business decisions, all of which are difficult or impossible to predict accurately and many of which are beyond the control of the City. Any of such assumptions could be inaccurate and, therefore, there can be no assurance that the forward-looking statements included in this Official Statement will prove to be accurate.

## **LINKS TO WEBSITES**

The City has provided links to websites in this Official Statement to allow investors independent access to information or expertise that may be of value. INFORMATION ON SUCH WEBSITES IS NOT INCORPORATED INTO THIS OFFICIAL STATEMENT BY REFERENCE OR OTHERWISE. The inclusion of any links does not imply a recommendation or endorsement of the information or views expressed within a website. The City has not participated in the preparation, compilation or selection of information or views in any website referenced in this Official Statement, and assumes no responsibility or liability for the information or views, or accuracy or completeness thereof, in any website referenced herein.

## **MISCELLANEOUS**

The Ordinances authorizing the issuance of the Obligations will approve the form and content of this Official Statement, and any addenda, supplement or amendment thereto, and will authorize its further use in the reoffering of the Obligations by the Initial Purchasers.

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PRICING OFFICER  
City of Denton, Texas

**SCHEDULE OF REFUNDED OBLIGATIONS\*****Certificates of Obligation, Series 2012**

<u>Original Dated Date</u>	<u>Maturity Date</u>	<u>Interest Rate</u>	<u>Principal Amount Outstanding</u>	<u>Principal Amount Refunded</u>
4/15/2012	2/15/2025	3.000%	\$ 1,935,000	\$ 1,935,000
	2/15/2026	3.000%	1,995,000	\$ 1,995,000
	2/15/2027	3.125%	2,055,000	2,055,000
	2/15/2032	3.500%	2,590,000	2,590,000
			<u>\$ 8,575,000</u>	<u>\$ 8,575,000</u>

The 2025 – 2032 maturities will be redeemed prior to original maturity on [REDACTED] at par.

**General Obligation Refunding and Improvement Bonds, Series 2012**

<u>Original Dated Date</u>	<u>Maturity Date</u>	<u>Interest Rate</u>	<u>Principal Amount Outstanding</u>	<u>Principal Amount Refunded</u>
4/15/2012	2/15/2025	3.000%	\$ 170,000	\$ 170,000
	2/15/2026	3.000%	180,000	180,000
	2/15/2027	3.125%	185,000	185,000
	2/15/2028	3.250%	190,000	190,000
	2/15/2029	3.375%	195,000	195,000
	2/15/2030	3.375%	200,000	200,000
	2/15/2031	3.500%	210,000	210,000
	2/15/2032	3.500%	215,000	215,000
			<u>\$ 1,545,000</u>	<u>\$ 1,545,000</u>

The 2025 – 2032 maturities will be redeemed prior to original maturity on [REDACTED] at par.

**General Obligation Refunding and Improvement Bonds, Series 2013**

<u>Original Dated Date</u>	<u>Maturity Date</u>	<u>Interest Rate</u>	<u>Principal Amount Outstanding</u>	<u>Principal Amount Refunded</u>
5/15/2013	2/15/2024	4.000%	\$ 870,000	\$ 870,000
	2/15/2025	3.125%	895,000	895,000
	2/15/2026	3.250%	210,000	210,000
	2/15/2027	3.500%	220,000	220,000
	2/15/2028	3.500%	225,000	225,000
	2/15/2029	3.625%	235,000	235,000
	2/15/2030	3.750%	245,000	245,000
	2/15/2031	3.750%	255,000	255,000
	2/15/2032	4.000%	260,000	260,000
	2/15/2033	4.000%	275,000	275,000
			<u>\$ 3,690,000</u>	<u>\$ 3,690,000</u>

The 2024 – 2033 maturities will be redeemed prior to original maturity on [REDACTED] at par.

\* Preliminary, subject to change.

**Certificates of Obligation, Series 2013**

<u>Original Dated Date</u>	<u>Maturity Date</u>	<u>Interest Rate</u>	<u>Principal Amount Outstanding</u>	<u>Principal Amount Refunded</u>
4/15/2013	2/15/2024	4.000%	\$ 2,660,000	\$ 2,660,000
	2/15/2025	4.000%	2,760,000	2,760,000
	2/15/2026	4.000%	2,875,000	2,875,000
	2/15/2027	4.000%	2,975,000	2,975,000
	2/15/2028	3.000%	3,085,000	3,085,000
	2/15/2029	3.125%	3,205,000	3,205,000
	2/15/2030	3.250%	3,340,000	3,340,000
	2/15/2031	3.250%	3,480,000	3,480,000
	2/15/2032	3.250%	3,615,000	3,615,000
	2/15/2033	3.375%	3,755,000	3,755,000
			<u>\$31,750,000</u>	<u>\$31,750,000</u>

The 2024 – 2033 maturities will be redeemed prior to original maturity on [REDACTED] at par.

PRELIMINARY

**APPENDIX A**

GENERAL INFORMATION REGARDING THE CITY

PRELIMINARY

**APPENDIX B**

EXCERPTS FROM THE

CITY OF DENTON, TEXAS

ANNUAL COMPREHENSIVE FINANCIAL REPORT

For the Year Ended September 30, 2022

The information contained in this Appendix consists of excerpts from the City of Denton, Texas Annual Comprehensive Financial Report for the Year Ended September 30, 2022, and is not intended to be a complete statement of the City's financial condition. Reference is made to the complete Report for further information.

**APPENDIX C**

**FORMS OF BOND COUNSEL'S OPINIONS**

PRELIMINARY

ORDINANCE NO. 23-\_\_

AN ORDINANCE CONSIDERING ALL MATTERS INCIDENT AND RELATED TO THE ISSUANCE, SALE AND DELIVERY OF UP TO \$80,500,000 IN PRINCIPAL AMOUNT OF "CITY OF DENTON GENERAL OBLIGATION REFUNDING AND IMPROVEMENT BONDS, SERIES 2023"; AUTHORIZING THE ISSUANCE OF THE BONDS; DELEGATING THE AUTHORITY TO CERTAIN CITY OFFICIALS TO EXECUTE CERTAIN DOCUMENTS RELATING TO THE SALE OF THE BONDS; APPROVING AND AUTHORIZING INSTRUMENTS AND PROCEDURES RELATING TO SAID BONDS; ENACTING OTHER PROVISIONS RELATING TO THE SUBJECT; AND PROVIDING AN EFFECTIVE DATE

WHEREAS, by virtue of an election held within the City of Denton, Texas (the "Issuer") on November 5, 2019, this City Council became authorized to issue, sell and deliver the general obligation bonds of the Issuer, of which there have been issued heretofore, are authorized to be issued by this Ordinance, and will remain authorized but unissued hereafter, as described in Schedule I attached hereto and incorporated herein; and

WHEREAS, this City Council finds and determines that it is necessary and proper to order the issuance, sale and delivery of such voted bonds; and

WHEREAS, the Issuer has previously issued and outstanding obligations described in Schedule II attached hereto and incorporated herein (collectively, the "Eligible Refunded Obligations") and the Issuer now desires to refund all or part of the Eligible Refunded Obligations, and those Eligible Refunded Obligations designated by the Pricing Officer in the Pricing Certificate, each as defined below, to be refunded are herein referred to as the "Refunded Obligations"; and

WHEREAS, Chapter 1207, Texas Government Code, as amended ("Chapter 1207") authorizes the Issuer to issue refunding bonds and to deposit the proceeds from the sale thereof, together with any other available funds or resources, directly with a paying agent for the Refunded Obligations or a trust company or commercial bank that does not act as a depository for the Issuer and is named in these proceedings, and such deposit, if made before the payment dates of the Refunded Obligations, shall constitute the making of firm banking and financial arrangements for the discharge and final payment of the Refunded Obligations; and

WHEREAS, Chapter 1207 further authorizes the Issuer to enter into an escrow or similar agreement with such paying agent for the Refunded Obligations or trust company or commercial bank with respect to the safekeeping, investment, reinvestment, administration and disposition of any such deposit, upon such terms and conditions as the Issuer and such paying agent or trust company or commercial bank may agree; and

WHEREAS, the City Council hereby finds and declares a public purpose and it is in the best interests of the Issuer to refund the Refunded Obligations in order to achieve a debt service savings, with such savings, among other information and terms to be included in a pricing certificate (the "Pricing Certificate") to be executed by the Pricing Officer (hereinafter designated) in connection with the initial issuance of each Series of Bonds, all in accordance with the provisions of Section 1207.007, Texas Government Code; and

WHEREAS, all the Refunded Obligations mature or are subject to redemption prior to maturity within 20 years of the date of the bonds hereinafter authorized; and



WHEREAS, the Issuer is an "issuer" within the meaning of Section 1371.001(4)(P), Texas Government Code, having (i) a principal amount of at least \$100 million in outstanding long-term indebtedness, in long-term indebtedness proposed to be issued, or in a combination of outstanding or proposed long-term indebtedness and (ii) some amount of long-term indebtedness outstanding or proposed to be issued that is rated in one of the four highest rating categories for long-term debt instruments by a nationally recognized rating agency for municipal securities, without regard to the effect of any credit agreement or other form of credit enhancement entered into in connection with the obligation; and

WHEREAS, the bonds hereinafter authorized to be issued were voted and are to be issued, sold and delivered pursuant to the general laws of the State of Texas, including Texas Government Code Chapters 1207, 1331 and 1371, as amended, and the Issuer's Home Rule Charter; and

WHEREAS, it is officially found, determined, and declared that the meeting at which this Ordinance has been adopted was open to the public and public notice of the time, place and subject matter of the public business to be considered and acted upon at said meeting, including this Ordinance, was given, all as required by the applicable provisions of Texas Government Code Chapter 551; NOW, THEREFORE,

THE COUNCIL OF THE CITY OF DENTON HEREBY ORDAINS:

SECTION 1. RECITALS, AMOUNT, PURPOSE AND DESIGNATION OF THE BONDS.

(a) The recitals set forth in the preamble hereof are incorporated herein and shall have the same force and effect as if set forth in this Section.

(b) The term "Bonds" as used in this Ordinance shall mean and include collectively all bonds initially issued and delivered pursuant to this Ordinance (the "Initial Bonds") and all substitute bonds exchanged therefor, as well as all other substitute bonds and replacement bonds issued pursuant hereto, and the term "Bond" shall mean any of the Bonds. "Series" or "Series of Bonds" means any designated series of Bonds issued pursuant to this Ordinance.

(c) The Bonds of the City of Denton, Texas (the "Issuer") are hereby authorized to be issued and delivered in one or more Series in the maximum aggregate principal amount of \$80,500,000 (i) up to \$46,145,000 for the public purpose of refunding the Refunded Obligations, (ii) for the purpose of the acquisition of property and making improvements for public purposes in said Issuer, to wit: \$34,355,000 for street improvements (including the reconstruction, restructuring and extension of Bonnie Brae Street and Hickory Creek Road), all in accordance with and subject to the election proposition authorizing such bonds (the "Improvement Projects"), and (iii) to pay the costs associated with the issuance of the Bonds (collectively, the "Projects").

(d) Each bond issued pursuant to this Ordinance shall be designated: "CITY OF DENTON GENERAL OBLIGATION REFUNDING AND IMPROVEMENT BOND, SERIES 2023," with each Series of Bonds having a letter designation following the year, starting with "A", and with such changes as designated by the Pricing Officer pursuant to Section 2. Initially there shall be issued, sold, and delivered hereunder fully registered bonds, without interest coupons, payable to the respective registered owners thereof (with the Initial Bond being made payable to the Purchaser as described in Section 10 hereof), or to the registered assignee or assignees of said Bonds or any portion or portions thereof (in each case, the "Registered Owner"). The Bonds shall be in the respective principal amounts, shall be numbered, shall mature and be payable on the date or dates in each of the years and in the principal amounts, and shall bear

interest to their respective dates of maturity or redemption prior to maturity at the rates per annum, as set forth in the Pricing Certificate.

## SECTION 2. DELEGATION TO PRICING OFFICER.

(a) As authorized by Sections 1207.007 and 1371.053, Texas Government Code, as amended, the City Manager or an Assistant City Manager (the "Pricing Officer") is hereby authorized to act on behalf of the Issuer in selling and delivering each Series of the Bonds, determining which of the Eligible Refunded Obligations shall be refunded and carrying out the other procedures specified in this Ordinance, including, determining the date of sale of the Bonds, the date of the Bonds, any additional or different designation or title by which the Bonds shall be known, the price at which the Bonds will be sold, the years in which the Bonds will mature, the principal amount to mature in each of such years, the rate of interest to be borne by each such maturity, the interest payment and record dates, the price and terms upon and at which the Bonds shall be subject to redemption prior to maturity at the option of the Issuer, as well as any mandatory sinking fund redemption provisions, and all other matters relating to the issuance, sale, and delivery of the Bonds and the refunding of the Refunded Obligations, including without limitation establishing the redemption date for and effecting the redemption of the Refunded Obligations and obtaining municipal bond insurance for all or any portion of the Bonds (including in connection therewith the execution of any commitment agreements, membership agreements in mutual insurance companies, and other similar agreements) and providing for the terms and provisions thereof applicable to the Bonds, all of which shall be specified in the Pricing Certificate; provided that:

- (i) the aggregate original principal amount of the Bonds shall not exceed \$80,500,000 with up to \$46,145,000 of such amount issued for the purposes described in Section 1(c)(i) and (iii) hereof, and \$34,355,000 of such amount to be issued for the purposes described in Section 1(c)(ii) and (iii) hereof;
- (ii) the maximum stated maturity of the Bonds shall not exceed February 15, 2043;
- (iii) the Bonds shall bear interest at a fixed rate, and the net effective interest rate on the Bonds shall not exceed 4.500%;
- (iv) the refunding of the Refunded Obligations must produce present value debt service savings of at least 1.000%, net of any Issuer contribution;
- (v) the delegation made hereby shall expire if not exercised by the Pricing Officer through execution of the Pricing Certificate on or prior to December 6, 2023; and
- (vi) on or prior to delivery, the Bonds shall be rated by a nationally recognized rating agency for municipal securities in one of the four highest categories for long-term obligations.

(b) In establishing the aggregate principal amount of a Series of Bonds, the Pricing Officer shall establish an amount not exceeding, in aggregate with any other Series of Bonds, the amount authorized in Subsection (a) hereof, which shall be sufficient in amount to provide for the purposes for which the Series of Bonds are authorized and to pay costs of issuing the Bonds. Each Series of Bonds shall be sold with and subject to such terms as set forth in the Pricing Certificate for such Series.

### SECTION 3. CHARACTERISTICS OF THE BONDS.

(a) Registration, Transfer, Conversion and Exchange; Authentication. The Issuer shall keep or cause to be kept at the principal corporate trust office of BOKF, NA, Dallas, Texas (the "Paying Agent/Registrar") books or records for the registration of the transfer, conversion and exchange of the Bonds (the "Registration Books"), and the Issuer hereby appoints the Paying Agent/Registrar as its registrar and transfer agent to keep such books or records and make such registrations of transfers, conversions and exchanges under such reasonable regulations as the Issuer and Paying Agent/Registrar may prescribe; and the Paying Agent/Registrar shall make such registrations, transfers, conversions and exchanges as herein provided. The Paying Agent/Registrar shall obtain and record in the Registration Books the address of the Registered Owner of each Bond to which payments with respect to the Bonds shall be mailed, as herein provided; but it shall be the duty of each Registered Owner to notify the Paying Agent/Registrar in writing of the address to which payments shall be mailed, and such interest payments shall not be mailed unless such notice has been given. The Issuer shall have the right to inspect the Registration Books during regular business hours of the Paying Agent/Registrar, but otherwise the Paying Agent/Registrar shall keep the Registration Books confidential and, unless otherwise required by law, shall not permit their inspection by any other entity. The Issuer shall pay the Paying Agent/Registrar's standard or customary fees and charges for making such registration, transfer, conversion, exchange and delivery of a substitute Bond or Bonds. Registration of assignments, transfers, conversions and exchanges of Bonds shall be made in the manner provided and with the effect stated in the FORM OF BOND set forth in this Ordinance. Each substitute Bond shall bear a letter and/or number to distinguish it from each other Bond.

Except as provided in Section 3(c) of this Ordinance, an authorized representative of the Paying Agent/Registrar shall, before the delivery of any such Bond, date and manually sign said Bond, and no such Bond shall be deemed to be issued or outstanding unless such Bond is so executed. The Paying Agent/Registrar promptly shall cancel all paid Bonds and Bonds surrendered for conversion and exchange. No additional ordinances, orders, or resolutions need be passed or adopted by the governing body of the Issuer or any other body or person so as to accomplish the foregoing conversion and exchange of any Bond or portion thereof, and the Paying Agent/Registrar shall provide for the printing, execution, and delivery of the substitute Bonds in the manner prescribed herein, and said Bonds shall be printed or typed on paper of customary weight and strength. Pursuant to Chapter 1201, Government Code, as amended, the duty of conversion and exchange of Bonds as aforesaid is hereby imposed upon the Paying Agent/Registrar, and, upon the execution of said Bond, the converted and exchanged Bond shall be valid, incontestable, and enforceable in the same manner and with the same effect as the Bonds that initially were issued and delivered pursuant to this Ordinance, approved by the Attorney General of the State of Texas (the "Attorney General") and registered by the Comptroller of Public Accounts of the State of Texas (the "Comptroller").

(b) Payment of Bonds and Interest. The Issuer hereby further appoints the Paying Agent/Registrar to act as the paying agent for paying the principal of and interest on the Bonds, all as provided in this Ordinance. The Paying Agent/Registrar shall keep proper records of all payments made by the Issuer and the Paying Agent/Registrar with respect to the Bonds, and of all conversions and exchanges of Bonds, and all replacements of Bonds, as provided in this Ordinance. However, in the event of a nonpayment of interest on a scheduled payment date, and for thirty (30) days thereafter, a new record date for such interest payment (a "Special Record Date") will be established by the Paying Agent/Registrar, if and when funds for the payment of such interest have been received from the Issuer. Notice of the past due interest shall be sent at least five (5) business days prior to the Special Record Date by United States mail, first-class postage prepaid, to the address of each Registered Owner appearing on the Registration Books at the close of business on the last business day next preceding the date of mailing of such notice.

(c) In General. The Bonds (i) shall be issued in fully registered form, without interest coupons, with the principal of and interest on such Bonds to be payable only to the Registered Owners thereof, (ii) may or shall be redeemed prior to their scheduled maturities (notice of which shall be given to the Paying Agent/Registrar by the Issuer at least 45 days prior to any such redemption date), (iii) may be converted and exchanged for other Bonds, (iv) may be transferred and assigned, (v) shall have the characteristics, (vi) shall be signed, sealed, executed and authenticated, (vii) the principal of and interest on the Bonds shall be payable, and (viii) shall be administered and the Paying Agent/Registrar and the Issuer shall have certain duties and responsibilities with respect to the Bonds, all as provided, and in the manner and to the effect as required or indicated, in the FORM OF BOND set forth in this Ordinance (as modified in the Pricing Certificate). The Initial Bonds are not required to be, and shall not be, authenticated by the Paying Agent/Registrar, but on each substitute Bond issued in conversion of and exchange for any Bond or Bonds issued under this Ordinance the Paying Agent/Registrar shall execute the Paying Agent/Registrar's Authentication Certificate, in the form set forth in the FORM OF BOND.

(d) Paying Agent/Registrar for the Bonds. The Issuer covenants with the Registered Owners of the Bonds that at all times while the Bonds are outstanding the Issuer will provide a competent and legally qualified bank, trust company, financial institution, or other entity to act as and perform the services of Paying Agent/Registrar for the Bonds under this Ordinance, and that the Paying Agent/Registrar will be a single entity. The Issuer reserves the right to, and may, at its option, change the Paying Agent/Registrar upon not less than 60 days written notice to the Paying Agent/Registrar, to be effective not later than 60 days prior to the next principal or interest payment date after such notice. In the event that the entity at any time acting as Paying Agent/Registrar (or its successor by merger, acquisition, or other method) should resign or otherwise cease to act as such, the Issuer covenants that promptly it will appoint a competent and legally qualified bank, trust company, financial institution, or other agency to act as Paying Agent/Registrar under this Ordinance. Upon any change in the Paying Agent/Registrar, the previous Paying Agent/Registrar promptly shall transfer and deliver the Registration Books (or a copy thereof), along with all other pertinent books and records relating to the Bonds, to the new Paying Agent/Registrar designated and appointed by the Issuer. Upon any change in the Paying Agent/Registrar, the Issuer promptly will cause a written notice thereof to be sent by the new Paying Agent/Registrar to each Registered Owner of the Bonds, by United States mail, first-class postage prepaid, which notice also shall give the address of the new Paying Agent/Registrar. By accepting the position and performing as such, each Paying Agent/Registrar shall be deemed to have agreed to the provisions of this Ordinance, and a certified copy of this Ordinance shall be delivered to each Paying Agent/Registrar.

(e) Authentication. Except as provided below, no Bond shall be valid or obligatory for any purpose or be entitled to any security or benefit of this Ordinance unless and until there appears thereon the Paying Agent/Registrar's Authentication Certificate substantially in the form provided in this Ordinance, duly authenticated by manual execution of the Paying Agent/Registrar. It shall not be required that the same authorized representative of the Paying Agent/Registrar sign the Paying Agent/Registrar's Authentication Certificate on all of the Bonds. In lieu of the executed Paying Agent/Registrar's Authentication Certificate described above, an Initial Bond delivered on the closing date shall have attached thereto the Comptroller's Registration Certificate substantially in the form provided in this Ordinance, manually executed by the Comptroller or by her duly authorized agent, which certificate shall be evidence that the Initial Bond has been duly approved by the Attorney General and that it is a valid and binding obligation of the Issuer, and has been registered by the Comptroller.

(f) Book-Entry-Only System. The Bonds issued in exchange for an Initial Bond shall be initially issued in the form of a separate single fully registered Bond for each of the maturities thereof. Upon initial issuance, the ownership of each such Bond shall be registered in the name of Cede & Co., as nominee of

The Depository Trust Company, New York, New York ("DTC"), and except as provided in subsection (g) hereof, all of the outstanding Bonds shall be registered in the name of Cede & Co., as nominee of DTC.

With respect to Bonds registered in the name of Cede & Co., as nominee of DTC, the Issuer and the Paying Agent/Registrar shall have no responsibility or obligation to any securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations on whose behalf DTC was created ("DTC Participant") to hold securities to facilitate the clearance and settlement of securities transactions among DTC Participants or to any person on behalf of whom such a DTC Participant holds an interest in the Bonds. Without limiting the immediately preceding sentence, the Issuer and the Paying Agent/Registrar shall have no responsibility or obligation with respect to (i) the accuracy of the records of DTC, Cede & Co. or any DTC Participant with respect to any ownership interest in the Bonds, (ii) the delivery to any DTC Participant or any other person, other than a Registered Owner of Bonds, as shown on the Registration Books, of any notice with respect to the Bonds, or (iii) the payment to any DTC Participant or any other person, other than a Registered Owner of Bonds, as shown in the Registration Books of any amount with respect to principal of or interest on the Bonds. Notwithstanding any other provision of this Ordinance to the contrary, the Issuer and the Paying Agent/Registrar shall be entitled to treat and consider the person in whose name each Bond is registered in the Registration Books as the absolute owner of such Bond for the purpose of payment of principal and interest with respect to such Bond, for the purpose of registering transfers with respect to such Bond, and for all other purposes whatsoever. The Paying Agent/Registrar shall pay all principal of and interest on the Bonds only to or upon the order of the Registered Owners, as shown in the Registration Books as provided in this Ordinance, or their respective attorneys duly authorized in writing, and all such payments shall be valid and effective to fully satisfy and discharge the Issuer's obligations with respect to payment of principal of and interest on the Bonds to the extent of the sum or sums so paid. No person other than a Registered Owner, as shown in the Registration Books, shall receive a Bond evidencing the obligation of the Issuer to make payments of principal and interest pursuant to this Ordinance. Upon delivery by DTC to the Paying Agent/Registrar of written notice to the effect that DTC has determined to substitute a new nominee in place of Cede & Co., and subject to the provisions in this Ordinance with respect to interest checks being mailed to the Registered Owner at the close of business on the Record Date, the words "Cede & Co." in this Ordinance shall refer to such new nominee of DTC.

The previous execution and delivery of the Blanket Issuer Letter of Representations with respect to obligations of the Issuer is hereby ratified and confirmed; and the provisions thereof shall be fully applicable to the Bonds.

(g) Successor Securities Depository; Transfers Outside Book-Entry-Only System. In the event that the Issuer determines that DTC is incapable of discharging its responsibilities described herein and in the Blanket Issuer Letter of Representations to DTC or that it is in the best interest of the beneficial owners of the Bonds that they be able to obtain certificated Bonds, the Issuer shall (i) appoint a successor securities depository, qualified to act as such under Section 17A of the Securities and Exchange Act of 1934, as amended, notify DTC and DTC Participants of the appointment of such successor securities depository and transfer one or more separate Bonds to such successor securities depository or (ii) notify DTC and DTC Participants of the availability through DTC of Bonds and transfer one or more separate certificated Bonds to DTC Participants having Bonds credited to their DTC accounts. In such event, the Bonds shall no longer be restricted to being registered in the Registration Books in the name of Cede & Co., as nominee of DTC, but may be registered in the name of the successor securities depository, or its nominee, or in whatever name or names Registered Owners transferring or exchanging Bonds shall designate, in accordance with the provisions of this Ordinance.

(h) Payments to Cede & Co. Notwithstanding any other provision of this Ordinance to the contrary, so long as any Bond is registered in the name of Cede & Co., as nominee of DTC, all payments with respect to principal of and interest on such Bond and all notices with respect to such Bond shall be made and given, respectively, in the manner provided in the Blanket Issuer Letter of Representations to DTC.

(i) Cancellation of Initial Bonds. On the closing date, one Initial Bond, representing the entire principal amount of a Series of the Bonds, payable in stated installments to the purchaser designated in Section 10 or its designee, executed by manual or facsimile signature of the Mayor and City Secretary of the Issuer, approved by the Attorney General, and registered and manually signed by the Comptroller, will be delivered to such purchaser or its designee. Upon payment for such Initial Bond, the Paying Agent/Registrar shall cancel such Initial Bond and deliver to DTC on behalf of such purchaser one registered definitive Bond for each year of maturity of the Bonds, in the aggregate principal amount of all of the Bonds for such maturity. To the extent that the Paying Agent/Registrar is eligible to participate in DTC's FAST System, pursuant to an agreement between the Paying Agent/Registrar and DTC, the Paying Agent/Registrar shall hold the definitive Bonds in safekeeping for DTC.

(j) Conditional Notice of Redemption. With respect to any optional redemption of the Bonds, unless the prerequisites to such redemption required by this Ordinance have been met and moneys sufficient to pay the principal of and premium, if any, and interest on the Bonds to be redeemed shall have been received by the Paying Agent/Registrar prior to the giving of such notice of redemption, such notice shall state that said redemption may, at the option of the Issuer, be conditional upon the satisfaction of such prerequisites and receipt of such moneys by the Paying Agent/Registrar on or prior to the date fixed for such redemption, or upon any prerequisite set forth in such notice of redemption. If a conditional notice of redemption is given and such prerequisites to the redemption and sufficient moneys are not received, such notice shall be of no force and effect, the Issuer shall not redeem such Bonds and the Paying Agent/Registrar shall give notice, in the manner in which the notice of redemption was given, to the effect that the Bonds have not been redeemed.

SECTION 4. FORM OF BONDS. The form of the Bonds, including the form of Paying Agent/Registrar's Authentication Certificate, the form of Assignment and the form of Comptroller's Registration Certificate to be attached to the Bonds initially issued and delivered pursuant to this Ordinance, shall be, respectively, substantially as follows, with such appropriate variations, omissions or insertions as are permitted or required by this Ordinance, and with the Form of Bond to be modified pursuant to, and completed with information set forth in, the Pricing Certificate.

(a) [Form of Bond]

NO. R-	UNITED STATES OF AMERICA STATE OF TEXAS CITY OF DENTON GENERAL OBLIGATION REFUNDING AND IMPROVEMENT BOND SERIES 2023	PRINCIPAL AMOUNT \$_____
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Interest Rate	Dated Date	Maturity Date	CUSIP No.
	_____, 20__	February 15, ____	

REGISTERED OWNER:

PRINCIPAL AMOUNT:

DOLLARS

ON THE MATURITY DATE specified above, the City of Denton, in Denton County, Texas (the "Issuer"), being a political subdivision and municipal corporation of the State of Texas, hereby promises to pay to the Registered Owner specified above, or registered assigns (hereinafter called the "Registered Owner"), on the Maturity Date specified above, the Principal Amount specified above. The Issuer promises to pay interest on the unpaid principal amount hereof (calculated on the basis of a 360-day year of twelve 30-day months) from the Delivery Date at the Interest Rate per annum specified above. Interest is payable on \_\_\_\_\_, 20\_\_ and semiannually on each \_\_\_\_\_ and \_\_\_\_\_ thereafter to the Maturity Date specified above, or the date of redemption prior to maturity; except, if this Bond is required to be authenticated and the date of its authentication is later than the first Record Date (hereinafter defined), such Principal Amount shall bear interest from the interest payment date next preceding the date of authentication, unless such date of authentication is after any Record Date but on or before the next following interest payment date, in which case such principal amount shall bear interest from such next following interest payment date; provided, however, that if on the date of authentication hereof the interest on the Bond or Bonds, if any, for which this Bond is being exchanged is due but has not been paid, then this Bond shall bear interest from the date to which such interest has been paid in full.

THE PRINCIPAL OF AND INTEREST ON this Bond are payable in lawful money of the United States of America, without exchange or collection charges. The principal of this Bond shall be paid to the Registered Owner hereof upon presentation and surrender of this Bond at maturity, or upon the date fixed for its redemption prior to maturity, at the principal corporate trust office of BOKF, NA, Dallas, Texas, which is the "Paying Agent/Registrar" for this Bond. The payment of interest on this Bond shall be made by the Paying Agent/Registrar to the Registered Owner hereof on each interest payment date by check or draft, dated as of such interest payment date, drawn by the Paying Agent/Registrar on, and payable solely from, funds of the Issuer required by the ordinance authorizing the issuance of this Bond (the "Bond Ordinance") to be on deposit with the Paying Agent/Registrar for such purpose as hereinafter provided; and such check or draft shall be sent by the Paying Agent/Registrar by United States mail, first-class postage prepaid, on each such interest payment date, to the Registered Owner hereof, at its address as it appeared on the last business day of the month preceding each such date (the "Record Date") on the Registration Books kept by the Paying Agent/Registrar, as hereinafter described. In addition, interest may be paid by such other method, acceptable to the Paying Agent/Registrar, requested by, and at the risk and expense of, the Registered Owner. In the event of a non-payment of interest on a scheduled payment date, and for 30 days thereafter, a new record date for such interest payment (a "Special Record Date") will be established by the Paying Agent/Registrar, if and when funds for the payment of such interest have been received from the Issuer. Notice of the Special Record Date and of the scheduled payment date of the past due interest (which shall be 15 days after the Special Record Date) shall be sent at least five business days prior to the Special Record Date by United States mail, first-class postage prepaid, to the address of each Registered Owner of a Bond appearing on the Registration Books at the close of business on the last business day next preceding the date of mailing of such notice.

ANY ACCRUED INTEREST due at maturity or upon the redemption of this Bond prior to maturity as provided herein shall be paid to the Registered Owner upon presentation and surrender of this Bond for redemption and payment at the principal corporate trust office of the Paying Agent/Registrar. The Issuer covenants with the Registered Owner of this Bond that on or before each principal payment date, interest payment date, and accrued interest payment date for this Bond it will make available to the Paying Agent/Registrar, from the "Interest and Sinking Fund" created by the Bond Ordinance, the amounts required

to provide for the payment, in immediately available funds, of all principal of and interest on the Bonds, when due.

IF THE DATE for the payment of the principal of or interest on this Bond shall be a Saturday, Sunday, a legal holiday or a day on which banking institutions in the city where the principal corporate trust office of the Paying Agent/Registrar is located are authorized by law or executive order to close, then the date for such payment shall be the next succeeding day that is not such a Saturday, Sunday, legal holiday or day on which banking institutions are authorized to close; and payment on such date shall have the same force and effect as if made on the original date payment was due.

THIS BOND is one of a series of Bonds dated \_\_\_\_\_, 20\_\_, authorized in accordance with the Constitution and laws of the State of Texas in the principal amount of \$80,500,000 (i) \$46,145,000 for the public purpose of refunding the Refunded Obligations, (ii) for the purpose of the acquisition of property and making improvements for public purposes in the Issuer, to wit: (A) \$34,355,000 for street improvements (including the reconstruction, restructuring and extension of Bonnie Brae Street and Hickory Creek Road), all in accordance with and subject to the election proposition authorizing such bonds; and (iii) to pay the costs associated with the issuance of the Bonds.

ON \_\_\_\_\_, 20\_\_, or on any date thereafter, the Bonds of this series may be redeemed prior to their scheduled maturities, at the option of the Issuer, with funds derived from any available and lawful source, as a whole, or in part, and, if in part, the particular Bonds, or portions thereof, to be redeemed shall be selected and designated by the Issuer (provided that a portion of a Bond may be redeemed only in an integral multiple of \$5,000), at a redemption price equal to the principal amount to be redeemed plus accrued interest to the date fixed for redemption.

[THE BONDS scheduled to mature on \_\_\_\_\_ in the years \_\_\_\_ and \_\_\_\_ ( the "Term Bonds") are subject to scheduled mandatory redemption by the Paying Agent/Registrar by lot, or by any other customary method that results in a random selection, at a price equal to the principal amount thereof, plus accrued interest to the redemption date, out of moneys available for such purpose in the interest and sinking fund for the Bonds, on the dates and in the respective principal amounts, set forth in the following schedule:

Term Bond Maturity: February 15, 20__		Term Bond Maturity: February 15, 20__	
Mandatory Redemption Date	Principal Amount	Mandatory Redemption Date	Principal Amount
February 15, 20__	\$ _____	February 15, 20__	\$ _____
February 15, 20__	_____	February 15, 20__	_____
February 15, 20__	_____	February 15, 20__	_____
February 15, 20__ (maturity)	_____	February 15, 20__ (maturity)	_____

The principal amount of Term Bonds of a stated maturity required to be redeemed on any mandatory redemption date pursuant to the operation of the mandatory sinking fund redemption provisions shall be reduced, at the option of the Issuer, by the principal amount of any Term Bonds of the same maturity which, at least 50 days prior to a mandatory redemption date (1) shall have been acquired by the Issuer at a price not exceeding the principal amount of such Term Bonds plus accrued interest to the date of purchase thereof, and delivered to the Paying Agent/Registrar for cancellation, (2) shall have been purchased and canceled by the Paying Agent/Registrar at the request of the Issuer at a price not exceeding the principal amount of



such Term Bonds plus accrued interest to the date of purchase, or (3) shall have been redeemed pursuant to the optional redemption provisions and not theretofore credited against a mandatory redemption requirement.]

AT LEAST 30 days prior to the date fixed for any redemption of Bonds or portions thereof prior to maturity a written notice of such redemption shall be sent by the Paying Agent/Registrar by United States mail, first-class postage prepaid, to the Registered Owner of each Bond to be redeemed at its address as it appeared on the 45th day prior to such redemption date; provided, however, that the failure of the Registered Owner to receive such notice, or any defect therein or in the sending or mailing thereof, shall not affect the validity or effectiveness of the proceedings for the redemption of any Bond. By the date fixed for any such redemption due provision shall be made with the Paying Agent/Registrar for the payment of the required redemption price for the Bonds or portions thereof that are to be so redeemed. If such written notice of redemption is sent and if due provision for such payment is made, all as provided above, the Bonds or portions thereof that are to be so redeemed thereby automatically shall be treated as redeemed prior to their scheduled maturities, and they shall not bear interest after the date fixed for redemption, and they shall not be regarded as being outstanding except for the right of the Registered Owner to receive the redemption price from the Paying Agent/Registrar out of the funds provided for such payment. If a portion of any Bond shall be redeemed, a substitute Bond or Bonds having the same maturity date, bearing interest at the same rate, in any denomination or denominations in any integral multiple of \$5,000, at the written request of the Registered Owner, and in aggregate principal amount equal to the unredeemed portion thereof, will be issued to the Registered Owner upon the surrender thereof for cancellation, at the expense of the Issuer, all as provided in the Bond Ordinance.

IF AT THE TIME OF MAILING of notice of optional redemption there shall not have either been deposited with the Paying Agent/Registrar or legally authorized escrow agent immediately available funds sufficient to redeem all the Bonds called for redemption, such notice may state that it is conditional, and is subject to the deposit of the redemption moneys with the Paying Agent/Registrar or legally authorized escrow agent at or prior to the redemption date or any prerequisite set forth in such notice of redemption. If such redemption is not effectuated, the Paying Agent/Registrar shall, within five days thereafter, give notice in the manner in which the notice of redemption was given that such moneys were not so received or such prerequisites were not met and shall rescind the redemption.

ALL BONDS OF THIS SERIES are issuable solely as fully registered bonds, without interest coupons, in the denomination of any integral multiple of \$5,000. As provided in the Bond Ordinance, this Bond may, at the request of the Registered Owner or the assignee or assignees hereof, be assigned, transferred, converted into and exchanged for a like aggregate principal amount of fully registered Bonds, without interest coupons, payable to the appropriate Registered Owner, assignee or assignees, as the case may be, having the same denomination or denominations in any integral multiple of \$5,000 as requested in writing by the appropriate Registered Owner, assignee or assignees, as the case may be, upon surrender of this Bond to the Paying Agent/Registrar for cancellation, all in accordance with the form and procedures set forth in the Bond Ordinance. Among other requirements for such assignment and transfer, this Bond must be presented and surrendered to the Paying Agent/Registrar, together with proper instruments of assignment, in form and with guarantee of signatures satisfactory to the Paying Agent/Registrar, evidencing assignment of this Bond or any portion or portions hereof in any integral multiple of \$5,000 to the assignee or assignees in whose name or names this Bond or any such portion or portions hereof is or are to be registered. The Form of Assignment printed or endorsed on this Bond may be executed by the Registered Owner to evidence the assignment hereof, but such method is not exclusive, and other instruments of assignment satisfactory to the Paying Agent/Registrar may be used to evidence the assignment of this Bond or any portion or portions hereof from time to time by the Registered Owner. The Paying Agent/Registrar's reasonable standard or customary fees and charges for assigning, transferring, converting and exchanging

any Bond or portion thereof will be paid by the Issuer. In any circumstance, any taxes or governmental charges required to be paid with respect thereto shall be paid by the one requesting such assignment, transfer, conversion or exchange, as a condition precedent to the exercise of such privilege. The Paying Agent/Registrar shall not be required to make any such transfer, conversion, or exchange (i) during the period commencing with the close of business on any Record Date and ending with the opening of business on the next following principal or interest payment date, or (ii) with respect to any Bond or any portion thereof called for redemption prior to maturity, within 45 days prior to its redemption date.

IN THE EVENT any Paying Agent/Registrar for the Bonds is changed by the Issuer, resigns, or otherwise ceases to act as such, the Issuer has covenanted in the Bond Ordinance that it promptly will appoint a competent and legally qualified substitute therefor, and cause written notice thereof to be mailed to the Registered Owners of the Bonds.

IT IS HEREBY certified, recited and covenanted that this Bond has been duly and validly authorized, issued and delivered; that all acts, conditions and things required or proper to be performed, exist and be done precedent to or in the authorization, issuance and delivery of this Bond have been performed, existed and been done in accordance with law; and that annual ad valorem taxes sufficient to provide for the payment of the interest on and principal of this Bond, as such interest comes due and such principal matures, have been levied and ordered to be levied against all taxable property in said Issuer, and have been pledged for such payment, within the limit prescribed by law.

THE ISSUER HAS RESERVED THE RIGHT to amend the Bond Ordinance as provided therein, and under some (but not all) circumstances amendments thereto must be approved by the Registered Owners of a majority in aggregate principal amount of the outstanding Bonds.

BY BECOMING the Registered Owner of this Bond, the Registered Owner thereby acknowledges all of the terms and provisions of the Bond Ordinance, agrees to be bound by such terms and provisions, acknowledges that the Bond Ordinance is duly recorded and available for inspection in the official minutes and records of the governing body of the Issuer, and agrees that the terms and provisions of this Bond and the Bond Ordinance constitute a contract between each Registered Owner hereof and the Issuer.

IN WITNESS WHEREOF, the Issuer has caused this Bond to be signed with the manual or facsimile signature of the Mayor of the Issuer (or in the Mayor's absence, of the Mayor Pro-Tem) and countersigned with the manual or facsimile signature of the City Secretary of said Issuer, and has caused the official seal of the Issuer to be duly impressed, or placed in facsimile, on this Bond.

\_\_\_\_\_  
(signature)  
City Secretary

\_\_\_\_\_  
(signature)  
Mayor

(SEAL)

[INSERT BOND INSURANCE LEGEND, IF ANY]

(b) [Form of Paying Agent/Registrar's Authentication Certificate]

PAYING AGENT/REGISTRAR'S AUTHENTICATION CERTIFICATE

(To be executed if this Bond is not accompanied by an executed Comptroller's Registration Certificate)

It is hereby certified that this Bond has been issued under the provisions of the Bond Ordinance described in the text of this Bond; and that this Bond has been issued in conversion or replacement of, or in exchange for, a bond, bonds, or a portion of a bond or bonds of a series that originally was approved by the Attorney General of the State of Texas and registered by the Comptroller of Public Accounts of the State of Texas.

Dated: \_\_\_\_\_

\_\_\_\_\_  
BOKF, NA, Dallas, Texas  
Paying Agent/Registrar

By: \_\_\_\_\_  
Authorized Representative

(c) [Form of Assignment]

ASSIGNMENT

For value received, the undersigned hereby sells, assigns and transfers unto  
\_\_\_\_\_.

Please insert Social Security or Taxpayer Identification Number of Transferee  
\_\_\_\_\_

(Please print or typewrite name and address, including zip code, of Transferee.)

\_\_\_\_\_  
the within Bond and all rights thereunder, and hereby irrevocably constitutes and appoints  
\_\_\_\_\_, attorney, to register the transfer of the within Bond  
on the books kept for registration thereof, with full power of substitution in the premises.

Dated: \_\_\_\_\_

Signature Guaranteed:

\_\_\_\_\_  
NOTICE: Signature(s) must be guaranteed by an eligible guarantor institution participating in a securities transfer association recognized signature guarantee program.

\_\_\_\_\_  
NOTICE: The signature above must correspond with the name of the Registered Owner as it appears upon the front of this bond in every particular, without alteration or enlargement or any change whatsoever.

(d) [Form of Comptroller's Registration Certificate]

COMPTROLLER'S REGISTRATION CERTIFICATE: REGISTER NO. \_\_\_\_\_

I hereby certify that this Bond has been examined, certified as to validity and approved by the Attorney General of the State of Texas, and that this Bond has been registered by the Comptroller of Public Accounts of the State of Texas.

Witness my signature and seal this

\_\_\_\_\_  
Comptroller of Public Accounts of the State of Texas

(COMPTROLLER'S SEAL)

(e) [Initial Bond Insertions]

(i) The Initial Bonds shall be in the form set forth in paragraph (a) of this Section, except that:

A. immediately under the name of the Bond, the headings "Interest Rate" and "Maturity Date" shall both be completed with the words "As shown below" and "CUSIP No. \_\_\_\_\_" shall be deleted.

B. the first paragraph shall be deleted and the following will be inserted:

"THE CITY OF DENTON, TEXAS, in Denton County, Texas (the "Issuer"), being a political subdivision and municipal corporation of the State of Texas, hereby promises to pay to the Registered Owner specified above, or registered assigns (hereinafter called the "Registered Owner"), on February 15 in each of the years, in the principal installments and bearing interest at the per annum rates set forth in the following schedule:

<u>Years</u>	<u>Principal Installments (\$)</u>	<u>Interest Rates (%)</u>
--------------	------------------------------------	---------------------------

(Information from Pricing Certificate to be inserted)

The Issuer promises to pay interest on the unpaid principal amount hereof (calculated on the basis of a 360-day year of twelve 30-day months) from the Delivery Date at the respective Interest Rate per annum specified above. Interest is payable on \_\_\_\_\_, 20\_\_\_\_, and semiannually on each \_\_\_\_\_ and \_\_\_\_\_ thereafter to the date of payment of the principal installment specified above, or the date of redemption prior to maturity; except, that if this Bond is required to be authenticated and the date of its authentication is later than the first Record Date (hereinafter defined), such Principal Amount shall bear interest from the interest payment date next preceding the date of authentication, unless such date of authentication is after any Record Date but on or before the next following interest payment date, in which case such principal amount shall bear interest from such next following interest payment date; provided, however, that if on the date of authentication hereof the interest on the Bond or Bonds, if any, for which this Bond is being exchanged is due but has not been paid, then this Bond shall bear interest from the date to which such interest has been paid in full."

C. The Initial Bond shall be numbered "T-1."

## SECTION 5. INTEREST AND SINKING FUND.

(a) A special Interest and Sinking Fund (the "Interest and Sinking Fund") is hereby created solely for the benefit of the Bonds, and the Interest and Sinking Fund shall be established and maintained by the Issuer at an official depository bank of the Issuer. The Interest and Sinking Fund shall be kept separate and apart from all other funds and accounts of the Issuer, and shall be used only for paying the interest on and principal of the Bonds. All ad valorem taxes levied and collected for and on account of the Bonds, together with any accrued interest received upon sale of the Bonds, shall be deposited, as collected, to the credit of the Interest and Sinking Fund. During each year while any of the Bonds or interest thereon are outstanding and unpaid, the governing body of the Issuer shall compute and ascertain a rate and amount of ad valorem tax which will be sufficient to raise and produce the money required to pay the interest on the Bonds as such interest becomes due, and to provide and maintain a sinking fund adequate to pay the principal of its Bonds as such principal matures or is scheduled for redemption (but never less than 2% of the original principal amount of the Bonds as a sinking fund each year). Said tax shall be based on the latest approval tax rolls of the Issuer, with full allowance being made for tax delinquencies and the cost of tax collection. Said rate and amount of ad valorem tax is hereby levied, and is hereby ordered to be levied, against all taxable property in the Issuer for each year while any of the Bonds or interest thereon are outstanding and unpaid; and said tax shall be assessed and collected each such year and deposited to the credit of the aforesaid Interest and Sinking Fund. Said ad valorem taxes sufficient to provide for the payment of the interest on and principal of the Bonds, as such interest comes due and such principal matures or is scheduled for redemption, are hereby pledged for such payment, within the limit prescribed by law. Notwithstanding the requirements of this Section, if Surplus Revenues or other lawfully available moneys of the Issuer are actually on deposit or budgeted and appropriated to be deposited in the Interest and Sinking Fund in advance of the time when ad valorem taxes are scheduled to be levied for any year, then the amount of taxes that otherwise would have been required to be levied pursuant to this Section may be reduced to the extent and by the amount of the Surplus Revenues or other lawfully available funds then on deposit or budgeted and appropriated to be deposited in the Interest and Sinking Fund. For purposes of this Section, "Surplus Revenues" means revenues derived by the Issuer from the ownership and operation of the Issuer's Utility System (consisting of its combined waterworks system, sanitary sewer system, and electric light and power system) that remain after the payment of all maintenance and operation expenses thereof, and all debt service, reserve and other requirements in connection with all of the Issuer's revenue obligations (now or hereafter outstanding) or contractual obligations (now or hereafter existing) which are payable from all or any part of the net revenues of the Issuer's Utility System. If Surplus Revenues are budgeted and appropriated for deposit into the Interest and Sinking Fund, the Issuer:

- (i) shall transfer and deposit in the Interest and Sinking Fund each month an amount of not less than 1/12th of the annual debt service on the Bonds to be paid from Surplus Revenues until the amount on deposit in the Interest and Sinking Fund equals the amount required for annual debt service on the Bonds;
- (ii) shall establish, adopt and maintain an annual budget that provides for either the monthly deposit of sufficient Surplus Revenues and/or tax revenues, the monthly deposit of any other legally available funds on hand at the time of the adoption of the annual budget, or a combination thereof, into the Interest and Sinking Fund for the repayment of the Bonds; and
- (iii) shall at all times maintain and collect sufficient Utility System rates and charges in conjunction with any other legally available funds that, after payment of the costs of operating and maintaining the Utility System, produce revenues in an amount not less than the debt service requirements of all outstanding Utility System revenue bonds of the Issuer and other obligations of the Issuer which are

secured in whole or in part by a pledge of revenues of the Utility System and for which the Issuer is budgeting the repayment of such obligations from the revenues of the Utility System, or the Issuer shall provide documentation which evidences the levy of an ad valorem tax rate dedicated to the Interest and Sinking Fund, in conjunction with any other legally available funds except Utility System rates and charges, sufficient for the repayment of Utility System debt service requirements.

(b) Chapter 1208, Texas Government Code, applies to the issuance of the Bonds and the pledge of the taxes granted by the Issuer under this Section and Section 9, respectively, and is therefore valid, effective, and perfected. Should Texas law be amended at any time while the Bonds are outstanding and unpaid, the result of such amendment being that the pledge of the taxes granted by the Issuer under this Section is to be subject to the filing requirements of Chapter 9, Texas Business & Commerce Code, in order to preserve to the Registered Owners of the Bonds a security interest in said pledge, the Issuer agrees to take such measures as it determines are reasonable and necessary under Texas law to comply with the applicable provisions of Chapter 9, Texas Business & Commerce Code and enable a filing of a security interest in said pledge to occur.

#### SECTION 6. DEFEASANCE OF BONDS.

(a) Any Bond and the interest thereon shall be deemed to be paid, retired and no longer outstanding (a "Defeased Bond") within the meaning of this Ordinance, except to the extent provided in subsection (d) of this Section, when payment of the principal of such Bond, plus interest thereon to the due date (whether such due date be by reason of maturity or otherwise) either (i) shall have been made or caused to be made in accordance with the terms thereof, or (ii) shall have been provided for on or before such due date by irrevocably depositing with or making available to the Paying Agent/Registrar in accordance with an escrow agreement or other instrument (the "Future Escrow Agreement") for such payment (1) lawful money of the United States of America sufficient to make such payment or (2) Government Obligations that mature as to principal and interest in such amounts and at such times as will insure the availability, without reinvestment, of sufficient money to provide for such payment, and when proper arrangements have been made by the Issuer with the Paying Agent/Registrar for the payment of its services until all Defeased Bonds shall have become due and payable. At such time as a Bond shall be deemed to be a Defeased Bond hereunder, as aforesaid, such Bond and the interest thereon shall no longer be secured by, payable from, or entitled to the benefits of, the ad valorem taxes herein levied and pledged as provided in this Ordinance, and such principal and interest shall be payable solely from such money or Government Obligations. Notwithstanding any other provision of this Ordinance to the contrary, it is hereby provided that any determination not to redeem Defeased Bonds that is made in conjunction with the payment arrangements specified in Subsection (a)(i) or (ii) of this Section shall not be irrevocable, provided that: (1) in the proceedings providing for such payment arrangements, the Issuer expressly reserves the right to call the Defeased Bonds for redemption; (2) gives notice of the reservation of that right to the Registered Owners of the Defeased Bonds immediately following the making of the payment arrangements; and (3) directs that notice of the reservation be included in any redemption notices that it authorizes.

(b) Any moneys so deposited with the Paying Agent/Registrar may at the written direction of the Issuer be invested in Government Obligations, maturing in the amounts and times as hereinbefore set forth, and all income from such Government Obligations received by the Paying Agent/Registrar that is not required for the payment of the Bonds and interest thereon, with respect to which such money has been so deposited, shall be turned over to the Issuer, or deposited as directed in writing by the Issuer. Any Future Escrow Agreement pursuant to which the money and/or Government Obligations are held for the payment of Defeased Bonds may contain provisions permitting the investment or reinvestment of such moneys in Government Obligations or the substitution of other Government Obligations upon the satisfaction of the requirements specified in Subsection (a)(i) or (ii) of this Section. All income from such Government

Obligations received by the Paying Agent/Registrar which is not required for the payment of the Defeased Bonds, with respect to which such money has been so deposited, shall be remitted to the Issuer or deposited as directed in writing by the Issuer.

(c) Unless modified in the Pricing Certificate, the term "Government Obligations" means any securities and obligations now or hereafter authorized by state law that are eligible to discharge obligations such as the Bonds, including (i) direct, noncallable obligations of the United States of America, including obligations that are unconditionally guaranteed by the United States of America, (ii) noncallable obligations of an agency or instrumentality of the United States of America, including obligations that are unconditionally guaranteed or insured by the agency or instrumentality and that, on the date the governing body of the Issuer adopts or approves the proceedings authorizing the financial arrangements, are rated as to investment quality by a nationally recognized investment rating firm not less than AAA or its equivalent, and (iii) noncallable obligations of a state or an agency or a county, municipality, or other political subdivision of a state that have been refunded and that, on the date the governing body of the Issuer adopts or approves the proceedings authorizing the financial arrangements, are rated as to investment quality by a nationally recognized investment rating firm not less than AAA or its equivalent.

(d) Until all Defeased Bonds shall have become due and payable, the Paying Agent/Registrar shall perform the services of Paying Agent/Registrar for such Defeased Bonds the same as if they had not been defeased, and the Issuer shall make proper arrangements to provide and pay for such services as required by this Ordinance.

(e) In the event that the Issuer elects to defease less than all of the principal amount of Bonds of a maturity, the Paying Agent/Registrar shall select, or cause to be selected, such amount of Bonds by such random method as it deems fair and appropriate.

#### SECTION 7. DAMAGED, MUTILATED, LOST, STOLEN, OR DESTROYED BONDS.

(a) Replacement Bonds. In the event any outstanding Bond is damaged, mutilated, lost, stolen or destroyed, the Paying Agent/Registrar shall cause to be printed, executed and delivered, a new Bond of the same principal amount, maturity and interest rate, as the damaged, mutilated, lost, stolen or destroyed Bond, in replacement for such Bond in the manner hereinafter provided.

(b) Application for Replacement Bonds. Application for replacement of damaged, mutilated, lost, stolen or destroyed Bonds shall be made by the Registered Owner thereof to the Paying Agent/Registrar. In every case of loss, theft or destruction of a Bond, the Registered Owner applying for a replacement Bond shall furnish to the Issuer and to the Paying Agent/Registrar such security or indemnity as may be required by them to save each of them harmless from any loss or damage with respect thereto. Also, in every case of loss, theft or destruction of a Bond, the Registered Owner shall furnish to the Issuer and to the Paying Agent/Registrar evidence to their satisfaction of the loss, theft or destruction of such Bond, as the case may be. In every case of damage or mutilation of a Bond, the Registered Owner shall surrender to the Paying Agent/Registrar for cancellation the Bond so damaged or mutilated.

(c) No Default Occurred. Notwithstanding the foregoing provisions of this Ordinance, in the event any such Bond shall have matured, and no default has occurred that is then continuing in the payment of the principal of, redemption premium, if any, or interest on the Bond, the Issuer may authorize the payment of the same (without surrender thereof except in the case of a damaged or mutilated Bond) instead of issuing a replacement Bond, provided security or indemnity is furnished as above provided in this Section.

(d) Charge for Issuing Replacement Bonds. Prior to the issuance of any replacement Bond, the Paying Agent/Registrar shall charge the Registered Owner of such Bond with all legal, printing, and other expenses in connection therewith. Every replacement Bond issued pursuant to the provisions of this Section by virtue of the fact that any Bond is lost, stolen or destroyed shall constitute a contractual obligation of the Issuer whether or not the lost, stolen or destroyed Bond shall be found at any time, or be enforceable by anyone, and shall be entitled to all the benefits of this Ordinance equally and proportionately with any and all other Bonds duly issued under this Ordinance.

(e) Authority for Issuing Replacement Bonds. In accordance with Sec. 1206.022, Government Code, this Section 7 of this Ordinance shall constitute authority for the issuance of any such replacement Bond without necessity of further action by the governing body of the Issuer or any other body or person, and the duty of the replacement of such Bonds is hereby authorized and imposed upon the Paying Agent/Registrar, and the Paying Agent/Registrar shall authenticate and deliver such Bonds in the form and manner and with the effect, as provided in Section 3(a) of this Ordinance for Bonds issued in conversion and exchange for other Bonds.

#### SECTION 8. CUSTODY, APPROVAL, AND REGISTRATION OF BONDS; BOND COUNSEL'S OPINION; CUSIP NUMBERS AND CONTINGENT INSURANCE PROVISION, IF OBTAINED; ENGAGEMENT OF BOND COUNSEL.

(a) The Mayor of the Issuer is hereby authorized to have control of the Initial Bonds and all necessary records and proceedings pertaining to the Bonds pending its delivery and its investigation, examination, and approval by the Attorney General, and its registration by the Comptroller. Upon registration of an Initial Bond said Comptroller (or a deputy designated in writing to act for said Comptroller) shall manually sign the Comptroller's Registration Certificate attached to such Bond, and the seal of said Comptroller shall be impressed, or placed in facsimile, on such Bond. The approving legal opinion of the Issuer's Bond Counsel and the assigned CUSIP numbers may, at the option of the Issuer, be printed on the Bonds issued and delivered under this Ordinance, but neither shall have any legal effect, and shall be solely for the convenience and information of the Registered Owners of the Bonds. In addition, if bond insurance is obtained, the Bonds may bear an appropriate legend as provided by the insurer.

(b) The obligation of the Purchaser to accept delivery of the Bonds is subject to the Purchaser being furnished with the final, approving opinion of McCall, Parkhurst & Horton L.L.P., bond counsel to the Issuer, which opinion shall be dated as of and delivered on the date of initial delivery of the Bonds to the Purchaser. The engagement of such firm as bond counsel to the Issuer in connection with the issuance, sale and delivery of the Bonds is hereby approved and confirmed. The execution and delivery of an engagement letter between the Issuer and such firm, with respect to such services as bond counsel, is hereby authorized in such form as may be approved by the Mayor, and the Mayor is hereby authorized to execute such engagement letter.

#### SECTION 9. COVENANTS REGARDING TAX EXEMPTION OF INTEREST ON THE BONDS.

(a) Covenants. The Issuer covenants to take any action necessary to assure, or refrain from any action that would adversely affect, the treatment of the Bonds as obligations described in section 103 of the Internal Revenue Code of 1986, as amended (the "Code"), the interest on which is not includable in the "gross income" of the holder for purposes of federal income taxation. In furtherance thereof, the Issuer covenants as follows:

(1) to take any action to assure that no more than 10 percent of the proceeds of the Bonds or the projects financed therewith (less amounts deposited to a reserve fund, if any) are used for any



"private business use," as defined in section 141(b)(6) of the Code or, if more than 10 percent of the proceeds or the projects financed or refinanced therewith are so used, such amounts, whether or not received by the Issuer, with respect to such private business use, do not, under the terms of this Ordinance or any underlying arrangement, directly or indirectly, secure or provide for the payment of more than 10 percent of the debt service on the Bonds, in contravention of section 141(b)(2) of the Code;

(2) to take any action to assure that in the event that the "private business use" described in subsection (1) hereof exceeds 5 percent of the proceeds of the Bonds or the projects financed therewith (less amounts deposited into a reserve fund, if any) then the amount in excess of 5 percent is used for a "private business use" that is "related" and not "disproportionate," within the meaning of section 141(b)(3) of the Code, to the governmental use;

(3) to take any action to assure that no amount that is greater than the lesser of \$5,000,000, or 5 percent of the proceeds of the Bonds (less amounts deposited into a reserve fund, if any) is directly or indirectly used to finance loans to persons, other than state or local governmental units, in contravention of section 141(c) of the Code;

(4) to refrain from taking any action that would otherwise result in the Bonds being treated as "private activity bonds" within the meaning of section 141(b) of the Code;

(5) to refrain from taking any action that would result in the Bonds being "federally guaranteed" within the meaning of section 149(b) of the Code;

(6) to refrain from using any portion of the proceeds of the Bonds, directly or indirectly, to acquire or to replace funds that were used, directly or indirectly, to acquire investment property (as defined in section 148(b)(2) of the Code) that produces a materially higher yield over the term of the Bonds, other than investment property acquired with:

(A) proceeds of the Bonds invested for a reasonable temporary period of 3 years or less or, in the case of a refunding bond, for a period of 90 days or less until such proceeds are needed for the purpose for which the bonds are issued,

(B) amounts invested in a bona fide debt service fund, within the meaning of section 1.148-1(b) of the rules and regulations of the United States Department of the Treasury ("Treasury Regulations"), and

(C) amounts deposited in any reasonably required reserve or replacement fund to the extent such amounts do not exceed 10 percent of the proceeds of the Bonds;

(7) to otherwise restrict the use of the proceeds of the Bonds or amounts treated as proceeds of the Bonds, as may be necessary, so that the Bonds do not otherwise contravene the requirements of section 148 of the Code (relating to arbitrage);

(8) to refrain from using the proceeds of the Bonds or proceeds of any prior bonds to pay debt service on another issue more than 90 days after the date of issue of the Bonds in contravention of the requirements of section 149(d) of the Code (relating to advance refundings); and

(9) to pay to the United States of America at least once during each five-year period (beginning on the date of delivery of the Bonds) an amount that is at least equal to 90 percent of the "Excess

Earnings," within the meaning of section 148(f) of the Code and to pay to the United States of America, not later than 60 days after the Bonds have been paid in full, 100 percent of the amount then required to be paid as a result of Excess Earnings under section 148(f) of the Code.

(b) Rebate Fund. In order to facilitate compliance with the above covenant (a)(9), a "Rebate Fund" is hereby established by the Issuer for the sole benefit of the United States of America, and such Rebate Fund shall not be subject to the claim of any other person, including without limitation the Bondholders. The Rebate Fund is established for the additional purpose of compliance with section 148 of the Code.

(c) Use of Proceeds. The Issuer understands that the term "proceeds" includes "disposition proceeds" as defined in the Treasury Regulations and, in the case of refunding bonds, transferred proceeds (if any) and proceeds of the refunded bonds expended prior to the date of issuance of the Bonds. It is the understanding of the Issuer that the covenants contained herein are intended to assure compliance with the Code and any regulations or rulings promulgated by the United States Department of the Treasury pursuant thereto. In the event that regulations or rulings are hereafter promulgated that modify or expand provisions of the Code, as applicable to the Bonds, the Issuer will not be required to comply with any covenant contained herein to the extent that such failure to comply, in the opinion of nationally recognized bond counsel, will not adversely affect the exemption from federal income taxation of interest on the Bonds under section 103 of the Code. In the event that regulations or rulings are hereafter promulgated that impose additional requirements applicable to the Bonds, the Issuer agrees to comply with the additional requirements to the extent necessary, in the opinion of nationally recognized bond counsel, to preserve the exemption from federal income taxation of interest on the Bonds under section 103 of the Code. In furtherance of such intention, the Issuer hereby authorizes and directs the Mayor or Pricing Officer to execute any documents, certificates or reports required by the Code and to make such elections, on behalf of the Issuer, that may be permitted by the Code as are consistent with the purpose for the issuance of the Bonds.

(d) Allocation of, and Limitation on, Expenditures for the Projects. The Issuer covenants to account for the expenditure of sale proceeds and investment earnings to be used for the construction and acquisition of the Improvement Projects on its books and records in accordance with the requirements of the Code. The Issuer recognizes that in order for the proceeds to be considered used for the reimbursement of costs, the proceeds must be allocated to expenditures within 18 months of the later of the date that (1) the expenditure is made, or (2) the Improvement Projects are completed; but in no event later than three years after the date on which the original expenditure is paid. The foregoing notwithstanding, the Issuer recognizes that in order for proceeds to be expended under the Code, the sale proceeds or investment earnings must be expended no more than 60 days after the earlier of (1) the fifth anniversary of the delivery of the Bonds, or (2) the date the Bonds are retired. The Issuer agrees to obtain the advice of nationally-recognized bond counsel if such expenditure fails to comply with the foregoing to assure that such expenditure will not adversely affect the tax-exempt status of the Bonds. For purposes hereof, the issuer shall not be obligated to comply with this covenant if it obtains an opinion that such failure to comply will not adversely affect the excludability for federal income tax purposes from gross income of the interest.

(e) Disposition of Projects. The Issuer covenants that the property constituting the Improvement Projects and the projects refinanced by the Bonds will not be sold or otherwise disposed in a transaction resulting in the receipt by the Issuer of cash or other compensation, unless any action taken in connection with such disposition will not adversely affect the tax-exempt status of the Bonds. For purposes of the foregoing, the Issuer may rely on an opinion of nationally-recognized bond counsel that the action taken in connection with such sale or other disposition will not adversely affect the tax-exempt status of the Bonds. For purposes of the foregoing, the portion of the property comprising personal property and disposed in the ordinary course shall not be treated as a transaction resulting in the receipt of cash or other compensation.

For purposes hereof, the Issuer shall not be obligated to comply with this covenant if it obtains an opinion that such failure to comply will not adversely affect the excludability for federal income tax purposes from gross income of the interest.

(f) Reimbursement. This Ordinance is intended to satisfy the official intent requirements set forth in section 1.150-2 of the Treasury Regulations.

#### SECTION 10. SALE OF BONDS AND APPROVAL OF OFFICIAL STATEMENT; FURTHER PROCEDURES.

(a) Each Series of Bonds shall be sold and delivered subject to the provisions of Section 1 and Section 2 hereof through a negotiated sale, competitive sale or private placement and pursuant to the terms and provisions of a purchase contract or a notice of sale and official bid form (in each case, a "Purchase Agreement"), the terms and provisions of which are to be determined by the Pricing Officer in accordance with Section 2 hereof, and in which the purchaser or purchasers of the Bonds (the "Purchaser") shall be designated. The Pricing Officer is hereby authorized to execute and deliver one or more Purchase Agreement for and on behalf of the Issuer. The Bonds shall initially be registered in the name of the Purchaser or its designee.

(b) The Issuer hereby approves the form and content of the draft preliminary official statement relating to the Bonds and any addenda, supplement or amendment thereto, and approves the distribution of one or more preliminary official statement or other preliminary offering document in the reoffering of the Bonds by the Purchaser in final form, with such changes therein or additions thereto as the Pricing Officer may deem advisable. The Pricing Officer is hereby authorized, in the name and on behalf of the Issuer, to approve, distribute, and deliver one or more final official statement or other final offering document relating to the Bonds to be used by the Purchaser in the marketing of the Bonds.

(c) The Pricing Officer is authorized, in connection with effecting the sale of the Bonds, to obtain from a municipal bond insurance company so designated in the Pricing Certificate (the "Insurer") a municipal bond insurance policy (the "Insurance Policy") in support of the Bonds. To that end, should the Pricing Officer exercise such authority and commit the Issuer to obtain a municipal bond insurance policy, for so long as the Insurance Policy is in effect, the requirements of the Insurer relating to the issuance of the Insurance Policy as set forth in the Pricing Certificate are incorporated by reference into this Ordinance and made a part hereof for all purposes, notwithstanding any other provision of this Ordinance to the contrary. The Pricing Officer shall have the authority to execute any documents to effect the issuance of the Insurance Policy by the Insurer, including commitment agreements, membership agreements in mutual insurance companies and other similar agreements.

(d) The Mayor and Mayor Pro Tem, the City Manager, Pricing Officer and City Secretary and all other officers, employees and agents of the Issuer, and each of them, shall be and they are hereby expressly authorized, empowered and directed from time to time and at any time to do and perform all such acts and things and to execute, acknowledge and deliver in the name and under the corporate seal and on behalf of the Issuer a Paying Agent/Registrar Agreement with the Paying Agent/Registrar and all other instruments, whether or not herein mentioned, as may be necessary or desirable in order to carry out the terms and provisions of this Ordinance, the Pricing Certificate, the Bonds, the sale of the Bonds, any Purchase Agreement and any official statement or other offering document. In case any officer whose signature shall appear on any Bond shall cease to be such officer before the delivery of such Bond, such signature shall nevertheless be valid and sufficient for all purposes the same as if such officer had remained in office until such delivery.

SECTION 11. INTEREST EARNINGS ON BOND PROCEEDS. Interest earnings derived from the investment of proceeds from the sale of the Bonds issued for the Improvement Projects shall be used along with other Bond proceeds for the Improvement Projects; provided that after completion of such purpose, if any of such interest earnings remain on hand, such interest earnings shall be deposited in the Interest and Sinking Fund. It is further provided, however, that any interest earnings on Bond proceeds that are required to be rebated to the United States of America pursuant to Section 9 hereof in order to prevent the Bonds from being arbitrage bonds shall be so rebated and not considered as interest earnings for the purposes of this Section.

#### SECTION 12. CONSTRUCTION FUND OR ACCOUNT; INVESTMENTS.

(a) The proceeds of sale of the Bonds, excluding any accrued interest received from the initial purchaser of the Bonds and any other amounts to be deposited into the Interest and Sinking Fund, any amounts to be deposited into the escrow fund under the escrow agreement approved in Section 16 of this Ordinance and amounts to pay costs of issuance of the Bonds, shall be deposited in one or more construction funds or accounts for use, along with any investment earnings thereon, by the Issuer for payment of all lawful costs associated with the acquisition and construction of the Improvement Projects as hereinbefore provided. Upon payment of all such costs, any moneys remaining on deposit in said funds or accounts, including investment earnings, shall be transferred to the Interest and Sinking fund. Amounts so deposited to the Interest and Sinking Fund shall be used in the manner described in Section 5 of this Ordinance.

(b) The Issuer may invest proceeds of the Bonds (including investment earnings thereon) issued for Improvement Projects and amounts deposited into the Interest and Sinking Fund in investments authorized by the Public Funds Investment Act, Chapter 2256, Texas Government Code, as amended; provided, however, that the Issuer hereby covenants that the proceeds of the sale of the Bonds will be used as soon as practicable for the purposes for which the Bonds are issued.

(c) All deposits authorized or required by this Ordinance shall be secured to the fullest extent required by law for the security of public funds.

#### SECTION 13. COMPLIANCE WITH RULE 15c2-12.

(a) Definitions. As used in this Section, the following terms have the meanings ascribed to such terms below:

*"Financial Obligation"* means a (i) debt obligation, (ii) derivative instrument entered into in connection with or pledged as security or a source of payment for, an existing or planned debt obligation, or (iii) a guarantee of (i) or (ii); provided however, that a "financial obligation" shall not include municipal securities as to which a final official statement (as defined in the Rule) has been provided to the MSRB consistent with the Rule.

*"MSRB"* means the Municipal Securities Rulemaking Board.

*"Rule"* means SEC Rule 15c2-12, as amended from time to time.

*"SEC"* means the United States Securities and Exchange Commission.

(b) Annual Reports.

(i) The Issuer shall provide annually to the MSRB, in the electronic format prescribed by the MSRB, financial information and operating data (the "Annual Operating Report") with respect to the Issuer of the general type included in the final official statement authorized by this Ordinance, being the information described in the Pricing Certificate. The Issuer will additionally provide financial statements of the Issuer (the "Financial Statements"), that will be (i) prepared in accordance with the accounting principles described in the Pricing Certificate or such other accounting principles as the Issuer may be required to employ from time to time pursuant to State law or regulation and shall be in substantially the form included in the final official statement and (ii) audited, if the Issuer commissions an audit of such Financial Statements and the audit is completed within the period during which they must be provided. The Issuer will update and provide the Annual Operating Report within six months after the end of each fiscal year and the Financial Statements within 12 months of the end of each fiscal year, in each case beginning with the fiscal year ending in and after 2023. The Issuer may provide the Financial Statements earlier, including at the time it provides its Annual Operating Report, but if the audit of such Financial Statements is not complete within 12 months after any such fiscal year end, then the Issuer shall file unaudited Financial Statements within such 12-month period and audited Financial Statements for the applicable fiscal year, when and if the audit report on such Financial Statements becomes available. All documents provided to the MSRB pursuant to this Section shall be accompanied by identifying information as prescribed by the MSRB.

(ii) If the Issuer changes its fiscal year, it will notify the MSRB of the change (and of the date of the new fiscal year end) prior to the next date by which the Issuer otherwise would be required to provide financial information and operating data pursuant to this Section. The financial information and operating data to be provided pursuant to this Section may be set forth in full in one or more documents or may be included by specific reference to any document (including an official statement or other offering document, if it is available from the MSRB) that theretofore has been provided to the MSRB or filed with the SEC.

(c) Event Notices.

(i) The Issuer shall notify the MSRB in an electronic format as prescribed by the MSRB, in a timely manner (but not in excess of ten business days after the occurrence of the event) of any of the following events with respect to the Bonds, if such event is material within the meaning of the federal securities laws:

1. Non-payment related defaults;
2. Modifications to rights of holders of the Bonds;
3. Bond calls;
4. Release, substitution, or sale of property securing repayment of the Bonds;
5. The consummation of a merger, consolidation, or acquisition involving an obligated person or the sale of all or substantially all of the assets of the obligated person, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms;
6. Appointment of a successor or additional trustee or the change of name of a trustee; and
7. Incurrence of a Financial Obligation of the Issuer or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the Issuer, any of which affect security holders.

(ii) The Issuer shall notify the MSRB in an electronic format as prescribed by the MSRB, in a timely manner (but not in excess of ten business days after the occurrence of the event) of any of the following events with respect to the Bonds, without regard to whether such event is considered material within the meaning of the federal securities laws:

1. Principal and interest payment delinquencies;
2. Unscheduled draws on debt service reserves reflecting financial difficulties;
3. Unscheduled draws on credit enhancements reflecting financial difficulties;
4. Substitution of credit or liquidity providers, or their failure to perform;
5. Adverse tax opinions or the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax-exempt status of the Bonds, or other material events affecting the tax-exempt status of the Bonds;
6. Tender offers;
7. Defeasances;
8. Rating changes;
9. Bankruptcy, insolvency, receivership or similar event of an obligated person; and
10. Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the Issuer, any of which reflect financial difficulties.

(iii) The Issuer shall notify the MSRB, in a timely manner, of any failure by the Issuer to provide financial information or operating data in accordance with subsection (b) of this Section by the time required by such subsection.

(d) Limitations, Disclaimers, and Amendments.

(i) The Issuer shall be obligated to observe and perform the covenants specified in this Section for so long as, but only for so long as, the Issuer remains an "obligated person" with respect to the Bonds within the meaning of the Rule, except that the Issuer in any event will give notice of any deposit made in accordance with this Ordinance or applicable law that causes the Bonds no longer to be outstanding.

(ii) The provisions of this Section are for the sole benefit of the Registered Owners and beneficial owners of the Bonds, and nothing in this Section, express or implied, shall give any benefit or any legal or equitable right, remedy, or claim hereunder to any other person. The Issuer undertakes to provide only the financial information, operating data, financial statements, and notices which it has expressly agreed to provide pursuant to this Section and does not hereby undertake to provide any other information that may be relevant or material to a complete presentation of the Issuer's financial results, condition, or prospects or hereby undertake to update any information provided in accordance with this Section or otherwise, except as expressly provided herein. The Issuer does not make any representation or warranty concerning such information or its usefulness to a decision to invest in or sell Bonds at any future date.

(iii) UNDER NO CIRCUMSTANCES SHALL THE ISSUER BE LIABLE TO THE REGISTERED OWNER OR BENEFICIAL OWNER OF ANY BOND OR ANY OTHER PERSON, IN CONTRACT OR TORT, FOR DAMAGES RESULTING IN WHOLE OR IN PART FROM ANY BREACH BY THE ISSUER, WHETHER NEGLIGENT OR WITHOUT FAULT ON ITS PART, OF ANY COVENANT SPECIFIED IN THIS SECTION, BUT EVERY RIGHT AND REMEDY OF

ANY SUCH PERSON, IN CONTRACT OR TORT, FOR OR ON ACCOUNT OF ANY SUCH BREACH SHALL BE LIMITED TO AN ACTION FOR MANDAMUS OR SPECIFIC PERFORMANCE.

(iv) No default by the Issuer in observing or performing its obligations under this Section shall comprise a breach of or default under this Ordinance for purposes of any other provision of this Ordinance. Nothing in this Section is intended or shall act to disclaim, waive, or otherwise limit the duties of the Issuer under federal and state securities laws.

(v) Notwithstanding anything to the contrary in Section 14 hereof, the provisions of this Section may be amended by the Issuer from time to time to adapt to changed circumstances that arise from a change in legal requirements, a change in law, or a change in the identity, nature, status, or type of operations of the Issuer, but only if (1) the provisions of this Section, as so amended, would have permitted an underwriter to purchase or sell Bonds in the primary offering of the Bonds in compliance with the Rule, taking into account any amendments or interpretations of the Rule since such offering as well as such changed circumstances and (2) either (a) the Registered Owners of a majority in aggregate principal amount (or any greater amount required by any other provision of this Ordinance that authorizes such an amendment) of the outstanding Bonds consent to such amendment or (b) a person that is unaffiliated with the Issuer (such as nationally recognized bond counsel) determined that such amendment will not materially impair the interest of the Registered Owners and beneficial owners of the Bonds. The Issuer may also amend or repeal the provisions of this continuing disclosure agreement if the SEC amends or repeals the applicable provision of the Rule or a court of final jurisdiction enters judgment that such provisions of the Rule are invalid, but only if and to the extent that the provisions of this sentence would not prevent an underwriter from lawfully purchasing or selling Bonds in the primary offering of the Bonds. If the Issuer so amends the provisions of this Section, it shall include with any amended financial information or operating data next provided in accordance with subsection (b) of this Section an explanation, in narrative form, of the reason for the amendment and of the impact of any change in the type of financial information or operating data so provided.

(e) Amendment of the Rule. The provisions of this Section shall be revised by the Pricing Officer to reflect the requirements of the Rule if the Rule is amended after the adoption of this Ordinance but prior to the delivery of the Bonds so as to permit an underwriter to purchase or sell Bonds in the primary offering of the Bonds in compliance with the Rule. Any such revisions shall be set forth in the Pricing Certificate and are incorporated by reference into this Ordinance and made a part hereof for all purposes, notwithstanding any other provision of this Ordinance to the contrary.

SECTION 14. METHOD OF AMENDMENT. The Issuer hereby reserves the right to amend this Ordinance subject to the following terms and conditions, to-wit:

(a) The Issuer may from time to time, without the consent of any holder, except as otherwise required by paragraph (b) below, amend or supplement this Ordinance in order to (i) cure any ambiguity, defect or omission in this Ordinance that does not materially adversely affect the interests of the holders, (ii) grant additional rights or security for the benefit of the holders, (iii) add events of default as shall not be inconsistent with the provisions of this Ordinance and that shall not materially adversely affect the interests of the holders, (iv) qualify this Ordinance under the Trust Indenture Act of 1939, as amended, or corresponding provisions of federal laws from time to time in effect, or (v) make such other provisions in regard to matters or questions arising under this Ordinance as shall not be inconsistent with the provisions of this Ordinance and that shall not in the opinion of the Issuer's Bond Counsel materially adversely affect the interests of the holders.

(b) Except as provided in paragraph (a) above, the holders of Bonds aggregating in principal amount a majority of the aggregate principal amount of then outstanding Bonds that are the subject of a proposed amendment shall have the right from time to time to approve any amendment hereto that may be deemed necessary or desirable by the Issuer; provided, however, that without the consent of 100% of the holders in aggregate principal amount of the then outstanding Bonds that are the subject of a proposed amendment, nothing herein contained shall permit or be construed to permit amendment of the terms and conditions of this Ordinance or in any of the Bonds so as to:

- (1) Make any change in the maturity of any of the affected outstanding Bonds;
- (2) Reduce the rate of interest borne by any of the affected outstanding Bonds;
- (3) Reduce the amount of the principal of, or redemption premium, if any, payable on any affected outstanding Bonds;
- (4) Modify the terms of payment of principal or of interest or redemption premium on affected outstanding Bonds or impose any condition with respect to such payment; or
- (5) Change the minimum percentage of the principal amount of Bonds necessary for consent to such amendment.

(c) If at any time the Issuer shall desire to amend this Ordinance under this Section, the Issuer shall send by U.S. mail to each Registered Owner of the affected Bonds a copy of the proposed amendment and cause notice of the proposed amendment to be published at least once in a financial publication published in The City of New York, New York or in the State of Texas. Such published notice shall briefly set forth the nature of the proposed amendment and shall state that a copy thereof is on file at the office of the Issuer for inspection by all holders of such Bonds.

(d) Whenever at any time within one year from the date of publication of such notice the Issuer shall receive an instrument or instruments executed by the holders of at least a majority in aggregate principal amount of all of the Bonds then outstanding that are required for the amendment, which instrument or instruments shall refer to the proposed amendment and that shall specifically consent to and approve such amendment, the Issuer may adopt the amendment in substantially the same form.

(e) Upon the adoption of any amendatory Ordinance pursuant to the provisions of this Section, this Ordinance shall be deemed to be modified and amended in accordance with such amendatory Ordinance, and the respective rights, duties, and obligations of the Issuer and all holders of such affected Bonds shall thereafter be determined, exercised, and enforced, subject in all respects to such amendment.

(f) Any consent given by the holder of a Bond pursuant to the provisions of this Section shall be irrevocable for a period of six months from the date of the publication of the notice provided for in this Section, and shall be conclusive and binding upon all future holders of the same Bond during such period. Such consent may be revoked at any time after six months from the date of the publication of said notice by the holder who gave such consent, or by a successor in title, by filing notice with the Issuer, but such revocation shall not be effective if the holders of a majority in aggregate principal amount of the affected Bonds then outstanding, have, prior to the attempted revocation, consented to and approved the amendment.

For the purposes of establishing ownership of the Bonds, the Issuer shall rely solely upon the registration of the ownership of such Bonds on the Registration Books kept by the Paying Agent/Registrar.



## SECTION 15. DEFAULT AND REMEDIES.

(a) Events of Default. Each of the following occurrences or events for the purpose of this Ordinance is hereby declared to be an Event of Default:

(i) the failure to make payment of the principal of or interest on any of the Bonds when the same becomes due and payable; or

(ii) default in the performance or observance of any other covenant, agreement or obligation of the Issuer, the failure to perform which materially, adversely affects the rights of the Registered Owners of the Bonds, including, but not limited to, their prospect or ability to be repaid in accordance with this Ordinance, and the continuation thereof for a period of 60 days after notice of such default is given by any Registered Owner to the Issuer.

(b) Remedies for Default.

(i) Upon the happening of any Event of Default, then and in every case, any Registered Owner or an authorized representative thereof, including, but not limited to, a trustee or trustees therefor, may proceed against the Issuer for the purpose of protecting and enforcing the rights of the Registered Owners under this Ordinance, by mandamus or other suit, action or special proceeding in equity or at law, in any court of competent jurisdiction, for any relief permitted by law, including the specific performance of any covenant or agreement contained herein, or thereby to enjoin any act or thing that may be unlawful or in violation of any right of the Registered Owners hereunder or any combination of such remedies.

(ii) It is provided that all such proceedings shall be instituted and maintained for the equal benefit of all Registered Owners of Bonds then outstanding.

(c) Remedies Not Exclusive.

(i) No remedy herein conferred or reserved is intended to be exclusive of any other available remedy or remedies, but each and every such remedy shall be cumulative and shall be in addition to every other remedy given hereunder or under the Bonds or now or hereafter existing at law or in equity; provided, however, that notwithstanding any other provision of this Ordinance, the right to accelerate the debt evidenced by the Bonds shall not be available as a remedy under this Ordinance.

(ii) The exercise of any remedy herein conferred or reserved shall not be deemed a waiver of any other available remedy.

(iii) By accepting the delivery of a Bond authorized under this Ordinance, such Registered Owner agrees that the certifications required to effectuate any covenants or representations contained in this Ordinance do not and shall never constitute or give rise to a personal or pecuniary liability or charge against the officers, employees or agents of the Issuer or the members of its governing body.

SECTION 16. APPROVAL OF ESCROW AGREEMENT AND TRANSFER OF FUNDS. In furtherance of authority granted by Section 1207.007(b), Texas Government Code, the Mayor or a Pricing Officer are further authorized to enter into and execute on behalf of the Issuer with the escrow agent named therein, an escrow or similar agreement, in the form and substance as shall be approved by the Pricing Officer, which agreement will provide for the payment in full of the Refunded Obligations. In addition, the

Mayor, Pricing Officer or other officer of the Issuer is authorized to purchase such securities, to execute such subscriptions for the purchase of the Escrowed Securities, (as defined in the agreement), if any, and to authorize such contributions to the escrow fund as provided in the agreement.

#### SECTION 17. REDEMPTION OF REFUNDED OBLIGATIONS.

(a) Subject to the execution and delivery of a Purchase Agreement with the Purchaser, the Issuer hereby directs that the Refunded Obligations be called for redemption on the dates and at such prices as set forth in the Pricing Certificate. The Pricing Officer is hereby authorized and directed to issue or cause to be issued the Notice of Redemption of the Refunded Obligations in substantially the form set forth in Exhibit A attached hereto, completed with information from the Pricing Certificate, to the paying agent/registrars(s) for the Refunded Obligations.

(b) In addition, the paying agent/registrars(s) for the Refunded Obligations is hereby directed to provide the appropriate notices of redemption and defeasance as specified by the ordinances authorizing the issuance of the Refunded Obligations and is hereby directed to make appropriate arrangements so that the Refunded Obligations may be redeemed on their respective redemption dates. The Refunded Obligations shall be presented for redemption at the paying agent/registrars therefore, and shall not bear interest after the date fixed for redemption.

(c) If the redemption of the Refunded Obligations results in the partial refunding of any maturity of the Refunded Obligations, the Pricing Officer shall direct the paying agent/registrars(s) for the Refunded Obligations to designate at random and by lot which of the Refunded Obligations will be payable from and secured solely from ad valorem taxes of the Issuer pursuant to the ordinance of the Issuer authorizing the issuance of such Refunded Obligations (the "Refunded Obligation Ordinance"). The paying agent/registrars(s) shall notify by first-class mail all registered owners of all affected obligations of such maturities that: (i) a portion of such obligations have been refunded and are secured until final maturity solely with cash and investments maintained by the escrow agent in the escrow fund, (ii) the principal amount of all affected obligations of such maturities registered in the name of such registered owner that have been refunded and are payable solely from cash and investments in the Escrow Fund and the remaining principal amount of all affected obligations of such maturities registered in the name of such registered owner, if any, have not been refunded and are payable and secured solely from ad valorem taxes of the Issuer described in the Refunded Obligation Ordinance, (iii) the registered owner is required to submit his or her Refunded Obligations to the paying agent/registrars(s), for the purposes of re-registering such registered owner's obligations and assigning new CUSIP numbers in order to distinguish the source of payment for the principal and interest on such obligations, and (iv) payment of principal of and interest on such obligations may, in some circumstances, be delayed until such obligations have been re-registered and new CUSIP numbers have been assigned as required by (iii) above.

(d) The source of funds for payment of the principal of and interest on the Refunded Obligations on their respective maturity or redemption dates shall be from the funds placed in escrow with the escrow agent, pursuant to an escrow agreement approved in Section 16 of this Ordinance.

SECTION 18. APPROPRIATION. To pay the debt service coming due on the Bonds, if any, prior to receipt of the taxes levied to pay such debt service, there is hereby appropriated from current funds on hand, which are hereby certified to be on hand and available for such purpose, an amount, which together with capitalized interest received from the sale of the Bonds, if any, will be sufficient to pay such debt service, and such amount shall be used for no other purpose.

SECTION 19. EFFECTIVE DATE. In accordance with the provisions of Texas Government Code Section 1201.028, this Ordinance shall be effective immediately upon its adoption by the City Council.

SECTION 20. SEVERABILITY. If any section, article, paragraph, sentence, clause, phrase or word in this Ordinance, or application thereof to any persons or circumstances is held invalid or unconstitutional by a court of competent jurisdiction, such holding shall not affect the validity of the remaining portion of this Ordinance, despite such invalidity, which remaining portions shall remain in full force and effect.

The motion to approve this ordinance was made by [\_\_\_\_\_] and seconded by [\_\_\_\_\_].  
The ordinance was passed and approved by the following vote [\_\_ – \_\_ – \_\_]:

	<b>Aye</b>	<b>Nay</b>	<b>Abstain</b>	<b>Absent</b>
Mayor Gerard Hudspeth:	_____	_____	_____	_____
Vicki Byrd, District 1:	_____	_____	_____	_____
Brian Beck, District 2:	_____	_____	_____	_____
Paul Meltzer, District 3:	_____	_____	_____	_____
Joe Holland, District 4:	_____	_____	_____	_____
Brandon Chase McGee, At Large Place 5:	_____	_____	_____	_____
Chris Watts, At Large Place 6:	_____	_____	_____	_____

PASSED, APPROVED AND EFFECTIVE this 6<sup>th</sup> day of June, 2023.

\_\_\_\_\_  
GERARD HUDSPETH, MAYOR

ATTEST:  
JESUS SALAZAR, INTERIM CITY SECRETARY

BY: \_\_\_\_\_

APPROVED AS TO LEGAL FORM:  
MACK REINWAND, CITY ATTORNEY

BY: \_\_\_\_\_

## SCHEDULE I

### November 5, 2019 Election Voted Bonds

<u>Purpose</u>	<u>Amount Authorized</u>	<u>Amount Previously Issued*</u>	<u>Unissued Balance</u>	<u>Amount Being Issued*</u>	<u>Remaining Balance</u>
Street Improvements	\$154,000,000	\$65,145,000	\$88,855,000	\$34,355,000	\$54,500,000
Police Public Safety Facilities	\$61,900,000	\$61,900,000	\$0	\$0	\$0
Acquisition of Land for Parks	\$5,000,000	\$5,000,000	\$0	\$0	\$0

\* Includes principal and premium

## SCHEDULE II

### Schedule of Eligible Refunded Obligations

#### City of Denton Certificates of Obligation, Series 2012

	Principal Amount
<u>Maturity Date</u>	<u>Outstanding</u>
2/15/2025	\$1,935,000
2/15/2026	1,995,000
2/15/2027	2,055,000
***	*****
2/15/2032	<u>2,590,000</u>
Total:	\$8,575,000

#### City of Denton General Obligation Refunding and Improvement Bonds, Series 2012

	Principal Amount
<u>Maturity Date</u>	<u>Outstanding</u>
2/15/2025	\$170,000
2/15/2026	180,000
2/15/2027	185,000
2/15/2028	190,000
2/15/2029	195,000
2/15/2030	200,000
2/15/2031	210,000
2/15/2032	<u>215,000</u>
Total:	\$1,545,000

#### City of Denton Certificates of Obligation, Series 2013

	Principal Amount
<u>Maturity Date</u>	<u>Outstanding</u>
2/15/2024	\$2,660,000
2/15/2025	2,760,000
2/15/2026	2,875,000
2/15/2027	2,975,000
2/15/2028	3,085,000
2/15/2029	3,205,000
2/15/2030	3,340,000
2/15/2031	3,480,000
2/15/2032	3,615,000
2/15/2033	<u>3,755,000</u>
Total:	\$31,750,000

**City of Denton General Obligation Refunding and  
Improvement Bonds, Series 2013**

<u>Maturity Date</u>	Principal Amount <u>Outstanding</u>
2/15/2024	\$870,000
2/15/2025	895,000
2/15/2026	210,000
2/15/2027	220,000
2/15/2028	225,000
2/15/2029	235,000
2/15/2030	245,000
2/15/2031	255,000
2/15/2032	260,000
2/15/2033	<u>275,000</u>
Total:	\$3,690,000



## EXHIBIT A

### Notice of Redemption

NOTICE IS HEREBY GIVEN that the City of Denton, Texas has called for redemption the outstanding obligations of the City described as follows (the "Refunded Obligations"):

**City of Denton** \_\_\_\_\_, **Series 20** \_\_, dated \_\_\_\_\_, 2012, scheduled to mature on February 15, 20\_\_ through February 15 20 \_\_, aggregating \$ \_\_\_\_\_ (and being all of the outstanding bonds of said series scheduled to mature on and after February 15, 20 \_\_);

Redemption Date: \_\_\_\_\_, 20 \_\_; redeemable at a redemption price of par plus accrued interest at the principal corporate offices of The Bank of New York Mellon Trust Company, N.A., only upon presentation by the owner thereof.

This notice of redemption and the payment of the redemption price of the Refunded Obligations is conditioned upon the deposit of moneys, in an amount equal to the amount necessary to effect the redemption, with the Paying Agent/Registrar or legally authorized escrow agent no later than the Redemption Date, and the City retains the right to rescind such notice at any time prior to the Redemption Date, and this notice of redemption shall be of no effect unless such moneys are so deposited on or prior to the Redemption Date. If such redemption is not effectuated, the Paying Agent/Registrar shall, within five days thereafter, give notice in the manner in which the notice of redemption was given that such moneys were not so received and shall rescind the redemption.

If moneys sufficient for the payment of such redemption price are held by or on behalf of the paying agent, the described Refunded Obligations shall become due and payable on the redemption date specified, and the interest thereon shall cease to accrue from and after the redemption date.

In compliance with section 3406 of the Internal Revenue Code of 1986, payors making certain payments due on debt securities may be obligated to deduct and withhold 30 percent of such payment from the remittance to any payee who has failed to provide such payor with a valid taxpayer identification number. To avoid the imposition of the withholding of tax, such payees should submit a taxpayer identification number when surrendering the Refunded Obligations for redemption.

NOTICE IS FURTHER GIVEN that all Refunded Obligations should be submitted to one of the following address:

<u>First Class/Registered/ Certified Mail</u>	<u>Express Delivery</u>	<u>Hand Delivery</u>
The Bank of New York Mellon Trust Company, N.A. Global Corporate Trust P.O. Box 396 East Syracuse, New York 13057	The Bank of New York Mellon Trust Company, N.A. Global Corporate Trust 111 Sanders Creek Parkway East Syracuse, New York 13057	The Bank of New York Mellon Trust Company, N.A. Global Corporate Trust Corporate Trust Window 101 Barclay Street 1 <sup>ST</sup> Floor East New York, New York 10286

Dated: \_\_\_\_\_, 20\_\_

By: The Bank of New York Mellon Trust Company, National Association



# Public Utilities Board Bond Ordinances



# Notice of Intent to Issue COs

- Council approved April 4, 2023.
- Published in Denton Record Chronicle on April 13<sup>th</sup> and 20<sup>th</sup>.
- This Bond Ordinance to authorize the sale of COs is at least 46 day after the first publication per state law.

# 2023 CO Bond Sale

Internal Service/Enterprise Total	\$ 2,453,000
General Government Total	\$ 31,176,718
Solid Waste Total	\$ 16,000,000
Water Total	\$ 21,188,000
Wastewater Total	\$ 16,596,000
Electric Total	\$ 70,000,000
Issuance Cost	\$ 1,086,282
	<hr/>
	<b>\$158,500,000</b>

# Solid Waste Projects

	NOI	BOND SALE
Scalehouse Update & Scale Replacement	\$ 1,300,000	\$ 1,300,000
Home Chemical Collection Storage Capacity	\$ 1,000,000	\$ 1,000,000
Landfill Roads & Infrastructure	\$ 2,000,000	\$ 2,000,000
Fleet Shop at Solid Waste	\$10,500,000	\$10,500,000
Case/Steiger Scraper	\$ 1,200,000	\$ 1,200,000
<b>Solid Waste Total</b>	<b>\$16,000,000</b>	<b>\$16,000,000</b>

# Utility Projects - Water

	NOI	BOND SALE
Supplement to Bond Election 2019 Projects	\$ 11,000,000	\$ 11,000,000
Westgate Road and Drainage	\$ 208,000	\$ 208,000
Morse Street Reconstruction	\$ 480,000	\$ 480,000
Transmission Line Condition Repairs	\$ 1,000,000	\$ 1,000,000
Northwest Transmission Lines & BPS	\$ 7,000,000	\$ 7,000,000
RRWTP Disinfection Conversion and Chemical Improvements	\$ 2,500,000	\$ -
LLWTP Raw Water Transmission Line	\$ 500,000	\$ -
LLWTP Clarifiers Rehab (Sludge Rake Coating)	\$ 1,000,000	\$ -
Capacity Rerate and Performance Upgrades	\$ 8,000,000	\$ -
SCADA Platform Development	\$ 1,500,000	\$ 1,500,000
<b>Water Total</b>	<b>\$ 33,188,000</b>	<b>\$ 21,188,000</b>

# Utility Projects - Wastewater

	NOI	BOND SALE
Supplement to Bond Election 2019 Projects	\$ 8,000,000	\$ 8,000,000
Annual Field Service Replacements	\$ 1,400,000	\$ 1,400,000
Hickory Creek Interceptor IV	\$ 1,000,000	\$ -
Dry Fork Sanitary Sewer	\$ 1,246,000	\$ 1,246,000
Milam Creek Basin Wastewater Line and Lift Station	\$ 6,752,000	\$ -
Solids Handling Improvements	\$ 2,000,000	\$ -
Cooper Creek Bar Screen	\$ 50,000	\$ -
PCWRP Headworks Reconfiguration	\$ 3,900,000	\$ 3,900,000
Hickory Creek Forcemain Replacement	\$ 2,400,000	\$ -
Grenada Lift Station Replacement	\$ 1,600,000	\$ -
Robson Ranch Decommissioning Project	\$ 550,000	\$ 550,000
SCADA Platform Development	\$ 1,500,000	\$ 1,500,000
<b>Wastewater Total</b>	<b>\$30,398,000</b>	<b>\$ 16,596,000</b>

# Utility Projects - Electric

	NOI	BOND SALE
Automated Meter Reading	\$ 1,102,000	\$ 2,930,223
Distribution Substations	\$ 7,745,000	\$ 1,024,000
Distribution Transformers	\$ 21,800,000	\$ 20,837,973
Feeder Extensions & Improvements	\$ 12,613,000	\$ 5,510,062
New Residential & Commercial	\$ 4,955,000	\$ 7,956,298
Over to Under Conversions	\$ 45,000	\$ -
Power Factor Improvements	\$ 500,000	\$ 205,000
Street Lighting	\$ 4,000,000	\$ 1,859,899
Transmission Lines	\$ 12,541,000	\$ 2,601,239
Transmission Substations	\$ 21,248,000	\$ 15,120,502
Production Plant Improvements	\$ 2,200,000	\$ 270,000
Technology - Software/Hardware	\$ 3,488,000	\$ 4,093,081
Electric Relocations	\$ 9,948,000	\$ 7,258,601
Miscellaneous Equipment	\$ -	\$ 333,122
<b>Electric Total</b>	<b>\$ 102,185,000</b>	<b>\$ 70,000,000</b>



# Total Solid Waste & Utilities

Solid Waste	\$ 16,000,000
Water	\$ 21,188,000
Wastewater	\$ 16,596,000
Electric	\$ 70,000,000
<b>Total CO</b>	<b>\$ 123,784,000</b>

# 2023 Debt Refunding

- Average Interest Rate of Refunded Bonds 3.37%
- Projected Interest Rate 2.75%

Refunding Bonds Opportunity	Principal Refunded	Maturities Refunded
Certificates of Obligation, Series 2012	\$ 8,575,000	2025-27, 2032
General Obligation Refunding & Improvement Bonds, Series 2012	\$ 1,545,000	2025-2032
General Obligation Refunding & Improvement Bonds, Series 2013	\$ 3,690,000	2024-2033
Certificates of Obligation, Series 2013	\$31,750,000	2024-2033
<b>Total Refunding Opportunity</b>	<b>\$45,560,000</b>	

## General Obligation Refunding Bonds, Series 2023 Projected Savings\*

Total \$1,446,839

By Debt Type					
General Fund	Water	Wastewater	Electric	Solid Waste	Airport
\$ 311,635	\$ 32,013	\$ 137,305	\$ 892,174	\$ 40,244	\$ 33,469

\*Preliminary, subject to change. Based on 5/8/2023 market conditions.

# Next Steps

- **June 6, 2023**
  - Council considers adoption of bond ordinance.
- **June 21, 2023**
  - Date of Sale
- **July 26, 2023**
  - Preliminary date of close and delivery of funds.

# Questions

Randee Klingele  
Treasury Manager





# City of Denton

City Hall  
215 E. McKinney St.  
Denton, Texas 76201  
[www.cityofdenton.com](http://www.cityofdenton.com)

## Legislation Text

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**File #:** PUB23-092, **Version:** 1

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### **AGENDA CAPTION**

Consider recommending adoption of an ordinance considering all matters incident and related to the issuance, sale and delivery of up to \$158,500,000 in principal amount of "City of Denton Certificates of Obligation, Series 2023"; authorizing the issuance of the certificates; delegating the authority to certain city officials to execute certain documents relating to the sale of the certificates; approving and authorizing instruments and procedures relating to said certificates; enacting other provisions relating to the subject; and providing an effective date.



# City of Denton

City Hall  
215 E. McKinney Street  
Denton, Texas  
[www.cityofdenton.com](http://www.cityofdenton.com)

## AGENDA INFORMATION SHEET

**DEPARTMENT:** Finance

**ACM:** Cassey Ogden

**DATE:** May 22, 2023

### **SUBJECT**

Consider recommending adoption of an ordinance considering all matters incident and related to the issuance, sale and delivery of up to \$158,500,000 in principal amount of "City of Denton Certificates of Obligation, Series 2023"; authorizing the issuance of the certificates; delegating the authority to certain city officials to execute certain documents relating to the sale of the certificates; approving and authorizing instruments and procedures relating to said certificates; enacting other provisions relating to the subject; and providing an effective date.

### **BACKGROUND**

On April 4, 2023, the City Council adopted Ordinance Nos. 23-195 and 23-196 directing the publication of Notice of Intentions to issue Certificates of Obligation (COs) for General Government, Water, Wastewater, Electric and Solid Waste projects. The notices were published in a newspaper of general circulation (Denton Record Chronicle) on April 13, 2022, and April 20, 2022, as required by state law. The notices were also posted on the City of Denton website. The COs will be issued as a single series of obligations totaling \$158,500,000. The below table summarizes the totals for each fund and the associated issuance cost.

General Government	\$ 33,629,718
Solid Waste	\$ 16,000,000
Water	\$ 21,188,000
Wastewater	\$ 16,596,000
Electric	\$ 70,000,000
Issuance Cost	\$ 1,086,282
Total	\$ 158,500,000

The adopted FY 2022-23 budget included \$166,347,641 in Water, Wastewater, Electric and Solid Waste projects increasing to \$181,771,000 for the Notice of Intent (NOI). However, the NOI project amounts were reduced by \$57.9 million after an internal analysis of funding and product availability as well as project timelines, reducing the Bond Sale project list to \$123,784,000 for these funds.

It is important to note that the City sells bonds in accordance with the useful life of the asset that is being acquired. For example, vehicles are typically sold with bonds that will be paid within five years. The 2023 bond sale includes debt issuance for Electric, of which \$70,000,000 will be 30-year debt, Wastewater \$16,596,000, Water \$21,188,000, and Solid Waste \$14,800,000 which will all be 20-year terms. Solid Waste will also issue 5-year debt in the amount of \$1,200,000. All issued debt will have a 9-year call option.

Since bond market conditions can change rapidly, staff is recommending that the Public Utilities Board (PUB) and City Council approve a delegated parameters sale for the COs. The parameters ordinance sets the following requirements in order to complete the sale of the COs. By doing so, City staff will be authorized to execute the sale without additional approval

- Maximum amount of sale is \$158,5000,000
- Final stated maturity of February 15, 2053
- Maximum net effective interest rate of 5.00%
- Delegation authority ends December 6, 2023

Below is a listing of the recommended CO Utility and Solid Waste funded projects:

<b>Certificate of Obligation Funded Projects</b>	<b>FY 22-23 NOI</b>	<b>FY 22-23 BOND SALE</b>
Supplement to Bond Election 2019 Projects	\$ 11,000,000	\$ 11,000,000
Westgate Road and Drainage	\$ 208,000	\$ 208,000
Morse Street Reconstruction	\$ 480,000	\$ 480,000
Transmission Line Condition Repairs	\$ 1,000,000	\$ 1,000,000
Northwest Transmission Lines & BPS	\$ 7,000,000	\$ 7,000,000
RRWTP Disinfection Conversion and Chemical Improvements	\$ 2,500,000	\$ -
LLWTP Raw Water Transmission Line	\$ 500,000	\$ -
LLWTP Clarifiers Rehab (Sludge Rake Coating)	\$ 1,000,000	\$ -
Capacity Rerate and Performance Upgrades	\$ 8,000,000	\$ -
SCADA Platform Development	\$ 1,500,000	\$ 1,500,000
<b>Water Total</b>	<b>\$ 33,188,000</b>	<b>\$ 21,188,000</b>

Supplement to Bond Election 2019 Projects	\$ 8,000,000	\$ 8,000,000
Annual Field Service Replacements	\$ 1,400,000	\$ 1,400,000
Hickory Creek Interceptor IV	\$ 1,000,000	\$ -
Dry Fork Sanitary Sewer	\$ 1,246,000	\$ 1,246,000
Milam Creek Basin Wastewater Line and Lift Station	\$ 6,752,000	\$ -
Solids Handling Improvements	\$ 2,000,000	\$ -
Cooper Creek Bar Screen	\$ 50,000	\$ -
PCWRP Headworks Reconfiguration	\$ 3,900,000	\$ 3,900,000
Hickory Creek Forcemain Replacement	\$ 2,400,000	\$ -
Grenada Lift Station Replacement	\$ 1,600,000	\$ -
Robson Ranch Decommissioning Project	\$ 550,000	\$ 550,000
SCADA Platform Development	\$ 1,500,000	\$ 1,500,000
<b>Wastewater Total</b>	<b>\$ 30,398,000</b>	<b>\$ 16,596,000</b>

Automated Meter Reading	\$ 1,102,000	\$ 2,930,223
Distribution Substations	\$ 7,745,000	\$ 1,024,000
Distribution Transformers	\$ 21,800,000	\$ 20,837,973
Feeder Extensions & Improvements	\$ 12,613,000	\$ 5,510,062
New Residential & Commercial	\$ 4,955,000	\$ 7,956,298
Over to Under Conversions	\$ 45,000	\$ -
Power Factor Improvements	\$ 500,000	\$ 205,000
Street Lighting	\$ 4,000,000	\$ 1,859,899
Transmission Lines	\$ 12,541,000	\$ 2,601,239
Transmission Substations	\$ 21,248,000	\$ 15,120,502
Production Plant Improvements	\$ 2,200,000	\$ 270,000
Technology - Software/Hardware	\$ 3,488,000	\$ 4,093,081
Electric Relocations	\$ 9,948,000	\$ 7,258,601
Miscellaneous Equipment	\$ -	\$ 333,122
<b>Electric Total</b>	<b>\$ 102,185,000</b>	<b>\$ 70,000,000</b>
<b>TOTAL UTILITIES</b>	<b>\$ 165,771,000</b>	<b>\$ 107,784,000</b>

<b>Certificate of Obligation Funded Projects</b>	<b>FY 22-23 NOI</b>	<b>FY 22-23 BOND SALE</b>
Scalehouse Update & Scale Replacement	\$ 1,300,000	\$ 1,300,000
Home Chemical Collection Storage Capacity	\$ 1,000,000	\$ 1,000,000
Landfill Roads & Infrastructure	\$ 2,000,000	\$ 2,000,000
Fleet Shop at Solid Waste	\$ 10,500,000	\$ 10,500,000
Case/Steiger Scraper	\$ 1,200,000	\$ 1,200,000
<b>Solid Waste Total</b>	<b>\$ 16,000,000</b>	<b>\$ 16,000,000</b>

### **RECOMMENDATION**

Staff recommends adoption of the ordinance.

### **PRIOR ACTION/REVIEW (Council, Boards, Commissions)**

On October 18, 2022, the City Council adopted reimbursement ordinances (Ord. 22-1924) authorizing General Obligation Bonds and Certificates of Obligation funded projects in preparation of the 2023 Bond Sale.

On April 4, 2023, the City Council adopted ordinances (Ord. 23-195, 23-196) directing the publication of Notice of Intentions to Issue Certificates of Obligation of the City of Denton.

### **EXHIBITS**

1. Agenda Information Sheet
2. Preliminary Official Statement
3. CO Ordinance
4. Presentation

Respectfully submitted:  
Aimee Kaslik  
Interim Director of Finance



Prepared by:  
Ranee Klingele  
Treasury Manager

Dated May 15, 2023

Ratings:  
Fitch: "BBB"  
S&P: "BBB"  
(See "Other Information -  
Ratings" herein)

**NEW ISSUE - Book-Entry-Only**

In the opinion of Bond Counsel, interest on the Certificates will be excludable from gross income for federal income tax purposes under statutes, regulations, published rulings and court decisions existing on the date thereof, subject to the matters described under "Tax Matters" herein, including the alternative minimum tax on certain corporations.

**THE CERTIFICATES WILL NOT BE DESIGNATED AS "QUALIFIED TAX-EXEMPT OBLIGATIONS" FOR FINANCIAL INSTITUTIONS.**



**\$146,795,000\***  
**CITY OF DENTON, TEXAS**  
**(Denton County)**  
**CERTIFICATES OF OBLIGATION, SERIES 2023**

**Dated Date: June 15, 2023**

**Interest Accrues from Delivery Date**

**Due: February 15, as shown on page 2**

**PAYMENT TERMS** . . . Interest on the \$146,795,000\* City of Denton, Texas Certificates of Obligation, Series 2023 (the "Certificates") will accrue from the delivery date (the "Delivery Date"), will be payable February 15 and August 15 of each year, commencing February 15, 2024, until maturity or prior redemption, and will be calculated on the basis of a 360-day year consisting of twelve 30-day months. The definitive Certificates will be initially registered and delivered only to Cede & Co., the nominee of The Depository Trust Company ("DTC") pursuant to the Book-Entry-Only System described herein. Beneficial ownership of the Certificates may be acquired in denominations of \$5,000 or integral multiples thereof within a maturity. **No physical delivery of the Certificates will be made to the beneficial owners thereof.** Principal of, premium, if any, and interest on the Certificates will be payable by the Paying Agent/Registrar to Cede & Co., which will make distribution of the amounts so paid to the participating members of DTC for subsequent payment to the beneficial owners of the Certificates. See "The Obligations - Book-Entry-Only System" herein. The initial Paying Agent/Registrar is BOKF, NA, Dallas, Texas (see "The Obligations - Paying Agent/Registrar").

**AUTHORITY FOR ISSUANCE** . . . The Certificates are issued pursuant to the Constitution and general laws of the State of Texas, (the "State") particularly Subchapter C of Chapter 271, Texas Local Government Code (the Certificate of Obligation Act of 1971), as amended, and Texas Government Code, Chapter 1371, as amended, and constitute direct obligations of the City of Denton, Texas (the "City"), payable from a combination of (i) the levy and collection of a direct annual ad valorem tax, within the limits prescribed by law, on all taxable property within the City, and (ii) a limited pledge of surplus net revenues of the City's Utility System not in excess of \$1,000, as provided in the Certificate Ordinance (defined herein) authorizing the Certificates (see "The Obligations - Authority for Issuance").

**PURPOSE** . . . Proceeds from the sale of the Certificates will be used for the purchase, construction and acquisition of certain real and personal property, to wit: (a) acquiring, constructing, installing and equipping fire stations; (b) acquisition of vehicles and equipment for the fire, police, building inspections, community improvement services, animal services, streets and traffic control, facilities management, airport, technology services, fleet management, warehouse management, and parks and recreation departments; (c) renovations to, and equipping of, existing municipal buildings, including the acquisition and installation of replacement heating, venting and air conditioning equipment, roofing and flooring; (d) acquiring, constructing, installing and equipping police stations; (e) acquiring, constructing and installing building security systems, including security system technology equipment and software, for municipal buildings; (f) constructing, reconstructing, renovating, installing and equipping municipal parks; (g) renovations to, expansion of, and equipping existing municipal vehicle maintenance facility; (h) acquisition and installation of technology equipment, including radio equipment, computer equipment and software, for various municipal departments; (i) constructing and improving streets, including traffic signalization, landscaping, drainage, utility line relocations and the acquisition of land and rights-of-way therefor; (j) constructing, reconstructing and renovating runways and taxiways at the municipal airport; (k) acquisition of vehicles and equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the City's solid waste disposal system; (l) acquisition of equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the City's waterworks and wastewater system; and (m) acquisition of equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the City's electric light and power system, and also for the purpose of paying all or a portion of the City's contractual obligations for professional services, including engineers, architects, attorneys, map makers, auditors, and financial advisors, in connection with said projects and the Certificates (see "Plan of Financing").

**MATURITY SCHEDULE**

**See page 2**

**SEPARATE ISSUES** . . . The Certificates are being offered by the City concurrently with the "City of Denton, Texas General Obligation Refunding and Improvement Bonds, Series 2023" (the "Bonds") under a common official statement, and the Certificates and Bonds are hereinafter sometimes referred to collectively as the "Obligations." The Certificates and Bonds are separate and distinct securities offerings being issued and sold independently except for the common Official Statement, and, while the Obligations share certain common attributes, each issue is separate from the other and should be reviewed and analyzed independently, including the type of obligation being offered, its terms for payment, the security for its payment, the rights of the holders, the federal, state or local tax consequences of the purchase, ownership or disposition of the Obligations and other features.

**LEGALITY** . . . The Certificates are offered for delivery when, as and if issued and received by the Initial Purchaser subject to the approving opinion of the Attorney General of Texas and the opinion of McCall, Parkhurst & Horton L.L.P., Bond Counsel, Dallas, Texas (see Appendix C, "Forms of Bond Counsel's Opinions").

**DELIVERY** . . . It is expected that the Certificates will be available for delivery through The Depository Trust Company on July 26, 2023.

**SEALED BIDS DUE JUNE 21, 2023, AT 9:45 AM, CDT\*\***

\* Preliminary, subject to change. See "Adjustment of Principal Amount and/or Types of Bids" in the Notice of Sale for the Certificates.

\*\* Place and Time of Bid Opening . . . The City will accept bids for the sale of the Certificates on a day during the period beginning June 21, 2023 and initially ending July 5, 2023. At least 12 hours prior to the sale of the Certificates, Hilltop Securities Inc., as Financial Advisor to the City, will communicate, through Parity and Bloomberg, the date and time for submission of bids. The Financial Advisor, acting on behalf of the City, shall accept bids up to the time specified in the notice as hereinbefore described..

**MATURITY SCHEDULE\***

**CUSIP Prefix: 248867<sup>(1)</sup>**

<u>Principal Amount</u>	<u>15-Feb Maturity</u>	<u>Interest Rate</u>	<u>Yield</u>	<u>CUSIP Suffix<sup>(1)</sup></u>	<u>Principal Amount</u>	<u>15-Feb Maturity</u>	<u>Interest Rate</u>	<u>Yield</u>	<u>CUSIP Suffix<sup>(1)</sup></u>
\$ 4,285,000	2024				\$ 6,525,000	2039			
4,875,000	2025				6,825,000	2040			
5,120,000	2026				7,100,000	2041			
5,375,000	2027				7,385,000	2042			
5,655,000	2028				7,690,000	2043			
4,535,000	2029				2,715,000	2044			
4,765,000	2030				2,825,000	2045			
5,020,000	2031				2,940,000	2046			
5,265,000	2032				3,060,000	2047			
5,545,000	2033				3,185,000	2048			
5,080,000	2034				3,315,000	2049			
5,335,000	2035				3,450,000	2050			
5,610,000	2036				3,595,000	2051			
5,890,000	2037				3,740,000	2052			
6,195,000	2038				3,895,000	2053			

(1) CUSIP is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services, managed on behalf of the American Bankers Association by FactSet Research Systems Inc. This data is not intended to create a database and does not serve in any way as a substitute for the CUSIP services. None of the City, the Financial Advisor or the Initial Purchaser shall be responsible for the selection or correctness of the CUSIP numbers set forth herein.

**REDEMPTION . . .** The City reserves the right, at its option, to redeem Certificates having stated maturities on and after February 15, 2033, in whole or in part in principal amounts of \$5,000 or any integral multiple thereof, on February 15, 2032, or any date thereafter, at the par value thereof plus accrued interest to the date of redemption (see "The Obligations – Optional Redemption").

\* Preliminary, subject to change. See "Adjustment of Principal Amount and/or Types of Bids" in the Notice of Sale for the Certificates.

Dated May 11, 2023

Ratings:  
Fitch: "BBB"  
S&P: "BBB"  
(See "Other Information -  
Ratings" herein)

## NEW ISSUE - Book-Entry-Only

In the opinion of Bond Counsel, interest on the Bonds will be excludable from gross income for federal income tax purposes under statutes, regulations, published rulings and court decisions existing on the date thereof, subject to the matters described under "Tax Matters" herein, including the alternative minimum tax on certain corporations.

**THE BONDS WILL NOT BE DESIGNATED AS "QUALIFIED TAX-EXEMPT OBLIGATIONS" FOR FINANCIAL INSTITUTIONS.**



**\$71,845,000\***  
**CITY OF DENTON, TEXAS**  
**(Denton County)**  
**GENERAL OBLIGATION REFUNDING AND IMPROVEMENT BONDS,**  
**SERIES 2023**

**Dated Date: June 15, 2023**

**Due: February 15, as shown on page 4**

**Interest Accrues from Delivery Date**

**PAYMENT TERMS** . . . Interest on the \$71,845,000\* City of Denton, Texas General Obligation Refunding and Improvement Bonds, Series 2023 (the "Bonds") will accrue from the delivery date (the "Delivery Date"), will be payable February 15 and August 15 of each year, commencing February 15, 2024, until maturity or prior redemption, and will be calculated on the basis of a 360-day year consisting of twelve 30-day months. The definitive Bonds will be initially registered and delivered only to Cede & Co., the nominee of The Depository Trust Company ("DTC") pursuant to the Book-Entry-Only System described herein. Beneficial ownership of the Bonds may be acquired in denominations of \$5,000 or integral multiples thereof within a maturity. **No physical delivery of the Bonds will be made to the beneficial owners thereof.** Principal of, premium, if any, and interest on the Bonds will be payable by the Paying Agent/Registrar to Cede & Co., which will make distribution of the amounts so paid to the participating members of DTC for subsequent payment to the beneficial owners of the Bonds. See "The Obligations - Book-Entry-Only System" herein. The initial Paying Agent/Registrar is BOKF, NA, Dallas, Texas (see "The Obligations - Paying Agent/Registrar").

**AUTHORITY FOR ISSUANCE** . . . The Bonds are issued pursuant to the Constitution and general laws of the State of Texas, (the "State") including particularly Texas Government Code, Chapters 1207, 1371 and 1331, as amended, and are direct obligations of the City of Denton, Texas (the "City"), payable from an annual ad valorem tax levied, within the limits prescribed by law, on all taxable property within the City, as provided in the Bond Ordinance (defined herein) authorizing the Bonds (see "The Obligations - Authority for Issuance" and "The Obligations - Security and Source of Payment").

**PURPOSE** . . . Proceeds of the Bonds are expected to be used for (i) , (ii) , (iii) , (iv) refunding the obligations described in Schedule I - Schedule of Refunded Obligations (the "Refunded Obligations") for debt service savings, and (v) to pay the costs associated with the issuance of the Bonds (see "Plan of Financing").

## MATURITY SCHEDULE

See page 4

**SEPARATE ISSUES** . . . The Bonds are being offered by the City concurrently with the "City of Denton, Texas Certificates of Obligation, Series 2023" (the "Certificates"), under a common Official Statement, and the Bonds and Certificates are hereinafter sometimes referred to collectively as the "Obligations." The Bonds and Certificates are separate and distinct securities offerings being issued and sold independently except for the common Official Statement, and, while the Obligations share certain common attributes, each issue is separate from the other and should be reviewed and analyzed independently, including the type of obligation being offered, its terms for payment, the security for its payment, the rights of the holders, the federal, state or local tax consequences of the purchase, ownership or disposition of the Obligations and other features.

**LEGALITY** . . . The Bonds are offered for delivery when, as and if issued and received by the Initial Purchaser subject to the approving opinion of the Attorney General of Texas and the opinion of McCall, Parkhurst & Horton L.L.P., Bond Counsel, Dallas, Texas (see Appendix C, "Forms of Bond Counsel's Opinions").

**DELIVERY** . . . It is expected that the Bonds will be available for delivery through The Depository Trust Company on July 26, 2023.

## SEALED BIDS DUE JUNE 21, 2023, AT 10:15 AM, CDT\*\*

\* Preliminary, subject to change. See "Adjustment of Principal Amount and/or Types of Bids" in the Notice of Sale for the Bonds.

\*\* Place and Time of Bid Opening . . . The City will accept bids for the sale of the Bonds on a day during the period beginning June 21, 2023 and initially ending July 5, 2023. At least 12 hours prior to the sale of the Bonds, Hilltop Securities Inc., as Financial Advisor to the City, will communicate, through Parity and Bloomberg, the date and time for submission of bids. The Financial Advisor, acting on behalf of the City, shall accept bids up to the time specified in the notice as hereinbefore described.

**MATURITY SCHEDULE\*****CUSIP Prefix: 248867<sup>(1)</sup>**

<u>Principal Amount</u>	<u>15-Feb Maturity</u>	<u>Interest Rate</u>	<u>Yield</u>	<u>CUSIP Suffix<sup>(1)</sup></u>	<u>Principal Amount</u>	<u>15-Feb Maturity</u>	<u>Interest Rate</u>	<u>Yield</u>	<u>CUSIP Suffix<sup>(1)</sup></u>
\$ 3,635,000	2024				\$ 1,545,000	2034			
6,085,000	2025				1,620,000	2035			
5,685,000	2026				1,705,000	2036			
5,955,000	2027				1,795,000	2037			
4,150,000	2028				1,885,000	2038			
4,390,000	2029				1,980,000	2039			
4,650,000	2030				2,070,000	2040			
4,915,000	2031				2,155,000	2041			
7,760,000	2032				2,245,000	2042			
5,285,000	2033				2,335,000	2043			

(1) CUSIP is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services, managed on behalf of the American Bankers Association by FactSet Research Systems Inc. This data is not intended to create a database and does not serve in any way as a substitute for the CUSIP services. None of the City, the Financial Advisor or the Initial Purchaser shall be responsible for the selection or correctness of the CUSIP numbers set forth herein.

**REDEMPTION . . .** The City reserves the right, at its option, to redeem Bonds having stated maturities on and after February 15, 2033, in whole or in part in principal amounts of \$5,000 or any integral multiple thereof, on February 15, 2032, or any date thereafter, at the par value thereof plus accrued interest to the date of redemption (see "The Obligations – Optional Redemption").

\* Preliminary, subject to change. See "Adjustment of Principal Amount and/or Types of Bids" in the Notice of Sale for the Bonds.

*This Official Statement, which includes the cover pages, the Schedule and the Appendices hereto, does not constitute an offer to sell or the solicitation of an offer to buy in any jurisdiction to any person to whom it is unlawful to make such offer, solicitation, or sale.*

*No dealer, broker, salesperson, or other person has been authorized to give information or to make any representation other than those contained in this Official Statement, and, if given or made, such other information or representations must not be relied upon.*

*For purposes of compliance with Rule 15c 2-12 of the Securities and Exchange Commission (the "Rule"), this document constitutes an Official Statement of the City with respect to the Obligations that has been "deemed final" by the City as of its date except for the omission of no more than the information permitted by the Rule.*

*The information set forth herein has been obtained from the City and other sources believed to be reliable, but such information is not guaranteed as to accuracy or completeness and is not to be construed as the representation, promise, or guarantee of the Financial Advisor. Any information and expressions of opinion herein contained are subject to change without notice, and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the City or other matters described herein since the date hereof. See "Other Information - Continuing Disclosure of Information" for a description of the City's undertaking to provide certain information on a continuing basis.*

*Neither the City nor its Financial Advisor make any representation as to the accuracy, completeness, or adequacy of the information supplied by The Depository Trust Company for use in this Official Statement.*

*THIS OFFICIAL STATEMENT CONTAINS "FORWARD-LOOKING" STATEMENTS WITHIN THE MEANING OF SECTION 21E OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED. SUCH STATEMENTS MAY INVOLVE KNOWN AND UNKNOWN RISKS, UNCERTAINTIES, AND OTHER FACTORS WHICH MAY CAUSE THE ACTUAL RESULTS, PERFORMANCE, AND ACHIEVEMENTS TO BE DIFFERENT FROM FUTURE RESULTS, PERFORMANCE, AND ACHIEVEMENTS EXPRESSED OR IMPLIED BY SUCH FORWARD-LOOKING STATEMENTS. INVESTORS ARE CAUTIONED THAT THE ACTUAL RESULTS COULD DIFFER MATERIALLY FROM THOSE SET FORTH IN THE FORWARD-LOOKING STATEMENTS.*

*THE OBLIGATIONS ARE EXEMPT FROM REGISTRATION WITH THE SECURITIES AND EXCHANGE COMMISSION AND CONSEQUENTLY HAVE NOT BEEN REGISTERED THEREWITH. THE REGISTRATION, QUALIFICATION, OR EXEMPTION OF THE OBLIGATIONS IN ACCORDANCE WITH APPLICABLE SECURITIES LAW PROVISIONS OF THE JURISDICTION IN WHICH THE OBLIGATIONS HAVE BEEN REGISTERED, QUALIFIED OR EXEMPTED SHOULD NOT BE REGARDED AS A RECOMMENDATION THEREOF.*

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The cover pages hereof, this page and the appendices included herein and any addenda, supplement or amendment hereto, are part of the Preliminary Official Statement.

## PRELIMINARY OFFICIAL STATEMENT SUMMARY

This summary is subject in all respects to the more complete information and definitions contained or incorporated in this Preliminary Official Statement. The offering of the Bonds and Certificates to potential investors is made only by means of this entire Preliminary Official Statement. No person is authorized to detach this summary from this Preliminary Official Statement or to otherwise use it without the entire Preliminary Official Statement.

<b>THE CITY</b> .....	The City of Denton (the "City") is a political subdivision and municipal corporation of the State of Texas (the "State"), located in Denton County, Texas. The City covers approximately 97.411 square miles (see "Introduction - Description of the City").
<b>THE BONDS</b> .....	The City's \$71,845,000* General Obligation Refunding and Improvement Bonds, Series 2023 are to mature on February 15 in the years 2024 through 2043 (see "The Obligations - Description of the Obligations").
<b>THE CERTIFICATES</b> .....	The City's \$146,795,000* Certificates of Obligation, Series 2023 are to mature on February 15 in the years 2024 through 2053 (see "The Obligations - Description of the Obligations").
<b>PAYMENT OF INTEREST</b> .....	Interest on the Obligations accrues from the Delivery Date (defined herein) and is payable February 15, 2024 and each August 15 and February 15 thereafter until maturity or prior redemption (see "The Obligations - Description of the Obligations" and "The Obligations - Optional Redemption").
<b>AUTHORITY FOR ISSUANCE</b> .....	<p>The Certificates are issued pursuant to the Constitution and general laws of the State, particularly Subchapter C of Chapter 271, Texas Local Government Code, as amended, and Texas Government Code, Chapter 1371, as amended, and an ordinance (the "Authorizing Certificate Ordinance") of the City in which the City Council delegated to each of the Assistant City Manager and Chief Financial Officer authority to complete the sale of the Certificates. The terms of the sale will be included in a "Pricing Certificate," which will complete the sale of the Certificates (the Authorizing Certificate Ordinance and the Pricing Certificate for the Certificates are jointly referred to as the "Certificate Ordinance") (see "The Obligations - Authority for Issuance").</p> <p>The Bonds are issued pursuant to the Constitution and general laws of the State, including particularly Texas Government Code, Chapters 1207, 1371 and 1331, as amended, and an ordinance (the "Authorizing Bond Ordinance") of the City in which the City Council delegated to each Assistant City Manager and Chief Financial Officer authority to complete the sale of the Bonds. The terms of the sale will be included in a "Pricing Certificate," which will complete the sale of the Bonds (the Authorizing Bond Ordinance and the Pricing Certificate for the Bonds are jointly referred to as the "Bond Ordinance") (see "The Obligations - Authority for Issuance").</p>
<b>SECURITY FOR THE CERTIFICATES</b> .....	The Certificates constitute direct obligations of the City, payable from a combination of (i) a direct annual ad valorem tax levied, within the limits prescribed by law, on all taxable property within the City, and (ii) a limited pledge (not to exceed \$1,000) of surplus net revenues of the City's Utility System (see "The Obligations - Security and Source of Payment").
<b>SECURITY FOR THE BONDS</b> .....	The Bonds constitute direct obligations of the City, payable from a direct annual ad valorem tax levied, within the limits prescribed by law, on all taxable property located within the City (see "The Obligations - Security and Source of Payment").
<b>REDEMPTION</b> .....	The City reserves the right, at its option, to redeem Bonds and Certificates, as the case may be, having stated maturities on and after February 15, 2033, in whole or in part in principal amounts of \$5,000 or any integral multiple thereof, on February 15, 2032, or any date thereafter, at the par value thereof plus accrued interest to the date of redemption (see "The Obligations - Optional Redemption").
<b>TAX EXEMPTION</b> .....	In the opinion of Bond Counsel, the interest on the Obligations will be excludable from gross income for federal income tax purposes under existing law, subject to the matters described under "Tax Matters" herein.

\* Preliminary, subject to change.

**USE OF PROCEEDS** ..... Proceeds from the sale of the Certificates will be used for the purchase, construction and acquisition of certain real and personal property, to wit: (a) acquiring, constructing, installing and equipping fire stations; (b) acquisition of vehicles and equipment for the fire, police, building inspections, community improvement services, animal services, streets and traffic control, facilities management, airport, technology services, fleet management, warehouse management, and parks and recreation departments; (c) renovations to, and equipping of, existing municipal buildings, including the acquisition and installation of replacement heating, venting and air conditioning equipment, roofing and flooring; (d) acquiring, constructing, installing and equipping police stations; (e) acquiring, constructing and installing building security systems, including security system technology equipment and software, for municipal buildings; (f) constructing, reconstructing, renovating, installing and equipping municipal parks; (g) renovations to, expansion of, and equipping existing municipal vehicle maintenance facility; (h) acquisition and installation of technology equipment, including radio equipment, computer equipment and software, for various municipal departments; (i) constructing and improving streets, including traffic signalization, landscaping, drainage, utility line relocations and the acquisition of land and rights-of-way therefor; (j) constructing, reconstructing and renovating runways and taxiways at the municipal airport; (k) acquisition of vehicles and equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the City's solid waste disposal system; (l) acquisition of equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the City's waterworks and wastewater system; and (m) acquisition of equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the City's electric light and power system, and also for the purpose of paying all or a portion of the City's contractual obligations for professional services, including engineers, architects, attorneys, map makers, auditors, and financial advisors, in connection with said projects and the Certificates (see "Plan of Financing").

Proceeds of the Bonds are expected to be used for (i) \_\_\_\_\_, (ii) \_\_\_\_\_, (iii) \_\_\_\_\_, (iv) refunding the obligations described in Schedule I – Schedule of Refunded Obligations (the "Refunded Obligations") for debt service savings and (v) to pay the costs associated with the issuance of the Bonds (see "Plan of Financing").

**RATINGS** ..... The Obligations and the presently outstanding general obligation debt of the City are rated "\_\_\_\_\_" by Fitch Ratings ("Fitch") and "\_\_\_\_\_" by S&P Global Ratings ("S&P"), a division of S&P Global Inc. See "Other Information – Ratings" herein.

**BOOK-ENTRY-ONLY SYSTEM** ..... The definitive Obligations will be initially registered and delivered only to Cede & Co., the nominee of DTC pursuant to the Book-Entry-Only System described herein. Beneficial ownership of the Obligations may be acquired in denominations of \$5,000 or integral multiples thereof within a maturity. No physical delivery of the Obligations will be made to the beneficial owners thereof. Principal of, premium, if any, and interest on the Obligations will be payable by the Paying Agent/Registrar to Cede & Co., which will make distribution of the amounts so paid to the participating members of DTC for subsequent payment to the beneficial owners of the Obligations (see "The Obligations - Book-Entry-Only System").

**PAYMENT RECORD** ..... The City has never defaulted on the payment of its tax-supported indebtedness.

#### SELECTED FINANCIAL INFORMATION

Fiscal Year Ended	Estimated Population <sup>(1)</sup>	Net Taxable Assessed Valuation <sup>(2)</sup>	Net Taxable Assessed Valuation Per Capita	Net Tax Debt Outstanding at End of Fiscal Year <sup>(8)</sup>	Per Capita Net Funded Tax Debt	Ratio Net Tax Debt to Net Taxable Assessed Valuation	% of Total Tax Collections
9/30							
2019	136,927	\$ 11,316,934,296 <sup>(3)</sup>	82,649	\$ 191,662,956	1,400	1.69%	99.82%
2020	140,956	12,620,560,528 <sup>(4)</sup>	89,535	249,482,532	1,770	1.98%	99.80%
2021	143,775	13,581,648,271 <sup>(5)</sup>	94,465	308,521,854	2,146	2.27%	99.74%
2022	146,950	14,403,105,063 <sup>(6)</sup>	98,014	354,343,240	2,411	2.46%	99.60%
2023	150,624	16,721,123,624 <sup>(7)</sup>	111,012	391,845,000 <sup>(9)</sup>	2,601	2.34%	98.12% <sup>(10)</sup>

(1) Source: City Officials.

(2) Valuations shown are certified taxable assessed values reported by the Denton Central Appraisal District to the State Comptroller of Public Accounts. Certified values are subject to change throughout the year as contested values are resolved and the Appraisal District updates records. Source: Denton Central Appraisal District as of September 12, 2022.

(3) Includes tax incremental value of approximately \$110,633,617 that is not available for the City's general obligations and debt of City.

(4) Includes tax incremental value of approximately \$168,826,531 that is not available for the City's general obligations and debt of City.

(5) Includes tax incremental value of approximately \$198,541,948 that is not available for the City's general obligations and debt of City.

(6) Includes tax incremental value of approximately \$236,666,283 that is not available for the City's general obligations and debt of City.

(7) Includes tax incremental value of approximately \$260,921,114 that is not available for the City's general obligations and debt of City.

(8) Excludes self-supported general obligation debt.

(9) Projected. Includes a portion of the Obligations. Excludes the Refunded Obligations. Preliminary, subject to change.

(10) Collections for part year only, through April 1, 2023.



## CITY OFFICIALS, STAFF AND CONSULTANTS

### ELECTED OFFICIALS

<u>City Council</u>	<u>Term Expires</u>
Gerard Hudspeth Mayor	May, 2024
Vicki Byrd Councilmember, District 1	May, 2025
Brian Beck Mayor Pro Tem Councilmember, District 2	May, 2025
Paul Meltzer Councilmember, District 3	May, 2025
Joe Holland Councilmember, District 4	May, 2025
Brandon Chase McGee Councilmember, At Large Place 5	May, 2024
Chris Watts Councilmember, At Large Place 6	May, 2024

### SELECTED ADMINISTRATIVE STAFF

<u>Name</u>	<u>Position</u>
Sara Hensley	City Manager
Frank Dixon	Assistant City Manager
Christine Taylor	Assistant City Manager
Cassandra Ogden	Assistant City Manager
Aimee Kaslik	Interim Director of Finance
Vis Bouaphanthavong	Controller
Jesus Salazar	Interim City Secretary
Mack Reinwand	City Attorney

### CONSULTANTS AND ADVISORS

Auditors ..... Weaver and Tidwell, L.L.P.  
Dallas, Texas

Bond Counsel ..... McCall, Parkhurst & Horton L.L.P.  
Dallas, Texas

Financial Advisor.....Hilltop Securities Inc.  
Fort Worth, Texas

For additional information regarding the City, please contact:

Cassandra Ogden-Assistant City Manager  
Mack Reinwand-City Attorney  
City of Denton  
215 E. McKinney Street  
Denton, Texas 76201  
(940) 349-7195

Laura Alexander  
Hilltop Securities Inc.  
777 Main Street, Suite 1525  
Fort Worth, Texas 76102  
or (817) 332-9710

## PRELIMINARY OFFICIAL STATEMENT

### RELATING TO

### CITY OF DENTON, TEXAS

**\$146,795,000\***

**CERTIFICATES OF OBLIGATION, SERIES 2023**

**\$71,845,000\***

**GENERAL OBLIGATION REFUNDING AND  
IMPROVEMENT BONDS, SERIES 2023**

### INTRODUCTION

This Preliminary Official Statement, which includes the Schedule and Appendices hereto, provides certain information regarding the issuance of \$146,795,000\* City of Denton, Texas Certificates of Obligation, Series 2023 (the "Certificates") and \$71,845,000\* City of Denton, Texas General Obligation Refunding and Improvement Bonds, Series 2023 (the "Bonds"). The Bonds and the Certificates (collectively the "Obligations") are separate and distinct securities offerings being authorized for issuance under separate ordinances (the "Bond Ordinance" and the "Certificate Ordinance", respectively, each as defined below, and collectively the "Ordinances") adopted by the City Council of the City, but are being offered and sold pursuant to a common Official Statement, and while the Bonds and Certificates share certain common attributes, each issue is separate and apart from the other and should be reviewed and analyzed independently, including the kind and type of obligation being issued, its terms of payment, the security for its payment, the rights of the holders, the federal, state or local tax consequences of the purchase, ownership or disposition of the Obligations and the covenants and agreements made with respect thereto. The City Council is expected to adopt an ordinance on June 6, 2023 authorizing the issuance of the Bonds (the "Authorizing Bond Ordinance"). In the Authorizing Bond Ordinance, as permitted by the provisions of Chapter 1371, Texas Government Code, as amended, the City Council delegated the authority to each of the Assistant City Manager and Chief Financial Officer to establish the terms and details of the Bonds and to effect the sale of the Bonds pursuant to a "Pricing Certificate" (the Authorizing Bond Ordinance and the Pricing Certificate for the Bonds are jointly referred to as the "Bond Ordinance"). The City Council is expected to adopt an ordinance on June 6, 2023 authorizing the issuance of the Certificates (the "Authorizing Certificate Ordinance"). In the Authorizing Certificate Ordinance, as permitted by the provisions of Chapters 1371, Texas Government Code, as amended, the City Council delegated the authority to each of the Assistant City Manager and Chief Financial Officer to establish the terms and details of the Certificates and to effect the sale of the Certificates pursuant to a "Pricing Certificate" (the Authorizing Certificate Ordinance and the Pricing Certificate for the Certificates are jointly referred to as the "Certificate Ordinance"). Capitalized terms used in this Preliminary Official Statement have the same meanings assigned to such terms in each respective Ordinance, except as otherwise indicated herein.

There follows in this Preliminary Official Statement descriptions of the Obligations and certain information regarding the City and its finances. All descriptions of documents contained herein are only summaries and are qualified in their entirety by reference to each such document. Copies of such documents may be obtained from the City's Financial Advisor, Hilltop Securities Inc., Fort Worth, Texas.

**DESCRIPTION OF THE CITY . . .** The City of Denton, Texas (the "City") is a political subdivision located in Denton County operating as a home-rule city under the laws of the State of Texas (the "State") and a charter approved by the voters in 1959. The City operates under the Council/Manager form of government where the Mayor and six Councilmembers are elected for staggered two-year terms. The City Council formulates operating policy for the City while the City Manager is the chief administrative officer. The City is approximately 97.411 square miles in area.

### PLAN OF FINANCING

**PURPOSE . . .** Proceeds from the sale of the Certificates will be used for the purchase, construction and acquisition of certain real and personal property, to wit: (a) acquiring, constructing, installing and equipping fire stations; (b) acquisition of vehicles and equipment for the fire, police, building inspections, community improvement services, animal services, streets and traffic control, facilities management, airport, technology services, fleet management, warehouse management, and parks and recreation departments; (c) renovations to, and equipping of, existing municipal buildings, including the acquisition and installation of replacement heating, venting and air conditioning equipment, roofing and flooring; (d) acquiring, constructing, installing and equipping police stations; (e) acquiring, constructing and installing building security systems, including security system technology equipment and software, for municipal buildings; (f) constructing, reconstructing, renovating, installing and equipping municipal parks; (g) renovations to, expansion of, and equipping existing municipal vehicle maintenance facility; (h) acquisition and installation of technology equipment, including radio equipment, computer equipment and software, for various municipal departments; (i) constructing and improving streets, including traffic signalization, landscaping, drainage, utility line relocations and the acquisition of land and rights-of-way therefor; (j) constructing, reconstructing and renovating runways and taxiways at the municipal airport; (k) acquisition of vehicles and equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the City's solid waste disposal system; (l) acquisition of equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the City's waterworks and wastewater system; and (m) acquisition of equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the City's electric light and power system, and also for the purpose of paying all or a portion of the City's contractual obligations for professional services, including engineers, architects, attorneys, map makers, auditors, and financial advisors, in connection with said projects and the Certificates.

Proceeds of the Bonds are expected to be used for (i) \_\_\_\_\_, (ii) \_\_\_\_\_, (iii) \_\_\_\_\_, (iv) refunding the obligations described in Schedule I – Schedule of Refunded Obligations (the "Refunded Obligations") for debt service savings, and (v) to pay the costs associated with the issuance of the Bonds.

\* Preliminary, subject to change.

**REFUNDED OBLIGATIONS** . . . A description and identification of the Refunded Obligations appears on Schedule I attached hereto. The Refunded Obligations are being called for redemption on [REDACTED] (the "Redemption Date"). The principal and interest due on the Refunded Obligations are to be paid on the Redemption Date from funds to be deposited with the paying agent/registrars for the Refunded Obligations (the "Refunded Obligations Paying Agent"). The Ordinance will provide that with respect to the Refunded Obligations, a portion of the proceeds from the sale of the Bonds, will be irrevocably deposited with the Refunded Obligations Paying Agent on the Redemption Date. The Bank of New York Mellon Trust Company, in its capacity as the Refunded Obligation Paying Agent, will certify as to the sufficiency of the amounts initially deposited with the Refunded Obligations Paying Agent to pay the principal of and interest on the Refunded Obligations when due at the Redemption Date of redemption. Such funds will be held uninvested by the Refunded Obligations Paying Agent in a trust clearing account pending their disbursement to redeem the Refunded Obligations on the Redemption Date. By the deposit with the Refunded Obligations Paying Agent in such trust clearing account, the City will have effected the defeasance of all the Refunded Obligations in accordance with the applicable law.

*THE REMAINDER OF THIS PAGE LEFT BLANK INTENTIONALLY*

## THE OBLIGATIONS

**DESCRIPTION OF THE OBLIGATIONS . . .** The Obligations are dated June 15, 2023, and mature on February 15 in each of the years and in the amounts shown on page 2 and page 4 hereof. Interest will accrue from the date of initial delivery thereof (the "Delivery Date"), will be computed on the basis of a 360-day year of twelve 30-day months, and will be payable on February 15 and August 15 of each year, commencing February 15, 2024 until maturity or prior redemption. The definitive Obligations will be issued only in fully registered form in any integral multiple of \$5,000 for any one maturity and will be initially registered and delivered only to Cede & Co., the nominee of The Depository Trust Company ("DTC") pursuant to the Book-Entry-Only System described herein. **No physical delivery of the Obligations will be made to the beneficial owners thereof.** Principal of, premium, if any, and interest on the Obligations will be payable by the Paying Agent/Registrar to Cede & Co., which will make distribution of the amounts so paid to the participating members of DTC for subsequent payment to the beneficial owners of the Obligations. See "The Obligations - Book-Entry-Only System" herein.

**AUTHORITY FOR ISSUANCE . . .** The Certificates are being issued pursuant to the Constitution and general laws of the State, particularly Subchapter C of Chapter 271, Texas Local Government Code, as amended, and Texas Government Code, Chapter 1371, as amended, and the Certificate Ordinance.

The Bonds are being issued pursuant to the Constitution and general laws of the State, particularly Chapters 1207, 1371 and 1331, Texas Government Code, as amended, and the Bond Ordinance.

### SECURITY AND SOURCE OF PAYMENT . . .

*The Certificates . . .* The Certificates constitute direct obligations of the City, payable from a combination of (i) a direct annual ad valorem tax levied, within the limits prescribed by law, on all taxable property within the City, and (ii) a limited pledge (not to exceed \$1,000) of surplus net revenues of the City's Utility System (consisting of the electric system and the waterworks and sewer system).

*The Bonds . . .* The Bonds constitute direct obligations of the City and the principal thereof and interest thereon are payable from an annual ad valorem tax levied by the City, within the limits prescribed by law, upon all taxable property in the City, as provided in the Bond Ordinance.

**TAX RATE LIMITATION . . .** All taxable property within the City is subject to the assessment, levy and collection by the City of a continuing, direct annual ad valorem tax sufficient to provide for the payment of principal of and interest on all ad valorem tax debt, including the Obligations, within the limits prescribed by law. Article XI, Section 5, of the Texas Constitution is applicable to the City, and limits its maximum ad valorem tax rate to \$2.50 per \$100 Taxable Assessed Valuation for all City purposes. The Home Rule Charter of the City adopts the constitutionally authorized maximum tax rate of \$2.50 per \$100 Taxable Assessed Valuation. Administratively, the Attorney General of the State will permit allocation of \$1.50 of the \$2.50 maximum tax rate for all general obligation debt, as calculated at the time of issuance and based on 90% tax collection factor.

**OPTIONAL REDEMPTION . . .** The City reserves the right, at its option, to redeem the Obligations having stated maturities on and after February 15, 2033 in whole or in part in principal amounts of \$5,000 or any integral multiple thereof, on February 15, 2032 or any date thereafter, at the par value thereof plus accrued interest to the date of redemption. If less than all of the Bonds or Certificates are to be redeemed, the City may select the maturities of Bonds or Certificates, as the case may be, to be redeemed. If less than all the Bonds or Certificates of any maturity are to be redeemed, the Paying Agent/Registrar (or DTC while the Bonds or Certificates, as the case may be, are in Book-Entry-Only form) shall determine by lot the Bonds or Certificates, or portions thereof, within such maturity to be redeemed. If a Bond or Certificate (or any portion of the principal sum thereof) shall have been called for redemption and notice of such redemption shall have been given, such Bond or Certificate (or the principal amount thereof to be redeemed) shall become due and payable on such redemption date and interest thereon shall cease to accrue from and after the redemption date, provided funds for the payment of the redemption price and accrued interest thereon are held by the Paying Agent/Registrar on the redemption date.

With respect to any optional redemption of the Bonds or Certificates, as the case may be, unless certain prerequisites to such redemption required by the respective Ordinance have been met and money sufficient to pay the principal of and premium, if any, and interest on the Bonds or Certificates, as the case may be, to be redeemed will have been received by the Paying Agent/Registrar prior to the giving of such notice of redemption, such notice may state that said redemption will, at the option of the City, be conditional upon the satisfaction of such prerequisites and receipt of such money by the Paying Agent/Registrar on or prior to the date fixed for such redemption or upon any prerequisite set forth in such notice of redemption. If a conditional notice of redemption is given and such prerequisites to the redemption are not fulfilled, such notice will be of no force and effect, the City will not redeem such Bonds or Certificates, as the case may be, and the Paying Agent/Registrar will give notice in the manner in which the notice of redemption was given, to the effect that the Bonds or Certificates, as the case may be, have not been redeemed.

**NOTICE OF REDEMPTION . . .** Not less than 30 days prior to a redemption date for the Obligations, the City shall cause a notice of redemption to be sent by United States mail, first class, postage prepaid, to the registered owners of the Obligations to be redeemed, in whole or in part, at the address of the registered owner appearing on the registration books of the Paying Agent/Registrar at the close of business on the business day next preceding the date of mailing such notice. ANY NOTICE SO MAILED SHALL BE CONCLUSIVELY PRESUMED TO HAVE BEEN DULY GIVEN WHETHER OR NOT THE REGISTERED OWNER RECEIVES SUCH NOTICE. IF AN OBLIGATION (OR ANY PORTION OF ITS PRINCIPAL SUM) SHALL HAVE BEEN DULY CALLED FOR REDEMPTION AND NOTICE OF SUCH REDEMPTION DULY GIVEN, THEN UPON THE REDEMPTION DATE SUCH OBLIGATION (OR THE PORTION OF ITS PRINCIPAL SUM TO BE REDEEMED) SHALL BECOME DUE AND PAYABLE, AND, IF MONIES FOR THE PAYMENT OF THE REDEMPTION PRICE ARE HELD FOR THE PURPOSE OF SUCH PAYMENT BY THE PAYING AGENT/REGISTRAR AND ALL OTHER CONDITIONS TO REDEMPTION ARE SATISFIED, INTEREST SHALL CEASE TO ACCRUE AND BE PAYABLE FROM AND AFTER THE REDEMPTION DATE ON THE PRINCIPAL AMOUNT REDEEMED.

**DEFEASANCE . . .** The Ordinances provide that any Obligation and the interest thereon shall be deemed to be paid, retired, and no longer outstanding (a "Defeased Obligation") within the meaning of such Ordinance when payment of the principal of such Obligation, plus interest thereon to the due date either (i) shall have been made or caused to be made in accordance with the terms thereof, or (ii) shall have been provided for on or before such due date by irrevocably depositing with or making available to the Paying Agent/Registrar for such payment (1) lawful money of the United States of America sufficient to make such payment or (2) Government Obligations which mature as to principal and interest in such amounts and at such times as will insure the availability, without reinvestment, of sufficient money to provide for such payment, and when proper arrangements have been made by the City with the Paying Agent/Registrar for the payment of its services until all Defeased Obligations shall have become due and payable, and thereafter the City will have no further responsibility with respect to amounts available to such paying agent (or other financial institution permitted by applicable law) for the payment of such defeased bonds, including any insufficiency therein caused by the failure of such paying agent (or other financial institution permitted by applicable law) to receive payment when due on the Government Obligations. At such time as an Obligation shall be deemed to be a Defeased Obligation hereunder, as aforesaid, such Obligation and the interest thereon shall no longer be secured by, payable from, or entitled to the benefits of, the ad valorem taxes herein levied and pledged as provided in the Ordinance, and such principal and interest shall be payable solely from such money or Government Obligations.

Any moneys so deposited with the Paying Agent/Registrar may at the written direction of the City also be invested in Government Obligations, maturing in the amounts and times as hereinbefore set forth, and all income from such Government Obligations received by the Paying Agent/Registrar which is not required for the payment of the Obligations and interest thereon, with respect to which such money has been so deposited, shall be turned over to the City, or deposited as directed in writing to the City. The Ordinances provide that "Government Obligations" means (a) direct, noncallable obligations of the United States of America including obligations that are unconditionally guaranteed by the United States of America and (b) noncallable obligations of an agency or instrumentality of the United States of America, including obligations that are unconditionally guaranteed or insured by the agency or instrumentality and that, on the date the City Council approves such defeasance, are rated as to investment quality by a nationally recognized investment rating firm not less than AAA or its equivalent.

Upon such deposit as described above, such Defeased Obligations shall no longer be regarded to be outstanding obligations payable from ad valorem taxes levied by the City or from the other revenues pledged to their payment in the Ordinances, but will be payable only from the funds and Government Obligations deposited in escrow and will not be considered debt of the City for any purpose. After firm banking and financial arrangements for the discharge and final payment or redemption of the Obligations have been made as described above, all rights of the City to initiate proceedings to call the Obligations for redemption or take any other action amending the terms of the Obligations are extinguished; provided, however, that the right to call the Obligations for redemption is not extinguished if the City: (i) in the proceedings providing for the firm banking and financial arrangements, expressly reserves the right to call the Obligations for redemption; and (ii) gives notice of the reservation of that right to the owners of the Obligations immediately following the making of the firm banking and financial arrangements; (iii) directs that notice of the reservation be included in any redemption notices that it authorizes.

**BOOK-ENTRY-ONLY SYSTEM . . .** *This section describes how ownership of the Obligations is to be transferred and how the principal of, premium, if any, and interest on the Obligations are to be paid to and accredited by DTC while the Obligations are registered in its nominee name. The information in this section concerning DTC and the Book-Entry-Only System has been provided by DTC for use in disclosure documents such as this Official Statement. The City believes the source of such information to be reliable, but takes no responsibility for the accuracy or completeness thereof.*

*The City cannot and does not give any assurance that (1) DTC will distribute payments of debt service on the Obligations, or redemption or other notices, to DTC Participants, (2) DTC Participants or others will distribute debt service payments paid to DTC or its nominee (as the registered owner of the Obligations), or redemption or other notices, to the Beneficial Owners, or that they will do so on a timely basis, or (3) DTC will serve and act in the manner described in this Official Statement. The current rules applicable to DTC are on file with the Securities and Exchange Commission, and the current procedures of DTC to be followed in dealing with DTC Participants are on file with DTC.*

DTC will act as securities depository for the Obligations. The Obligations will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered security certificate will be issued for each maturity of the Obligations in the aggregate principal amount thereof and will be deposited with DTC.

DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a Standard & Poor's rating of "AA+". The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at [www.dtcc.com](http://www.dtcc.com) and [www.dtc.org](http://www.dtc.org).

Purchases of Obligations under the DTC system must be made by or through Direct Participants, which will receive a credit for the Obligations on DTC's records. The ownership interest of each actual purchaser of each Obligation ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase, but Beneficial Owners are expected to receive written confirmations providing details of the transactions, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owners entered into the transaction. Transfers of ownership interest in the Obligations are to be accomplished by entries made on the books of Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in the Obligations, except in the event that use of the book-entry system for the Obligations is discontinued.

To facilitate subsequent transfers, all Obligations deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Obligations with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Obligations; DTC's records reflect only the identity of the Direct Participant to whose account such Obligations are credited, which may or may not be the Beneficial Owners. The Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of Obligations may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Obligations, such as redemptions, tenders, defaults, and proposed amendments to the Obligation documents. For example, Beneficial Owners of Obligations may wish to ascertain that the nominee holding the Obligations for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the Obligations within a maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

Neither DTC nor Cede & Co. will consent or vote with respect to the Obligations unless authorized by a Direct Participant in accordance with DTC's procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the City as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Obligations are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Payments on the Obligations will be made to DTC. DTC's practice is to credit Direct Participants' accounts, upon DTC's receipt of funds and corresponding detail information from the City or the Paying Agent/Registrar on payable dates in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as in the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Paying Agent/Registrar or the City, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment to DTC is the responsibility of the City, disbursement of such payments to Direct Participants shall be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners shall be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as securities depository with respect to the Obligations at any time by giving reasonable notice to the City and the Paying Agent/Registrar. Under such circumstances, in the event that a successor securities depository is not obtained, Obligation certificates are required to be printed and delivered.

The City may decide to discontinue use of the system of book-entry transfers through DTC (or a successor securities depository). In that event, Obligations will be printed and delivered.

*Use of Certain Terms in Other Sections of this Official Statement.* In reading this Official Statement it should be understood that while the Obligations are in the Book-Entry-Only System, references in other sections of this Official Statement to registered owners should be read to include the person for which the Participant acquires an interest in the Obligations, but (i) all rights of ownership must be exercised through DTC and the Book-Entry-Only System, and (ii) except as described above, notices that are to be given to registered owners under the Ordinances will be given only to DTC.

Information concerning DTC and the Book-Entry-Only System has been obtained from DTC and is not guaranteed as to accuracy or completeness by, and is not to be construed as a representation by the City, the Financial Advisor or the Initial Purchasers.

**EFFECT OF TERMINATION OF BOOK-ENTRY-ONLY SYSTEM . . .** In the event that the Book-Entry-Only System is discontinued by DTC or the use of the Book-Entry-Only System is discontinued by the City, printed Obligations will be issued to the holders and the Obligations will be subject to transfer, exchange and registration provisions as set forth in the Ordinances and summarized under "The Obligations - Transfer, Exchange and Registration" below.

**PAYING AGENT/REGISTRAR . . .** The initial Paying Agent/Registrar for the Bonds and the Certificates is BOKF, NA, Dallas, Texas. In the Ordinances, the City retains the right to replace the Paying Agent/Registrar. The City covenants to maintain and provide a Paying Agent/Registrar at all times until the Bonds and Certificates are duly paid and any successor Paying Agent/Registrar shall be a commercial bank, trust company, financial institution or other entity duly qualified and legally authorized to serve as and perform the duties and services of Paying Agent/Registrar for the Bonds and Certificates. Upon any change in the Paying Agent/Registrar for the Bonds and Certificates, the City agrees to promptly cause a written notice thereof to be sent to each registered owner of the Bonds and Certificates, as applicable, by United States mail, first class, postage prepaid, which notice shall also give the address of the new Paying Agent/Registrar.

In the event the use of the Book-Entry-Only system is discontinued, principal of the Bonds and Certificates is payable to the registered holder appearing on the registration books of the Paying Agent/Registrar (the "Registered Owner") at the designated corporate trust office of the Paying Agent/Registrar upon surrender of the Bonds and Certificates for payment; provided, however, that so long as Cede & Co. (or other DTC nominee) is the registered owner of the Obligations, all payments will be made as described under "The Obligations - Book-Entry-Only System" herein. Interest on the Bonds and Certificates is payable to the Register Owners appearing on the registration books of the Paying Agent/Registrar at the close of business on the Record Date (identified below) and such interest shall be paid by the Paying Agent/Registrar by check mailed, first class postage prepaid, to the Register Owner or by such other arrangement, acceptable to the Paying Agent/Registrar, requested by and at the risk and expense of the Registered Owner. If the date for the payment of the principal of or interest on the Bonds and Certificates shall be a Saturday, Sunday, a legal holiday, or a day when banking institutions in the city where the designated corporate office of the Paying Agent/Registrar is located is authorized by law or executive order to close, then the date for such payment shall be the next succeeding day which is not such a Saturday, Sunday, legal holiday, or day when banking institutions are authorized to close; and payment on such date shall have the same force and effect as if made on the original date payment was due.

**TRANSFER, EXCHANGE AND REGISTRATION . . .** In the event the Book-Entry-Only System should be discontinued, printed Obligations will be delivered to the Registered Owners and thereafter the Obligations may be transferred and exchanged on the registration books of the Paying Agent/Registrar only upon presentation and surrender of such printed Obligations to the Paying Agent/Registrar and such transfer or exchange shall be without expense or service charge to the Registered Owner, except for any tax or other governmental charges required to be paid with respect to such registration, exchange and transfer. Obligations may be assigned by the execution of an assignment form on the Obligations or by other instrument of transfer and assignment acceptable to the Paying Agent/Registrar. New Obligations will be delivered by the Paying Agent/Registrar, in lieu of the Obligations being transferred or exchanged, at the designated office of the Paying Agent/Registrar, or sent by United States mail, first class, postage prepaid, to the new Registered Owner or his designee. To the extent possible, new Obligations issued in an exchange or transfer of Obligations will be delivered to the Registered Owner or assignee of the Registered Owner in not more than three business days after the receipt of the Obligations to be canceled, and the written instrument of transfer or request for exchange duly executed by the Registered Owner or his duly authorized agent, in form satisfactory to the Paying Agent/Registrar. New Obligations registered and delivered in an exchange or transfer shall be in any integral multiple of \$5,000 for any one maturity and for a like aggregate principal amount as the Obligations surrendered for exchange or transfer. See "The Obligations—Book-Entry-Only System" herein for a description of the system to be utilized initially in regard to ownership and transferability of the Obligations. Neither the City nor the Paying Agent/Registrar shall be required to transfer or exchange any Obligation called for redemption, in whole or in part, within 45 days of the date fixed for redemption; provided, however, such limitation of transfer shall not be applicable to an exchange by the Registered Owner of the uncalled balance of an Obligation.

**RECORD DATE FOR INTEREST PAYMENT . . .** The record date ("Record Date") for the interest payable on the Bonds and Certificates on any interest payment date means the close of business on the last business day of the month next preceding such interest payment date.

In the event of a non-payment of interest on a scheduled payment date, and for 30 days thereafter, a new record date for such interest payment (a "Special Record Date") will be established by the Paying Agent/Registrar, if and when funds for the payment of such interest have been received from the City. Notice of the Special Record Date and of the scheduled payment date of the past due interest ("Special Payment Date", which shall be 15 days after the Special Record Date) shall be sent at least five business days prior to the Special Record Date by United States mail, first class postage prepaid, to the address of each Registered Owner of a Bond and Certificate appearing on the registration books of the Paying Agent/Registrar at the close of business on the last business day next preceding the date of mailing of such notice.

**AMENDMENTS . . .** In each Ordinance, the City has reserved the right to amend the Ordinance without the consent of any holder of the respective Obligation for the purpose of amending or supplementing the Ordinance to (i) cure any ambiguity, defect or omission therein that does not materially adversely affect the interests of the holders, (ii) grant additional rights or security for the benefit of the holders, (iii) add events of default as shall not be inconsistent with the provisions of the Ordinance that do not materially adversely affect the interests of the holders, (iv) qualify the Ordinance under the Trust Indenture Act of 1939, as amended, or corresponding provisions of federal laws from time to time in effect or (v) make such other provisions in regard to matters or questions arising under the Ordinance that are not inconsistent with the provisions thereof and which, in the opinion of Bond Counsel for the City, do not materially adversely affect the interests of the holders.

Each Ordinance further provides that the holders of the Bonds or Certificates, as applicable, aggregating in principal amount a majority of the outstanding Bonds or Certificates, as the case may be, shall have the right from time to time to approve any amendment not described above to the applicable Ordinance if it is deemed necessary or desirable by the City; provided, however, that without the consent of 100% of the holders in original principal amount of the then outstanding Bonds or Certificates so affected, no amendment may be made for the purpose of: (i) making any change in the maturity of any of the outstanding Bonds or Certificates; (ii) reducing the rate of interest borne by any of the outstanding Bonds or Certificates; (iii) reducing the amount of the principal of, or redemption premium, if any, payable on any outstanding Bonds or Certificates; (iv) modifying the terms of payment of principal or of interest or redemption premium on outstanding Bonds or Certificates, or imposing any condition with respect to such payment; or (v) changing the minimum percentage of the principal amount of the Bonds or Certificates necessary for consent to such amendment. Reference is made to the Ordinances for further provisions relating to the amendment thereof.

**REMEDIES . . .** Each Ordinance establishes specific events of default with respect to the respective series of Obligations. If the City defaults in the payment of the principal of or interest on the Bonds or Certificates when due or the City defaults in the observance or performance of any of the covenants, conditions, or obligations of the City, the failure to perform which materially, adversely affects the rights of the owners thereof, including but not limited to, their prospect or ability to be repaid in accordance with the respective Ordinance, and the continuation thereof for a period of 60 days after notice of such default is given by any owner to the City, each Ordinance provides that any registered owner of a respective Obligation is entitled to seek a writ of mandamus from a court of proper jurisdiction requiring the City to make such payment or observe and perform such covenants, obligations, or conditions. The issuance of a writ of mandamus may be sought if there is no other available remedy at law to compel performance of the respective Obligations or Ordinance and the City's obligations are not uncertain or disputed. The remedy of mandamus is controlled by equitable principles, so rests with the discretion of the court, but may not be arbitrarily refused. There is no acceleration of maturity of the Obligations in the event of default and, consequently, the remedy of mandamus may have to be relied upon from year to year. The Ordinances do not provide for the appointment of a trustee to represent the interest of the owners of the respective Obligations upon any failure of the City to perform in accordance with the terms of the Ordinances, or upon any other condition and accordingly all legal actions to enforce such remedies would have to be undertaken at the initiative of, and be financed by, the Registered Owners. The Texas Supreme Court has ruled in *Tooke v. City of Mexia* 197 S.W.3d 325 (Tex. 2006) that a waiver of sovereign immunity in a contractual dispute must be provided for by statute in "clear and unambiguous" language. Furthermore, Tooke, and subsequent jurisprudence, held that a municipality is not immune from suit for torts committed in the performance of its proprietary functions, as it is for torts committed in the performance of its governmental functions (the "Proprietary-Governmental Dichotomy"). Governmental functions are those that are enjoined on a municipality by law and are given by the State as a part of the State's sovereignty, to be exercised by the municipality in the interest of the general public, while proprietary functions are those that a municipality may, in its discretion, perform in the interest of the inhabitants of municipality. In *Wasson Interests, Ltd., V. City of Jacksonville*, No. 489 S.W.3d 427 (Tex. 2016), ("Wasson") the Texas Supreme Court (the "Court") addressed whether the distinction between governmental and proprietary acts (as found in tort-based causes of action) applies to the breach of contract claims against municipalities. The Court analyzed the rationale behind the Proprietary-Governmental Dichotomy to determine that "a city's proprietary functions are not done pursuant to the 'will of the people' and protecting such municipalities 'via the State's immunity is not an efficient way to ensure efficient allocation of State resources'". While the Court recognized that the distinction between government and proprietary functions is not clear, the Wasson opinion held the Proprietary-Governmental Dichotomy applies in contract-claims context. Therefore, in regard to municipal contract cases (as in tort claims), it is incumbent on the courts to determine whether a function is proprietary or governmental based upon the statutory guidance and definitions found in the Texas Civil Practice and Remedies Code. Notwithstanding the foregoing new case law issued by the Court, such sovereign immunity issues have not been adjudicated in relation to bond matters (specifically, in regard to the issuance of municipal debt). Each situation will be prospectively evaluated based on the facts and circumstances surrounding the contract in question to determine if a suit, and subsequently, a judgment, is justiciable against a municipality. Because it is unclear whether the Texas legislature has effectively waived the City's sovereign immunity from a suit for money damages, owners of Obligations may not be able to bring such a suit against the City for breach of the Obligations or Ordinance covenants in the absence of City action. Chapter 1371, Texas Government Code ("Chapter 1371"), which pertains to the issuance of public securities by issuers such as the City, permits the



City to waive sovereign immunity in the proceedings authorizing its debt, but in connection with the issuance of the Obligations, the City has not waived sovereign immunity. Even if a judgment against the City could be obtained, it could not be enforced by direct levy and execution against the City's property. Further, the Registered Owners cannot themselves foreclose on property within the City or sell property within the City to enforce the tax lien on taxable property to pay the principal of and interest on the Bonds or the Certificates. Furthermore, the City is eligible to seek relief from its creditors under Chapter 9 of the U.S. Bankruptcy Code ("Chapter 9"). Although Chapter 9 provides for the recognition of a security interest represented by a specifically pledged source of revenues, the pledge of ad valorem taxes in support of a general obligation of a bankrupt entity is not specifically recognized as a security interest under Chapter 9. Chapter 9 also includes an automatic stay provision that would prohibit, without Bankruptcy Court approval, the prosecution of any other legal action by creditors or Obligationholders of an entity which has sought protection under Chapter 9. Therefore, should the City avail itself of Chapter 9 protection from creditors, the ability to enforce would be subject to the approval of the Bankruptcy Court (which could require that the action be heard in Bankruptcy Court instead of other federal or state court); and the Bankruptcy Code provides for broad discretionary powers of a Bankruptcy Court in administering any proceeding brought before it. The opinions of Bond Counsel will note that all opinions relative to the enforceability of the Obligations are qualified with respect to the customary rights of debtors relative to their creditors, by principles of governmental immunity, and by general principles of equity which permit the exercise of judicial discretion.

Initially, the only Registered Owner of the Bonds and Certificates will be Cede & Co., as DTC's nominee. See "The Obligations - Book-Entry-Only System" herein for a description of the duties of DTC with regard to ownership of the Bonds and Certificates.

### **TAX INFORMATION**

**AD VALOREM TAX LAW . . .** The appraisal of property within the City is the responsibility of the Denton Central Appraisal District (the "Appraisal District"). Excluding agricultural and open-space land, which may be taxed on the basis of productive capacity, the Appraisal District is required under V.T.C.A., Title I, Tax Code, as amended (the "Property Tax Code") to appraise all property within the Appraisal District on the basis of 100% of its market value and is prohibited from applying any assessment ratios. In determining the market value of property, different methods of appraisal may be used, including the cost method of appraisal, the income method of appraisal and the market data comparison method of appraisal, and the method considered most appropriate by the chief appraiser is to be used. State law requires the appraised value of a residence homestead to be based solely on the property's value as a residence homestead, regardless of whether residential use is considered to be the highest and best use of the property. State law further limits the appraised value of a residence homestead for a tax year to an amount that would not exceed the lesser of (1) the market value of the property for the most recent tax year that the market value was determined by the appraisal office or (2) the sum of (a) 10% of the property's appraised value in the preceding tax year, plus (b) the property's appraised value in the preceding tax year, plus (c) the market value of all new improvements to the property. The value placed upon property within the Appraisal District is subject to review by an Appraisal Review Board, consisting of members appointed by the Board of Directors of the Appraisal District. The Appraisal District is required to review the value of property within the Appraisal District at least every three years. The City may require annual review at its own expense, and is entitled to challenge the determination of appraised value of property within the City by petition filed with the Appraisal Review Board.

Reference is made to the Property Tax Code, for identification of property subject to taxation; property exempt or which may be exempted from taxation, if claimed; the appraisal of property for ad valorem taxation purposes; and the procedures and limitations applicable to the levy and collection of ad valorem taxes.

Article VIII of the State Constitution ("Article VIII") and State law provide for certain exemptions from property taxes, the valuation of agricultural and open-space lands at productivity value, and the exemption of certain personal property from ad valorem taxation.

Under Section 1-b, Article VIII, and State law, the governing body of a political subdivision, at its option, may grant an exemption of not less than \$3,000 of the market value of the residence homestead of persons 65 years of age or older and the disabled from all ad valorem taxes thereafter levied by the political subdivision. Once authorized, such exemption may be repealed or decreased or increased in amount (i) by the governing body of the political subdivision or (ii) by a favorable vote of a majority of the qualified voters at an election called by the governing body of the political subdivision, which election must be called upon receipt of a petition signed by at least 20% of the number of qualified voters who voted in the preceding election of the political subdivision. In the case of a decrease, the amount of the exemption may not be reduced to less than \$3,000 of the market value.

The surviving spouse of an individual who qualifies for the foregoing exemption for the residence homestead of a person 65 or older (but not the disabled) is entitled to an exemption for the same property in an amount equal to that of the exemption for which the deceased spouse qualified if (i) the deceased spouse died in a year in which the deceased spouse qualified for the exemption, (ii) the surviving spouse was at least 55 years of age at the time of the death of the individual's spouse and (iii) the property was the residence homestead of the surviving spouse when the deceased spouse died and remains the residence homestead of the surviving spouse.

In addition to any other exemptions provided by the Property Tax Code, the governing body of a political subdivision, at its option, may grant an exemption of up to 20% of the market value of residence homesteads, with a minimum exemption of \$5,000.

In the case of residence homestead exemptions granted under Section 1-b, Article VIII, ad valorem taxes may continue to be levied against the value of homesteads exempted where ad valorem taxes have previously been pledged for the payment of debt if cessation of the levy would impair the obligation of the contract by which the debt was created.

Under Article VIII and State law, the governing body of a county, municipality or junior college district may provide for a freeze on total amount of ad valorem taxes levied on the residence homestead of a disabled person or persons 65 years of age or older above the amount of tax imposed in the year such residence qualified for such exemption. Also, upon receipt of a petition signed by five percent of the registered voters of the county, municipality or junior college district, an election must be held to determine by majority vote whether to establish such a limitation on taxes paid on residence homesteads of persons 65 years of age or who are disabled. Upon providing for such exemption, the total amount of taxes imposed on such homestead cannot be increased except for improvements (other than maintenance, repairs or improvements required to comply with governmental requirements) and such freeze is transferable to a different residence homestead. Also, a surviving spouse of a taxpayer who qualifies for the freeze on ad valorem taxes is entitled to the same exemption so long as the property was the residence homestead of the surviving spouse when the deceased spouse died and remains the residence homestead of the surviving spouse and the spouse was at least 55 years of age at the time of the death of the individual's spouse. Once established such freeze cannot be repealed or rescinded.

State law and Section 2, Article VIII, mandate an additional property tax exemption for disabled veterans or the surviving spouse or children of a deceased veteran who died while on active duty in the armed forces; the exemption applies to either real or personal property with the amount of assessed valuation exempted ranging from \$5,000 to a maximum of \$12,000, dependent upon the degree of disability or whether the exemption is applicable to a surviving spouse or children; provided, however, that beginning in the 2009 tax year, a disabled veteran who receives from the United States Department of Veterans Affairs or its successor 100 percent disability compensation due to a service-connected disability and a rating of 100 percent disabled or of individual unemployability is entitled to an exemption from taxation of the total appraised value of the veteran's residence homestead. In addition, effective January 1, 2012, and subject to certain conditions, surviving spouses of a deceased veteran who had received a disability rating of 100% will be entitled to receive a residential homestead exemption equal to the exemption received by the deceased spouse until such surviving spouse remarries.

Article VIII provides that eligible owners of both agricultural land (Section 1-d) and open-space land (Section 1-d-1), including open-space land devoted to farm or ranch purposes or open-space land devoted to timber production, may elect to have such property appraised for property taxation on the basis of its productive capacity. The same land may not be qualified under both Section 1-d and 1-d-1.

Nonbusiness personal property, such as automobiles or light trucks, are exempt from ad valorem taxation unless the governing body of a political subdivision elects to tax this property. Boats owned as nonbusiness property are exempt from ad valorem taxation.

Article VIII, Section 1-j, provides for "freeport property" to be exempted from ad valorem taxation. Freeport property is defined as goods detained in Texas for 175 days or less for the purpose of assembly, storage, manufacturing, processing or fabrication. Notwithstanding such exemption, counties, school districts, junior college districts and cities may tax such tangible personal property provided official action to tax the same was taken before April 1, 1990. Decisions to continue to tax may be reversed in the future; decisions to exempt freeport property are not subject to reversal.

Article VIII, Section 1-n of the Texas Constitution provides for the exemption from taxation of "goods-in-transit." "Goods-in-transit" is defined by Section 11.253 of the Property Tax Code, as personal property acquired or imported into Texas and transported to another location in the State or outside of the State within 175 days of the date the property was acquired or imported into Texas. The exemption excludes oil, natural gas, petroleum products, aircraft and special inventory, including motor vehicle, vessel and out-board motor, heavy equipment and manufactured housing inventory. Section 11.253 permits local governmental entities, on a local option basis, to take official action by January 1 of the year preceding a tax year, after holding a public hearing, to tax "goods-in-transit" during the following tax year. After taking such official action, the goods-in-transit remain subject to taxation by the local governmental entity until the governing body of the governmental entity rescinds or repeals its previous actions to tax goods-in-transit. A taxpayer may only receive either the freeport exemption or the "goods-in-transit" exemption for items of personal property.

The City or Denton County may create one or more tax increment financing districts ("TIF") within the City or Denton County, as applicable, and freeze the taxable values of property in the TIF at the value at the time of its creation. Other overlapping taxing units levying taxes in the TIF may agree to contribute all or part of future ad valorem taxes levied and collected against the value of property in the TIF in excess of the "frozen values" to pay or finance the costs of certain public improvements in the TIF. Taxes levied by the City against the values of real property in the TIF in excess of the "frozen" value are not available for general city use but are restricted to paying or financing "project costs" within the TIF. The City also may enter into tax abatement agreements to encourage economic development. Under the agreements, a property owner agrees to construct certain improvements on its property. The City in turn agrees not to levy a tax on all or part of the increased value attributable to the improvements until the expiration of the agreement. The abatement agreement could last for a period of up to 10 years. The City has active reinvestment zones for tax abatements and tax increment financing zones for tax increment financing purposes. See "Tax Information - Tax Incentive Policy, – Property Tax Abatement" and "- Tax Increment Financing and Public Improvement District" and "Table 1 - Valuation, Exemptions and General Obligation Debt".

The City is also authorized, pursuant to Chapter 380, Texas Local Government Code, as amended ("Chapter 380"), to establish programs to promote state or local economic development and to stimulate business and commercial activity in the City. In accordance with a program established pursuant to Chapter 380, the City may make loans or grants of public funds such as ad valorem taxes or sales taxes for economic development purposes, however no obligations secured by ad valorem taxes may be issued for such purposes unless approved by voters of the City. The City has entered into several Chapter 380 Agreements. See "Tax Information - Chapter 380 Agreements".

**NO-NEW-REVENUE TAX RATE AND VOTER-APPROVAL TAX RATE . . .** The Following terms as used in this section have the meanings provided below:

"adjusted" means lost values are not included in the calculation of the prior year's taxes and new values are not included in the current year's taxable values.

"de minimis rate" means the maintenance and operations tax rate that will produce the prior year's total maintenance and operations tax levy (adjusted) from the current year's values (adjusted), plus the rate that produces an additional \$500,000 in tax revenue when applied to the current year's taxable value, plus the debt service tax rate.

"no-new-revenue tax rate" means the combined maintenance and operations tax rate and debt service tax rate that will produce the prior year's total tax levy (adjusted) from the current year's total taxable values (adjusted).

"special taxing unit" means a city for which the maintenance and operations tax rate proposed for the current tax year is 2.5 cents or less per \$100 of taxable value.

"unused increment rate" means the cumulative difference between a city's voter-approval tax rate and its actual tax rate for each of the tax years 2020 through 2022, which may be applied to a city's tax rate in tax years 2021 through 2023 without impacting the voter-approval tax rate.

"voter-approval tax rate" mean the maintenance and operations tax rate that will produce the prior year's total maintenance and operations tax levy (adjusted) from the current year's values (adjusted) multiplied by 1.035, plus the debt service tax rate, plus the "unused increment rate".

The City's tax rate consists of two components: (1) a rate for funding of maintenance and operations expenditures in the current year (the "maintenance and operations tax rate"), and (2) a rate for funding debt service in the current year (the "debt service tax rate"). Under State law, the assessor for the City must submit an appraisal roll showing the total appraised, assessed, and taxable values for all property in the City to the City Council by August 1 of each year, or as soon as practicable thereafter.

A city must annually calculate its "voter-approval tax rate" and "no-new-revenue tax rate" (as such terms are defined above) in accordance with forms prescribed by the State Comptroller and provide notice of such rates to each owner of taxable property within the city and the county tax assessor-collector for each county in which all or part of the city is located. A city must adopt a tax rate before the later of September 30 or the 60th day after receipt of the certified appraisal roll, except that a tax rate that exceeds the voter-approval tax rate must be adopted not later than the 71st day before the next occurring November uniform election date. If a city fails to timely adopt a tax rate, the tax rate is statutorily set as the lower of the no-new-revenue tax rate for the current tax year or the tax rate adopted by the city for the preceding tax year.

As described below, the Property Tax Code provides that if a city adopts a tax rate that exceeds its voter-approval tax rate or, in certain cases, its "de minimis rate", an election must be held to determine whether or not to reduce the adopted tax rate to the voter-approval tax rate.

A city may not adopt a tax rate that exceeds the lower of the voter-approval tax rate or the no-new-revenue tax rate until each appraisal district in which such city participates has delivered notice to each taxpayer of the estimated total amount of property taxes owed and the city has held a public hearing on the proposed tax increase.

For cities with a population of 30,000 or more as of the most recent federal decennial census, if the adopted tax rate for any tax year exceeds the voter-approval tax rate, that city must conduct an election on the next occurring November uniform election date to determine whether or not to reduce the adopted tax rate to the voter-approval tax rate.

For cities with a population less than 30,000 as of the most recent federal decennial census, if the adopted tax rate for any tax year exceeds the greater of (i) the voter-approval tax rate or (ii) the de minimis rate, the city must conduct an election on the next occurring November uniform election date to determine whether or not to reduce the adopted tax rate to the voter-approval tax rate. However, for any tax year during which a city has a population of less than 30,000 as of the most recent federal decennial census and does not qualify as a special taxing unit, if a city's adopted tax rate is equal to or less than the de minimis rate but greater than both (a) the no-new-revenue tax rate, multiplied by 1.08, plus the debt service tax rate or (b) the city's voter-approval tax rate, then a valid petition signed by at least three percent of the registered voters in the city would require that an election be held to determine whether or not to reduce the adopted tax rate to the voter-approval tax rate.

Any city located at least partly within an area declared a disaster area by the Governor of the State or the President of the United States during the current year may calculate its "voter-approval tax rate" using a 1.08 multiplier, instead of 1.035, until the earlier of (i) the second tax year in which such city's total taxable appraised value exceeds the taxable appraised value on January 1 of the year the disaster occurred, or (ii) the third tax year after the tax year in which the disaster occurred.

State law provides cities and counties in the State the option of assessing a maximum one-half percent (1/2%) sales and use tax on retail sales of taxable items for the purpose of reducing its ad valorem taxes, if approved by a majority of the voters in a local option election. If the additional sales and use tax for ad valorem tax reduction is approved and levied, the no-new-revenue tax rate and voter-approval tax rate must be reduced by the amount of the estimated sales tax revenues to be generated in the current tax year.

The calculations of the no-new-revenue tax rate and voter-approval tax rate do not limit or impact the City's ability to set a debt service tax rate in each year sufficient to pay debt service on all of the City's tax-supported debt obligations, including the Obligations.

Reference is made to the Property Tax Code for definitive requirements for the levy and collection of ad valorem taxes and the calculation of the various defined tax rates.

**PROPERTY ASSESSMENT AND TAX PAYMENT . . .** Property within the City is generally assessed as of January 1 of each year. Business inventory may, at the option of the taxpayer, be assessed as of September 1. Oil and gas reserves are assessed on the basis of a valuation process that uses pricing information contained in the most recently published Early Release Overview of the Annual Energy Outlook published by the United States Energy Information Administration, as well as appraisal formulas developed by the State Comptroller of Public Accounts. Taxes become due October 1 of the same year, and become delinquent on February 1 of the following year. Taxpayers 65 years old or older are permitted by State law to pay taxes on homesteads in four installments with the first due on February 1 of each year and the final installment due on August 1.

**PENALTIES AND INTEREST . . .** Charges for penalty and interest on the unpaid balance of delinquent taxes are made as follows:

Month	Cumulative Penalty	Cumulative Interest	Total
February	6%	1%	7%
March	7	2	9
April	8	3	11
May	9	4	13
June	10	5	15
July	12	6	18

After July, the penalty remains at 12%, and interest accrues at a rate of one percent (1%) for each month or portion of a month the tax remains unpaid. A delinquent tax continues to incur the penalty interest as long as the tax remains unpaid, regardless of whether a judgment for the delinquent tax has been rendered. The purpose of imposing such interest is to compensate the taxing unit for revenue lost because of the delinquency. In addition, if an account is delinquent in July, an attorney's collection fee of up to 20% may be added to the total tax penalty and interest charge. Under certain circumstances, taxes which become delinquent on the homestead of a taxpayer 65 years old or older incur a penalty of 8% per annum with no additional penalties or interest assessed. In general, property subject to the City's lien may be sold, in whole or in parcels, pursuant to court order to collect the amounts due. Federal law does not allow for the collection of penalty and interest against an estate in bankruptcy. Federal bankruptcy law provides that an automatic stay of action by creditors and other entities, including governmental units, goes into effect with the filing of any petition in bankruptcy. The automatic stay prevents governmental units from foreclosing on property and prevents liens for post-petition taxes from attaching to property and obtaining secured creditor status unless, in either case, an order lifting the stay is obtained from the bankruptcy court. In many cases post-petition taxes are paid as an administrative expense of the estate in bankruptcy or by order of the bankruptcy court.

**CITY APPLICATION OF TAX CODE . . .** The City grants an exemption to the market value of the residence homestead of persons 65 years of age or older of \$50,000. Disabled taxpayers also receive a \$50,000 exemption.

The City grants an additional one-half of one percent, or a minimum of \$5,000 exemption of the market value of residence homesteads.

See Table 1 for a listing of the amounts of the exemptions described above.

Ad valorem taxes are not levied by the City against the exempt value of residence homesteads for the payment of debt. The City does not tax nonbusiness personal property.

Denton County began collecting taxes for the City during the fiscal year 2006-07.

The City does not allow split payments, and discounts are not allowed.

The City does not tax freeport property.

The City collects the additional one-half cent sales tax for reduction of ad valorem taxes.

The City does tax "goods-in-transit".

The City has adopted the tax freeze (limitation) for citizens who are disabled or are 65 years of age or older.

The City has adopted a tax abatement policy.

The City participates in two tax increment reinvestment zones, which were created in 2010 and 2012.

**TAX INCREMENT FINANCING AND PUBLIC IMPROVEMENT DISTRICT . . .** The City participates in two tax increment reinvestment zones, which were created in 2010 and 2012. And the City created Rayzor Ranch Public Improvement District No. 1 (the "District") in 2014 for the undertaking and financing of public improvements authorized by Chapter 372 of the Texas Local Government Code. Additional information on the tax increment reinvestment zones and the District can be found in the Annual Comprehensive Financial Report, Notes to Basic Financial Statements, IV. Detailed Notes on All Funds, B. Property Tax Revenue.

**TAX INCENTIVE POLICY . . .** The City enters into economic development incentive agreements consisting of property tax abatement agreements and Chapter 380 agreements with entities to promote development and redevelopment within the City, stimulate commercial activity, generate additional sales tax, and enhance the property tax base and economic vitality of the City. A summary of newly initiated agreements and terminated agreements follows.

**PROPERTY TAX ABATEMENTS . . .** No new property tax abatements were approved, initiated, or terminated in 2023.

**CHAPTER 380 AGREEMENTS . . .** No new Chapter 380 Agreements were approved in 2023. Two agreements for Ranchland Foods and United States Cold Storage were terminated. From the Future will initiate in 2023. Payments continue to be made to Buc-ee's Travel Center, Unicorn Lake, Rayzor Ranch Marketplace and Town Center, Golden Triangle Mall, and O'Reilly Hotel and Convention Center for sales tax, and Mayday Manufacturing, Westgate Business Park, WinCo Distribution Center, and O'Reilly Hotel and Convention Center for ad valorem rebates. Safran and TeamOfDefenders received job-based grant and expansion grant payments, respectively. O'Reilly Hotel and Convention Center also receives hotel occupancy tax payments.

Additional information on all of the tax abatement and Chapter 380 agreements may be found in Appendix B – Excerpts from the City of Denton, Texas Annual Comprehensive Financial Report, Notes to Basic Financial Statements, V. Other Information, F Tax Abatements.

**RECENT FINANCIAL DEVELOPMENTS – INFECTIOUS DISEASE OUTBREAK – COVID-19 . . .** The outbreak of COVID-19, a respiratory disease caused by a new strain of coronavirus, has been characterized as a pandemic (the "Pandemic") by the World Health Organization and is currently affecting many parts of the world, including the United States and Texas. On January 31, 2020, the Secretary of the United States Health and Human Services Department declared a public health emergency for the United States and on March 13, 2020, the President of the United States declared the outbreak of COVID-19 in the United States a national emergency. Subsequently, the President's Coronavirus Guidelines for America and the United States Centers for Disease Control and Prevention called upon Americans to take actions to slow the spread of COVID-19 in the United States.

On March 13, 2020, the Governor of Texas (the "Governor") declared a state of disaster for all counties in Texas in response to the Pandemic. Pursuant to Chapter 418 of the Texas Government Code, the Governor has broad authority to respond to disasters, including suspending any regulatory statute prescribing the procedures for conducting state business or any order or rule of a state agency that would in any way prevent, hinder, or delay necessary action in coping with the disaster, and issuing executive orders that have the force and effect of law. The Governor issued a number of executive orders relating to COVID-19 preparedness and mitigation, which restricted or halted business activity, restricted the number of people that can congregate in a

public setting, and limited the movement of many citizens to only essential activities. Under executive orders in effect as of the date of this Official Statement, there are no COVID-19 related operating limits for any business or other establishment. The Governor retains the right to impose new restrictions on activities. Additional information regarding executive orders issued by the Governor is accessible on the website of the Governor at <https://gov.texas.gov/>. Neither the information on (nor accessed through) such website of the Governor is incorporated by reference, either expressly or by implication, into this Official Statement.

The Pandemic has negatively affected travel, commerce, and financial markets globally, and is widely expected to continue negatively affecting economic growth and financial markets worldwide. These negative impacts may reduce or negatively affect property values and/or the collection of sales tax revenues, ad valorem tax revenues and other revenues within the City, including utility system revenues. See "TAX INFORMATION" and "FINANCIAL INFORMATION – Table 13 – Municipal Sales Tax History." The Obligations are secured by an ad valorem tax (within the limits prescribed by law), and a reduction in the receipt of such revenues or in the property values within the City may require an increase in the ad valorem tax rate required to pay the Obligations as well as the City's operations and maintenance expenses. See "TAX INFORMATION - No-New-Revenue Tax Rate and Voter Approval Tax Rate" and "THE OBLIGATIONS – Tax Rate Limitation." Additionally, the City collects a sales and use tax on all taxable transactions within the City's boundaries. A reduction in the collection of sales tax revenues may negatively impact the City's operating budget and overall financial condition. The City did not see a negative impact on property tax revenues in fiscal year 2020 or 2021. The City's certified values increased in each of the fiscal years 2020 or 2021 as compared to the respective prior year. See "TAX INFORMATION – Table 2 – Taxable Assessed Valuation by Category." Also, the City's sales tax revenue increased in each of fiscal years 2020 and 2021 as compared to the respective prior year. See "FINANCIAL INFORMATION – Table 13 – Municipal Sales Tax History."

#### **RECENT EVENTS AFFECTING THE ELECTRIC INDUSTRY IN TEXAS AND THE CITY OF DENTON**

##### *General*

The State experienced unprecedented freezing temperatures that put pressure on the availability of electric power within the State during the period beginning on Saturday, February 13, 2021 through Friday, February 19, 2021 (the "Weather Event"). On February 12, 2021, in anticipation of the winter weather event known as Winter Storm Uri, the Governor declared a state of disaster for all counties in Texas, including Denton County in which the City of Denton is located. On February 14, 2021, the President of the United States made an emergency declaration for the State of Texas, and on February 15, 2021, the Mayor of Denton made a declaration of emergency for the City of Denton. The President subsequently made a major disaster declaration for 126 of the 254 counties in Texas, including Denton County.

Due to the prolonged freezing temperatures, energy demand far exceeded the generation available across the State. Additionally, the cold weather also caused some of the electric producing facilities in the Electric Reliability Council of Texas ("ERCOT") service area, located entirely within Texas, to experience mechanical failures of the equipment needed to provide and distribute the electricity. As the Weather Event covered the State, ERCOT, the independent system operator for all the transmission and generation facilities with the boundaries of ERCOT, implemented mandatory load shed orders to all ERCOT load serving entities. The load shed event was initially expected to be rolling blackouts to conserve electricity and address energy needs across the entirety of the State; however, due to the severity of the Weather Event and the corresponding increase in demand on the State electric grid, combined with limited availability of generation, widespread and prolonged power outages began at 1:00 a.m., Central time, on Monday, February 15, 2021, and continued throughout the week. Ultimately, approximately 4,000,000 Texas residents were without power for significant stretches of the week.

##### *Impact on the City*

The power outages affected many municipally owned and privately-owned utilities in the State, including the City's electric utility system, Denton Municipal Electric ("DME" or the "Electric System"). Due to the high demand for power and the limited availability of the power across the entire ERCOT market, the purchase price for power increased dramatically during the period of the Weather Event. These energy price increases coupled with unexpected fuel supply issues to electric generating plants, resulted in utilities, including DME, needing to access their financial reserves in order to provide required collateral and to make payments to ERCOT for the power purchased necessary to service their customers.

Over the period from February 16 to March 1, 2021, the City paid \$209.8 million in storm-related charges to ERCOT for electric power, and \$28.2 million in fuel and power purchase agreement expenses related to the City's electric generating facilities. The City received from ERCOT payments for electric power generated by the City and other credits of approximately \$97.8 million, for a net expenditure of approximately \$140.2 million during this period. These power purchases are unparalleled for the City, and the net expenditures incurred during the storm far exceeds typical costs for an entire year for the City. As a comparison, in fiscal year 2019, electric power purchase expenses for the City were \$97,075,122, and \$63,764,110 in fiscal year 2020. In addition, the price of natural gas, which is used as fuel for the City's electric generating facilities, increased dramatically during the period of the Weather Event. In fiscal year 2019, natural gas fuel expenses for the City were \$6,954,969 million, and \$3,599,350 million in fiscal year 2020.

As of February 14, 2021, the City's Electric System Fund balance was approximately \$105 million. Prior to the Weather Event, the Electric System Fund was considered fully funded in accordance with the then applicable City fund balance policy, which provided for a minimum fund balance of \$48.5 million to meet unforeseen operational needs. Since the beginning of the Weather Event, the City evaluated all options to make available the cash necessary for power expenses. To meet immediate cash flow needs for electric power purchases, the City utilized cash in the Electric System Fund and issued \$100 million of utility system revenue commercial paper notes ("Utility ECP Notes") on Friday, February 19, 2021, through the City's Utility System Revenue Extendable Commercial Paper Financing Program established by the City on February 2, 2021 (the "Utility ECP Program"). After use of the proceeds of the \$100 million of the Utility ECP Notes to pay a portion of the electric power purchases resulting from the Weather Event and expenditures from the Electric System Fund for electric power and fuel purchases, the Electric System Fund balance was approximately \$63 million. The City also amended the Utility ECP Program on February 23, 2021 to increase the maximum principal amount of Utility ECP Notes that may be outstanding from time to time from \$100 million to \$300 million to provide additional capacity for additional electric power purchases, replenishing reserves used for power purchases and for other authorized purposes under the Utility ECP Program. Utility ECP Notes may be "rolled" by the City from time to time with new Utility ECP Notes issued under the program, or the City may refund the Utility ECP Notes with long-term bonds, allowing the costs to be recovered over multiple years instead of realizing the substantial cost in the short term, if the City determines that would be in its best interests. On May 20, 2021, the City issued an additional \$40 million of Utility ECP Notes to cover expenses incurred as a result of the Weather Event.

The extreme electric power prices during the Weather Event caused numerous retail electric provider market participants located in the ERCOT market to be unable to pay the amounts owed to ERCOT for that power. The City received notice from ERCOT that if ERCOT market participants "short-pay" amounts due for power purchases, then, because of unavailability of adequate funds to fully pay generation market participants, amounts due to generators, including the City, would in turn be short paid their proportionate share of the amounts of the short pays by load serving entities. Effective April 20, 2022, the City is still owed approximately \$6.2 million from ERCOT due to the unresolved short pays during the Winter Event. In the event that ERCOT and the short paying entities are unable to resolve their disputes, all other market participants, including the City, will be required to pay their proportionate share of the amounts owed by the defaulting party or parties through a mechanism in the ERCOT protocols known as "uplift." Because at the time of the short pays and the uncertainty of the number and financial consequences to the City, the City filed a lawsuit against ERCOT on February 25, 2021, in the District Court of Denton County, Texas, asking for temporary and permanent injunctions on payment by the City for short-pay amounts by others. The court granted a temporary restraining order ("TRO") on that date in favor of the City. Subsequently, the parties agreed to transfer venue to Travis County, Texas, and extend the TRO to June 1, 2021. ERCOT filed pleas in April 2021 arguing that the district court does not have jurisdiction over the case, or that if it does, the City should be required to join other parties before further consideration on the merits. A hearing on ERCOT's pleas was held on May 10, 2021. On June 4, 2021, the district court granted ERCOT's plea to jurisdiction, opining that the City did not exhaust its administrative remedies before the Public Utility Commission of Texas ("PUCT") before filing the lawsuit. Based on information provided to the City to date by ERCOT, the City estimates its potential liability under the uplift mechanism, based upon currently known and unresolved short pays and defaults could be up to \$6.2 million, however, the City cannot determine with certainty the scope or magnitude of its potential uplift liability which depends on the outcome of pending bankruptcy litigation and other pending litigation against ERCOT. The City believes that under certain outcomes in pending litigation against ERCOT by parties other than the City, other market participants may also file claims against ERCOT, including the City, which could substantially increase the potential uplift liability to the City. The City cannot predict the likelihood of success of the litigation against ERCOT or future litigation that may result from the pending litigation.

After the Weather Event, the City received several claims and subrogation notices from various insurance companies for property damage as a result of the storm. The City is analyzing its potential exposure in these matters. The City has opted into three lawsuits in the Winter Storm Uri Multi-District Litigation Court pending before the 164<sup>th</sup> Judicial District in Harris County, Texas. On May 17, 2022, in each of these three cases, the City filed a plea to the jurisdiction and moved to dismiss the Plaintiffs' cases with prejudice for lack of subject-matter jurisdiction. The City's exposure under these lawsuits is limited because the Electric Service Standards enacted by DME specifically disclaim all liability for damages arising from service interruptions due to (i) a wholesale power supplier's failure to deliver sufficient energy to DME, (ii) orders by ERCOT, and (iii) failure of the transmission grid of the State. Additionally, the City has not been named in any lawsuits or received any new claims related to the Weather Event in about a year.

The City continues to review the impact that the Weather Event has had on its combined Electric System, waterworks system, wastewater system, and drainage system (together, the "Utility System"), and its financial condition, as well as options to address and manage the financial impact of the Weather Event.

The City issued Utility System revenue bonds to refund the \$140 million of the Utility ECP Notes on a long-term basis on September 21, 2021. In light of the financial risks that were made evident by the Winter Event, the City revised its Electric System fund balance policy on September 3, 2021, and now has a target level of 46% to 69% of annual electric fund expenses. Fiscal year 2020-2021 annual Electric Fund expenses were \$335,524,613. The Electric System fund balance as of April 30, 2022, was \$130,069,410 million which is 39% of FY 21 expenses.

At the direction of the Texas Legislature pursuant to Senate Bill 3 passed during the 87th session, the PUCT has directed ERCOT to evaluate and adopt market protocol changes that are intended to increase the reliability of the ERCOT transmission system and to incentivize new dispatchable generation. Protocol changes that have already been implemented to achieve conservative market operations have changed the price formation in the ERCOT market and will continue to impact both real-time market prices and future energy and ancillary service prices. Additional protocol changes are under consideration by ERCOT at the direction of the PUCT that also have the potential to impact price formation. Phase II market design changes are also being debated by the PUCT and ERCOT with the intent of increasing the reliability of the ERCOT grid and to incentivize construction of new dispatchable generation. These Phase II initiatives will impact the market in several years and the City cannot make predictions concerning its future operating results as the outcome is dependent on circumstances over which the City does not control.

#### **Rating Agency Actions**

On May 28, 2021, Fitch affirmed its "AA+" rating on outstanding GO and CO debt while assigning the same rating of "AA+" to the 2021 Series bonds. The outlook is Stable.

On June 2, 2021, S&P affirmed its "AA+" rating on the outstanding GO debt and assigned the same "AA+" rating to the 2021 Series bonds. The outlook is Stable.

On July 22, 2021, S&P affirmed its "a-1" short-term rating and its "A+" long-term rating on the City's outstanding Utility System Revenue Bonds, removing them from CreditWatch. At the same time, S&P also assigned its "A+" long term rating to the Taxable 2021 Utility System Revenue Bonds. The outlook is Negative.

On August 16, 2021, Fitch downgraded the City's outstanding long-term Utility System Revenue Bonds from "A+" (Rating Watch Negative) to an "A" rating. This rating includes Series 2017 and 2021 bonds. The outlook is Negative for both. Fitch does not provide a rating on the Utility ECP Notes.

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**TABLE 1 - VALUATION, EXEMPTIONS AND GENERAL OBLIGATION DEBT**

2022/23 Market Valuation Established by Denton Central Appraisal District		\$ 19,159,235,108
Less Exemptions/Reductions at 100% Market Value:		
Residence Homestead Exemptions	\$ 103,219,630	
Over 65 Exemptions	430,946,619	
Disabled Persons Exemptions	11,464,443	
Disabled Veterans Exemptions	135,558,399	
Agricultural Land Use Productivity	421,855,576	
Historical/Other Exemptions	4,730,025	
Freeport Exemptions	279,969,998	
Abatement Exemptions	11,277,270	
Pollution Exemptions	25,712,762	
Homestead Cap Adjustment	<u>752,455,648</u>	<u>2,177,190,370</u>
2022/23 Taxable Assessed Valuation (as of 9-12-2022)		\$ 16,982,044,738
2022/23 Incremental Taxable Assessed Value of Real Property within Reinvestment Zones		<u>(260,921,114)</u>
2022/23 Net Taxable Assessed Valuation available for General Obligations and Debt of City (as of 9-12-2022)		<u><u>\$ 16,721,123,624</u></u>
City Funded Debt Payable from Ad Valorem Taxes <sup>(1)</sup>		
General Obligation Bonds (as of 4-1-23)	\$ 297,280,000 <sup>(2)</sup>	
Certificates of Obligation (as of 4-1-23)	558,775,000 <sup>(2)</sup>	
The Bonds	71,845,000 <sup>(3)</sup>	
The Certificates	<u>146,795,000 <sup>(3)</sup></u>	
Funded Debt Payable from Ad Valorem Taxes		\$ 1,074,695,000
Less Self-Supporting General Obligation Debt <sup>(4)</sup>		
Solid Waste System General Obligation Debt	\$ 39,270,000 <sup>(5)</sup>	
Utility System General Obligation Debt	<u>643,580,000 <sup>(5)</sup></u>	<u>682,850,000</u>
Net Tax Supported Debt Payable from Ad Valorem Taxes		<u><u>\$ 391,845,000</u></u>
Interest and Sinking Fund as of 4-1-23 (estimated)		\$ 9,012,739
Ratio Total Funded Debt to Net Taxable Assessed Valuation .....		6.43%
Ratio Net Funded Debt to Net Taxable Assessed Valuation .....		2.34%
2023 Estimated Population - 146,950		
Per Capita Net Taxable Assessed Valuation - \$113,788		
Per Capita Total Funded Debt - \$7,313		

(1) The above statement of indebtedness does not include \$182,160,000 Utility System Revenue Bonds, \$138,360,000 Utility System Revenue Refunding Bonds or \$100,000,000 Utility System Revenue Extendable Commercial Paper Notes, Series A as these bonds and notes are payable solely from the net revenues of the Utility System (the "System"), as defined in the ordinances authorizing such bonds and notes.

(2) Excludes the Refunded Obligations. Preliminary, subject to change.

(3) Preliminary, subject to change.

(4) As a matter of policy, the City pays debt service on its general obligation debt issued to fund improvements to its Utility System and Solid Waste System from surplus revenues of these Systems (see "Table 7 – General Obligation Debt Service Requirements" and "Table 9 – Computation of Self-Supporting Debt"). This policy may be subject to change in the future.

The City's Utility System is comprised of the City's entire existing electric, light and power system and the waterworks and sewer system. Drainage is managed under the waterworks and wastewater system. The City's Utility System General Obligation Debt has been issued to finance or refinance Utility System improvements and contractual obligations and is paid, or is expected to be paid, from Utility System revenues. In addition, the City has \$182,160,000 Utility System Revenue Bonds, \$138,360,000 Utility System Revenue Refunding Bonds outstanding payable from a pledge of Utility System revenues.

The City's Solid Waste System General Obligation Debt has been issued to finance or refinance Solid Waste System improvements and is paid, or is expected to be paid, from Solid Waste System revenues. The City has no outstanding Solid Waste System Revenue Bonds.

(5) Includes a portion of the Obligations. Preliminary, subject to change.

**TABLE 2 - TAXABLE ASSESSED VALUATIONS BY CATEGORY <sup>(1)</sup>**

Category	Taxable Appraised Value for Fiscal Year Ended September 30,					
	2023		2022		2021	
	Amount	% of Total	Amount	% of Total	Amount	% of Total
Real, Residential, Single Family	\$ 10,290,861,945	53.71%	\$ 8,179,274,977	51.07%	\$ 7,448,956,811	49.84%
Real, Residential, Multi-Family	2,581,359,659	13.47%	2,192,401,019	13.69%	2,079,085,736	13.91%
Real, Vacant Lots/Tracts	423,344,124	2.21%	314,300,099	1.96%	281,625,453	1.88%
Real, Acreage (Land Only)	429,021,486	2.24%	361,523,875	2.26%	365,649,752	2.45%
Real, Farm and Ranch Improvements	182,206,679	0.95%	157,873,244	0.99%	119,135,103	0.80%
Real, Commercial and Industrial	3,299,538,286	17.22%	3,032,461,538	18.93%	2,965,114,413	19.84%
Real, Oil, Gas, and Other Mineral Reserves	87,640,017	0.46%	48,516,939	0.30%	32,916,830	0.22%
Real and Tangible Personal, Utilities	152,340,178	0.80%	142,991,907	0.89%	133,632,949	0.89%
Tangible Personal, Commercial and Industrial	1,507,941,787	7.87%	1,425,520,232	8.90%	1,393,035,792	9.32%
Tangible Personal, Other	23,831,628	0.12%	23,969,949	0.15%	24,210,105	0.16%
Real and Special Property, Inventory	181,149,319	0.95%	137,388,170	0.86%	101,288,806	0.68%
Total Appraised Value Before Exemptions	\$ 19,159,235,108	100.00%	\$ 16,016,221,949	100.00%	\$ 14,944,651,750	100.00%
Less: Total Exemptions/Reductions	(2,177,190,370)		(1,376,450,603)		(1,377,732,859)	
Less: Tax Increment Value	(260,921,114)		(236,666,283)		14,729,380	
Net Taxable Assessed Value	<u>\$ 16,721,123,624</u>		<u>\$ 14,403,105,063</u>		<u>\$ 13,581,648,271</u>	

Category	Taxable Appraised Value for Fiscal Year Ended September 30,			
	2020		2019	
	Amount	% of Total	Amount	% of Total
Real, Residential, Single Family	\$ 7,010,158,815	49.41%	\$ 6,381,144,639	39.84%
Real, Residential, Multi-Family	1,778,847,172	12.54%	1,572,513,883	9.82%
Real, Vacant Lots/Tracts	263,786,761	1.86%	226,805,770	1.42%
Real, Acreage (Land Only)	374,863,507	2.64%	372,583,109	2.33%
Real, Farm and Ranch Improvements	123,803,396	0.87%	122,273,681	0.76%
Real, Commercial and Industrial	2,780,957,817	19.60%	2,518,745,519	15.73%
Real, Oil, Gas, and Other Mineral Reserves	70,254,568	0.50%	74,198,617	0.46%
Real and Tangible Personal, Utilities	124,940,388	0.88%	106,362,242	0.66%
Tangible Personal, Commercial and Industrial	1,519,412,977	10.71%	1,117,006,842	6.97%
Tangible Personal, Other	24,514,962	0.17%	24,430,946	0.15%
Real Property, Inventory	115,151,665	0.81%	131,986,240	0.82%
Total Appraised Value Before Exemptions	\$ 14,186,692,028	100.00%	\$ 12,648,051,488	78.97%
Less: Total Exemptions/Reductions	(1,397,304,969)		(1,220,483,575)	
Less: Tax Increment Value	(168,826,531)		(110,633,617)	
Net Taxable Assessed Value	<u>\$ 12,620,560,528</u>		<u>\$ 11,316,934,296</u>	

(1) Valuations shown are certified taxable assessed values reported by the Denton Central Appraisal District to the State Comptroller of Public Accounts. Certified values are subject to change throughout the year as contested values are resolved and the Appraisal District updates records. For the Fiscal Year ended 2023, the values were reported on September 12, 2022 based on information as of January 1, 2022.

**TABLE 3 - VALUATION AND GENERAL OBLIGATION DEBT HISTORY**

Fiscal Year Ended	Estimated Population <sup>(1)</sup>	Net Taxable Assessed Valuation <sup>(2)</sup>	Net Taxable Assessed Valuation Per Capita	Net Tax Debt Outstanding at End of Year <sup>(8)</sup>	Ratio Net Tax Debt to Net Taxable Assessed Valuation	Net Funded Tax Debt Per Capita
9/30						
2019	136,927	\$ 11,316,934,296 <sup>(3)</sup>	\$ 82,649	\$ 191,662,956	1.69%	\$ 1,400
2020	140,956	12,620,560,528 <sup>(4)</sup>	89,535	249,482,532	1.98%	1,770
2021	143,775	13,581,648,271 <sup>(5)</sup>	94,465	308,521,854	2.27%	2,146
2022	146,950	14,403,105,063 <sup>(6)</sup>	98,014	354,343,240	2.46%	2,411
2023	150,624	16,721,123,624 <sup>(7)</sup>	111,012	391,845,000 <sup>(9)</sup>	2.34%	2,601

(1) Source: City Officials.

(2) Valuations shown are certified taxable assessed values reported by the Denton Central Appraisal District to the State Comptroller of Public Accounts. Certified values are subject to change throughout the year as contested values are resolved and the Appraisal District updates records. Source: Denton Central Appraisal District as of September 12, 2022.

(3) Excludes tax incremental value of approximately \$110,633,617 that is not available for the City's general obligations and debt of City.

(4) Excludes tax incremental value of approximately \$168,826,531 that is not available for the City's general obligations and debt of City.

(5) Excludes tax incremental value of approximately \$198,541,948 that is not available for the City's general obligations and debt of City.

(6) Excludes tax incremental value of approximately \$236,666,283 that is not available for the City's general obligations and debt of City.

(7) Excludes tax incremental value of approximately \$260,921,114 that is not available for the City's general obligations and debt of City.

(8) Excludes self-supported general obligation debt.

(9) Projected. Includes a portion of the Obligations. Excludes the Refunded Obligations. Preliminary, subject to change.

**TABLE 4 - TAX RATE, LEVY AND COLLECTION HISTORY**

Fiscal Year Ended	Tax Rate	Distribution		Tax Levy <sup>(1)</sup>	% Current Collections	% Total Collections
9/30		General Fund	Interest and Sinking Fund			
2019	\$ 0.62048	\$ 0.40543	\$ 0.21505	\$ 70,786,144	99.35%	99.82%
2020	0.59045	0.38536	0.20509	75,040,101	99.78%	99.80%
2021	0.59045	0.38036	0.21009	77,955,806	99.72%	99.74%
2022	0.56582	0.35044	0.21538	79,440,823	99.60%	99.60%
2023	0.56068	0.35643	0.20425	92,092,863	98.12% <sup>(2)</sup>	98.12% <sup>(2)</sup>

(1) Tax levy for the year 2023 is based on the adjusted certified value. Prior years represent adjusted values that include all supplements through September 12, 2022. Includes tax incremental reinvestment zone revenues.

(2) Collections through April 1, 2023 (partial year).

**TABLE 5 - TEN LARGEST TAXPAYERS <sup>(1)</sup>**

Name of Taxpayer	Nature of Property	2022/23 Taxable Assessed Valuation	% of Total Taxable Assessed Valuation
Southwire Company, LLC	Manufacturing	\$110,244,449	0.65%
Columbia Medical Center of Denton	Hospital/Professional Building	86,992,602	0.51%
Paccar Inc.	Diesel Truck Manufacturing	80,971,836	0.48%
TRDWind Timberlinks Borrower LLC	Apartments	65,030,537	0.38%
NREA Gardens, DST	Retail	64,800,000	0.38%
Razor Ranch Marketplace Associates LLC	Retail	64,765,228	0.38%
Winco Foods LLC	Food Distribution	63,500,000	0.37%
RR Town Center Associates LLC	Retail	61,901,818	0.36%
Village at Razor Ranch LLC	Apartments	60,212,732	0.35%
Westdale Carriage Square Ltd	Apartments	59,705,000	0.35%
		<u>\$ 718,124,202</u>	<u>4.23%</u>

(1) Source: Denton Central Appraisal District.

**GENERAL OBLIGATION DEBT LIMITATION . . .** No general obligation debt limitation is imposed on the City under current State law or the City's Home Rule Charter (see "The Obligations – Tax Rate Limitation" for a description of the limitations on ad valorem tax rates).

**TABLE 6 - ESTIMATED OVERLAPPING TAX DEBT**

Expenditures of the various taxing entities within the territory of the City are paid out of ad valorem taxes levied by such entities on properties within the City. Such entities are independent of the City and may incur borrowings to finance their expenditures. This statement of direct and estimated overlapping ad valorem tax debt ("Tax Debt") was developed from information contained in "Texas Municipal Reports" published by the Municipal Advisory Council of Texas. Except for the amounts relating to the City, the City has not independently verified the accuracy or completeness of such information, and no person should rely upon such information as being accurate or complete. Furthermore, certain entities listed may have issued additional Tax Debt since the date hereof, and such entities may have programs requiring the issuance of substantial amounts of additional Tax Debt, the amount of which cannot be determined. The following table reflects the estimated share of overlapping Tax Debt of the City.

Taxing Jurisdiction	2022/23 Taxable Assessed Value	2022/23 Tax Rate	Total Funded Debt	Estimated % Applicable	City's Overlapping Funded Debt As of 4-1-23	Authorized But Unissued Debt As Of 4-1-23
City of Denton	\$ 16,721,123,624 <sup>(1)</sup>	\$ 0.56582	\$ 391,845,000 <sup>(2)</sup>	100.00%	\$ 391,845,000 <sup>(2)</sup>	\$ 54,500,000 <sup>(3)</sup>
Denton Independent School District	24,853,496,991		1,237,690,283	58.75%	727,143,041	-
Denton County	149,854,372,945		559,930,000	11.89%	66,575,677	659,690,625
Argyle Independent School District	4,020,293,871		324,967,774	7.03%	22,845,235	150,500,000
Aubrey Independent School District	2,012,008,073		283,193,983	0.12%	339,833	187,330,000
Krum Independent School District	1,496,797,598		50,940,189	6.65%	3,387,523	224,700,000
Lake Dallas Independent School District	2,933,068,988		176,388,624	0.01%	17,639	-
Pilot Point Independent School District	1,117,832,936		46,340,000	0.25%	115,850	-
Ponder Independent School District	968,459,432		71,135,000	3.77%	2,681,790	-
Sanger Independent School District	1,884,201,976		142,197,917	0.45%	639,891	-
Total Direct and Overlapping Funded Debt					<u>\$ 1,215,591,477</u>	
Ratio of Direct and Overlapping Funded Debt to Taxable Assessed Valuation.....					7.27%	
Per Capita Overlapping Funded Debt.....					\$ 5,738.76	

- (1) Excludes tax incremental value of approximately \$260,921,114 that is not available for the City's general obligations and debt of City.
- (2) Includes a portion of the Obligations. Excludes self-supporting. See Tables 1 and 9 herein for more detailed information on the City's general obligation self-supporting debt. Preliminary, subject to change.
- (3) Reflects remaining authorization after the issuance of the Bonds. Preliminary, subject to change.

TABLE 7 – PRO FORMA GENERAL OBLIGATION DEBT SERVICE REQUIREMENTS

Fiscal Year Ended	Outstanding Debt Service <sup>(1)</sup>			The Bonds <sup>(2)</sup>		The Certificates <sup>(3)</sup>		Total Outstanding Debt	Less: Self- Supporting Solid Waste Debt Service <sup>(4)</sup>	Less: Self- Supporting Utility Debt Service <sup>(4)</sup>	Total Debt Service Requirements
9/30	Principal	Interest	Total	Principal	Interest	Principal	Interest				
2023	\$ 59,375,000	\$ 36,411,934	\$ 95,786,934	\$ -	\$ -	\$ -	\$ -	\$ 95,786,934	\$ 3,853,331	\$ 55,653,741	\$ 36,279,862
2024	54,885,000	32,538,663	87,423,663	3,635,000	3,598,269	4,285,000	6,970,226	105,912,158	4,783,493	60,357,580	40,771,084
2025	50,520,000	30,167,800	80,687,800	6,085,000	3,170,325	4,875,000	6,386,425	101,204,550	4,646,538	57,771,513	38,786,500
2026	44,750,000	28,042,163	72,792,163	5,685,000	2,876,075	5,120,000	6,136,550	92,609,788	4,422,288	49,861,638	38,325,862
2027	44,620,000	26,029,888	70,649,888	5,955,000	2,585,075	5,375,000	5,874,175	90,439,138	4,042,788	49,723,838	36,672,512
2028	44,090,000	23,971,750	68,061,750	4,150,000	2,332,450	5,655,000	5,598,425	85,797,625	3,532,269	48,550,306	33,715,050
2029	43,015,000	21,945,684	64,960,684	4,390,000	2,118,950	4,535,000	5,343,675	81,348,309	3,224,763	47,421,325	30,702,222
2030	44,950,000	19,936,475	64,886,475	4,650,000	1,892,950	4,765,000	5,111,175	81,305,600	3,229,100	47,627,813	30,448,687
2031	41,045,000	18,072,091	59,117,091	4,915,000	1,653,825	5,020,000	4,866,550	75,572,466	3,031,056	42,530,275	30,011,134
2032	38,490,000	16,474,819	54,964,819	7,760,000	1,336,950	5,265,000	4,609,425	73,936,194	2,814,438	41,590,900	29,530,856
2033	39,745,000	14,956,928	54,701,928	5,285,000	1,010,825	5,545,000	4,339,175	70,881,928	2,777,738	39,253,300	28,850,891
2034	41,260,000	13,441,022	54,701,022	1,545,000	840,075	5,080,000	4,073,550	66,239,647	2,659,956	36,376,669	27,203,022
2035	40,505,000	12,012,391	52,517,391	1,620,000	760,950	5,335,000	3,813,175	64,046,516	2,316,925	35,304,000	26,425,591
2036	39,160,000	10,651,659	49,811,659	1,705,000	677,825	5,610,000	3,539,550	61,344,034	2,066,775	34,657,413	24,619,847
2037	38,010,000	9,318,641	47,328,641	1,795,000	590,325	5,890,000	3,252,050	58,856,016	1,600,300	33,955,475	23,300,241
2038	37,580,000	8,002,941	45,582,941	1,885,000	498,325	6,195,000	2,949,925	57,111,191	1,529,125	34,000,709	21,581,356
2039	35,320,000	6,758,347	42,078,347	1,980,000	401,700	6,525,000	2,631,925	53,616,972	1,531,250	34,020,397	18,065,325
2040	34,140,000	5,622,203	39,762,203	2,070,000	310,800	6,825,000	2,332,300	51,300,303	1,532,000	33,204,694	16,563,609
2041	31,650,000	4,540,963	36,190,963	2,155,000	226,300	7,100,000	2,053,800	47,726,063	1,531,900	32,633,094	13,561,069
2042	25,530,000	3,506,422	29,036,422	2,245,000	138,300	7,385,000	1,764,100	40,568,822	1,534,500	30,389,422	8,644,900
2043	16,455,000	2,695,300	19,150,300	2,335,000	46,700	7,690,000	1,462,600	30,684,600	1,025,100	25,747,800	3,911,700
2044	17,065,000	2,079,316	19,144,316	-	-	2,715,000	1,254,500	23,113,816	-	23,113,816	-
2045	14,255,000	1,525,903	15,780,903	-	-	2,825,000	1,143,700	19,749,603	-	19,749,603	-
2046	10,810,000	1,098,497	11,908,497	-	-	2,940,000	1,028,400	15,876,897	-	15,876,897	-
2047	8,130,000	781,097	8,911,097	-	-	3,060,000	908,400	12,879,497	-	12,879,497	-
2048	4,800,000	571,084	5,371,084	-	-	3,185,000	783,500	9,339,584	-	9,339,584	-
2049	4,945,000	424,781	5,369,781	-	-	3,315,000	653,500	9,338,281	-	9,338,281	-
2050	4,710,000	278,369	4,988,369	-	-	3,450,000	518,200	8,956,569	-	8,956,569	-
2051	3,685,000	144,531	3,829,531	-	-	3,595,000	377,300	7,801,831	-	7,801,831	-
2052	1,935,000	41,119	1,976,119	-	-	3,740,000	230,600	5,946,719	-	5,946,719	-
2053	-	-	-	-	-	3,895,000	77,900	3,972,900	-	3,972,900	-
	<u>\$915,430,000</u>	<u>\$352,042,778</u>	<u>\$1,267,472,778</u>	<u>\$71,845,000</u>	<u>\$27,066,994</u>	<u>\$146,795,000</u>	<u>\$ 90,084,776</u>	<u>\$1,603,264,547</u>	<u>\$57,685,630</u>	<u>\$ 987,607,597</u>	<u>\$ 557,971,321</u>

- (1) "Outstanding Debt" does not include lease/purchase obligations, however, it does include self-supporting debt. Preliminary, subject to change.  
(2) Average life of the issue - 7.979 years. Interest on the Bonds has been calculated at the rate of 3.04% for purposes of illustration. Preliminary, subject to change.  
(3) Average life of the issue - 14.120 years. Interest on the Certificates has been calculated at the rate of 3.65% for purposes of illustration. Preliminary, subject to change.  
(4) Includes a portion of the Obligations. Excludes the Refunded Obligations Preliminary, subject to change.

**TABLE 8 - INTEREST AND SINKING FUND BUDGET PROJECTION <sup>(1)</sup>**

Budgeted Tax Supported Debt Service Requirements and Fiscal Charges, Fiscal Year Ending 9/30/2023 . . . . .	\$ 93,815,225	
Interest and Sinking Fund Balance as of 9/30/22 . . . . .	\$ 2,411,532	
Interest and Sinking Fund Tax Levy . . . . .	32,605,476	
From Revenue Supported Sources . . . . .	61,829,824	
Interest Income . . . . .	100,000	96,946,832
Estimated Balance, 9/30/23 . . . . .		<u>\$ 3,131,607</u>

(1) Source: City's Annual Budget for Fiscal Year 2022/23.

**TABLE 9 - COMPUTATION OF SELF-SUPPORTING DEBT**

Net Revenue from Solid Waste System, Fiscal Year Ended 9-30-22 . . . . .	\$ 17,315,395 <sup>(1)</sup>
Less: Solid Waste System Revenue Bond Requirements, 2023 Fiscal Year . . . . .	-
Balance Available for Other Purposes . . . . .	\$ 17,315,395
Solid Waste System General Obligation Bond Requirements, 2023 Fiscal Year . . . . .	(3,853,331)
Balance . . . . .	<u>\$ 13,462,064</u>
Net Revenue from Utility System, Fiscal Year Ended 9-30-22 . . . . .	\$ 156,926,668 <sup>(1)</sup>
Less: Utility System Revenue Bond Requirements, 2023 Fiscal Year . . . . .	(25,295,259)
Balance Available for Other Purposes . . . . .	\$ 131,631,409
Utility System General Obligation Bond Requirements, 2023 Fiscal Year . . . . .	(55,653,741)
Balance . . . . .	<u>\$ 75,977,668</u>

(1) Does not deduct franchise fees and/or return on investment paid to the General Fund.

**TABLE 10 - AUTHORIZED BUT UNISSUED GENERAL OBLIGATION REFUNDING AND IMPROVEMENT BONDS**

Purpose	Authorized	Authorized	Issued	Issued <sup>(1)</sup>	Balance
Street & Drainage	11/5/2019	\$ 154,000,000	\$ 65,145,000	\$ 34,355,000	\$ 54,500,000
Police Public Safety Facilities	11/5/2019	61,900,000	61,900,000	-	-
Parks	11/5/2019	5,000,000	5,000,000	-	-
		<u>\$ 220,900,000</u>	<u>\$ 132,045,000</u>	<u>\$ 34,355,000</u>	<u>\$ 54,500,000</u>

(1) Includes premium on the Bonds. Preliminary, subject to change.

**ANTICIPATED ISSUANCE OF ADDITIONAL GENERAL OBLIGATION DEBT . . .** As shown in Table 10 above, after the issuance of the Bonds, the City will have \$54,500,000 voted but unissued debt remaining from the November 5, 2019 authorization. In June of 2020, the City established a commercial paper note program which allows for the issuance, at one time, or from time to time, of up to \$100,000,000 aggregate principal amount of commercial paper notes (the "CP Notes") in order to finance public improvements authorized in the November 5, 2019 bond election. The CP Notes are secured by ad valorem taxes and proceeds from "rolls" of CP Notes and from bonds issued under the November 5, 2019 authorization. As of April 1, 2023, no CP Notes are outstanding. The City may also issue tax-supported debt other than voter approved general obligation bonds to fund public improvements, such as certificates of obligation or tax anticipation notes, without submitting a measure to the voters, but in certain instances, subject to voter petition rights for a referendum. Further, the City may issue tax-supported debt other than voter approved general obligation bonds to refund bonds or other obligations not currently payable from or supported by ad valorem taxes, such as the City's Utility System revenue bonds. **The City anticipates the issuance of approximately \$ \_\_\_ million in tax supported debt in fiscal year 2024.**

## TABLE 11 - OTHER OBLIGATIONS

As of September 30, 2022, the City does not have any other obligations outstanding.

**PENSION FUND . . .** The City of Denton participates as one of 901 plans in the defined benefit cash-balance plan administered by the Texas Municipal Retirement System (TMRS). TMRS is statewide public retirement plan created by the State of Texas and administered in accordance with the TMRS Act, Subtitle G, Title 8, Texas Government Code (the TMRS Act) as an agent multiple-employer retirement system for employees of Texas participating cities. The TMRS Act places the general administration and management of the System with a six-member, Governor-appointed board of trustees; however, TMRS is not fiscally dependent on the State of Texas. TMRS issues a publicly-available annual comprehensive financial report obtainable at [www.tmrs.com](http://www.tmrs.com).

All eligible employees of the city are required to participate in TMRS.

*Benefits Provided . . .* TMRS provides retirement, disability, and death benefits. Benefit provisions are adopted by the governing body of the City, within the options available in the state statutes governing TMRS.

At retirement, the employee's benefit is calculated based on the sum of the employee's contributions with interest, and the city-financed monetary credits with interest. Employees may choose to receive their retirement benefit in one of seven payments options. Employees may also choose to receive a portion of their benefit as a Partial Lump Sum Distribution in an amount equal to 12, 24, or 36 monthly payments, which cannot exceed 75% of the employee's deposits and interest.

Upon retirement, the employee's retirement benefits are calculated based on the sum of the employee's contributions, with interest, and the City-financed monetary credits, with interest. City-financed monetary credits are composed of three sources: prior service credits, current service credits, and updated service credits.

- Prior service credit, granted by each city joining TMRS, is a monetary credit equal to the accumulated value of the percentage of prior service credit selected by the City, multiplied by an employee's contributions that would have been made, based on the average salary prior to TMRS participation, for the number of months the employee was employed by the City before joining TMRS, accruing 3% annual interest and including the matching ratio adopted by the City.
- Current Service Credit is a monetary credit for service performed by an employee after the City joined TMRS and is based on a percent (200%) of the employee's total contributions and interest credits (commonly referred to as the City's matching ratio). Each participating city designates the rate the employee contributions (7% for the City) and interest is credited on contribution balances annually at a guaranteed minimum 5% rate. Any change in the matching ratio would be applied prospectively.
- Updated Service Credits (USC) is an optional monetary credit granted on an annually repeated basis by the City, and it may increase an employee's monthly retirement benefit. In calculating USC, TMRS looks at the changes in the employee's salary over their career and any changes the City has made to its TMRS plan, such as the employee contribution rate or the City's matching ratio. Although USC may increase the employee's retirement benefit, USC does not affect the amount of contributions in an employee's account or the amount an employee will receive if they refund.

The plan provisions also include an annually repeating basis cost of living adjustments for retirees equal to 70% of the change in the consumer price index. If an employee terminates employment and refunds their account, the employee will receive their total contributions, plus credited interest. The employee will not receive any of the city-financed monetary credits. An employee can retire at ages 60 and above with 5 or more years of service or with 20 years of service regardless of age. A member is vested after five years.

*Employees covered by benefit terms . . .* At the December 31, 2021 valuation and measurement date, the following employees were covered by the benefit terms:

Inactive Employees or Beneficiaries Currently Receiving Benefits	839
Inactive Employees Entitled to But Not Yet Receiving Benefits	745
Active Employees	<u>1,323</u>
	2,907

*Contributions . . .* The contribution rates for employees in TMRS are either 5%, 6%, or 7% of employee gross earnings, and the city matching percentages are either 100%, 150%, or 200%, both as adopted by the City Council. Under the state law governing TMRS, the contribution rate for each city is determined annually by the actuary, using the Entry Age Normal (EAN) actuarial cost method. The City's contribution rate is based on the liabilities created from the benefit plan options selected by the City and any changes in benefits or actual experience over time.

Employees for the City were required to contribute 7% of their annual gross earnings during the fiscal year. The contribution rates for the City were 17.61% and 17.47% in calendar years 2021 and 2022, respectively.

The City's contributions to TMRS for the year ended September 30, 2022 were \$18,471,103 and were equal to the required contributions.

*Net Pension Liability* . . . The City's Net Pension Liability ("NPL") was measured as of December 31, 2021, and the Total Pension Liability ("TPL") used to calculate the NPL was determined by an actuarial valuation as of that date.

*Actuarial Assumptions* . . . The TPL in the December 31, 2020 actuarial valuation was determined using the following actuarial assumptions:

Inflation	2.50% per year
Overall payroll growth	2.75% per year
Investment Rate of Return	6.75%, net of pension plan investment expense, including inflation

Salary increases were based on a service-related table. Mortality rates for active members are based on the PUB(10) mortality tables with the Public Safety table used for males and the General Employee table used for females. Mortality rates for healthy retirees and beneficiaries are based on the gender-distinct 2019 Municipal Retirees of Texas mortality tables. The rates for actives, healthy retirees and beneficiaries are projected on a fully generational basis by Scale UMP to account for future mortality improvements. For disabled annuitants, the same mortality tables for healthy retirees are used with a 4-year set-forward for males and a 3-year set-forward for females. In addition, a 3.5% and 3.0% minimum mortality rate is applied, for males and females respectively, to reflect the impairment for younger members who become disabled. The rates are projected on a fully generational basis by Scale UMP to account for future mortality improvements subject to the floor.

The actuarial assumptions were developed primarily from the actuarial investigation of the experience of TMRS over the four-year period from December 31, 2014 to December 31, 2018. They were adopted in 2019 and first used in the December 31, 2019 actuarial valuation. The post-retirement mortality assumption for healthy annuitants and Annuity Purchase Rate (APRs) are based on the Mortality Experience Investigation Study covering 2009 through 2011 and dated December 31, 2013. Plan assets are managed on a total return basis with an emphasis on both capital appreciation as well as the production of income in order to satisfy the short-term and long-term funding needs of TMRS.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of real rates of return for each major asset class in fiscal year 2022 are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return (Arithmetic)
Global Equity	30.0%	5.30%
Core Fixed Income	10.0%	1.25%
None-Core Fixed Income	20.0%	4.14%
Real Return	10.0%	3.85%
Real Estate	10.0%	4.00%
Absolute Return	10.0%	3.48%
Private Equity	10.0%	7.75%
Total	100.0%	

*Discount Rate* . . . The discount rate used to measure the Total Pension Liability was 6.75%. The projection of cash flows used to determine the discount rate assumed that employee and employer contributions will be made at the rates specified in statute. Based on that assumption, the pension plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.



## Changes in the Net Pension Liability

	Increase (Decrease)		
	Total	Plan	Net
	Pension Liability (a)	Fiduciary Net Position (b)	Pension Liability (a) - (b)
Balance at 12/31/2020	\$ 560,470,110	\$ 494,893,606	\$ 65,576,504
Changes for the year:			
Service cost	17,667,234	-	17,667,234
Interest	37,617,145	-	37,617,145
Difference between expected and actual experience	8,560,080	-	8,560,080
Changes of assumptions	-	-	-
Contributions - employer	-	17,849,684	(17,849,684)
Contributions - employee	-	7,095,275	(7,095,275)
Net investment income	-	64,564,009	(64,564,009)
Benefit payments, including refunds of employee contributions	(24,025,384)	(24,025,384)	-
Administrative expense	-	(298,515)	298,515
Other changes	-	2,043	(2,043)
Net changes	39,819,075	65,187,112	(25,368,037)
Balance at 12/31/2021	\$ 600,289,185	\$ 560,080,718	\$ 40,208,467

*Sensitivity of the Net Pension Liability to changes in the Discount Rate* . . . The following presents the net pension liability of the City, calculated using the discount rate of 6.75%, as well as what the City's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (5.75%) or 1-percentage-point higher (7.75%) than the current rate:

	1% Decrease in Discount Rate (5.75%)	Current Discount Rate (6.75%)	1% Increase in Discount Rate (7.75%)
City's Net Pension Liability	\$128,986,586	\$ 40,208,467	\$(32,147,421)

*Pension Plan Fiduciary Net Position* . . . Detailed information about the pension plan's Fiduciary Net Position is available in a separately-issued TMRS financial report. That report may be obtained on the Internet at [www.tmrs.com](http://www.tmrs.com).

*Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions* . . . For the year ended September 30, 2022, the City recognized pension expense of \$7,836,233. This amount is included as part of personal services expenses.

At September 30, 2022, the City reported deferred outflows of resources and deferred inflows of resources related to TMRS pension from the following sources:

	Deferred Outflow of Resources	Deferred Inflows of Resources
Differences between projected and actual investment earnings	\$ -	\$ (33,191,633)
Contributions subsequent to the measurement date	13,454,404	-
Differences between expected and actual economic experience	9,068,338	-
Difference in assumption changes	498,406	-
Total	\$ 23,021,148	\$ (33,191,633)

\$13,454,404 reported as deferred outflows of resources related to pensions resulting from contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability for the City's fiscal year ending September 30, 2023. Other amounts reported as deferred outflows and inflows of resources related to pensions will be recognized in pension expense as follows:

For the Year Ended September 30,	
2023	\$ (2,581,969)
2024	(11,021,823)
2025	(4,740,479)
2026	(5,280,618)
2027	-
Total	<u>\$ (23,624,889)</u>

#### **FIREMEN'S RELIEF AND RETIREMENT FUND**

*Plan Description* . . . The City contributes to the retirement plan for firefighters in the Denton Fire Department known as the Denton Firemen's Relief and Retirement Fund (the Fund). The Fund is a single employer, contributory, defined benefit plan. The benefit provisions of the Fund are authorized by the Texas Local Fire Fighters' Retirement Act (TLFFRA). TLFFRA provides the authority and procedure to amend benefit provisions. The plan is administered by the Board of Trustees of the Denton Firemen's Relief and Retirement Fund. The City does not have access to nor can it utilize assets within the retirement plan trust. The Fund issues a stand-alone report pursuant to GASB Statement No. 67, which may be obtained by writing the Denton Firemen's Relief and Retirement Fund at P.O. Box 2375, Denton, Texas 76202. See that report for all information about the plan fiduciary net position.

*Benefits Provided* . . . Firefighters in the Denton Fire Department are covered by the Denton Firemen's Relief and Retirement Fund

which provides service retirement, death, disability, and withdrawal benefits. These benefits fully vest after 20 years of credited service. Firefighters may retire at age 50 with 20 years of service. A partially-vested benefit is provided for firefighters who terminate employment with at least 10 but less than 20 years of service. If a terminated firefighter has a partially vested benefit, the firefighter may retire starting on the date they would have both completed 20 years of service if they had remained a Denton firefighter and attained age 50. The present plan provides a monthly normal service retirement benefit, payable in a Joint and Two- Thirds to Spouse form of annuity, equal to 2.59% of Highest 36-Month Average Salary for each year of service.

A retiring firefighter who is at least age 52 with at least 22 years of service has the option to elect the Retroactive Deferred Retirement Option Plan (RETRO DROP) which will provide a lump sum benefit and a reduced monthly benefit. The reduced monthly benefit is based on the service and Highest 36-Month Average Salary as if the firefighter had terminated employment on their selected RETRO DROP benefit calculation date, which is no earlier than the later of the date the firefighter meets the age 52 and 22 years of service requirements and the date four years prior to the date the firefighter actually retires. Upon retirement, the employee will receive, in addition to the monthly retirement benefit, a lump sum equal to the sum of (1) the amount of monthly contributions the member has made to the Fund after the RETRO DROP benefit calculation date plus (2) the total of the monthly retirement benefits the member would have received between the RETRO DROP benefit calculation date and the date retired under the plan. There are no account balances. The lump sum is calculated at the time of retirement and distributed as soon as administratively possible.

There is no provision for automatic postretirement benefit increases. The Fund has the authority to provide, and has periodically in the past provided, ad hoc postretirement benefit increases. The December 31, 2021 actuarial valuation reflects tiered ad hoc postretirement benefit increases effective July 1, 2022 of 4% for those retired 15 or more years, 3% for those retired for 10 to 15 years, and 2% for those retired five to ten years.

*Employees Covered by Benefit Terms* . . . In the December 31, 2021 actuarial valuation, the following numbers of members were covered by the Fund:

Inactive Employees or Beneficiaries Currently Receiving Benefits	92
Inactive Employees Entitled to But Not Yet Receiving Benefits	7
Active Employees	<u>211</u>
	310

*Contributions* . . . The contribution provisions of the Fund are authorized by TLFFRA. TLFFRA provides the authority and procedure to change the amount of contributions determined as a percentage of pay by each firefighter and a percentage of payroll by the City.

The contribution policy of the Denton Firemen's Relief and Retirement Fund requires contributions equal to 12.6% of pay by the firefighters, the rate elected by the firefighters according to TLFFRA. The City began contributing in December 2017 according to a new City funding policy. The ordinance defining it includes an actuarially determined contribution rate over a closed 25-year amortization period, a contribution rate of 18.5% for several years, a minimum rate standard, and City review and approval of each actuarial valuation. The December 31, 2021 actuarial valuation includes the assumption the City contribution rate will be 18.5% over the unfunded liability amortization period. The costs of administering the plan are paid from the Fund assets. The City's contributions to the Fund for the year ended September 30, 2022 were \$4,440,025.

Ultimately, the funding policy also depends upon the total return of the Fund's assets, which varies from year to year. Investment policy decisions are established and maintained by the board of trustees. For the calendar year ending December 31, 2021, the money-weighted rate of return on pension plan investments was 17.93%. This measurement of the investment performance is net of investment-related expenses, reflecting the effect of the timing of the contributions received and the benefits paid during the year.

While the contribution requirements are not actuarially determined, state law requires that each change in plan benefits adopted by the Fund must first be approved by an eligible actuary, certifying the contribution commitment by the firefighters and the assumed city contribution rate together provide an adequate contribution arrangement. Using the entry age actuarial cost method, the plan's normal cost contribution rate is determined as a percentage of payroll. The excess of the total contribution rate over the normal cost contribution rate is used to amortize the plan's unfunded actuarial accrued liability (UAAL). The number of years needed to amortize the plan's UAAL is actuarially determined using an open, level percentage of payroll method.

*Net Pension Liability* . . . The City of Denton's net pension liability was measured as of December 31, 2021, and the total pension liability used to calculate the net pension liability was determined based on the actuarial valuation as of December 31, 2021..

Total Pension Liability	\$ 142,439,646
Plan fiduciary net position	<u>140,537,577</u>
City's net pension liability	1,902,069
Plan fiduciary net position as a percentage of the total pension liability	98.7%

*Actuarial Assumptions* . . . The total pension liability in the December 31, 2021 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.50% per year
Overall payroll growth	3.00% per year, plus promotion, step and longevity increases that vary by service
Investment Rate of Return	6.75%, net of pension plan investment expense, including inflation

Mortality rates were based on the PubS-2010 (public safety) total dataset mortality tables employees and for retirees (sex distinct), projected for mortality improvement generationally using the projection scale MP-2019.

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The long-term expected rate of return on pension plan investments is reviewed for each biennial actuarial valuation and was determined using a building-block method in which expected future net real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These components are combined to produce the long-term expected rate of return by weighting the expected future net real rates of return by the target asset allocation percentage (currently resulting in 4.96%) and by adding expected inflation (2.5%). In addition, the final 6.75% assumption was selected by “rounding down” and thereby reflects a reduction of 0.71% for adverse deviation. The target allocation and expected arithmetic net real rates of return for each major asset class are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return (Arithmetic)
Equities		
Large Cap Domestic	40.0%	6.00%
Small/Mid Cap Domestic	10.0%	6.50%
International Developed	10.0%	6.50%
Alternatives		
Master Limited Partnerships	8.0%	6.50%
Real Estate	15.0%	4.50%
Fixed Income	10.0%	1.00%
Cash	2.0%	0.00%
Total	95.0%	
Weighted Average		4.96%

*Discount Rate* . . . The discount rate used to measure the total pension liability was 6.75%. No projection of cash flows was used to determine the discount rate because the December 31, 2021 actuarial valuation showed expected contributions would pay the normal cost and amortize the unfunded actuarial accrued liability (UAAL) in nine years. Because of the nine-year amortization period of the UAAL, the pension plan’s fiduciary net position is expected to be available to make all projected future benefit payments of current active and inactive members. Therefore, the long-term expected rate of return on pension plan investments of 6.75% was applied to all periods of projected benefit payments as the discount rate to determine the total pension liability.

*Changes in Net Pension Liability*

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
Balance at 12/31/2020	\$ 128,332,828	\$ 117,198,139	\$ 11,134,689
Changes for the year:			
Service cost	4,380,049	-	4,380,049
Interest	8,791,959	-	8,791,959
Contributions - employer	-	4,249,769	(4,249,769)
Contributions - employee	-	2,894,437	(2,894,437)
Net investment income	-	21,206,371	(21,206,371)
Benefit payments, including refunds of employee contributions	(4,923,273)	(4,923,273)	-
Administrative expense	-	(87,866)	87,866
Net changes	14,106,818	23,339,438	(9,232,620)
Balance at 12/31/2021	<u>\$ 142,439,646</u>	<u>\$ 140,537,577</u>	<u>\$ 1,902,069</u>

*Sensitivity of the Net Pension Liability to Changes in the Discount Rate . . .* The following presents the net pension liability of the City of Denton, calculated using the discount rate of 6.75%, as well as what the city's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (5.75%) or 1-percentage-point higher (7.75%) than the current rate:

	1% Decrease in Discount Rate (5.75%)	Current Discount Rate (6.75%)	1% Increase in Discount Rate (7.75%)
City's Net Pension Liability	\$20,586,807	\$ 1,902,069	\$(13,710,288)

*Pension Plan Fiduciary Net Position . . .* The plan fiduciary net position reported above is the same as reported by the Fund. Detailed information about the plan fiduciary net position is available in the Fund's separately issued audited financial statements, which are reported using the economic resources measurement focus and the accrual basis of accounting in conformity with accounting principles generally accepted in the United States of America. Revenues are recorded when earned, and expenses are recorded when a liability is incurred, regardless of the timing of the related cash flows. Investments are reported at fair value, the price that would be recognized to sell an asset in an orderly transaction between market participants at the measurement date.

*Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions . . .* For the year ended September 30, 2022, the City recognized pension expense of \$338,204. Amounts recognized in the fiscal year represent changes between the current and prior year measurement dates. This amount is included as part of personnel services expenses.

At September 30, 2022, the City reported deferred outflows of resources and deferred inflows of resources related to the Fund from the following sources:

	Deferred Outflow of Resources	Deferred Inflows of Resources
Differences between projected and actual investment earnings	\$ -	\$(16,227,774)
Contributions subsequent to the measurement date	3,248,454	-
Differences between expected and actual economic experience	6,297,607.00	(586,533)
Difference in assumption changes	3,019,507	-
Total	\$ 12,565,568	\$(16,814,307)

Deferred outflows of resources related to pensions resulting from contributions subsequent to the measurement date of \$3,248,454 will be recognized as a reduction of the net pension liability for the measurement year ending December 31, 2022 and the City's fiscal year ending September 30, 2023. Other amounts reported as deferred outflows and inflows of resources related to pensions will be recognized in pension expense (income) as follows:

For the Year Ended September 30,	
2023	\$(3,061,592)
2024	(4,261,959)
2025	(2,424,421)
2026	(1,391,775)
2027	1,187,642
Thereafter	2,454,912
Total	\$(7,497,193)

**OTHER POST EMPLOYMENT BENEFITS . . .** The City of Denton provides for two post-employment benefit (OPEB) plans; one provides for postemployment medical care through a single-employer defined benefit medical plan (Medical OPEB), and the other is the Texas Municipal Retirement System Supplemental Death Benefits Fund (TMRS SDBF), a singleemployer defined benefit OPEB plan. Both plans are described in detail following.

Aggregate amounts for the two OPEB plans are as follows:

	<u>Medical OPEB</u>	<u>TMRS SDBF</u>	<u>Total</u>
Total OPEB Liability	\$ 49,266,518	\$ 5,376,347	\$ 54,642,865
Deferred outflows of resources	\$ 6,322,148	\$ 1,204,610	7,526,758
Deferred inflows of resources	4,135,547	378,134	4,513,681
OPEB expense	4,744,360	548,705	5,293,065

*Plan Description . . .* The City of Denton provides post-employment medical care (OPEB) for retired employees through a singleemployer defined benefit medical plan. The plan provides medical benefits for eligible retirees, their spouses and dependents through the City's group health insurance plans, which covers both active and retired members. The benefits, benefit levels, and contribution rates are recommended annually by the City management as part of the budget process. Any changes in rate subsidies for retirees are approved by the City Council. Since an irrevocable trust has not been established, the plan is not accounted for as a trust fund. The plan does not issue a separate financial report.

*Benefits Provided . . .* The City provides post-employment medical, dental, and vision care benefits to its retirees. To be eligible for benefits, an employee must qualify for retirement under the Texas Municipal Retirement System or the Denton Firemen's Relief and Retirement Plan. Retirees must make a one-time irrevocable decision to choose benefits at the time of retirement, after that their eligibility for the benefits ceases. However, retirees can move between plans and can add and drop dependents based on qualifying events.

All medical care benefits are provided through the City's self-insured health plan. The benefit levels are the same as those afforded to active employees.

In the December 31, 2021 actuarial valuation, the following number of employees were covered by the benefit terms:

Inactive Employees or Beneficiaries Currently Receiving Benefits	249
Active Employees	<u>1,540</u>
	1,789

*Funding Policy . . .* The plan premium rates are recommended annually by City management and approved by the City Council as part of the annual budget. The retiree's contribution is the full amount of the actuarially determined blended premium rate less a subsidy dependent upon years of service at retirement. By providing retirees with access to the City's healthcare plans based on the same rates it charges to active employees, the City is in effect providing a subsidy to retirees. This implied subsidy exists because, on average, retiree health care costs are higher than active employee healthcare costs. By the City not contributing anything toward this plan in advance, the City employs a pay-as-you-go method through paying the higher rate for active employees each year. The City contributes \$40 per month for each five-year increment of service, up to \$200 per month, toward the cost of retiree coverage. The full cost for dental and vision is paid by the retiree. Retirees are required to enroll in Medicare Part B once eligible (age 65) and are moved into a fully-insured Medicare Supplement plan at that time. The same City contribution level applies to the supplement.

*Medical OPEB Liability. . .* The City's medical OPEB liability of \$49,266,518 was measured as of December 31, 2021, the same date as the actuarial valuation.

The medical OPEB liability in the December 31, 2021 actuarial valuation was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified.

Significant method and assumptions used for this fiscal year valuation were as follows:

Valuation Date	December 31, 2021
Actuarial cost method	Individual Entry-Age Normal Method
Discount Rate	2.75% as of December 31, 2019 2.00% as of December 31, 2020 1.84% as of December 31, 2021
Inflation Rate	2.50% per annum
Projected salary increases	3.50% to 11.50% for TMRS, including inflation 3.00% to 9.18% for Fire, including inflation
Healthcare trend rates	Initial rate of 7.00% declining to an ultimate rate of 4.15% after 15 years
Mortality	<b>TMRS:</b> For healthy retirees, the gender-distinct 2019 Municipal Retirees of Texas mortality tables are used. The rates are projected on a fully generational basis using the ultimate mortality improvement rates in the MP tables to account for future mortality improvements. <b>Firefighters:</b> The gender-distinct PubS-2010 (safety employees) total data set mortality are used. The rates are projected on a fully generational basis using the projection scale of MP-2019.
Participation Rates	60% for employees retiring at age 65 or older; 45% for employees retiring between the ages 50 and 64; 5% for employees retiring between the ages of 45 and 49; 0% for retirees under the age 50 at retirement

*Changes in the Medical OPEB Liability*

	Total Medical OPEB Liability
Balance at 12/31/2020	\$ 48,918,032
Changes for the year:	
Service cost	3,554,317
Interest	995,640
Difference between expected and actual experience	(1,283,436)
Changes of assumptions	(1,091,668)
Benefit payments	(1,826,367)
Net Changes	348,486
Balance at 12/31/2021	\$ 49,266,518

Total OPEB liability as a percentage of covered payroll was 38.92%.

*Sensitivity of the Medical OPEB Liability to Changes in the Discount Rate*

The following schedule shows the impact of the medical OPEB liability if the discount rate used was 1% less than (1.00%) and 1% greater than (3.00%) the discount rate that was used (2.00%) in measuring the medical OPEB liability:

	1% Decrease (1.00%)	Current Discount Rate (2.00%)	1% Increase (3.00%)
Total medical OPEB Liability	\$54,844,998	\$ 49,266,518	\$44,418,232

*Sensitivity of the Medical OPEB Liability to Changes in the Healthcare Cost Trend Rate Assumption*

The following schedule shows the impact of the medical OPEB liability if the healthcare trend cost rate used was 1% less than (6.00%) and 1% more than (8.00%) the healthcare cost trend rate that was used (7.00%) in measuring the medical OPEB liability:

	1% Decrease (6.00%)	Current Healthcare Cost Trend Rate (7.00%)	1% Increase (8.00%)
Total medical OPEB Liability	\$45,370,854	\$ 49,266,518	\$53,902,870

*Medical OPEB Expense and Deferred outflows of Resources and Deferred Inflows of Resources Related to Medical OPEB*

For the year ended September 30, 2022, the City recognized medical OPEB expense of \$4,744,360. At September 30, 2022, the City reported deferred outflows of resources and deferred inflows of resources related to medical OPEB from the following

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual economic experience	\$ 254,892	\$ 2,212,338
Changes in actuarial assumptions	4,700,449	1,923,209
Contribution subsequent to the measurement date	1,366,807	-
Totals	<u>\$ 6,322,148</u>	<u>\$ 4,135,547</u>

Deferred outflows of resources related to OPEB contributions subsequent to the measurement date of \$1,366,807 will be recognized as a reduction of the medical OPEB liability for the City's fiscal year ending September 30, 2023. Other amounts reported as deferred outflows of resources related to the medical OPEB will be recognized in OPEB expense as follows:

Year Ending September 30,	
2023	\$ 194,403
2024	194,403
2025	194,403
2026	186,610
2027	(29,140)
Thereafter	<u>79,115</u>
Total	\$ 819,794

*Supplemental Death Benefit Fund . . .* The City of Denton voluntarily participates in the Texas Municipal Retirement System Supplemental Death Benefits Fund (TMRS SDBF). The SDBF is a defined benefit group-term life insurance Other Postemployment Benefit (OPEB) plan as defined by GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. No assets are accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement No. 75. It is established and administered in accordance with the TMRS Act identically to the City's pension plan.

*Benefits provided . . .* The SDBF provides group-term life insurance to City employees who are active members in TMRS, including or not including retirees. The City Council opted into this system via an ordinance, and may terminate coverage under, and discontinue participation in, the SDBF by adopting an ordinance before November 1st of any year to be effective the following January 1st.

Payments from this fund are similar to group-term life insurance benefits and are paid to the designated beneficiaries upon the receipt of an approved application for payment. The death benefit for active employees provides a lump-sum payment approximately equal to the employee's annual salary (calculated based on the employee's actual earnings for the 12-month period preceding the month of death). The death benefit for retirees is considered an "other postemployment benefit" (OPEB) and is a fixed amount of \$7,500. As the SDBF covers both active and retiree participants with no segregation of assets, the SDBF is considered to be an unfunded OPEB plan.

In the December 31, 2021 actuarial valuation, the following number of employees were covered by the benefit terms:

Inactive Employees or Beneficiaries Currently Receiving Benefits	647
Inactive Employees entitled to but not yet receiving benefits	217
Active Employees	<u>1,323</u>
	2,187

The City contributes to the SDBF at a contractually required rate as determined by an annual actuarial valuation, which was 0.18% for 2022 and 0.18% for 2021, of which 0.09% for 2022 and 0.08% for 2021, represented the retiree-only portion for each year, as a percentage of annual covered payroll. The rate is equal to the cost of providing one-year term life insurance. The funding policy for the SDBF program is to assure that adequate resources are available to meet all the death benefit payments for the upcoming year; the intent is not to prefund retiree term life insurance during employees' entire careers. The City's contribution to the SDBF for two years ended September 30, 2022 and 2021 were \$190,063 and \$179,918 respectively, year.



## FINANCIAL INFORMATION

**TABLE 12 - CHANGES IN NET POSITION OF GOVERNMENTAL ACTIVITIES**

	Fiscal Year Ended September 30,				
	2022	2021	2020	2019	2018
<b>Revenues:</b>					
Program Revenue:					
Charges for Services	\$ 25,203,727	\$ 18,751,972	\$ 17,442,268	\$ 20,276,028	\$ 20,212,367
Operating Grants and Contributions	9,545,392	8,607,304	8,991,320	4,092,532	3,697,696
Capital Grants and Contributions	34,406,757	23,945,640	34,911,879	28,085,591	33,991,306
General Revenue:					
Property Tax	79,552,638	78,243,553	75,431,860	71,351,314	67,185,610
Sales Tax	53,264,724	45,404,857	39,337,834	38,330,825	38,270,026
Other Taxes/Fees	42,503,178	35,648,023	32,100,345	29,873,654	29,384,183
Miscellaneous	7,125,797	5,876,421	7,111,569	10,119,145	6,827,003
Total Revenue	<u>\$ 251,602,213</u>	<u>\$ 216,477,770</u>	<u>\$ 215,327,075</u>	<u>\$ 202,129,089</u>	<u>\$ 199,568,191</u>
<b>Expenditures:</b>					
General Government	\$ 40,369,454	\$ 37,401,990	\$ 37,921,928	\$ 39,051,942	\$ 37,968,945
Public Safety	87,970,791	93,415,418	82,119,480	77,883,435	71,945,219
Public Works	25,489,369	14,063,366	26,049,847	24,502,864	25,683,779
Parks and Recreation	22,787,282	19,295,206	15,759,371	17,710,634	17,422,273
Interest on Long-Term Debt	8,571,877	7,380,293	6,757,736	6,750,917	5,379,149
Total Expenses	<u>\$ 185,188,773</u>	<u>\$ 171,556,273</u>	<u>\$ 168,608,362</u>	<u>\$ 165,899,792</u>	<u>\$ 158,399,365</u>
Increase in Net Position before Transfers	\$ 66,413,440	\$ 44,921,497	\$ 46,718,713	\$ 36,229,297	\$ 41,168,826
Transfers	2,913,731	1,975,432	1,296,624	1,018,664	(1,104,290)
Increase (Decrease) in Net Position	\$ 69,327,171	\$ 46,896,929	\$ 48,015,337	\$ 37,247,961	\$ 40,064,536
Prior Period Adjustment	9,072,792 <sup>(3)</sup>	-	-	-	(16,960,959) <sup>(2)</sup>
Net Position at Beginning of Year	328,693,298	281,796,369	233,781,032	196,533,071	173,429,494
Net Position at End of Year	<u>\$ 407,093,261 <sup>(1)</sup></u>	<u>\$ 328,693,298</u>	<u>\$ 281,796,369</u>	<u>\$ 233,781,032</u>	<u>\$ 196,533,071</u>

(1) Unrestricted net position, that part of the net position that may be used to meet the City's ongoing obligations, was (\$2,815,218) as of September 30, 2022. This table refers to governmental activities only and does not include enterprise funds such as solid waste or utility activities.

(2) Represents a net adjustment due to GASB 75 "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions".

(3) An adjustment has been recorded to account for the recognition of intergovernmental revenues received in advance and held as an unearned revenue liability.

**TABLE 12A - GENERAL FUND REVENUES AND EXPENDITURE HISTORY**

	Fiscal Year Ended September 30,				
<u>Revenues:</u>	2022	2021	2020	2019	2018
Taxes	\$ 102,491,584	\$ 95,276,289	\$ 88,273,338	\$ 85,149,284	\$ 83,621,197
Licenses and Permits	9,058,717	5,939,320	5,225,128	3,889,820	3,739,691
Franchise Fee	19,910,133	17,961,984	16,196,987	13,443,408	13,263,247
Fines and Forfeitures	1,875,399	1,572,587	2,279,771	3,651,697	3,523,068
Fees for Service	9,630,662	9,354,890	6,803,459	6,981,182	7,223,541
Interest Revenue	(127,267)	160,094	793,413	1,114,348	514,938
Intergovernmental	2,508,006	4,166,856	5,075,506	1,339,188	1,005,259
Miscellaneous	322,173	385,998	313,541	470,502	432,820
Total Revenues	<u>\$ 145,669,407</u>	<u>\$ 134,818,018</u>	<u>\$ 124,961,143</u>	<u>\$ 116,039,429</u>	<u>\$ 113,323,761</u>
<u>Expenditures:</u>					
General Government	\$ 26,563,210	\$ 26,460,924	\$ 26,969,064	\$ 29,967,473	\$ 27,725,208
Public Safety	86,682,395	80,847,727	75,985,961	68,174,782	63,268,420
Public Works	2,956,465	2,919,114	3,021,395	3,035,748	3,077,807
Parks and Recreation	13,308,304	11,259,612	8,872,556	9,786,783	12,332,725
Capital Outlay	540,289	476,296	442,932	737,271	623,931
Debt Service: Principal Retirement	-	-	-	4,171	50,052
Total Expenditures	<u>\$ 130,050,663</u>	<u>\$ 121,963,673</u>	<u>\$ 115,291,908</u>	<u>\$ 111,706,228</u>	<u>\$ 107,078,143</u>
Excess (Deficiency) of Revenues Over Expenditures	\$ 15,618,744	\$ 12,854,345	\$ 9,669,235	\$ 4,333,201	\$ 6,245,618
<u>Other Financing Sources (Uses):</u>					
Transfers In	\$ 2,728	\$ 33,964	\$ -	\$ -	\$ -
Sale of Capital Assets	568,128	326,682	112,824	17,033	111,674
Transfers (Out)	(9,230,186)	(8,497,210)	(6,738,692)	(3,928,775)	(7,810,680)
Total Other Financing Sources (Uses)	<u>\$ (8,659,330)</u>	<u>\$ (8,136,564)</u>	<u>\$ (6,625,868)</u>	<u>\$ (3,911,742)</u>	<u>\$ (7,699,006)</u>
Net Changes in Fund Balance	\$ 6,959,414	\$ 4,717,781	\$ 3,043,367	\$ 421,459	\$ (1,453,388)
Fund Balance at Beginning of Year	<u>38,499,992</u>	<u>33,782,211</u>	<u>30,738,844</u>	<u>30,317,385</u>	<u>31,770,773</u>
Fund Balance at End of Year	<u>\$ 45,459,406</u>	<u>\$ 38,499,992</u>	<u>\$ 33,782,211</u>	<u>\$ 30,738,844</u>	<u>\$ 30,317,385</u>

**TABLE 13 - MUNICIPAL SALES TAX HISTORY**

The City has adopted the Municipal Sales and Use Tax Act, Texas Tax Code, Chapter 321, which grants the City the power to impose and levy a 1% Local Sales and Use Tax within the City; the proceeds are credited to the General Fund and are not pledged to the payment of the Obligations. Collections and enforcements are effected through the offices of the Comptroller of Public Accounts, State of Texas, who remits the proceeds of the tax, after deduction of a 2% service fee, to the City monthly. In January 1994, the voters of the City approved the imposition of an additional one-half of one percent ( $\frac{1}{2}$  of 1%) for property tax reduction. In September 2003, the voters of the City approved the imposition of an additional one-half of one percent ( $\frac{1}{2}$  of 1%) for the Denton County Transportation Authority. The implementation of this tax began January 2004, and is allocated directly to the Denton County Transportation Authority.

Fiscal Year Ended 9/30	Total Collected <sup>(1)</sup>	% of Ad Valorem Tax Levy	Equivalent of Ad Valorem Tax Rate	Per Capita
2019	\$ 38,330,825	54.15%	\$ 0.3387	\$ 280
2020	39,337,834	52.42%	0.3117	279
2021	45,404,857	58.24%	0.3343	316
2022	53,264,724	67.05%	0.3698	362
2023 <sup>(2)</sup>	22,357,725	24.28%	0.1337	148

(1) Source: City of Denton Annual Program of Services.

(2) Collections through April 1, 2023.

The sales tax breakdown for the City is as follows:

Property Tax Relief	0.50¢
Denton County Transportation Authority	0.50¢
City Sales & Use Tax	1.00¢
State Sales & Use Tax	<u>6.25¢</u>
Total	8.25¢

## FINANCIAL POLICIES

*Basis of Accounting* . . . The accounting policies of the City conform to generally accepted accounting principles of the Governmental Accounting Standards Board and program standards adopted by the Government Finance Officers Association of the United States and Canada. The GFOA has awarded a Certificate of Achievement for Excellence in Financial Reporting to the City of Denton for each fiscal year since 1983. The City's current report will be submitted to GFOA to determine its eligibility for another Certificate.

The City has also received the GFOA's award for Distinguished Budget Presentation each year since 1986.

The measurement focuses for the Enterprise Funds, Internal Service Funds and Nonexpendable Trust Funds are income determination and cost of service, respectively. Accordingly, the accrual basis, whereby revenues and expenses are identified in the accounting period in which they are earned and incurred and net income, is utilized for these funds. The modified accrual basis, whereby revenues are recognized when they become both measurable and available for use during the year and expenditures are recognized when the related fund liability is incurred, is used for all other funds.

*Fund Balance Policy* . . . The City strives to achieve and maintain an unassigned fund balance in the General Fund equal to 20% of budgeted expenditures. An additional 5% resiliency reserve (25% combined total) may be maintained to safeguard against unusual financial circumstances or economic downturns.

*Budgetary Procedures* . . . As prescribed by City Charter, the City Manager, within the time period required by law, submits to the City Council a proposed budget for the fiscal year beginning the following October 1. The budget includes proposed expenditures and revenues required to fund the expenditures. Following Council considerations, amendments and refinements, a public hearing is ordered and conducted for the purpose of obtaining taxpayer comments. The budget is finally approved and adopted by passage of an ordinance by the City Council prior to the beginning of the fiscal year. The budget is adopted on a basis consistent with generally accepted accounting principles. It is the goal of the City to achieve and maintain an unassigned fund balance in the general fund equal to 20% of budgeted expenditures. An additional 5% resiliency reserve (25% combined total) may be maintained to safeguard against unusual financial circumstances and/or economic downturns.

## INVESTMENTS

The City invests its investable funds in investments authorized by Texas law in accordance with investment policies approved by the City Council. Both Texas law and the City's investment policies are subject to change.

**LEGAL INVESTMENTS** . . . Under State law, the City is authorized to invest in: (1) obligations, including letters of credit, of the United States or its agencies and instrumentalities, including the Federal Home Loan Banks; (2) direct obligations of the State or its agencies and instrumentalities; (3) collateralized mortgage obligations issued by a federal agency or instrumentality of the United States, the underlying security for which is guaranteed by an agency or instrumentality of the United States; (4) other obligations, the principal and interest of which are unconditionally guaranteed or insured by, or backed by the full faith and credit of, the State or the United States or their respective agencies and instrumentalities, including obligations that are fully guaranteed or insured by the Federal Deposit Insurance Corporation (the "FDIC") or by the explicit full faith and credit of the United States; (5) obligations of states, agencies, counties, cities, and other political subdivisions of any state rated as to investment quality by a nationally recognized investment rating firm not less than A or its equivalent; (6) bonds issued, assumed, or guaranteed by the State of Israel; (7) interest-bearing banking deposits that are guaranteed or insured by the FDIC or the National Credit Union Share Insurance Fund (the "NCUSIF") or their respective successors; (8) interest-bearing banking deposits, other than those described in clause (7), that (i) are invested through a broker or institution with a main office or branch office in this state and selected by the City in compliance with the PFIA, (ii) the broker or institution arranges for the deposit of the funds in one or more federally insured depository institutions, wherever located, for the City's account, (iii) the full amount of the principal and accrued interest of the banking deposits is insured by the United States or an instrumentality of the United States, and (iv) the City appoints as its custodian of the banking deposits, in compliance with the PFIA, the institution in clause (8)(i) above, a bank, or a broker-dealer; (9) certificates of deposit and share certificates meeting the requirements of the PFIA (i) that are issued by an institution that has its main office or a branch office in the State and are guaranteed or insured by the FDIC or the NCUSIF, or their respective successors, or are secured as to principal by obligations described in clauses (1) through (8), above, or secured in accordance with Chapter 2257, Texas Government Code, or in any other manner and amount provided by law for City deposits, or (ii) where (a) the funds are invested by the City through a broker or institution that has a main office or branch office in the State and selected by the City in compliance with the PFIA, (b) the broker or institution arranges for the deposit of the funds in one or more federally insured depository institutions, wherever located, for the account of the City, (c) the full amount of the principal and accrued interest of each of the certificates of deposit is insured by the United States or an instrumentality of the United States; and (d) the City appoints, in compliance with the PFIA, the institution in clause (9)(ii)(a) above, a bank, or broker-dealer as custodian for the City with respect to the certificates of deposit; (10) fully collateralized repurchase agreements that have a defined termination date, are secured by a combination of cash and obligations described by clauses (1) or (12), which are pledged to the City, held in the City's name, and deposited at the time the investment is made with the City or with a third party selected and approved by the City, and are placed through a primary government securities dealer, as defined by the Federal Reserve, or a financial institution doing business in the State; (11) certain bankers' acceptances with a stated maturity of 270 days or less, if the short-term obligations of the accepting bank, or of the holding company of which the bank is the largest subsidiary, are rated not less than A-1 or P-1 or the equivalent by at least one nationally recognized credit rating agency; (12) commercial paper with a stated maturity of 365 days or less that is rated at least A-1 or P-1 or an equivalent by either (i) two nationally recognized credit rating agencies, or (ii) one nationally recognized credit rating agency if the commercial paper is fully secured by an irrevocable letter of credit issued by a United States or state bank; (13) no-load money market mutual funds registered with and regulated by the Securities and Exchange Commission and complies with Securities and Exchange Commission Rule 2a-7; (14) no-load mutual funds that are registered and regulated by the Securities and Exchange Commission that have a weighted maturity of less than two years and either (i) have a duration of one year or more and are invested exclusively in obligations approved in this paragraph, or (ii) have a duration of less than one year and the investment portfolio is limited to investment grade securities, excluding asset backed securities; (15) guaranteed investment contracts that have a defined termination date and are secured by obligations described in clause (1), excluding obligations which the City is explicitly prohibited from investing in, and in an amount at least equal to the amount of bond proceeds invested under such contract; and (16) securities lending programs if (i) the securities loaned under the program are 100% collateralized, including accrued income, (ii) a loan made under the program allows for termination at any time, (iii) a loan made under the program is either secured by (a) obligations described in clauses (1) through (8) above, (b) irrevocable letters of credit issued by a state or national bank that is continuously rated by a nationally recognized investment rating firm at not less than A or its equivalent, or (c) cash invested in obligations described in clauses (1) through (8) above, clauses (12) through (14) above, or an authorized investment pool, (iv) the terms of a loan made under the program require that the securities being held as collateral be pledged to the City, held in the City's name, and deposited at the time the investment is made with the City or with a third party designated by the City, (v) a loan made under the program is placed through either a primary government securities dealer or a financial institution doing business in the State, and (vi) the agreement to lend securities has a term of one year or less.

The City may invest in such obligations directly or through government investment pools that invest solely in such obligations provided that the pools are rated no lower than "AAA" or "AAA-m" or an equivalent by at least one nationally recognized rating service. The City may also contract with an investment management firm registered under the Investment Advisers Act of 1940 (15 U.S.C. Section 80b-1 et seq.) or with the State Securities Board to provide for the investment and management of its public funds or other funds under its control for a term up to two years, but the City retains ultimate responsibility as fiduciary of its assets. In order to renew or extend such a contract, the City must do so by order, ordinance, or resolution.

The City is specifically prohibited from investing in (1) obligations whose payment represents the coupon payments on the outstanding principal balance of the underlying mortgage-backed security collateral and pays no principal (2) obligations whose payment represents the principal stream of cash flow from the underlying mortgage-backed security and bears no interest (3) collateralized mortgage obligations that have a stated final maturity of greater than 10 years and (4) collateralized mortgage obligations the interest rate of which is determined by an index that adjusts opposite to the changes in a market index.

**INVESTMENT POLICIES . . .** Under Texas law, the City is required to invest its funds under written investment policies that primarily emphasize safety of principal and liquidity; that address investment diversification, yield, maturity, and the quality and capability of investment management; and that includes a list of authorized investments for City funds, maximum allowable stated maturity of any individual investment, the maximum average dollar-weighted maturity allowed for pooled fund groups, methods to monitor the market price of investments acquired with public funds, a requirement for settlement of all transactions, except investment pool funds and mutual funds, on a delivery versus payment basis, and procedures to monitor rating changes in investments acquired with public funds and the liquidation of such investments consistent with the Public Funds Investment Act. All City funds must be invested consistent with a formally adopted "Investment Strategy Statement" that specifically addresses each fund's investment. Each Investment Strategy Statement will describe its objectives concerning: (1) suitability of investment type, (2) preservation and safety of principal, (3) liquidity, (4) marketability of each investment, (5) diversification of the portfolio, and (6) yield.

Under Texas law, City investments must be made "with judgment and care, under prevailing circumstances, that a person of prudence, discretion, and intelligence would exercise in the management of the person's own affairs, not for speculation, but for investment, considering the probable safety of capital and the probable income to be derived." At least quarterly the investment officers of the City shall submit an investment report detailing: (1) the investment position of the City, (2) that all investment officers jointly prepared and signed the report, (3) the beginning market value, the ending market value and the fully accrued interest during the reporting period of each pooled fund group, (4) the book value and market value of each separately listed asset at the end of the reporting period, (5) the maturity date of each separately invested asset, (6) the account or fund or pooled fund group for which each individual investment was acquired, and (7) the compliance of the investment portfolio as it relates to: (a) adopted investment strategy statements and (b) state law. No person may invest City funds without express written authority from the City Council.

Effective September 1, 2019, the investment officer of a local government is allowed to invest bond proceeds or pledged revenue only to the extent permitted by the PFIA and in accordance with (i) statutory provisions governing the debt issuance (or lease, installment sale, or other agreement) and (ii) the local government's investment policy regarding the debt issuance or the agreement.

**ADDITIONAL PROVISIONS . . .** Under Texas law the City is additionally required to: (1) annually review its adopted policies and strategies; (2) adopt a rule, order, ordinance or resolution stating that it has reviewed its investment policy and investment strategies and records any changes made to either its investment policy or investment strategy in the respective rule, order, ordinance or resolution; (3) require any investment officers with personal business relationships or relatives with firms seeking to sell securities to the City to disclose the relationship and file a statement with the Texas Ethics Commission and the City Council; (4) require the registered principal of firms seeking to sell securities to the City to: (a) receive and review the City's investment policy, (b) acknowledge that reasonable controls and procedures have been implemented to preclude investment transactions conducted between the City and the business organization that are not authorized by the City's investment policy (except to the extent that this authorization is dependent on an analysis of the makeup of the City's entire portfolio or requires an interpretation of subjective investment standards), and (c) deliver a written statement attesting to these requirements; (5) perform an annual audit of the management controls on investments and adherence to the City's investment policy; (6) provide specific investment training for the Treasurer, Chief Financial Officer and investment officers; (7) restrict reverse repurchase agreements to not more than 90 days and restrict the investment of reverse repurchase agreement funds to no greater than the term of the reverse repurchase agreement; (8) restrict the investment in no-load mutual funds in the aggregate to no more than 15% of the entity's monthly average fund balance, excluding bond proceeds and reserves and other funds held for debt service; (9) require local government investment pools to conform to the new disclosure, rating, net asset value, yield calculation, and advisory board requirements; and (10) at least annually review, revise, and adopt a list of qualified brokers that are authorized to engage in investment transactions with the City.

**TABLE 14- CURRENT INVESTMENTS <sup>(1)</sup>**

As of April 1, 2023, the City's available funds were invested as follows:

Description	Market Value Percent	Market Value	Book Value
Treasury Securities	34.96%	\$ 260,480,645	\$ 262,589,489
Federal Agency Issues - Coupon	26.23%	195,419,362	196,581,287
Federal Agency Issues - Amortizing	1.34%	9,982,484	9,981,458
Federal Agency Issues - Step-Up	1.34%	9,974,011	10,000,000
Commercial Paper	13.52%	100,717,660	100,776,333
Local Government Inv. Pool- TexSTAR	1.34%	10,000,000	10,000,000
Local Government Inv. Pool- TexPool	17.45%	130,000,000	130,000,000
Demand Deposits/Wells Fargo <sup>(2)</sup>	3.82%	28,439,762	28,439,762
	<u>100.00%</u>	<u>\$ 745,013,924</u>	<u>\$ 748,368,329</u>

(1) There are no City funds invested in derivative securities, i.e., securities whose rate of return is determined by reference to some other instrument, index or commodity.

(2) Insured up to the FDIC limit with uninsured amounts collateralized by U.S. federal agency securities at a minimum of 102% of principal plus accrued interest.

TexSTAR is a local government investment pool for whom Hilltop Securities Asset Management, Inc. provides customer service and marketing for the pool. TexSTAR currently maintains a "AAAm" rating from Standard & Poor's and has an investment objective of achieving and maintaining a stable net asset value of \$1.00 per share. Daily investments or redemptions of funds is allowed by the participants.

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## TAX MATTERS

### OPINIONS

The Certificates . . . On the date of initial delivery of the Certificates, McCall, Parkhurst and Horton L.L.P., Dallas, Texas, Bond Counsel to the City, will render its opinion that, in accordance with Existing Law, (1) interest on the Certificates for federal income tax purposes will be excludable from the "gross income" of the holders thereof and (2) the Certificates will not be treated as "specified private activity bonds" the interest on which would be included as an alternative minimum tax preference item under section 57(a)(5) of the Code. Except as stated above, Bond Counsel to the City will express no opinion as to any other federal, state or local tax consequences of the purchase, ownership or disposition of the Certificates. See Appendix C – Forms of Bond Counsel's Opinions.

The Bonds . . . On the date of initial delivery of the Bonds, Bond Counsel to the City, will render its opinion that, in accordance with statutes, regulations, published rulings and court decisions existing on the date thereof ("Existing Law"), (1) interest on the Bonds for federal income tax purposes will be excludable from the "gross income" of the holders thereof and (2) the Bonds will not be treated as "specified private activity bonds" the interest on which would be included as an alternative minimum tax preference item under section 57(a)(5) of the Internal Revenue Code of 1986 (the "Code"). Except as stated above, Bond Counsel to the City will express no opinion as to any other federal, state or local tax consequences of the purchase, ownership or disposition of the Bonds. See Appendix C – Forms of Bond Counsel's Opinions.

In rendering each of the foregoing opinions, Bond Counsel to the City will rely upon (a) certain information and representations of the City, including information and representations contained in the City's federal tax certificate with respect to each Obligation issue, and (b) covenants of the City contained in the Obligation documents relating to certain matters, including arbitrage and the use of the proceeds of the Obligations and the property financed or refinanced therewith. Failure by the City to observe the aforementioned representations or covenants could cause the interest on the Obligations to become taxable retroactively to the date of issuance.

The Code and the regulations promulgated thereunder contain a number of requirements that must be satisfied subsequent to the issuance of the Obligations in order for interest on the Obligations to be, and to remain, excludable from gross income for federal income tax purposes. Failure to comply with such requirements may cause interest on the Obligations to be included in gross income retroactively to the date of issuance of the Obligations. The opinion of Bond Counsel to the City is conditioned on compliance by the City with the covenants and other requirements described in the preceding paragraph, and Bond Counsel to the City has not been retained to monitor compliance with these requirements subsequent to the issuance of the Obligations.

Bond Counsel's opinion represents its legal judgment based upon its review of Existing Law and the reliance on the aforementioned information, representations and covenants. Bond Counsel's opinion is not a guarantee of a result. The Existing Law is subject to change by the Congress and to subsequent judicial and administrative interpretation by the courts and the Department of the Treasury. There can be no assurance that such Existing Law or the interpretation thereof will not be changed in a manner which would adversely affect the tax treatment of the purchase, ownership or disposition of the Obligations.

A ruling was not sought from the Internal Revenue Service by the City with respect to the Obligations or the projects being financed or refinanced therewith. Bond Counsel's opinion represents its legal judgment based upon its review of Existing Law and the representations of the City that it deems relevant to render such opinion and is not a guarantee of a result. No assurances can be given as to whether or not the Internal Revenue Service will commence an audit of the Obligations, or as to whether the Internal Revenue Service would agree with the opinion of Bond Counsel. If an audit is commenced, under current procedures the Internal Revenue Service is likely to treat the City as the taxpayer and the holders of the Obligations may have no right to participate in such procedure. No additional interest will be paid upon any determination of taxability.

### FEDERAL INCOME TAX ACCOUNTING TREATMENT OF ORIGINAL ISSUE DISCOUNT

The initial public offering price to be paid for one or more maturities of the Obligations may be less than the principal amount thereof or one or more periods for the payment of interest on the Obligations may not be equal to the accrual period or be in excess of one year (the "Original Issue Discount Bonds"). In such event, the difference between (i) the "stated redemption price at maturity" of each Original Issue Discount Bond, and (ii) the initial offering price to the public of such Original Issue Discount Bond would constitute original issue discount. The "stated redemption price at maturity" means the sum of all payments to be made on the Obligations less the amount of all periodic interest payments. Periodic interest payments are payments which are made during equal accrual periods (or during any unequal period if it is the initial or final period) and which are made during accrual periods which do not exceed one year.

Under Existing Law, any owner who has purchased such Original Issue Discount Bond in the initial public offering is entitled to exclude from gross income (as defined in section 61 of the Code) an amount of income with respect to such Original Issue Discount Bond equal to that portion of the amount of such original issue discount allocable to the accrual period. For a discussion of certain collateral federal tax consequences, see discussion set forth below.

In the event of the redemption, sale or other taxable disposition of such Original Issue Discount Bond prior to stated maturity, however, the amount realized by such owner in excess of the basis of such Original Issue Discount Bond in the hands of such owner (adjusted upward by the portion of the original issue discount allocable to the period for which such Original Issue Discount Bond was held by such initial owner) is includable in gross income.

Under Existing Law, the original issue discount on each Original Issue Discount Bond is accrued daily to the stated maturity thereof (in amounts calculated as described below for each six-month period ending on the date before the semiannual anniversary dates of the date of the Obligations and ratably within each such six-month period) and the accrued amount is added to an initial owner's basis for such Original Issue Discount Bond for purposes of determining the amount of gain or loss recognized by such owner upon the redemption, sale or other disposition thereof. The amount to be added to basis for each accrual period is equal to (a) the sum of the issue price and the amount of original issue discount accrued in prior periods multiplied by the yield to stated maturity (determined on the basis of compounding at the close of each accrual period and properly adjusted for the length of the accrual period) less (b) the amounts payable as current interest during such accrual period on such Original Issue Discount Bond.

The federal income tax consequences of the purchase, ownership, redemption, sale or other disposition of Original Issue Discount Bonds which are not purchased in the initial offering at the initial offering price may be determined according to rules which differ from those described above. All owners of Original Issue Discount Bonds should consult their own tax advisors with respect to the determination for federal, state and local income tax purposes of the treatment of interest accrued upon redemption, sale or other disposition of such Original Issue Discount Bonds and with respect to the federal, state, local and foreign tax consequences of the purchase, ownership, redemption, sale or other disposition of such Original Issue Discount Bonds.

#### **COLLATERAL FEDERAL INCOME TAX CONSEQUENCES**

The following discussion is a summary of certain collateral federal income tax consequences resulting from the purchase, ownership or disposition of the Obligations. This discussion is based on Existing Law, all of which are subject to change or modification, retroactively.

The following discussion is applicable to investors, other than those who are subject to special provisions of the Code, such as financial institutions, property and casualty insurance companies, life insurance companies, individual recipients of Social Security or Railroad Retirement benefits, individuals allowed an earned income credit, certain S corporations with subchapter C earnings and profits, foreign corporations subject to the branch profits tax, taxpayers qualifying for the health insurance premium assistance credit, and taxpayers who may be deemed to have incurred or continued indebtedness to purchase tax-exempt obligations.

THE DISCUSSION CONTAINED HEREIN MAY NOT BE EXHAUSTIVE. INVESTORS, INCLUDING THOSE WHO ARE SUBJECT TO SPECIAL PROVISIONS OF THE CODE, SHOULD CONSULT THEIR OWN TAX ADVISORS AS TO THE TAX TREATMENT WHICH MAY BE ANTICIPATED TO RESULT FROM THE PURCHASE, OWNERSHIP AND DISPOSITION OF TAX-EXEMPT OBLIGATIONS BEFORE DETERMINING WHETHER TO PURCHASE THE OBLIGATIONS.

Interest on the Obligations may be includable in certain corporation's "adjusted financial statement income" determined under section 56A of the Code to calculate the alternative minimum tax imposed by section 55 of the Code.

Under section 6012 of the Code, holders of tax-exempt obligations, such as the Obligations, may be required to disclose interest received or accrued during each taxable year on their returns of federal income taxation.

Section 1276 of the Code provides for ordinary income tax treatment of gain recognized upon the disposition of a tax-exempt obligation, such as the Obligations, if such obligation was acquired at a "market discount" and if the fixed maturity of such obligation is equal to, or exceeds, one year from the date of issue. Such treatment applies to "market discount bonds" to the extent such gain does not exceed the accrued market discount of such bonds; although for this purpose, a de minimis amount of market discount is ignored. A "market discount bond" is one which is acquired by the holder at a purchase price which is less than the stated redemption price at maturity or, in the case of a bond issued at an original issue discount, the "revised issue price" (i.e., the issue price plus accrued original issue discount). The "accrued market discount" is the amount which bears the same ratio to the market discount as the number of days during which the holder holds the obligation bears to the number of days between the acquisition date and the final maturity date.

#### **STATE, LOCAL AND FOREIGN TAXES**

Investors should consult their own tax advisors concerning the tax implications of the purchase, ownership or disposition of the Obligations under applicable state or local laws. Foreign investors should also consult their own tax advisors regarding the tax consequences unique to investors who are not United States persons.



## INFORMATION REPORTING AND BACKUP WITHHOLDING

Subject to certain exceptions, information reports describing interest income, including original issue discount, with respect to the Obligations will be sent to each registered holder and to the Internal Revenue Service. Payments of interest and principal may be subject to backup withholding under section 3406 of the Code if a recipient of the payments fails to furnish to the payor such owner's social security number or other taxpayer identification number ("TIN"), furnishes an incorrect TIN, or otherwise fails to establish an exemption from the backup withholding tax. Any amounts so withheld would be allowed as a credit against the recipient's federal income tax. Special rules apply to partnerships, estates and trusts, and in certain circumstances, and in respect of Non-U.S. Holders, certifications as to foreign status and other matters may be required to be provided by partners and beneficiaries thereof.

## FUTURE AND PROPOSED LEGISLATION

Tax legislation, administrative actions taken by tax authorities, or court decisions, whether at the Federal or state level, may adversely affect the tax-exempt status of interest on the Obligations under Federal or state law and could affect the market price or marketability of the Obligations. Any such proposal could limit the value of certain deductions and exclusions, including the exclusion for tax-exempt interest. The likelihood of any such proposal being enacted cannot be predicted. Prospective purchasers of the Obligations should consult their own tax advisors regarding the foregoing matters.

## CONTINUING DISCLOSURE OF INFORMATION

In each of the Ordinances, the City has made the following agreement for the benefit of the holders and beneficial owners of the respective series of Obligations. The City is required to observe each agreement while it remains obligated to advance funds to pay such Obligations. Under each agreement, the City will be obligated to provide certain updated financial information and operating data annually, and the timely notice of specified events to the Municipal Securities Rulemaking Board ("MSRB"). This information will be available free of charge from the MSRB via the Electronic Municipal Market Access ("EMMA") system at [www.emma.msrb.org](http://www.emma.msrb.org).

**ANNUAL REPORTS . . .** The City shall provide annually to the MSRB, in the electronic format prescribed by the MSRB, financial information and operating data (the "Annual Operating Report") with respect to the City of the general type included in this Official Statement under Tables numbered 1 through 5 and 7 through 14. The City will additionally provide financial statements of the City (the "Financial Statements"), that will be (i) prepared in accordance with the accounting principles described in the City's annual audited financial statements or such other accounting principles as the City may be required to employ from time to time pursuant to State law or regulation and shall be in substantially the form included in this Official Statement and (ii) audited, if the City commissions an audit of such Financial Statements and the audit is completed within the period during which they must be provided. The City will update and provide the Annual Operating Report within six months after the end of each fiscal year and the Financial Statements within 12 months of the end of each fiscal year, in each case beginning with the fiscal year ending in and after 2023. The City may provide the Financial Statements earlier, including at the time it provides its Annual Operating Report, but if the audit of such Financial Statements is not complete within 12 months after any such fiscal year end, then the City shall file unaudited Financial Statements within such 12-month period and audited Financial Statements for the applicable fiscal year, when and if the audit report on such Financial Statements becomes available.

The financial information and operating data to be provided may be set forth in full in one or more documents or may be included by specific reference to any document available to the public on the MSRB's Internet Web site or filed with the United States Securities and Exchange Commission (the "SEC"), as permitted by SEC Rule 15c2-12 (the "Rule").

The City's current fiscal year end is September 30. Accordingly, it must provide the Annual Operating Report by March 31 in each year, unless the City changes its fiscal year. If the City changes its fiscal year, it will notify the MSRB of the change.

**NOTICE OF CERTAIN EVENTS . . .** The City will also provide timely notices of certain events to the MSRB. The City will provide notice of any of the following events with respect to the Obligations to the MSRB in a timely manner (but not in excess of ten business days after the occurrence of the event): (1) principal and interest payment delinquencies; (2) non-payment related defaults, if material; (3) unscheduled draws on debt service reserves reflecting financial difficulties; (4) unscheduled draws on credit enhancements reflecting financial difficulties; (5) substitution of credit or liquidity providers, or their failure to perform; (6) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB), or other material notices or determinations with respect to the tax status of the Obligations, or other material events affecting the tax status of the Obligations; (7) modifications to rights of holders of the Obligations, if material; (8) Obligation calls, if material, and tender offers; (9) defeasances; (10) release, substitution, or sale of property securing repayment of the Obligations, if material; (11) rating changes; (12) bankruptcy, insolvency, receivership, or similar event of the City, which shall occur as described below; (13) the consummation of a merger, consolidation, or acquisition involving the City or the sale of all or substantially all of its assets, other than in the ordinary course of business, the entry into of a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; (14) appointment of a successor or additional trustee or the change of name of a trustee, if material; (15) incurrence of a Financial Obligation, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of any Financial Obligation of the City, any of which affect security holders, if material; and (16) default, event of acceleration, termination event, modification of terms, or other similar events under the terms of any Financial

Obligation of the City, any of which reflect financial difficulties. In addition, the City will provide timely notice of any failure by the City to provide annual financial information in accordance with their agreement described above under "Annual Reports". For purposes of clauses (15) and (16) above, "Financial Obligation" means (i) a debt obligation, (ii) a derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation, or (iii) guarantee of (i) or (ii). The term Financial Obligation shall not include municipal securities as to which a final official statement has been provided to the MSRB consistent with the Rule.

For these purposes, any event described in (12) in the immediately preceding paragraph is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent, or similar officer for the City in a proceeding under the United States Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the City, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement, or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the City.

**LIMITATIONS AND AMENDMENTS . . .** The City has agreed to update information and to provide notices of specified events only as described above. The City has not agreed to provide other information that may be relevant or material to a complete presentation of its financial results of operations, condition, or prospects or agreed to update any information that is provided, except as described above. The City makes no representation or warranty concerning such information or concerning its usefulness to a decision to invest in or sell Obligations at any future date. The City disclaims any contractual or tort liability for damages resulting in whole or in part from any breach of its continuing disclosure agreement or from any statement made pursuant to its agreement, although holders of Obligations may seek a writ of mandamus to compel the City to comply with its agreement.

The City may amend its continuing disclosure agreement for either or both of the Bonds and Certificates from time to time to adapt to changed circumstances that arise from a change in legal requirements, a change in law, or a change in the identity, nature, status, or type of operations of the City, if (i) the agreement, as amended, would have permitted an underwriter to purchase or sell Bonds or Certificates, as the case may be, in the offering described herein in compliance with the Rule, taking into account any amendments or interpretations of the Rule to the date of such amendment, as well as such changed circumstances, and (ii) either (a) the holders of a majority in aggregate principal amount of the outstanding Bonds or Certificates, as the case may be, consent to the amendment or (b) any person unaffiliated with the City (such as nationally recognized bond counsel) determines that the amendment will not materially impair the interests of the holders and beneficial owners of the Bonds or Certificates, as the case may be. The City may also amend or repeal the provisions of this continuing disclosure agreement if the SEC amends or repeals the applicable provisions of the Rule or a court of final jurisdiction enters judgment that such provisions of the Rule are invalid, but only if and to the extent that the provisions of this sentence would not prevent an underwriter from lawfully purchasing or selling Obligations in the primary offering of the Obligations. If the City so amends the agreement, it has agreed to include with the next financial information and operating data provided in accordance with its agreement described above under "Annual Reports" an explanation, in narrative form, of the reasons for the amendment and of the impact of any change in the type of financial information and operating data so provided.

**COMPLIANCE WITH PRIOR UNDERTAKINGS . . .** During the last five years, the City believes it has complied in all material respects with all continuing disclosure agreements made by it in accordance with SEC Rule 15c2-12.

## **OTHER INFORMATION**

### **RATINGS**

The Obligations and the presently outstanding tax supported debt of the City are rated "A" by Fitch and "A" by S&P. An explanation of the significance of such ratings may be obtained from the company furnishing the rating. The ratings reflect only the respective views of such organizations and the City makes no representation as to the appropriateness of the ratings. There is no assurance that such ratings will continue for any given period of time or that they will not be revised downward or withdrawn entirely by either or both of such rating companies, if in the judgment of either or both companies, circumstances so warrant. Any such downward revision or withdrawal of such ratings, or either of them, may have an adverse effect on the market price of the Obligations.

### **LITIGATION**

Various claims and lawsuits are pending against the City. In accordance with Generally Accepted Accounting Principles, those judgments considered "probable" are accrued by the City, while those claims and judgments considered "reasonably possible" are disclosed but not accrued. In the opinion of City management and the City Attorney, the maximum amount of all significant claims considered reasonably possible, excluding condemnation proceedings, is approximately \$500,000 as of the date of this Official Statement. It is the opinion of the City Attorney and City management that potential losses after insurance coverage on all probable claims and lawsuits will not have a material adverse financial impact upon the City or its operations, see Appendix B, Notes to Basic Financial Statements G., page 85.

At the time of the initial delivery of the Bonds, the City will provide the Initial Purchasers with a certificate to the effect that, except as disclosed herein, no litigation of any nature has been filed or is then pending challenging the issuance of the Bonds or that affects the payment and security of the Bonds or in any other manner questioning the issuance, sale or delivery of the Bonds.

#### **REGISTRATION AND QUALIFICATION OF OBLIGATIONS FOR SALE**

The sale of the Obligations has not been registered under the Federal Securities Act of 1933, as amended, in reliance upon the exemption provided thereunder by Section 3(a)(2); and the Obligations have not been qualified under the Securities Act of Texas in reliance upon various exemptions contained therein; nor have the Bonds or Certificates been qualified under the securities acts of any jurisdiction. The City assumes no responsibility for qualification of the Bonds or Certificates under the securities laws of any jurisdiction in which the Obligations may be sold, assigned, pledged, hypothecated or otherwise transferred. This disclaimer of responsibility for qualification for sale or other disposition of the Obligations shall not be construed as an interpretation of any kind with regard to the availability of any exemption from securities registration provisions.

#### **LEGAL INVESTMENTS AND ELIGIBILITY TO SECURE PUBLIC FUNDS IN TEXAS**

**The Obligations.** Section 1201.041 of the Public Security Procedures Act (Chapter 1201, Texas Government Code) provides that the Obligations are negotiable instruments, investment securities governed by Chapter 8, Texas Business and Commerce Code, and are legal and authorized investments for insurance companies, fiduciaries, and trustees, and for the sinking funds of municipalities or other political subdivisions or public agencies of the State of Texas. In addition, various provisions of the Texas Finance Code provide that, subject to a prudent investor standard, the Obligations are legal investments for state banks, savings banks, trust companies with at least \$1 million of capital, and savings and loan associations.

**The Certificates.** Section 271.051, Texas Local Government Code, provides that the Certificates are legal and authorized investments for banks, savings banks, trust companies, savings and loan associations, insurance companies, fiduciaries, trustees and guardians, and for the sinking funds of municipalities, school districts, and other political subdivisions or public agencies of the State of Texas. The Certificates are eligible to secure deposits of any public funds of the State, municipalities, school districts, and other political subdivisions of the State, and are legal security for those deposits to the extent of their market value.

**General Considerations.** For political subdivisions in Texas that have adopted investment policies and guidelines in accordance with the Public Funds Investment Act (Texas Government Code, Chapter 2256), the Obligations may have to be assigned a rating of at least "A" or its equivalent as to investment quality by a national rating agency before such obligations are eligible investments for sinking funds and other public funds. The City has made no investigation of other laws, rules, regulations, or investment criteria which might apply to such institutions or entities or which might limit the suitability of the Obligations for any of the foregoing purposes or limit the authority of such institutions or entities to purchase or invest in the Obligations for such purposes. The City has made no review of laws in other states to determine whether the Obligations are legal investments for various institutions in those states.

#### **LEGAL OPINIONS AND NO-LITIGATION CERTIFICATE**

The City will furnish a complete transcript of proceedings had incident to the authorization and issuance of the Bonds and of the Certificates, including the unqualified approving legal opinions of the Attorney General of Texas approving the Initial Bond and the Initial Certificate and to the effect that the Bonds and the Certificates are valid and legally binding obligations of the City, and based upon examination of such transcript of proceedings, the approving legal opinions of Bond Counsel, to like effect and to the effect that the interest on the Bonds and the Certificates will be excludable from gross income for federal income tax purposes under Section 103(a) of the Code, subject to the matters described under "Tax Matters" herein. The customary closing papers, including a certificate to the effect that no litigation of any nature has been filed or is then pending to restrain the issuance and delivery of the Obligations, or which would affect the provision made for their payment or security or in any manner questioning the validity of said Obligations will also be furnished. Though it represents the Financial Advisor and purchasers of debt from governmental issuers from time to time in matters unrelated to the issuance of the Obligations, Bond Counsel has been engaged by and only represents the City in connection with the issuance of the Obligations. Bond Counsel was not requested to participate, and did not take part, in the preparation of the Notice of Sale and Bidding Instructions, the Official Bid Form and the Official Statement, and such firm has not assumed any responsibility with respect thereto or undertaken independently to verify any of the information contained therein, except that, in its capacity as Bond Counsel, such firm has reviewed the information describing the Obligations in the Official Statement to verify that such description conforms to the provisions of the Bond Ordinance and the Certificate Ordinance. The legal fee to be paid Bond Counsel for services rendered in connection with the issuance of the Obligations is contingent on the sale and delivery of the Obligations. The legal opinion will accompany the Obligations deposited with DTC or will be printed on the Obligations in the event of the discontinuance of the Book-Entry-Only System.

The legal opinions to be delivered concurrently with the delivery of the Obligations express the professional judgment of the attorneys rendering the opinions as to the legal issues explicitly addressed therein. In rendering a legal opinion, the attorney does not become an insurer or guarantor of that expression of professional judgment, of the transaction opined upon, or of the future performance of the parties to the transaction. Nor does the rendering of an opinion guarantee the outcome of any legal dispute that may arise out of the transaction.

#### **AUTHENTICITY OF FINANCIAL DATA AND OTHER INFORMATION**

The financial data and other information contained herein have been obtained from City records, audited financial statements, and other sources which are believed to be reliable. There is no guarantee that any of the assumptions or estimates contained herein will be realized. All of the summaries of the statutes, documents, and ordinances contained in this Official Statement are made subject to all of the provisions of such statutes, documents, and ordinances. These summaries do not purport to be complete statements of such provisions and reference is made to such documents for further information. Reference is made to original documents in all respects.

#### **FINANCIAL ADVISOR**

Hilltop Securities Inc., ("HilltopSecurities") is employed as Financial Advisor to the City in connection with the issuance of the Obligations. The Financial Advisor's fee for services rendered with respect to the sale of the Obligations is contingent upon the issuance and delivery of the Obligations. HilltopSecurities, in its capacity as Financial Advisor, has relied on the opinion of Bond Counsel and has not verified and does not assume any responsibility for the information, covenants, and representations contained in any of the legal documents with respect to the federal income tax status of the Obligations, or the possible impact of any present, pending, or future actions taken by any legislative or judicial bodies.

The Financial Advisor to the City has provided the following sentence for inclusion in this Official Statement. The Financial Advisor has reviewed the information in this Official Statement in accordance with, and as part of, its responsibilities to the City and, as applicable, to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Financial Advisor does not guarantee the accuracy or completeness of such information.

#### **INITIAL PURCHASER OF THE CERTIFICATES**

After requesting competitive bids for the Certificates, the City accepted the bid of \_\_\_\_\_ (the "Initial Purchaser of the Certificates") to purchase the Certificates at the interest rates shown on page 2 of the Official Statement at a price of par plus a cash premium of \$ \_\_\_\_\_. The Initial Purchaser of the Certificates can give no assurance that any trading market will be developed for the Certificates after their sale by the City to the Initial Purchaser of the Certificates. The City has no control over the price at which the Certificates are subsequently sold and the initial yield at which the Certificates will be priced and reoffered will be established by and will be the sole responsibility of the Initial Purchaser of the Certificates.

#### **INITIAL PURCHASER OF THE BONDS**

After requesting competitive bids for the Bonds, the City accepted the bid of \_\_\_\_\_ (the "Initial Purchaser of the Bonds") to purchase the Bonds at the interest rates shown on page 4 of the Official Statement at a price of par plus a cash premium of \$ \_\_\_\_\_. The Initial Purchaser of the Bonds can give no assurance that any trading market will be developed for the Bonds after their sale by the City to the Initial Purchaser of the Bonds. The City has no control over the price at which the Bonds are subsequently sold and the initial yield at which the Bonds will be priced and reoffered will be established by and will be the sole responsibility of the Initial Purchaser of the Bonds.

The Initial Purchaser of the Bonds and the Initial Purchaser of the Certificates are herein collectively referred to as the "Initial Purchasers".

#### **CERTIFICATION OF THE OFFICIAL STATEMENT**

At the time of payment for and delivery of the Obligations, the City will furnish to the Initial Purchasers a certificate, executed by a proper City officer, acting in such officer's official capacity, to the effect that to the best of such officer's knowledge and belief: (a) the descriptions and statements of or pertaining to the City contained in the Official Statement, and any addenda, supplement, or amendment thereto, on the date of the Official Statement, on the date of sale of the Obligations, and the acceptance of the best bid therefor, and on the date of the delivery, were and are true and correct in all material respects; (b) insofar as the City and its affairs, including its financial affairs, are concerned, the Official Statement did not and does not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading; (c) insofar as the descriptions and statements, including financial data, of or pertaining to entities, other than the City, and their activities contained in the Official Statement are concerned, such statements and data have been obtained from sources which the City believes to be reliable and the City has no reason to believe that they are untrue in any material respect; and (d) there has been no material adverse change in the financial condition of the City since the date of the last audited financial statements of the City.

## **CYBERSECURITY**

The unauthorized access, use, disclosure, disruption, modification, or destruction of the City's Information or information systems could negatively impact the operations of the city and its ability to provide services to its citizens. The City uses a risk-based approach and "best practices" to protect the confidentiality, integrity and availability of the information and information systems that it is entrusted with. Employees are required to take annual security training which is re-enforced with continuous phishing email tests. The City uses the NIST-CSF framework to assure compliance with multiple standards, regulations, and other obligations. In addition, to help protect the City against claims and expenses due to a cybersecurity incident, the City maintains cyber insurance.

## **FORWARD LOOKING STATEMENTS DISCLAIMER**

The statements contained in this Official Statement, and in any other information provided by the City, that are not purely historical, are forward-looking statements, including statements regarding the City's expectations, hopes, intentions, or strategies regarding the future. Readers should not place undue reliance on forward-looking statements. All forward-looking statements included in this Official Statement are based on information available to the City on the date hereof, and the City assumes no obligation to update any such forward-looking statements. The City's actual results could differ materially from those discussed in such forward-looking statements.

The forward-looking statements included herein are necessarily based on various assumptions and estimates and are inherently subject to various risks and uncertainties, including risks and uncertainties relating to the possible invalidity of the underlying assumptions and estimates and possible changes or developments in social, economic, business, industry, market, legal, and regulatory circumstances and conditions and actions taken or omitted to be taken by third parties, including customers, suppliers, business partners and competitors, and legislative, judicial, and other governmental authorities and officials. Assumptions related to the foregoing involve judgments with respect to, among other things, future economic, competitive, and market conditions and future business decisions, all of which are difficult or impossible to predict accurately and many of which are beyond the control of the City. Any of such assumptions could be inaccurate and, therefore, there can be no assurance that the forward-looking statements included in this Official Statement will prove to be accurate.

## **LINKS TO WEBSITES**

The City has provided links to websites in this Official Statement to allow investors independent access to information or expertise that may be of value. INFORMATION ON SUCH WEBSITES IS NOT INCORPORATED INTO THIS OFFICIAL STATEMENT BY REFERENCE OR OTHERWISE. The inclusion of any links does not imply a recommendation or endorsement of the information or views expressed within a website. The City has not participated in the preparation, compilation or selection of information or views in any website referenced in this Official Statement, and assumes no responsibility or liability for the information or views, or accuracy or completeness thereof, in any website referenced herein.

## **MISCELLANEOUS**

The Ordinances authorizing the issuance of the Obligations will approve the form and content of this Official Statement, and any addenda, supplement or amendment thereto, and will authorize its further use in the reoffering of the Obligations by the Initial Purchasers.

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PRICING OFFICER  
City of Denton, Texas

**SCHEDULE OF REFUNDED OBLIGATIONS\*****Certificates of Obligation, Series 2012**

<u>Original Dated Date</u>	<u>Maturity Date</u>	<u>Interest Rate</u>	<u>Principal Amount Outstanding</u>	<u>Principal Amount Refunded</u>
4/15/2012	2/15/2025	3.000%	\$ 1,935,000	\$ 1,935,000
	2/15/2026	3.000%	1,995,000	\$ 1,995,000
	2/15/2027	3.125%	2,055,000	2,055,000
	2/15/2032	3.500%	2,590,000	2,590,000
			<u>\$ 8,575,000</u>	<u>\$ 8,575,000</u>

The 2025 – 2032 maturities will be redeemed prior to original maturity on [REDACTED] at par.

**General Obligation Refunding and Improvement Bonds, Series 2012**

<u>Original Dated Date</u>	<u>Maturity Date</u>	<u>Interest Rate</u>	<u>Principal Amount Outstanding</u>	<u>Principal Amount Refunded</u>
4/15/2012	2/15/2025	3.000%	\$ 170,000	\$ 170,000
	2/15/2026	3.000%	180,000	180,000
	2/15/2027	3.125%	185,000	185,000
	2/15/2028	3.250%	190,000	190,000
	2/15/2029	3.375%	195,000	195,000
	2/15/2030	3.375%	200,000	200,000
	2/15/2031	3.500%	210,000	210,000
	2/15/2032	3.500%	215,000	215,000
			<u>\$ 1,545,000</u>	<u>\$ 1,545,000</u>

The 2025 – 2032 maturities will be redeemed prior to original maturity on [REDACTED] at par.

**General Obligation Refunding and Improvement Bonds, Series 2013**

<u>Original Dated Date</u>	<u>Maturity Date</u>	<u>Interest Rate</u>	<u>Principal Amount Outstanding</u>	<u>Principal Amount Refunded</u>
5/15/2013	2/15/2024	4.000%	\$ 870,000	\$ 870,000
	2/15/2025	3.125%	895,000	895,000
	2/15/2026	3.250%	210,000	210,000
	2/15/2027	3.500%	220,000	220,000
	2/15/2028	3.500%	225,000	225,000
	2/15/2029	3.625%	235,000	235,000
	2/15/2030	3.750%	245,000	245,000
	2/15/2031	3.750%	255,000	255,000
	2/15/2032	4.000%	260,000	260,000
	2/15/2033	4.000%	275,000	275,000
			<u>\$ 3,690,000</u>	<u>\$ 3,690,000</u>

The 2024 – 2033 maturities will be redeemed prior to original maturity on [REDACTED] at par.

\* Preliminary, subject to change.

**Certificates of Obligation, Series 2013**

<u>Original Dated Date</u>	<u>Maturity Date</u>	<u>Interest Rate</u>	<u>Principal Amount Outstanding</u>	<u>Principal Amount Refunded</u>
4/15/2013	2/15/2024	4.000%	\$ 2,660,000	\$ 2,660,000
	2/15/2025	4.000%	2,760,000	2,760,000
	2/15/2026	4.000%	2,875,000	2,875,000
	2/15/2027	4.000%	2,975,000	2,975,000
	2/15/2028	3.000%	3,085,000	3,085,000
	2/15/2029	3.125%	3,205,000	3,205,000
	2/15/2030	3.250%	3,340,000	3,340,000
	2/15/2031	3.250%	3,480,000	3,480,000
	2/15/2032	3.250%	3,615,000	3,615,000
	2/15/2033	3.375%	3,755,000	3,755,000
			<u>\$31,750,000</u>	<u>\$31,750,000</u>

The 2024 – 2033 maturities will be redeemed prior to original maturity on [REDACTED] at par.

PRELIMINARY

**APPENDIX A**

GENERAL INFORMATION REGARDING THE CITY

PRELIMINARY



**APPENDIX B**

EXCERPTS FROM THE

CITY OF DENTON, TEXAS

ANNUAL COMPREHENSIVE FINANCIAL REPORT

For the Year Ended September 30, 2022

The information contained in this Appendix consists of excerpts from the City of Denton, Texas Annual Comprehensive Financial Report for the Year Ended September 30, 2022, and is not intended to be a complete statement of the City's financial condition. Reference is made to the complete Report for further information.

**APPENDIX C**

**FORMS OF BOND COUNSEL'S OPINIONS**

PRELIMINARY

ORDINANCE NO. 23-\_\_

AN ORDINANCE CONSIDERING ALL MATTERS INCIDENT AND RELATED TO THE ISSUANCE, SALE AND DELIVERY OF UP TO \$158,500,000 IN PRINCIPAL AMOUNT OF "CITY OF DENTON CERTIFICATES OF OBLIGATION, SERIES 2023"; AUTHORIZING THE ISSUANCE OF THE CERTIFICATES; DELEGATING THE AUTHORITY TO CERTAIN CITY OFFICIALS TO EXECUTE CERTAIN DOCUMENTS RELATING TO THE SALE OF THE CERTIFICATES; APPROVING AND AUTHORIZING INSTRUMENTS AND PROCEDURES RELATING TO SAID CERTIFICATES; ENACTING OTHER PROVISIONS RELATING TO THE SUBJECT; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City Council of the City of Denton, Texas (the "Issuer"), deems it advisable to issue Certificates of Obligation in the amount of up to \$158,500,000 for the purposes hereinafter set forth; and

WHEREAS, the Certificates of Obligation hereinafter authorized and designated are to be issued and delivered for cash pursuant to Subchapter C of Chapter 271, Texas Local Government Code, Subchapter B, Chapter 1502, Texas Government Code and Chapter 1371, Texas Government Code; and

WHEREAS, the City Council has heretofore passed two ordinances authorizing and directing the City Secretary to give notice of intention to issue Certificates of Obligation, and said notices have been duly published in a newspaper of general circulation in said Issuer, said newspaper being a "newspaper" as defined in Section 2051.044, Texas Government Code; and

WHEREAS, the Issuer received no petition from the qualified electors of the Issuer protesting the issuance of such Certificates of Obligation; and

WHEREAS, no bond proposition to authorize the issuance of bonds for the same purpose as any of the projects being financed with the proceeds of the Certificates of Obligation was submitted to the voters of the Issuer during the preceding three years and failed to be approved; and

WHEREAS, the Issuer is an "issuer" within the meaning of Section 1371.001(4)(P), Texas Government Code, having (i) a principal amount of at least \$100 million in outstanding long-term indebtedness, in long-term indebtedness proposed to be issued, or in a combination of outstanding or proposed long-term indebtedness and (ii) some amount of long-term indebtedness outstanding or proposed to be issued that is rated in one of the four highest rating categories for long-term debt instruments by a nationally recognized rating agency for municipal securities, without regard to the effect of any credit agreement or other form of credit enhancement entered into in connection with the obligation; and

WHEREAS, it is officially found, determined, and declared that the meeting at which this Ordinance has been adopted was open to the public and public notice of the time, place and subject matter of the public business to be considered and acted upon at said meeting, including this Ordinance, was given, all as required by the applicable provisions of Texas Government Code Chapter 551; NOW, THEREFORE,

THE COUNCIL OF THE CITY OF DENTON HEREBY ORDAINS:

SECTION 1. RECITALS, AMOUNT, PURPOSE AND DESIGNATION OF THE CERTIFICATES.

(a) The recitals set forth in the preamble hereof are incorporated herein and shall have the same force and effect as if set forth in this Section.

(b) The term "Certificates" as used in this Ordinance shall mean and include collectively the certificate of obligation initially issued and delivered pursuant to this Ordinance (the "Initial Certificate") and all substitute certificates of obligation exchanged therefor, as well as all other substitute certificates of obligation and replacement certificates of obligation issued pursuant hereto, and the term "Certificate" shall mean any of the Certificates.

(c) The Certificates of Obligation of the City of Denton, Texas (the "Issuer") are hereby authorized to be issued and delivered in the maximum aggregate principal amount of \$158,500,000 for the purpose of paying all or a portion of the Issuer's contractual obligations incurred pursuant to contracts for the purchase, construction and acquisition of certain real and personal property, to wit: up to \$108,300,000 in principal amount for the purpose of: (i) acquisition of equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the Issuer's waterworks and wastewater system; and (ii) acquisition of equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the Issuer's electric light and power system; and also for the purpose of paying all or a portion of the Issuer's contractual obligations for professional services, including engineers, architects, attorneys, map makers, auditors, and financial advisors, in connection with said projects and said Certificates of Obligation; and up to \$50,200,000 in principal amount for the purpose of: (i) acquiring, constructing, installing and equipping fire stations; (ii) acquisition of vehicles and equipment for the fire, police, building inspections, community improvement services, animal services, streets and traffic control, facilities management, technology services, fleet management, warehouse management, and parks and recreation departments; (iii) renovations to, and equipping of, existing municipal buildings, including the acquisition and installation of replacement heating, venting and air conditioning equipment, roofing and flooring; (iv) acquiring, constructing, installing and equipping police stations; (v) acquiring, constructing and installing building security systems, including security system technology equipment and software, for municipal buildings; (vi) constructing, reconstructing, renovating, installing and equipping municipal parks; (vii) renovations to, expansion of, and equipping existing municipal vehicle maintenance facility; (viii) acquisition and installation of technology equipment, including radio equipment, computer equipment and software, for various municipal departments; (ix) constructing and improving streets, including traffic signalization, landscaping, drainage, utility line relocations and the acquisition of land and rights-of-way therefor; (x) constructing, reconstructing and renovating runways and taxiways at the municipal airport; and (xi) acquisition of vehicles and equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the City's solid waste disposal system; and also for the purpose of paying all or a portion of the Issuer's contractual obligations for professional services, including engineers, architects, attorneys, map makers, auditors, and financial advisors, in connection with said projects and said Certificates of Obligation (collectively, the "Projects").

(d) Each Certificate issued pursuant to this Ordinance shall be designated: "CITY OF DENTON CERTIFICATE OF OBLIGATION, SERIES 2023," and initially there shall be issued, sold, and delivered hereunder fully registered certificates, without interest coupons, payable to the respective registered owners thereof (with the Initial Certificate being made payable to the Purchaser as described in Section 10 hereof), or to the registered assignee or assignees of said Certificates or any portion or portions thereof (in each case, the "Registered Owner"). The Certificates shall be in the respective principal amounts, shall be

numbered, shall mature and be payable on the date or dates in each of the years and in the principal amounts, and shall bear interest to their respective dates of maturity or redemption prior to maturity at the rates per annum, as set forth in the Pricing Certificate.

## SECTION 2. DELEGATION TO PRICING OFFICER.

(a) As authorized by Section 1371.053, Texas Government Code, as amended, the City Manager or an Assistant City Manager (the "Pricing Officer") is hereby authorized to act on behalf of the Issuer in selling and delivering the Certificates and carrying out the other procedures specified in this Ordinance, including, determining the date of the Certificates, any additional or different designation or title by which the Certificates shall be known, the price at which the Certificates will be sold, the years in which the Certificates will mature, the principal amount to mature in each of such years, the rate of interest to be borne by each such maturity, the interest payment and record dates, the price and terms upon and at which the Certificates shall be subject to redemption prior to maturity at the option of the Issuer, as well as any mandatory sinking fund redemption provisions, and all other matters relating to the issuance, sale, and delivery of the Certificates, including without limitation, obtaining municipal bond insurance for all or any portion of the Certificates (including in connection therewith the execution of any commitment agreements, membership agreements in mutual insurance companies, and other similar agreements) and providing for the terms and provisions thereof applicable to the Certificates, all of which shall be specified in the Pricing Certificate; provided that:

- (i) the aggregate original principal amount of the Certificates shall not exceed the amount set forth in Section 1(c) hereof;
- (ii) the maximum stated maturity of the Certificates shall not exceed February 15, 2053;
- (iii) the Certificates shall bear interest at a fixed rate, and the net effective interest rate on the Certificates shall not exceed 5.00%;
- (iv) the delegation made hereby shall expire if not exercised by the Pricing Officer through execution of the Pricing Certificate on or prior to December 6, 2023; and
- (v) on or prior to delivery, the Certificates shall be rated by a nationally recognized rating agency for municipal securities in one of the four highest categories for long-term obligations.

(b) In establishing the aggregate principal amount of the Certificates, the Pricing Officer shall establish an amount not exceeding the aggregate principal amount authorized in Subsection (a) hereof, and not exceeding the respective amounts set forth in Section 1(c) hereof for each group of Projects, which shall be sufficient in amount to provide for the purposes for which the Certificates are authorized and to pay costs of issuing the Certificates. The Certificates shall be sold with and subject to such terms as set forth in the Pricing Certificate.

## SECTION 3. CHARACTERISTICS OF THE CERTIFICATES.

(a) Registration, Transfer, Conversion and Exchange; Authentication. The Issuer shall keep or cause to be kept at the principal corporate trust office of BOKF, NA, Dallas, Texas (the "Paying Agent/Registrar") books or records for the registration of the transfer, conversion and exchange of the Certificates (the "Registration Books"), and the Issuer hereby appoints the Paying Agent/Registrar as its registrar and transfer agent to keep such books or records and make such registrations of transfers, conversions and exchanges under such reasonable regulations as the Issuer and Paying Agent/Registrar may

prescribe; and the Paying Agent/Registrar shall make such registrations, transfers, conversions and exchanges as herein provided. The Paying Agent/Registrar shall obtain and record in the Registration Books the address of the Registered Owner of each Certificate to which payments with respect to the Certificates shall be mailed, as herein provided; but it shall be the duty of each Registered Owner to notify the Paying Agent/Registrar in writing of the address to which payments shall be mailed, and such interest payments shall not be mailed unless such notice has been given. The Issuer shall have the right to inspect the Registration Books during regular business hours of the Paying Agent/Registrar, but otherwise the Paying Agent/Registrar shall keep the Registration Books confidential and, unless otherwise required by law, shall not permit their inspection by any other entity. The Issuer shall pay the Paying Agent/Registrar's standard or customary fees and charges for making such registration, transfer, conversion, exchange and delivery of a substitute Certificate or Certificates. Registration of assignments, transfers, conversions and exchanges of Certificates shall be made in the manner provided and with the effect stated in the FORM OF CERTIFICATE set forth in this Ordinance. Each substitute Certificate shall bear a letter and/or number to distinguish it from each other Certificate.

Except as provided in Section 3(c) of this Ordinance, an authorized representative of the Paying Agent/Registrar shall, before the delivery of any such Certificate, date and manually sign said Certificate, and no such Certificate shall be deemed to be issued or outstanding unless such Certificate is so executed. The Paying Agent/Registrar promptly shall cancel all paid Certificates and Certificates surrendered for conversion and exchange. No additional ordinances, orders, or resolutions need be passed or adopted by the governing body of the Issuer or any other body or person so as to accomplish the foregoing conversion and exchange of any Certificate or portion thereof, and the Paying Agent/Registrar shall provide for the printing, execution, and delivery of the substitute Certificates in the manner prescribed herein, and said Certificates shall be printed or typed on paper of customary weight and strength. Pursuant to Chapter 1201, Government Code, as amended, the duty of conversion and exchange of Certificates as aforesaid is hereby imposed upon the Paying Agent/Registrar, and, upon the execution of said Certificate, the converted and exchanged Certificate shall be valid, incontestable, and enforceable in the same manner and with the same effect as the Certificates that initially were issued and delivered pursuant to this Ordinance, approved by the Attorney General of the State of Texas (the "Attorney General") and registered by the Comptroller of Public Accounts of the State of Texas (the "Comptroller").

(b) Payment of Certificates and Interest. The Issuer hereby further appoints the Paying Agent/Registrar to act as the paying agent for paying the principal of and interest on the Certificates, all as provided in this Ordinance. The Paying Agent/Registrar shall keep proper records of all payments made by the Issuer and the Paying Agent/Registrar with respect to the Certificates, and of all conversions and exchanges of Certificates, and all replacements of Certificates, as provided in this Ordinance. However, in the event of a nonpayment of interest on a scheduled payment date, and for thirty (30) days thereafter, a new record date for such interest payment (a "Special Record Date") will be established by the Paying Agent/Registrar, if and when funds for the payment of such interest have been received from the Issuer. Notice of the past due interest shall be sent at least five (5) business days prior to the Special Record Date by United States mail, first-class postage prepaid, to the address of each Registered Owner appearing on the Registration Books at the close of business on the last business day next preceding the date of mailing of such notice.

(c) In General. The Certificates (i) shall be issued in fully registered form, without interest coupons, with the principal of and interest on such Certificates to be payable only to the Registered Owners thereof, (ii) may or shall be redeemed prior to their scheduled maturities (notice of which shall be given to the Paying Agent/Registrar by the Issuer at least 45 days prior to any such redemption date), (iii) may be converted and exchanged for other Certificates, (iv) may be transferred and assigned, (v) shall have the characteristics, (vi) shall be signed, sealed, executed and authenticated, (vii) the principal of and interest on the Certificates shall be payable, and (viii) shall be administered and the Paying Agent/Registrar and the

Issuer shall have certain duties and responsibilities with respect to the Certificates, all as provided, and in the manner and to the effect as required or indicated, in the FORM OF CERTIFICATE set forth in this Ordinance (as modified in the Pricing Certificate). The Initial Certificate is not required to be, and shall not be, authenticated by the Paying Agent/Registrar, but on each substitute Certificate issued in conversion of and exchange for any Certificate or Certificates issued under this Ordinance the Paying Agent/Registrar shall execute the Paying Agent/Registrar's Authentication Certificate, in the form set forth in the FORM OF CERTIFICATE.

(d) Paying Agent/Registrar for the Certificates. The Issuer covenants with the Registered Owners of the Certificates that at all times while the Certificates are outstanding the Issuer will provide a competent and legally qualified bank, trust company, financial institution, or other entity to act as and perform the services of Paying Agent/Registrar for the Certificates under this Ordinance, and that the Paying Agent/Registrar will be a single entity. The Issuer reserves the right to, and may, at its option, change the Paying Agent/Registrar upon not less than 60 days written notice to the Paying Agent/Registrar, to be effective not later than 60 days prior to the next principal or interest payment date after such notice. In the event that the entity at any time acting as Paying Agent/Registrar (or its successor by merger, acquisition, or other method) should resign or otherwise cease to act as such, the Issuer covenants that promptly it will appoint a competent and legally qualified bank, trust company, financial institution, or other agency to act as Paying Agent/Registrar under this Ordinance. Upon any change in the Paying Agent/Registrar, the previous Paying Agent/Registrar promptly shall transfer and deliver the Registration Books (or a copy thereof), along with all other pertinent books and records relating to the Certificates, to the new Paying Agent/Registrar designated and appointed by the Issuer. Upon any change in the Paying Agent/Registrar, the Issuer promptly will cause a written notice thereof to be sent by the new Paying Agent/Registrar to each Registered Owner of the Certificates, by United States mail, first-class postage prepaid, which notice also shall give the address of the new Paying Agent/Registrar. By accepting the position and performing as such, each Paying Agent/Registrar shall be deemed to have agreed to the provisions of this Ordinance, and a certified copy of this Ordinance shall be delivered to each Paying Agent/Registrar.

(e) Authentication. Except as provided below, no Certificate shall be valid or obligatory for any purpose or be entitled to any security or benefit of this Ordinance unless and until there appears thereon the Paying Agent/Registrar's Authentication Certificate substantially in the form provided in this Ordinance, duly authenticated by manual execution of the Paying Agent/Registrar. It shall not be required that the same authorized representative of the Paying Agent/Registrar sign the Paying Agent/Registrar's Authentication Certificate on all of the Certificates. In lieu of the executed Paying Agent/Registrar's Authentication Certificate described above, the Initial Certificate delivered on the closing date shall have attached thereto the Comptroller's Registration Certificate substantially in the form provided in this Ordinance, manually executed by the Comptroller or by her duly authorized agent, which certificate shall be evidence that the Initial Certificate has been duly approved by the Attorney General and that it is a valid and binding obligation of the Issuer, and has been registered by the Comptroller.

(f) Book-Entry-Only System. The Certificates issued in exchange for the Initial Certificate shall be initially issued in the form of a separate single fully registered Certificate for each of the maturities thereof. Upon initial issuance, the ownership of each such Certificate shall be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"), and except as provided in subsection (g) hereof, all of the outstanding Certificates shall be registered in the name of Cede & Co., as nominee of DTC.

With respect to Certificates registered in the name of Cede & Co., as nominee of DTC, the Issuer and the Paying Agent/Registrar shall have no responsibility or obligation to any securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations on whose behalf DTC was created ("DTC Participant") to hold securities to facilitate the clearance and settlement of securities

transactions among DTC Participants or to any person on behalf of whom such a DTC Participant holds an interest in the Certificates. Without limiting the immediately preceding sentence, the Issuer and the Paying Agent/Registrar shall have no responsibility or obligation with respect to (i) the accuracy of the records of DTC, Cede & Co. or any DTC Participant with respect to any ownership interest in the Certificates, (ii) the delivery to any DTC Participant or any other person, other than a Registered Owner of Certificates, as shown on the Registration Books, of any notice with respect to the Certificates, or (iii) the payment to any DTC Participant or any other person, other than a Registered Owner of Certificates, as shown in the Registration Books of any amount with respect to principal of or interest on the Certificates. Notwithstanding any other provision of this Ordinance to the contrary, the Issuer and the Paying Agent/Registrar shall be entitled to treat and consider the person in whose name each Certificate is registered in the Registration Books as the absolute owner of such Certificate for the purpose of payment of principal and interest with respect to such Certificate, for the purpose of registering transfers with respect to such Certificate, and for all other purposes whatsoever. The Paying Agent/Registrar shall pay all principal of and interest on the Certificates only to or upon the order of the Registered Owners, as shown in the Registration Books as provided in this Ordinance, or their respective attorneys duly authorized in writing, and all such payments shall be valid and effective to fully satisfy and discharge the Issuer's obligations with respect to payment of principal of and interest on the Certificates to the extent of the sum or sums so paid. No person other than a Registered Owner, as shown in the Registration Books, shall receive a Certificate evidencing the obligation of the Issuer to make payments of principal and interest pursuant to this Ordinance. Upon delivery by DTC to the Paying Agent/Registrar of written notice to the effect that DTC has determined to substitute a new nominee in place of Cede & Co., and subject to the provisions in this Ordinance with respect to interest checks being mailed to the Registered Owner at the close of business on the Record Date, the words "Cede & Co." in this Ordinance shall refer to such new nominee of DTC.

The previous execution and delivery of the Blanket Issuer Letter of Representations with respect to obligations of the Issuer is hereby ratified and confirmed; and the provisions thereof shall be fully applicable to the Certificates.

(g) Successor Securities Depository; Transfers Outside Book-Entry-Only System. In the event that the Issuer determines that DTC is incapable of discharging its responsibilities described herein and in the Blanket Issuer Letter of Representations to DTC or that it is in the best interest of the beneficial owners of the Certificates that they be able to obtain certificated Certificates, the Issuer shall (i) appoint a successor securities depository, qualified to act as such under Section 17A of the Securities and Exchange Act of 1934, as amended, notify DTC and DTC Participants of the appointment of such successor securities depository and transfer one or more separate Certificates to such successor securities depository or (ii) notify DTC and DTC Participants of the availability through DTC of Certificates and transfer one or more separate certificated Certificates to DTC Participants having Certificates credited to their DTC accounts. In such event, the Certificates shall no longer be restricted to being registered in the Registration Books in the name of Cede & Co., as nominee of DTC, but may be registered in the name of the successor securities depository, or its nominee, or in whatever name or names Registered Owners transferring or exchanging Certificates shall designate, in accordance with the provisions of this Ordinance.

(h) Payments to Cede & Co. Notwithstanding any other provision of this Ordinance to the contrary, so long as any Certificate is registered in the name of Cede & Co., as nominee of DTC, all payments with respect to principal of and interest on such Certificate and all notices with respect to such Certificate shall be made and given, respectively, in the manner provided in the Blanket Issuer Letter of Representations to DTC.

(i) Cancellation of Initial Certificate. On the closing date, the Initial Certificate, representing the entire principal amount of the Certificates, payable in stated installments to the Purchaser designated in



Section 10 or its designee, executed by manual or facsimile signature of the Mayor and City Secretary of the Issuer, approved by the Attorney General, and registered and manually signed by the Comptroller, will be delivered to such Purchaser or its designee. Upon payment for the Initial Certificate, the Paying Agent/Registrar shall cancel the Initial Certificate and deliver to DTC on behalf of such Purchaser one registered definitive Certificate for each year of maturity of the Certificates, in the aggregate principal amount of all of the Certificates for such maturity. To the extent that the Paying Agent/Registrar is eligible to participate in DTC's FAST System, pursuant to an agreement between the Paying Agent/Registrar and DTC, the Paying Agent/Registrar shall hold the definitive Certificates in safekeeping for DTC.

(j) Conditional Notice of Redemption. With respect to any optional redemption of the Certificates, unless the prerequisites to such redemption required by this Ordinance have been met and moneys sufficient to pay the principal of and premium, if any, and interest on the Certificates to be redeemed shall have been received by the Paying Agent/Registrar prior to the giving of such notice of redemption, such notice shall state that said redemption may, at the option of the Issuer, be conditional upon the satisfaction of such prerequisites and receipt of such moneys by the Paying Agent/Registrar on or prior to the date fixed for such redemption, or upon any prerequisite set forth in such notice of redemption. If a conditional notice of redemption is given and such prerequisites to the redemption and sufficient moneys are not received, such notice shall be of no force and effect, the Issuer shall not redeem such Certificates and the Paying Agent/Registrar shall give notice, in the manner in which the notice of redemption was given, to the effect that the Certificates have not been redeemed.

SECTION 4. FORM OF CERTIFICATES. The form of the Certificates, including the form of Paying Agent/Registrar's Authentication Certificate, the form of Assignment and the form of Comptroller's Registration Certificate to be attached to the Certificates initially issued and delivered pursuant to this Ordinance, shall be, respectively, substantially as follows, with such appropriate variations, omissions or insertions as are permitted or required by this Ordinance, and with the Form of Certificate to be modified pursuant to, and completed with information set forth in, the Pricing Certificate.

(a) [Form of Certificate]

NO. R-	UNITED STATES OF AMERICA STATE OF TEXAS CITY OF DENTON CERTIFICATE OF OBLIGATION SERIES 2023	PRINCIPAL AMOUNT \$_____
--------	--	--------------------------------

Interest Rate	Dated Date	Maturity Date	CUSIP No.
	_____, 2023	February 15, 20__	

REGISTERED OWNER:

PRINCIPAL AMOUNT: \_\_\_\_\_ DOLLARS

ON THE MATURITY DATE specified above, the City of Denton, in Denton County, Texas (the "Issuer"), being a political subdivision and municipal corporation of the State of Texas, hereby promises to pay to the Registered Owner specified above, or registered assigns (hereinafter called the "Registered Owner"), on the Maturity Date specified above, the Principal Amount specified above. The Issuer promises to pay interest on the unpaid principal amount hereof (calculated on the basis of a 360-day year of

twelve 30-day months) from the Delivery Date at the Interest Rate per annum specified above. Interest is payable on \_\_\_\_\_, 20\_\_ and semiannually on each \_\_\_\_\_ and \_\_\_\_\_ thereafter to the Maturity Date specified above, or the date of redemption prior to maturity; except, if this Certificate is required to be authenticated and the date of its authentication is later than the first Record Date (hereinafter defined), such Principal Amount shall bear interest from the interest payment date next preceding the date of authentication, unless such date of authentication is after any Record Date but on or before the next following interest payment date, in which case such principal amount shall bear interest from such next following interest payment date; provided, however, that if on the date of authentication hereof the interest on the Certificate or Certificates, if any, for which this Certificate is being exchanged is due but has not been paid, then this Certificate shall bear interest from the date to which such interest has been paid in full.

THE PRINCIPAL OF AND INTEREST ON this Certificate are payable in lawful money of the United States of America, without exchange or collection charges. The principal of this Certificate shall be paid to the Registered Owner hereof upon presentation and surrender of this Certificate at maturity, or upon the date fixed for its redemption prior to maturity, at the principal corporate trust office of BOKF, NA, Dallas, Texas, which is the "Paying Agent/Registrar" for this Certificate. The payment of interest on this Certificate shall be made by the Paying Agent/Registrar to the Registered Owner hereof on each interest payment date by check or draft, dated as of such interest payment date, drawn by the Paying Agent/Registrar on, and payable solely from, funds of the Issuer required by the ordinance authorizing the issuance of this Certificate (the "Certificate Ordinance") to be on deposit with the Paying Agent/Registrar for such purpose as hereinafter provided; and such check or draft shall be sent by the Paying Agent/Registrar by United States mail, first-class postage prepaid, on each such interest payment date, to the Registered Owner hereof, at its address as it appeared on the last business day of the month preceding each such date (the "Record Date") on the Registration Books kept by the Paying Agent/Registrar, as hereinafter described. In addition, interest may be paid by such other method, acceptable to the Paying Agent/Registrar, requested by, and at the risk and expense of, the Registered Owner. In the event of a non-payment of interest on a scheduled payment date, and for 30 days thereafter, a new record date for such interest payment (a "Special Record Date") will be established by the Paying Agent/Registrar, if and when funds for the payment of such interest have been received from the Issuer. Notice of the Special Record Date and of the scheduled payment date of the past due interest (which shall be 15 days after the Special Record Date) shall be sent at least five business days prior to the Special Record Date by United States mail, first-class postage prepaid, to the address of each Registered Owner of a Certificate appearing on the Registration Books at the close of business on the last business day next preceding the date of mailing of such notice.

ANY ACCRUED INTEREST due at maturity or upon the redemption of this Certificate prior to maturity as provided herein shall be paid to the Registered Owner upon presentation and surrender of this Certificate for redemption and payment at the principal corporate trust office of the Paying Agent/Registrar. The Issuer covenants with the Registered Owner of this Certificate that on or before each principal payment date, interest payment date, and accrued interest payment date for this Certificate it will make available to the Paying Agent/Registrar, from the "Interest and Sinking Fund" created by the Certificate Ordinance, the amounts required to provide for the payment, in immediately available funds, of all principal of and interest on the Certificates, when due.

IF THE DATE for the payment of the principal of or interest on this Certificate shall be a Saturday, Sunday, a legal holiday or a day on which banking institutions in the city where the principal corporate trust office of the Paying Agent/Registrar is located are authorized by law or executive order to close, then the date for such payment shall be the next succeeding day that is not such a Saturday, Sunday, legal holiday or day on which banking institutions are authorized to close; and payment on such date shall have the same force and effect as if made on the original date payment was due.

THIS CERTIFICATE is one of a series of Certificates dated \_\_\_\_\_, 2023, authorized in accordance with the Constitution and laws of the State of Texas in the principal amount of \$158,500,000 for the purpose of paying all or a portion of the Issuer's contractual obligations incurred pursuant to contracts for the purchase, construction and acquisition of certain real and personal property, to wit: \$108,300,000 for the purpose of: (a) acquisition of equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the Issuer's waterworks and wastewater system; and (b) acquisition of equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the Issuer's electric light and power system; and also for the purpose of paying all or a portion of the Issuer's contractual obligations for professional services, including engineers, architects, attorneys, map makers, auditors, and financial advisors, in connection with said projects and said Certificates; and \$50,200,000 for the purpose of: (a) acquiring, constructing, installing and equipping fire stations; (b) acquisition of vehicles and equipment for the fire, police, building inspections, community improvement services, animal services, streets and traffic control, facilities management, technology services, fleet management, warehouse management, and parks and recreation departments; (c) renovations to, and equipping of, existing municipal buildings, including the acquisition and installation of replacement heating, venting and air conditioning equipment, roofing and flooring; (d) acquiring, constructing, installing and equipping police stations; (e) acquiring, constructing and installing building security systems, including security system technology equipment and software, for municipal buildings; (f) constructing, reconstructing, renovating, installing and equipping municipal parks; (g) renovations to, expansion of, and equipping existing municipal vehicle maintenance facility; (h) acquisition and installation of technology equipment, including radio equipment, computer equipment and software, for various municipal departments; (i) constructing and improving streets, including traffic signalization, landscaping, drainage, utility line relocations and the acquisition of land and rights-of-way therefor; (j) constructing, reconstructing and renovating runways and taxiways at the municipal airport; and (k) acquisition of vehicles and equipment for, and acquiring, constructing, installing and equipping additions, extensions, renovations and improvements to, the City's solid waste disposal system; and also for the purpose of paying all or a portion of the Issuer's contractual obligations for professional services, including engineers, architects, attorneys, map makers, auditors, and financial advisors, in connection with said projects and said Certificates.

ON \_\_\_\_\_, 20\_\_, or on any date thereafter, the Certificates of this series may be redeemed prior to their scheduled maturities, at the option of the Issuer, with funds derived from any available and lawful source, as a whole, or in part, and, if in part, the particular Certificates, or portions thereof, to be redeemed shall be selected and designated by the Issuer (provided that a portion of a Certificate may be redeemed only in an integral multiple of \$5,000), at a redemption price equal to the principal amount to be redeemed plus accrued interest to the date fixed for redemption.

[THE CERTIFICATES scheduled to mature on \_\_\_\_\_ in the years \_\_\_\_ and \_\_\_\_ ( the "Term Certificates") are subject to scheduled mandatory redemption by the Paying Agent/Registrar by lot, or by any other customary method that results in a random selection, at a price equal to the principal amount thereof, plus accrued interest to the redemption date, out of moneys available for such purpose in the interest and sinking fund for the Certificates, on the dates and in the respective principal amounts, set forth in the following schedule:

Term Certificate Maturity: February 15, 20__		Term Certificate Maturity: February 15, 20__	
Mandatory Redemption Date	Principal Amount	Mandatory Redemption Date	Principal Amount
February 15, 20__	\$ _____	February 15, 20__	\$ _____

February 15,20__	_____	February 15,20__	_____
February 15,20__	_____	February 15,20__	_____
February 15,20__ (maturity)	_____	February 15,20__ (maturity)	_____

The principal amount of Term Certificates of a stated maturity required to be redeemed on any mandatory redemption date pursuant to the operation of the mandatory sinking fund redemption provisions shall be reduced, at the option of the Issuer, by the principal amount of any Term Certificates of the same maturity which, at least 50 days prior to a mandatory redemption date (1) shall have been acquired by the Issuer at a price not exceeding the principal amount of such Term Certificates plus accrued interest to the date of purchase thereof, and delivered to the Paying Agent/Registrar for cancellation, (2) shall have been purchased and canceled by the Paying Agent/Registrar at the request of the Issuer at a price not exceeding the principal amount of such Term Certificates plus accrued interest to the date of purchase, or (3) shall have been redeemed pursuant to the optional redemption provisions and not theretofore credited against a mandatory redemption requirement.]

AT LEAST 30 days prior to the date fixed for any redemption of Certificates or portions thereof prior to maturity a written notice of such redemption shall be sent by the Paying Agent/Registrar by United States mail, first-class postage prepaid, to the Registered Owner of each Certificate to be redeemed at its address as it appeared on the 45th day prior to such redemption date; provided, however, that the failure of the Registered Owner to receive such notice, or any defect therein or in the sending or mailing thereof, shall not affect the validity or effectiveness of the proceedings for the redemption of any Certificate. By the date fixed for any such redemption due provision shall be made with the Paying Agent/Registrar for the payment of the required redemption price for the Certificates or portions thereof that are to be so redeemed. If such written notice of redemption is sent and if due provision for such payment is made, all as provided above, the Certificates or portions thereof that are to be so redeemed thereby automatically shall be treated as redeemed prior to their scheduled maturities, and they shall not bear interest after the date fixed for redemption, and they shall not be regarded as being outstanding except for the right of the Registered Owner to receive the redemption price from the Paying Agent/Registrar out of the funds provided for such payment. If a portion of any Certificate shall be redeemed, a substitute Certificate or Certificates having the same maturity date, bearing interest at the same rate, in any denomination or denominations in any integral multiple of \$5,000, at the written request of the Registered Owner, and in aggregate principal amount equal to the unredeemed portion thereof, will be issued to the Registered Owner upon the surrender thereof for cancellation, at the expense of the Issuer, all as provided in the Certificate Ordinance.

IF AT THE TIME OF MAILING of notice of optional redemption there shall not have either been deposited with the Paying Agent/Registrar or legally authorized escrow agent immediately available funds sufficient to redeem all the Certificates called for redemption, such notice may state that it is conditional, and is subject to the deposit of the redemption moneys with the Paying Agent/Registrar or legally authorized escrow agent at or prior to the redemption date or any prerequisite set forth in such notice of redemption. If such redemption is not effectuated, the Paying Agent/Registrar shall, within five days thereafter, give notice in the manner in which the notice of redemption was given that such moneys were not so received or such prerequisites were not met and shall rescind the redemption.

ALL CERTIFICATES OF THIS SERIES are issuable solely as fully registered certificates, without interest coupons, in the denomination of any integral multiple of \$5,000. As provided in the Certificate Ordinance, this Certificate may, at the request of the Registered Owner or the assignee or assignees hereof, be assigned, transferred, converted into and exchanged for a like aggregate principal amount of fully registered Certificates, without interest coupons, payable to the appropriate Registered Owner, assignee or assignees, as the case may be, having the same denomination or denominations in any integral multiple of \$5,000 as requested in writing by the appropriate Registered Owner, assignee or assignees, as the case

may be, upon surrender of this Certificate to the Paying Agent/Registrar for cancellation, all in accordance with the form and procedures set forth in the Certificate Ordinance. Among other requirements for such assignment and transfer, this Certificate must be presented and surrendered to the Paying Agent/Registrar, together with proper instruments of assignment, in form and with guarantee of signatures satisfactory to the Paying Agent/Registrar, evidencing assignment of this Certificate or any portion or portions hereof in any integral multiple of \$5,000 to the assignee or assignees in whose name or names this Certificate or any such portion or portions hereof is or are to be registered. The Form of Assignment printed or endorsed on this Certificate may be executed by the Registered Owner to evidence the assignment hereof, but such method is not exclusive, and other instruments of assignment satisfactory to the Paying Agent/Registrar may be used to evidence the assignment of this Certificate or any portion or portions hereof from time to time by the Registered Owner. The Paying Agent/Registrar's reasonable standard or customary fees and charges for assigning, transferring, converting and exchanging any Certificate or portion thereof will be paid by the Issuer. In any circumstance, any taxes or governmental charges required to be paid with respect thereto shall be paid by the one requesting such assignment, transfer, conversion or exchange, as a condition precedent to the exercise of such privilege. The Paying Agent/Registrar shall not be required to make any such transfer, conversion, or exchange (i) during the period commencing with the close of business on any Record Date and ending with the opening of business on the next following principal or interest payment date, or (ii) with respect to any Certificate or any portion thereof called for redemption prior to maturity, within 45 days prior to its redemption date.

IN THE EVENT any Paying Agent/Registrar for the Certificates is changed by the Issuer, resigns, or otherwise ceases to act as such, the Issuer has covenanted in the Certificate Ordinance that it promptly will appoint a competent and legally qualified substitute therefor, and cause written notice thereof to be mailed to the Registered Owners of the Certificates.

IT IS HEREBY certified, recited and covenanted that this Certificate has been duly and validly authorized, issued and delivered; that all acts, conditions and things required or proper to be performed, exist and be done precedent to or in the authorization, issuance and delivery of this Certificate have been performed, existed and been done in accordance with law; and that annual ad valorem taxes sufficient to provide for the payment of the interest on and principal of this Certificate, as such interest comes due and such principal matures, have been levied and ordered to be levied against all taxable property in said Issuer, and have been pledged for such payment, within the limit prescribed by law; and that this Certificate is additionally secured by and payable from a limited pledge (not to exceed \$1,000) of the surplus revenues derived by the Issuer from the ownership and operation of the Issuer's Utility System (consisting of the Issuer's combined waterworks system, sanitary sewer system, and electric light and power system), all as provided in the Certificate Ordinance.

THE ISSUER HAS RESERVED THE RIGHT to issue, in accordance with law, and in accordance with the Certificate Ordinance, other and additional obligations, and to enter into contracts, payable from ad valorem taxes and/or revenues of the Issuer's Utility System, on a parity with, or with respect to said revenues, superior in lien to, this Certificate.

THE ISSUER HAS RESERVED THE RIGHT to amend the Certificate Ordinance as provided therein, and under some (but not all) circumstances amendments thereto must be approved by the Registered Owners of a majority in aggregate principal amount of the outstanding Certificates.

BY BECOMING the Registered Owner of this Certificate, the Registered Owner thereby acknowledges all of the terms and provisions of the Certificate Ordinance, agrees to be bound by such terms and provisions, acknowledges that the Certificate Ordinance is duly recorded and available for inspection in the official minutes and records of the governing body of the Issuer, and agrees that the terms and

provisions of this Certificate and the Certificate Ordinance constitute a contract between each Registered Owner hereof and the Issuer.

IN WITNESS WHEREOF, the Issuer has caused this Certificate to be signed with the manual or facsimile signature of the Mayor of the Issuer (or in the Mayor's absence, of the Mayor Pro-Tem) and countersigned with the manual or facsimile signature of the City Secretary of said Issuer, and has caused the official seal of the Issuer to be duly impressed, or placed in facsimile, on this Certificate.

\_\_\_\_\_  
(signature)  
City Secretary

\_\_\_\_\_  
(signature)  
Mayor

(SEAL)

[INSERT BOND INSURANCE LEGEND, IF ANY]

(b) [Form of Paying Agent/Registrar's Authentication Certificate]

PAYING AGENT/REGISTRAR'S AUTHENTICATION CERTIFICATE

(To be executed if this Certificate is not accompanied by an executed Comptroller's Registration Certificate)

It is hereby certified that this Certificate has been issued under the provisions of the Certificate Ordinance described in the text of this Certificate; and that this Certificate has been issued in conversion or replacement of, or in exchange for, a certificate, certificates, or a portion of a certificate or certificates of a series that originally was approved by the Attorney General of the State of Texas and registered by the Comptroller of Public Accounts of the State of Texas.

Dated: \_\_\_\_\_

\_\_\_\_\_  
BOKF, NA, Dallas, Texas  
Paying Agent/Registrar

By: \_\_\_\_\_  
Authorized Representative

(c) [Form of Assignment]

ASSIGNMENT

For value received, the undersigned hereby sells, assigns and transfers unto \_\_\_\_\_.

Please insert Social Security or Taxpayer Identification Number of Transferee  
\_\_\_\_\_

(Please print or typewrite name and address, including zip code, of Transferee.)  
\_\_\_\_\_

the within Certificate and all rights thereunder, and hereby irrevocably constitutes and appoints \_\_\_\_\_, attorney, to register the transfer of the within Certificate on the books kept for registration thereof, with full power of substitution in the premises.

Dated: \_\_\_\_\_

Signature Guaranteed:

\_\_\_\_\_  
NOTICE: Signature(s) must be guaranteed by an eligible guarantor institution participating in a securities transfer association recognized signature guarantee program.

\_\_\_\_\_  
NOTICE: The signature above must correspond with the name of the Registered Owner as it appears upon the front of this Certificate in every particular, without alteration or enlargement or any change whatsoever.

(d) [Form of Comptroller's Registration Certificate]

COMPTROLLER'S REGISTRATION CERTIFICATE: REGISTER NO. \_\_\_\_\_

I hereby certify that this Certificate of Obligation has been examined, certified as to validity and approved by the Attorney General of the State of Texas, and that this Certificate of Obligation has been registered by the Comptroller of Public Accounts of the State of Texas.

Witness my signature and seal this

\_\_\_\_\_  
Comptroller of Public Accounts of the State of Texas

(COMPTROLLER'S SEAL)

(e) [Initial Certificate Insertions]

- (i) The Initial Certificate shall be in the form set forth in paragraph (a) of this Section, except that:

A. immediately under the name of the Certificate, the headings "Interest Rate" and "Maturity Date" shall both be completed with the words "As shown below" and "CUSIP No. \_\_\_\_\_" shall be deleted.

B. the first paragraph shall be deleted and the following will be inserted:

"THE CITY OF DENTON, TEXAS, in Denton County, Texas (the "Issuer"), being a political subdivision and municipal corporation of the State of Texas, hereby promises to pay to the Registered Owner specified above, or registered assigns (hereinafter called the "Registered Owner"), on February 15 in each of the years, in the principal installments and bearing interest at the per annum rates set forth in the following schedule:

<u>Years</u>	<u>Principal Installments (\$)</u>	<u>Interest Rates (%)</u>
--------------	------------------------------------	---------------------------

(Information from Pricing Certificate to be inserted)

The Issuer promises to pay interest on the unpaid principal amount hereof (calculated on the basis of a 360-day year of twelve 30-day months) from the Delivery Date at the respective Interest Rate per annum specified above. Interest is payable on \_\_\_\_\_, 20\_\_ and semiannually on each \_\_\_\_\_ and \_\_\_\_\_ thereafter to the date of payment of the principal installment specified above, or the date of redemption prior to maturity; except, that if this Certificate is required to be authenticated and the date of its authentication is later than the first Record Date (hereinafter defined), such Principal Amount shall bear interest from the interest payment date next preceding the date of authentication, unless such date of authentication is after any Record Date but on or before the next following interest payment date, in which case such principal amount shall bear interest from such next following interest payment date; provided, however, that if on the date of authentication hereof the interest on the Certificate or Certificates, if any, for which this Certificate is being exchanged is due but has not been paid, then this Certificate shall bear interest from the date to which such interest has been paid in full."

C. The Initial Certificate shall be numbered "T-1."

#### SECTION 5. INTEREST AND SINKING FUND; SURPLUS REVENUES.

(a) A special Interest and Sinking Fund (the "Interest and Sinking Fund") is hereby created solely for the benefit of the Certificates, and the Interest and Sinking Fund shall be established and maintained by the Issuer at an official depository bank of the Issuer. The Interest and Sinking Fund shall be kept separate and apart from all other funds and accounts of the Issuer, and shall be used only for paying the interest on and principal of the Certificates. All ad valorem taxes levied and collected for and on account of the Certificates, together with any accrued interest received upon sale of the Certificates, shall be deposited, as collected, to the credit of the Interest and Sinking Fund. During each year while any of the Certificates or interest thereon are outstanding and unpaid, the governing body of the Issuer shall compute and ascertain a rate and amount of ad valorem tax which will be sufficient to raise and produce the money required to pay the interest on the Certificates as such interest becomes due, and to provide and maintain a sinking fund adequate to pay the principal of its Certificates as such principal matures or is scheduled for redemption (but never less than 2% of the original principal amount of the Certificates as a sinking fund each year). Said tax shall be based on the latest approval tax rolls of the Issuer, with full allowance being made for tax delinquencies and the cost of tax collection. Said rate and amount of ad valorem tax is hereby levied, and is hereby ordered to be levied, against all taxable property in the Issuer for each year while any of the Certificates or interest thereon are outstanding and unpaid; and said tax shall be assessed and collected each such year and deposited to the credit of the aforesaid Interest and Sinking Fund. Said ad valorem taxes sufficient to



provide for the payment of the interest on and principal of the Certificates, as such interest comes due and such principal matures or is scheduled for redemption, are hereby pledged for such payment, within the limit prescribed by law.

(b) The Certificates are additionally secured by revenues derived by the Issuer from the ownership and operation of the Issuer's Utility System (consisting of its combined waterworks system, sanitary sewer system, and electric light and power system) that remain after the payment of all maintenance and operation expenses thereof, and all debt service, reserve and other requirements in connection with all of the Issuer's revenue obligations (now or hereafter outstanding) or contractual obligations (now or hereafter existing) which are payable from all or any part of the net revenues of the Issuer's Utility System, constituting "Surplus Revenues", not to exceed \$1,000. The Issuer shall deposit such Surplus Revenues to the credit of the Interest and Sinking Fund created pursuant to this Section, to the extent necessary to pay the principal and interest on the Certificates. Notwithstanding the requirements of this Section, if Surplus Revenues or other lawfully available moneys of the Issuer are actually on deposit or budgeted and appropriated to be deposited in the Interest and Sinking Fund in advance of the time when ad valorem taxes are scheduled to be levied for any year, then the amount of taxes that otherwise would have been required to be levied pursuant to subsection (a) of this Section may be reduced to the extent and by the amount of the Surplus Revenues or other lawfully available funds then on deposit or budgeted and appropriated to be deposited in the Interest and Sinking Fund. If Surplus Revenues are budgeted and appropriated for deposit into the Interest and Sinking Fund, the Issuer:

(i) shall transfer and deposit in the Interest and Sinking Fund each month an amount of not less than 1/12th of the annual debt service on the Certificates to be paid from Surplus Revenues until the amount on deposit in the Interest and Sinking Fund equals the amount required for annual debt service on the Certificates;

(ii) shall establish, adopt and maintain an annual budget that provides for either the monthly deposit of sufficient Surplus Revenues and/or tax revenues, the monthly deposit of any other legally available funds on hand at the time of the adoption of the annual budget, or a combination thereof, into the Interest and Sinking Fund for the repayment of the Certificates; and

(iii) shall at all times maintain and collect sufficient Utility System rates and charges in conjunction with any other legally available funds that, after payment of the costs of operating and maintaining the Utility System, produce revenues in an amount not less than the debt service requirements of all outstanding Utility System revenue bonds of the Issuer and other obligations of the Issuer which are secured in whole or in part by a pledge of revenues of the Utility System and for which the Issuer is budgeting the repayment of such obligations from the revenues of the Utility System, or the Issuer shall provide documentation which evidences the levy of an ad valorem tax rate dedicated to the Interest and Sinking Fund, in conjunction with any other legally available funds except Utility System rates and charges, sufficient for the repayment of Utility System debt service requirements.

(c) Chapter 1208, Texas Government Code, applies to the issuance of the Certificates and the pledge of the taxes and Surplus Revenues granted by the Issuer under this Section and Section 9, respectively, and is therefore valid, effective, and perfected. Should Texas law be amended at any time while the Certificates are outstanding and unpaid, the result of such amendment being that the pledge of the taxes and Surplus Revenues granted by the Issuer under this Section is to be subject to the filing requirements of Chapter 9, Texas Business & Commerce Code, in order to preserve to the Registered Owners of the Certificates a security interest in said pledge, the Issuer agrees to take such measures as it determines are reasonable and necessary under Texas law to comply with the applicable provisions of Chapter 9, Texas Business & Commerce Code and enable a filing of a security interest in said pledge to occur.

## SECTION 6. DEFEASANCE OF CERTIFICATES.

(a) Any Certificate and the interest thereon shall be deemed to be paid, retired and no longer outstanding (a "Defeased Certificate") within the meaning of this Ordinance, except to the extent provided in subsection (d) of this Section, when payment of the principal of such Certificate, plus interest thereon to the due date (whether such due date be by reason of maturity or otherwise) either (i) shall have been made or caused to be made in accordance with the terms thereof, or (ii) shall have been provided for on or before such due date by irrevocably depositing with or making available to the Paying Agent/Registrar in accordance with an escrow agreement or other instrument (the "Future Escrow Agreement") for such payment (1) lawful money of the United States of America sufficient to make such payment or (2) Government Obligations that mature as to principal and interest in such amounts and at such times as will insure the availability, without reinvestment, of sufficient money to provide for such payment, and when proper arrangements have been made by the Issuer with the Paying Agent/Registrar for the payment of its services until all Defeased Certificates shall have become due and payable. At such time as a Certificate shall be deemed to be a Defeased Certificate hereunder, as aforesaid, such Certificate and the interest thereon shall no longer be secured by, payable from, or entitled to the benefits of, the ad valorem taxes herein levied and pledged as provided in this Ordinance, and such principal and interest shall be payable solely from such money or Government Obligations. Notwithstanding any other provision of this Ordinance to the contrary, it is hereby provided that any determination not to redeem Defeased Certificates that is made in conjunction with the payment arrangements specified in Subsection (a)(i) or (ii) of this Section shall not be irrevocable, provided that: (1) in the proceedings providing for such payment arrangements, the Issuer expressly reserves the right to call the Defeased Certificates for redemption; (2) gives notice of the reservation of that right to the Registered Owners of the Defeased Certificates immediately following the making of the payment arrangements; and (3) directs that notice of the reservation be included in any redemption notices that it authorizes.

(b) Any moneys so deposited with the Paying Agent/Registrar may at the written direction of the Issuer be invested in Government Obligations, maturing in the amounts and times as hereinbefore set forth, and all income from such Government Obligations received by the Paying Agent/Registrar that is not required for the payment of the Certificates and interest thereon, with respect to which such money has been so deposited, shall be turned over to the Issuer, or deposited as directed in writing by the Issuer. Any Future Escrow Agreement pursuant to which the money and/or Government Obligations are held for the payment of Defeased Certificates may contain provisions permitting the investment or reinvestment of such moneys in Government Obligations or the substitution of other Government Obligations upon the satisfaction of the requirements specified in Subsection (a)(i) or (ii) of this Section. All income from such Government Obligations received by the Paying Agent/Registrar which is not required for the payment of the Defeased Certificates, with respect to which such money has been so deposited, shall be remitted to the Issuer or deposited as directed in writing by the Issuer.

(c) Unless modified in the Pricing Certificate, the term "Government Obligations" means any securities and obligations now or hereafter authorized by state law that are eligible to discharge obligations such as the Certificates, including (i) direct, noncallable obligations of the United States of America, including obligations that are unconditionally guaranteed by the United States of America., (ii) noncallable obligations of an agency or instrumentality of the United States of America, including obligations that are unconditionally guaranteed or insured by the agency or instrumentality and that, on the date the governing body of the Issuer adopts or approves the proceedings authorizing the financial arrangements, are rated as to investment quality by a nationally recognized investment rating firm not less than AAA or its equivalent, and (iii) noncallable obligations of a state or an agency or a county, municipality, or other political subdivision of a state that have been refunded and that, on the date the governing body of the Issuer adopts or approves the proceedings authorizing the financial arrangements, are rated as to investment quality by a nationally recognized investment rating firm not less than AAA or its equivalent.

(d) Until all Defeased Certificates shall have become due and payable, the Paying Agent/Registrar shall perform the services of Paying Agent/Registrar for such Defeased Certificates the same as if they had not been defeased, and the Issuer shall make proper arrangements to provide and pay for such services as required by this Ordinance.

(e) In the event that the Issuer elects to defease less than all of the principal amount of Certificates of a maturity, the Paying Agent/Registrar shall select, or cause to be selected, such amount of Certificates by such random method as it deems fair and appropriate.

#### SECTION 7. DAMAGED, MUTILATED, LOST, STOLEN, OR DESTROYED CERTIFICATES.

(a) Replacement Certificates. In the event any outstanding Certificate is damaged, mutilated, lost, stolen or destroyed, the Paying Agent/Registrar shall cause to be printed, executed and delivered, a new Certificate of the same principal amount, maturity and interest rate, as the damaged, mutilated, lost, stolen or destroyed Certificate, in replacement for such Certificate in the manner hereinafter provided.

(b) Application for Replacement Certificates. Application for replacement of damaged, mutilated, lost, stolen or destroyed Certificates shall be made by the Registered Owner thereof to the Paying Agent/Registrar. In every case of loss, theft or destruction of a Certificate, the Registered Owner applying for a replacement Certificate shall furnish to the Issuer and to the Paying Agent/Registrar such security or indemnity as may be required by them to save each of them harmless from any loss or damage with respect thereto. Also, in every case of loss, theft or destruction of a Certificate, the Registered Owner shall furnish to the Issuer and to the Paying Agent/Registrar evidence to their satisfaction of the loss, theft or destruction of such Certificate, as the case may be. In every case of damage or mutilation of a Certificate, the Registered Owner shall surrender to the Paying Agent/Registrar for cancellation the Certificate so damaged or mutilated.

(c) No Default Occurred. Notwithstanding the foregoing provisions of this Ordinance, in the event any such Certificate shall have matured, and no default has occurred that is then continuing in the payment of the principal of, redemption premium, if any, or interest on the Certificate, the Issuer may authorize the payment of the same (without surrender thereof except in the case of a damaged or mutilated Certificate) instead of issuing a replacement Certificate, provided security or indemnity is furnished as above provided in this Section.

(d) Charge for Issuing Replacement Certificates. Prior to the issuance of any replacement Certificate, the Paying Agent/Registrar shall charge the Registered Owner of such Certificate with all legal, printing, and other expenses in connection therewith. Every replacement Certificate issued pursuant to the provisions of this Section by virtue of the fact that any Certificate is lost, stolen or destroyed shall constitute a contractual obligation of the Issuer whether or not the lost, stolen or destroyed Certificate shall be found at any time, or be enforceable by anyone, and shall be entitled to all the benefits of this Ordinance equally and proportionately with any and all other Certificates duly issued under this Ordinance.

(e) Authority for Issuing Replacement Certificates. In accordance with Sec. 1206.022, Government Code, this Section 7 of this Ordinance shall constitute authority for the issuance of any such replacement Certificate without necessity of further action by the governing body of the Issuer or any other body or person, and the duty of the replacement of such Certificates is hereby authorized and imposed upon the Paying Agent/Registrar, and the Paying Agent/Registrar shall authenticate and deliver such Certificates in the form and manner and with the effect, as provided in Section 3(a) of this Ordinance for Certificates issued in conversion and exchange for other Certificates.

SECTION 8. CUSTODY, APPROVAL, AND REGISTRATION OF CERTIFICATES; BOND COUNSEL'S OPINION; CUSIP NUMBERS AND CONTINGENT INSURANCE PROVISION, IF OBTAINED; ENGAGEMENT OF BOND COUNSEL.

(a) The Mayor of the Issuer is hereby authorized to have control of the Initial Certificate and all necessary records and proceedings pertaining to the Initial Certificate pending its delivery and its investigation, examination, and approval by the Attorney General, and its registration by the Comptroller. Upon registration of the Initial Certificate said Comptroller (or a deputy designated in writing to act for said Comptroller) shall manually sign the Comptroller's Registration Certificate attached to such Certificate, and the seal of said Comptroller shall be impressed, or placed in facsimile, on such Certificate. The approving legal opinion of the Issuer's Bond Counsel and the assigned CUSIP numbers may, at the option of the Issuer, be printed on the Certificates issued and delivered under this Ordinance, but neither shall have any legal effect, and shall be solely for the convenience and information of the Registered Owners of the Certificates. In addition, if bond insurance is obtained, the Certificates may bear an appropriate legend as provided by the insurer.

(b) The obligation of the Purchaser to accept delivery of the Certificates is subject to the Purchaser being furnished with the final, approving opinion of McCall, Parkhurst & Horton L.L.P., bond counsel to the Issuer, which opinion shall be dated as of and delivered on the date of initial delivery of the Certificates to the Purchaser. The engagement of such firm as bond counsel to the Issuer in connection with the issuance, sale and delivery of the Certificates is hereby approved and confirmed. The execution and delivery of an engagement letter between the Issuer and such firm, with respect to such services as bond counsel, is hereby authorized in such form as may be approved by the Mayor, and the Mayor is hereby authorized to execute such engagement letter.

SECTION 9. COVENANTS REGARDING TAX EXEMPTION OF INTEREST ON THE CERTIFICATES.

(a) Covenants. The Issuer covenants to take any action necessary to assure, or refrain from any action that would adversely affect, the treatment of the Certificates as obligations described in section 103 of the Internal Revenue Code of 1986, as amended (the "Code"), the interest on which is not includable in the "gross income" of the holder for purposes of federal income taxation. In furtherance thereof, the Issuer covenants as follows:

(1) to take any action to assure that no more than 10 percent of the proceeds of the Certificates or the projects financed therewith (less amounts deposited to a reserve fund, if any) are used for any "private business use," as defined in section 141(b)(6) of the Code or, if more than 10 percent of the proceeds or the projects financed therewith are so used, such amounts, whether or not received by the Issuer, with respect to such private business use, do not, under the terms of this Ordinance or any underlying arrangement, directly or indirectly, secure or provide for the payment of more than 10 percent of the debt service on the Certificates, in contravention of section 141(b)(2) of the Code;

(2) to take any action to assure that in the event that the "private business use" described in subsection (1) hereof exceeds 5 percent of the proceeds of the Certificates or the projects financed therewith (less amounts deposited into a reserve fund, if any) then the amount in excess of 5 percent is used for a "private business use" that is "related" and not "disproportionate," within the meaning of section 141(b)(3) of the Code, to the governmental use;

(3) to take any action to assure that no amount that is greater than the lesser of \$5,000,000, or 5 percent of the proceeds of the Certificates (less amounts deposited into a reserve fund, if any) is

directly or indirectly used to finance loans to persons, other than state or local governmental units, in contravention of section 141(c) of the Code;

(4) to refrain from taking any action that would otherwise result in the Certificates being treated as "private activity bonds" within the meaning of section 141(b) of the Code;

(5) to refrain from taking any action that would result in the Certificates being "federally guaranteed" within the meaning of section 149(b) of the Code;

(6) to refrain from using any portion of the proceeds of the Certificates, directly or indirectly, to acquire or to replace funds that were used, directly or indirectly, to acquire investment property (as defined in section 148(b)(2) of the Code) that produces a materially higher yield over the term of the Certificates, other than investment property acquired with B

(A) proceeds of the Certificates invested for a reasonable temporary period of 3 years or less or, in the case of a refunding bond, for a period of 90 days or less until such proceeds are needed for the purpose for which the bonds are issued,

(B) amounts invested in a bona fide debt service fund, within the meaning of section 1.148-1(b) of the rules and regulations of the United States Department of the Treasury ("Treasury Regulations"), and

(C) amounts deposited in any reasonably required reserve or replacement fund to the extent such amounts do not exceed 10 percent of the proceeds of the Certificates;

(7) to otherwise restrict the use of the proceeds of the Certificates or amounts treated as proceeds of the Certificates, as may be necessary, so that the Certificates do not otherwise contravene the requirements of section 148 of the Code (relating to arbitrage);

(8) to refrain from using the proceeds of the Certificates or proceeds of any prior bonds to pay debt service on another issue more than 90 days after the date of issue of the Certificates in contravention of the requirements of section 149(d) of the Code (relating to advance refundings); and

(9) to pay to the United States of America at least once during each five-year period (beginning on the date of delivery of the Certificates) an amount that is at least equal to 90 percent of the "Excess Earnings," within the meaning of section 148(f) of the Code and to pay to the United States of America, not later than 60 days after the Certificates have been paid in full, 100 percent of the amount then required to be paid as a result of Excess Earnings under section 148(f) of the Code.

(b) Rebate Fund. In order to facilitate compliance with the above covenant (a)(9), a "Rebate Fund" is hereby established by the Issuer for the sole benefit of the United States of America, and such Rebate Fund shall not be subject to the claim of any other person, including without limitation the Certificateholders. The Rebate Fund is established for the additional purpose of compliance with section 148 of the Code.

(c) Use of Proceeds. The Issuer understands that the term "proceeds" includes "disposition proceeds" as defined in the Treasury Regulations and, in the case of refunding bonds, transferred proceeds (if any) and proceeds of the refunded bonds expended prior to the date of issuance of the Certificates. It is the understanding of the Issuer that the covenants contained herein are intended to assure compliance with the Code and any regulations or rulings promulgated by the United States Department of the Treasury pursuant thereto. In the event that regulations or rulings are hereafter promulgated that modify or expand provisions

of the Code, as applicable to the Certificates, the Issuer will not be required to comply with any covenant contained herein to the extent that such failure to comply, in the opinion of nationally recognized bond counsel, will not adversely affect the exemption from federal income taxation of interest on the Certificates under section 103 of the Code. In the event that regulations or rulings are hereafter promulgated that impose additional requirements applicable to the Certificates, the Issuer agrees to comply with the additional requirements to the extent necessary, in the opinion of nationally recognized bond counsel, to preserve the exemption from federal income taxation of interest on the Certificates under section 103 of the Code. In furtherance of such intention, the Issuer hereby authorizes and directs the Mayor or the Pricing Officer to execute any documents, certificates or reports required by the Code and to make such elections, on behalf of the Issuer, that may be permitted by the Code as are consistent with the purpose for the issuance of the Certificates.

(d) Allocation of, and Limitation on, Expenditures for the Projects. The Issuer covenants to account for the expenditure of sale proceeds and investment earnings to be used for the construction and acquisition of the Projects on its books and records in accordance with the requirements of the Code. The Issuer recognizes that in order for the proceeds to be considered used for the reimbursement of costs, the proceeds must be allocated to expenditures within 18 months of the later of the date that (1) the expenditure is made, or (2) the Projects are completed; but in no event later than three years after the date on which the original expenditure is paid. The foregoing notwithstanding, the Issuer recognizes that in order for proceeds to be expended under the Code, the sale proceeds or investment earnings must be expended no more than 60 days after the earlier of (1) the fifth anniversary of the delivery of the Certificates, or (2) the date the Certificates are retired. The Issuer agrees to obtain the advice of nationally-recognized bond counsel if such expenditure fails to comply with the foregoing to assure that such expenditure will not adversely affect the tax-exempt status of the Certificates. For purposes hereof, the issuer shall not be obligated to comply with this covenant if it obtains an opinion that such failure to comply will not adversely affect the excludability for federal income tax purposes from gross income of the interest.

(e) Disposition of Projects. The Issuer covenants that the property constituting the Projects will not be sold or otherwise disposed in a transaction resulting in the receipt by the Issuer of cash or other compensation, unless any action taken in connection with such disposition will not adversely affect the tax-exempt status of the Certificates. For purposes of the foregoing, the Issuer may rely on an opinion of nationally-recognized bond counsel that the action taken in connection with such sale or other disposition will not adversely affect the tax-exempt status of the Certificates. For purposes of the foregoing, the portion of the property comprising personal property and disposed in the ordinary course shall not be treated as a transaction resulting in the receipt of cash or other compensation. For purposes hereof, the Issuer shall not be obligated to comply with this covenant if it obtains an opinion that such failure to comply will not adversely affect the excludability for federal income tax purposes from gross income of the interest.

(f) Reimbursement. This Ordinance is intended to satisfy the official intent requirements set forth in section 1.150-2 of the Treasury Regulations.

#### SECTION 10. SALE OF CERTIFICATES AND APPROVAL OF OFFICIAL STATEMENT; FURTHER PROCEDURES.

(a) The Certificates shall be sold and delivered subject to the provisions of Section 1 and Section 2 hereof through a negotiated sale, competitive sale or private placement and pursuant to the terms and provisions of a purchase contract or a notice of sale and official bid form (in either case, the "Purchase Agreement"), the terms and provisions of which are to be determined by the Pricing Officer in accordance with Section 2 hereof, and in which the purchaser or purchasers of the Certificates (the "Purchaser") shall be designated. The Pricing Officer is hereby authorized to execute and deliver the Purchase Agreement for

an on behalf of the Issuer. The Certificates shall initially be registered in the name of the Purchaser or its designee.

(b) The Issuer hereby approves the form and content of the draft preliminary official statement relating to the Certificates and any addenda, supplement or amendment thereto, and approves the distribution of such preliminary official statement in the reoffering of the Certificates by the Purchaser in final form, with such changes therein or additions thereto as the Pricing Officer may deem advisable. The Pricing Officer is hereby authorized, in the name and on behalf of the Issuer, to approve, distribute, and deliver a final preliminary official statement and a final official statement relating to the Certificates to be used by the Purchaser in the marketing of the Certificates.

(c) The Pricing Officer is authorized, in connection with effecting the sale of the Certificates, to obtain from a municipal bond insurance company so designated in the Pricing Certificate (the "Insurer") a municipal bond insurance policy (the "Insurance Policy") in support of the Certificates. To that end, should the Pricing Officer exercise such authority and commit the Issuer to obtain a municipal bond insurance policy, for so long as the Insurance Policy is in effect, the requirements of the Insurer relating to the issuance of the Insurance Policy as set forth in the Pricing Certificate are incorporated by reference into this Ordinance and made a part hereof for all purposes, notwithstanding any other provision of this Ordinance to the contrary. The Pricing Officer shall have the authority to execute any documents to effect the issuance of the Insurance Policy by the Insurer, including commitment agreements, membership agreements in mutual insurance companies and other similar agreements.

(d) The Mayor and Mayor Pro Tem, the City Manager, Pricing Officer and City Secretary and all other officers, employees and agents of the Issuer, and each of them, shall be and they are hereby expressly authorized, empowered and directed from time to time and at any time to do and perform all such acts and things and to execute, acknowledge and deliver in the name and under the corporate seal and on behalf of the Issuer a Paying Agent/Registrar Agreement with the Paying Agent/Registrar and all other instruments, whether or not herein mentioned, as may be necessary or desirable in order to carry out the terms and provisions of this Ordinance, the Pricing Certificate, the Certificates, the sale of the Certificates, any Purchase Agreement and the Official Statement. In case any officer whose signature shall appear on any Certificate shall cease to be such officer before the delivery of such Certificate, such signature shall nevertheless be valid and sufficient for all purposes the same as if such officer had remained in office until such delivery.

SECTION 11. INTEREST EARNINGS ON CERTIFICATE PROCEEDS. Interest earnings derived from the investment of proceeds from the sale of the Certificates issued for the Projects shall be used along with other Certificate proceeds for the Projects; provided that after completion of such purpose, if any of such interest earnings remain on hand, such interest earnings shall be deposited in the Interest and Sinking Fund. It is further provided, however, that any interest earnings on Certificate proceeds that are required to be rebated to the United States of America pursuant to Section 9 hereof in order to prevent the Certificates from being arbitrage bonds shall be so rebated and not considered as interest earnings for the purposes of this Section.

#### SECTION 12. CONSTRUCTION FUND OR ACCOUNT; INVESTMENTS.

(a) The proceeds of sale of the Certificates, excluding any accrued interest received from the initial purchaser of the Certificates and any other amounts to be deposited into the Interest and Sinking Fund, and amounts to pay costs of issuance of the Certificates, shall be deposited in one or more construction funds or accounts for use, along with any investment earnings thereon, by the Issuer for payment of all lawful costs associated with the acquisition and construction of the Projects as hereinbefore provided. Upon payment of all such costs, any moneys remaining on deposit in said funds or accounts, including investment

earnings, shall be transferred to the Interest and Sinking fund. Amounts so deposited to the Interest and Sinking Fund shall be used in the manner described in Section 5 of this Ordinance.

(b) The Issuer may invest proceeds of the Certificates (including investment earnings thereon) issued for the Projects and amounts deposited into the Interest and Sinking Fund in investments authorized by the Public Funds Investment Act, Chapter 2256, Texas Government Code, as amended; provided, however, that the Issuer hereby covenants that the proceeds of the sale of the Certificates will be used as soon as practicable for the purposes for which the Certificates are issued.

(c) All deposits authorized or required by this Ordinance shall be secured to the fullest extent required by law for the security of public funds.

### SECTION 13. COMPLIANCE WITH RULE 15c2-12.

(a) Definitions. As used in this Section, the following terms have the meanings ascribed to such terms below:

*"Financial Obligation"* means a (i) debt obligation, (ii) derivative instrument entered into in connection with or pledged as security or a source of payment for, an existing or planned debt obligation, or (iii) a guarantee of (i) or (ii); provided however, that a "financial obligation" shall not include municipal securities as to which a final official statement (as defined in the Rule) has been provided to the MSRB consistent with the Rule.

*"MSRB"* means the Municipal Securities Rulemaking Board.

*"Rule"* means SEC Rule 15c2-12, as amended from time to time.

*"SEC"* means the United States Securities and Exchange Commission.

(b) Annual Reports.

(i) The Issuer shall provide annually to the MSRB, in the electronic format prescribed by the MSRB, financial information and operating data (the "Annual Operating Report") with respect to the Issuer of the general type included in the final Official Statement authorized by this Ordinance, being the information described in the Pricing Certificate. The Issuer will additionally provide financial statements of the Issuer (the "Financial Statements"), that will be (i) prepared in accordance with the accounting principles described in the Pricing Certificate or such other accounting principles as the Issuer may be required to employ from time to time pursuant to State law or regulation and shall be in substantially the form included in the final Official Statement and (ii) audited, if the Issuer commissions an audit of such Financial Statements and the audit is completed within the period during which they must be provided. The Issuer will update and provide the Annual Operating Report within six months after the end of each fiscal year and the Financial Statements within 12 months of the end of each fiscal year, in each case beginning with the fiscal year ending in and after 2023. The Issuer may provide the Financial Statements earlier, including at the time it provides its Annual Operating Report, but if the audit of such Financial Statements is not complete within 12 months after any such fiscal year end, then the Issuer shall file unaudited Financial Statements within such 12-month period and audited Financial Statements for the applicable fiscal year, when and if the audit report on such Financial Statements becomes available. All documents provided to the MSRB pursuant to this Section shall be accompanied by identifying information as prescribed by the MSRB.



(ii) If the Issuer changes its fiscal year, it will notify the MSRB of the change (and of the date of the new fiscal year end) prior to the next date by which the Issuer otherwise would be required to provide financial information and operating data pursuant to this Section. The financial information and operating data to be provided pursuant to this Section may be set forth in full in one or more documents or may be included by specific reference to any document (including an official statement or other offering document, if it is available from the MSRB) that theretofore has been provided to the MSRB or filed with the SEC.

(c) Event Notices.

(i) The Issuer shall notify the MSRB in an electronic format as prescribed by the MSRB, in a timely manner (but not in excess of ten business days after the occurrence of the event) of any of the following events with respect to the Certificates, if such event is material within the meaning of the federal securities laws:

1. Non-payment related defaults;
2. Modifications to rights of holders of the Certificates;
3. Certificate calls;
4. Release, substitution, or sale of property securing repayment of the Certificates;
5. The consummation of a merger, consolidation, or acquisition involving the an obligated person or the sale of all or substantially all of the assets of the obligated person, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms;
6. Appointment of a successor or additional trustee or the change of name of a trustee; and
7. Incurrence of a Financial Obligation of the Issuer or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the Issuer, any of which affect security holders.

(ii) The Issuer shall notify the MSRB in an electronic format as prescribed by the MSRB, in a timely manner (but not in excess of ten business days after the occurrence of the event) of any of the following events with respect to the Certificates, without regard to whether such event is considered material within the meaning of the federal securities laws:

1. Principal and interest payment delinquencies;
2. Unscheduled draws on debt service reserves reflecting financial difficulties;
3. Unscheduled draws on credit enhancements reflecting financial difficulties;
4. Substitution of credit or liquidity providers, or their failure to perform;
5. Adverse tax opinions or the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax-exempt status of the Certificates, or other material events affecting the tax-exempt status of the Certificates;
6. Tender offers;
7. Defeasances;
8. Rating changes;
9. Bankruptcy, insolvency, receivership or similar event of an obligated person; and
10. Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the Issuer, any of which reflect financial difficulties.

(iii) The Issuer shall notify the MSRB, in a timely manner, of any failure by the Issuer to provide financial information or operating data in accordance with subsection (b) of this Section by the time required by such subsection.

(d) Limitations, Disclaimers, and Amendments.

(i) The Issuer shall be obligated to observe and perform the covenants specified in this Section for so long as, but only for so long as, the Issuer remains an "obligated person" with respect to the Certificates within the meaning of the Rule, except that the Issuer in any event will give notice of any deposit made in accordance with this Ordinance or applicable law that causes the Certificates no longer to be outstanding.

(ii) The provisions of this Section are for the sole benefit of the Registered Owners and beneficial owners of the Certificates, and nothing in this Section, express or implied, shall give any benefit or any legal or equitable right, remedy, or claim hereunder to any other person. The Issuer undertakes to provide only the financial information, operating data, financial statements, and notices which it has expressly agreed to provide pursuant to this Section and does not hereby undertake to provide any other information that may be relevant or material to a complete presentation of the Issuer's financial results, condition, or prospects or hereby undertake to update any information provided in accordance with this Section or otherwise, except as expressly provided herein. The Issuer does not make any representation or warranty concerning such information or its usefulness to a decision to invest in or sell Certificates at any future date.

(iii) UNDER NO CIRCUMSTANCES SHALL THE ISSUER BE LIABLE TO THE REGISTERED OWNER OR BENEFICIAL OWNER OF ANY CERTIFICATE OR ANY OTHER PERSON, IN CONTRACT OR TORT, FOR DAMAGES RESULTING IN WHOLE OR IN PART FROM ANY BREACH BY THE ISSUER, WHETHER NEGLIGENT OR WITHOUT FAULT ON ITS PART, OF ANY COVENANT SPECIFIED IN THIS SECTION, BUT EVERY RIGHT AND REMEDY OF ANY SUCH PERSON, IN CONTRACT OR TORT, FOR OR ON ACCOUNT OF ANY SUCH BREACH SHALL BE LIMITED TO AN ACTION FOR MANDAMUS OR SPECIFIC PERFORMANCE.

(iv) No default by the Issuer in observing or performing its obligations under this Section shall comprise a breach of or default under this Ordinance for purposes of any other provision of this Ordinance. Nothing in this Section is intended or shall act to disclaim, waive, or otherwise limit the duties of the Issuer under federal and state securities laws.

(v) Notwithstanding anything to the contrary in Section 14 hereof, the provisions of this Section may be amended by the Issuer from time to time to adapt to changed circumstances that arise from a change in legal requirements, a change in law, or a change in the identity, nature, status, or type of operations of the Issuer, but only if (1) the provisions of this Section, as so amended, would have permitted an underwriter to purchase or sell Certificates in the primary offering of the Certificates in compliance with the Rule, taking into account any amendments or interpretations of the Rule since such offering as well as such changed circumstances and (2) either (a) the Registered Owners of a majority in aggregate principal amount (or any greater amount required by any other provision of this Ordinance that authorizes such an amendment) of the outstanding Certificates consent to such amendment or (b) a person that is unaffiliated with the Issuer (such as nationally recognized bond counsel) determined that such amendment will not materially impair the interest of the Registered Owners and beneficial owners of the Certificates. The Issuer may also amend or repeal the provisions of this continuing disclosure agreement if the SEC amends or repeals the applicable

provision of the Rule or a court of final jurisdiction enters judgment that such provisions of the Rule are invalid, but only if and to the extent that the provisions of this sentence would not prevent an underwriter from lawfully purchasing or selling Certificates in the primary offering of the Certificates. If the Issuer so amends the provisions of this Section, it shall include with any amended financial information or operating data next provided in accordance with subsection (b) of this Section an explanation, in narrative form, of the reason for the amendment and of the impact of any change in the type of financial information or operating data so provided.

(e) Amendment of the Rule. The provisions of this Section shall be revised by the Pricing Officer to reflect the requirements of the Rule if the Rule is amended after the adoption of this Ordinance but prior to the delivery of the Certificates so as to permit an underwriter to purchase or sell Certificates in the primary offering of the Certificates in compliance with the Rule. Any such revisions shall be set forth in the Pricing Certificate and are incorporated by reference into this Ordinance and made a part hereof for all purposes, notwithstanding any other provision of this Ordinance to the contrary.

SECTION 14. METHOD OF AMENDMENT. The Issuer hereby reserves the right to amend this Ordinance subject to the following terms and conditions, to-wit:

(a) The Issuer may from time to time, without the consent of any holder, except as otherwise required by paragraph (b) below, amend or supplement this Ordinance in order to (i) cure any ambiguity, defect or omission in this Ordinance that does not materially adversely affect the interests of the holders, (ii) grant additional rights or security for the benefit of the holders, (iii) add events of default as shall not be inconsistent with the provisions of this Ordinance and that shall not materially adversely affect the interests of the holders, (iv) qualify this Ordinance under the Trust Indenture Act of 1939, as amended, or corresponding provisions of federal laws from time to time in effect, or (v) make such other provisions in regard to matters or questions arising under this Ordinance as shall not be inconsistent with the provisions of this Ordinance and that shall not in the opinion of the Issuer's Bond Counsel materially adversely affect the interests of the holders.

(b) Except as provided in paragraph (a) above, the holders of Certificates aggregating in principal amount a majority of the aggregate principal amount of then outstanding Certificates that are the subject of a proposed amendment shall have the right from time to time to approve any amendment hereto that may be deemed necessary or desirable by the Issuer; provided, however, that without the consent of 100% of the holders in aggregate principal amount of the then outstanding Certificates that are the subject of a proposed amendment, nothing herein contained shall permit or be construed to permit amendment of the terms and conditions of this Ordinance or in any of the affected Certificates so as to:

- (1) Make any change in the maturity of any of the affected outstanding Certificates;
- (2) Reduce the rate of interest borne by any of the affected outstanding Certificates;
- (3) Reduce the amount of the principal of, or redemption premium, if any, payable on any affected outstanding Certificates;
- (4) Modify the terms of payment of principal or of interest or redemption premium on affected outstanding Certificates or impose any condition with respect to such payment; or
- (5) Change the minimum percentage of the principal amount of Certificates necessary for consent to such amendment.

(c) If at any time the Issuer shall desire to amend this Ordinance under this Section, the Issuer shall send by U.S. mail to each Registered Owner of the affected Certificates a copy of the proposed amendment and cause notice of the proposed amendment to be published at least once in a financial publication published in The City of New York, New York or in the State of Texas. Such published notice shall briefly set forth the nature of the proposed amendment and shall state that a copy thereof is on file at the office of the Issuer for inspection by all holders of such Certificates.

(d) Whenever at any time within one year from the date of publication of such notice the Issuer shall receive an instrument or instruments executed by the holders of at least a majority in aggregate principal amount of all of the Certificates then outstanding that are required for the amendment, which instrument or instruments shall refer to the proposed amendment and that shall specifically consent to and approve such amendment, the Issuer may adopt the amendment in substantially the same form.

(e) Upon the adoption of any amendatory Ordinance pursuant to the provisions of this Section, this Ordinance shall be deemed to be modified and amended in accordance with such amendatory Ordinance, and the respective rights, duties, and obligations of the Issuer and all holders of such affected Certificates shall thereafter be determined, exercised, and enforced, subject in all respects to such amendment.

(f) Any consent given by the holder of a Certificate pursuant to the provisions of this Section shall be irrevocable for a period of six months from the date of the publication of the notice provided for in this Section, and shall be conclusive and binding upon all future holders of the same Certificate during such period. Such consent may be revoked at any time after six months from the date of the publication of said notice by the holder who gave such consent, or by a successor in title, by filing notice with the Issuer, but such revocation shall not be effective if the holders of a majority in aggregate principal amount of the affected Certificates then outstanding, have, prior to the attempted revocation, consented to and approved the amendment.

For the purposes of establishing ownership of the Certificates, the Issuer shall rely solely upon the registration of the ownership of such Certificates on the Registration Books kept by the Paying Agent/Registrar.

## SECTION 15. DEFAULT AND REMEDIES.

(a) Events of Default. Each of the following occurrences or events for the purpose of this Ordinance is hereby declared to be an Event of Default:

(i) the failure to make payment of the principal of or interest on any of the Certificates when the same becomes due and payable; or

(ii) default in the performance or observance of any other covenant, agreement or obligation of the Issuer, the failure to perform which materially, adversely affects the rights of the Registered Owners of the Certificates, including, but not limited to, their prospect or ability to be repaid in accordance with this Ordinance, and the continuation thereof for a period of 60 days after notice of such default is given by any Registered Owner to the Issuer.

(b) Remedies for Default.

(i) Upon the happening of any Event of Default, then and in every case, any Registered Owner or an authorized representative thereof, including, but not limited to, a trustee or trustees therefor, may proceed against the Issuer for the purpose of protecting and enforcing the rights of the Registered Owners under this Ordinance, by mandamus or other suit, action or special proceeding in equity or

at law, in any court of competent jurisdiction, for any relief permitted by law, including the specific performance of any covenant or agreement contained herein, or thereby to enjoin any act or thing that may be unlawful or in violation of any right of the Registered Owners hereunder or any combination of such remedies.

(ii) It is provided that all such proceedings shall be instituted and maintained for the equal benefit of all Registered Owners of Certificates then outstanding.

(c) Remedies Not Exclusive.

(i) No remedy herein conferred or reserved is intended to be exclusive of any other available remedy or remedies, but each and every such remedy shall be cumulative and shall be in addition to every other remedy given hereunder or under the Certificates or now or hereafter existing at law or in equity; provided, however, that notwithstanding any other provision of this Ordinance, the right to accelerate the debt evidenced by the Certificates shall not be available as a remedy under this Ordinance.

(ii) The exercise of any remedy herein conferred or reserved shall not be deemed a waiver of any other available remedy.

(iii) By accepting the delivery of a Certificate authorized under this Ordinance, such Registered Owner agrees that the certifications required to effectuate any covenants or representations contained in this Ordinance do not and shall never constitute or give rise to a personal or pecuniary liability or charge against the officers, employees or agents of the Issuer or the members of its governing body.

SECTION 16. APPROPRIATION. To pay the debt service coming due on the Certificates, if any, prior to receipt of the taxes levied to pay such debt service, there is hereby appropriated from current funds on hand, which are hereby certified to be on hand and available for such purpose, an amount, which together with capitalized interest received from the sale of the Certificates, if any, will be sufficient to pay such debt service, and such amount shall be used for no other purpose.

SECTION 17. EFFECTIVE DATE. In accordance with the provisions of Texas Government Code Section 1201.028, this Ordinance shall be effective immediately upon its adoption by the City Council.

SECTION 18. SEVERABILITY. If any section, article, paragraph, sentence, clause, phrase or word in this Ordinance, or application thereof to any persons or circumstances is held invalid or unconstitutional by a court of competent jurisdiction, such holding shall not affect the validity of the remaining portion of this Ordinance, despite such invalidity, which remaining portions shall remain in full force and effect.

	<b>Aye</b>	<b>Nay</b>	<b>Abstain</b>	<b>Absent</b>
Mayor Gerard Hudspeth:	_____	_____	_____	_____
Vicki Byrd, District 1:	_____	_____	_____	_____
Brian Beck, District 2:	_____	_____	_____	_____
Paul Meltzer, District 3:	_____	_____	_____	_____
Joe Holland, District 4:	_____	_____	_____	_____
Brandon Chase McGee, At Large Place 5:	_____	_____	_____	_____
Chris Watts, At Large Place 6:	_____	_____	_____	_____

PASSED AND APPROVED this the \_\_\_\_\_ day of \_\_\_\_\_, 2023.

\_\_\_\_\_  
GERARD HUDSPETH, MAYOR

ATTEST:  
JESUS SALAZAR, INTERIM CITY SECRETARY

BY: \_\_\_\_\_

APPROVED AS TO LEGAL FORM:  
MACK REINWAND, CITY ATTORNEY

BY: \_\_\_\_\_



# Public Utilities Board Bond Ordinances



# Notice of Intent to Issue COs

- Council approved April 4, 2023.
- Published in Denton Record Chronicle on April 13<sup>th</sup> and 20<sup>th</sup>.
- This Bond Ordinance to authorize the sale of COs is at least 46 day after the first publication per state law.



# 2023 CO Bond Sale

Internal Service/Enterprise Total	\$ 2,453,000
General Government Total	\$ 31,176,718
Solid Waste Total	\$ 16,000,000
Water Total	\$ 21,188,000
Wastewater Total	\$ 16,596,000
Electric Total	\$ 70,000,000
Issuance Cost	\$ 1,086,282
	<hr/>
	<b>\$158,500,000</b>

# Solid Waste Projects

	NOI	BOND SALE
Scalehouse Update & Scale Replacement	\$ 1,300,000	\$ 1,300,000
Home Chemical Collection Storage Capacity	\$ 1,000,000	\$ 1,000,000
Landfill Roads & Infrastructure	\$ 2,000,000	\$ 2,000,000
Fleet Shop at Solid Waste	\$10,500,000	\$10,500,000
Case/Steiger Scraper	\$ 1,200,000	\$ 1,200,000
<b>Solid Waste Total</b>	<b>\$16,000,000</b>	<b>\$16,000,000</b>

# Utility Projects - Water

	NOI	BOND SALE
Supplement to Bond Election 2019 Projects	\$ 11,000,000	\$ 11,000,000
Westgate Road and Drainage	\$ 208,000	\$ 208,000
Morse Street Reconstruction	\$ 480,000	\$ 480,000
Transmission Line Condition Repairs	\$ 1,000,000	\$ 1,000,000
Northwest Transmission Lines & BPS	\$ 7,000,000	\$ 7,000,000
RRWTP Disinfection Conversion and Chemical Improvements	\$ 2,500,000	\$ -
LLWTP Raw Water Transmission Line	\$ 500,000	\$ -
LLWTP Clarifiers Rehab (Sludge Rake Coating)	\$ 1,000,000	\$ -
Capacity Rerate and Performance Upgrades	\$ 8,000,000	\$ -
SCADA Platform Development	\$ 1,500,000	\$ 1,500,000
<b>Water Total</b>	<b>\$ 33,188,000</b>	<b>\$ 21,188,000</b>

# Utility Projects - Wastewater

	NOI	BOND SALE
Supplement to Bond Election 2019 Projects	\$ 8,000,000	\$ 8,000,000
Annual Field Service Replacements	\$ 1,400,000	\$ 1,400,000
Hickory Creek Interceptor IV	\$ 1,000,000	\$ -
Dry Fork Sanitary Sewer	\$ 1,246,000	\$ 1,246,000
Milam Creek Basin Wastewater Line and Lift Station	\$ 6,752,000	\$ -
Solids Handling Improvements	\$ 2,000,000	\$ -
Cooper Creek Bar Screen	\$ 50,000	\$ -
PCWRP Headworks Reconfiguration	\$ 3,900,000	\$ 3,900,000
Hickory Creek Forcemain Replacement	\$ 2,400,000	\$ -
Grenada Lift Station Replacement	\$ 1,600,000	\$ -
Robson Ranch Decommissioning Project	\$ 550,000	\$ 550,000
SCADA Platform Development	\$ 1,500,000	\$ 1,500,000
<b>Wastewater Total</b>	<b>\$30,398,000</b>	<b>\$ 16,596,000</b>

# Utility Projects - Electric

	NOI	BOND SALE
Automated Meter Reading	\$ 1,102,000	\$ 2,930,223
Distribution Substations	\$ 7,745,000	\$ 1,024,000
Distribution Transformers	\$ 21,800,000	\$ 20,837,973
Feeder Extensions & Improvements	\$ 12,613,000	\$ 5,510,062
New Residential & Commercial	\$ 4,955,000	\$ 7,956,298
Over to Under Conversions	\$ 45,000	\$ -
Power Factor Improvements	\$ 500,000	\$ 205,000
Street Lighting	\$ 4,000,000	\$ 1,859,899
Transmission Lines	\$ 12,541,000	\$ 2,601,239
Transmission Substations	\$ 21,248,000	\$ 15,120,502
Production Plant Improvements	\$ 2,200,000	\$ 270,000
Technology - Software/Hardware	\$ 3,488,000	\$ 4,093,081
Electric Relocations	\$ 9,948,000	\$ 7,258,601
Miscellaneous Equipment	\$ -	\$ 333,122
<b>Electric Total</b>	<b>\$ 102,185,000</b>	<b>\$ 70,000,000</b>

# Total Solid Waste & Utilities

Solid Waste	\$ 16,000,000
Water	\$ 21,188,000
Wastewater	\$ 16,596,000
Electric	\$ 70,000,000
<b>Total CO</b>	<b>\$ 123,784,000</b>

# 2023 Debt Refunding

- Average Interest Rate of Refunded Bonds 3.37%
- Projected Interest Rate 2.75%

Refunding Bonds Opportunity	Principal Refunded	Maturities Refunded
Certificates of Obligation, Series 2012	\$ 8,575,000	2025-27, 2032
General Obligation Refunding & Improvement Bonds, Series 2012	\$ 1,545,000	2025-2032
General Obligation Refunding & Improvement Bonds, Series 2013	\$ 3,690,000	2024-2033
Certificates of Obligation, Series 2013	\$31,750,000	2024-2033
<b>Total Refunding Opportunity</b>	<b>\$45,560,000</b>	

## General Obligation Refunding Bonds, Series 2023 Projected Savings\*

Total \$1,446,839

By Debt Type					
General Fund	Water	Wastewater	Electric	Solid Waste	Airport
\$ 311,635	\$ 32,013	\$ 137,305	\$ 892,174	\$ 40,244	\$ 33,469

\*Preliminary, subject to change. Based on 5/8/2023 market conditions.

# Next Steps

- **June 6, 2023**
  - Council considers adoption of bond ordinance.
- **June 21, 2023**
  - Date of Sale
- **July 26, 2023**
  - Preliminary date of close and delivery of funds.



# Questions

Randee Klingele  
Treasury Manager





# City of Denton

City Hall  
215 E. McKinney St.  
Denton, Texas 76201  
[www.cityofdenton.com](http://www.cityofdenton.com)

## Legislation Text

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**File #:** PUB23-095, **Version:** 1

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### **AGENDA CAPTION**

Consider recommending adoption of an ordinance of the City of Denton, a Texas home-rule municipal corporation, authorizing the City Manager to execute a Professional Services Agreement with Kimley-Horn and Associates, Inc., to provide regulatory permitting/approval support, process evaluation, design services, bidding assistance, and construction phase services for the Pecan Creek Water Reclamation Plant (PCWRP) Expansion to 26MGD Project for the Wastewater Department; providing for the expenditure of funds therefor; and providing an effective date (RFQ 7574-027 - Professional Services Agreement for design services awarded to Kimley-Horn and Associates, Inc., in the not-to-exceed amount of \$14,952,000.00).



## AGENDA INFORMATION SHEET

**DEPARTMENT:** Procurement & Compliance

**ACM:** Frank Dixon

**DATE:** May 22, 2023

### **SUBJECT**

Consider adoption of an ordinance of the City of Denton, a Texas home-rule municipal corporation, authorizing the City Manager, or their designee, to execute a contract with Kimley Horn and Associates Inc., for a Professional Service Agreement for the Water Utilities Department. This agreement provides for the expenditure of funds therefor; and providing an effective date (RFQ 7574-027 Professional Service Agreement) to provide regulatory permitting/approval support, process evaluation, design services, bidding assistance, construction phase services for the Pecan Creek Water Reclamation Plant (PCWRP) Expansion to 26MGD Project – awarded to Kimley Horn and Associates Inc., authorizing the expenditure of funds in the not-to-exceed amount of \$14,952,000

### **STRATEGIC ALIGNMENT**

This action supports Key Focus Area: Enhance Infrastructure and Mobility.

### **INFORMATION/BACKGROUND**

The Pecan Creek Water Reclamation Plant (PCWRP) is the City's only Wastewater Reclamation Facility and is currently permitted for an annual average capacity of 21 million gallons per day (MGD) and 46 MGD Peak 2-hour flow (P2HF). The facility treats 14-15 MGD of wastewater, which is 71% of the permit limit. The Texas Commission on Environmental Quality (TCEQ) requires a utility to begin design for capacity expansion when flows reach 75% of the permit limit and to begin construction of improvements when flows reach 90% of the permit limit. An updated discharge permit submitted to the Texas Commission on Environmental Quality (TCEQ) includes two additional phases of 26 MGD and 30 MGD, respectfully. TCEQ has administratively approved the amended discharge permit and Water Utilities anticipates the issuance this summer.

The proposed expansion of PCWRP will include a new 5 MGD treatment train that will utilize membrane bioreactor (MBR) technology, new 26 MGD solids handling facilities and ultraviolet disinfection (UV) facilities. The project will include the necessary piping and electrical/SCADA improvements to integrate the new facilities with the existing facilities to treat 26 MGD.

MBR technology, a new process for PCWRP, offers increased capacity in a similar footprint as a conventional treatment process. The effluent result from MBR treatment is free of suspended solids and contains reduced bacterial and viral content, requiring minimal disinfection. This process allows the treated effluent to be discharged into sensitive receiving streams or to be reclaimed for applications such as irrigation.

The proposed project utilizes proven new technology to effectively treat the influent at the location, resulting in high quality discharge and ensures environmental sustainability. This expansion will provide a capacity upgrade to provide safe wastewater treatment service associated with the increased growth within the City and surrounding communities.

Request for Qualifications for professional engineering services was solicited using the City's formal solicitation process. City Council approved a pre-qualified list of engineering firms on March 23, 2021 (Ordinance 2021-546). Engineering firms listed on the prequalified list for Wastewater Treatment facilities, were interviewed separately to determine the most qualified firm for the project. Based on the qualifications, knowledge, experience in designing large projects of similar type and concept most in line with future expansion, staff selected Kimley Horn and Associates Inc. from the list of qualified consultants to perform this work.

### **PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)**

On March 23, 2021, Council approved RFQ 7574 for a prequalified list of professional services firms (Ordinance 2021-546).

### **RECOMMENDATION**

Award a contract with Kimley Horn and Associates Inc., for the Professional Service Agreement for the Water Utilities Department, in the not-to-exceed amount of \$14,952,000.

### **SUSTAINABILITY MEASURES**

The proposed 5 MGD MBR facility and the supporting process equipment allows the Pecan Creek Water Reclamation Plant to expand the existing location with a smaller equipment footprint, sustain quality service and improve the water quality to be discharged.

### **Relationship to Sustainability Framework**

Focus Area: *Water and Wastewater*

*What are some of the goals the department will be setting up to ensure that the sustainability measures are met?*

Goal 1: Expand the wastewater treatment capacity at Pecan Creek Water Reclamation Plant.

Goal 2: Ensure wastewater is treated and discharged in accordance with regulatory requirements.

Goal 3: Protect health, safety, and the environment by increasing the treatment capacity, improving reliability, and using advance technology to discharge safer effluent.

### **FISCAL INFORMATION**

These Engineering Services will be funded from the Wastewater Utilities account 640496545.1360.20100. The initial \$1M is currently funded, with additional funds requested in the submitted Capital Improvement Budget for FY 24 through FY 27. Requisitions will be entered on an as-needed basis. The budgeted amount for this item is \$14,952,000

## **EXHIBITS**

Exhibit 1: Agenda Information Sheet

Exhibit 2: Evaluation Sheet, Scope and Fee

Exhibit 3: Ordinance and Contract

Exhibit 4: Presentation

Respectfully submitted:

Lori Hewell, 940-349-7100

Purchasing Manager

Prepared by

David Brown

Project Manager

Denton Water Utilities

## PCWRP Expansion to 26 MGD Evaluation file 7574-027

Project Scoring		Freese and Nichols, Inc.	Kimley-Horn and Associates, In	Garver	CP&Y, Inc.	Hazen and Sawyer
Key personnel and project team	30	26.00	28.00	26.40	26.60	26.40
Adequacy and availability of resources	30	26.00	28.00	26.80	26.20	25.60
Experience of the Firm	20	17.60	18.20	17.20	17.20	17.80
Past Performance	20	16.40	18.60	17.20	17.20	16.00
Total		86.00	92.80	87.60	87.20	85.80

## ATTACHMENT "A"

Scope for Engineering Design Related Services for:

### **PECAN CREEK WATER RECLAMATION PLANT EXPANSION TO 26 MGD INCLUDING SOLIDS HANDLING AND DISINFECTION SYSTEM IMPROVEMENTS**

The ENGINEER will perform its services pursuant to the requirements delineated below. Services under this attachment include engineering services for the design and bidding for the PECAN CREEK WATER RECLAMATION PLANT EXPANSION TO 26 MGD INCLUDING SOLIDS HANDLING AND DISINFECTION SYSTEM IMPROVEMENTS project.

#### **Project Understanding**

The CITY needs to expand the existing Pecan Creek Water Reclamation Plant (PCWRP) to 26 MGD. Currently, PCWRP is designed and permitted to discharge 21 MGD. An updated discharge permit submitted to the Texas Commission on Environmental Quality (TCEQ) includes two additional phases of 26 MGD and 30 MGD, respectfully. The CITY anticipates receiving an approved TCEQ discharge permit in early 2023.

The expansion of PCWRP will include a new 5 MGD treatment train that will utilize membrane bioreactor (MBR) technology, new 26 MGD solids handling facilities and ultraviolet disinfection (UV) facilities.

The project will include the necessary piping and electrical/SCADA improvements to have the new facilities work with the existing facilities to treat 26 MGD.

ENGINEER will provide professional services for the following tasks:

- Task 1 – Design Management
- Task 2 – Preliminary Design
- Task 3 – Geotechnical Services
- Task 4 – Final Design
- Task 5 – Construction Contract Documents
- Task 6 – Bidding Phase Services
- Task 7 – Construction Phase Services

## **Task 1 – DESIGN MANAGEMENT**

### **A. Project Management**

1. Develop project communication plan.
  - a. Develop project contact list.
  - b. Prepare and e-mail progress reports to the project team once a month to be included with invoices. 24 months are assumed.
  - c. Prepare project schedule and provide schedule updates if the schedule changes.
2. Meetings
  - a. Prepare for and attend one (1) project kickoff meeting.
  - b. Prepare for and attend up to twenty-four (24) project status meetings with the CITY.
  - c. Prepare meeting notes and distribute to the CITY.
3. Sub-consultant Agreement Preparation
  - a. Prepare and execute up to five (5) subconsultant agreements.

## **Task 2 – PRELIMINARY DESIGN**

### **A. Equipment Selection Process**

The ENGINEER will prepare for and conduct the pre-design equipment selection process. This process includes the following items:

1. Prepare the equipment selection criteria based on CITY input for the following items:
  - a. Membrane Bioreactor (MBR) Equipment
  - b. Peak Wet Weather Treatment Equipment
  - c. Aeration Equipment
  - d. UV Disinfection Equipment
  - e. Solids Thickening Equipment
  - f. Solids Dewatering Equipment
2. Prepare for and conduct up to ten (10) equipment provider interviews with CITY. The ENGINEER will schedule the in-person interviews in coordination with the CITY on time and location. Each interview will be at least one hour in length.
3. Prepare for and arrange up to five (5) site visits to existing water reclamation plant with CITY to observe similar processes and equipment that may be considered for installation on this project. The ENGINEER anticipates each site visit being one day in length.
  - a. Expenses for travel will include travel expense for up to four (4) CITY staff
4. Participate on equipment selection committee with CITY
5. Document the equipment selection process and prepare a technical memorandum summarizing the selected and equipment.



6. Once the equipment above has been selected and approved by the CITY, preliminary technical specifications will be prepared for all the equipment that will be used on this project and preliminary design will be based around specific equipment selections.

**Meetings:**

- a. Prepare for and conduct equipment provider interviews
- b. Facilitate and attend site visits to existing water reclamation plant

**Deliverables:**

- a. Two (2) copies of Equipment Selection Technical Memorandum and .pdf electronic copy
- b. Two (2) copies of the preliminary technical specifications and .pdf electronic copy

**Services/Deliverables provided by the CITY:**

- a. Participate in pre-design equipment selection process
- b. Attend water reclamation plant site visits

**B. Prepare Preliminary Engineering Report (PER) for Expansion to 26 MGD**

The ENGINEER shall prepare a Preliminary Engineering Report. The ENGINEER shall perform the following tasks:

1. Design and size each treatment unit. Calculations, analyses, graphs, formulas, constants, and technical assumptions will be provided to support the design and sizing of each unit.
2. Develop a process flow diagram for the treatment facility.
3. Develop hydraulic model to determine the elevations of the treatment units and determine the sizing of interconnected piping.
4. Prepare the Preliminary Engineering Report Document including:
  - a. Types of units proposed and their capacities
  - b. Detention times, surface loadings and weir loadings for each unit
  - c. Plot of the hydraulic gradient at peak flow conditions
  - d. The recommended operation mode
  - e. Organic and volumetric loadings pertinent to each treatment unit
  - f. Preliminary site plan
  - g. Site access and security
  - h. Flood protection
  - i. Emergency power

**Meetings:**

- a. Prepare for and conduct one (1) Preliminary Engineering Report review meeting

**Deliverables:**

- a. Five (5) copies of the Draft and Final Engineering Report and .pdf electronic copy of each

**Services/Deliverables provided by the CITY:**

- a. Participate in the Preliminary Engineering Report review meeting
- b. Review and provide comments on the Final Engineering Report

**C. Preliminary Design**

1. Prepare engineering plan sheets and technical specifications in accordance with the preliminary engineering report.
2. The 30 % plans will include:
  - a. Civil sheets:
    - i. General notes
    - ii. Overall site plan
    - iii. Yard piping plan
    - iv. Paving plan
  - b. Mechanical sheets:
    - i. General notes
    - ii. MBR treatment equipment layouts
    - iii. Peak wet weather treatment equipment layouts
    - iv. Aeration equipment layouts
    - v. Permeate pumping equipment layouts
    - vi. UV Disinfection equipment layouts
    - vii. Solids Thickening equipment layouts
    - viii. Solids Stabilization equipment layout
    - ix. Solids Dewatering equipment layout
  - c. Structural sheets:
    - i. General notes
    - ii. Site plans
    - iii. Foundation plans

- d. Electrical sheets:
  - i. Site plan
  - ii. Electrical plan
  - iii. Grounding plan
  - iv. One-line diagrams
  - v. Conduit and wiring plan
  - vi. Lighting plan
  - vii. SCADA/instrumentation layout
- 3. Prepare 30% quantity take-off for proposed improvements and engineer's opinion of probable construction cost (OPCC).
- 4. Prepare a cost-benefit analysis for further processing solids with drying technologies.

**Meetings:**

- a. Prepare for and conduct one (1) Preliminary Design review meeting

**Deliverables:**

- a. Five (5) copies of 30% 11"x17" plans and .pdf electronic copy
- b. Five (5) copies of 30% OPCC and .pdf electronic copy

**Services/Deliverables provided by the CITY:**

- a. Review and comment on the 30% plans, preliminary specifications and OPCC
- b. Participate in 30% design review meeting

## **Task 3 –GEOTECHNICAL SERVICES**

### **A. Geotechnical Engineering**

- 1. Perform a geotechnical analysis of the site utilizing a qualified geotechnical laboratory to determine subsurface conditions and make recommendations regarding design parameters. The analysis shall include the following:
  - a. Subsurface exploration including up to ten (10) sample bore drilled to between 35 and 40 feet depending upon depth to un-weathered shale or limestone.
  - b. Laboratory tests for classification purposes and strength characteristics.
  - c. Engineering services that address the following:
    - i. Soil and groundwater conditions
    - ii. Comments on general excavatability of soils and shale encountered
    - iii. Recommendations for foundations, transformer and generator pads, and vault foundation types, depth, allowable loading and backfill requirements

- iv. Foundation construction requirements
  - v. Recommended lateral pressures for the design of below grade walls
  - vi. Evaluation of the subgrade soils
  - vii. Recommendations for yard piping installation, including bedding and backfill
  - viii. Recommendations for earthwork.
2. A geotechnical report will be furnished by the geotechnical engineer to present the results of the field and laboratory data as well as analyses and recommendations. The data contained in the geotechnical report will be made available to contractors during the bidding process for informational purposes.

**Meetings:**

- a. N/A

**Deliverables:**

- a. Two (2) copies of geotechnical report

**Services/Deliverables provided by the CITY:**

- a. Site access

## **Task 4 –FINAL DESIGN**

### **A. 60% Design**

- 1. Prepare 60% engineering plan sheets and specifications in accordance with the preliminary engineering report.
- 2. The plans will include:
  - a. Civil sheets:
    - i. General notes
    - ii. Overall site plan
    - iii. Yard piping plan and profiles
    - iv. Paving plan and profile
    - v. Grading plan
    - vi. Details
  - b. Mechanical sheets:
    - i. General notes
    - ii. Membrane treatment equipment layouts and sections
    - iii. Peak wet weather treatment equipment layouts and sections
    - iv. Aeration equipment layouts and sections

- v. Permeate pumping equipment layouts and sections
    - vi. Disinfection equipment layouts and sections
    - vii. Solids Thickening equipment layouts and sections
    - viii. Solids Stabilization equipment layouts and sections
    - ix. Solids Dewatering equipment layouts and sections
  - c. Structural sheets:
    - i. General notes
    - ii. Site plans
    - iii. Foundation plans
    - iv. Excavation plan
    - v. Sections
  - d. Electrical sheets:
    - i. Site plan
    - ii. Electrical plan
    - iii. Grounding plan
    - iv. One-line diagrams
    - v. Conduit and wiring plan
    - vi. Lighting plan
    - vii. SCADA/instrumentation layout
- 3. Specifications shall include CITY Standard and non-standard technical specifications for materials and installation of the proposed facilities.

**Meetings:**

- a. Prepare for and conduct a 60% design review workshop

**Deliverables:**

- a. Five (5) copies of 60% 11"x17" plans, specification, and construction documents and .pdf electronic copy
- b. Five (5) copies of 60% OPCC and electronic copy

**Services/Deliverables provided by the CITY:**

- a. Review and comment on the 60% plans, specifications, and OPCC
- b. Participate in the 60% design review workshop

**B. 90% Design**

- 1. Prepare 90% engineering plan sheets and specifications in accordance with the preliminary engineering report.

2. The plans will include:
  - a. Civil sheets:
    - i. General notes
    - ii. Overall site plan
    - iii. Yard piping plan and profiles
    - iv. Paving plan and profile
    - v. Grading plan
    - vi. Details
  - b. Mechanical sheets:
    - i. General notes
    - ii. Membrane treatment equipment layouts, sections, and details
    - iii. Peak wet weather treatment equipment layouts, sections and details
    - iv. Aeration equipment layouts, sections, and details
    - v. Permeate pumping equipment layouts, sections, and details
    - vi. Disinfection equipment layouts, sections, and details
    - vii. Solids Thickening equipment layouts, sections, and details
    - viii. Solids Stabilization equipment layout, sections, and details
    - ix. Solids Dewatering equipment layout, sections, and details
  - c. Structural sheets:
    - i. General notes
    - ii. Site plans
    - iii. Foundation plans
    - iv. Excavation plan
    - v. Sections
    - vi. Details
  - d. Electrical sheets:
    - i. Site plan
    - ii. Electrical plans
    - iii. Grounding plans
    - iv. One-line diagrams
    - v. Conduit and wiring plans
    - vi. Lighting plans and details
    - vii. SCADA/instrumentation layout
    - viii. Details

3. Specifications shall include CITY Standard and non-standard technical specifications for materials and installation of the proposed facilities.

**Meetings:**

- a. Prepare for and conduct a 90% design review workshop

**Deliverables:**

- a. Five (5) copies of 90% 11"x17" plans, specification, and construction documents and .pdf electronic copy
- b. Five (5) copies of 90% OPCC and electronic copy

**Services/Deliverables provided by the CITY:**

- a. Review and comment on the 90% plans, specifications, and OPCC
- b. Participate in the 90% design review workshop

**C. Final Engineering Report and Summary Transmittal Letter**

The ENGINEER shall prepare a Final Engineering Report based on the comments received on the Preliminary Engineering Report and design changes determined during Final Design. The ENGINEER will prepare and submit a Summary Transmittal Letter to the TCEQ. The Final Engineering Report will include:

- a. Types of units proposed and their capacities
- b. Detention times, surface loadings and weir loadings for each unit
- c. Plot of the hydraulic gradient at peak flow conditions
- d. The recommended operation mode
- e. Organic and volumetric loadings pertinent to each treatment unit
- f. Final site plan
- g. Site access and security
- h. Flood protection
- i. Emergency power
- j. Variance requests (if any)

**Meetings:**

- a. N/A

**Deliverables:**

- a. Submit five (5) copies and one electronic .pdf copy of the Final Engineering Report

**Services/Deliverables provided by the CITY:**

- a. Review and approve the report for submittal to TCEQ

## **Task 5 – CONSTRUCTION CONTRACT DOCUMENTS**

### **A. Bidding Construction Contract Documents**

1. Incorporate CITY comments from final design submittal and prepare construction contract documents, bid plans, and opinion of probable construction cost.
2. Construction contract documents will consist of the final plans and project manual, both signed and sealed by a licensed professional engineer in the State of Texas and in accordance with comments provided by the CITY during final design.

**Meetings:**

- a. Prepare for and conduct a construction contract document review workshop

**Deliverables:**

- a. Construction Contract Documents Submittal
- b. Submit two (2) copies and electronic (.pdf) documents to the CITY for bidding.
- c. Submittal shall include the following:
  - a. Bid drawings
  - b. Bid project manual
  - c. Opinion of probable construction cost

**Services/Deliverables provided by the CITY:**

- a. Review and approve the construction contract documents for bidding.

## **Task 6 – BID PHASE SERVICES**

### **A. Bid Phase Services**

1. Provide electronic bid documents to the CITY purchasing department for bidding.
2. Provide the Notice to Bidders to the CITY for publication. The CITY will be responsible for publication of the notice. The CITY will be responsible for distribution of the bidding documents to prospective contractors, suppliers, and plan rooms.
3. The following assistance will be provided to the CITY during the bidding phase:



- a. Preparation of addenda and delivery to CITY for distribution to plans holders.
- b. Responses to questions submitted by plans holders.
- c. Attend bid opening facilitated by CITY.
- d. Preparation of bid tabulation.
- e. Preparation of recommendation of award letter.
4. Conformance plans and specifications
  - a. Based on potential questions and addenda from the bidding phase, prepare conformance set of plans and specifications to be used during construction.
    - i. Provide up to four (4) sets to CITY for execution.

## **Task 7 – CONSTRUCTION PHASE SERVICES**

### **A. Construction Phase Services**

1. Prepare for and conduct one (1) public meeting with CITY staff and Contractor.
2. Pre-Construction Conference
  - a. Prepare for and attend a pre-construction conference prior to commencement of Work at the Site
3. Site Visits
  - a. Prepare for and conduct up to twenty-four (24) monthly construction progress meetings with the CITY and contractor on site. Meetings will also be considered site visits.
  - b. Site Visits are not intended to be exhaustive or to extend to every aspect of Contractor's work in progress. Observations are to be limited to spot checking, selective measurement, and similar methods of general observation of the Work based on ENGINEER's exercise of professional judgement.
  - c. Based on information obtained during site visits, ENGINEER will determine if Contractor's work is generally proceeding in accordance with the Contract Documents, and ENGINEER will keep CITY informed of the general progress of the work.
4. Resident Project Representative. ENGINEER'S role as Resident Project Representative will include furnishing a Resident Project Representative ("RPR") to assist ENGINEER in observing progress and quality of the work.
  - a. The duties and responsibilities of the RPR are limited to those of ENGINEER in the Agreement with the CITY and in the Contract Documents, and are further limited and described as follows:
    - i. General
      - a) RPR is the ENGINEER'S agent at the Site, will act as directed by and under the supervision of the ENGINEER, and will confer with the ENGINEER regarding RPR's actions

- b) RPR's dealings in matters pertaining to a Contractor's work in progress shall in general be with the ENGINEER and Contractor, keeping CITY advised as necessary
  - c) RPR's dealings with subcontractors shall only be through or with the full knowledge and approval of Contractor
  - d) RPR shall generally communicate with CITY with the knowledge of and under the direction of the ENGINEER
- ii. Schedules
  - a) Review the progress schedule, schedule of Shop Drawing and submittals, and any other schedules prepared by Contractor and consult with ENGINEER concerning acceptability
- iii. Conferences and Meetings
  - a) Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof
- iv. Liaison
  - a) Serve as ENGINEER's liaison with Contractor, working principally through Contractor's superintendent, and assist in providing information regarding the intent of the Contract Documents
  - b) Assist ENGINEER in serving as CITY's liaison with Contractor when Contractor's operations affect CITY's on-site operations
  - c) Assist in obtaining from CITY additional details or information, when required for proper execution of the Work
- v. Interpretation of Contract Documents
  - a) Report to ENGINEER when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by ENGINEER
- vi. Shop Drawings and Submittals
  - a) Maintain Shop Drawing and Submittal Record log
  - b) Advise ENGINEER and Contractor of the commencement of any portion of the Work requiring a Shop Drawing or submittal for which RPR believes that the submittal has not been approved by ENGINEER

- vii. Modifications.
  - a) Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report such suggestions, together with RPR's recommendations, to ENGINEER. Transmit to Contractor in writing decisions as issued by ENGINEER
- viii. Review of Work and Rejection of Defective Work
  - a) Conduct on-Site observations of Contractor's work in progress to assist ENGINEER in determining if the Work is in general proceeding in accordance with the Contract Documents
  - b) Report to ENGINEER whenever RPR believes that any part of Contractor's work in progress will not produce a completed project that conforms generally to the Contract Documents or will imperil the integrity of the design concept of the completed Specific Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise ENGINEER of that part of work in progress that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval
- ix. Inspections, Tests, and System Start-ups
  - a) Consult with ENGINEER in advance of scheduled major inspections, tests, and systems start-ups of important phases of the Work
  - b) Verify that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate CITY 's personnel, and that Contractor maintains adequate records thereof
  - c) Observe, record, and report to ENGINEER appropriate details relative to the test procedures and systems start-ups
  - d) Accompany visiting inspectors representing public or other agencies having jurisdiction over a Specific Project, record the results of these inspections, and report to ENGINEER
- x. Records
  - a) Maintain at the Site orderly files for correspondence, reports of job conferences, reproductions of original Contract Documents including all Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the Contract, ENGINEER's clarifications and interpretations of the Contract Documents, progress reports, Shop Drawing

and submittals received from and delivered to Contractor, and other Specific Project-related documents

- b) Prepare a daily report or keep a diary or logbook, recording Contractor's hours on the Site, weather conditions, data relative to questions of Change Orders, Field Orders, or changed conditions, Site visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to ENGINEER
- c) Record names, addresses, fax numbers, e-mail addresses, web site locations and telephone numbers of all Contractors, subcontractors, and major suppliers of materials and equipment
- d) Maintain records for use in preparing project documentation
- e) Upon completion of the Work, furnish original set of all RPR Specific Project documentation to ENGINEER

xi. Reports

- a) Furnish to ENGINEER periodic reports, as required, of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and submittals
- b) Draft and recommend to ENGINEER proposed Change Orders and Field Orders. Obtain backup material from Contractor
- c) Furnish to ENGINEER and CITY copies of all inspection, test, and system startup reports
- d) Immediately notify ENGINEER of the occurrence of any Site accidents, emergencies, acts of God endangering the Work, damage to property by fire or other causes, or the discovery of any Constituent of Concern

xii. Payment Request

- a) Review Applications for Payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to ENGINEER, noting particularly the relationship of the payment requested to the Work completed, and materials delivered at the Site but not incorporated in the Work
- b) Certificates, Operation and Maintenance Manuals
- c) During the course of the Work, verify that materials and equipment certificates, operation and maintenance manuals and other data required by the Specifications to be assembled and furnished by Contractor are applicable

to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to ENGINEER for review and forwarding to CITY prior to payment for that part of the Work

xiii. Completion

- a) Participate in a final inspection in the company of ENGINEER, CITY, and Contractor and prepare a final list of items to be completed and deficiencies to be remedied
- b) Observe whether all items on the final list have been completed or corrected and make recommendations to ENGINEER concerning acceptance and issuance of the Notice of Acceptability of the Work

xiv. Resident Project Representative shall not:

- a) Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items)
- b) Exceed limitations of ENGINEER's authority as set forth in the Agreement or the Contract Documents
- c) Undertake any of the responsibilities of a Contractor, subcontractors, suppliers, or a Contractor's superintendent
- d) Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences, or procedures of the Contractor's work unless such advice or directions are specifically required by the Contract Documents
- e) Advise on, issue directions regarding, or assume control over safety practices, precautions and programs in connection with the activities or operations of CITY or Contractor
- f) Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by ENGINEER
- g) Accept Shop Drawings or submittals from anyone other than Contractor
- h) Authorize CITY to occupy a Specific Project in whole or in part
- i) Through such observations of Contractor's work in progress and field checks of materials and equipment by the RPR, ENGINEER shall endeavor to provide CITY a greater degree of confidence that the completed Work will conform in general to the Contract Documents. However, ENGINEER shall not, during such visits or as a result of such observations of Contractor's work in

progress, supervise, direct, or have control over Contractor's work, nor shall ENGINEER have authority over or responsibility for the means, methods, techniques, equipment choice and usage, sequences, schedules, or procedures of construction selected by Contractor, for safety precautions and programs incident to Contractor's work, nor for any failure of Contractor to comply with laws and regulations applicable to Contractor's furnishing and performing the Work. Accordingly, ENGINEER neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish and perform its work in accordance with the Contract Documents.

5. Recommendations with Respect to Defective Work

- a. Provide recommendations to CITY that Contractor's work be disapproved and rejected while it is in progress if, on the basis of site visit evaluations, ENGINEER believes such work will not produce a completed Project that conforms generally to Contract Documents or that it will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents. Notwithstanding the foregoing, the CITY reserves the right to disapprove or reject Contractor's work without a recommendation from the ENGINEER.

6. Clarifications and Interpretations

- a. Issue necessary clarifications and interpretations of the Contract Documents to CITY as appropriate to the orderly completion of Contractor's work. Such clarifications and interpretations will be consistent with the intent of the Contract Documents. Field orders authorizing variations from the requirements of the Contract Documents will be made by CITY.

7. Change Orders

- a. Recommend change orders to CITY, as appropriate.
- b. Review and make recommendations related to Change Orders submitted or proposed by the Contractor.

8. Shop Drawings and Samples

- a. Review and approve or take other appropriate action in respect to Shop Drawings and Samples and other data which Contractor is required to submit, but only for conformance with the information given in the Contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated in the Contract Documents. Such review and approvals or other action will not extend to means, methods, techniques, equipment choice and usage, sequences, schedules, or procedures of construction or to related safety precautions and programs. Assumes up to thirty (30) shop drawings.

9. Substitutes and “or-equal”

- a. Evaluate and determine the acceptability of substitute or “or-equal” materials and equipment proposed by Contractor in accordance with the Contract Documents, but subject to the provisions of applicable standards of state or local government entities.
- b. Provide recommendations to CITY

10. Inspections and Tests

- a. Review certificates of inspections and tests within ENGINEER’s area of responsibility for the purpose of determining that the results certified indicate compliance with the Contract Documents and will not constitute an independent evaluation that the content or procedures of such inspections, tests, or approvals comply with the requirements of the Contract Documents. ENGINEER will be entitled to rely on the results of such tests and facts being certified. The scope of services assumes the pumps and motors will go through a non-witnessed factory test. Attending testing will be considered additional services.

11. Disagreements between CITY and Contractor

- a. As necessary, ENGINEER will, with reasonable promptness, render initial written decision on all claims of CITY and Contractor relating to the acceptability of Contractor’s work or the interpretation of the requirements of the Contract Documents pertaining to the progress of the Contractor’s work. In rendering such decisions, ENGINEER will be fair and not show partiality to CITY or Contractor and will not be liable in connection with any decision rendered in good faith in such capacity. The initial decision of the ENGINEER shall be required as a condition precedent to mediation or litigation of any claim arising prior to the date final payment is due to the Contractor, unless thirty (30) days have passed after a claim has been referred to the ENGINEER with no decision having been rendered.

12. Final Walkthrough and Punchlist Preparation

- a. Attend final walkthrough with Contractor and CITY to determine if the completed work of Contractor is generally in accordance with the Contract Documents.
  - i. Limitation of Responsibilities: The ENGINEER will not be responsible for the acts or omissions of any Contractor, or of any of their subcontractors, suppliers, or of any other individual entity performing or furnishing the work. ENGINEER will not have the authority or responsibility to stop the work of any Contractor.
- b. Compile punch list from information gathered during final walkthrough with CITY and Contractor.

13. Start-up Assistance: The ENGINEER will attend manufacturer’s start-up and training for major equipment components and will assist the CITY with questions during an initial six-week start-up of the facility. The ENGINEER will be available for an additional eight weeks beyond the initial start-up completion to

conduct site visits and answer additional questions with regards to making adjustments to operating protocols or process control changes.

## **Task 8 – RECORD DRAWINGS**

### **A. Record Drawings**

1. Obtain and review comments and field changes on the construction plans from CITY and Contractor.
2. Prepare record drawings based on comments and field changes. The ENGINEER will not be providing resident engineering services and will not be observing on a full-time basis and will therefore not seal the record drawings. The record drawings will be provided in the following format:
  - a. PDF electronic copy



## **ADDITIONAL SERVICES NOT INCLUDED IN THE EXISTING SCOPE OF SERVICES**

CITY and ENGINEER agree that the following services are beyond the Scope of Services described in the tasks above. However, ENGINEER can provide these services, if needed, upon the CITY's written request. Any additional amounts paid to ENGINEER as a result of any material change to the Scope of the Project shall be agreed upon in writing by both parties before the services are performed. These additional services include, but are not limited to the following:

- Design of solids drying or composting facilities
- Evaluation and design of improvements to existing North and South treatment trains
- Redesign to reflect project scope changes requested by the CITY, required to address changed conditions, or change in direction previously approved by the CITY, mandated by changing governmental laws, or necessitated by the CITY's acceptance of substitutions proposed by the contractor.
- Design or Survey of any offsite collection system improvements beyond the improvements identified in the scope
- Preparation for and attendance at public meetings beyond those identified in the scope
- Furnish additional copies of review documents and/or bid documents in excess of the number of the same identified above.
- Services related to disputes over bid protests, bid rejection, and re-bidding of the contract for construction.
- Appearing before regulatory agencies or courts as an expert witness in any litigation with third parties or condemnation proceedings arising from the development or construction of the Project, including the preparation of engineering data and reports for assistance to the CITY.
- Accompanying the CITY when meeting with the TCEQ, U.S. Environmental Protection Agency, or other regulatory agencies during the course of the Project, beyond those meetings identified above. The ENGINEER will assist the CITY on an as-needed basis in preparing compliance schedules, progress reports, and providing general technical support for the CITY's compliance efforts.
- Assisting CITY or Contractor in the defense or prosecution of litigation in connection with or in addition to those services contemplated by this Agreement. Such services, if any, will be furnished by ENGINEER on a fee basis negotiated by the respective parties outside of and in addition to this Agreement.
- Providing professional services associated with the discovery of any hazardous waste or materials in the project site.
- Performance of materials or specialty testing services.
- Services necessary due to default of the Contractor.
- Services related to damages caused by fire, flood, earthquake, or other acts of God.
- Services related to warranty claims, enforcement, and inspection after final completion.
- Services related to Survey Construction Staking.
- Services to support, prepare, document, bring, defend, or assist in litigation undertaken or defended by the CITY.
- Performance of miscellaneous and supplemental services related to the project as requested by the CITY.
- "Value engineering" after bidding
- Additional bid packages beyond the scope identified above
- SWPPP inspections / coordination
- Any services not listed in the Scope of Services

## ATTACHMENT "B"

Compensation for Engineering Design Related Services for:

### PECAN CREEK WATER RECLAMATION PLANT EXPANSION TO 26 MGD INCLUDING SOLIDS HANDLING AND DISINFECTION SYSTEM IMPROVEMENTS

Total compensation for the ENGINEER contemplated under the terms of this agreement **shall be a total not-to-exceed \$14,952,000** for all services including reimbursable expenses. The CITY shall compensate the ENGINEER as follows:

For Tasks 1-8 the total compensation shall be on a lump sum basis and not to exceed **\$14,952,000**.

Progress payments for shall be paid monthly based on the actual work satisfactorily completed per month in each phase, with the following amounts of the total compensation for each phase of the Project:

• Task 1 – Project Management	\$ 189,000
• Task 2 – Preliminary Design	\$3,684,000
• Task 3 – Geotechnical Services	\$ 80,000
• Task 4 – Final Design	\$6,898,000
• Task 5 – Construction Contract Documents	\$ 235,000
• Task 6 – Bid Phase Services	\$ 35,000
• Task 7 – Construction Phase Services	
○ CCA	\$2,906,000
○ RPR	\$ 860,000
• Task 8 – Record Drawings	\$ 65,000

**Grand Total           \$ 14,952,000**

ENGINEER will not exceed the total maximum fee shown without authorization from the CITY. Individual task amounts are provided for budgeting purposes only. ENGINEER reserves the right to reallocate amounts among tasks as necessary.

All permitting, application, and similar project fees will be paid directly by the CITY.

**Non-Labor Expenses:** Non-labor expenses for reimbursable tasks shall be reimbursed as Direct Expenses at invoice or internal office cost. 4.6% will be added to each invoice to cover certain other internal office cost expenses as to these tasks, such as in-house duplicating, local mileage, telephone calls, facsimiles, postage, and word processing.

**Direct Expenses** (non-labor) for reimbursable tasks include, but are not limited to, mileage, travel and lodging expenses, mail, supplies, printing and reproduction services, other direct expenses associated with delivery of the work; plus applicable sales, use, value added, business transfer, gross receipts, or other similar taxes. Direct reimbursable expenses such as express delivery services, fees, travel, and other direct expenses will be billed at 1.10 times the cost.

Payment will be due within 25 days of your receipt of the invoice and should include the invoice number and Kimley-Horn project number.

ORDINANCE NO. \_\_\_\_\_

AN ORDINANCE OF THE CITY OF DENTON, A TEXAS HOME-RULE MUNICIPAL CORPORATION, AUTHORIZING THE CITY MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH KIMLEY-HORN AND ASSOCIATES, INC., TO PROVIDE REGULATORY PERMITTING/APPROVAL SUPPORT, PROCESS EVALUATION, DESIGN SERVICES, BIDDING ASSISTANCE, AND CONSTRUCTION PHASE SERVICES FOR THE PECAN CREEK WATER RECLAMATION PLANT (PCWRP) EXPANSION TO 26MGD PROJECT FOR THE WASTEWATER DEPARTMENT; PROVIDING FOR THE EXPENDITURE OF FUNDS THEREFOR; AND PROVIDING AN EFFECTIVE DATE (RFQ 7574-027 – PROFESSIONAL SERVICES AGREEMENT FOR DESIGN SERVICES AWARDED TO KIMLEY-HORN AND ASSOCIATES, INC., IN THE NOT-TO-EXCEED AMOUNT OF \$14,952,000.00).

WHEREAS, on March 23, 2021, the City Council approved a pre-qualified engineer list for Water and Wastewater (Ordinance 21-546), and the professional services provider (the “Provider”) mentioned in this ordinance is being selected as the most highly qualified on the basis of its demonstrated competence and qualifications to perform the proposed professional services; and

WHEREAS, this procurement was undertaken as part of the City’s governmental function; and

WHEREAS, the fees under the proposed contract are fair and reasonable and are consistent with, and not higher than, the recommended practices and fees published by the professional associations applicable to the Provider’s profession, and such fees do not exceed the maximum provided by law; NOW, THEREFORE,

THE COUNCIL OF THE CITY OF DENTON HEREBY ORDAINS:

SECTION 1. The City Manager, or their designee, is hereby authorized to enter into an agreement with Kimley-Horn and Associates, Inc., to provide regulatory permitting/approval support, process evaluation, design services, bidding assistance, and construction phase services for the Pecan Creek Water Reclamation Plant (PCWRP) Expansion to 26MGD Project for the Wastewater Department, a copy of which is attached hereto and incorporated by reference herein.

SECTION 2. The City Manager, or their designee, is authorized to expend funds as required by the attached contract.

SECTION 3. The City Council of the City of Denton, hereby expressly delegates the authority to take any actions that may be required or permitted to be performed by the City of Denton under this ordinance to the City Manager of the City of Denton, or their designee.

SECTION 4. The findings in the preamble of this ordinance are incorporated herein by reference.

SECTION 5. This ordinance shall become effective immediately upon its passage and approval.

The motion to approve this ordinance was made by \_\_\_\_\_ and seconded by \_\_\_\_\_. This ordinance was passed and approved by the following vote [\_\_\_\_ - \_\_\_\_]:

	<b>Aye</b>	<b>Nay</b>	<b>Abstain</b>	<b>Absent</b>
Mayor Gerard Hudspeth:	_____	_____	_____	_____
Vicki Byrd, District 1:	_____	_____	_____	_____
Brian Beck, District 2:	_____	_____	_____	_____
Paul Meltzer, District 3:	_____	_____	_____	_____
Joe Holland, District 4:	_____	_____	_____	_____
Brandon Chase McGee, At Large Place 5:	_____	_____	_____	_____
Chris Watts, At Large Place 6:	_____	_____	_____	_____


PASSED AND APPROVED this the \_\_\_\_\_ day of \_\_\_\_\_, 2023.

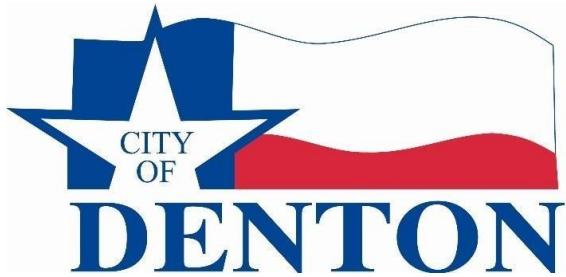
\_\_\_\_\_  
GERARD HUDSPETH, MAYOR

ATTEST:  
JESUS SALAZAR, INTERIM CITY SECRETARY

BY: \_\_\_\_\_

APPROVED AS TO LEGAL FORM:  
MACK REINWAND, CITY ATTORNEY

BY:  \_\_\_\_\_  
Digitally signed by Marcella Lunn  
DN: cn=Marcella Lunn, o,  
ou=City of Denton,  
email=marcella.lunn@cityofdent  
on.com, c=US  
Date: 2023.05.10 17:20:32 -05'00'



Docusign City Council Transmittal Coversheet

PSA	7574-027
File Name	PCWRP EXPANSION TO 26MGD
Purchasing Contact	Crystal westbrook
City Council Target Date	
Piggy Back Option	Not Applicable
Contract Expiration	
Ordinance	

## **CITY OF DENTON, TEXAS**

### **STANDARD AGREEMENT FOR ENGINEERING RELATED PROFESSIONAL SERVICES**

This AGREEMENT is between the City of Denton, a Texas home-rule municipality ("CITY"), and **KIMLEY-HORN AND ASSOCIATES, INC.**, with its corporate office at 421 Fayetteville Street, Suite 600, Raleigh, NC 27601 and authorized to do business in Texas, ("ENGINEER"), for a PROJECT generally described as: PCWRP Expansion To 26MGD (the "PROJECT").

#### **SECTION 1** **Scope of Services**

- A.** The CITY hereby agrees to retain the ENGINEER, and the ENGINEER hereby agrees to perform, professional engineering services set forth in the Scope of Services attached hereto as Attachment A. These services shall be performed in connection with the PROJECT.
- B.** Additional services, if any, will be requested in writing by the CITY. CITY shall not pay for any work performed by ENGINEER or its consultants, subcontractors and/or suppliers that has not been ordered in advance and in writing. It is specifically agreed that ENGINEER shall not be compensated for any additional work resulting from oral orders of any person.

#### **SECTION 2** **Compensation and Term of Agreement**

- A.** The ENGINEER shall be compensated for all services provided pursuant to this AGREEMENT in an amount not to exceed \$14,952,000 in the manner and in accordance with the fee schedule as set forth in Attachment A. Payment shall be considered full compensation for all labor, materials, supplies, and equipment necessary to complete the services described in Attachment A.
- B.** Unless otherwise terminated pursuant to Section 6. D. herein, this AGREEMENT shall be for a term beginning upon the effective date, as described below, and shall continue for a period which may reasonably be required for the completion of the PROJECT, until the expiration of the funds, or completion of the PROJECT and acceptance by the CITY, whichever occurs first. ENGINEER shall proceed diligently with the PROJECT to completion as described in the PROJECT schedule as set forth in Attachment A.

#### **SECTION 3** **Terms of Payment**

Payments to the ENGINEER will be made as follows:

## **A. Invoice and Payment**

- (1) The Engineer shall provide the City sufficient documentation, including but not limited to meeting the requirements set forth in the PROJECT schedule as set forth in Attachment A to reasonably substantiate the invoices.
- (2) The ENGINEER will issue monthly invoices for all work performed under this AGREEMENT. Invoices for the uncontested performance of the particular services are due and payable within 30 days of receipt by City.
- (3) Upon completion of services enumerated in Section 1, the final payment of any balance for the uncontested performance of the services will be due within 30 days of receipt of the final invoice.
- (4) In the event of a disputed or contested billing, only that portion so contested will be withheld from payment, and the undisputed portion will be paid. The CITY will exercise reasonableness in contesting any bill or portion thereof. No interest will accrue on any contested portion of the billing until mutually resolved.
- (5) If the CITY fails to make payment in full to ENGINEER for billings contested in good faith within 60 days of the amount due, the ENGINEER may, after giving 7 days' written notice to CITY, suspend services under this AGREEMENT until paid in full. In the event of suspension of services, the ENGINEER shall have no liability to CITY for delays or damages caused the CITY because of such suspension of services.

## **SECTION 4 Obligations of the Engineer**

### **A. General**

The ENGINEER will serve as the CITY's professional engineering representative under this AGREEMENT, providing professional engineering consultation and advice and furnishing customary services incidental thereto.

### **B. Standard of Care**

The ENGINEER shall perform its services:

- (1) with the professional skill and care ordinarily provided by competent engineers practicing in the same or similar locality and under the same or similar circumstances and professional license; and
- (2) as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer.

### **C. Subsurface Investigations**

- (1) The ENGINEER shall advise the CITY with regard to the necessity for subcontract work such as special surveys, tests, test borings, or other subsurface investigations in connection with design and engineering work to be performed hereunder. The ENGINEER shall also advise the CITY concerning the results of same. Such surveys, tests, and investigations shall be furnished by the CITY, unless otherwise specified in Attachment A.
- (2) In soils, foundation, groundwater, and other subsurface investigations, the actual characteristics may vary significantly between successive test points and sample intervals and at locations other than where observations, exploration, and investigations have been made. Because of the inherent uncertainties in subsurface evaluations, changed or unanticipated underground conditions may occur that could affect the total PROJECT cost and/or execution. These conditions and cost/execution effects are not the responsibility of the ENGINEER.

### **D. Preparation of Engineering Drawings**

The ENGINEER will provide to the CITY the original drawings of all plans in ink on reproducible mylar sheets and electronic files in .pdf format, or as otherwise approved by CITY, which shall become the property of the CITY. CITY may use such drawings in any manner it desires; provided, however, that the ENGINEER shall not be liable for the use of such drawings for any project other than the PROJECT described herein.

### **E. Engineer's Personnel at Construction Site**

- (1) The presence or duties of the ENGINEER's personnel at a construction site, whether as on-site representatives or otherwise, do not make the ENGINEER or its personnel in any way responsible for those duties that belong to the CITY and/or the CITY's construction contractors or other entities, and do not relieve the construction contractors or any other entity of their obligations, duties, and responsibilities, including, but not limited to, all construction methods, means, techniques, sequences, and procedures necessary for coordinating and completing all portions of the construction work in accordance with the AGREEMENT Documents and any health or safety precautions required by such construction work. The ENGINEER and its personnel have no authority to exercise any control over any construction contractor or other entity or their employees in connection with their work or any health or safety precautions.
- (2) Except to the extent of specific site visits expressly detailed and set forth in Attachment A, the ENGINEER or its personnel shall have no obligation or responsibility to visit the construction site to become familiar with the progress or quality of the completed work on the PROJECT or to determine, in general, if



the work on the PROJECT is being performed in a manner indicating that the PROJECT, when completed, will be in accordance with the AGREEMENT Documents, nor shall anything in the AGREEMENT Documents or this AGREEMENT between CITY and ENGINEER be construed as requiring ENGINEER to make exhaustive or continuous on-site inspections to discover latent defects in the work or otherwise check the quality or quantity of the work on the PROJECT. If the ENGINEER makes on-site observation(s) of a deviation from the AGREEMENT Documents, the ENGINEER shall inform the CITY.

- (3) When professional certification of performance or characteristics of materials, systems or equipment is reasonably required to perform the services set forth in the Scope of Services, the ENGINEER shall be entitled to rely upon such certification to establish materials, systems or equipment and performance criteria to be required in the AGREEMENT Documents.

## **F. Opinions of Probable Cost, Financial Considerations, and Schedules**

- (1) The ENGINEER shall provide opinions of probable costs based on the current available information at the time of preparation, in accordance with Attachment A.
- (2) In providing opinions of cost, financial analyses, economic feasibility projections, and schedules for the PROJECT, the ENGINEER has no control over cost or price of labor and materials; unknown or latent conditions of existing equipment or structures that may affect operation or maintenance costs; competitive bidding procedures and market conditions; time or quality of performance by third parties; quality, type, management, or direction of operating personnel; and other economic and operational factors that may materially affect the ultimate PROJECT cost or schedule. Therefore, the ENGINEER makes no warranty that the CITY's actual PROJECT costs, financial aspects, economic feasibility, or schedules will not vary from the ENGINEER's opinions, analyses, projections, or estimates.

## **G. Construction Progress Payments**

Recommendations by the ENGINEER to the CITY for periodic construction progress payments to the construction contractor will be based on the ENGINEER's knowledge, information, and belief from selective sampling and observation that the work has progressed to the point indicated. Such recommendations do not represent that continuous or detailed examinations have been made by the ENGINEER to ascertain that the construction contractor has completed the work in exact accordance with the AGREEMENT Documents; that the final work will be acceptable in all respects; that the ENGINEER has made an examination to ascertain how or for what purpose the construction contractor has used the moneys paid; that title to any of the work, materials, or equipment has passed to the CITY free and clear of liens, claims, security interests, or

encumbrances; or that there are not other matters at issue between the CITY and the construction contractor that affect the amount that should be paid.

## **H. Record Drawings**

Record drawings, if required, will be prepared, in part, on the basis of information compiled and furnished by others, and may not always represent the exact location, type of various components, or exact manner in which the PROJECT was finally constructed. The ENGINEER is not responsible for any errors or omissions in the information from others that is incorporated into the record drawings.

## **I. Right to Audit**

- (1) ENGINEER agrees that the CITY shall, until the expiration of five (5) years after final payment under this AGREEMENT, have access to and the right to examine and photocopy any directly pertinent books, documents, papers and records of the ENGINEER involving transactions relating to this AGREEMENT. ENGINEER agrees that the CITY shall have access during normal working hours to all necessary ENGINEER facilities and shall be provided adequate and appropriate work space in order to conduct audits in compliance with the provisions of this section. The CITY shall give ENGINEER reasonable advance notice of intended audits.
- (2) ENGINEER further agrees to include in all its subconsultant agreements hereunder a provision to the effect that the subconsultant agrees that the CITY shall, until the expiration of five (5) years after final payment under the subcontract, have access to and the right to examine and photocopy any directly pertinent books, documents, papers and records of such subconsultant, involving transactions to the subcontract, and further, that the CITY shall have access during normal working hours to all subconsultant facilities, and shall be provided adequate and appropriate work space, in order to conduct audits in compliance with the provisions of this section together with subsection (3) hereof. CITY shall give subconsultant reasonable advance notice of intended audits.
- (3) ENGINEER and subconsultant agree to photocopy such documents as may be requested by the CITY. The CITY agrees to reimburse ENGINEER for the cost of copies at the rate published in the Texas Administrative Code in effect as of the time copying is performed.

## J. INSURANCE

### (1) ENGINEER'S INSURANCE

- a. Commercial General Liability – the ENGINEER shall maintain commercial general liability (CGL) and, if necessary, commercial umbrella insurance with a limit of not less than \$1,000,000.00 per each occurrence with a \$2,000,000.00 aggregate. If such Commercial General Liability insurance contains a general aggregate limit, it shall apply separately to this PROJECT or location.
  - i. The CITY shall be included as an additional insured with all rights of defense under the CGL, using ISO additional insured endorsement or a substitute providing equivalent coverage, and under the commercial umbrella, if any. This insurance shall apply as primary insurance with respect to any other insurance or self-insurance programs afforded to the CITY. The Commercial General Liability insurance policy shall have no exclusions or endorsements that would alter or nullify: premises/operations, products/completed operations, contractual, personal injury, or advertising injury, which are normally contained within the policy, unless the CITY specifically approves such exclusions in writing.
  - ii. ENGINEER waives all rights against the CITY and its agents, officers, directors and employees for recovery of damages to the extent these damages are covered by the commercial general liability or commercial umbrella liability insurance maintained in accordance with this AGREEMENT.
- b. Business Auto – the ENGINEER shall maintain business auto liability and, if necessary, commercial umbrella liability insurance with a limit of not less than \$1,000,000 each accident. Such insurance shall cover liability arising out of “any auto”, including owned, hired, and non-owned autos, when said vehicle is used in the course of the PROJECT. If the engineer owns no vehicles, coverage for hired or non-owned is acceptable.
  - i. ENGINEER waives all rights against the CITY and its agents, officers, directors and employees for recovery of damages to the extent these damages are covered by the business auto liability or commercial umbrella liability insurance obtained by ENGINEER pursuant to this AGREEMENT or under any applicable auto physical damage coverage.
- c. Workers' Compensation – ENGINEER shall maintain workers compensation and employers liability insurance and, if necessary,

commercial umbrella liability insurance with a limit of not less than \$100,000.00 each accident for bodily injury by accident or \$100,000.00 each employee for bodily injury by disease, with \$500,000.00 policy limit.

- i. ENGINEER waives all rights against the CITY and its agents, officers, directors and employees for recovery of damages to the extent these damages are covered by workers compensation and employer's liability or commercial umbrella insurance obtained by ENGINEER pursuant to this AGREEMENT.
- d. Professional Liability – ENGINEER shall maintain professional liability, a claims-made policy, with a minimum of \$1,000,000.00 per claim and aggregate. The policy shall contain a retroactive date prior to the date of the AGREEMENT or the first date of services to be performed, whichever is earlier. Coverage shall be maintained for a period of 5 years following the completion of the AGREEMENT. An annual certificate of insurance specifically referencing this PROJECT shall be submitted to the CITY for each year following completion of the AGREEMENT.

## (2) GENERAL INSURANCE REQUIREMENTS

- a. Certificates of insurance evidencing that the ENGINEER has obtained all required insurance shall be attached to this AGREEMENT prior to its execution.
- b. Applicable policies shall be endorsed to name the CITY an Additional Insured thereon, subject to any defense provided by the policy, as its interests may appear. The term CITY shall include its employees, officers, officials, agents, and volunteers as respects the contracted services.
- c. Certificate(s) of insurance shall document that insurance coverage specified in this AGREEMENT are provided under applicable policies documented thereon.
- d. Any failure on part of the CITY to attach the required insurance documentation hereto shall not constitute a waiver of the insurance requirements.
- e. A minimum of thirty (30) days notice of cancellation or material change in coverage shall be provided to the CITY. A ten (10) days notice shall be acceptable in the event of non-payment of premium. Notice shall be sent to the respective Department Director (by name), City of Denton, 901 Texas Street, Denton, Texas 76209.
- f. Insurers for all policies must be authorized to do business in the State of

Texas and have a minimum rating of A:V or greater, in the current A.M. Best Key Rating Guide or have reasonably equivalent financial strength and solvency to the satisfaction of Risk Management.

- g. Any deductible or self insured retention in excess of \$25,000.00 that would change or alter the requirements herein is subject to approval by the CITY in writing, if coverage is not provided on a first-dollar basis. The CITY, at its sole discretion, may consent to alternative coverage maintained through insurance pools or risk retention groups. Dedicated financial resources or letters of credit may also be acceptable to the CITY.
- h. Applicable policies shall each be endorsed with a waiver of subrogation in favor of the CITY as respects the PROJECT.
- i. The CITY shall be entitled, upon its request and without incurring expense, to review the ENGINEER's insurance policies including endorsements thereto and, at the CITY's discretion; the ENGINEER may be required to provide proof of insurance premium payments.
- j. Lines of coverage, other than Professional Liability, underwritten on a claims-made basis, shall contain a retroactive date coincident with or prior to the date of the AGREEMENT. The certificate of insurance shall state both the retroactive date and that the coverage is claims-made.
- k. Coverages, whether written on an occurrence or claims-made basis, shall be maintained without interruption nor restrictive modification or changes from date of commencement of the PROJECT until final payment and termination of any coverage required to be maintained after final payments.
- l. The CITY shall not be responsible for the direct payment of any insurance premiums required by this AGREEMENT.
- m. Sub consultants and subcontractors to/of the ENGINEER shall be required by the ENGINEER to maintain the same or reasonably equivalent insurance coverage as required for the ENGINEER. When sub consultants/subcontractors maintain insurance coverage, ENGINEER shall provide CITY with documentation thereof on a certificate of insurance.

## **K. Independent Consultant**

The ENGINEER agrees to perform all services as an independent consultant and not as a subcontractor, agent, or employee of the CITY. The doctrine of *respondeat superior* shall not apply.

**L. Disclosure**

The ENGINEER acknowledges to the CITY that it has made full disclosure in writing of any existing conflicts of interest or potential conflicts of interest, including personal financial interest, direct or indirect, in property abutting the proposed PROJECT and business relationships with abutting property cities. The ENGINEER further acknowledges that it will make disclosure in writing of any conflicts of interest that develop subsequent to the signing of this AGREEMENT and prior to final payment under the AGREEMENT.

**M. Asbestos or Hazardous Substances**

- (1) If asbestos or hazardous substances in any form are encountered or suspected, the ENGINEER will stop its own work in the affected portions of the PROJECT to permit testing and evaluation.
- (2) If asbestos or other hazardous substances are suspected, the CITY may request the ENGINEER to assist in obtaining the services of a qualified subcontractor to manage the remediation activities of the PROJECT.

**N. Permitting Authorities - Design Changes**

If permitting authorities require design changes so as to comply with published design criteria and/or current engineering practice standards which the ENGINEER should have been aware of at the time this AGREEMENT was executed, the ENGINEER shall revise plans and specifications, as required, at its own cost and expense. However, if design changes are required due to the changes in the permitting authorities' published design criteria and/or practice standards criteria which are published after the date of this AGREEMENT which the ENGINEER could not have been reasonably aware of, the ENGINEER shall notify the CITY of such changes and an adjustment in compensation will be made through an amendment to this AGREEMENT.

**O. Schedule**

ENGINEER shall manage the PROJECT in accordance with the schedule developed per Attachment A to this AGREEMENT.

**P. Equal Opportunity**

- (1) **Equal Employment Opportunity:** ENGINEER and ENGINEER's agents shall engage in any discriminatory employment practice. No person shall, on the grounds of race, sex, sexual orientation, age, disability, creed, color, genetic testing, or national origin, be refused the benefits of, or be otherwise subjected to discrimination under any activities resulting from this AGREEMENT.
- (2) **Americans with Disabilities Act (ADA) Compliance:** ENGINEER and

ENGINEER's agents shall not engage in any discriminatory employment practice against individuals with disabilities as defined in the ADA.

## **SECTION 5**

### **Obligations of the City**

#### **A. City-Furnished Data**

ENGINEER may rely upon the accuracy, timeliness, and completeness of the information provided by the CITY.

#### **B. Access to Facilities and Property**

The CITY will make its facilities accessible to the ENGINEER as required for the ENGINEER's performance of its services. The CITY will perform, at no cost to the ENGINEER, such tests of equipment, machinery, pipelines, and other components of the CITY's facilities as may be required in connection with the ENGINEER's services. The CITY will be responsible for all acts of the CITY's personnel.

#### **C. Advertisements, Permits, and Access**

Unless otherwise agreed to in the Scope of Services, the CITY will obtain, arrange, and pay for all advertisements for bids; permits and licenses required by local, state, or federal authorities; and land, easements, rights-of-way, and access necessary for the ENGINEER's services or PROJECT construction.

#### **D. Timely Review**

The CITY will examine the ENGINEER's studies, reports, sketches, drawings, specifications, proposals, and other documents; obtain advice of an attorney, insurance counselor, accountant, auditor, bond and financial advisors, and other consultants as the CITY deems appropriate; and render in writing decisions required by the CITY in a timely manner in accordance with the PROJECT schedule prepared in accordance with Attachment A.

#### **E. Prompt Notice**

The CITY will give prompt written notice to the ENGINEER whenever CITY observes or becomes aware of any development that affects the scope or timing of the ENGINEER's services or of any defect in the work of the ENGINEER or construction contractors.

#### **F. Asbestos or Hazardous Substances Release.**

- (1) CITY acknowledges ENGINEER will perform part of the work at CITY's facilities that may contain hazardous materials, including asbestos containing materials, or conditions, and that ENGINEER had no prior role in the generation, treatment, storage, or disposition of such materials. In consideration of the associated risks that may give rise to claims by third parties or employees of City, City hereby releases ENGINEER from any damage or liability related to the presence of such materials.
- (2) The release required above shall not apply in the event the discharge, release or escape of hazardous substances, contaminants, or asbestos is a result of ENGINEER's negligence or if ENGINEER brings such hazardous substance, contaminant or asbestos onto the PROJECT.

### **G. Contractor Indemnification and Claims**

The CITY agrees to include in all construction contracts the provisions of Article IV.E. regarding the ENGINEER's Personnel at Construction Site, and provisions providing for contractor indemnification of the CITY and the ENGINEER for contractor's negligence.

### **H. Contractor Claims and Third-Party Beneficiaries**

- (1) The CITY agrees to include the following clause in all contracts with construction contractors and equipment or materials suppliers:
 

"Contractors, subcontractors and equipment and materials suppliers on the PROJECT, or their sureties, shall maintain no direct action against the ENGINEER, its officers, employees, and subcontractors, for any claim arising out of, in connection with, or resulting from the engineering services performed. Only the CITY will be the beneficiary of any undertaking by the ENGINEER."
- (2) This AGREEMENT gives no rights or benefits to anyone other than the CITY and the ENGINEER and there are no third-party beneficiaries.
- (3) The CITY will include in each agreement it enters into with any other entity or person regarding the PROJECT a provision that such entity or person shall have no third-party beneficiary rights under this AGREEMENT.
- (4) Nothing contained in this Section H. shall be construed as a waiver of any right the CITY has to bring a claim against ENGINEER.

### **I. CITY's Insurance**

- (1) The CITY may maintain property insurance on certain pre-existing structures associated with the PROJECT.



- (2) The CITY may secure Builders Risk/Installation insurance at the replacement cost value of the PROJECT. The CITY may provide ENGINEER a copy of the policy or documentation of such on a certificate of insurance.

#### **J. Litigation Assistance**

The Scope of Services does not include costs of the ENGINEER for required or requested assistance to support, prepare, document, bring, defend, or assist in litigation undertaken or defended by the CITY. In the event CITY requests such services of the ENGINEER, this AGREEMENT shall be amended or a separate agreement will be negotiated between the parties.

#### **K. Changes**

The CITY may make or approve changes within the general Scope of Services in this AGREEMENT. If such changes affect the ENGINEER's cost of or time required for performance of the services, an equitable adjustment will be made through an amendment to this AGREEMENT with appropriate CITY approval.

### **SECTION 6** **General Legal Provisions**

#### **A. Authorization to Proceed**

ENGINEER shall be authorized to proceed with this AGREEMENT upon receipt of a written Notice to Proceed from the CITY.

#### **B. Reuse of Project Documents**

All designs, drawings, specifications, documents, and other work products of the ENGINEER, whether in hard copy or in electronic form, are instruments of service for this PROJECT, whether the PROJECT is completed or not. Reuse, change, or alteration by the CITY or by others acting through or on behalf of the CITY of any such instruments of service without the written permission of the ENGINEER will be at the CITY's sole risk. The CITY shall own the final designs, drawings, specifications and documents.

#### **C. Force Majeure**

The ENGINEER is not responsible for damages or delay in performance caused by acts of God, strikes, lockouts, accidents, or other events beyond the control of the ENGINEER that prevent ENGINEER's performance of its obligations hereunder.

#### **D. Termination**

(1) This AGREEMENT may be terminated:

- a. by the City for its convenience upon 30 days' written notice to ENGINEER.
- b. by either the CITY or the ENGINEER for cause if either party fails substantially to perform through no fault of the other and the nonperforming party does not commence correction of such nonperformance within 5 days' written notice or thereafter fails to diligently complete the correction.

(2) If this AGREEMENT is terminated for the convenience of the City, the ENGINEER will be paid for termination expenses as follows:

- a. Cost of reproduction of partial or complete studies, plans, specifications or other forms of ENGINEER'S work product;
- b. Out-of-pocket expenses for purchasing electronic data files and other data storage supplies or services;
- c. The time requirements for the ENGINEER'S personnel to document the work underway at the time of the CITY'S termination for convenience so that the work effort is suitable for long time storage.

(3) Prior to proceeding with termination services, the ENGINEER will submit to the CITY an itemized statement of all termination expenses. The CITY'S approval will be obtained in writing prior to proceeding with termination services.

#### **E. Suspension, Delay, or Interruption to Work**

The CITY may suspend, delay, or interrupt the services of the ENGINEER for the convenience of the CITY. In the event of such suspension, delay, or interruption, an equitable adjustment in the PROJECT's schedule, commitment and cost of the ENGINEER's personnel and subcontractors, and ENGINEER's compensation will be made.

#### **F. Indemnification**

**IN ACCORDANCE WITH TEXAS LOCAL GOVERNMENT CODE SECTION 271.904, THE ENGINEER SHALL INDEMNIFY OR HOLD HARMLESS THE CITY AGAINST LIABILITY FOR ANY DAMAGE COMMITTED BY THE ENGINEER OR ENGINEER'S AGENT, CONSULTANT UNDER CONTRACT, OR ANOTHER ENTITY OVER WHICH THE ENGINEER EXERCISES CONTROL TO THE EXTENT THAT THE DAMAGE IS CAUSED BY OR RESULTING FROM AN ACT OF NEGLIGENCE, INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT, OR FAILURE TO PAY A SUBCONTRACTOR OR SUPPLIER. CITY IS ENTITLED TO RECOVER ITS**

## **REASONABLE ATTORNEY'S FEES IN PROPORTION TO THE ENGINEER'S LIABILITY.**

### **G. Assignment**

Neither party shall assign all or any part of this AGREEMENT without the prior written consent of the other party.

### **H. Jurisdiction**

The law of the State of Texas shall govern the validity of this AGREEMENT, its interpretation and performance, and any other claims related to it. The venue for any litigation related to this AGREEMENT shall be Denton County, Texas.

### **I. Severability and Survival**

If any of the provisions contained in this AGREEMENT are held for any reason to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability will not affect any other provision, and this AGREEMENT shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein. Sections 5.F., 6.B., 6.D., 6.F., 6.H., and 6.I. shall survive termination of this AGREEMENT for any cause.

### **J. Observe and Comply**

ENGINEER shall at all times observe and comply with all federal and State laws and regulations and with all City ordinances and regulations which in any way affect this AGREEMENT and the work hereunder, and shall observe and comply with all orders, laws ordinances and regulations which may exist or may be enacted later by governing bodies having jurisdiction or authority for such enactment. No plea of misunderstanding or ignorance thereof shall be considered. **ENGINEER AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS CITY AND ALL OF ITS OFFICERS, AGENTS AND EMPLOYEES FROM AND AGAINST ALL CLAIMS OR LIABILITY ARISING OUT OF THE VIOLATION OF ANY SUCH ORDER, LAW, ORDINANCE, OR REGULATION, WHETHER IT BE BY ITSELF OR ITS EMPLOYEES.**

### **K. Immigration Nationality Act**

ENGINEER shall verify the identity and employment eligibility of its employees who perform work under this AGREEMENT, including completing the Employment Eligibility Verification Form (I-9). Upon request by CITY, ENGINEER shall provide CITY with copies of all I-9 forms and supporting eligibility documentation for each employee who performs work under this AGREEMENT. ENGINEER shall adhere to all Federal and State laws as well as establish appropriate procedures and controls so that no services will be performed by any ENGINEER employee who is not legally eligible to perform such services. **ENGINEER SHALL INDEMNIFY CITY AND HOLD CITY HARMLESS FROM ANY PENALTIES, LIABILITIES, OR LOSSES DUE TO VIOLATIONS OF THIS**

**PARAGRAPH BY ENGINEER, ENGINEER'S EMPLOYEES, SUBCONTRACTORS, AGENTS, OR LICENSEES.** CITY, upon written notice to ENGINEER, shall have the right to immediately terminate this AGREEMENT for violations of this provision by ENGINEER.

#### **L. Prohibition On Contracts With Companies Boycotting Israel**

Engineer acknowledges that in accordance with Chapter 2271 of the Texas Government Code, City is prohibited from entering into a contract with a company for goods or services unless the contract contains a written verification from the company that it: (1) does not boycott Israel; and (2) will not boycott Israel during the term of the contract. The terms "boycott Israel" and "company" shall have the meanings ascribed to those terms in Section 808.001 of the Texas Government Code. ***By signing this agreement, Engineer certifies that Engineer's signature provides written verification to the City that Engineer: (1) does not boycott Israel; and (2) will not boycott Israel during the term of the agreement.*** Failure to meet or maintain the requirements under this provision will be considered a material breach.

#### **M. Prohibition On Contracts With Companies Doing Business with Iran, Sudan, or a Foreign Terrorist Organization**

Sections 2252 and 2270 of the Texas Government Code restricts CITY from contracting with companies that do business with Iran, Sudan, or a foreign terrorist organization. ***By signing this agreement, Engineer certifies that Engineer's signature provides written verification to the City that Engineer, pursuant to Chapters 2252 and 2270, is not ineligible to enter into this agreement and will not become ineligible to receive payments under this agreement by doing business with Iran, Sudan, or a foreign terrorist organization.*** Failure to meet or maintain the requirements under this provision will be considered a material breach.

#### **N. Prohibition on Contracts with Companies Boycotting Certain Energy Companies**

Engineer acknowledges that in accordance with Chapter 2274 of the Texas Government Code, City is prohibited from entering into a contract with a company for goods or services unless the contract contains written verification from the company that it (1) does not boycott energy companies; and (2) will not boycott energy companies during the term of the contract. The terms "boycott energy company" and "company" shall have the meanings ascribed to those terms in Section 809.001 of the Texas Government Code. ***By signing this agreement, Engineer certifies that Engineer's signature provides written verification to the City that Engineer: (1) does not boycott energy companies; and (2) will not boycott energy companies during the term of the agreement.*** Failure to meet or maintain the requirements under this provision will be considered a material breach.

## **O. Prohibition on Contracts with Companies Boycotting Certain Firearm Entities and Firearm Trade Associations**

Engineer acknowledges that in accordance with Chapter 2274 of the Texas Government Code, City is prohibited from entering into a contract with a company for goods or services unless the contract contains written verification from the company that it (1) does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association; and (2) will not discriminate during the term of the contract against a firearm entity or firearm trade association. The terms “discriminate against a firearm entity or firearm trade association,” “firearm entity” and “firearm trade association” shall have the meanings ascribed to those terms in Chapter 2274 of the Texas Government Code. ***By signing this agreement, Engineer certifies that Engineer’s signature provides written verification to the City that Engineer: (1) does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association; and (2) will not discriminate during the term of the contract against a firearm entity or firearm trade association.*** Failure to meet or maintain the requirements under this provision will be considered a material breach.

## **P. Termination Right for Contracts with Companies Doing Business with Certain Foreign-Owned Companies**

The City of Denton may terminate this Contract immediately without any further liability if the City of Denton determines, in its sole judgment, that this Contract meets the requirements under Chapter 2274, and Engineer is, or will be in the future, (i) owned by or the majority of stock or other ownership interest of the company is held or controlled by individuals who are citizens of China, Iran, North Korea, Russia, or other designated country (ii) directly controlled by the Government of China, Iran, North Korea, Russia, or other designated country, or (iii) is headquartered in China, Iran, North Korea, Russia, or other designated country.

## **Q. PROHIBITION AGAINST PERSONAL INTEREST IN CONTRACTS**

No officer, employee, independent consultant, or elected official of the City who is involved in the development, evaluation, or decision-making process of the performance of any solicitation shall have a financial interest, direct or indirect, in the Contract resulting from that solicitation as defined in the City’s Ethic Ordinance 18-757 and in the City Charter chapter 2 article XI(Ethics). Any willful violation of this section shall constitute impropriety in office, and any officer or employee guilty thereof shall be subject to disciplinary action up to and including dismissal. Any violation of this provision, with the knowledge, expressed or implied, of the Contractor shall render the Contract voidable by the City. The Contractor shall complete and submit the City’s Conflict of Interest Questionnaire.

## **R. Agreement Documents**

This AGREEMENT, including its attachments and schedules, constitutes the entire AGREEMENT, which supersedes all prior written or oral understandings, and may only be changed by a written amendment executed by both parties. This AGREEMENT may be executed in one or more counterparts and each counterpart shall, for all purposes, be deemed an original, but all such counterparts shall together constitute but one and the same instrument. The following attachments and schedules are hereby made a part of this AGREEMENT:

Attachment A - Scope of Services, Compensation, Project Schedule, Location Map

These documents make up the AGREEMENT documents and what is called for by one shall be as binding as if called for by all. In the event of an inconsistency or conflict in any of the provisions of the AGREEMENT documents, the inconsistency or conflict shall be resolved by giving precedence first to the written AGREEMENT then to the AGREEMENT documents in the order in which they are listed above.

The parties agree to transact business electronically. Any statutory requirements that certain terms be in writing will be satisfied using electronic documents and signing. Electronic signing of this document will be deemed an original for all legal purposes.

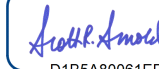
Duly executed by each party's designated representative to be effective on

BY:  
CITY OF DENTON, TEXAS

\_\_\_\_\_  
Sara Hensley, City Manager

BY:  
ENGINEER  
KIMLEY-HORN AND ASSOCIATES,  
INC.

DocuSigned by:



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\_\_\_\_\_  
Scott Arnold  
Vice President

Date: 5/8/2023  
\_\_\_\_\_

2023-1017512

\_\_\_\_\_  
TEXAS ETHICS COMMISSION  
CERTIFICATE NUMBER

THIS AGREEMENT HAS BEEN  
BOTH REVIEWED AND APPROVED  
as to financial and operational  
obligations and business terms.

  
9EBFF5658E56492...

Signature

Director,

Title

water utilities

Department

Date Signed: 5/8/2023

ATTEST:  
JESUS SALAZAR, INTERIM CITY  
SECRETARY

BY: \_\_\_\_\_

APPROVED AS TO LEGAL FORM:  
MACK REINWAND, CITY ATTORNEY

DocuSigned by:



BY: \_\_\_\_\_

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## ATTACHMENT "A"

Scope for Engineering Design Related Services for:

### **PECAN CREEK WATER RECLAMATION PLANT EXPANSION TO 26 MGD INCLUDING SOLIDS HANDLING AND DISINFECTION SYSTEM IMPROVEMENTS**

The ENGINEER will perform its services pursuant to the requirements delineated below. Services under this attachment include engineering services for the design and bidding for the PECAN CREEK WATER RECLAMATION PLANT EXPANSION TO 26 MGD INCLUDING SOLIDS HANDLING AND DISINFECTION SYSTEM IMPROVEMENTS project.

#### **Project Understanding**

The CITY needs to expand the existing Pecan Creek Water Reclamation Plant (PCWRP) to 26 MGD. Currently, PCWRP is designed and permitted to discharge 21 MGD. An updated discharge permit submitted to the Texas Commission on Environmental Quality (TCEQ) includes two additional phases of 26 MGD and 30 MGD, respectfully. The CITY anticipates receiving an approved TCEQ discharge permit in early 2023.

The expansion of PCWRP will include a new 5 MGD treatment train that will utilize membrane bioreactor (MBR) technology, new 26 MGD solids handling facilities and ultraviolet disinfection (UV) facilities.

The project will include the necessary piping and electrical/SCADA improvements to have the new facilities work with the existing facilities to treat 26 MGD.

ENGINEER will provide professional services for the following tasks:

- Task 1 – Design Management
- Task 2 – Preliminary Design
- Task 3 –Geotechnical Services
- Task 4 – Final Design
- Task 5 – Construction Contract Documents
- Task 6 – Bidding Phase Services
- Task 7 – Construction Phase Services



## **Task 1 – DESIGN MANAGEMENT**

### **A. Project Management**

1. Develop project communication plan.
  - a. Develop project contact list.
  - b. Prepare and e-mail progress reports to the project team once a month to be included with invoices. 24 months are assumed.
  - c. Prepare project schedule and provide schedule updates if the schedule changes.
2. Meetings
  - a. Prepare for and attend one (1) project kickoff meeting.
  - b. Prepare for and attend up to twenty-four (24) project status meetings with the CITY.
  - c. Prepare meeting notes and distribute to the CITY.
3. Sub-consultant Agreement Preparation
  - a. Prepare and execute up to five (5) subconsultant agreements.

## **Task 2 – PRELIMINARY DESIGN**

### **A. Equipment Selection Process**

The ENGINEER will prepare for and conduct the pre-design equipment selection process. This process includes the following items:

1. Prepare the equipment selection criteria based on CITY input for the following items:
  - a. Membrane Bioreactor (MBR) Equipment
  - b. Peak Wet Weather Treatment Equipment
  - c. Aeration Equipment
  - d. UV Disinfection Equipment
  - e. Solids Thickening Equipment
  - f. Solids Dewatering Equipment
2. Prepare for and conduct up to ten (10) equipment provider interviews with CITY. The ENGINEER will schedule the in-person interviews in coordination with the CITY on time and location. Each interview will be at least one hour in length.
3. Prepare for and arrange up to five (5) site visits to existing water reclamation plant with CITY to observe similar processes and equipment that may be considered for installation on this project. The ENGINEER anticipates each site visit being one day in length.
  - a. Expenses for travel will include travel expense for up to four (4) CITY staff
4. Participate on equipment selection committee with CITY
5. Document the equipment selection process and prepare a technical memorandum summarizing the selected and equipment.

6. Once the equipment above has been selected and approved by the CITY, preliminary technical specifications will be prepared for all the equipment that will be used on this project and preliminary design will be based around specific equipment selections.

**Meetings:**

- a. Prepare for and conduct equipment provider interviews
- b. Facilitate and attend site visits to existing water reclamation plant

**Deliverables:**

- a. Two (2) copies of Equipment Selection Technical Memorandum and .pdf electronic copy
- b. Two (2) copies of the preliminary technical specifications and .pdf electronic copy

**Services/Deliverables provided by the CITY:**

- a. Participate in pre-design equipment selection process
- b. Attend water reclamation plant site visits

**B. Prepare Preliminary Engineering Report (PER) for Expansion to 26 MGD**

The ENGINEER shall prepare a Preliminary Engineering Report. The ENGINEER shall perform the following tasks:

1. Design and size each treatment unit. Calculations, analyses, graphs, formulas, constants, and technical assumptions will be provided to support the design and sizing of each unit.
2. Develop a process flow diagram for the treatment facility.
3. Develop hydraulic model to determine the elevations of the treatment units and determine the sizing of interconnected piping.
4. Prepare the Preliminary Engineering Report Document including:
  - a. Types of units proposed and their capacities
  - b. Detention times, surface loadings and weir loadings for each unit
  - c. Plot of the hydraulic gradient at peak flow conditions
  - d. The recommended operation mode
  - e. Organic and volumetric loadings pertinent to each treatment unit
  - f. Preliminary site plan
  - g. Site access and security
  - h. Flood protection
  - i. Emergency power

**Meetings:**

- a. Prepare for and conduct one (1) Preliminary Engineering Report review meeting

**Deliverables:**

- a. Five (5) copies of the Draft and Final Engineering Report and .pdf electronic copy of each

**Services/Deliverables provided by the CITY:**

- a. Participate in the Preliminary Engineering Report review meeting
- b. Review and provide comments on the Final Engineering Report

**C. Preliminary Design**

1. Prepare engineering plan sheets and technical specifications in accordance with the preliminary engineering report.
2. The 30 % plans will include:
  - a. Civil sheets:
    - i. General notes
    - ii. Overall site plan
    - iii. Yard piping plan
    - iv. Paving plan
  - b. Mechanical sheets:
    - i. General notes
    - ii. MBR treatment equipment layouts
    - iii. Peak wet weather treatment equipment layouts
    - iv. Aeration equipment layouts
    - v. Permeate pumping equipment layouts
    - vi. UV Disinfection equipment layouts
    - vii. Solids Thickening equipment layouts
    - viii. Solids Stabilization equipment layout
    - ix. Solids Dewatering equipment layout
  - c. Structural sheets:
    - i. General notes
    - ii. Site plans
    - iii. Foundation plans

- d. Electrical sheets:
  - i. Site plan
  - ii. Electrical plan
  - iii. Grounding plan
  - iv. One-line diagrams
  - v. Conduit and wiring plan
  - vi. Lighting plan
  - vii. SCADA/instrumentation layout
- 3. Prepare 30% quantity take-off for proposed improvements and engineer's opinion of probable construction cost (OPCC).
- 4. Prepare a cost-benefit analysis for further processing solids with drying technologies.

**Meetings:**

- a. Prepare for and conduct one (1) Preliminary Design review meeting

**Deliverables:**

- a. Five (5) copies of 30% 11"x17" plans and .pdf electronic copy
- b. Five (5) copies of 30% OPCC and .pdf electronic copy

**Services/Deliverables provided by the CITY:**

- a. Review and comment on the 30% plans, preliminary specifications and OPCC
- b. Participate in 30% design review meeting

## **Task 3 –GEOTECHNICAL SERVICES**

### **A. Geotechnical Engineering**

- 1. Perform a geotechnical analysis of the site utilizing a qualified geotechnical laboratory to determine subsurface conditions and make recommendations regarding design parameters. The analysis shall include the following:
  - a. Subsurface exploration including up to ten (10) sample bore drilled to between 35 and 40 feet depending upon depth to un-weathered shale or limestone.
  - b. Laboratory tests for classification purposes and strength characteristics.
  - c. Engineering services that address the following:
    - i. Soil and groundwater conditions
    - ii. Comments on general excavatability of soils and shale encountered
    - iii. Recommendations for foundations, transformer and generator pads, and vault foundation types, depth, allowable loading and backfill requirements

- iv. Foundation construction requirements
  - v. Recommended lateral pressures for the design of below grade walls
  - vi. Evaluation of the subgrade soils
  - vii. Recommendations for yard piping installation, including bedding and backfill
  - viii. Recommendations for earthwork.
2. A geotechnical report will be furnished by the geotechnical engineer to present the results of the field and laboratory data as well as analyses and recommendations. The data contained in the geotechnical report will be made available to contractors during the bidding process for informational purposes.

**Meetings:**

- a. N/A

**Deliverables:**

- a. Two (2) copies of geotechnical report

**Services/Deliverables provided by the CITY:**

- a. Site access

## **Task 4 –FINAL DESIGN**

### **A. 60% Design**

- 1. Prepare 60% engineering plan sheets and specifications in accordance with the preliminary engineering report.
- 2. The plans will include:
  - a. Civil sheets:
    - i. General notes
    - ii. Overall site plan
    - iii. Yard piping plan and profiles
    - iv. Paving plan and profile
    - v. Grading plan
    - vi. Details
  - b. Mechanical sheets:
    - i. General notes
    - ii. Membrane treatment equipment layouts and sections
    - iii. Peak wet weather treatment equipment layouts and sections
    - iv. Aeration equipment layouts and sections

- v. Permeate pumping equipment layouts and sections
    - vi. Disinfection equipment layouts and sections
    - vii. Solids Thickening equipment layouts and sections
    - viii. Solids Stabilization equipment layouts and sections
    - ix. Solids Dewatering equipment layouts and sections
  - c. Structural sheets:
    - i. General notes
    - ii. Site plans
    - iii. Foundation plans
    - iv. Excavation plan
    - v. Sections
  - d. Electrical sheets:
    - i. Site plan
    - ii. Electrical plan
    - iii. Grounding plan
    - iv. One-line diagrams
    - v. Conduit and wiring plan
    - vi. Lighting plan
    - vii. SCADA/instrumentation layout
- 3. Specifications shall include CITY Standard and non-standard technical specifications for materials and installation of the proposed facilities.

**Meetings:**

- a. Prepare for and conduct a 60% design review workshop

**Deliverables:**

- a. Five (5) copies of 60% 11"x17" plans, specification, and construction documents and .pdf electronic copy
- b. Five (5) copies of 60% OPCC and electronic copy

**Services/Deliverables provided by the CITY:**

- a. Review and comment on the 60% plans, specifications, and OPCC
- b. Participate in the 60% design review workshop

**B. 90% Design**

- 1. Prepare 90% engineering plan sheets and specifications in accordance with the preliminary engineering report.

2. The plans will include:
  - a. Civil sheets:
    - i. General notes
    - ii. Overall site plan
    - iii. Yard piping plan and profiles
    - iv. Paving plan and profile
    - v. Grading plan
    - vi. Details
  - b. Mechanical sheets:
    - i. General notes
    - ii. Membrane treatment equipment layouts, sections, and details
    - iii. Peak wet weather treatment equipment layouts, sections and details
    - iv. Aeration equipment layouts, sections, and details
    - v. Permeate pumping equipment layouts, sections, and details
    - vi. Disinfection equipment layouts, sections, and details
    - vii. Solids Thickening equipment layouts, sections, and details
    - viii. Solids Stabilization equipment layout, sections, and details
    - ix. Solids Dewatering equipment layout, sections, and details
  - c. Structural sheets:
    - i. General notes
    - ii. Site plans
    - iii. Foundation plans
    - iv. Excavation plan
    - v. Sections
    - vi. Details
  - d. Electrical sheets:
    - i. Site plan
    - ii. Electrical plans
    - iii. Grounding plans
    - iv. One-line diagrams
    - v. Conduit and wiring plans
    - vi. Lighting plans and details
    - vii. SCADA/instrumentation layout
    - viii. Details

3. Specifications shall include CITY Standard and non-standard technical specifications for materials and installation of the proposed facilities.

**Meetings:**

- a. Prepare for and conduct a 90% design review workshop

**Deliverables:**

- a. Five (5) copies of 90% 11"x17" plans, specification, and construction documents and .pdf electronic copy
- b. Five (5) copies of 90% OPCC and electronic copy

**Services/Deliverables provided by the CITY:**

- a. Review and comment on the 90% plans, specifications, and OPCC
- b. Participate in the 90% design review workshop

**C. Final Engineering Report and Summary Transmittal Letter**

The ENGINEER shall prepare a Final Engineering Report based on the comments received on the Preliminary Engineering Report and design changes determined during Final Design. The ENGINEER will prepare and submit a Summary Transmittal Letter to the TCEQ. The Final Engineering Report will include:

- a. Types of units proposed and their capacities
- b. Detention times, surface loadings and weir loadings for each unit
- c. Plot of the hydraulic gradient at peak flow conditions
- d. The recommended operation mode
- e. Organic and volumetric loadings pertinent to each treatment unit
- f. Final site plan
- g. Site access and security
- h. Flood protection
- i. Emergency power
- j. Variance requests (if any)

**Meetings:**

- a. N/A

**Deliverables:**

- a. Submit five (5) copies and one electronic .pdf copy of the Final Engineering Report



**Services/Deliverables provided by the CITY:**

- a. Review and approve the report for submittal to TCEQ

## **Task 5 – CONSTRUCTION CONTRACT DOCUMENTS**

### **A. Bidding Construction Contract Documents**

1. Incorporate CITY comments from final design submittal and prepare construction contract documents, bid plans, and opinion of probable construction cost.
2. Construction contract documents will consist of the final plans and project manual, both signed and sealed by a licensed professional engineer in the State of Texas and in accordance with comments provided by the CITY during final design.

**Meetings:**

- a. Prepare for and conduct a construction contract document review workshop

**Deliverables:**

- a. Construction Contract Documents Submittal
- b. Submit two (2) copies and electronic (.pdf) documents to the CITY for bidding.
- c. Submittal shall include the following:
  - a. Bid drawings
  - b. Bid project manual
  - c. Opinion of probable construction cost

**Services/Deliverables provided by the CITY:**

- a. Review and approve the construction contract documents for bidding.

## **Task 6 – BID PHASE SERVICES**

### **A. Bid Phase Services**

1. Provide electronic bid documents to the CITY purchasing department for bidding.
2. Provide the Notice to Bidders to the CITY for publication. The CITY will be responsible for publication of the notice. The CITY will be responsible for distribution of the bidding documents to prospective contractors, suppliers, and plan rooms.
3. The following assistance will be provided to the CITY during the bidding phase:

- a. Preparation of addenda and delivery to CITY for distribution to plans holders.
- b. Responses to questions submitted by plans holders.
- c. Attend bid opening facilitated by CITY.
- d. Preparation of bid tabulation.
- e. Preparation of recommendation of award letter.
4. Conformance plans and specifications
  - a. Based on potential questions and addenda from the bidding phase, prepare conformance set of plans and specifications to be used during construction.
    - i. Provide up to four (4) sets to CITY for execution.

## **Task 7 – CONSTRUCTION PHASE SERVICES**

### **A. Construction Phase Services**

1. Prepare for and conduct one (1) public meeting with CITY staff and Contractor.
2. Pre-Construction Conference
  - a. Prepare for and attend a pre-construction conference prior to commencement of Work at the Site
3. Site Visits
  - a. Prepare for and conduct up to twenty-four (24) monthly construction progress meetings with the CITY and contractor on site. Meetings will also be considered site visits.
  - b. Site Visits are not intended to be exhaustive or to extend to every aspect of Contractor's work in progress. Observations are to be limited to spot checking, selective measurement, and similar methods of general observation of the Work based on ENGINEER's exercise of professional judgement.
  - c. Based on information obtained during site visits, ENGINEER will determine if Contractor's work is generally proceeding in accordance with the Contract Documents, and ENGINEER will keep CITY informed of the general progress of the work.
4. Resident Project Representative. ENGINEER'S role as Resident Project Representative will include furnishing a Resident Project Representative ("RPR") to assist ENGINEER in observing progress and quality of the work.
  - a. The duties and responsibilities of the RPR are limited to those of ENGINEER in the Agreement with the CITY and in the Contract Documents, and are further limited and described as follows:
    - i. General
      - a) RPR is the ENGINEER'S agent at the Site, will act as directed by and under the supervision of the ENGINEER, and will confer with the ENGINEER regarding RPR's actions

- b) RPR's dealings in matters pertaining to a Contractor's work in progress shall in general be with the ENGINEER and Contractor, keeping CITY advised as necessary
  - c) RPR's dealings with subcontractors shall only be through or with the full knowledge and approval of Contractor
  - d) RPR shall generally communicate with CITY with the knowledge of and under the direction of the ENGINEER
- ii. Schedules
  - a) Review the progress schedule, schedule of Shop Drawing and submittals, and any other schedules prepared by Contractor and consult with ENGINEER concerning acceptability
- iii. Conferences and Meetings
  - a) Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof
- iv. Liaison
  - a) Serve as ENGINEER's liaison with Contractor, working principally through Contractor's superintendent, and assist in providing information regarding the intent of the Contract Documents
  - b) Assist ENGINEER in serving as CITY's liaison with Contractor when Contractor's operations affect CITY's on-site operations
  - c) Assist in obtaining from CITY additional details or information, when required for proper execution of the Work
- v. Interpretation of Contract Documents
  - a) Report to ENGINEER when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by ENGINEER
- vi. Shop Drawings and Submittals
  - a) Maintain Shop Drawing and Submittal Record log
  - b) Advise ENGINEER and Contractor of the commencement of any portion of the Work requiring a Shop Drawing or submittal for which RPR believes that the submittal has not been approved by ENGINEER

- vii. Modifications.
  - a) Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report such suggestions, together with RPR's recommendations, to ENGINEER. Transmit to Contractor in writing decisions as issued by ENGINEER
- viii. Review of Work and Rejection of Defective Work
  - a) Conduct on-Site observations of Contractor's work in progress to assist ENGINEER in determining if the Work is in general proceeding in accordance with the Contract Documents
  - b) Report to ENGINEER whenever RPR believes that any part of Contractor's work in progress will not produce a completed project that conforms generally to the Contract Documents or will imperil the integrity of the design concept of the completed Specific Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise ENGINEER of that part of work in progress that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval
- ix. Inspections, Tests, and System Start-ups
  - a) Consult with ENGINEER in advance of scheduled major inspections, tests, and systems start-ups of important phases of the Work
  - b) Verify that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate CITY 's personnel, and that Contractor maintains adequate records thereof
  - c) Observe, record, and report to ENGINEER appropriate details relative to the test procedures and systems start-ups
  - d) Accompany visiting inspectors representing public or other agencies having jurisdiction over a Specific Project, record the results of these inspections, and report to ENGINEER
- x. Records
  - a) Maintain at the Site orderly files for correspondence, reports of job conferences, reproductions of original Contract Documents including all Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the Contract, ENGINEER's clarifications and interpretations of the Contract Documents, progress reports, Shop Drawing

and submittals received from and delivered to Contractor, and other Specific Project-related documents

- b) Prepare a daily report or keep a diary or logbook, recording Contractor's hours on the Site, weather conditions, data relative to questions of Change Orders, Field Orders, or changed conditions, Site visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to ENGINEER
- c) Record names, addresses, fax numbers, e-mail addresses, web site locations and telephone numbers of all Contractors, subcontractors, and major suppliers of materials and equipment
- d) Maintain records for use in preparing project documentation
- e) Upon completion of the Work, furnish original set of all RPR Specific Project documentation to ENGINEER

xi. Reports

- a) Furnish to ENGINEER periodic reports, as required, of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and submittals
- b) Draft and recommend to ENGINEER proposed Change Orders and Field Orders. Obtain backup material from Contractor
- c) Furnish to ENGINEER and CITY copies of all inspection, test, and system startup reports
- d) Immediately notify ENGINEER of the occurrence of any Site accidents, emergencies, acts of God endangering the Work, damage to property by fire or other causes, or the discovery of any Constituent of Concern

xii. Payment Request

- a) Review Applications for Payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to ENGINEER, noting particularly the relationship of the payment requested to the Work completed, and materials delivered at the Site but not incorporated in the Work
- b) Certificates, Operation and Maintenance Manuals
- c) During the course of the Work, verify that materials and equipment certificates, operation and maintenance manuals and other data required by the Specifications to be assembled and furnished by Contractor are applicable

to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to ENGINEER for review and forwarding to CITY prior to payment for that part of the Work

xiii. Completion

- a) Participate in a final inspection in the company of ENGINEER, CITY, and Contractor and prepare a final list of items to be completed and deficiencies to be remedied
- b) Observe whether all items on the final list have been completed or corrected and make recommendations to ENGINEER concerning acceptance and issuance of the Notice of Acceptability of the Work

xiv. Resident Project Representative shall not:

- a) Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items)
- b) Exceed limitations of ENGINEER's authority as set forth in the Agreement or the Contract Documents
- c) Undertake any of the responsibilities of a Contractor, subcontractors, suppliers, or a Contractor's superintendent
- d) Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences, or procedures of the Contractor's work unless such advice or directions are specifically required by the Contract Documents
- e) Advise on, issue directions regarding, or assume control over safety practices, precautions and programs in connection with the activities or operations of CITY or Contractor
- f) Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by ENGINEER
- g) Accept Shop Drawings or submittals from anyone other than Contractor
- h) Authorize CITY to occupy a Specific Project in whole or in part
- i) Through such observations of Contractor's work in progress and field checks of materials and equipment by the RPR, ENGINEER shall endeavor to provide CITY a greater degree of confidence that the completed Work will conform in general to the Contract Documents. However, ENGINEER shall not, during such visits or as a result of such observations of Contractor's work in

progress, supervise, direct, or have control over Contractor's work, nor shall ENGINEER have authority over or responsibility for the means, methods, techniques, equipment choice and usage, sequences, schedules, or procedures of construction selected by Contractor, for safety precautions and programs incident to Contractor's work, nor for any failure of Contractor to comply with laws and regulations applicable to Contractor's furnishing and performing the Work. Accordingly, ENGINEER neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish and perform its work in accordance with the Contract Documents.

5. Recommendations with Respect to Defective Work

- a. Provide recommendations to CITY that Contractor's work be disapproved and rejected while it is in progress if, on the basis of site visit evaluations, ENGINEER believes such work will not produce a completed Project that conforms generally to Contract Documents or that it will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents. Notwithstanding the foregoing, the CITY reserves the right to disapprove or reject Contractor's work without a recommendation from the ENGINEER.

6. Clarifications and Interpretations

- a. Issue necessary clarifications and interpretations of the Contract Documents to CITY as appropriate to the orderly completion of Contractor's work. Such clarifications and interpretations will be consistent with the intent of the Contract Documents. Field orders authorizing variations from the requirements of the Contract Documents will be made by CITY.

7. Change Orders

- a. Recommend change orders to CITY, as appropriate.
- b. Review and make recommendations related to Change Orders submitted or proposed by the Contractor.

8. Shop Drawings and Samples

- a. Review and approve or take other appropriate action in respect to Shop Drawings and Samples and other data which Contractor is required to submit, but only for conformance with the information given in the Contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated in the Contract Documents. Such review and approvals or other action will not extend to means, methods, techniques, equipment choice and usage, sequences, schedules, or procedures of construction or to related safety precautions and programs. Assumes up to thirty (30) shop drawings.



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9. Substitutes and “or-equal”

- a. Evaluate and determine the acceptability of substitute or “or-equal” materials and equipment proposed by Contractor in accordance with the Contract Documents, but subject to the provisions of applicable standards of state or local government entities.
- b. Provide recommendations to CITY

10. Inspections and Tests

- a. Review certificates of inspections and tests within ENGINEER’s area of responsibility for the purpose of determining that the results certified indicate compliance with the Contract Documents and will not constitute an independent evaluation that the content or procedures of such inspections, tests, or approvals comply with the requirements of the Contract Documents. ENGINEER will be entitled to rely on the results of such tests and facts being certified. The scope of services assumes the pumps and motors will go through a non-witnessed factory test. Attending testing will be considered additional services.

11. Disagreements between CITY and Contractor

- a. As necessary, ENGINEER will, with reasonable promptness, render initial written decision on all claims of CITY and Contractor relating to the acceptability of Contractor’s work or the interpretation of the requirements of the Contract Documents pertaining to the progress of the Contractor’s work. In rendering such decisions, ENGINEER will be fair and not show partiality to CITY or Contractor and will not be liable in connection with any decision rendered in good faith in such capacity. The initial decision of the ENGINEER shall be required as a condition precedent to mediation or litigation of any claim arising prior to the date final payment is due to the Contractor, unless thirty (30) days have passed after a claim has been referred to the ENGINEER with no decision having been rendered.

12. Final Walkthrough and Punchlist Preparation

- a. Attend final walkthrough with Contractor and CITY to determine if the completed work of Contractor is generally in accordance with the Contract Documents.
  - i. Limitation of Responsibilities: The ENGINEER will not be responsible for the acts or omissions of any Contractor, or of any of their subcontractors, suppliers, or of any other individual entity performing or furnishing the work. ENGINEER will not have the authority or responsibility to stop the work of any Contractor.
- b. Compile punch list from information gathered during final walkthrough with CITY and Contractor.

13. Start-up Assistance: The ENGINEER will attend manufacturer’s start-up and training for major equipment components and will assist the CITY with questions during an initial six-week start-up of the facility. The ENGINEER will be available for an additional eight weeks beyond the initial start-up completion to



conduct site visits and answer additional questions with regards to making adjustments to operating protocols or process control changes.

## **Task 8 – RECORD DRAWINGS**

### **A. Record Drawings**

1. Obtain and review comments and field changes on the construction plans from CITY and Contractor.
2. Prepare record drawings based on comments and field changes. The ENGINEER will not be providing resident engineering services and will not be observing on a full-time basis and will therefore not seal the record drawings. The record drawings will be provided in the following format:
  - a. PDF electronic copy

## **ADDITIONAL SERVICES NOT INCLUDED IN THE EXISTING SCOPE OF SERVICES**

CITY and ENGINEER agree that the following services are beyond the Scope of Services described in the tasks above. However, ENGINEER can provide these services, if needed, upon the CITY's written request. Any additional amounts paid to ENGINEER as a result of any material change to the Scope of the Project shall be agreed upon in writing by both parties before the services are performed. These additional services include, but are not limited to the following:

- Design of solids drying or composting facilities
- Evaluation and design of improvements to existing North and South treatment trains
- Redesign to reflect project scope changes requested by the CITY, required to address changed conditions, or change in direction previously approved by the CITY, mandated by changing governmental laws, or necessitated by the CITY's acceptance of substitutions proposed by the contractor.
- Design or Survey of any offsite collection system improvements beyond the improvements identified in the scope
- Preparation for and attendance at public meetings beyond those identified in the scope
- Furnish additional copies of review documents and/or bid documents in excess of the number of the same identified above.
- Services related to disputes over bid protests, bid rejection, and re-bidding of the contract for construction.
- Appearing before regulatory agencies or courts as an expert witness in any litigation with third parties or condemnation proceedings arising from the development or construction of the Project, including the preparation of engineering data and reports for assistance to the CITY.
- Accompanying the CITY when meeting with the TCEQ, U.S. Environmental Protection Agency, or other regulatory agencies during the course of the Project, beyond those meetings identified above. The ENGINEER will assist the CITY on an as-needed basis in preparing compliance schedules, progress reports, and providing general technical support for the CITY's compliance efforts.
- Assisting CITY or Contractor in the defense or prosecution of litigation in connection with or in addition to those services contemplated by this Agreement. Such services, if any, will be furnished by ENGINEER on a fee basis negotiated by the respective parties outside of and in addition to this Agreement.
- Providing professional services associated with the discovery of any hazardous waste or materials in the project site.
- Performance of materials or specialty testing services.
- Services necessary due to default of the Contractor.
- Services related to damages caused by fire, flood, earthquake, or other acts of God.
- Services related to warranty claims, enforcement, and inspection after final completion.
- Services related to Survey Construction Staking.
- Services to support, prepare, document, bring, defend, or assist in litigation undertaken or defended by the CITY.
- Performance of miscellaneous and supplemental services related to the project as requested by the CITY.
- "Value engineering" after bidding
- Additional bid packages beyond the scope identified above
- SWPPP inspections / coordination
- Any services not listed in the Scope of Services

Compensation for Engineering Design Related Services for:

## PECAN CREEK WATER RECLAMATION PLANT EXPANSION TO 26 MGD INCLUDING SOLIDS HANDLING AND DISINFECTION SYSTEM IMPROVEMENTS

Total compensation for the ENGINEER contemplated under the terms of this agreement **shall be a total not-to-exceed \$14,952,000** for all services including reimbursable expenses. The CITY shall compensate the ENGINEER as follows:

For Tasks 1-8 the total compensation shall be on a lump sum basis and not to exceed **\$14,952,000**.

Progress payments for shall be paid monthly based on the actual work satisfactorily completed per month in each phase, with the following amounts of the total compensation for each phase of the Project:

• Task 1 – Project Management	\$ 189,000
• Task 2 – Preliminary Design	\$3,684,000
• Task 3 – Geotechnical Services	\$ 80,000
• Task 4 – Final Design	\$6,898,000
• Task 5 – Construction Contract Documents	\$ 235,000
• Task 6 – Bid Phase Services	\$ 35,000
• Task 7 – Construction Phase Services	
○ CCA	\$2,906,000
○ RPR	\$ 860,000
• Task 8 – Record Drawings	\$ 65,000

**Grand Total           \$ 14,952,000**

ENGINEER will not exceed the total maximum fee shown without authorization from the CITY. Individual task amounts are provided for budgeting purposes only. ENGINEER reserves the right to reallocate amounts among tasks as necessary.

All permitting, application, and similar project fees will be paid directly by the CITY.

**Non-Labor Expenses:** Non-labor expenses for reimbursable tasks shall be reimbursed as Direct Expenses at invoice or internal office cost. 4.6% will be added to each invoice to cover certain other internal office cost expenses as to these tasks, such as in-house duplicating, local mileage, telephone calls, facsimiles, postage, and word processing.

**Direct Expenses** (non-labor) for reimbursable tasks include, but are not limited to, mileage, travel and lodging expenses, mail, supplies, printing and reproduction services, other direct expenses associated with delivery of the work; plus applicable sales, use, value added, business transfer, gross receipts, or other similar taxes. Direct reimbursable expenses such as express delivery services, fees, travel, and other direct expenses will be billed at 1.10 times the cost.

Payment will be due within 25 days of your receipt of the invoice and should include the invoice number and Kimley-Horn project number.

**CONFLICT OF INTEREST QUESTIONNAIRE -****FORM CIQ****For vendor or other person doing business with local governmental entity****This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.**

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a) and by City of Denton Ethics Code, Ordinance 18-757.

By law this questionnaire must be filed with the records administrator of the local government entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

**1 Name of vendor who has a business relationship with local governmental entity.**

KIMLEY-HORN AND ASSOCIATES, INC.

**2 ☐ Check this box if you are filing an update to a previously filed questionnaire.**

(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7<sup>th</sup> business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

**3 Name of local government officer about whom the information in this section is being disclosed.**

n/a

\_\_\_\_\_  
Name of Officer

Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. This section, (item 3 including subparts A, B, C & D), must be completed for each officer with whom the vendor has an employment or other business relationship as defined by Section 176.001(1-a), Local Government Code. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer named in this section receiving or likely to receive taxable income, other than investment income, from the vendor?

☐

Yes

☐

No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer named in this section AND the taxable income is not received from the local governmental entity?

☐

Yes

☐

No

C. Is the filer of this questionnaire employed by a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership of one percent or more?

☐

Yes

☐

No

D. Describe each employment or business and family relationship with the local government officer named in this section.

**4 ☒ I have no Conflict of Interest to disclose.****5** DocuSigned by:

5/8/2023

\_\_\_\_\_  
Signature of vendor doing business with the governmental entity\_\_\_\_\_  
Date

## CONFLICT OF INTEREST QUESTIONNAIRE

### For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at [http://www.statutes.legis.state.tx.us/ Docs/LG/htm/LG.176.htm](http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm). For easy reference, below are some of the sections cited on this form.

**Local Government Code § 176.001(1-a):** "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

- (A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;
- (B) a transaction conducted at a price and subject to terms available to the public; or
- (C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

**Local Government Code § 176.003(a)(2)(A) and (B):**

- (A) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:
  - (2) the vendor:
    - (A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds \$2,500 during the 12-month period preceding the date that the officer becomes aware that
    - (i) a contract between the local governmental entity and vendor has been executed; or
    - (ii) the local governmental entity is considering entering into a contract with the vendor;
    - (B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than \$100 in the 12-month period preceding the date the officer becomes aware that:
      - (i) a contract between the local governmental entity and vendor has been executed; or
      - (ii) the local governmental entity is considering entering into a contract with the vendor.

**Local Government Code § 176.006(a) and (a-1)**

- (a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:
  - (1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);
  - (2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or
  - (3) has a family relationship with a local government officer of that local governmental entity.
- (a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:
  - (1) the date that the vendor:
    - (A) begins discussions or negotiations to enter into a contract with the local governmental entity; or
    - (B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or
  - (2) the date the vendor becomes aware:
    - (A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);
    - (B) that the vendor has given one or more gifts described by Subsection (a); or
    - (C) of a family relationship with a local government officer.

### **City of Denton Ethics Code Ordinance Number 18-757**

**Definitions:**

**Relative:** a family member related to a City Official within the third 3<sup>rd</sup> degree of affinity (marriage) or consanguinity (blood or adoption)

**City Official:** for purpose of this article, the term consists of the Council Members, Department Heads, or member of the Board of Ethics, Planning and zoning Commission Members, Board of Adjustment, Historic Landmark Commission, or Public Utilities Board

**Vendor:** a person who provides or seeks to provide goods, services, and/or real property to the City in exchange for compensation. This definition does not include those property owners from whom the City acquires public right-of-way or other real property interests for public use.

Per the City of Denton Ethics Code, Section 2-273. – Prohibitions

- (3) It shall be a violation of this Article for a Vendor to offer or give a Gift to City Official exceeding fifty dollars (\$50.00) per gift, or multiple gifts cumulatively valued at more than two hundred dollars (\$200.00) per a single fiscal year.

Per the City of Denton Ethics Code, Section 2-282. – Disposition (b), (5) Ineligibility

If the Board of Ethics finds that a Vendor has violated this Article, the Board may recommend to the City Manager that the Vendor be deemed ineligible to enter into a City contract or other arrangement for goods, services, or real property, for a period of one (1) year.

**Certificate Of Completion**

Envelope Id: 1CCDF23CA2D34F78BF7EAD719E39F1AC

Status: Sent

Subject: Please DocuSign: City Council Contract 7574-027 PCWRP Expansion to 26MGD

Source Envelope:

Document Pages: 41

Signatures: 4

Envelope Originator:

Certificate Pages: 6

Initials: 1

Crystal Westbrook

AutoNav: Enabled

901B Texas Street

Enveloped Stamping: Enabled

Denton, TX 76209

Time Zone: (UTC-06:00) Central Time (US &amp; Canada)

crystal.westbrook@cityofdenton.com

IP Address: 198.49.140.10

**Record Tracking**

Status: Original

Holder: Crystal Westbrook

Location: DocuSign

4/28/2023 3:48:34 PM

crystal.westbrook@cityofdenton.com

**Signer Events****Signature****Timestamp**

Crystal Westbrook

**Completed**

Sent: 4/28/2023 3:54:12 PM

crystal.westbrook@cityofdenton.com

Viewed: 4/28/2023 3:55:51 PM

Senior Buyer

Signed: 4/28/2023 3:56:56 PM

City of Denton

Using IP Address: 198.49.140.10

Security Level: Email, Account Authentication  
(None)**Electronic Record and Signature Disclosure:**

Not Offered via DocuSign

Lori Hewell



Sent: 4/28/2023 3:56:59 PM

lori.hewell@cityofdenton.com

Viewed: 5/1/2023 8:45:50 AM

Purchasing Manager

Signed: 5/1/2023 8:46:30 AM

City of Denton

Signature Adoption: Pre-selected Style

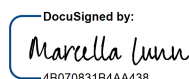
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Using IP Address: 198.49.140.10

**Electronic Record and Signature Disclosure:**

Not Offered via DocuSign

Marcella Lunn



Sent: 5/1/2023 8:46:33 AM

marcella.lunn@cityofdenton.com

Viewed: 5/5/2023 5:24:20 PM

Mack Reinwand City Attorney

Signed: 5/5/2023 5:28:50 PM

City of Denton

Signature Adoption: Pre-selected Style

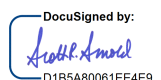
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Using IP Address: 198.49.140.10

**Electronic Record and Signature Disclosure:**

Not Offered via DocuSign

Scott Arnold



Sent: 5/5/2023 5:28:53 PM

scott.arnold@kimley-horn.com

Viewed: 5/8/2023 7:14:26 AM

Vice President

Signed: 5/8/2023 2:01:41 PM

Kimley-Horn and Associates, Inc.

Signature Adoption: Uploaded Signature Image

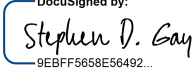
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ID: a1f38400-e5cc-4b57-8548-4dd7e031355d

Signer Events	Signature	Timestamp
Stephen D. Gay stephen.gay@cityofdenton.com Director, Security Level: Email, Account Authentication (None)	DocuSigned by:  9EBFF5658E56492...  Signature Adoption: Pre-selected Style Using IP Address: 198.49.140.10	Sent: 5/8/2023 2:01:44 PM Viewed: 5/8/2023 2:42:52 PM Signed: 5/8/2023 2:52:26 PM

**Electronic Record and Signature Disclosure:**  
Accepted: 5/8/2023 2:42:52 PM  
ID: edaedd9fe-cc1a-4e36-b92c-77b0f3225fc9

Cheyenne Defee  
cheyenne.defee@cityofdenton.com  
Procurement Administration Supervisor  
City of Denton  
Security Level: Email, Account Authentication (None)

Sent: 5/8/2023 2:52:29 PM

**Electronic Record and Signature Disclosure:**  
Not Offered via DocuSign

Sara Hensley  
sara.hensley@cityofdenton.com  
Security Level: Email, Account Authentication (None)

**Electronic Record and Signature Disclosure:**  
Not Offered via DocuSign

Jesus Salazar  
jesus.salazar@cityofdenton.com  
Security Level: Email, Account Authentication (None)

**Electronic Record and Signature Disclosure:**  
Accepted: 5/5/2023 6:59:14 PM  
ID: 05778190-ddf5-4769-9e02-141f24d5bb62

In Person Signer Events	Signature	Timestamp
Editor Delivery Events	Status	Timestamp
Agent Delivery Events	Status	Timestamp
Intermediary Delivery Events	Status	Timestamp
Certified Delivery Events	Status	Timestamp
Carbon Copy Events	Status	Timestamp

Cheyenne Defee  
cheyenne.defee@cityofdenton.com  
Procurement Administration Supervisor  
City of Denton  
Security Level: Email, Account Authentication (None)

**Electronic Record and Signature Disclosure:**  
Not Offered via DocuSign

**COPIED**

Sent: 4/28/2023 3:56:59 PM

Carbon Copy Events	Status	Timestamp
Gretna Jones gretna.jones@cityofdenton.com Legal Secretary City of Denton Security Level: Email, Account Authentication (None) <b>Electronic Record and Signature Disclosure:</b> Not Offered via DocuSign  City Secretary Office citysecretary@cityofdenton.com Security Level: Email, Account Authentication (None) <b>Electronic Record and Signature Disclosure:</b> Not Offered via DocuSign  David Brown david.brown@cityofdenton.com Security Level: Email, Account Authentication (None) <b>Electronic Record and Signature Disclosure:</b> Accepted: 4/10/2019 2:54:36 PM ID: 20238ddf-ccd6-4d52-988f-8c9f3436055e  Jewel Lanning jewel.lanning@cityofdenton.com Security Level: Email, Account Authentication (None) <b>Electronic Record and Signature Disclosure:</b> Not Offered via DocuSign	<div>COPIED</div>	Sent: 5/8/2023 2:52:29 PM Viewed: 5/8/2023 2:57:45 PM
Witness Events	Signature	Timestamp
Notary Events	Signature	Timestamp
Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	4/28/2023 3:54:12 PM
Payment Events	Status	Timestamps
Electronic Record and Signature Disclosure		



## **ELECTRONIC RECORD AND SIGNATURE DISCLOSURE**

From time to time, City of Denton (we, us or Company) may be required by law to provide to you certain written notices or disclosures. Described below are the terms and conditions for providing to you such notices and disclosures electronically through your DocuSign, Inc. (DocuSign) Express user account. Please read the information below carefully and thoroughly, and if you can access this information electronically to your satisfaction and agree to these terms and conditions, please confirm your agreement by clicking the 'I agree' button at the bottom of this document.

### **Getting paper copies**

At any time, you may request from us a paper copy of any record provided or made available electronically to you by us. For such copies, as long as you are an authorized user of the DocuSign system you will have the ability to download and print any documents we send to you through your DocuSign user account for a limited period of time (usually 30 days) after such documents are first sent to you. After such time, if you wish for us to send you paper copies of any such documents from our office to you, you will be charged a \$0.00 per-page fee. You may request delivery of such paper copies from us by following the procedure described below.

### **Withdrawing your consent**

If you decide to receive notices and disclosures from us electronically, you may at any time change your mind and tell us that thereafter you want to receive required notices and disclosures only in paper format. How you must inform us of your decision to receive future notices and disclosure in paper format and withdraw your consent to receive notices and disclosures electronically is described below.

### **Consequences of changing your mind**

If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. To indicate to us that you are changing your mind, you must withdraw your consent using the DocuSign 'Withdraw Consent' form on the signing page of your DocuSign account. This will indicate to us that you have withdrawn your consent to receive required notices and disclosures electronically from us and you will no longer be able to use your DocuSign Express user account to receive required notices and consents electronically from us or to sign electronically documents from us.

### **All notices and disclosures will be sent to you electronically**

Unless you tell us otherwise in accordance with the procedures described herein, we will provide electronically to you through your DocuSign user account all required notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you during the course of our relationship with you. To reduce the chance of you inadvertently not receiving any notice or disclosure, we prefer to provide all of the required notices and disclosures to you by the same method and to the same address that you have given us. Thus, you can receive all the disclosures and notices electronically or in paper format through the paper mail delivery system. If you do not agree with this process, please let us know as described below. Please also see the paragraph immediately above that describes the consequences of your electing not to receive delivery of the notices and disclosures electronically from us.

**How to contact City of Denton:**

You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:

To contact us by email send messages to: [purchasing@cityofdenton.com](mailto:purchasing@cityofdenton.com)

**To advise City of Denton of your new e-mail address**

To let us know of a change in your e-mail address where we should send notices and disclosures electronically to you, you must send an email message to us at [melissa.kraft@cityofdenton.com](mailto:melissa.kraft@cityofdenton.com) and in the body of such request you must state: your previous e-mail address, your new e-mail address. We do not require any other information from you to change your email address..

In addition, you must notify DocuSign, Inc to arrange for your new email address to be reflected in your DocuSign account by following the process for changing e-mail in DocuSign.

**To request paper copies from City of Denton**

To request delivery from us of paper copies of the notices and disclosures previously provided by us to you electronically, you must send us an e-mail to [purchasing@cityofdenton.com](mailto:purchasing@cityofdenton.com) and in the body of such request you must state your e-mail address, full name, US Postal address, and telephone number. We will bill you for any fees at that time, if any.

**To withdraw your consent with City of Denton**

To inform us that you no longer want to receive future notices and disclosures in electronic format you may:

- i. decline to sign a document from within your DocuSign account, and on the subsequent page, select the check-box indicating you wish to withdraw your consent, or you may;
- ii. send us an e-mail to [purchasing@cityofdenton.com](mailto:purchasing@cityofdenton.com) and in the body of such request you must state your e-mail, full name, US Postal Address, telephone number, and account number. We do not need any other information from you to withdraw consent.. The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process..

**Required hardware and software**

Operating Systems:	Windows2000? or WindowsXP?
Browsers (for SENDERS):	Internet Explorer 6.0? or above
Browsers (for SIGNERS):	Internet Explorer 6.0?, Mozilla FireFox 1.0, NetScape 7.2 (or above)
Email:	Access to a valid email account
Screen Resolution:	800 x 600 minimum
Enabled Security Settings:	<ul style="list-style-type: none"><li>•Allow per session cookies</li><li>•Users accessing the internet behind a Proxy Server must enable HTTP 1.1 settings via proxy connection</li></ul>

\*\* These minimum requirements are subject to change. If these requirements change, we will provide you with an email message at the email address we have on file for you at that time providing you with the revised hardware and software requirements, at which time you will have the right to withdraw your consent.

**Acknowledging your access and consent to receive materials electronically**

To confirm to us that you can access this information electronically, which will be similar to other electronic notices and disclosures that we will provide to you, please verify that you were able to read this electronic disclosure and that you also were able to print on paper or electronically save this page for your future reference and access or that you were able to e-mail this disclosure and consent to an address where you will be able to print on paper or save it for your future reference and access. Further, if you consent to receiving notices and disclosures exclusively in electronic format on the terms and conditions described above, please let us know by clicking the 'I agree' button below.

By checking the 'I Agree' box, I confirm that:

- I can access and read this Electronic CONSENT TO ELECTRONIC RECEIPT OF ELECTRONIC RECORD AND SIGNATURE DISCLOSURES document; and
- I can print on paper the disclosure or save or send the disclosure to a place where I can print it, for future reference and access; and
- Until or unless I notify City of Denton as described above, I consent to receive from exclusively through electronic means all notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to me by City of Denton during the course of my relationship with you.



# Pecan Creek Water Reclamation Plant Expansion to 26 MGD



PUB23-095 – May 22, 2023

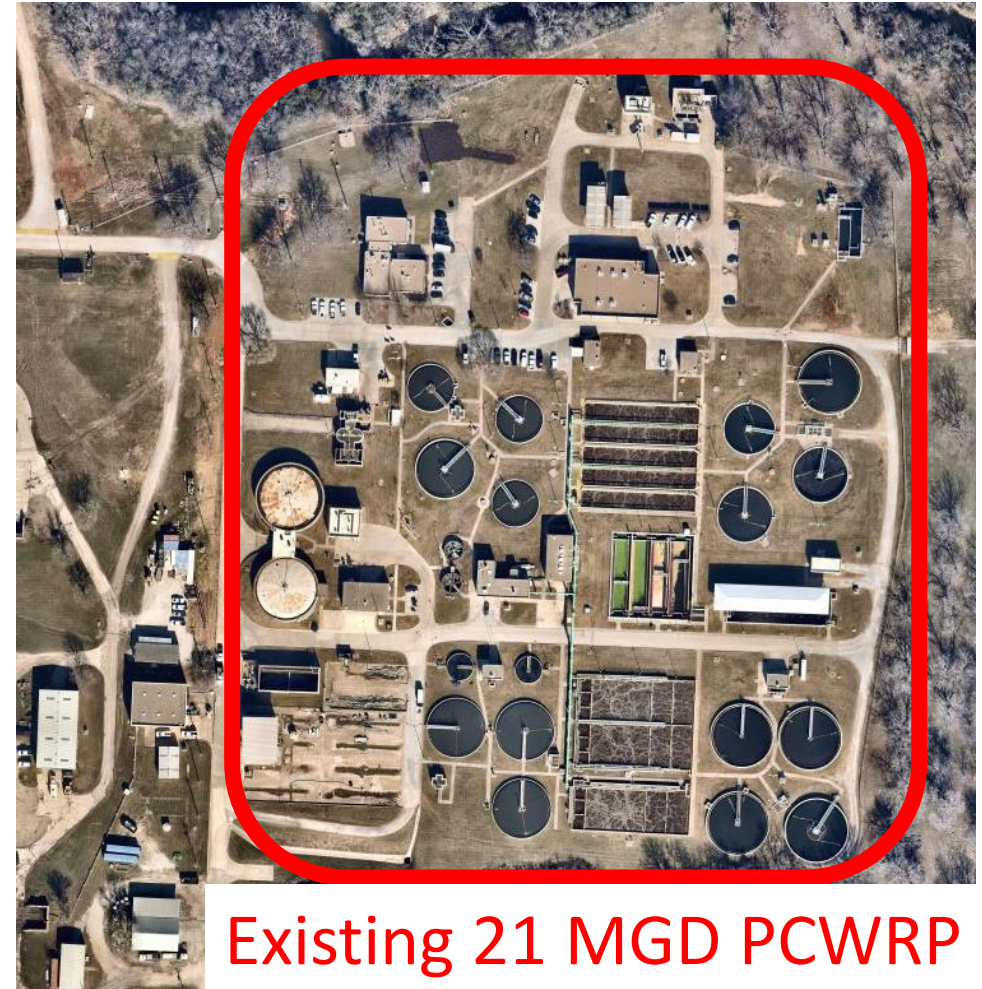


# Texas Commission on Environmental Quality (TCEQ)

- A utility **must** begin design for capacity upgrades when flows reach 75% of the permitted limit.
- When 90% of the permitted flows are reached, construction of the facility upgrades and or expansion **must** be initiated.

# Pecan Creek Water Reclamation Plant (PCWRP)

- Currently permitted for 21 MGD Annual Average Flow and 46 MGD Peak 2-Hour Flow.
- A TCEQ permit amendment for the next phases of 26 MGD and 30 MGD Permit is administratively complete as of Feb 06, 2023.
- Anticipate receiving final issuance of permit from TCEQ this summer.

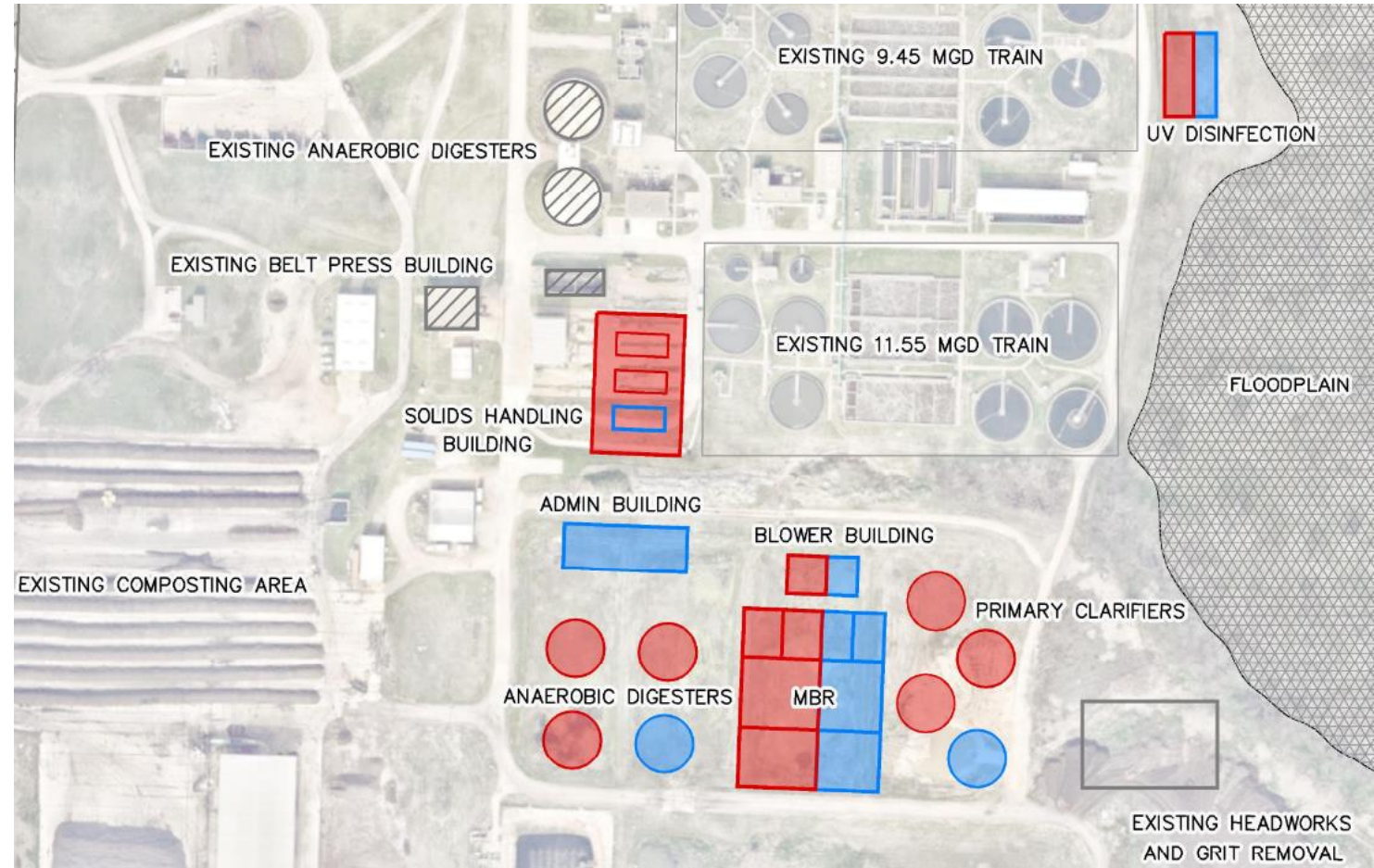


Existing 21 MGD PCWRP



# PCWRP Expansion Plan

- The Wastewater Master Plan includes a PCWRP Facility Master Plan
- The Facility Master Plan recommends a 5 MGD expansion utilizing membrane bioreactor (MBR) technology and Solids Handling Improvements including Disinfection Improvements







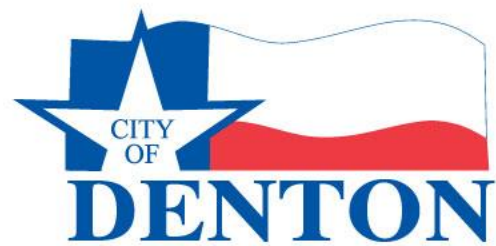
## Engineering Firm Selection

- RFQ 7574 Prequalification list utilized
- Staff recommends Kimley Horn and Associates for design
- Design Contract amount: \$14,952,000





# Questions?



PUB23-095 – May 22, 2023



# City of Denton

City Hall  
215 E. McKinney St.  
Denton, Texas 76201  
[www.cityofdenton.com](http://www.cityofdenton.com)

## Legislation Text

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**File #: PUB23-097, Version: 1**

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### **AGENDA CAPTION**

Consider recommending adoption of an ordinance of the City of Denton, a Texas home-rule municipal corporation, authorizing the City Manager to execute a contract with Alamo Transformer Supply Company, for the purchase of refurbished, rebuilt, and salvaged transformers and transformer disposal for Denton Municipal Electric as set forth in the contract; providing for the expenditure of funds therefor; and providing an effective date (RFQ 8192 - contract for transformers awarded to Alamo Transformer Supply Company, in the three (3) year not-to-exceed amount of \$10,000,000.00).





# City of Denton

City Hall  
215 E. McKinney Street  
Denton, Texas  
[www.cityofdenton.com](http://www.cityofdenton.com)

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## AGENDA INFORMATION SHEET

**DEPARTMENT:** Procurement  
**ACM:** Cassey Ogden  
**DATE:** May 22, 2023

### **SUBJECT**

Consider recommending adoption of an ordinance of the City of Denton, a Texas home-rule municipal corporation, authorizing the City Manager to execute a contract with Alamo Transformer Supply Company, for the purchase of refurbished, rebuilt, and salvaged transformers and transformer disposal for Denton Municipal Electric as set forth in the contract; providing for the expenditure of funds therefor; and providing an effective date (RFQ 8192 – contract for transformers awarded to Alamo Transformer Supply Company, in the three (3) year not-to-exceed amount of \$10,000,000.00).

### **STRATEGIC ALIGNMENT**

This action supports Key Focus Area: Strengthen Community and Quality of Life.

### **INFORMATION/BACKGROUND**

Denton Municipal Electric (DME) inventory of transformers currently in stock is at levels reserved for emergencies and/or for the provision of electric service restoration associated with normal, daily operation responsibilities. For new construction, DME prioritizes transformers on a project first come, first ready basis for customers and developers that have inspections and permits complete. DME has notified customers and developers DME may not be able to provide service due to the low inventory of transformers and the current supply chain issues.

Supply chain issues for distribution transformers continue to be a challenge. There are major shortages nationwide of critical electric utility equipment such as electric distribution transformers, underground cables, substation equipment, and other equipment necessary to maintain and provide new electric service in Denton. The need for this contract with Alamo Transformers stems from lead times on transformers approaching 80 weeks in some instances. Vendors cannot provide reliable estimates of lead times for equipment. DME has seen an increase of 350% or higher in the average cost of transformers supplied by its vendors.

The number of transformers purchased from this contract will fluctuate. Since this contract is to purchase refurbished and rebuilt transformers, the purchases will depend on the availability of the current vendor and the supply chain. Having this contract in place will slow the need for DME to make emergency purchases of transformers.

This contract will include refurbishing and rebuilding of transformers and also allow DME to purchase rebuilt transformers. This contract will include the pick-up and disposal of salvaged transformers that cannot be repaired and the pickup and disposal of transformer oil.

To promote sustainability and strengthen the Denton community, DME needs a contract in place to keep the correct number of electric transformers on hand for electric outages and new electric projects. While many surrounding electric utilities are shutting down because of the transformer supply chain, this contract for purchasing refurbished transformers and refurbishing our old existing transformers will help DME operate as normal.

This contract will be a 3-year contract. This contract will not exceed \$10,000,000.

The items are stocked by the DME pole yard and used as needed. The commodities are “common stock items” in the DME capital inventory.

<b>Project Description</b>	<b>Estimated 3-Year Expenditure</b>
Year 1	\$ 3,000,000
Year 2	\$ 3,000,000
Year 3	\$ 3,000,000
Contingency	\$ 1,000,000
<b>Total:</b>	<b>\$10,000,000</b>

Requests for Qualifications were sent to 320 prospective suppliers of this item. In addition, specifications were placed on the Procurement website for prospective suppliers to download and advertised in the local newspaper. Three (3) qualifications were received and evaluated based upon published criteria including communication and responsiveness, ability to meet schedule, experience and qualifications, past performance, and overall fit. Based upon this evaluation, the recommended award is to Alamo Transformers Supply Company, and is determined to be the best value for the City.

NIGP Code Used for Solicitation:	285 - Electrical Equipment and Supplies (Except Cable and Wire)
Notifications sent for Solicitation sent in IonWave:	320
Number of Suppliers that viewed Solicitation in IonWave:	18
HUB-Historically Underutilized Business Invitations sent out:	32
SBE-Small Business Enterprise Invitations sent out:	135
Responses from Solicitation:	3

## **RECOMMENDATION**

Award a contract with Alamo Transformer Supply Company, for the purchase of refurbished, rebuilt, and salvaged transformers and transformer disposal for Denton Municipal Electric in a three (3) year not-to-exceed amount of \$10,000,000.

## **PRINCIPAL PLACE OF BUSINESS**

Alamo Transformer Supply Company  
San Antonio, TX

## **SUSTAINABILITY MEASURES**

Deploying a refurbished transformer is an excellent way to minimize waste and reuse valuable resources. Refurbishing a transformer is more efficient than recycling its component materials and reduces the demand for energy and materials needed to manufacture new transformers from scratch.

## **ESTIMATED SCHEDULE OF PROJECT**

This is a three (3) year contract.

## **FISCAL INFORMATION**

These items will be funded from the DME Capital Budget account 605227500.1350.3680. Requisitions will be entered on an as-needed basis. The budgeted amount for this item is \$10,000,000. The City will only pay for services rendered and is not obligated to pay the full contract amount unless needed.

## **EXHIBITS**

Exhibit 1: Agenda Information Sheet

Exhibit 2: Evaluation Sheet

Exhibit 3: Presentation

Exhibit 4: Ordinance and Contract

Respectfully submitted:  
Lori Hewell, 940-349-7100  
Purchasing Manager

For information concerning this acquisition, contact: Randy Key, 940-231-2966.

Legal point of contact: Marcella Lunn at 940-349-8333.

**Exhibit 2**  
**RFQ 8192 - Evaluation Sheet for Prequalification for Transformer Salvage, Refurbishment, and Disposal**

Respondent's Business Name:		Alamo Transformer Supply Company	Texas Electric Cooperatives, Inc.	Sunbelt Solomon Services, LLC
Principal Place of Business (City and State):		San Antonio, TX	Georgetown, TX	Temple, TX
Item #	Standard Criteria			
1	Communication and Responsiveness - 20%	17.60	11.20	4.80
2	Ability to meet schedule for this service and defined in the scope of work - 20%	16.80	12.00	11.20
3	Experience and qualifications of the respondent and key personnel available for this project - 20%	16.80	13.60	10.40
4	Past Performance and experience on projects of this magnitude and complexity - 30%	25.20	19.20	13.20
5	Overall Fit of this team with City Goals & Objectives - 10%	8.40	6.80	4.80
Total Score:		84.80	62.80	44.40



# Contract for Alamo Transformers

---

Randy Key  
Electric Engineering Supervisor  
Electric Engineering  
5/22/2023

PUB23-097



# Transformer Supplies

- Lead times are currently 80 + weeks. Industry trend moving towards 2-3 years.
- Current transformer inventory below minimum levels. Contract will allow DME to get back to minimum operating levels for maintenance and outages.
- Shipments of the transformers continue to be sporadic with little notification of deliveries.



## Contract Functions

- Rebuild or refurbish current transformers and return to service.
- Rebuilt and refurbished transformers provide significant cost saving and quicker lead times compared to new transformers.
- Opportunity to purchase rebuilt/refurbished from other utilities.
- Provide sustainable practices with pick-up and disposal of used oil and scrap irreparable transformers.
- Purchase new transformers with shorter lead times and apply credit from scrapped transformers.
- Provide relief in supply chain challenges and support in service reliability.

# Recommendation

Approve proposed contract

Project Description	Estimated 3-Year Expenditure
Year 1	\$ 3,000,000
Year 2	\$ 3,000,000
Year 3	\$ 3,000,000
Contingency	\$ 1,000,000
Total	\$10,000,000



# Questions?

Randy Key

Electric Engineering Supervisor



PUB23-097

May 22, 2023

5

ORDINANCE NO. \_\_\_\_\_

AN ORDINANCE OF THE CITY OF DENTON, A TEXAS HOME-RULE MUNICIPAL CORPORATION, AUTHORIZING THE CITY MANAGER TO EXECUTE A CONTRACT WITH ALAMO TRANSFORMER SUPPLY COMPANY, FOR THE PURCHASE OF REFURBISHED, REBUILT, AND SALVAGED TRANSFORMERS AND TRANSFORMER DISPOSAL FOR DENTON MUNICIPAL ELECTRIC AS SET FORTH IN THE CONTRACT; PROVIDING FOR THE EXPENDITURE OF FUNDS THEREFOR; AND PROVIDING AN EFFECTIVE DATE (RFQ 8192 – CONTRACT FOR TRANSFORMERS AWARDED TO ALAMO TRANSFORMER SUPPLY COMPANY, IN THE THREE (3) YEAR NOT-TO-EXCEED AMOUNT OF \$10,000,000.00).

WHEREAS, Alamo Transformer Supply Company, the professional services provider (the “Provider”) set forth in this ordinance, is being selected as the most highly qualified on the basis of its demonstrated competence and qualifications to perform the proposed professional services; and

WHEREAS, this procurement was undertaken as part of the City’s governmental function; and

WHEREAS, the fees under the proposed contract are fair and reasonable and are consistent with, and not higher than, the recommended practices and fees published by the professional associations applicable to the Provider’s profession, and such fees do not exceed the maximum provided by law; NOW, THEREFORE,

THE COUNCIL OF THE CITY OF DENTON HEREBY ORDAINS:

SECTION 1. The City Manager, or their designee, is authorized to enter into the service contract attached hereto with Alamo Transformer Supply Company, for the purchase of refurbished, rebuilt, and salvaged transformers for Denton Municipal Electric.

SECTION 2. The City Manager, or their designee, is authorized to expend funds as required by the attached contract.

SECTION 3. The City Council of the City of Denton, Texas expressly delegates the authority to take any actions that may be required or permitted to be performed by the City of Denton under this ordinance to the City Manager of the City of Denton, or their designee.

SECTION 4. The findings in the preamble of this ordinance are incorporated herein by reference.

SECTION 5. This ordinance shall become effective immediately upon its passage and approval.

The motion to approve this ordinance was made by \_\_\_\_\_ and seconded by \_\_\_\_\_. This ordinance was passed and approved by the following vote [\_\_\_\_ - \_\_\_\_]:

	<b>Aye</b>	<b>Nay</b>	<b>Abstain</b>	<b>Absent</b>
Mayor Gerard Hudspeth:	_____	_____	_____	_____
Vicki Byrd, District 1:	_____	_____	_____	_____
Brian Beck, District 2:	_____	_____	_____	_____
Paul Meltzer, District 3:	_____	_____	_____	_____
Joe Holland, District 4:	_____	_____	_____	_____
Brandon Chase McGee, At Large Place 5:	_____	_____	_____	_____
Chris Watts, At Large Place 6:	_____	_____	_____	_____


PASSED AND APPROVED this the \_\_\_\_\_ day of \_\_\_\_\_, 2023.

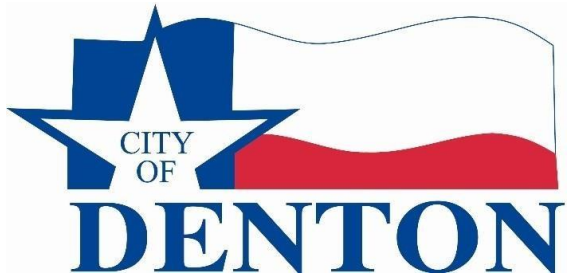
\_\_\_\_\_  
GERARD HUDSPETH, MAYOR

ATTEST:  
JESUS SALAZAR, INTERIM CITY SECRETARY

BY: \_\_\_\_\_

APPROVED AS TO LEGAL FORM:  
MACK REINWAND, CITY ATTORNEY

BY:  \_\_\_\_\_  
Digitally signed by Marcella Lunn  
DN: cn=Marcella Lunn, o,  
ou=City of Denton,  
email=marcella.lunn@cityofdent  
on.com, c=US  
Date: 2023.05.10 10:50:56 -05'00'



Docusign City Council Transmittal Coversheet

RFQ	8192
File Name	Transformer Salvage, Refurbishment, and Disposal
Purchasing Contact	Christa Christian
City Council Target Date	
Piggy Back Option	Not Applicable
Contract Expiration	
Ordinance	

**CONTRACT BY AND BETWEEN  
CITY OF DENTON, TEXAS AND ALAMO TRANSFORMER SUPPLY COMPANY  
(Contract # 8192)**

**THIS CONTRACT** is made and entered into this date \_\_\_\_\_, by and between ALAMO TRANSFORMER SUPPLY COMPANY a TEXAS Corporation whose address is 4931 SPACE CENTER SAN ANTONIO, TEXAS 78218 hereinafter referred to as "Contractor," and the **CITY OF DENTON, TEXAS**, a home rule municipal corporation, hereinafter referred to as "City," to be effective upon approval of the Denton City Council and subsequent execution of this Contract by the Denton City Manager or his duly authorized designee.

For and in consideration of the covenants and agreements contained herein, and for the mutual benefits to be obtained hereby, the parties agree as follows:

**SCOPE OF SERVICES**

Contractor shall provide products in accordance with the City's RFQ # 8192 Transformer Salvage, Refurbishment, and Disposal, a copy of which is on file at the office of Purchasing Agent and incorporated herein for all purposes. The Contract consists of this written agreement and the following items which are attached hereto, or on file, and incorporated herein by reference:

- (a) Special Terms and Conditions (**Exhibit "A"**);
- (b) City of Denton's RFQ 8192 (**Exhibit "B" on file at the office of the Purchasing Agent**);
- (c) City of Denton Standard Terms and Conditions (**Exhibit "C"**);
- (d) Certificate of Interested Parties Electronic Filing (**Exhibit "D"**);
- (e) Contractor's Proposal. (**Exhibit "E"**);
- (f) Form CIQ – Conflict of Interest Questionnaire (**Exhibit "F"**)

These documents make up the Contract documents and what is called for by one shall be as binding as if called for by all. In the event of an inconsistency or conflict in any of the provisions of the Contract documents, the inconsistency or conflict shall be resolved by giving precedence first to the written agreement then to the contract documents in the order in which they are listed above. These documents shall be referred to collectively as "Contract Documents."

**Prohibition on Contracts with Companies Boycotting Israel**

Contractor acknowledges that in accordance with Chapter 2271 of the Texas Government Code, City is prohibited from entering into a contract with a company for goods or services unless the contract contains a written verification from the company that it: (1) does not boycott Israel; and (2) will not boycott Israel during the term of the contract. The terms "boycott Israel" and "company" shall have the meanings ascribed to those terms in Section 808.001 of the Texas Government Code. ***By signing this agreement, Contractor certifies that Contractor's signature provides written verification to the City that Contractor: (1) does not boycott Israel; and (2) will not boycott Israel during the term of the agreement.*** Failure to meet or maintain the requirements under this provision will be considered a material breach.

**Prohibition on Contracts with Companies Boycotting Certain Energy Companies**

Contractor acknowledges that in accordance with Chapter 2274 of the Texas Government Code, City is prohibited from entering into a contract with a company for goods or services unless the contract contains written verification from the company that it (1) does not boycott energy companies; and (2) will not boycott

energy companies during the term of the contract. The terms “boycott energy company” and “company” shall have the meanings ascribed to those terms in Section 809.001 of the Texas Government Code. ***By signing this agreement, Contractor certifies that Contractor’s signature provides written verification to the City that Contractor: (1) does not boycott energy companies; and (2) will not boycott energy companies during the term of the agreement.*** Failure to meet or maintain the requirements under this provision will be considered a material breach.

#### **Prohibition on Contracts with Companies Boycotting Certain Firearm Entities and Firearm Trade Associations**

Contractor acknowledges that in accordance with Chapter 2274 of the Texas Government Code, City is prohibited from entering into a contract with a company for goods or services unless the contract contains written verification from the company that it (1) does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association; and (2) will not discriminate during the term of the contract against a firearm entity or firearm trade association. The terms “discriminate against a firearm entity or firearm trade association,” “firearm entity” and “firearm trade association” shall have the meanings ascribed to those terms in Chapter 2274 of the Texas Government Code. ***By signing this agreement, Contractor certifies that Contractor’s signature provides written verification to the City that Contractor: (1) does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association; and (2) will not discriminate during the term of the contract against a firearm entity or firearm trade association.*** Failure to meet or maintain the requirements under this provision will be considered a material breach.

#### **Prohibition On Contracts With Companies Doing Business with Iran, Sudan, or a Foreign Terrorist Organization**

Sections 2252 and 2270 of the Texas Government Code restricts CITY from contracting with companies that do business with Iran, Sudan, or a foreign terrorist organization. ***By signing this agreement, Contractor certifies that Contractor’s signature provides written verification to the City that Contractor, pursuant to Chapters 2252 and 2270, is not ineligible to enter into this agreement and will not become ineligible to receive payments under this agreement by doing business with Iran, Sudan, or a foreign terrorist organization.*** Failure to meet or maintain the requirements under this provision will be considered a material breach.

#### **Termination Right for Contracts with Companies Doing Business with Certain Foreign-Owned Companies**

The City of Denton may terminate this Contract immediately without any further liability if the City of Denton determines, in its sole judgment, that this Contract meets the requirements under Chapter 2274, and Contractor is, or will be in the future, (i) owned by or the majority of stock or other ownership interest of the company is held or controlled by individuals who are citizens of China, Iran, North Korea, Russia, or other designated country (ii) directly controlled by the Government of China, Iran, North Korea, Russia, or other designated country, or (iii) is headquartered in China, Iran, North Korea, Russia, or other designated country.

The parties agree to transact business electronically. Any statutory requirements that certain terms be in writing will be satisfied using electronic documents and signing. Electronic signing of this document will be deemed an original for all legal purposes.

IN WITNESS WHEREOF, the parties of these presents have executed this agreement in the year and day first above written.



CONTRACTOR BY: Eric K. Peter  
AUTHORIZED SIGNATURE

Printed Name: Eric K. Peter

Title: President  
210 661-8411

PHONE NUMBER  
Epeter@alamotransformer.com

EMAIL ADDRESS  
2023- Epeter@alamotransformer.com

TEXAS ETHICS COMMISSION  
1295 CERTIFICATE NUMBER

CITY OF DENTON, TEXAS  
BY: SARA HENSLEY, CITY MANAGER

ATTEST:  
JESUS SALAZAR, INTERIM CITY  
SECRETARY  
BY: \_\_\_\_\_

APPROVED AS TO LEGAL FORM:  
MACK REINWAND, CITY ATTORNEY  
BY: Marcella Lunn

THIS AGREEMENT HAS BEEN  
BOTH REVIEWED AND APPROVED  
as to financial and operational obligations  
and business terms.

Antonio Puente, Jr. Antonio Puente, Jr.  
SIGNATURE PRINTED NAME

DME General Manager  
TITLE  
Electric  
DEPARTMENT

## **Exhibit A**

### **Special Terms and Conditions**

#### **1. The Quantities**

The quantities indicated on Exhibit E are estimates based upon the best available information. The City reserves the right to increase or decrease the quantities to meet its actual needs without any adjustments in the bid price. Individual purchase orders will be issued on an as needed basis.

#### **2. Product Changes During Contract Term**

The Contractor shall not change specifications during the contract term without prior approval. Any deviation in the specifications or change in the product must be approved in advance by the City of Denton. Notice of a change shall be submitted in writing to [purchasing@cityofdenton.com](mailto:purchasing@cityofdenton.com), with the above file number in the subject line, for review. Products found to have changed specifications without notification, and acceptance, will be returned at the contractor's expense. Products that have been installed will be replaced at the contractor's expense.

#### **3. Authorized Distributor**

The Contractor shall be the manufacturer or authorized distributor of the proposed products. The distributor shall be authorized to sell to the City of Denton, and make available the manufacturer's representative as needed by the City.

#### **4. Contract Terms**

The contract term will be three (3) years, effective from date of award.

The Contract shall commence upon the issuance of a Notice of Award by the City of Denton and shall automatically renew each year, from the date of award by City Council. The Contractor's request to not renew the contract must be submitted in writing to the Purchasing Manager at least 60 days prior to the contract renewal date for each year. At the sole option of the City of Denton, the Contract may be further extended as needed, not to exceed a total of six (6) months.

#### **5. Price Escalation and De-escalation**

On Contractor's request in the form stated herein, the City will implement an escalation/de-escalation price adjustment annually based on these special terms. Any request for price adjustment must be based on the, U.S Department of Labor, Bureau of Labor Statistics, Producer Price Index (PPI) or the manufacturer published pricing list. The maximum escalation will not exceed +/- 8% for any individual year. The escalation will be determined annually at the renewal date. The price will be increased or decreased based upon the annual percentage change in the PPI or the percentage change in the manufacturer's price list. Should the PPI or manufacturer price list change exceed a minimum threshold value of +/-1%, then the stated eligible bid prices shall be adjusted in accordance with the percent change not to exceed the 8% limit per year. The Contractor should provide documentation as percentage of each cost associated with the unit prices quoted for consideration.

Request must be submitted in writing with supporting evidence for need of such increase to the Purchasing Manager at least 60 days prior to contract expiration of each year. Respondent must also provide supporting documentation as justification for the request. If no request is made, then it will be assumed that the current contract price will be in effect.

Upon receipt of such request, the City of Denton reserves the right to either: accept the escalation as competitive with the general market price at the time, and become effective upon the renewal date of the contract award or reject the increases within 30 calendar days after receipt of a properly submitted request. If a properly submitted increase is rejected, the Contractor may request cancellation of such items from the Contract by giving the City of Denton written notice. Cancellation will not go into effect for 15 calendar days after a determination has been issued. Pre-price increase prices must be honored on orders dated up to the official date of the City of Denton approval and/or cancellation.

The request can be sent by e-mail to: purchasing@cityofdenton.com noting the solicitation number.

The City of Denton reserves the right to accept, reject, or negotiate the proposed price changes.

#### **6. Total Contract Amount**

The contract total shall not exceed \$10,000,000. Pricing shall be per Exhibit E attached.

#### **7. Delivery Lead Time**

ALAMO repair time on units that fit repair specifications and do not have to be quoted but fall into DME guidelines is approximately 12-16 weeks once received at our repair shop(s). Quoted repairs will include an estimated lead time. Delivery could vary from lead time based on maximizing use of space available on ALAMO Trucks.

#### **8. Performance Liquidated Damages**

The Contractor shall incur contractual payment losses, as initiated by the City for performance that falls short of specified performance standards as outlined below:

- Delivery beyond contracted lead times
- Performance below contracted levels (services only)

The Contractor shall be assessed a one (1%) percent fee each month when any one of the performance standards outlined above are not met in full. The Contractor shall be assessed a two (2%) percent profit fee each month when any two (2) or more performance standards outlined above are not met in full. At the end of each month, the City will review the monthly reports and determine the percentage of penalty to be assessed to the Contractor's monthly profit margin.

**Exhibit C**  
**City of Denton**  
**Standard Purchase Terms and Conditions**

These standard Terms and Conditions and the Terms and Conditions, Specifications, Drawings and other requirements included in the City of Denton's contract are applicable to contracts/purchase orders issued by the City of Denton hereinafter referred to as the City or Buyer and the Seller or respondent herein after referred to as Contractor or Supplier. Any deviations must be in writing and signed by a representative of the City's Procurement Department and the Supplier. No Terms and Conditions contained in the seller's proposal response, invoice or statement shall serve to modify the terms set forth herein. If there is a conflict between the provisions on the face of the contract/purchase order these written provisions will take precedence.

The Contractor agrees that the contract shall be governed by the following terms and conditions, unless exceptions are duly noted and fully negotiated. Unless otherwise specified in the contract, Sections 3, 4, 5, 6, 7, 8, 20, 21, and 36 shall apply only to a solicitation to purchase goods, and sections 9, 10, 11, 22 and 32 shall apply only to a solicitation to purchase services to be performed principally at the City's premises or on public rights-of-way.

1. **CONTRACTOR'S OBLIGATIONS.** The Contractor shall fully and timely provide all deliverables described in the Solicitation and in the Contractor's Offer in strict accordance with the terms, covenants, and conditions of the Contract and all applicable Federal, State, and local laws, rules, and regulations.

2. **EFFECTIVE DATE/TERM.** Unless otherwise specified in the Solicitation, this Contract shall be effective as of the date the contract is signed by the City, and shall continue in effect until all obligations are performed in accordance with the Contract.

3. **CONTRACTOR TO PACKAGE DELIVERABLES:** The Contractor will package deliverables in accordance with good commercial practice and shall include a packing list showing the description of each item, the quantity and unit price unless otherwise provided in the Specifications or Supplemental Terms and Conditions, each shipping container shall be clearly and permanently marked as follows: (a) The Contractor's name and address, (b) the City's name, address and purchase order or purchase release number and the price agreement number if applicable, (c) Container number and total number of containers, e.g. box 1 of 4 boxes, and (d) the number of the container bearing the packing list. The Contractor shall bear cost of packaging. Deliverables shall be suitably packed to secure lowest transportation costs and to conform to all the requirements of common carriers and any applicable specification. The City's count or weight shall be final and conclusive on shipments not accompanied by packing lists.

4. **SHIPMENT UNDER RESERVATION PROHIBITED:** The Contractor is not authorized to ship the deliverables under reservation and no tender of a bill of lading will operate as a tender of deliverables.

5. **TITLE & RISK OF LOSS:** Title to and risk of loss of the deliverables shall pass to the City only when the City actually receives and accepts the deliverables.

**6. DELIVERY TERMS AND TRANSPORTATION CHARGES:** Deliverables shall be shipped F.O.B. point of delivery unless otherwise specified in the Supplemental Terms and Conditions. Unless otherwise stated in the Offer, the Contractor's price shall be deemed to include all delivery and transportation charges. The City shall have the right to designate what method of transportation shall be used to ship the deliverables. The place of delivery shall be that set forth the purchase order.

**7. RIGHT OF INSPECTION AND REJECTION:** The City expressly reserves all rights under law, including, but not limited to the Uniform Commercial Code, to inspect the deliverables at delivery before accepting them, and to reject defective or non-conforming deliverables. If the City has the right to inspect the Contractor's, or the Contractor's Subcontractor's, facilities, or the deliverables at the Contractor's, or the Contractor's Subcontractor's, premises, the Contractor shall furnish, or cause to be furnished, without additional charge, all reasonable facilities and assistance to the City to facilitate such inspection.

**8. NO REPLACEMENT OF DEFECTIVE TENDER:** Every tender or delivery of deliverables must fully comply with all provisions of the Contract as to time of delivery, quality, and quantity. Any non-complying tender shall constitute a breach and the Contractor shall not have the right to substitute a conforming tender; provided, where the time for performance has not yet expired, the Contractor may notify the City of the intention to cure and may then make a conforming tender within the time allotted in the contract.

**9. PLACE AND CONDITION OF WORK:** The City shall provide the Contractor access to the sites where the Contractor is to perform the services as required in order for the Contractor to perform the services in a timely and efficient manner, in accordance with and subject to the applicable security laws, rules, and regulations. The Contractor acknowledges that it has satisfied itself as to the nature of the City's service requirements and specifications, the location and essential characteristics of the work sites, the quality and quantity of materials, equipment, labor and facilities necessary to perform the services, and any other condition or state of fact which could in any way affect performance of the Contractor's obligations under the contract. The Contractor hereby releases and holds the City harmless from and against any liability or claim for damages of any kind or nature if the actual site or service conditions differ from expected conditions.

The contractor shall, at all times, exercise reasonable precautions for the safety of their employees, City Staff, participants and others on or near the City's facilities.

## **10. WORKFORCE**

A. The Contractor shall employ only orderly and competent workers, skilled in the performance of the services which they will perform under the Contract.

B. The Contractor, its employees, subcontractors, and subcontractor's employees may not while engaged in participating or responding to a solicitation or while in the course and scope of delivering goods or services under a City of Denton contract or on the City's property .

i. use or possess a firearm, including a concealed handgun that is licensed under state law, except as required by the terms of the contract; or

ii. use or possess alcoholic or other intoxicating beverages, illegal drugs or controlled substances, nor may such workers be intoxicated, or under the influence of alcohol or drugs, on the job.

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C. If the City or the City's representative notifies the Contractor that any worker is incompetent, disorderly or disobedient, has knowingly or repeatedly violated safety regulations, has possessed any firearms, or has possessed or was under the influence of alcohol or drugs on the job, the Contractor shall immediately remove such worker from Contract services, and may not employ such worker again on Contract services without the City's prior written consent.

**Immigration:** The Contractor represents and warrants that it shall comply with the requirements of the Immigration Reform and Control Act of 1986 and 1990 regarding employment verification and retention of verification forms for any individuals hired on or after November 6, 1986, who will perform any labor or services under the Contract and the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 ("IIRIRA) enacted on September 30, 1996.

**11. COMPLIANCE WITH HEALTH, SAFETY, AND ENVIRONMENTAL REGULATIONS:** The Contractor, its Subcontractors, and their respective employees, shall comply fully with all applicable federal, state, and local health, safety, and environmental laws, ordinances, rules and regulations in the performance of the services, including but not limited to those promulgated by the City and by the Occupational Safety and Health Administration (OSHA). In case of conflict, the most stringent safety requirement shall govern. The Contractor shall indemnify and hold the City harmless from and against all claims, demands, suits, actions, judgments, fines, penalties and liability of every kind arising from the breach of the Contractor's obligations under this paragraph.

**Environmental Protection:** The Respondent shall be in compliance with all applicable standards, orders, or regulations issued pursuant to the mandates of the Clean Air Act (42 U.S.C. §7401 *et seq.*) and the Federal Water Pollution Control Act, as amended, (33 U.S.C. §1251 *et seq.*).

## **12. INVOICES:**

A. The Contractor shall submit separate invoices in duplicate on each purchase order or purchase release after each delivery. If partial shipments or deliveries are authorized by the City, a separate invoice must be sent for each shipment or delivery made.

**B. Proper Invoices must include a unique invoice number, the purchase order or delivery order number and the master agreement number if applicable, the Department's Name, and the name of the point of contact for the Department.** Invoices shall be itemized and transportation charges, if any, shall be listed separately. A copy of the bill of lading and the freight waybill, when applicable, shall be attached to the invoice. The Contractor's name, remittance address and, if applicable, the tax identification number on the invoice must exactly match the information in the Vendor's registration with the City. Unless otherwise instructed in writing, the City may rely on the remittance address specified on the Contractor's invoice.

C. Invoices for labor shall include a copy of all time-sheets with trade labor rate and deliverables order number clearly identified. Invoices shall also include a tabulation of work-hours at the appropriate rates and grouped by work order number. Time billed for labor shall be limited to hours actually worked at the work site.

D. Unless otherwise expressly authorized in the Contract, the Contractor shall pass through all Subcontract and other authorized expenses at actual cost without markup.

E. Federal excise taxes, State taxes, or City sales taxes must not be included in the invoiced amount.

The City will furnish a tax exemption certificate upon request.

**13. PAYMENT:**

A. All proper invoices need to be sent to Accounts Payable. Approved invoices will be paid within thirty (30) calendar days of the City's receipt of the deliverables or of the invoice being received in Accounts Payable, whichever is later.

**B. If payment is not timely made, (per paragraph A); interest shall accrue on the unpaid balance at the lesser of the rate specified in Texas Government Code Section 2251.025 or the maximum lawful rate; except, if payment is not timely made for a reason for which the City may withhold payment hereunder, interest shall not accrue until ten (10) calendar days after the grounds for withholding payment have been resolved.**

C. If partial shipments or deliveries are authorized by the City, the Contractor will be paid for the partial shipment or delivery, as stated above, provided that the invoice matches the shipment or delivery.

D. The City may withhold or set off the entire payment or part of any payment otherwise due the Contractor to such extent as may be necessary on account of:

- i. delivery of defective or non-conforming deliverables by the Contractor;
- ii. third party claims, which are not covered by the insurance which the Contractor is required to provide, are filed or reasonable evidence indicating probable filing of such claims;
- iii. failure of the Contractor to pay Subcontractors, or for labor, materials or equipment;
- iv. damage to the property of the City or the City's agents, employees or contractors, which is not covered by insurance required to be provided by the Contractor;
- v. reasonable evidence that the Contractor's obligations will not be completed within the time specified in the Contract, and that the unpaid balance would not be adequate to cover actual or damages for the anticipated delay;
- vi. failure of the Contractor to submit proper invoices with purchase order number, with all required attachments and supporting documentation; or
- vii. failure of the Contractor to comply with any material provision of the Contract Documents.

E. Notice is hereby given that any awarded firm who is in arrears to the City of Denton for delinquent taxes, the City may offset indebtedness owed the City through payment withholding.

F. Payment will be made by check unless the parties mutually agree to payment by credit card or electronic transfer of funds. The Contractor agrees that there shall be no additional charges, surcharges, or penalties to the City for payments made by credit card or electronic funds transfer.

G. The awarding or continuation of this contract is dependent upon the availability of funding. The City's payment obligations are payable only and solely from funds Appropriated and available for this contract. The absence of Appropriated or other lawfully available funds shall render the Contract null and void to the extent funds are not Appropriated or available and any deliverables delivered but unpaid shall be returned to the Contractor. The City shall provide the Contractor written notice of the failure of the City to make an adequate Appropriation for any fiscal year to pay the amounts due under the Contract, or the reduction of any Appropriation to an amount insufficient to permit the City to pay its obligations under the Contract. In the event of none or inadequate appropriation of funds, there will be no penalty nor removal fees charged to the City.

**14. TRAVEL EXPENSES:** All travel, lodging and per diem expenses in connection with the Contract shall be paid by the Contractor, unless otherwise stated in the contract terms. During the term of this contract, the contractor shall bill and the City shall reimburse contractor for all reasonable and approved out of pocket expenses which are incurred in the connection with the performance of duties hereunder. Notwithstanding the foregoing, expenses for the time spent by Contractor 8192

the contractor in traveling to and from City facilities shall not be reimbursed, unless otherwise negotiated.

**15. FINAL PAYMENT AND CLOSE-OUT:**

A. If a DBE/MBE/WBE Program Plan is agreed to and the Contractor has identified Subcontractors, the Contractor is required to submit a Contract Close-Out MBE/WBE Compliance Report to the Purchasing Manager no later than the 15th calendar day after completion of all work under the contract. Final payment, retainage, or both may be withheld if the Contractor is not in compliance with the requirements as accepted by the City.

B. The making and acceptance of final payment will constitute:

i. a waiver of all claims by the City against the Contractor, except claims (1) which have been previously asserted in writing and not yet settled, (2) arising from defective work appearing after final inspection, (3) arising from failure of the Contractor to comply with the Contract or the terms of any warranty specified herein, (4) arising from the Contractor's continuing obligations under the Contract, including but not limited to indemnity and warranty obligations, or (5) arising under the City's right to audit; and ii. a waiver of all claims by the Contractor against the City other than those previously asserted in writing and not yet settled.

**16. SPECIAL TOOLS & TEST EQUIPMENT:** If the price stated on the Offer includes the cost of any special tooling or special test equipment fabricated or required by the Contractor for the purpose of filling this order, such special tooling equipment and any process sheets related thereto shall become the property of the City and shall be identified by the Contractor as such.

**17. RIGHT TO AUDIT:**

A. The City shall have the right to audit and make copies of the books, records and computations pertaining to the Contract. The Contractor shall retain such books, records, documents and other evidence pertaining to the Contract period and five years thereafter, except if an audit is in progress or audit findings are yet unresolved, in which case records shall be kept until all audit tasks are completed and resolved. These books, records, documents and other evidence shall be available, within ten (10) business days of written request. Further, the Contractor shall also require all Subcontractors, material suppliers, and other payees to retain all books, records, documents and other evidence pertaining to the Contract, and to allow the City similar access to those documents. All books and records will be made available within a 50 mile radius of the City of Denton. The cost of the audit will be borne by the City unless the audit reveals an overpayment of 1% or greater. If an overpayment of 1% or greater occurs, the reasonable cost of the audit, including any travel costs, must be borne by the Contractor which must be payable within five (5) business days of receipt of an invoice.

B. Failure to comply with the provisions of this section shall be a material breach of the Contract and shall constitute, in the City's sole discretion, grounds for termination thereof. Each of the terms "books", "records", "documents" and "other evidence", as used above, shall be construed to include drafts and electronic files, even if such drafts or electronic files are subsequently used to generate or prepare a final printed document.

**18. SUBCONTRACTORS:**

A. If the Contractor identified Subcontractors in a DBE/MBE/WBE agreed to Plan, the Contractor shall comply with all requirements approved by the City. The Contractor shall not initially employ any Subcontractor except as provided in the Contractor's Plan. The Contractor shall not substitute any Subcontractor identified in the Plan, unless the substitute has been accepted by the City in



writing. No acceptance by the City of any Subcontractor shall constitute a waiver of any rights or remedies of the City with respect to defective deliverables provided by a Subcontractor. If a Plan has been approved, the Contractor is additionally required to submit a monthly Subcontract Awards and Expenditures Report to the Procurement Manager, no later than the tenth calendar day of each month.

B. Work performed for the Contractor by a Subcontractor shall be pursuant to a written contract between the Contractor and Subcontractor. The terms of the subcontract may not conflict with the terms of the

Contract, and shall contain provisions that:

- i. require that all deliverables to be provided by the Subcontractor be provided in strict accordance with the provisions, specifications and terms of the Contract;
- ii. prohibit the Subcontractor from further subcontracting any portion of the Contract without the prior written consent of the City and the Contractor. The City may require, as a condition to such further subcontracting, that the Subcontractor post a payment bond in form, substance and amount acceptable to the City;
- iii. require Subcontractors to submit all invoices and applications for payments, including any claims for additional payments, damages or otherwise, to the Contractor in sufficient time to enable the Contractor to include same with its invoice or application for payment to the City in accordance with the terms of the Contract;
- iv. require that all Subcontractors obtain and maintain, throughout the term of their contract, insurance in the type and amounts specified for the Contractor, with the City being a named insured as its interest shall appear; and
- v. require that the Subcontractor indemnify and hold the City harmless to the same extent as the Contractor is required to indemnify the City.

C. The Contractor shall be fully responsible to the City for all acts and omissions of the Subcontractors just as the Contractor is responsible for the Contractor's own acts and omissions. Nothing in the Contract shall create for the benefit of any such Subcontractor any contractual relationship between the City and any such Subcontractor, nor shall it create any obligation on the part of the City to pay or to see to the payment of any moneys due any such Subcontractor except as may otherwise be required by law.

D. The Contractor shall pay each Subcontractor its appropriate share of payments made to the Contractor not later than ten (10) calendar days after receipt of payment from the City.

#### **19. WARRANTY-PRICE:**

A. The Contractor warrants the prices quoted in the Offer are no higher than the Contractor's current prices on orders by others for like deliverables under similar terms of purchase.

B. The Contractor certifies that the prices in the Offer have been arrived at independently without consultation, communication, or agreement for the purpose of restricting competition, as to any matter relating to such fees with any other firm or with any competitor.

C. In addition to any other remedy available, the City may deduct from any amounts owed to the Contractor, or otherwise recover, any amounts paid for items in excess of the Contractor's current prices on orders by others for like deliverables under similar terms of purchase.

**20. WARRANTY – TITLE:** The Contractor warrants that it has good and indefeasible title to all deliverables furnished under the Contract, and that the deliverables are free and clear of all liens, claims, security interests and encumbrances. The Contractor shall indemnify and hold the City harmless from and against all adverse title claims to the deliverables.

**21. WARRANTY – DELIVERABLES:** The Contractor warrants and represents that all deliverables sold the City under the Contract shall be free from defects in design, workmanship or manufacture, and conform in all material respects to the specifications, drawings, and descriptions in the Solicitation, to any samples furnished by the Contractor, to the terms, covenants and conditions of the Contract, and to all applicable State, Federal or local laws, rules, and regulations, and industry codes and standards. Unless otherwise stated in the Solicitation, the deliverables shall be new or recycled merchandise, and not used or reconditioned.

A. Recycled deliverables shall be clearly identified as such.

B. The Contractor may not limit, exclude or disclaim the foregoing warranty or any warranty implied by law; and any attempt to do so shall be without force or effect.

C. Unless otherwise specified in the Contract, the warranty period shall be at least one year from the date of acceptance of the deliverables or from the date of acceptance of any replacement deliverables. If during the warranty period, one or more of the above warranties are breached, the Contractor shall promptly upon receipt of demand either repair the non-conforming deliverables, or replace the non-conforming deliverables with fully conforming deliverables, at the City's option and at no additional cost to the City. All costs incidental to such repair or replacement, including but not limited to, any packaging and shipping costs shall be borne exclusively by the Contractor. The City shall endeavor to give the Contractor written notice of the breach of warranty within thirty (30) calendar days of discovery of the breach of warranty, but failure to give timely notice shall not impair the City's rights under this section.

D. If the Contractor is unable or unwilling to repair or replace defective or non-conforming deliverables as required by the City, then in addition to any other available remedy, the City may reduce the quantity of deliverables it may be required to purchase under the Contract from the Contractor, and purchase conforming deliverables from other sources. In such event, the Contractor shall pay to the City upon demand the increased cost, if any, incurred by the City to procure such deliverables from another source.

E. If the Contractor is not the manufacturer, and the deliverables are covered by a separate manufacturer's warranty, the Contractor shall transfer and assign such manufacturer's warranty to the City. If for any reason the manufacturer's warranty cannot be fully transferred to the City, the Contractor shall assist and cooperate with the City to the fullest extent to enforce such manufacturer's warranty for the benefit of the City.

**22. WARRANTY – SERVICES:** The Contractor warrants and represents that all services to be provided the City under the Contract will be fully and timely performed in a good and workmanlike manner in accordance with generally accepted industry standards and practices, the terms, conditions, and covenants of the Contract, and all applicable Federal, State and local laws, rules or regulations.

A. The Contractor may not limit, exclude or disclaim the foregoing warranty or any warranty implied by law, and any attempt to do so shall be without force or effect.

B. Unless otherwise specified in the Contract, the warranty period shall be at least one year from the Acceptance Date. If during the warranty period, one or more of the above warranties are breached, the Contractor shall promptly upon receipt of demand perform the services again in accordance with above standard at no additional cost to the City. All costs incidental to such additional performance shall be borne by the Contractor. The City shall endeavor to give the Contractor written notice of the breach of warranty within thirty (30) calendar days of discovery of the breach warranty, but failure to give timely notice shall not impair the City's rights under this section.

C. If the Contractor is unable or unwilling to perform its services in accordance with the above Contract 8192

standard as required by the City, then in addition to any other available remedy, the City may reduce the amount of services it may be required to purchase under the Contract from the Contractor, and purchase conforming services from other sources. In such event, the Contractor shall pay to the City upon demand the increased cost, if any, incurred by the City to procure such services from another source.

**23. ACCEPTANCE OF INCOMPLETE OR NON-CONFORMING DELIVERABLES:** If, instead of requiring immediate correction or removal and replacement of defective or non-conforming deliverables, the City prefers to accept it, the City may do so. The Contractor shall pay all claims, costs, losses and damages attributable to the City's evaluation of and determination to accept such defective or non-conforming deliverables. If any such acceptance occurs prior to final payment, the City may deduct such amounts as are necessary to compensate the City for the diminished value of the defective or non-conforming deliverables. If the acceptance occurs after final payment, such amount will be refunded to the City by the Contractor.

**24. RIGHT TO ASSURANCE:** Whenever one party to the Contract in good faith has reason to question the other party's intent to perform, demand may be made to the other party for written assurance of the intent to perform. In the event that no assurance is given within the time specified after demand is made, the demanding party may treat this failure as an anticipatory repudiation of the Contract.

**25. STOP WORK NOTICE:** The City may issue an immediate Stop Work Notice in the event the Contractor is observed performing in a manner that is in violation of Federal, State, or local guidelines, or in a manner that is determined by the City to be unsafe to either life or property. Upon notification, the Contractor will cease all work until notified by the City that the violation or unsafe condition has been corrected. The Contractor shall be liable for all costs incurred by the City as a result of the issuance of such Stop Work Notice.

**26. DEFAULT:** The Contractor shall be in default under the Contract if the Contractor (a) fails to fully, timely and faithfully perform any of its material obligations under the Contract, (b) fails to provide adequate assurance of performance under Paragraph 24, (c) becomes insolvent or seeks relief under the bankruptcy laws of the United States or (d) makes a material misrepresentation in Contractor's Offer, or in any report or deliverable required to be submitted by the Contractor to the City.

**27. TERMINATION FOR CAUSE:** In the event of a default by the Contractor, the City shall have the right to terminate the Contract for cause, by written notice effective ten (10) calendar days, unless otherwise specified, after the date of such notice, unless the Contractor, within such ten (10) day period, cures such default, or provides evidence sufficient to prove to the City's reasonable satisfaction that such default does not, in fact, exist. In addition to any other remedy available under law or in equity, the City shall be entitled to recover all actual damages, costs, losses and expenses, incurred by the City as a result of the Contractor's default, including, without limitation, cost of cover, reasonable attorneys' fees, court costs, and prejudgment and post-judgment interest at the maximum lawful rate. Additionally, in the event of a default by the Contractor, the City may remove the Contractor from the City's vendor list for three (3) years and any Offer submitted by the Contractor may be disqualified for up to three (3) years. All rights and remedies under the Contract are cumulative and are not exclusive of any other right or remedy provided by law.

**28. TERMINATION WITHOUT CAUSE:** The City shall have the right to terminate the Contract, in whole or in part, without cause any time upon thirty (30) calendar days' prior written notice. Upon receipt of a notice of termination, the Contractor shall promptly cease all further work pursuant to the Contract, with such exceptions, if any, specified in the notice of termination. The City shall pay the Contractor, to the extent of funds Appropriated or otherwise legally available for such purposes, for all goods delivered and services performed and obligations incurred prior to the date of termination in accordance with the terms hereof.

**29. FRAUD:** Fraudulent statements by the Contractor on any Offer or in any report or deliverable required to be submitted by the Contractor to the City shall be grounds for the termination of the Contract for cause by the City and may result in legal action.

**30. DELAYS:**

A. The City may delay scheduled delivery or other due dates by written notice to the Contractor if the City deems it is in its best interest. If such delay causes an increase in the cost of the work under the Contract, the City and the Contractor shall negotiate an equitable adjustment for costs incurred by the Contractor in the Contract price and execute an amendment to the Contract. The Contractor must assert its right to an adjustment within thirty (30) calendar days from the date of receipt of the notice of delay. Failure to agree on any adjusted price shall be handled under the Dispute Resolution process specified in paragraph 49. However, nothing in this provision shall excuse the Contractor from delaying the delivery as notified.

B. Neither party shall be liable for any default or delay in the performance of its obligations under this Contract if, while and to the extent such default or delay is caused by acts of God, fire, riots, civil commotion, labor disruptions, sabotage, sovereign conduct, or any other cause beyond the reasonable control of such Party. In the event of default or delay in contract performance due to any of the foregoing causes, then the time for completion of the services will be extended; provided, however, in such an event, a conference will be held within three (3) business days to establish a mutually agreeable period of time reasonably necessary to overcome the effect of such failure to perform.

**31. INDEMNITY:**

**A. Definitions:**

i. "Indemnified Claims" shall include any and all claims, demands, suits, causes of action, judgments and liability of every character, type or description, including all reasonable costs and expenses of litigation, mediation or other alternate dispute resolution mechanism, including attorney and other professional fees for: (1) damage to or loss of the property of any person (including, but not limited to the City, the Contractor, their respective agents, officers, employees and subcontractors; the officers, agents, and employees of such subcontractors; and third parties); and/or (2) death, bodily injury, illness, disease, worker's compensation, loss of services, or loss of income or wages to any person (including but not limited to the agents, officers and employees of the City, the Contractor, the Contractor's subcontractors, and third parties), ii. "Fault" shall include the sale of defective or non-conforming deliverables, negligence, willful misconduct or a breach of any legally imposed strict liability standard.

**B. THE CONTRACTOR SHALL DEFEND (AT THE OPTION OF THE CITY), INDEMNIFY, AND HOLD THE CITY, ITS SUCCESSORS, ASSIGNS, OFFICERS,**  
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**EMPLOYEES AND ELECTED OFFICIALS HARMLESS FROM AND AGAINST ALL INDEMNIFIED CLAIMS DIRECTLY ARISING OUT OF, INCIDENT TO, CONCERNING OR RESULTING FROM THE FAULT OF THE CONTRACTOR, OR THE CONTRACTOR'S AGENTS, EMPLOYEES OR SUBCONTRACTORS, IN THE PERFORMANCE OF THE CONTRACTOR'S OBLIGATIONS UNDER THE CONTRACT. NOTHING HEREIN SHALL BE DEEMED TO LIMIT THE RIGHTS OF THE CITY OR THE CONTRACTOR (INCLUDING, BUT NOT LIMITED TO, THE RIGHT TO SEEK CONTRIBUTION) AGAINST ANY THIRD PARTY WHO MAY BE LIABLE FOR AN INDEMNIFIED CLAIM.**

**32. INSURANCE:** The following insurance requirements are applicable, in addition to the specific insurance requirements detailed in **Appendix A** for services only. The successful firm shall procure and maintain insurance of the types and in the minimum amounts acceptable to the City of Denton. The insurance shall be written by a company licensed to do business in the State of Texas and satisfactory to the City of Denton.

**A. General Requirements:**

- i. The Contractor shall at a minimum carry insurance in the types and amounts indicated and agreed to, as submitted to the City and approved by the City within the procurement process, for the duration of the Contract, including extension options and hold over periods, and during any warranty period.
- ii. The Contractor shall provide Certificates of Insurance with the coverage's and endorsements required to the City as verification of coverage prior to contract execution and within fourteen (14) calendar days after written request from the City. Failure to provide the required Certificate of Insurance may subject the Offer to disqualification from consideration for award. The Contractor must also forward a Certificate of Insurance to the City whenever a previously identified policy period has expired, or an extension option or hold over period is exercised, as verification of continuing coverage.
- iii. The Contractor shall not commence work until the required insurance is obtained and until such insurance has been reviewed by the City. Approval of insurance by the City shall not relieve or decrease the liability of the Contractor hereunder and shall not be construed to be a limitation of liability on the part of the Contractor.
- iv. The Contractor must submit certificates of insurance to the City for all subcontractors prior to the subcontractors commencing work on the project.
- v. The Contractor's and all subcontractors' insurance coverage shall be written by companies licensed to do business in the State of Texas at the time the policies are issued and shall be written by companies with A.M. Best ratings of **A- VII or better**. The City will accept workers' compensation coverage written by the Texas Workers' Compensation Insurance Fund.
- vi. All endorsements naming the City as additional insured, waivers, and notices of cancellation endorsements as well as the Certificate of Insurance shall contain the solicitation number and the following information:  
City of Denton  
Materials Management Department  
901B Texas Street  
Denton, Texas 76209
- vii. The "other" insurance clause shall not apply to the City where the City is an additional insured shown on any policy. It is intended that policies required in the Contract, covering both the City and the Contractor, shall be considered primary coverage as applicable.

- viii. If insurance policies are not written for amounts agreed to with the City, the Contractor shall carry Umbrella or Excess Liability Insurance for any differences in amounts specified. If Excess Liability Insurance is provided, it shall follow the form of the primary coverage.
- ix. The City shall be entitled, upon request, at an agreed upon location, and without expense, to review certified copies of policies and endorsements thereto and may make any reasonable requests for deletion or revision or modification of particular policy terms, conditions, limitations, or exclusions except where policy provisions are established by law or regulations binding upon either of the parties hereto or the underwriter on any such policies.
- x. The City reserves the right to review the insurance requirements set forth during the effective period of the Contract and to make reasonable adjustments to insurance coverage, limits, and exclusions when deemed necessary and prudent by the City based upon changes in statutory law, court decisions, the claims history of the industry or financial condition of the insurance company as well as the Contractor.
- xi. The Contractor shall not cause any insurance to be canceled nor permit any insurance to lapse during the term of the Contract or as required in the Contract.
- xii. The Contractor shall be responsible for premiums, deductibles and self-insured retentions, if any, stated in policies. All deductibles or self-insured retentions shall be disclosed on the Certificate of Insurance.
- xiii. The Contractor shall endeavor to provide the City thirty (30) calendar days' written notice of erosion of the aggregate limits below occurrence limits for all applicable coverage's indicated within the Contract.
- xiv. The insurance coverage's specified in within the solicitation and requirements are required minimums and are not intended to limit the responsibility or liability of the Contractor.

B. Specific Coverage Requirements: Specific insurance requirements are contained in the solicitation instrument.

**33. CLAIMS:** If any claim, demand, suit, or other action is asserted against the Contractor which arises under or concerns the Contract, or which could have a material adverse effect on the Contractor's ability to perform thereunder, the Contractor shall give written notice thereof to the City within ten (10) calendar days after receipt of notice by the Contractor. Such notice to the City shall state the date of notification of any such claim, demand, suit, or other action; the names and addresses of the claimant(s); the basis thereof; and the name of each person against whom such claim is being asserted. Such notice shall be delivered personally or by mail and shall be sent to the City and to the Denton City Attorney. Personal delivery to the City Attorney shall be to City Hall, 215 East McKinney Street, Denton, Texas 76201.

**34. NOTICES:** Unless otherwise specified, all notices, requests, or other communications required or appropriate to be given under the Contract shall be in writing and shall be deemed delivered three (3) business days after postmarked if sent by U.S. Postal Service Certified or Registered Mail, Return Receipt Requested. Notices delivered by other means shall be deemed delivered upon receipt by the addressee. Routine communications may be made by first class mail, telefax, or other commercially accepted means. Notices to the Contractor shall be sent to the address specified in the Contractor's Offer, or at such other address as a party may notify the other in writing. Notices to the City shall be addressed to the City at 901B Texas Street, Denton, Texas 76209 and marked to the attention of the Purchasing Manager.

**35. RIGHTS TO BID, PROPOSAL AND CONTRACTUAL MATERIAL:** All material submitted by the Contractor to the City shall become property of the City upon receipt. Any portions of such material claimed by the Contractor to be proprietary must be clearly marked as such. Determination of the public nature of the material is subject to the Texas Public Information Act, Chapter 552, and Texas Government Code.

**36. NO WARRANTY BY CITY AGAINST INFRINGEMENTS:** The Contractor represents and warrants to the City that: (i) the Contractor shall provide the City good and indefeasible title to the deliverables and (ii) the deliverables supplied by the Contractor in accordance with the specifications in the Contract will not infringe, directly or contributorily, any patent, trademark, copyright, trade secret, or any other intellectual property right of any kind of any third party; that no claims have been made by any person or entity with respect to the ownership or operation of the deliverables and the Contractor does not know of any valid basis for any such claims. The Contractor shall, at its sole expense, defend, indemnify, and hold the City harmless from and against all liability, damages, and costs (including court costs and reasonable fees of attorneys and other professionals) arising out of or resulting from: (i) any claim that the City's exercise anywhere in the world of the rights associated with the City's ownership, and if applicable, license rights, and its use of the deliverables infringes the intellectual property rights of any third party; or (ii) the Contractor's breach of any of Contractor's representations or warranties stated in this Contract. In the event of any such claim, the City shall have the right to monitor such claim or at its option engage its own separate counsel to act as co-counsel on the City's behalf. Further, Contractor agrees that the City's specifications regarding the deliverables shall in no way diminish Contractor's warranties or obligations under this paragraph and the City makes no warranty that the production, development, or delivery of such deliverables will not impact such warranties of Contractor.

**37. CONFIDENTIALITY:** In order to provide the deliverables to the City, Contractor may require access to certain of the City's and/or its licensors' confidential information (including inventions, employee information, trade secrets, confidential know-how, confidential business information, and other information which the City or its licensors consider confidential) (collectively, "Confidential Information"). Contractor acknowledges and agrees that the Confidential Information is the valuable property of the City and/or its licensors and any unauthorized use, disclosure, dissemination, or other release of the Confidential Information will substantially injure the City and/or its licensors. The Contractor (including its employees, subcontractors, agents, or representatives) agrees that it will maintain the Confidential Information in strict confidence and shall not disclose, disseminate, copy, divulge, recreate, or otherwise use the Confidential Information without the prior written consent of the City or in a manner not expressly permitted under this Agreement, unless the Confidential Information is required to be disclosed by law or an order of any court or other governmental authority with proper jurisdiction, provided the Contractor promptly notifies the City before disclosing such information so as to permit the City reasonable time to seek an appropriate protective order. The Contractor agrees to use protective measures no less stringent than the Contractor uses within its own business to protect its own most valuable information, which protective measures shall under all circumstances be at least reasonable measures to ensure the continued confidentiality of the Confidential Information.

**38. OWNERSHIP AND USE OF DELIVERABLES:** The City shall own all rights, titles, and interests throughout the world in and to the deliverables.

A. Patents. As to any patentable subject matter contained in the deliverables, the Contractor agrees

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to disclose such patentable subject matter to the City. Further, if requested by the City, the Contractor agrees to assign and, if necessary, cause each of its employees to assign the entire right, title, and interest to specific inventions under such patentable subject matter to the City and to execute, acknowledge, and deliver and, if necessary, cause each of its employees to execute, acknowledge, and deliver an assignment of letters patent, in a form to be reasonably approved by the City, to the City upon request by the City.

B. Copyrights. As to any deliverables containing copyrightable subject matter, the Contractor agrees that upon their creation, such deliverables shall be considered as work made-for-hire by the Contractor for the City and the City shall own all copyrights in and to such deliverables, provided however, that nothing in this Paragraph 38 shall negate the City's sole or joint ownership of any such deliverables arising by virtue of the City's sole or joint authorship of such deliverables. Should by operation of law, such deliverables not be considered works made-for-hire, the Contractor hereby assigns to the City (and agrees to cause each of its employees providing services to the City hereunder to execute, acknowledge, and deliver an assignment to the City of) all worldwide right, title, and interest in and to such deliverables. With respect to such work made-for-hire, the Contractor agrees to execute, acknowledge, and deliver and cause each of its employees providing services to the City hereunder to execute, acknowledge, and deliver a work-made-for-hire agreement, in a form to be reasonably approved by the City, to the City upon delivery of such deliverables to the City or at such other time as the City may request.

C. Additional Assignments. The Contractor further agrees to, and if applicable, cause each of its employees to, execute, acknowledge, and deliver all applications, specifications, oaths, assignments, and all other instruments which the City might reasonably deem necessary in order to apply for and obtain copyright protection, mask work registration, trademark registration and/or protection, letters patent, or any similar rights in any and all countries and in order to assign and convey to the City, its successors, assigns and nominees, the sole and exclusive right, title, and interest in and to the deliverables. The Contractor's obligations to execute, acknowledge, and deliver (or cause to be executed, acknowledged, and delivered) instruments or papers such as those described in this Paragraph 38 a., b., and c. shall continue after the termination of this Contract with respect to such deliverables. In the event the City should not seek to obtain copyright protection, mask work registration or patent protection for any of the deliverables, but should desire to keep the same secret, the Contractor agrees to treat the same as Confidential Information under the terms of Paragraph 37 above.

39. **PUBLICATIONS:** All published material and written reports submitted under the Contract must be originally developed material unless otherwise specifically provided in the Contract. When material not originally developed is included in a report in any form, the source shall be identified.

40. **ADVERTISING:** The Contractor shall not advertise or publish, without the City's prior consent, the fact that the City has entered into the Contract, except to the extent required by law.

41. **NO CONTINGENT FEES:** The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure the Contract upon any agreement or understanding for commission, percentage, brokerage, or contingent fee, excepting bona fide employees of bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty, the City shall have the right, in addition to any other remedy available, to cancel the Contract without liability and to deduct from any amounts owed to the Contractor, or otherwise recover, the full amount of such commission,



percentage, brokerage or contingent fee.

**42. GRATUITIES:** The City may, by written notice to the Contractor, cancel the Contract without liability if it is determined by the City that gratuities were offered or given by the Contractor or any agent or representative of the Contractor to any officer or employee of the City of Denton with a view toward securing the Contract or securing favorable treatment with respect to the awarding or amending or the making of any determinations with respect to the performing of such contract. In the event the Contract is canceled by the City pursuant to this provision, the City shall be entitled, in addition to any other rights and remedies, to recover or withhold the amount of the cost incurred by the Contractor in providing such gratuities.

**43. PROHIBITION AGAINST PERSONAL INTEREST IN CONTRACTS:** No officer, employee, independent consultant, or elected official of the City who is involved in the development, evaluation, or decision-making process of the performance of any solicitation shall have a financial interest, direct or indirect, in the Contract resulting from that solicitation as defined in the City's Ethic Ordinance 18-757 and in the City Charter chapter 2 article XI(Ethics). Any willful violation of this section shall constitute impropriety in office, and any officer or employee guilty thereof shall be subject to disciplinary action up to and including dismissal. Any violation of this provision, with the knowledge, expressed or implied, of the Contractor shall render the Contract voidable by the City. The Contractor shall complete and submit the City's Conflict of Interest Questionnaire.

**44. INDEPENDENT CONTRACTOR:** The Contract shall not be construed as creating an employer/employee relationship, a partnership, or a joint venture. The Contractor's services shall be those of an independent contractor. The Contractor agrees and understands that the Contract does not grant any rights or privileges established for employees of the City of Denton, Texas for the purposes of income tax, withholding, social security taxes, vacation or sick leave benefits, worker's compensation, or any other City employee benefit. The City shall not have supervision and control of the Contractor or any employee of the Contractor, and it is expressly understood that Contractor shall perform the services hereunder according to the attached specifications at the general direction of the City Manager of the City of Denton, Texas, or his designee under this agreement. The contractor is expressly free to advertise and perform services for other parties while performing services for the City.

**45. ASSIGNMENT-DELEGATION:** The Contract shall be binding upon and ensure to the benefit of the City and the Contractor and their respective successors and assigns, provided however, that no right or interest in the Contract shall be assigned and no obligation shall be delegated by the Contractor without the prior written consent of the City. Any attempted assignment or delegation by the Contractor shall be void unless made in conformity with this paragraph. The Contract is not intended to confer rights or benefits on any person, firm or entity not a party hereto; it being the intention of the parties that there are no third party beneficiaries to the Contract.

The Vendor shall notify the City's Purchasing Manager, in writing, of a company name, ownership, or address change for the purpose of maintaining updated City records. The president of the company or authorized official must sign the letter. A letter indicating changes in a company name or ownership must be accompanied with supporting legal documentation such as an updated W-9, documents filed with the state indicating such change, copy of the board of director's resolution approving the action, or an executed

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merger or acquisition agreement. Failure to do so may adversely impact future invoice payments.

**46. WAIVER:** No claim or right arising out of a breach of the Contract can be discharged in whole or in part by a waiver or renunciation of the claim or right unless the waiver or renunciation is supported by consideration and is in writing signed by the aggrieved party. No waiver by either the Contractor or the City of any one or more events of default by the other party shall operate as, or be construed to be, a permanent waiver of any rights or obligations under the Contract, or an express or implied acceptance of any other existing or future default or defaults, whether of a similar or different character.

**47. MODIFICATIONS:** The Contract can be modified or amended only by a writing signed by both parties. No pre-printed or similar terms on any the Contractor invoice, order or other document shall have any force or effect to change the terms, covenants, and conditions of the Contract.

**48. INTERPRETATION:** The Contract is intended by the parties as a final, complete and exclusive statement of the terms of their agreement. No course of prior dealing between the parties or course of performance or usage of the trade shall be relevant to supplement or explain any term used in the Contract. Although the Contract may have been substantially drafted by one party, it is the intent of the parties that all provisions be construed in a manner to be fair to both parties, reading no provisions more strictly against one party or the other. Whenever a term defined by the Uniform Commercial Code, as enacted by the State of Texas, is used in the Contract, the UCC definition shall control, unless otherwise defined in the Contract.

**49. DISPUTE RESOLUTION:**

A. If a dispute arises out of or relates to the Contract, or the breach thereof, the parties agree to negotiate prior to prosecuting a suit for damages. However, this section does not prohibit the filing of a lawsuit to toll the running of a statute of limitations or to seek injunctive relief. Either party may make a written request for a meeting between representatives of each party within fourteen (14) calendar days after receipt of the request or such later period as agreed by the parties. Each party shall include, at a minimum, one (1) senior level individual with decision-making authority regarding the dispute. The purpose of this and any subsequent meeting is to attempt in good faith to negotiate a resolution of the dispute. If, within thirty (30) calendar days after such meeting, the parties have not succeeded in negotiating a resolution of the dispute, they will proceed directly to mediation as described below. Negotiation may be waived by a written agreement signed by both parties, in which event the parties may proceed directly to mediation as described below.

B. If the efforts to resolve the dispute through negotiation fail, or the parties waive the negotiation process, the parties may select, within thirty (30) calendar days, a mediator trained in mediation skills to assist with resolution of the dispute. Should they choose this option; the City and the Contractor agree to act in good faith in the selection of the mediator and to give consideration to qualified individuals nominated to act as mediator. Nothing in the Contract prevents the parties from relying on the skills of a person who is trained in the subject matter of the dispute or a contract interpretation expert. If the parties fail to agree on a mediator within thirty (30) calendar days of initiation of the mediation process, the mediator shall be selected by the Denton County Alternative Dispute Resolution Program (DCAP). The parties agree to participate in mediation in good faith for up to thirty (30) calendar days from the date of the first mediation session. The City and the Contractor will share the mediator's fees equally and the parties will bear their own costs of

participation such as fees for any consultants or attorneys they may utilize to represent them or otherwise assist them in the mediation.

**50. JURISDICTION AND VENUE:** The Contract is made under and shall be governed by the laws of the State of Texas, including, when applicable, the Uniform Commercial Code as adopted in Texas, V.T.C.A., Bus. & Comm. Code, Chapter 1, excluding any rule or principle that would refer to and apply the substantive law of another state or jurisdiction. All issues arising from this Contract shall be resolved in the courts of Denton County, Texas and the parties agree to submit to the exclusive personal jurisdiction of such courts. The foregoing, however, shall not be construed or interpreted to limit or restrict the right or ability of the City to seek and secure injunctive relief from any competent authority as contemplated herein.

**51. INVALIDITY:** The invalidity, illegality, or unenforceability of any provision of the Contract shall in no way affect the validity or enforceability of any other portion or provision of the Contract. Any void provision shall be deemed severed from the Contract and the balance of the Contract shall be construed and enforced as if the Contract did not contain the particular portion or provision held to be void. The parties further agree to reform the Contract to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken provision. The provisions of this section shall not prevent this entire Contract from being void should a provision which is the essence of the Contract be determined to be void.

**52. HOLIDAYS:** The following holidays are observed by the City:

New Year's Day (observed)
Martin Luther King, Jr. Day
Memorial Day
Juneteenth
Independence Day
Labor Day
Veterans Day
Thanksgiving
Friday After Thanksgiving
Christmas Eve (observed)
Christmas Day (observed)

If a Legal Holiday falls on Saturday, it will be observed on the preceding Friday. If a Legal Holiday falls on Sunday, it will be observed on the following Monday. Normal hours of operation shall be between 8:00 am and 4:00 pm, Monday through Friday, excluding City of Denton Holidays. Any scheduled deliveries or work performance not within the normal hours of operation **must be approved** by the City Manager of Denton, Texas or his authorized designee.

**53. SURVIVABILITY OF OBLIGATIONS:** All provisions of the Contract that impose continuing obligations on the parties, including but not limited to the warranty, indemnity, and confidentiality obligations of the parties, shall survive the expiration or termination of the Contract.

**54. NON-SUSPENSION OR DEBARMENT CERTIFICATION:**

The City of Denton is prohibited from contracting with or making prime or sub-awards to parties that are suspended or debarred or whose principals are suspended or debarred from Federal, State, Contract 8192

or City of Denton Contracts. By accepting a Contract with the City, the Vendor certifies that its firm and its principals are not currently suspended or debarred from doing business with the Federal Government, as indicated by the General Services Administration List of Parties Excluded from Federal Procurement and Non-Procurement Programs, the State of Texas, or the City of Denton.

## **55. EQUAL OPPORTUNITY**

**A. Equal Employment Opportunity:** No Offeror, or Offeror's agent, shall engage in any discriminatory employment practice. No person shall, on the grounds of race, sex, sexual orientation, age, disability, creed, color, genetic testing, or national origin, be refused the benefits of, or be otherwise subjected to discrimination under any activities resulting from this RFQ.

**B. Americans with Disabilities Act (ADA) Compliance:** No Offeror, or Offeror's agent, shall engage in any discriminatory employment practice against individuals with disabilities as defined in the ADA.

## **56. BUY AMERICAN ACT-SUPPLIES (Applicable to certain federally funded requirements)**

The following federally funded requirements are applicable. A. Definitions. As used in this paragraph –

i. "Component" means an article, material, or supply incorporated directly into an end product.

ii. "Cost of components" means -

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the end product (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or  
(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the end product.

iii. "Domestic end product" means-

(1) An unmanufactured end product mined or produced in the United States; or

(2) An end product manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind as those that the agency determines are not mined, produced, or manufactured in sufficient and reasonably available commercial quantities of a satisfactory quality are treated as domestic. Scrap generated, collected, and prepared for processing in the United States is considered domestic.

iv. "End product" means those articles, materials, and supplies to be acquired under the contract for public use.

v. "Foreign end product" means an end product other than a domestic end product.

vi. "United States" means the 50 States, the District of Columbia, and outlying areas.

**B.** The Buy American Act (41 U.S.C. 10a - 10d) provides a preference for domestic end products for supplies acquired for use in the United States.

**C.** The City does not maintain a list of foreign articles that will be treated as domestic for this Contract; but will consider for approval foreign articles as domestic for this product if the articles are on a list approved by another Governmental Agency. The Offeror shall submit documentation with their Offer demonstrating that the article is on an approved Governmental list.

**D.** The Contractor shall deliver only domestic end products except to the extent that it specified delivery of foreign end products in the provision of the Solicitation entitled "Buy American Act Contract 8192

Certificate".

**57. RIGHT TO INFORMATION:** The City of Denton reserves the right to use any and all information presented in any response to this contract, whether amended or not, except as prohibited by law. Selection of rejection of the submittal does not affect this right.

**58. LICENSE FEES OR TAXES:** Provided the solicitation requires an awarded contractor or supplier to be licensed by the State of Texas, any and all fees and taxes are the responsibility of the respondent.

**59. PREVAILING WAGE RATES:** The contractor shall comply with prevailing wage rates as defined by the United States Department of Labor Davis-Bacon Wage Determination at <http://www.dol.gov/whd/contracts/dbra.htm> and at the Wage Determinations website [www.wdol.gov](http://www.wdol.gov) for Denton County, Texas (WD-2509).

**60. COMPLIANCE WITH ALL STATE, FEDERAL, AND LOCAL LAWS:** The contractor or supplier shall comply with all State, Federal, and Local laws and requirements. The Respondent must comply with all applicable laws at all times, including, without limitation, the following: (i) §36.02 of the Texas Penal Code, which prohibits bribery; (ii) §36.09 of the Texas Penal Code, which prohibits the offering or conferring of benefits to public servants. The Respondent shall give all notices and comply with all laws and regulations applicable to furnishing and performance of the Contract.

**61. FEDERAL, STATE, AND LOCAL REQUIREMENTS:** Respondent shall demonstrate on-site compliance with the Federal Tax Reform Act of 1986, Section 1706, amending Section 530 of the Revenue Act of 1978, dealing with issuance of Form W-2's to common law employees. Respondent is responsible for both federal and State unemployment insurance coverage and standard Workers' Compensation insurance coverage. Respondent shall ensure compliance with all federal and State tax laws and withholding requirements. The City of Denton shall not be liable to Respondent or its employees for any Unemployment or Workers' Compensation coverage, or federal or State withholding requirements. Contractor shall indemnify the City of Denton and shall pay all costs, penalties, or losses resulting from Respondent's omission or breach of this Section.

**62. DRUG FREE WORKPLACE:** The contractor shall comply with the applicable provisions of the Drug-Free Work Place Act of 1988 (Public Law 100-690, Title V, Subtitle D; 41 U.S.C. 701 ET SEQ.) and maintain a drug-free work environment; and the final rule, government-wide requirements for drug-free work place (grants), issued by the Office of Management and Budget and the Department of Defense (32 CFR Part 280, Subpart F) to implement the provisions of the Drug-Free Work Place Act of 1988 is incorporated by reference and the contractor shall comply with the relevant provisions thereof, including any amendments to the final rule that may hereafter be issued.

**63. RESPONDENT LIABILITY FOR DAMAGE TO GOVERNMENT PROPERTY:** The Respondent shall be liable for all damages to government-owned, leased, or occupied property and equipment caused by the Respondent and its employees, agents, subcontractors, and suppliers, including any delivery or cartage company, in connection with any performance pursuant to the Contract. The Respondent shall notify the City of Denton Procurement Manager in writing of any such damage within one (1) calendar day.

Contract 8192

**64. FORCE MAJEURE:** The City of Denton, any Customer, and the Respondent shall not be responsible for performance under the Contract should it be prevented from performance by an act of war, order of legal authority, act of God, or other unavoidable cause not attributable to the fault or negligence of the City of Denton. In the event of an occurrence under this Section, the Respondent will be excused from any further performance or observance of the requirements so affected for as long as such circumstances prevail and the Respondent continues to use commercially reasonable efforts to recommence performance or observance whenever and to whatever extent possible without delay. The Respondent shall immediately notify the City of Denton Procurement Manager by telephone (to be confirmed in writing within five (5) calendar days of the inception of such occurrence) and describe at a reasonable level of detail the circumstances causing the non-performance or delay in performance.

**65. NON-WAIVER OF RIGHTS:** Failure of a Party to require performance by another Party under the Contract will not affect the right of such Party to require performance in the future. No delay, failure, or waiver of either Party's exercise or partial exercise of any right or remedy under the Contract shall operate to limit, impair, preclude, cancel, waive or otherwise affect such right or remedy. A waiver by a Party of any breach of any term of the Contract will not be construed as a waiver of any continuing or succeeding breach.

**66. NO WAIVER OF SOVEREIGN IMMUNITY:** The Parties expressly agree that no provision of the Contract is in any way intended to constitute a waiver by the City of Denton of any immunities from suit or from liability that the City of Denton may have by operation of law.

**67. RECORDS RETENTION:** The Respondent shall retain all financial records, supporting documents, statistical records, and any other records or books relating to the performances called for in the Contract. The Respondent shall retain all such records for a period of four (4) years after the expiration of the Contract, or until the CPA or State Auditor's Office is satisfied that all audit and litigation matters are resolved, whichever period is longer. The Respondent shall grant access to all books, records and documents pertinent to the Contract to the CPA, the State Auditor of Texas, and any federal governmental entity that has authority to review records due to federal funds being spent under the Contract.

**Should a conflict arise between any of the contract documents, it shall be resolved with the following order of precedence (if applicable). In any event, the final negotiated contract shall take precedence over any and all contract documents to the extent of such conflict.**

- 1. Final negotiated contract**
- 2. RFP/Bid documents**
- 3. City's standard terms and conditions**
- 4. Purchase order**
- 5. Contractor terms and conditions**

**Exhibit D**  
**Certificate of Interested Parties Electronic Filing**

In 2015, the Texas Legislature adopted House Bill 1295, which added section 2252.908 of the Government Code. The law states that the City may not enter into this contract unless the Contractor submits a disclosure of interested parties (Form 1295) to the City at the time the Contractor submits the signed contract. The Texas Ethics Commission has adopted rules requiring the business entity to file Form 1295 electronically with the Commission.

**Contractor will be required to furnish a Certificate of Interest Parties before the contract is awarded, in accordance with Government Code 2252.908.**

The contractor shall:

1. Log onto the State Ethics Commission Website at :  
<https://www.ethics.state.tx.us/filinginfo/1295/>
2. Register utilizing the tutorial provided by the State
3. Print a copy of the completed Form 1295
4. Enter the Certificate Number on page 2 of this contract.
5. Complete and sign the Form 1295
6. Email the form to [purchasing@cityofdenton.com](mailto:purchasing@cityofdenton.com) with the contract number in the subject line.  
(EX: Contract 1234 – Form 1295)

The City must acknowledge the receipt of the filed Form 1295 not later than the 30th day after Council award. Once a Form 1295 is acknowledged, it will be posted to the Texas Ethics Commission's website within seven business days.



SERVING CUSTOMERS SINCE 1963  
 San Antonio / Houston  
<http://ALAMOTransformer.com>



**Denton Municipal Electric (DME)**  
**ALAMO Flat Rate Pricing for Reconditioning Single and Three Phase Pole Mounted & Pad Mounted Distribution Transformers, Regulators, Reclosers.**  
 (Applicable to All Repairs Not Requiring Rewinding with Noted Exceptions)

ALAMO Transformer Supply Company (ALAMO) is happy to help fulfill DME’s growing and changing transformer needs.

Since 1963 ALAMO Transformer has been servicing customers’ in and along the Gulf Coast states repairing or rewinding transformers, fabricating custom retrofits, renting necessary units on short notice or selling an ALAMO reconditioned or remanufactured transformers.

ALAMO Transformer also stocks and sells new manufactured oil filled or dry-type transformers, in addition to performing field service calls and decommissioning transformers for recycling. ALAMO recently expanded our service capabilities to include in field technical experts who provide painting and coating services on both.

Please find below our single-phase pole and pad mounted Repair Price schedule.

**Reconditioned Flat Rate Repair:** Flat rate pricing covers two levels of repair in accordance with ALAMO repair standards as defined as CATEGORY C or CATEGORY B repair regardless of the level of repairs needed if it is not a CATEGORY A (Rewind) repair. **Rewinds can be quoted as requested and per customer guidelines for 15 kVA and above.**

This flat rate repair pricing provides customers with a known repair cost regardless of the degree of repairs needed on each transformer.

Flat Rate pricing includes incoming tests and inspections as well as sanding, cleaning, painting, replacement of gaskets and testing of each transformer. Included as part of the pricing is the replacement of missing or broken HV or LV porcelain bushings and terminals and any drying of the core and coil as necessary. New gaskets and any minor tank repair and refinishing as well as the replacement of, or addition of reprocessed <1 mineral oil in each unit is covered for no additional cost to flat rate pricing.

The transportation to and from collection points on an ALAMO truck during normal delivery runs is also included in the pricing. Pricing assumes the goal of having truck load quantities with load averages of 40 or more. Scheduled pick-ups include the DME service center. ALAMO has ability of leaving an empty trailer for DME to load at their convenience. Once a trailer is loaded, DME can contact ALAMO for a pickup. ALAMO would drop an empty trailer when picking up the full DME loaded ALAMO trailer. Generally, turn arounds on scheduling pickups is within 5 to 7 workdays after notice. Loads can be picked up quicker if customer has an urgent need.

**November 2022 Single Phase Pole Mount & Pad Mount Flat Rate Pricing:**

kVA	Pole Price	kVA	Pad Price
10	\$364		
15	\$406		
25	\$475	25	\$1286
37.5	\$655	37.5	\$1286
50	\$765	50	\$1387
75	\$840	75	\$1387
100	\$915	100	\$1792



167	\$1,125
250	\$1,285
333	\$1,595
500	\$1,875
833, 1000 & 1667	Price on Arrival

167	\$4,560
250	\$4,960

**Effective Date: April 2023**

DME Flat Rate Repair Pricing for Poles/Pads &amp; Salvage

Note: Transformers not covered by this price schedule are ones that are excessively damaged oversized and cast-iron transformers.

**Not Included in the cost of flat rate repairs are** Arresters, Fusing, Dead Front Inserts, Dual Voltage Switches, Parts other than HV or LV Assemblies, Tank Fabrication and Sandblasting. Pad Mount Pricing is for ANSI I and ANSI II style only and does not include Apartment Pads (Uprights) on this price schedule. Flat rate pricing is based on the use of re-refined mineral oil when needed.

**Adder Pricing Not Included in Flat Rate Pricing**

Price Adders (as needed)	Price	Unit of measurement
Welding/Tank Fabrication	\$95	Per hour
Sandblasting / Pole Cover & Ring Only	\$28	Per unit
Sandblasting / Pole Tank	\$48	Per Unit
Sandblasting / Pad	\$95	Per Unit
Dead Front Inserts	\$79	Each
Pull Ring/Air Valve	\$12	Each
Pallets and Banding	\$15	Per pallet
CSP Pole Conversion	\$192	Each
18 kV Lightening Arrester with Mounting Bracket & Installation	\$84	Each
New Mineral Oil used in Repairs.	\$6.50	Per gallon
Oil Sample	\$15	Each as per definition under Oil Sampling
Other Parts	TBA	Can be priced and approved as needed

**Warranty:** Standard ALAMO warranty is 18 months from date of delivery or 12 months from date of installation, whichever comes first. Warranty covers the work and parts supplied by ALAMO Transformer. All repairs are subject to standard "ALAMO Terms and Conditions of Sale". ALAMO reserves the right to reject any unit considered unsuitable for repair under this schedule.

**Oil Sampling:** All transformers arriving at ALAMO must be non-PCB per nameplate, <1 PPM PCB, or the customer must provide test results from a certified laboratory. ALAMO will test all transformers that are not non-PCB per nameplate, do not have certified test results, or were previously repaired by another transformer shop. The cost for these oil samples will be \$15 per unit. **Disposal:** ALAMO Transformer Supply Co. does not knowingly purchase or transport PCB or PCB contaminated transformers/equipment. Any transformers/equipment found to be either PCB (500 PPM/PCB or greater) or PCB contaminated (50 PPM/PCB to 499 PPM/PCB) will be sent to an EPA approved disposal site for disposal and the seller will be back charged for the disposal cost.

**ALAMO Transformer Supply Company & DME****Memorandum of Understanding**

*The following understanding proposed to outline the business relationship between the two parties assumes that ALAMO will be the primary transformer repair supplier for DME with pricing reflective of previous repair volume and specifications provided. ALAMO strives to meet and exceed service and responsiveness expectations and provide repairs with the highest quality workmanship. ALAMO has an open-door policy to come view our operations in San Antonio and Houston and welcomes DME to visually inspect inventory or witness repair or testing during normal hours.*

**Repairs:** According to provided repair specifications, ALAMO will perform repairs to IEEE standards and return repaired, workmanship warrantied, transformers and reclosers.

**Normal Repairs:** Flat Rate Pricing includes repairing transformers in accordance with ALAMO repair standards defined under the **CATEGORY C** or **CATEGORY B** repair scope. The category of repair is determined from the incoming inspection process and testing results. The types of covered repair are further defined in the opening paragraph as **Reconditioned Flat Rate Price**

**Rewind (CAT A) Pricing For 1 Phase Pads and Poles**

kVA	Pole Price	kVA	Pad Price
10	\$858		
15	\$909		
25	\$975	25	\$2,023
37.5	\$1,192	37.5	\$2,303
50	\$1,593	50	\$2,583
75	\$1,884	75	\$3,283
100	\$3,473	100	\$4,123
167	\$4,019	167	\$4,599
250	\$4,576	250	\$5,159
333	\$5,522		
500	\$6,419		
833	Price on Arrival		
1000	Price on Arrival		

**PCB Verification:** All transformers that arrive at ALAMO facility will be verified as to their PCB content by one of three methods. 1) Original Manufactured nameplate stating less than 1 PPM PCB status, 2) Customer supplied certification by third party lab of non-PCB status, 3) ALAMO performed oil sampling with analysis by third party lab. **All Oil Sample Testing Performed by ALAMO will be Billed at \$15 per Test.**

**Rewind of Transformer; CATEGORY A Repair for 3 Phase:** All transformer repairs that require rewinding of coils will be quoted by ALAMO and approved in writing by DME prior to work commencing. This is not covered in Flat Rate Pricing.

**Oil Specs:** ALAMO will use the following insulating fluid for Flat Rate Repairs: <1PPM PCB Re-Refined Mineral Oil. ALAMO will use the following insulating fluid for CAT A/Rewind Repairs: Type II Less Than 1 PPM PCB New Mineral Oil

**Field Service:** Field service pricing will apply, repair pricing in this agreement is for routine, in shop repairs. ALAMO will quote field service work as requested by DME.

**Substation Maintenance, Repair, Painting & Coating:** On-site substation maintenance and repair can be performed by ALAMO. Upon request, ALAMO will submit a quote for authorization and if approved perform service as applicable. New-Hart Services is an ALAMO owned company and their coating technicians are corrosion experts and can provide in field painting of substation transformers, circuit breakers, motor control centers, switch gear and structural steel. They also provide CSL 570 high voltage Insulator Coating.

**2023 3 Phase Pad Repair Pricing for 25 kV and below transformers.**

kVA	CAT B Pad	kVA	Rewind (CAT A) Pad
225 & below	\$2,618	45/75	TBD
300	\$3,081	112.5/150	TBD
500	\$4,775	225	TBD
750	\$6,315	300	TBD
1000	\$7,239	500	TBD
1500	\$10,068	750	TBD
Call For Pricing kVA above 1500 kVA		1000 or Above	TBD

**CAT B Repair:** Price includes incoming inspection, incoming tests, machine sanding of tank, prepping/priming and painting with Acrylithane finish and epoxy undercoating. It includes performing steps to dry the core/coil as well as an inspection of the tap changer and coil bracing. Gasket replacement is included for bushings, inspection lids and throats. Pricing includes final testing in accordance with IEEE specifications. **There will be additional charges above CAT B base price for all parts, material needed, insulating fluids added and any service or additional repair work necessary to repair the customers transformer after customer approval.** Examples of additional repair work that would trigger added charges would be Sandblasting, hardware packages, fabrication work, tank modifications, control wiring, reinsulating core frame, reconnecting leads to tap changer, removing rads and filtering/reprocessing insulating fluids.

**Regulator Repair:** All Base rate repair includes inspection, incoming testing, untanking, drying out of core and coil unit, new gaskets, reassembly and final testing and painting. Parts and oil priced separate.

Regulator Size (AMPS)	Base Rate Repair	Plus New Oil & Parts
50 to 250 AMPS	\$3,728	Plus New Oil & Parts
300 to 500 AMPS	\$5,528	Plus New Oil & Parts
Over 500 AMPS	Starting at \$6,634 - To be Quoted	Plus New Oil & Parts

ALAMO Transformer only uses new mineral oil when filling regulators. All Regulators will be final quoted to customer for approval prior to repair.

**Reclosers:** To be reconditioned/repared by Central Texas Reclosers. ALAMO will coordinate and schedule all pick up and repairs. Pricing will include freight.

\*\*\* NOVA reclosers 1 phase or 3 phase will be quoted separately from the flat rate pricing\*\*\*

**Flat Rate Price for Rebuilding a Recloser:** Flat Rate Price for rebuilding a Recloser includes replacing all gaskets, cleaning and painting of the tank and recalibration of the recloser. Reprocessed mineral oil is used in all flat rate recloser repairs unless DME elects to use new mineral oil. Rebuilding includes the following:

1. Reclosers will receive thorough internal cleaning
2. Reclosers will be inspected for worn parts and any worn parts will be replaced as necessary. Parts replaced will appear on the test report
3. Reclosers will be set for a time curve that DME specifies
4. Each Recloser will be powdered coated with light grey polyurethane enamel
5. Coil rating and type will be stick-on florescent letters and numbers
6. Company numbers will be 1 ½" florescent numbers unless specified
7. Date of rebuild will be a black number on tank

Flat Rate Pricing for Rebuilding/Reconditioning of Reclosers: McGraw/Cooper/Eaton	Flat Rate Price for Rebuild 1 Phase Reclosers*	Price to Add One-Shot
4H	\$398	\$281
H	\$398	\$281
L	\$445	\$412
4E	\$492	\$412
E	\$492	\$412
<b>McGraw/Cooper/Eaton</b>	<b>Flat Rate Price for Rebuild 3 Phase Reclosers*</b>	
3 Phase various types	\$2,475 plus parts**	

**Switchgear:** ALAMO can repair or recondition HV 5kv and 15kv switch gear and /or depending on the customized work required, ALAMO can contract out to qualified 3<sup>rd</sup> party vendors for both LV and HV switchgear needs. Some of these services include switchgear cabinet and panel fabrication, replacement switchgear doors and panels as well as fabrication of bus duct covers and enclosures.

**New Stock:** ALAMO can provide quotes for new transformers including single and three phase transformers from ALAMO in-stock inventory.

**Payment for Salvage:** ALAMO will currently issue credit payments to offset repair or stock purchases for transformers that are designated not to be repaired (No electrical testing, quoting). If the transformer is tested and evaluated, the transformer will (generally) not qualify for credit payment in lieu of labor/handling expense. Credit

valid for SBEC REPAIR work or ALAMO RECONDITIONED stock transformer purchases only. ALAMO reserves the right to adjust salvage prices up or down based on market commodity fluctuations. ALAMO will advise SBEC in writing should adjustments be needed. Freight is Allowed on ALAMO Scheduled Normal Delivery runs.

#### Salvage Breakdown 1 Phase Poles and Pads

Type	5 kVA up to 50 kVA	75 kVA up to 500 kVA	Larger than 500 kVA
Single Phase Pole	\$0.15 per kVA	\$0.25 per kVA	Price upon request
Single Phase Pad	\$0.10 per kVA	\$0.25 per kVA	Price upon request

**Credit for Salvage of Three-Phase Pad Mount Transformers:**

Credit for Purchase/Repair 45kVA-2500 kVA 3 Phase Pad Mount - \$.25/kVA

**ALAMO Purchase of Electrically Good 3 PH Padmount Transformers:**

45kVA – 75kVA Decommissioned and Electrically Good\*\*: \$2.00 kVA.

112.5 kVA up to 750 kVA Decommissioned and Electrically Good\*\*: \$2.50 kVA.

1000 kVA up to 2500 kVA Decommissioned and Electrically Good\*\*: \$2.25 kVA.

**\*\*Note:** Offer Valid for e-Ok core and coils with Tanks, Radiators and Cabinets in good condition and the core, coil and insulation not at end of life or in need of extensive repair. Transformer needs to be full <1 PPM PCB mineral oil.

**Credit for Salvage of Regulators:**

Credit for Purchase/Repair 25-225 kVA: \$0.50

**Communication:** ALAMO encourages open communication and feedback so that ALAMO can provide the best possible products and service to meet or exceed SBEC's expectations. Our goal is to be available to respond to DME's requests 7 days a week, as needed.

**Lead Time:** ALAMO repair time on units that fit repair specifications and do not have to be quoted but fall into DME guidelines is approximately 12-16 weeks once received at our repair shop(s). Quoted repairs will include an estimated lead time. Delivery could vary from lead time based on maximizing use of space available on ALAMO Trucks.

**Quoted Repair Pricing/Quote Response Time:** Flat Rate Pricing is in effect for DME for all single pole and pad mounted transformers. Flat Rate Pricing will provide consistent, timely service by allowing transformers immediate entry into production when they meet approved DME repair specifications without further quoting. Any poles or pads requiring repair adders exceeding \$300 will be quoted in writing. Any nonconforming transformers requiring quote approval will be quoted to DME in writing. ALAMO requests that DME responds to any quotations outside of standard repair specifications to be returned no later than 5 business days after quote is received.

For Quoted transformers, DME can choose to:

1. Authorize the repair.
2. Request Return of Transformer (Transformer will be returned but is subject to applicable testing and evaluation fees. No charge for freight if on regular ALAMO delivery.)
3. Authorize Decommission/Salvage (\*No salvage value paid in lieu of evaluation/freight expense). *\*Exceptions could be made for three phase or large single-phase transformers on a case-by-case basis. Exceptions may only be authorized by ALAMO Management.*
4. Replace with the Purchase of an ALAMO Reconditioned or ALAMO New Transformer.

**Consulting:** Consultation on repair work is included in the business relationship as an added value to DME. Additionally, ALAMO will perform complimentary educational seminars for SBEC staff upon request.

**Process to Amend Repair and or Replace Specifications:** DME can change repair specifications by providing new specifications in writing. New specifications will come into effect after date of notification. Pricing adjustments may be applicable, and ALAMO will notify DME after receipt and review.

**Safety:** ALAMO has an exemplary safety record and will always operate in ways that promote workplace safety for our employees, contractors, and guests.

**Warranty:** ALAMO takes pride and responsibility for the products and workmanship provided to customers. See addendum "Terms and Condition of Sale" for warranties and Terms.

**Data Storage:** ALAMO creates and maintains records on all transformers repaired including PCB documentation. Records can be obtained from ALAMO with a written request. ALAMO will furnish records as quickly as possible during normal business hours. Timing will vary depending on type and scope of records requested.

**Documentation of Proper Disposal:** ALAMO will store, and provide upon request, records of proper environmentally approved disposal for items that are found to be PCB or PCB Contaminated as defined by the US EPA.

**Changes/Adjustments in Pricing Procedure:** As market factors change, ALAMO has the option to adjust prices paid and charged to DME. Pricing adjustments will be communicated in writing, and will be in effect at a stated, future date. ALAMO will not retroactively apply price changes.

**Information disclosure:** ALAMO will make every effort to keep DME information confidential including pricing, practices, and corporate

knowledge. DME will make every effort to keep ALAMO information confidential including pricing, practices, and corporate knowledge.

**Pandemic Disclaimer:** Given the ongoing constraints on the US and Global markets effecting supply chain, human resources, commodity availability and logistics, ALAMO and our customer may experience delays that are out of the control of both supplier and buyer. While ALAMO will do everything, we can minimize these delays. They may effect availability of parts and lead times for repairs. Fortunately, ALAMO has our own fleet of trucks and so logistical delays in scheduling pickups and deliveries should be minimal.

**Authorized Agents:** Agents of ALAMO and DME:

**ALAMO Authorized Agent:**

ALAMO Agent's Name   \_\_\_Eric K Peter\_\_\_\_\_

ALAMO Agent Signature   \_\_\_\_\_

ALAMO Agent's Title   \_\_\_\_\_President/CEO\_\_\_\_\_

**DME Authorized Agent:**

DME Agent's Name (Print) \_\_\_\_\_

DME Agent's Signature   \_\_\_\_\_

DME Agent's Title \_\_\_\_\_

## Summary of Pricing for Alamo transformer

Category			
Single Phase Pole Mount and Pad Mount Flat Rate.	KVA	Pole Price	Pad Price
	10	\$ 364.00	
	15	\$ 406.00	
	25	\$ 475.00	\$ 1,286.00
	37.5	\$ 655.00	\$ 1,286.00
	50	\$ 765.00	\$ 1,387.00
	70		
	75	\$ 840.00	\$ 1,387.00
	100	\$ 915.00	\$ 1,792.00
	167	\$ 1,125.00	\$ 4,560.00
	250	\$ 1,285.00	\$ 4,690.00
	333	\$ 1,595.00	
	500	\$ 1,875.00	
	833 and Above	Price on Arrival.	
Price Adder (as Needed)	Price	Unit of Measurement	
Welding/ Tank fabrication	\$ 95.00	Per hour	
Sandblasting/ Pole Cover & Ring Only	\$ 28.00	Per unit	
Sandblasting/ Pole Tank	\$ 48.00	Per unit	
Sandblasting/ Pad	\$ 95.00	Per unit	
Dead Front Inserts	\$ 79.00	Each	
Pull ring / Air Value	\$ 12.00	Each	
Pallets and Banding	\$ 15.00	Per Pallet	
CSP Pole Conversion	\$ 192.00	Each	
18 KV LA with Mounting Bracket & Installion	\$ 84.00	Each	
New Mineral Oil used in repairs	\$ 6.50	Per Gallon	
Oil Sample	\$ 15.00	Each as definded under oil sample.	

Other Parts	TBA	
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Rewind Pricing(Cat A) Pricing for Single Phase Pads & Pole	KVA	Pole Price	Pad Price
	10	\$ 858.00	
	15	\$ 909.00	
	25	\$ 975.00	\$ 2,023.00
	37.5	\$ 1,192.00	\$ 2,303.00
	50	\$ 1,593.00	\$ 2,583.00
	75	\$ 1,884.00	\$ 3,283.00
	100	\$ 3,473.00	\$ 4,123.00
	167	\$ 4,019.00	\$ 4,599.00
	250	\$ 4,576.00	\$ 5,159.00
	333	\$ 5,522.00	
	500	\$ 6,419.00	
	833	Price on Arrival	
	1000	Price on Arrival	

2023 # phase pad repairs for 25 KV and Below	KVA	Cat B Pad	KVA	Rewind Cat A Pad
	225 & Below	\$ 2,618.00	45/75	TBD
	300	\$ 3,018.00	112.5/150	TBD
	500	\$ 4,775.00	225	TBD
	750	\$ 6,315.00	300	TBD
	1000	\$ 7,239.00	500	TBD
	1500	\$ 10,068.00	750	TBD
	Call for Pricing Above 1500		1000 & Above	TBD

Regulator Repair (Amps)	Base Rate Repair	Plus New Oil & Parts	
50 - 250 AMPS	\$ 3,728.00	Plus New Oil & Parts	
300-500 AMPS	\$ 5,528.00	Plus New Oil & Parts	
Over 500 AMPS	Starting at \$6634, To be	Plus New Oil & Parts	

Flat Rate Pricing for of Reclosers	Flat rate for 1 Phase Rebuild Recloser	Price to add 1-shot
4H	\$ 398.00	\$ 281.00
H	\$ 398.00	\$ 281.00
L	\$ 445.00	\$ 412.00
4E	\$ 492.00	\$ 412.00
E	\$ 492.00	\$ 412.00
Mcgraw/Cooper/Eaton	Flat Rate for 3 phase Rebuild	
3 phase various types	2475 Plus parts ***	

**Salvage Break down**

Type	5KVA up to 50 KVA	75 KVA up to 500 KVA	500 KVA & up
Single Phase Pole	\$0.15 per KVA	\$0.25 per KVA	Price on request
single Phase Pad	\$0.15 per KVA	\$0.25 per KVA	Price on request

Credit for Salvage 3 Phase Pad	45 KVA - 2500 KVA - \$.025 per KVA	
Alamo Purchase for electrically good 3 phase Pads	45KVA-75 KVA decommissioned and Good	\$2.00 KVA
	112.5 KVA up to 750 KVA Decommissioned and Good	\$2.50 KVA
	1000 KVA up to 2500 KVA Decommissioned and Good	\$2.25 KVA
Credit for Salvage of Regulators	25-225 KVA	\$0.50 KVA



**CONFLICT OF INTEREST QUESTIONNAIRE -****FORM CIQ****For vendor or other person doing business with local governmental entity****This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.**

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a) and by City of Denton Ethics Code, Ordinance 18-757.

By law this questionnaire must be filed with the records administrator of the local government entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

**1 Name of vendor who has a business relationship with local governmental entity.**

ALAMO Transformer Supply Company

**2 ☐ Check this box if you are filing an update to a previously filed questionnaire.**☐

(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7<sup>th</sup> business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

**3 Name of local government officer about whom the information in this section is being disclosed.**

\_\_\_\_\_  
Name of Officer

Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. This section, (item 3 including subparts A, B, C & D), must be completed for each officer with whom the vendor has an employment or other business relationship as defined by Section 176.001(1-a), Local Government Code. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer named in this section receiving or likely to receive taxable income, other than investment income, from the vendor?

☐

Yes

☒

No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer named in this section AND the taxable income is not received from the local governmental entity?

☐

Yes

☒

No

C. Is the filer of this questionnaire employed by a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership of one percent or more?

☐

Yes

☒

No

D. Describe each employment or business and family relationship with the local government officer named in this section.

**4 ☒ I have no Conflict of Interest to disclose.****5 DocuSigned by:**

Eric K. Peter

5/1/2023

Signature of Vendor doing business with the governmental entity

Date

## CONFLICT OF INTEREST QUESTIONNAIRE

### For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at [http://www.statutes.legis.state.tx.us/ Docs/LG/htm/LG.176.htm](http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm). For easy reference, below are some of the sections cited on this form.

**Local Government Code § 176.001(1-a):** "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

- (A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;
- (B) a transaction conducted at a price and subject to terms available to the public; or
- (C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

**Local Government Code § 176.003(a)(2)(A) and (B):**

- (A) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:
  - (2) the vendor:
    - (A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds \$2,500 during the 12-month period preceding the date that the officer becomes aware that
    - (i) a contract between the local governmental entity and vendor has been executed; or
    - (ii) the local governmental entity is considering entering into a contract with the vendor;
    - (B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than \$100 in the 12-month period preceding the date the officer becomes aware that:
      - (i) a contract between the local governmental entity and vendor has been executed; or
      - (ii) the local governmental entity is considering entering into a contract with the vendor.

**Local Government Code § 176.006(a) and (a-1)**

- (a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:
  - (1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);
  - (2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or
  - (3) has a family relationship with a local government officer of that local governmental entity.
- (a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:
  - (1) the date that the vendor:
    - (A) begins discussions or negotiations to enter into a contract with the local governmental entity; or
    - (B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or
  - (2) the date the vendor becomes aware:
    - (A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);
    - (B) that the vendor has given one or more gifts described by Subsection (a); or
    - (C) of a family relationship with a local government officer.

### **City of Denton Ethics Code Ordinance Number 18-757**

#### **Definitions:**

**Relative:** a family member related to a City Official within the third 3<sup>rd</sup> degree of affinity (marriage) or consanguinity (blood or adoption)

**City Official:** for purpose of this article, the term consists of the Council Members, Department Heads, or member of the Board of Ethics, Planning and zoning Commission Members, Board of Adjustment, Historic Landmark Commission, or Public Utilities Board

**Vendor:** a person who provides or seeks to provide goods, services, and/or real property to the City in exchange for compensation. This definition does not include those property owners from whom the City acquires public right-of-way or other real property interests for public use.

Per the City of Denton Ethics Code, Section 2-273. – Prohibitions

- (3) It shall be a violation of this Article for a Vendor to offer or give a Gift to City Official exceeding fifty dollars (\$50.00) per gift, or multiple gifts cumulatively valued at more than two hundred dollars (\$200.00) per a single fiscal year.

Per the City of Denton Ethics Code, Section 2-282. – Disposition (b), (5) Ineligibility

If the Board of Ethics finds that a Vendor has violated this Article, the Board may recommend to the City Manager that the Vendor be deemed ineligible to enter into a City contract or other arrangement for goods, services, or real property, for a period of one (1) year.

**Certificate Of Completion**

Envelope Id: 15DC6B33BE4D4A2881279AC81E6802E1

Status: Sent

Subject: Please DocuSign: City Council Contract RFQ 8192 Transformer Salvage, Refurbishment, and Disposal

Source Envelope:

Document Pages: 37

Signatures: 4

Envelope Originator:

Certificate Pages: 6

Initials: 1

Christa Christian

AutoNav: Enabled

901B Texas Street

Envelope Stamping: Enabled

Denton, TX 76209

Time Zone: (UTC-06:00) Central Time (US &amp; Canada)

Christa.Christian@cityofdenton.com

IP Address: 198.49.140.104

**Record Tracking**

Status: Original

Holder: Christa Christian

Location: DocuSign

4/24/2023 11:38:35 AM

Christa.Christian@cityofdenton.com

**Signer Events****Signature****Timestamp**

Christa Christian

**Completed**

Sent: 4/24/2023 11:57:41 AM

christa.christian@cityofdenton.com

Viewed: 4/24/2023 11:57:50 AM

Senior Buyer

Signed: 4/24/2023 11:58:01 AM

City of Denton

Using IP Address: 198.49.140.104

Security Level: Email, Account Authentication (None)

**Electronic Record and Signature Disclosure:**

Not Offered via DocuSign

Lori Hewell



Sent: 4/24/2023 11:58:05 AM

lori.hewell@cityofdenton.com

Resent: 4/26/2023 4:40:24 PM

Purchasing Manager

Viewed: 4/28/2023 10:31:10 AM

City of Denton

Signed: 4/28/2023 10:33:44 AM

Security Level: Email, Account Authentication (None)

Signature Adoption: Pre-selected Style

Using IP Address: 198.49.140.10

**Electronic Record and Signature Disclosure:**

Not Offered via DocuSign

Christa Christian

**Completed**

Sent: 4/28/2023 10:37:16 AM

christa.christian@cityofdenton.com

Viewed: 4/28/2023 12:19:14 PM

Senior Buyer

Signed: 4/28/2023 12:19:16 PM

City of Denton

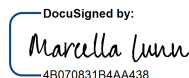
Using IP Address: 198.49.140.104

Security Level: Email, Account Authentication (None)

**Electronic Record and Signature Disclosure:**

Not Offered via DocuSign

Marcella Lunn



Sent: 4/28/2023 10:33:47 AM

marcella.lunn@cityofdenton.com

Resent: 4/28/2023 12:19:19 PM

Mack Reinwand City Attorney

Viewed: 4/28/2023 1:22:29 PM

City of Denton

Signed: 4/28/2023 1:26:10 PM

Security Level: Email, Account Authentication (None)

Signature Adoption: Pre-selected Style

Using IP Address: 198.49.140.10

**Electronic Record and Signature Disclosure:**

Not Offered via DocuSign

Signer Events	Signature	Timestamp
<p>Eric K. Peter</p> <p>Epeter@alamotransformer.com</p> <p>President</p> <p>Security Level: Email, Account Authentication (None)</p> <p><b>Electronic Record and Signature Disclosure:</b> Accepted: 5/1/2023 3:47:28 PM ID: 4f6f503d-f390-4854-a98a-965d1b568b0d</p>	<p>DocuSigned by: <i>Eric K. Peter</i> CBDE93C1FA484A0...</p> <p>Signature Adoption: Pre-selected Style Using IP Address: 174.202.236.121 Signed using mobile</p>	<p>Sent: 4/28/2023 1:26:13 PM</p> <p>Resent: 5/1/2023 11:19:09 AM</p> <p>Viewed: 5/1/2023 3:47:28 PM</p> <p>Signed: 5/1/2023 5:36:45 PM</p>
<p>Antonio Puente, Jr.</p> <p>Antonio.Puente@cityofdenton.com</p> <p>DME General Manager</p> <p>Security Level: Email, Account Authentication (None)</p> <p><b>Electronic Record and Signature Disclosure:</b> Accepted: 5/1/2023 5:52:47 PM ID: ae982cf7-f512-46c8-bfa9-740e6b82646e</p>	<p>DocuSigned by: <i>Antonio Puente, Jr.</i> E3760944C2BF4B5...</p> <p>Signature Adoption: Pre-selected Style Using IP Address: 198.49.140.10</p>	<p>Sent: 5/1/2023 5:36:49 PM</p> <p>Viewed: 5/1/2023 5:52:47 PM</p> <p>Signed: 5/1/2023 5:53:07 PM</p>
<p>Cheyenne Defee</p> <p>cheyenne.defee@cityofdenton.com</p> <p>Procurement Administration Supervisor</p> <p>City of Denton</p> <p>Security Level: Email, Account Authentication (None)</p> <p><b>Electronic Record and Signature Disclosure:</b> Not Offered via DocuSign</p>		<p>Sent: 5/1/2023 5:53:12 PM</p>
<p>Sara Hensley</p> <p>sara.hensley@cityofdenton.com</p> <p>Security Level: Email, Account Authentication (None)</p> <p><b>Electronic Record and Signature Disclosure:</b> Not Offered via DocuSign</p>		
<p>Jesus Salazar</p> <p>jesus.salazar@cityofdenton.com</p> <p>Security Level: Email, Account Authentication (None)</p> <p><b>Electronic Record and Signature Disclosure:</b> Accepted: 4/19/2023 11:07:17 AM ID: 30bd57f7-b273-439e-b86c-6349853f566e</p>		
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Editor Delivery Events	Status	Timestamp
Agent Delivery Events	Status	Timestamp
Intermediary Delivery Events	Status	Timestamp
Certified Delivery Events	Status	Timestamp
Carbon Copy Events	Status	Timestamp

Carbon Copy Events	Status	Timestamp
Cheyenne Defee cheyenne.defee@cityofdenton.com Procurement Administration Supervisor City of Denton Security Level: Email, Account Authentication (None) <b>Electronic Record and Signature Disclosure:</b> Not Offered via DocuSign	COPIED	Sent: 4/24/2023 11:58:05 AM
Gretna Jones gretna.jones@cityofdenton.com Legal Secretary City of Denton Security Level: Email, Account Authentication (None) <b>Electronic Record and Signature Disclosure:</b> Not Offered via DocuSign	COPIED	Sent: 5/1/2023 5:53:11 PM Viewed: 5/2/2023 2:42:53 PM
City Secretary Office citysecretary@cityofdenton.com Security Level: Email, Account Authentication (None) <b>Electronic Record and Signature Disclosure:</b> Not Offered via DocuSign		
Randall A. Key randy.key@cityofdenton.com Security Level: Email, Account Authentication (None) <b>Electronic Record and Signature Disclosure:</b> Accepted: 4/7/2023 10:36:34 AM ID: 0836b89e-b34e-4938-893e-51e9536413aa		
Witness Events	Signature	Timestamp
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Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	4/24/2023 11:57:41 AM
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Envelope Updated	Security Checked	4/28/2023 10:37:16 AM
Payment Events	Status	Timestamps
Electronic Record and Signature Disclosure		

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### **Withdrawing your consent**

If you decide to receive notices and disclosures from us electronically, you may at any time change your mind and tell us that thereafter you want to receive required notices and disclosures only in paper format. How you must inform us of your decision to receive future notices and disclosure in paper format and withdraw your consent to receive notices and disclosures electronically is described below.

### **Consequences of changing your mind**

If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. To indicate to us that you are changing your mind, you must withdraw your consent using the DocuSign 'Withdraw Consent' form on the signing page of your DocuSign account. This will indicate to us that you have withdrawn your consent to receive required notices and disclosures electronically from us and you will no longer be able to use your DocuSign Express user account to receive required notices and consents electronically from us or to sign electronically documents from us.

### **All notices and disclosures will be sent to you electronically**

Unless you tell us otherwise in accordance with the procedures described herein, we will provide electronically to you through your DocuSign user account all required notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you during the course of our relationship with you. To reduce the chance of you inadvertently not receiving any notice or disclosure, we prefer to provide all of the required notices and disclosures to you by the same method and to the same address that you have given us. Thus, you can receive all the disclosures and notices electronically or in paper format through the paper mail delivery system. If you do not agree with this process, please let us know as described below. Please also see the paragraph immediately above that describes the consequences of your electing not to receive delivery of the notices and disclosures electronically from us.

**How to contact City of Denton:**

You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:

To contact us by email send messages to: [purchasing@cityofdenton.com](mailto:purchasing@cityofdenton.com)

**To advise City of Denton of your new e-mail address**

To let us know of a change in your e-mail address where we should send notices and disclosures electronically to you, you must send an email message to us at [melissa.kraft@cityofdenton.com](mailto:melissa.kraft@cityofdenton.com) and in the body of such request you must state: your previous e-mail address, your new e-mail address. We do not require any other information from you to change your email address..

In addition, you must notify DocuSign, Inc to arrange for your new email address to be reflected in your DocuSign account by following the process for changing e-mail in DocuSign.

**To request paper copies from City of Denton**

To request delivery from us of paper copies of the notices and disclosures previously provided by us to you electronically, you must send us an e-mail to [purchasing@cityofdenton.com](mailto:purchasing@cityofdenton.com) and in the body of such request you must state your e-mail address, full name, US Postal address, and telephone number. We will bill you for any fees at that time, if any.

**To withdraw your consent with City of Denton**

To inform us that you no longer want to receive future notices and disclosures in electronic format you may:

- i. decline to sign a document from within your DocuSign account, and on the subsequent page, select the check-box indicating you wish to withdraw your consent, or you may;
- ii. send us an e-mail to [purchasing@cityofdenton.com](mailto:purchasing@cityofdenton.com) and in the body of such request you must state your e-mail, full name, US Postal Address, telephone number, and account number. We do not need any other information from you to withdraw consent.. The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process..

**Required hardware and software**

Operating Systems:	Windows2000? or WindowsXP?
Browsers (for SENDERS):	Internet Explorer 6.0? or above
Browsers (for SIGNERS):	Internet Explorer 6.0?, Mozilla FireFox 1.0, NetScape 7.2 (or above)
Email:	Access to a valid email account
Screen Resolution:	800 x 600 minimum
Enabled Security Settings:	<ul style="list-style-type: none"><li>•Allow per session cookies</li><li>•Users accessing the internet behind a Proxy Server must enable HTTP 1.1 settings via proxy connection</li></ul>

\*\* These minimum requirements are subject to change. If these requirements change, we will provide you with an email message at the email address we have on file for you at that time providing you with the revised hardware and software requirements, at which time you will have the right to withdraw your consent.

**Acknowledging your access and consent to receive materials electronically**

To confirm to us that you can access this information electronically, which will be similar to other electronic notices and disclosures that we will provide to you, please verify that you were able to read this electronic disclosure and that you also were able to print on paper or electronically save this page for your future reference and access or that you were able to e-mail this disclosure and consent to an address where you will be able to print on paper or save it for your future reference and access. Further, if you consent to receiving notices and disclosures exclusively in electronic format on the terms and conditions described above, please let us know by clicking the 'I agree' button below.

By checking the 'I Agree' box, I confirm that:

- I can access and read this Electronic CONSENT TO ELECTRONIC RECEIPT OF ELECTRONIC RECORD AND SIGNATURE DISCLOSURES document; and
- I can print on paper the disclosure or save or send the disclosure to a place where I can print it, for future reference and access; and
- Until or unless I notify City of Denton as described above, I consent to receive from exclusively through electronic means all notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to me by City of Denton during the course of my relationship with you.





# City of Denton

City Hall  
215 E. McKinney St.  
Denton, Texas 76201  
[www.cityofdenton.com](http://www.cityofdenton.com)

## Legislation Text

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**File #:** PUB23-098, **Version:** 1

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### **AGENDA CAPTION**

Consider recommending adoption of an ordinance of the City of Denton, a Texas home-rule municipal corporation, authorizing the City Manager to execute a contract with Pure Technologies US Inc., for the Transmission Mains Condition Assessment for the Water Utilities Department; providing for the expenditure of funds therefor; and providing an effective date (RFP 8181 - awarded to Pure Technologies US Inc., for three (3) years, with the option for two (2) additional one (1) year extensions, in the total five (5) year not-to-exceed amount of \$10,000,000.00).



## AGENDA INFORMATION SHEET

**DEPARTMENT:** Procurement  
**ACM:** Cassey Ogden  
**DATE:** May 22, 2023

### **SUBJECT**

Consider recommending adoption of an ordinance of the City of Denton, a Texas home-rule municipal corporation, authorizing the City Manager to execute a contract with Pure Technologies US Inc., for the Transmission Mains Condition Assessment for the Water Utilities Department; providing for the expenditure of funds therefor; and providing an effective date (RFP 8181 – awarded to Pure Technologies US Inc., for three (3) years, with the option for two (2) additional one (1) year extensions, in the total five (5) year not-to-exceed amount of \$10,000,000.00).

### **STRATEGIC ALIGNMENT**

This action supports Key Focus Area: Enhance Infrastructure and Mobility.

### **INFORMATION/BACKGROUND**

Denton, Texas owns and operates many pipelines that convey raw water to water treatment facilities and treated water to the City's water distribution system. There are 642 miles of water main, 25.85 miles of sewer force mains and 35,601 feet of high-priority large-diameter water transmission pipes. The City would like to enter into a long-term agreement for a condition assessment of the large-diameter high-priority water transmission pipes greater than or equal to 14 inches in diameter and sewer force mains on an as-needed basis.

Water transmission mains play an important role in bringing drinking water to the distribution system. Transmission mains are large-diameter pipes that provide water supply across the City's service area, playing a critical role in the delivery of drinking water and sustaining flow to meet our customer's needs. Gauging the condition of these critical mains is essential to their operability and can pre-empt any catastrophic environmental, monetary, and social damage that can occur due to an unexpected break or a leak.

This condition assessment will target mains 14 inches in diameter or larger, specifically those which have a high level of risk identified. Our InfoAsset Planner model, developed in coordination with a consultant, identified many targeted areas, and field staff is assisting in identifying additional known areas of concern. This condition assessment will help us ensure that these critical assets remain in good operational use and will minimize the cost of any necessary repairs by avoiding emergencies. For some assets, this will help us accurately identify the need to replace any mains which may pose a significant risk of failure with ample preparation and planning time.

<b>Project Description</b>	<b>Estimated 5-Year Expenditure</b>
Year 1 Assessments	\$ 1,739,574
Year 2 Assessments	\$ 1,870,022
Year 3 Assessments	\$ 1,870,223
Year 4 Assessments	\$ 1,805,876
Year 5 Assessments	\$ 1,714,305
Contingency for additional services	\$ 1,000,000
<b>Total</b>	<b>\$ 10,000,000</b>

Request for Proposals was sent to 360 prospective suppliers, including ten (10) Denton firms. In addition, specifications were placed on the Procurement website for prospective suppliers to download and advertised in the local newspaper. One (1) proposal was received, and references were checked to ensure the vendor can provide the services requested in the Scope of Work. The proposal was evaluated based upon published criteria including delivery/project schedule, compliance with specifications, probable performance, and price. The department is awarding the contract to Pure Technologies US Inc.

NIGP Code Used for Solicitation:	968 - (Service Only) - Public Works and Related Services
Notifications sent for Solicitation sent in IonWave:	360
Number of Suppliers that viewed Solicitation in IonWave:	13
HUB-Historically Underutilized Business Invitations sent out:	34
SBE-Small Business Enterprise Invitations sent out:	114
Responses from Solicitation:	1

## **RECOMMENDATION**

Award a contract with Pure Technologies US, Inc., for the Transmission Mains Condition Assessment for the Water Utilities Department, in a three (3) year, with the option for two (2) additional one (1) year extensions, in the total five (5) year not-to-exceed amount of \$10,000,000.

## **PRINCIPAL PLACE OF BUSINESS**

Pure Technologies US, Inc.  
Columbia, MD

## **SUSTAINABILITY MEASURES**

### **Relationship to Sustainability Framework**

Focus Area: *Water*

Goal 1: Proactively address identified pipeline defects in order to avoid emergency main breaks

## **ESTIMATED SCHEDULE OF PROJECT**

This is an initial three (3) year contract with options to extend the contract for two (2) additional one (1) year periods, with all terms and conditions remaining the same.

## **FISCAL INFORMATION**

These services will be funded from Trans Line Assesmt - Repairs account 630518523.1360.47710. Requisition #160151 has been entered into the Purchasing software system in the amount of \$2,000,000. The budgeted amount for this item is \$10,000,000.

## **EXHIBITS**

Exhibit 1: Agenda Information Sheet

Exhibit 2: Presentation

Exhibit 3: Ordinance and Contract

Respectfully submitted:  
Lori Hewell, 940-349-7100  
Purchasing Manager

For information concerning this acquisition, contact: Tyler Dawson, 940-349-8944.

Legal point of contact: Marcella Lunn at 940-349-8333.



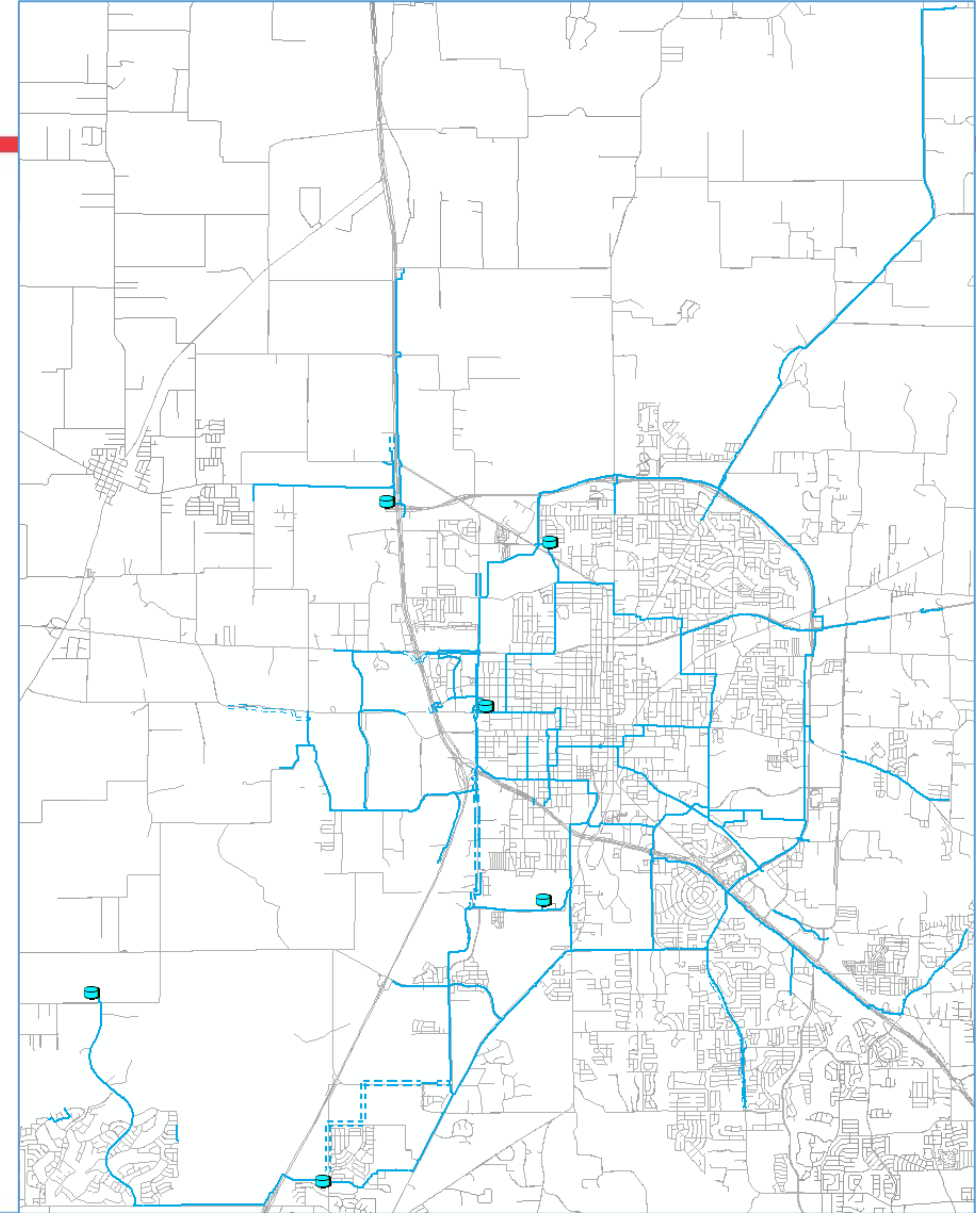
# Transmission Main Condition Assessment

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**Tyler Dawson**  
**Business Systems Administrator**  
**Water Utilities**  
**May 22, 2023**  
**PUB23-098**

# Transmission Mains

- Water mains 14" or larger
- Transmit water around the City before branching off to reach customers
- Carry higher flows than smaller Distribution mains
- Are critical to ensure our water reaches customers
- Some of the longest design life of all water assets



# Condition Assessment Methodology

- Remotely controlled and/or monitored free-swimming inspection equipment will be sent through each pipeline
- A variety of technologies will be applied, which can:
  - Listen for leaks or irregular flow of water caused by pipe degradation
  - Determine remaining thickness of the steel cylinder within the pipe wall
  - Visually identify damage or degradation to the interior pipe wall
- Inspections typically will not involve excavation
- In limited cases, installation of a pipe access point may be required
- Expert review of results will report on areas of concern
  - Identified leaks or potential leaks will be repaired as they are found
  - Overall pipe condition will guide future capital decisions





# Improving Service Through Main Break Prevention

- Any main break is difficult to tolerate
  - Potential water outages
  - Potential water contamination
  - Potential pressure loss could result in loss of fire protection or a boil water notice
  - Traffic interruptions during repair
  - Temporary damage to streets or yards
- Impacts are magnified on larger mains
- We want to avoid transmission main breaks where possible





# Cost Savings vs. Capital Reinvestment

Item	Installation	Assessment
Per Foot Cost to Install or Inspect	\$500-\$1,500	\$5-\$25
Life Cycle of Investment (years)	70	10
Annualized Cost	\$7-21	\$0.50-\$2.50

At a cost of 35% or less compared to capital reinvestment, assessments are a great tool to extend the in-service life of transmission mains and anticipate failures before they appear

ORDINANCE NO. \_\_\_\_\_

AN ORDINANCE OF THE CITY OF DENTON, A TEXAS HOME-RULE MUNICIPAL CORPORATION, AUTHORIZING THE CITY MANAGER TO EXECUTE A CONTRACT WITH PURE TECHNOLOGIES US INC., FOR THE TRANSMISSION MAINS CONDITION ASSESSMENT FOR THE WATER UTILITIES DEPARTMENT; PROVIDING FOR THE EXPENDITURE OF FUNDS THEREFOR; AND PROVIDING AN EFFECTIVE DATE (RFP 8181 – AWARDED TO PURE TECHNOLOGIES US INC., FOR THREE (3) YEARS, WITH THE OPTION FOR TWO (2) ADDITIONAL ONE (1) YEAR EXTENSIONS, IN THE TOTAL FIVE (5) YEAR NOT-TO-EXCEED AMOUNT OF \$10,000,000.00).

WHEREAS, the City has solicited, received, and evaluated competitive proposals for the Transmission Mains Condition Assessment for the Water Utilities Department; and

WHEREAS, the City Manager, or a designated employee, has received, reviewed, and recommended that the herein described proposals are the most advantageous to the City considering the relative importance of price and the other evaluation factors included in the request for proposals; and

WHEREAS, this procurement was undertaken as part of the City’s governmental function [Water and sewer service]; and

WHEREAS, the City Council has provided in the City Budget for the appropriation of funds to be used for the purchase of the materials, equipment, supplies, or services approved and accepted herein; NOW, THEREFORE,

THE COUNCIL OF THE CITY OF DENTON HEREBY ORDAINS:

SECTION 1. The items in the following numbered request for proposal for materials, equipment, supplies, or services shown in the “Request Proposals” on file in the office of the Purchasing Agent, are hereby accepted and approved as being the most advantageous to the City considering the relative importance of price and the other evaluation factors included in the request for proposals.

<u>RFP NUMBER</u>	<u>CONTRACTOR</u>	<u>AMOUNT</u>
8181	Pure Technologies US Inc.	\$10,000,000.00

SECTION 2. That by the acceptance and approval of the above numbered items of the submitted proposals, the City accepts the offer of the persons submitting the proposals for such items and agrees to purchase the materials, equipment, supplies, or services in accordance with the terms, specifications, standards, quantities, and for the specified sums contained in the Proposal Invitations, Proposals, and related documents.

**SECTION 3.** That should the City and person submitting approved and accepted items wish to enter into a formal written agreement as a result of the acceptance, approval, and awarding of the proposals, the City Manager, or their designated representative, is hereby authorized to execute the written contract which shall be attached hereto; provided that the written contract is in accordance with the terms, conditions, specifications, standards, quantities, and specified sums contained in the Proposal and related documents herein approved and accepted.

**SECTION 4.** The City Council of the City of Denton, hereby expressly delegates the authority to take any actions that may be required or permitted to be performed by the City of Denton under this ordinance to the City Manager of the City of Denton, or their designee.

**SECTION 5.** By the acceptance and approval of the above enumerated bids, the City Council hereby authorizes the expenditure of funds therefor in the amount and in accordance with the approved bids.

**SECTION 6.** This ordinance shall become effective immediately upon its passage and approval.

The motion to approve this ordinance was made by \_\_\_\_\_ and seconded by \_\_\_\_\_. This ordinance was passed and approved by the following vote [\_\_\_ - \_\_\_]:

	<b>Aye</b>	<b>Nay</b>	<b>Abstain</b>	<b>Absent</b>
Mayor Gerard Hudspeth:	_____	_____	_____	_____
Vicki Byrd, District 1:	_____	_____	_____	_____
Brian Beck, District 2:	_____	_____	_____	_____
Paul Meltzer, District 3:	_____	_____	_____	_____
Joe Holland, District 4:	_____	_____	_____	_____
Brandon Chase McGee, At Large Place 5:	_____	_____	_____	_____
Chris Watts, At Large Place 6:	_____	_____	_____	_____


PASSED AND APPROVED this the \_\_\_\_\_ day of \_\_\_\_\_, 2023.

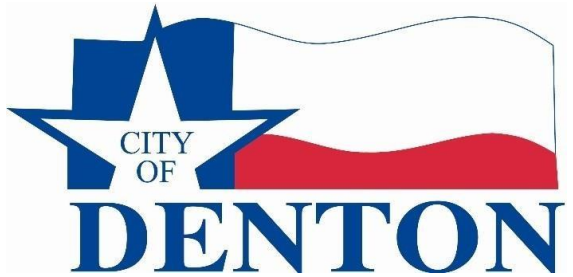
\_\_\_\_\_  
GERARD HUDSPETH, MAYOR

ATTEST:  
JESUS SALAZAR, INTERIM CITY SECRETARY

BY: \_\_\_\_\_

APPROVED AS TO LEGAL FORM:  
MACK REINWAND, CITY ATTORNEY

BY:  \_\_\_\_\_  
Digitally signed by Marcella Lunn  
DN: cn=Marcella Lunn, o, ou=City  
of Denton,  
email=marcella.lunn@cityofdenton  
.com, c=US  
Date: 2023.05.10 17:16:22 -05'00'



Docusign City Council Transmittal Coversheet

RFP	8181
File Name	TRANSMISSION MAINS CONDITION ASSESSMENT
Purchasing Contact	Crystal westbrook
City Council Target Date	
Piggy Back Option	Yes
Contract Expiration	
Ordinance	

**CONTRACT BY AND BETWEEN  
CITY OF DENTON, TEXAS AND PURE TECHNOLOGIES US INC.  
(CONTRACT 8181)**

**THIS CONTRACT** is made and entered into this date \_\_\_\_\_, by and between **PURE TECHNOLOGIES US INC.**, a DELAWARE corporation, whose address is 2310 McDaniel Drive, Carrollton, TX 75006 hereinafter referred to as "Contractor," and the **CITY OF DENTON, TEXAS**, a home rule municipal corporation, hereinafter referred to as "City," to be effective upon approval of the Denton City Council and subsequent execution of this Contract by the Denton City Manager or their duly authorized designee.

For and in consideration of the covenants and agreements contained herein, and for the mutual benefits to be obtained hereby, the parties agree as follows:

**SCOPE OF SERVICES**

Contractor shall provide products and/or services in accordance with the City's document RFP #8181 Transmission Mains Condition Assessment, a copy of which is on file at the office of Purchasing Agent and incorporated herein for all purposes. The Contract consists of this written agreement and the following items which are attached hereto and incorporated herein by reference:

- (a) Special Terms and Conditions (**Exhibit "A"**);
- (b) City of Denton's RFP #8181 (**Exhibit "B" on File at the Office of the Purchasing Agent**);
- (c) City of Denton Standard Terms and Conditions (**Exhibit "C"**);
- (d) Insurance Requirements (**Exhibit "D"**);
- (e) Certificate of Interested Parties Electronic Filing (**Exhibit "E"**);
- (f) Contractor's Proposal (**Exhibit "F"**);
- (g) Form CIQ – Conflict of Interest Questionnaire (**Exhibit "G"**);

These documents make up the Contract documents and what is called for by one shall be as binding as if called for by all. In the event of an inconsistency or conflict in any of the provisions of the Contract documents, the inconsistency or conflict shall be resolved by giving precedence first to the written agreement then to the contract documents in the order in which they are listed above. These documents shall be referred to collectively as "Contract Documents."

**Prohibition on Contracts with Companies Boycotting Israel**

Contractor acknowledges that in accordance with Chapter 2271 of the Texas Government Code, City is prohibited from entering into a contract with a company for goods or services unless the contract contains a written verification from the company that it: (1) does not boycott Israel; and (2) will not boycott Israel during the term of the contract. The terms "boycott Israel" and "company" shall have the meanings ascribed to those terms in Section 808.001 of the Texas Government Code. ***By signing this agreement, Contractor certifies that Contractor's signature provides written verification to the City that Contractor: (1) does not boycott Israel; and (2) will not boycott Israel during the term of the agreement.*** Failure to meet or maintain the requirements under this provision will be considered a material breach.

**Prohibition on Contracts with Companies Boycotting Certain Energy Companies**

Contractor acknowledges that in accordance with Chapter 2274 of the Texas Government Code, City is

Contract # 8181

prohibited from entering into a contract with a company for goods or services unless the contract contains written verification from the company that it (1) does not boycott energy companies; and (2) will not boycott energy companies during the term of the contract. The terms “boycott energy company” and “company” shall have the meanings ascribed to those terms in Section 809.001 of the Texas Government Code. ***By signing this agreement, Contractor certifies that Contractor’s signature provides written verification to the City that Contractor: (1) does not boycott energy companies; and (2) will not boycott energy companies during the term of the agreement.*** Failure to meet or maintain the requirements under this provision will be considered a material breach.

#### **Prohibition on Contracts with Companies Boycotting Certain Firearm Entities and Firearm Trade Associations**

Contractor acknowledges that in accordance with Chapter 2274 of the Texas Government Code, City is prohibited from entering into a contract with a company for goods or services unless the contract contains written verification from the company that it (1) does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association; and (2) will not discriminate during the term of the contract against a firearm entity or firearm trade association. The terms “discriminate against a firearm entity or firearm trade association,” “firearm entity” and “firearm trade association” shall have the meanings ascribed to those terms in Chapter 2274 of the Texas Government Code. ***By signing this agreement, Contractor certifies that Contractor’s signature provides written verification to the City that Contractor: (1) does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association; and (2) will not discriminate during the term of the contract against a firearm entity or firearm trade association.*** Failure to meet or maintain the requirements under this provision will be considered a material breach.

#### **Prohibition on Contracts with Companies Doing Business with Iran, Sudan, or a Foreign Terrorist Organization**

Sections 2252 and 2270 of the Texas Government Code restricts CITY from contracting with companies that do business with Iran, Sudan, or a foreign terrorist organization. ***By signing this agreement, Contractor certifies that Contractor’s signature provides written verification to the City that Contractor, pursuant to Chapters 2252 and 2270, is not ineligible to enter into this agreement and will not become ineligible to receive payments under this agreement by doing business with Iran, Sudan, or a foreign terrorist organization.*** Failure to meet or maintain the requirements under this provision will be considered a material breach.

#### **Termination Right for Contracts with Companies Doing Business with Certain Foreign-Owned Companies**

The City of Denton may terminate this Contract immediately without any further liability if the City of Denton determines, in its sole judgment, that this Contract meets the requirements under Chapter 2274, and Contractor is, or will be in the future, (i) owned by or the majority of stock or other ownership interest of the company is held or controlled by individuals who are citizens of China, Iran, North Korea, Russia, or other designated country (ii) directly controlled by the Government of China, Iran, North Korea, Russia, or other designated country, or (iii) is headquartered in China, Iran, North Korea, Russia, or other designated country.

The parties agree to transact business electronically. Any statutory requirements that certain terms be in writing will be satisfied using electronic documents and signing. Electronic signing of this document will be deemed an original for all legal purposes.

IN WITNESS WHEREOF, the parties of these presents have executed this agreement in the year and day first above written.

Contract # 8181

**CONTRACTOR**

DocuSigned by:  
Mike Garaci  
BY: 7A576A7CD4F8404...  
AUTHORIZED SIGNATURE

Printed Name: Mike Garaci

Title: Director, Business Development  
4,165,744,446.00

PHONE NUMBER  
mike.garaci@xylem.com

EMAIL ADDRESS  
mike.garaci@xylem.com

TEXAS ETHICS COMMISSION  
1295 CERTIFICATE NUMBER

THIS AGREEMENT HAS BEEN  
BOTH REVIEWED AND APPROVED  
as to financial and operational obligations  
and business terms.

DocuSigned by:  
Stephen D. Gay Stephen D. Gay  
9EBFF5658E56492...  
SIGNATURE PRINTED NAME

Director,  
TITLE  
Water Utilities

DEPARTMENT

**CITY OF DENTON, TEXAS**

BY: \_\_\_\_\_  
SARA HENSLEY, CITY MANAGER

ATTEST:  
JESUS SALAZAR, INTERIM CITY  
SECRETARY

BY: \_\_\_\_\_

APPROVED AS TO LEGAL FORM:  
MACK REINWAND, CITY ATTORNEY

DocuSigned by:  
Marcella Lunn  
BY: 4B070831B4AA438...



## **Exhibit A**

### **Special Terms and Conditions**

#### **1. Total Contract Amount**

The contract total for services shall not exceed \$10,000,000. Pricing shall be per Exhibit F attached.

#### **2. The Quantities**

The quantities indicated on Exhibit F are estimates based upon the best available information. The City reserves the right to increase or decrease the quantities to meet its actual needs without any adjustments in the bid price. Individual purchase orders will be issued on an as needed basis.

#### **3. Contract Terms**

The contract term will be three (3) year, effective from date of award. The City and the Supplier shall have the option to renew this contract for an additional two (2) one-year periods.

The Contract shall commence upon the issuance of a Notice of Award by the City of Denton and shall automatically renew each year, from the date of award by City Council. The Supplier's request to not renew the contract must be submitted in writing to the Purchasing Manager at least 60 days prior to the contract renewal date for each year. At the sole option of the City of Denton, the Contract may be further extended as needed, not to exceed a total of six (6) months.

#### **4. Price Escalation and De-escalation**

On Supplier's request in the form stated herein, the City will implement an escalation/de-escalation price adjustment annually based on these special terms. Any request for price adjustment must be based on the, U.S Department of Labor, Bureau of Labor Statistics, Producer Price Index (PPI) or the manufacturer published pricing list. The maximum escalation will not exceed +/- 8% for any individual year. The escalation will be determined annually at the renewal date. The price will be increased or decreased based upon the annual percentage change in the PPI or the percentage change in the manufacturer's price list. Should the PPI or manufacturer price list change exceed a minimum threshold value of +/-1%, then the stated eligible bid prices shall be adjusted in accordance with the percent change not to exceed the 8% limit per year. The supplier should provide documentation as percentage of each cost associated with the unit prices quoted for consideration.

Request must be submitted in writing with supporting evidence for need of such increase to the Purchasing Manager at least 60 days prior to contract expiration of each year. Respondent must also provide supporting documentation as justification for the request. If no request is made, then it will be assumed that the current contract price will be in effect.

Upon receipt of such request, the City of Denton reserves the right to either: accept the escalation as competitive with the general market price at the time, and become effective upon the renewal

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date of the contract award or reject the increases within 30 calendar days after receipt of a properly submitted request. If a properly submitted increase is rejected, the Contractor may request cancellation of such items from the Contract by giving the City of Denton written notice. Cancellation will not go into effect for 15 calendar days after a determination has been issued. Pre-price increase prices must be honored on orders dated up to the official date of the City of Denton approval and/or cancellation.

The request can be sent by e-mail to: [purchasing@cityofdenton.com](mailto:purchasing@cityofdenton.com) noting the solicitation number.

The City of Denton reserves the right to accept, reject, or negotiate the proposed price changes.

## **5. Performance Liquidated Damages**

The Contractor shall incur contractual payment losses, as initiated by the City for performance that falls short of specified performance standards as outlined below:

- Delivery beyond contracted lead times
- Performance below contracted levels (services only)

The Contractor shall be assessed a one (1%) percent fee each month when any one of the performance standards outlined above are not met in full. The Contractor shall be assessed a two (2%) percent profit fee each month when any two (2) or more performance standards outlined above are not met in full. At the end of each month, the City will review the monthly reports and determine the percentage of penalty to be assessed to the Contractor's monthly profit margin.

## **Exhibit C**

### **Standard Purchase Terms and Conditions**

These standard Terms and Conditions and the Terms and Conditions, Specifications, Drawings and other requirements included in the City of Denton's contract are applicable to contracts/purchase orders issued by the City of Denton hereinafter referred to as the City or Buyer and the Seller or respondent herein after referred to as Contractor or Supplier. Any deviations must be in writing and signed by a representative of the City's Procurement Department and the Supplier. No Terms and Conditions contained in the seller's proposal response, invoice or statement shall serve to modify the terms set forth herein. If there is a conflict between the provisions on the face of the contract/purchase order these written provisions will take precedence.

The Contractor agrees that the contract shall be governed by the following terms and conditions, unless exceptions are duly noted and fully negotiated. Unless otherwise specified in the contract, Sections 3, 4, 5, 6, 7, 8, 20, 21, and 36 shall apply only to a solicitation to purchase goods, and sections 9, 10, 11, 22 and 32 shall apply only to a solicitation to purchase services to be performed principally at the City's premises or on public rights-of-way.

**1. CONTRACTOR'S OBLIGATIONS.** The Contractor shall fully and timely provide all deliverables described in the Solicitation and in the Contractor's Offer in strict accordance with the terms, covenants, and conditions of the Contract and all applicable Federal, State, and local laws, rules, and regulations.

**2. EFFECTIVE DATE/TERM.** Unless otherwise specified in the Solicitation, this Contract shall be effective as of the date the contract is signed by the City, and shall continue in effect until all obligations are performed in accordance with the Contract.

**3. CONTRACTOR TO PACKAGE DELIVERABLES:** The Contractor will package deliverables in accordance with good commercial practice and shall include a packing list showing the description of each item, the quantity and unit price unless otherwise provided in the Specifications or Supplemental Terms and Conditions, each shipping container shall be clearly and permanently marked as follows: (a) The Contractor's name and address, (b) the City's name, address and purchase order or purchase release number and the price agreement number if applicable, (c) Container number and total number of containers, e.g. box 1 of 4 boxes, and (d) the number of the container bearing the packing list. The Contractor shall bear cost of packaging. Deliverables shall be suitably packed to secure lowest transportation costs and to conform to all the requirements of common carriers and any applicable specification. The City's count or weight shall be final and conclusive on shipments not accompanied by packing lists.

**4. SHIPMENT UNDER RESERVATION PROHIBITED:** The Contractor is not authorized to ship the deliverables under reservation and no tender of a bill of lading will operate as a tender of deliverables.

**5. TITLE & RISK OF LOSS:** Title to and risk of loss of the deliverables shall pass to the City only when the City actually receives and accepts the deliverables.

**6. DELIVERY TERMS AND TRANSPORTATION CHARGES:** Deliverables shall be

shipped F.O.B. point of delivery unless otherwise specified in the Supplemental Terms and Conditions. Unless otherwise stated in the Offer, the Contractor's price shall be deemed to include all delivery and transportation charges. The City shall have the right to designate what method of transportation shall be used to ship the deliverables. The place of delivery shall be that set forth the purchase order.

**7. RIGHT OF INSPECTION AND REJECTION:** The City expressly reserves all rights under law, including, but not limited to the Uniform Commercial Code, to inspect the deliverables at delivery before accepting them, and to reject defective or non-conforming deliverables. If the City has the right to inspect the Contractor's, or the Contractor's Subcontractor's, facilities, or the deliverables at the Contractor's, or the Contractor's Subcontractor's, premises, the Contractor shall furnish, or cause to be furnished, without additional charge, all reasonable facilities and assistance to the City to facilitate such inspection.

**8. NO REPLACEMENT OF DEFECTIVE TENDER:** Every tender or delivery of deliverables must fully comply with all provisions of the Contract as to time of delivery, quality, and quantity. Any non-complying tender shall constitute a breach and the Contractor shall not have the right to substitute a conforming tender; provided, where the time for performance has not yet expired, the Contractor may notify the City of the intention to cure and may then make a conforming tender within the time allotted in the contract.

**9. PLACE AND CONDITION OF WORK:** The City shall provide the Contractor access to the sites where the Contractor is to perform the services as required in order for the Contractor to perform the services in a timely and efficient manner, in accordance with and subject to the applicable security laws, rules, and regulations. The Contractor acknowledges that it has satisfied itself as to the nature of the City's service requirements and specifications, the location and essential characteristics of the work sites, the quality and quantity of materials, equipment, labor and facilities necessary to perform the services, and any other condition or state of fact which could in any way affect performance of the Contractor's obligations under the contract. The Contractor hereby releases and holds the City harmless from and against any liability or claim for damages of any kind or nature if the actual site or service conditions differ from expected conditions.

The contractor shall, at all times, exercise reasonable precautions for the safety of their employees, City Staff, participants and others on or near the City's facilities.

#### **10. WORKFORCE**

A. The Contractor shall employ only orderly and competent workers, skilled in the performance of the services which they will perform under the Contract.

B. The Contractor, its employees, subcontractors, and subcontractor's employees may not while engaged in participating or responding to a solicitation or while in the course and scope of delivering goods or services under a City of Denton contract or on the City's property .

i. use or possess a firearm, including a concealed handgun that is licensed under state law, except as required by the terms of the contract; or

ii. use or possess alcoholic or other intoxicating beverages, illegal drugs or controlled substances, nor may such workers be intoxicated, or under the influence of alcohol or drugs, on the job.

C. If the City or the City's representative notifies the Contractor that any worker is incompetent, disorderly or disobedient, has knowingly or repeatedly violated safety regulations, has possessed

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any firearms, or has possessed or was under the influence of alcohol or drugs on the job, the Contractor shall immediately remove such worker from Contract services, and may not employ such worker again on Contract services without the City's prior written consent.

**Immigration:** The Contractor represents and warrants that it shall comply with the requirements of the Immigration Reform and Control Act of 1986 and 1990 regarding employment verification and retention of verification forms for any individuals hired on or after November 6, 1986, who will perform any labor or services under the Contract and the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 ("IIRIRA") enacted on September 30, 1996.

**11. COMPLIANCE WITH HEALTH, SAFETY, AND ENVIRONMENTAL REGULATIONS:** The Contractor, its Subcontractors, and their respective employees, shall comply fully with all applicable federal, state, and local health, safety, and environmental laws, ordinances, rules and regulations in the performance of the services, including but not limited to those promulgated by the City and by the Occupational Safety and Health Administration (OSHA). In case of conflict, the most stringent safety requirement shall govern. The Contractor shall indemnify and hold the City harmless from and against all claims, demands, suits, actions, judgments, fines, penalties and liability of every kind arising from the breach of the Contractor's obligations under this paragraph.

**Environmental Protection:** The Respondent shall be in compliance with all applicable standards, orders, or regulations issued pursuant to the mandates of the Clean Air Act (42 U.S.C. §7401 *et seq.*) and the Federal Water Pollution Control Act, as amended, (33 U.S.C. §1251 *et seq.*).

## **12. INVOICES:**

A. The Contractor shall submit separate invoices in duplicate on each purchase order or purchase release after each delivery. If partial shipments or deliveries are authorized by the City, a separate invoice must be sent for each shipment or delivery made.

**B. Proper Invoices must include a unique invoice number, the purchase order or delivery order number and the master agreement number if applicable, the Department's Name, and the name of the point of contact for the Department.** Invoices shall be itemized and transportation charges, if any, shall be listed separately. A copy of the bill of lading and the freight waybill, when applicable, shall be attached to the invoice. The Contractor's name, remittance address and, if applicable, the tax identification number on the invoice must exactly match the information in the Vendor's registration with the City. Unless otherwise instructed in writing, the City may rely on the remittance address specified on the Contractor's invoice.

C. Invoices for labor shall include a copy of all time-sheets with trade labor rate and deliverables order number clearly identified. Invoices shall also include a tabulation of work-hours at the appropriate rates and grouped by work order number. Time billed for labor shall be limited to hours actually worked at the work site.

D. Unless otherwise expressly authorized in the Contract, the Contractor shall pass through all Subcontract and other authorized expenses at actual cost without markup.

E. Federal excise taxes, State taxes, or City sales taxes must not be included in the invoiced amount.

The City will furnish a tax exemption certificate upon request.

## **13. PAYMENT:**

A. All proper invoices need to be sent to Accounts Payable. Approved invoices will be paid within thirty (30) calendar days of the City's receipt of the deliverables or of the invoice being received

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in Accounts Payable, whichever is later.

**B. If payment is not timely made, (per paragraph A); interest shall accrue on the unpaid balance at the lesser of the rate specified in Texas Government Code Section 2251.025 or the maximum lawful rate; except, if payment is not timely made for a reason for which the City may withhold payment hereunder, interest shall not accrue until ten (10) calendar days after the grounds for withholding payment have been resolved.**

C. If partial shipments or deliveries are authorized by the City, the Contractor will be paid for the partial shipment or delivery, as stated above, provided that the invoice matches the shipment or delivery.

D. The City may withhold or set off the entire payment or part of any payment otherwise due the Contractor to such extent as may be necessary on account of:

- i. delivery of defective or non-conforming deliverables by the Contractor;
- ii. third party claims, which are not covered by the insurance which the Contractor is required to provide, are filed or reasonable evidence indicating probable filing of such claims;
- iii. failure of the Contractor to pay Subcontractors, or for labor, materials or equipment;
- iv. damage to the property of the City or the City's agents, employees or contractors, which is not covered by insurance required to be provided by the Contractor;
- v. reasonable evidence that the Contractor's obligations will not be completed within the time specified in the Contract, and that the unpaid balance would not be adequate to cover actual or damages for the anticipated delay;
- vi. failure of the Contractor to submit proper invoices with purchase order number, with all required attachments and supporting documentation; or
- vii. failure of the Contractor to comply with any material provision of the Contract Documents.

E. Notice is hereby given that any awarded firm who is in arrears to the City of Denton for delinquent taxes, the City may offset indebtedness owed the City through payment withholding.

F. Payment will be made by check unless the parties mutually agree to payment by credit card or electronic transfer of funds. The Contractor agrees that there shall be no additional charges, surcharges, or penalties to the City for payments made by credit card or electronic funds transfer.

G. The awarding or continuation of this contract is dependent upon the availability of funding. The City's payment obligations are payable only and solely from funds Appropriated and available for this contract. The absence of Appropriated or other lawfully available funds shall render the Contract null and void to the extent funds are not Appropriated or available and any deliverables delivered but unpaid shall be returned to the Contractor. The City shall provide the Contractor written notice of the failure of the City to make an adequate Appropriation for any fiscal year to pay the amounts due under the Contract, or the reduction of any Appropriation to an amount insufficient to permit the City to pay its obligations under the Contract. In the event of none or inadequate appropriation of funds, there will be no penalty nor removal fees charged to the City.

**14. TRAVEL EXPENSES:** All travel, lodging and per diem expenses in connection with the Contract shall be paid by the Contractor, unless otherwise stated in the contract terms. During the term of this contract, the contractor shall bill and the City shall reimburse contractor for all reasonable and approved out of pocket expenses which are incurred in the connection with the performance of duties hereunder. Notwithstanding the foregoing, expenses for the time spent by the contractor in traveling to and from City facilities shall not be reimbursed, unless otherwise negotiated.

**15. FINAL PAYMENT AND CLOSE-OUT:**

A. If a DBE/MBE/WBE Program Plan is agreed to and the Contractor has identified Subcontractors, the Contractor is required to submit a Contract Close-Out MBE/WBE Compliance Report to the Purchasing Manager no later than the 15th calendar day after completion of all work under the contract. Final payment, retainage, or both may be withheld if the Contractor is not in compliance with the requirements as accepted by the City.

B. The making and acceptance of final payment will constitute:

i. a waiver of all claims by the City against the Contractor, except claims (1) which have been previously asserted in writing and not yet settled, (2) arising from defective work appearing after final inspection, (3) arising from failure of the Contractor to comply with the Contract or the terms of any warranty specified herein, (4) arising from the Contractor's continuing obligations under the Contract, including but not limited to indemnity and warranty obligations, or (5) arising under the City's right to audit; and ii. a waiver of all claims by the Contractor against the City other than those previously asserted in writing and not yet settled.

**16. SPECIAL TOOLS & TEST EQUIPMENT:** If the price stated on the Offer includes the cost of any special tooling or special test equipment fabricated or required by the Contractor for the purpose of filling this order, such special tooling equipment and any process sheets related thereto shall become the property of the City and shall be identified by the Contractor as such.

**17. RIGHT TO AUDIT:**

A. The City shall have the right to audit and make copies of the books, records and computations pertaining to the Contract. The Contractor shall retain such books, records, documents and other evidence pertaining to the Contract period and five years thereafter, except if an audit is in progress or audit findings are yet unresolved, in which case records shall be kept until all audit tasks are completed and resolved. These books, records, documents and other evidence shall be available, within ten (10) business days of written request. Further, the Contractor shall also require all Subcontractors, material suppliers, and other payees to retain all books, records, documents and other evidence pertaining to the Contract, and to allow the City similar access to those documents. All books and records will be made available within a 50 mile radius of the City of Denton. The cost of the audit will be borne by the City unless the audit reveals an overpayment of 1% or greater. If an overpayment of 1% or greater occurs, the reasonable cost of the audit, including any travel costs, must be borne by the Contractor which must be payable within five (5) business days of receipt of an invoice.

B. Failure to comply with the provisions of this section shall be a material breach of the Contract and shall constitute, in the City's sole discretion, grounds for termination thereof. Each of the terms "books", "records", "documents" and "other evidence", as used above, shall be construed to include drafts and electronic files, even if such drafts or electronic files are subsequently used to generate or prepare a final printed document.

**18. SUBCONTRACTORS:**

A. If the Contractor identified Subcontractors in a DBE/MBE/WBE agreed to Plan, the Contractor shall comply with all requirements approved by the City. The Contractor shall not initially employ any Subcontractor except as provided in the Contractor's Plan. The Contractor shall not substitute any Subcontractor identified in the Plan, unless the substitute has been accepted by the City in writing. No acceptance by the City of any Subcontractor shall constitute a waiver of any rights or remedies of the City with respect to defective deliverables provided by a Subcontractor. If a Plan has been approved, the Contractor is additionally required to submit a monthly Subcontract

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Awards and Expenditures Report to the Procurement Manager, no later than the tenth calendar day of each month.

B. Work performed for the Contractor by a Subcontractor shall be pursuant to a written contract between the Contractor and Subcontractor. The terms of the subcontract may not conflict with the terms of the

Contract, and shall contain provisions that:

- i. require that all deliverables to be provided by the Subcontractor be provided in strict accordance with the provisions, specifications and terms of the Contract;
- ii. prohibit the Subcontractor from further subcontracting any portion of the Contract without the prior written consent of the City and the Contractor. The City may require, as a condition to such further subcontracting, that the Subcontractor post a payment bond in form, substance and amount acceptable to the City;
- iii. require Subcontractors to submit all invoices and applications for payments, including any claims for additional payments, damages or otherwise, to the Contractor in sufficient time to enable the Contractor to include same with its invoice or application for payment to the City in accordance with the terms of the Contract;
- iv. require that all Subcontractors obtain and maintain, throughout the term of their contract, insurance in the type and amounts specified for the Contractor, with the City being a named insured as its interest shall appear; and
- v. require that the Subcontractor indemnify and hold the City harmless to the same extent as the Contractor is required to indemnify the City.

C. The Contractor shall be fully responsible to the City for all acts and omissions of the Subcontractors just as the Contractor is responsible for the Contractor's own acts and omissions. Nothing in the Contract shall create for the benefit of any such Subcontractor any contractual relationship between the City and any such Subcontractor, nor shall it create any obligation on the part of the City to pay or to see to the payment of any moneys due any such Subcontractor except as may otherwise be required by law.

D. The Contractor shall pay each Subcontractor its appropriate share of payments made to the Contractor not later than ten (10) calendar days after receipt of payment from the City.

#### **19. WARRANTY-PRICE:**

A. The Contractor warrants the prices quoted in the Offer are no higher than the Contractor's current prices on orders by others for like deliverables under similar terms of purchase.

B. The Contractor certifies that the prices in the Offer have been arrived at independently without consultation, communication, or agreement for the purpose of restricting competition, as to any matter relating to such fees with any other firm or with any competitor.

C. In addition to any other remedy available, the City may deduct from any amounts owed to the Contractor, or otherwise recover, any amounts paid for items in excess of the Contractor's current prices on orders by others for like deliverables under similar terms of purchase.

**20. WARRANTY – TITLE:** The Contractor warrants that it has good and indefeasible title to all deliverables furnished under the Contract, and that the deliverables are free and clear of all liens, claims, security interests and encumbrances. The Contractor shall indemnify and hold the City harmless from and against all adverse title claims to the deliverables.

**21. WARRANTY – DELIVERABLES:** The Contractor warrants and represents that all deliverables sold the City under the Contract shall be free from defects in design, workmanship or manufacture, and conform in all material respects to the specifications, drawings, and descriptions

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in the Solicitation, to any samples furnished by the Contractor, to the terms, covenants and conditions of the Contract, and to all applicable State, Federal or local laws, rules, and regulations, and industry codes and standards. Unless otherwise stated in the Solicitation, the deliverables shall be new or recycled merchandise, and not used or reconditioned.

A. Recycled deliverables shall be clearly identified as such.

B. The Contractor may not limit, exclude or disclaim the foregoing warranty or any warranty implied by law; and any attempt to do so shall be without force or effect.

C. Unless otherwise specified in the Contract, the warranty period shall be at least one year from the date of acceptance of the deliverables or from the date of acceptance of any replacement deliverables. If during the warranty period, one or more of the above warranties are breached, the Contractor shall promptly upon receipt of demand either repair the non-conforming deliverables, or replace the non-conforming deliverables with fully conforming deliverables, at the City's option and at no additional cost to the City. All costs incidental to such repair or replacement, including but not limited to, any packaging and shipping costs shall be borne exclusively by the Contractor. The City shall endeavor to give the Contractor written notice of the breach of warranty within thirty (30) calendar days of discovery of the breach of warranty, but failure to give timely notice shall not impair the City's rights under this section.

D. If the Contractor is unable or unwilling to repair or replace defective or non-conforming deliverables as required by the City, then in addition to any other available remedy, the City may reduce the quantity of deliverables it may be required to purchase under the Contract from the Contractor, and purchase conforming deliverables from other sources. In such event, the Contractor shall pay to the City upon demand the increased cost, if any, incurred by the City to procure such deliverables from another source.

E. If the Contractor is not the manufacturer, and the deliverables are covered by a separate manufacturer's warranty, the Contractor shall transfer and assign such manufacturer's warranty to the City. If for any reason the manufacturer's warranty cannot be fully transferred to the City, the Contractor shall assist and cooperate with the City to the fullest extent to enforce such manufacturer's warranty for the benefit of the City.

**22. WARRANTY – SERVICES:** The Contractor warrants and represents that all services to be provided the City under the Contract will be fully and timely performed in a good and workmanlike manner in accordance with generally accepted industry standards and practices, the terms, conditions, and covenants of the Contract, and all applicable Federal, State and local laws, rules or regulations.

A. The Contractor may not limit, exclude or disclaim the foregoing warranty or any warranty implied by law, and any attempt to do so shall be without force or effect.

B. Unless otherwise specified in the Contract, the warranty period shall be at least one year from the Acceptance Date. If during the warranty period, one or more of the above warranties are breached, the Contractor shall promptly upon receipt of demand perform the services again in accordance with above standard at no additional cost to the City. All costs incidental to such additional performance shall be borne by the Contractor. The City shall endeavor to give the Contractor written notice of the breach of warranty within thirty (30) calendar days of discovery of the breach warranty, but failure to give timely notice shall not impair the City's rights under this section.

C. If the Contractor is unable or unwilling to perform its services in accordance with the above standard as required by the City, then in addition to any other available remedy, the City may reduce the amount of services it may be required to purchase under the Contract from the Contractor, and purchase conforming services from other sources. In such event, the Contractor

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shall pay to the City upon demand the increased cost, if any, incurred by the City to procure such services from another source.

**23. ACCEPTANCE OF INCOMPLETE OR NON-CONFORMING DELIVERABLES:** If, instead of requiring immediate correction or removal and replacement of defective or non-conforming deliverables, the City prefers to accept it, the City may do so. The Contractor shall pay all claims, costs, losses and damages attributable to the City's evaluation of and determination to accept such defective or non-conforming deliverables. If any such acceptance occurs prior to final payment, the City may deduct such amounts as are necessary to compensate the City for the diminished value of the defective or non-conforming deliverables. If the acceptance occurs after final payment, such amount will be refunded to the City by the Contractor.

**24. RIGHT TO ASSURANCE:** Whenever one party to the Contract in good faith has reason to question the other party's intent to perform, demand may be made to the other party for written assurance of the intent to perform. In the event that no assurance is given within the time specified after demand is made, the demanding party may treat this failure as an anticipatory repudiation of the Contract.

**25. STOP WORK NOTICE:** The City may issue an immediate Stop Work Notice in the event the Contractor is observed performing in a manner that is in violation of Federal, State, or local guidelines, or in a manner that is determined by the City to be unsafe to either life or property. Upon notification, the Contractor will cease all work until notified by the City that the violation or unsafe condition has been corrected. The Contractor shall be liable for all costs incurred by the City as a result of the issuance of such Stop Work Notice.

**26. DEFAULT:** The Contractor shall be in default under the Contract if the Contractor (a) fails to fully, timely and faithfully perform any of its material obligations under the Contract, (b) fails to provide adequate assurance of performance under Paragraph 24, (c) becomes insolvent or seeks relief under the bankruptcy laws of the United States or (d) makes a material misrepresentation in Contractor's Offer, or in any report or deliverable required to be submitted by the Contractor to the City.

**27. TERMINATION FOR CAUSE:** In the event of a default by the Contractor, the City shall have the right to terminate the Contract for cause, by written notice effective ten (10) calendar days, unless otherwise specified, after the date of such notice, unless the Contractor, within such ten (10) day period, cures such default, or provides evidence sufficient to prove to the City's reasonable satisfaction that such default does not, in fact, exist. In addition to any other remedy available under law or in equity, the City shall be entitled to recover all actual damages, costs, losses and expenses, incurred by the City as a result of the Contractor's default, including, without limitation, cost of cover, reasonable attorneys' fees, court costs, and prejudgment and post-judgment interest at the maximum lawful rate. Additionally, in the event of a default by the Contractor, the City may remove the Contractor from the City's vendor list for three (3) years and any Offer submitted by the Contractor may be disqualified for up to three (3) years. All rights and remedies under the Contract are cumulative and are not exclusive of any other right or remedy provided by law.

**28. TERMINATION WITHOUT CAUSE:** The City shall have the right to terminate the Contract, in whole or in part, without cause any time upon thirty (30) calendar days' prior written notice. Upon receipt of a notice of termination, the Contractor shall promptly cease all further work pursuant to the Contract, with such exceptions, if any, specified in the notice of termination. The Contract # 8181

City shall pay the Contractor, to the extent of funds Appropriated or otherwise legally available for such purposes, for all goods delivered and services performed and obligations incurred prior to the date of termination in accordance with the terms hereof.

**29. FRAUD:** Fraudulent statements by the Contractor on any Offer or in any report or deliverable required to be submitted by the Contractor to the City shall be grounds for the termination of the Contract for cause by the City and may result in legal action.

**30. DELAYS:**

A. The City may delay scheduled delivery or other due dates by written notice to the Contractor if the City deems it is in its best interest. If such delay causes an increase in the cost of the work under the Contract, the City and the Contractor shall negotiate an equitable adjustment for costs incurred by the Contractor in the Contract price and execute an amendment to the Contract. The Contractor must assert its right to an adjustment within thirty (30) calendar days from the date of receipt of the notice of delay. Failure to agree on any adjusted price shall be handled under the Dispute Resolution process specified in paragraph 49. However, nothing in this provision shall excuse the Contractor from delaying the delivery as notified.

B. Neither party shall be liable for any default or delay in the performance of its obligations under this Contract if, while and to the extent such default or delay is caused by acts of God, fire, riots, civil commotion, labor disruptions, sabotage, sovereign conduct, or any other cause beyond the reasonable control of such Party. In the event of default or delay in contract performance due to any of the foregoing causes, then the time for completion of the services will be extended; provided, however, in such an event, a conference will be held within three (3) business days to establish a mutually agreeable period of time reasonably necessary to overcome the effect of such failure to perform.

**31. INDEMNITY:**

**A. Definitions:**

i. "Indemnified Claims" shall include any and all claims, demands, suits, causes of action, judgments and liability of every character, type or description, including all reasonable costs and expenses of litigation, mediation or other alternate dispute resolution mechanism, including attorney and other professional fees for: (1) damage to or loss of the property of any person (including, but not limited to the City, the Contractor, their respective agents, officers, employees and subcontractors; the officers, agents, and employees of such subcontractors; and third parties); and/or (2) death, bodily injury, illness, disease, worker's compensation, loss of services, or loss of income or wages to any person (including but not limited to the agents, officers and employees of the City, the Contractor, the Contractor's subcontractors, and third parties), ii. "Fault" shall include the sale of defective or non-conforming deliverables, negligence, willful misconduct or a breach of any legally imposed strict liability standard.

**B. THE CONTRACTOR SHALL DEFEND (AT THE OPTION OF THE CITY), INDEMNIFY, AND HOLD THE CITY, ITS SUCCESSORS, ASSIGNS, OFFICERS, EMPLOYEES AND ELECTED OFFICIALS HARMLESS FROM AND AGAINST ALL INDEMNIFIED CLAIMS DIRECTLY CAUSED BY THE FAULT OF THE CONTRACTOR, OR THE CONTRACTOR'S AGENTS, EMPLOYEES OR SUBCONTRACTORS, IN THE PERFORMANCE OF THE CONTRACTOR'S OBLIGATIONS UNDER THE CONTRACT. NOTHING HEREIN SHALL BE DEEMED**

**TO LIMIT THE RIGHTS OF THE CITY OR THE CONTRACTOR (INCLUDING, BUT NOT LIMITED TO, THE RIGHT TO SEEK CONTRIBUTION) AGAINST ANY THIRD PARTY WHO MAY BE LIABLE FOR AN INDEMNIFIED CLAIM.**

Notwithstanding anything herein to the contrary, neither party hereto will be liable to the other for any consequential, indirect, incidental, or special loss or damage suffered by the other party or any third party, or for any punitive damages, even if advised of the possibility thereof. Contractor's cumulative liability hereunder, whether in contract, tort, or otherwise, will in no event exceed the greater of (i) the aggregate consideration paid by the City to Contractor for the portion of the Services that gave rise to the liability, or (ii) \$1 million; provided, however, that this clause shall not limit Contractor's indemnification obligations hereunder.

**32. INSURANCE:** The following insurance requirements are applicable, in addition to the specific insurance requirements detailed in **Appendix A** for services only. The successful firm shall procure and maintain insurance of the types and in the minimum amounts acceptable to the City of Denton. The insurance shall be written by a company licensed to do business in the State of Texas and satisfactory to the City of Denton.

**A. General Requirements:**

- i. The Contractor shall at a minimum carry insurance in the types and amounts indicated and agreed to, as submitted to the City and approved by the City within the procurement process, for the duration of the Contract, including extension options and hold over periods, and during any warranty period.
- ii. The Contractor shall provide Certificates of Insurance with the coverage's and endorsements required to the City as verification of coverage prior to contract execution and within fourteen (14) calendar days after written request from the City. Failure to provide the required Certificate of Insurance may subject the Offer to disqualification from consideration for award. The Contractor must also forward a Certificate of Insurance to the City whenever a previously identified policy period has expired, or an extension option or hold over period is exercised, as verification of continuing coverage.
- iii. The Contractor shall not commence work until the required insurance is obtained and until such insurance has been reviewed by the City. Approval of insurance by the City shall not relieve or decrease the liability of the Contractor hereunder and shall not be construed to be a limitation of liability on the part of the Contractor.
- iv. The Contractor must submit certificates of insurance to the City for all subcontractors prior to the subcontractors commencing work on the project.
- v. The Contractor's and all subcontractors' insurance coverage shall be written by companies licensed to do business in the State of Texas at the time the policies are issued and shall be written by companies with A.M. Best ratings of **A- VII or better**. The City will accept workers' compensation coverage written by the Texas Workers' Compensation Insurance Fund.
- vi. All endorsements naming the City as additional insured, waivers, and notices of cancellation endorsements as well as the Certificate of Insurance shall contain the solicitation number and the following information:  
City of Denton  
Materials Management Department  
901B Texas Street  
Denton, Texas 76209
- vii. The "other" insurance clause shall not apply to the City where the City is an additional

insured shown on any policy. It is intended that policies required in the Contract, covering both the City and the Contractor, shall be considered primary coverage as applicable.

viii. If insurance policies are not written for amounts agreed to with the City, the Contractor shall carry Umbrella or Excess Liability Insurance for any differences in amounts specified. If Excess Liability Insurance is provided, it shall follow the form of the primary coverage.

ix. The City shall be entitled, upon request, at an agreed upon location, and without expense, to review certified copies of policies and endorsements thereto and may make any reasonable requests for deletion or revision or modification of particular policy terms, conditions, limitations, or exclusions except where policy provisions are established by law or regulations binding upon either of the parties hereto or the underwriter on any such policies.

x. The City reserves the right to review the insurance requirements set forth during the effective period of the Contract and to make reasonable adjustments to insurance coverage, limits, and exclusions when deemed necessary and prudent by the City based upon changes in statutory law, court decisions, the claims history of the industry or financial condition of the insurance company as well as the Contractor.

xi. The Contractor shall not cause any insurance to be canceled nor permit any insurance to lapse during the term of the Contract or as required in the Contract.

xii. The Contractor shall be responsible for premiums, deductibles and self-insured retentions, if any, stated in policies. All deductibles or self-insured retentions shall be disclosed on the Certificate of Insurance.

xiii. The Contractor shall endeavor to provide the City thirty (30) calendar days' written notice of erosion of the aggregate limits below occurrence limits for all applicable coverage's indicated within the Contract.

xiv. The insurance coverage's specified in within the solicitation and requirements are required minimums and are not intended to limit the responsibility or liability of the Contractor.

B. Specific Coverage Requirements: Specific insurance requirements are contained in the solicitation instrument.

**33. CLAIMS:** If any claim, demand, suit, or other action is asserted against the Contractor which arises under or concerns the Contract, or which could have a material adverse effect on the Contractor's ability to perform thereunder, the Contractor shall give written notice thereof to the City within ten (10) calendar days after receipt of notice by the Contractor. Such notice to the City shall state the date of notification of any such claim, demand, suit, or other action; the names and addresses of the claimant(s); the basis thereof; and the name of each person against whom such claim is being asserted. Such notice shall be delivered personally or by mail and shall be sent to the City and to the Denton City Attorney. Personal delivery to the City Attorney shall be to City Hall, 215 East McKinney Street, Denton, Texas 76201.

**34. NOTICES:** Unless otherwise specified, all notices, requests, or other communications required or appropriate to be given under the Contract shall be in writing and shall be deemed delivered three (3) business days after postmarked if sent by U.S. Postal Service Certified or Registered Mail, Return Receipt Requested. Notices delivered by other means shall be deemed delivered upon receipt by the addressee. Routine communications may be made by first class mail, telefax, or other commercially accepted means. Notices to the Contractor shall be sent to the address specified in the Contractor's Offer, or at such other address as a party may notify the other in writing. Notices to the City shall be addressed to the City at 901B Texas Street, Denton, Texas 76209 and marked

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to the attention of the Purchasing Manager.

**35. RIGHTS TO BID, PROPOSAL AND CONTRACTUAL MATERIAL:** All material submitted by the Contractor to the City shall become property of the City upon receipt. Any portions of such material claimed by the Contractor to be proprietary must be clearly marked as such. Determination of the public nature of the material is subject to the Texas Public Information Act, Chapter 552, and Texas Government Code.

**36. NO WARRANTY BY CITY AGAINST INFRINGEMENTS:** The Contractor represents and warrants to the City that: (i) the Contractor shall provide the City good and indefeasible title to the deliverables and (ii) the deliverables supplied by the Contractor in accordance with the specifications in the Contract will not infringe, directly or contributorily, any patent, trademark, copyright, trade secret, or any other intellectual property right of any kind of any third party; that no claims have been made by any person or entity with respect to the ownership or operation of the deliverables and the Contractor does not know of any valid basis for any such claims. The Contractor shall, at its sole expense, defend, indemnify, and hold the City harmless from and against all liability, damages, and costs (including court costs and reasonable fees of attorneys and other professionals) arising out of or resulting from: (i) any claim that the City's exercise anywhere in the world of the rights associated with the City's ownership, and if applicable, license rights, and its use of the deliverables infringes the intellectual property rights of any third party; or (ii) the Contractor's breach of any of Contractor's representations or warranties stated in this Contract. In the event of any such claim, the City shall have the right to monitor such claim or at its option engage its own separate counsel to act as co-counsel on the City's behalf. Further, Contractor agrees that the City's specifications regarding the deliverables shall in no way diminish Contractor's warranties or obligations under this paragraph and the City makes no warranty that the production, development, or delivery of such deliverables will not impact such warranties of Contractor.

**37. CONFIDENTIALITY:** In order to provide the deliverables to the City, Contractor may require access to certain of the City's and/or its licensors' confidential information (including inventions, employee information, trade secrets, confidential know-how, confidential business information, and other information which the City or its licensors consider confidential) (collectively, "Confidential Information"). Contractor acknowledges and agrees that the Confidential Information is the valuable property of the City and/or its licensors and any unauthorized use, disclosure, dissemination, or other release of the Confidential Information will substantially injure the City and/or its licensors. The Contractor (including its employees, subcontractors, agents, or representatives) agrees that it will maintain the Confidential Information in strict confidence and shall not disclose, disseminate, copy, divulge, recreate, or otherwise use the Confidential Information without the prior written consent of the City or in a manner not expressly permitted under this Agreement, unless the Confidential Information is required to be disclosed by law or an order of any court or other governmental authority with proper jurisdiction, provided the Contractor promptly notifies the City before disclosing such information so as to permit the City reasonable time to seek an appropriate protective order. The Contractor agrees to use protective measures no less stringent than the Contractor uses within its own business to protect its own most valuable information, which protective measures shall under all circumstances be at least reasonable measures to ensure the continued confidentiality of the Confidential Information.

**38. OWNERSHIP AND USE OF DELIVERABLES:** The City shall own all rights, titles, and

interests throughout the world in and to the deliverables.

A. Reserved.

B. Copyrights. As to any deliverables containing copyrightable subject matter, the Contractor agrees that upon their creation, such deliverables shall be considered as work made-for-hire by the Contractor for the City and the City shall own all copyrights in and to such deliverables, provided however, that nothing in this Paragraph 38 shall negate the City's sole or joint ownership of any such deliverables arising by virtue of the City's sole or joint authorship of such deliverables. Should by operation of law, such deliverables not be considered works made-for-hire, the Contractor hereby assigns to the City (and agrees to cause each of its employees providing services to the City hereunder to execute, acknowledge, and deliver an assignment to the City of) all worldwide right, title, and interest in and to such deliverables. With respect to such work made-for-hire, the Contractor agrees to execute, acknowledge, and deliver and cause each of its employees providing services to the City hereunder to execute, acknowledge, and deliver a work-made-for-hire agreement, in a form to be reasonably approved by the City, to the City upon delivery of such deliverables to the City or at such other time as the City may request.

C. Additional Assignments. The Contractor further agrees to, and if applicable, cause each of its employees to, execute, acknowledge, and deliver all applications, specifications, oaths, assignments, and all other instruments which the City might reasonably deem necessary in order to apply for and obtain copyright protection, mask work registration, trademark registration and/or protection, or any similar rights in any and all countries and in order to assign and convey to the City, its successors, assigns and nominees, the sole and exclusive right, title, and interest in and to the deliverables. The Contractor's obligations to execute, acknowledge, and deliver (or cause to be executed, acknowledged, and delivered) instruments or papers such as those described in this Paragraph 38 a., b., and c. shall continue after the termination of this Contract with respect to such deliverables. In the event the City should not seek to obtain copyright protection, mask work registration or patent protection for any of the deliverables, but should desire to keep the same secret, the Contractor agrees to treat the same as Confidential Information under the terms of Paragraph 37 above.

**39. PUBLICATIONS:** All published material and written reports submitted under the Contract must be originally developed material unless otherwise specifically provided in the Contract. When material not originally developed is included in a report in any form, the source shall be identified.

**40. ADVERTISING:** The Contractor shall not advertise or publish, without the City's prior consent, the fact that the City has entered into the Contract, except to the extent required by law.

**41. NO CONTINGENT FEES:** The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure the Contract upon any agreement or understanding for commission, percentage, brokerage, or contingent fee, excepting bona fide employees of bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty, the City shall have the right, in addition to any other remedy available, to cancel the Contract without liability and to deduct from any amounts owed to the Contractor, or otherwise recover, the full amount of such commission, percentage, brokerage or contingent fee.

**42. GRATUITIES:** The City may, by written notice to the Contractor, cancel the Contract without liability if it is determined by the City that gratuities were offered or given by the Contractor or

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any agent or representative of the Contractor to any officer or employee of the City of Denton with a view toward securing the Contract or securing favorable treatment with respect to the awarding or amending or the making of any determinations with respect to the performing of such contract. In the event the Contract is canceled by the City pursuant to this provision, the City shall be entitled, in addition to any other rights and remedies, to recover or withhold the amount of the cost incurred by the Contractor in providing such gratuities.

**43. PROHIBITION AGAINST PERSONAL INTEREST IN CONTRACTS:** No officer, employee, independent consultant, or elected official of the City who is involved in the development, evaluation, or decision-making process of the performance of any solicitation shall have a financial interest, direct or indirect, in the Contract resulting from that solicitation as defined in the City's Ethic Ordinance 18-757 and in the City Charter chapter 2 article XI(Ethics). Any willful violation of this section shall constitute impropriety in office, and any officer or employee guilty thereof shall be subject to disciplinary action up to and including dismissal. Any violation of this provision, with the knowledge, expressed or implied, of the Contractor shall render the Contract voidable by the City. The Contractor shall complete and submit the City's Conflict of Interest Questionnaire.

**44. INDEPENDENT CONTRACTOR:** The Contract shall not be construed as creating an employer/employee relationship, a partnership, or a joint venture. The Contractor's services shall be those of an independent contractor. The Contractor agrees and understands that the Contract does not grant any rights or privileges established for employees of the City of Denton, Texas for the purposes of income tax, withholding, social security taxes, vacation or sick leave benefits, worker's compensation, or any other City employee benefit. The City shall not have supervision and control of the Contractor or any employee of the Contractor, and it is expressly understood that Contractor shall perform the services hereunder according to the attached specifications at the general direction of the City Manager of the City of Denton, Texas, or their designee under this agreement. The contractor is expressly free to advertise and perform services for other parties while performing services for the City.

**45. ASSIGNMENT-DELEGATION:** The Contract shall be binding upon and ensure to the benefit of the City and the Contractor and their respective successors and assigns, provided however, that no right or interest in the Contract shall be assigned and no obligation shall be delegated by the Contractor without the prior written consent of the City. Any attempted assignment or delegation by the Contractor shall be void unless made in conformity with this paragraph. The Contract is not intended to confer rights or benefits on any person, firm or entity not a party hereto; it being the intention of the parties that there are no third party beneficiaries to the Contract.

The Vendor shall notify the City's Purchasing Manager, in writing, of a company name, ownership, or address change for the purpose of maintaining updated City records. The president of the company or authorized official must sign the letter. A letter indicating changes in a company name or ownership must be accompanied with supporting legal documentation such as an updated W-9, documents filed with the state indicating such change, copy of the board of director's resolution approving the action, or an executed merger or acquisition agreement. Failure to do so may adversely impact future invoice payments.

**46. WAIVER:** No claim or right arising out of a breach of the Contract can be discharged in whole Contract # 8181



or in part by a waiver or renunciation of the claim or right unless the waiver or renunciation is supported by consideration and is in writing signed by the aggrieved party. No waiver by either the Contractor or the City of any one or more events of default by the other party shall operate as, or be construed to be, a permanent waiver of any rights or obligations under the Contract, or an express or implied acceptance of any other existing or future default or defaults, whether of a similar or different character.

**47. MODIFICATIONS:** The Contract can be modified or amended only by a writing signed by both parties. No pre-printed or similar terms on any the Contractor invoice, order or other document shall have any force or effect to change the terms, covenants, and conditions of the Contract.

**48. INTERPRETATION:** The Contract is intended by the parties as a final, complete and exclusive statement of the terms of their agreement. No course of prior dealing between the parties or course of performance or usage of the trade shall be relevant to supplement or explain any term used in the Contract. Although the Contract may have been substantially drafted by one party, it is the intent of the parties that all provisions be construed in a manner to be fair to both parties, reading no provisions more strictly against one party or the other. Whenever a term defined by the Uniform Commercial Code, as enacted by the State of Texas, is used in the Contract, the UCC definition shall control, unless otherwise defined in the Contract.

**49. DISPUTE RESOLUTION:**

A. If a dispute arises out of or relates to the Contract, or the breach thereof, the parties agree to negotiate prior to prosecuting a suit for damages. However, this section does not prohibit the filing of a lawsuit to toll the running of a statute of limitations or to seek injunctive relief. Either party may make a written request for a meeting between representatives of each party within fourteen (14) calendar days after receipt of the request or such later period as agreed by the parties. Each party shall include, at a minimum, one (1) senior level individual with decision-making authority regarding the dispute. The purpose of this and any subsequent meeting is to attempt in good faith to negotiate a resolution of the dispute. If, within thirty (30) calendar days after such meeting, the parties have not succeeded in negotiating a resolution of the dispute, they will proceed directly to mediation as described below. Negotiation may be waived by a written agreement signed by both parties, in which event the parties may proceed directly to mediation as described below.

B. If the efforts to resolve the dispute through negotiation fail, or the parties waive the negotiation process, the parties may select, within thirty (30) calendar days, a mediator trained in mediation skills to assist with resolution of the dispute. Should they choose this option; the City and the Contractor agree to act in good faith in the selection of the mediator and to give consideration to qualified individuals nominated to act as mediator. Nothing in the Contract prevents the parties from relying on the skills of a person who is trained in the subject matter of the dispute or a contract interpretation expert. If the parties fail to agree on a mediator within thirty (30) calendar days of initiation of the mediation process, the mediator shall be selected by the Denton County Alternative Dispute Resolution Program (DCAP). The parties agree to participate in mediation in good faith for up to thirty (30) calendar days from the date of the first mediation session. The City and the Contractor will share the mediator's fees equally and the parties will bear their own costs of participation such as fees for any consultants or attorneys they may utilize to represent them or otherwise assist them in the mediation.

**50. JURISDICTION AND VENUE:** The Contract is made under and shall be governed by the Contract # 8181

laws of the State of Texas, including, when applicable, the Uniform Commercial Code as adopted in Texas, V.T.C.A., Bus. & Comm. Code, Chapter 1, excluding any rule or principle that would refer to and apply the substantive law of another state or jurisdiction. All issues arising from this Contract shall be resolved in the courts of Denton County, Texas and the parties agree to submit to the exclusive personal jurisdiction of such courts. The foregoing, however, shall not be construed or interpreted to limit or restrict the right or ability of the City to seek and secure injunctive relief from any competent authority as contemplated herein.

**51. INVALIDITY:** The invalidity, illegality, or unenforceability of any provision of the Contract shall in no way affect the validity or enforceability of any other portion or provision of the Contract. Any void provision shall be deemed severed from the Contract and the balance of the Contract shall be construed and enforced as if the Contract did not contain the particular portion or provision held to be void. The parties further agree to reform the Contract to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken provision. The provisions of this section shall not prevent this entire Contract from being void should a provision which is the essence of the Contract be determined to be void.

**52. HOLIDAYS:** The following holidays are observed by the City:

New Year's Day (observed)
Martin Luther King, Jr. Day
Memorial Day
Juneteenth
Independence Day
Labor Day
Veterans Day
Thanksgiving
Friday After Thanksgiving
Christmas Eve (observed)
Christmas Day (observed)

If a Legal Holiday falls on Saturday, it will be observed on the preceding Friday. If a Legal Holiday falls on Sunday, it will be observed on the following Monday. Normal hours of operation shall be between 8:00 am and 4:00 pm, Monday through Friday, excluding City of Denton Holidays. Any scheduled deliveries or work performance not within the normal hours of operation **must be approved** by the City Manager of Denton, Texas or their authorized designee.

**53. SURVIVABILITY OF OBLIGATIONS:** All provisions of the Contract that impose continuing obligations on the parties, including but not limited to the warranty, indemnity, and confidentiality obligations of the parties, shall survive the expiration or termination of the Contract.

**54. NON-SUSPENSION OR DEBARMENT CERTIFICATION:**

The City of Denton is prohibited from contracting with or making prime or sub-awards to parties that are suspended or debarred or whose principals are suspended or debarred from Federal, State, or City of Denton Contracts. By accepting a Contract with the City, the Vendor certifies that its firm and its principals are not currently suspended or debarred from doing business with the Federal Government, as indicated by the General Services Administration List of Parties Excluded from Federal Procurement and Non-Procurement Programs, the State of Texas, or the City of Denton.

**55. EQUAL OPPORTUNITY**

**A. Equal Employment Opportunity:** No Offeror, or Offeror's agent, shall engage in any discriminatory employment practice. No person shall, on the grounds of race, sex, sexual orientation, age, disability, creed, color, genetic testing, or national origin, be refused the benefits of, or be otherwise subjected to discrimination under any activities resulting from this RFQ.

**B. Americans with Disabilities Act (ADA) Compliance:** No Offeror, or Offeror's agent, shall engage in any discriminatory employment practice against individuals with disabilities as defined in the ADA.

**56. BUY AMERICAN ACT-SUPPLIES (Applicable to certain federally funded requirements)**

The following federally funded requirements are applicable. A. Definitions. As used in this paragraph –

i. "Component" means an article, material, or supply incorporated directly into an end product.

ii. "Cost of components" means -

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the end product (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or  
(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the end product.

iii. "Domestic end product" means-

(1) An unmanufactured end product mined or produced in the United States; or

(2) An end product manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind as those that the agency determines are not mined, produced, or manufactured in sufficient and reasonably available commercial quantities of a satisfactory quality are treated as domestic. Scrap generated, collected, and prepared for processing in the United States is considered domestic.

iv. "End product" means those articles, materials, and supplies to be acquired under the contract for public use.

v. "Foreign end product" means an end product other than a domestic end product.

vi. "United States" means the 50 States, the District of Columbia, and outlying areas.

B. The Buy American Act (41 U.S.C. 10a - 10d) provides a preference for domestic end products for supplies acquired for use in the United States.

C. The City does not maintain a list of foreign articles that will be treated as domestic for this Contract; but will consider for approval foreign articles as domestic for this product if the articles are on a list approved by another Governmental Agency. The Offeror shall submit documentation with their Offer demonstrating that the article is on an approved Governmental list.

D. The Contractor shall deliver only domestic end products except to the extent that it specified delivery of foreign end products in the provision of the Solicitation entitled "Buy American Act Certificate".

**57. RIGHT TO INFORMATION:** The City of Denton reserves the right to use any and all information presented in any response to this contract, whether amended or not, except as prohibited by law. Selection of rejection of the submittal does not affect this right.

**58. LICENSE FEES OR TAXES:** Provided the solicitation requires an awarded contractor or Contract # 8181

supplier to be licensed by the State of Texas, any and all fees and taxes are the responsibility of the respondent.

**59. PREVAILING WAGE RATES:** The contractor shall comply with prevailing wage rates as defined by the United States Department of Labor Davis-Bacon Wage Determination at <http://www.dol.gov/whd/contracts/dbra.htm> and at the Wage Determinations website [www.wdol.gov](http://www.wdol.gov) for Denton County, Texas (WD-2509).

**60. COMPLIANCE WITH ALL STATE, FEDERAL, AND LOCAL LAWS:** The contractor or supplier shall comply with all State, Federal, and Local laws and requirements. The Respondent must comply with all applicable laws at all times, including, without limitation, the following: (i) §36.02 of the Texas Penal Code, which prohibits bribery; (ii) §36.09 of the Texas Penal Code, which prohibits the offering or conferring of benefits to public servants. The Respondent shall give all notices and comply with all laws and regulations applicable to furnishing and performance of the Contract.

**61. FEDERAL, STATE, AND LOCAL REQUIREMENTS:** Respondent shall demonstrate on-site compliance with the Federal Tax Reform Act of 1986, Section 1706, amending Section 530 of the Revenue Act of 1978, dealing with issuance of Form W-2's to common law employees. Respondent is responsible for both federal and State unemployment insurance coverage and standard Workers' Compensation insurance coverage. Respondent shall ensure compliance with all federal and State tax laws and withholding requirements. The City of Denton shall not be liable to Respondent or its employees for any Unemployment or Workers' Compensation coverage, or federal or State withholding requirements. Contractor shall indemnify the City of Denton and shall pay all costs, penalties, or losses resulting from Respondent's omission or breach of this Section.

**62. DRUG FREE WORKPLACE:** The contractor shall comply with the applicable provisions of the Drug-Free Work Place Act of 1988 (Public Law 100-690, Title V, Subtitle D; 41 U.S.C. 701 ET SEQ.) and maintain a drug-free work environment; and the final rule, government-wide requirements for drug-free work place (grants), issued by the Office of Management and Budget and the Department of Defense (32 CFR Part 280, Subpart F) to implement the provisions of the Drug-Free Work Place Act of 1988 is incorporated by reference and the contractor shall comply with the relevant provisions thereof, including any amendments to the final rule that may hereafter be issued.

**63. RESPONDENT LIABILITY FOR DAMAGE TO GOVERNMENT PROPERTY:** The Respondent shall be liable for all damages to government-owned, leased, or occupied property and equipment caused by the Respondent and its employees, agents, subcontractors, and suppliers, including any delivery or cartage company, in connection with any performance pursuant to the Contract. The Respondent shall notify the City of Denton Procurement Manager in writing of any such damage within one (1) calendar day.

**64. FORCE MAJEURE:** The City of Denton, any Customer, and the Respondent shall not be responsible for performance under the Contract should it be prevented from performance by an act of war, order of legal authority, act of God, or other unavoidable cause not attributable to the fault or negligence of the City of Denton. In the event of an occurrence under this Section, the Respondent will be excused from any further performance or observance of the requirements so affected for as long as such circumstances prevail and the Respondent continues to use Contract # 8181

commercially reasonable efforts to recommence performance or observance whenever and to whatever extent possible without delay. The Respondent shall immediately notify the City of Denton Procurement Manager by telephone (to be confirmed in writing within five (5) calendar days of the inception of such occurrence) and describe at a reasonable level of detail the circumstances causing the non-performance or delay in performance.

**65. NON-WAIVER OF RIGHTS:** Failure of a Party to require performance by another Party under the Contract will not affect the right of such Party to require performance in the future. No delay, failure, or waiver of either Party's exercise or partial exercise of any right or remedy under the Contract shall operate to limit, impair, preclude, cancel, waive or otherwise affect such right or remedy. A waiver by a Party of any breach of any term of the Contract will not be construed as a waiver of any continuing or succeeding breach.

**66. NO WAIVER OF SOVEREIGN IMMUNITY:** The Parties expressly agree that no provision of the Contract is in any way intended to constitute a waiver by the City of Denton of any immunities from suit or from liability that the City of Denton may have by operation of law.

**67. RECORDS RETENTION:** The Respondent shall retain all financial records, supporting documents, statistical records, and any other records or books relating to the performances called for in the Contract. The Respondent shall retain all such records for a period of four (4) years after the expiration of the Contract, or until the CPA or State Auditor's Office is satisfied that all audit and litigation matters are resolved, whichever period is longer. The Respondent shall grant access to all books, records and documents pertinent to the Contract to the CPA, the State Auditor of Texas, and any federal governmental entity that has authority to review records due to federal funds being spent under the Contract.

**Should a conflict arise between any of the contract documents, it shall be resolved with the following order of precedence (if applicable). In any event, the final negotiated contract shall take precedence over any and all contract documents to the extent of such conflict.**

- 1. Final negotiated contract**
- 2. RFP/Bid documents**
- 3. City's standard terms and conditions**
- 4. Purchase order**
- 5. Supplier terms and conditions**

## Exhibit D INSURANCE REQUIREMENTS AND WORKERS' COMPENSATION REQUIREMENTS

*Upon contract execution, all insurance requirements shall become contractual obligations, which the successful contractor shall have a duty to maintain throughout the course of this contract.*

### STANDARD PROVISIONS:

***Without limiting any of the other obligations or liabilities of the Contractor, the Contractor shall provide and maintain until the contracted work has been completed and accepted by the City of Denton, Owner, the minimum insurance coverage as indicated hereinafter.***

***Contractor shall file with the Purchasing Department satisfactory certificates of insurance including any applicable addendum or endorsements, containing the contract number and title of the project. Contractor may, upon written request to the Purchasing Department, ask for clarification of any insurance requirements at any time; however, Contractor shall not commence any work or deliver any material until he or she receives notification that the contract has been accepted, approved, and signed by the City of Denton.***

***All insurance policies proposed or obtained in satisfaction of these requirements shall comply with the following general specifications, and shall be maintained in compliance with these general specifications throughout the duration of the Contract, or longer, if so noted:***

- Each policy shall be issued by a company authorized to do business in the State of Texas with an A.M. Best Company rating of at least **A or better**.
- Any deductibles or self-insured retentions shall be declared in the proposal. If requested by the City, the insurer shall reduce or eliminate such deductibles or self-insured retentions with respect to the City, its officials, agents, employees and volunteers; or, the contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.
- Liability policies shall be endorsed to provide the following:
  - Name as Additional Insured the City of Denton, its Officials, Agents, Employees and volunteers.
  - That such insurance is primary to any other insurance available to the Additional Insured with respect to claims covered under the policy and that this insurance applies separately to each insured against whom claim is made or suit is brought. The inclusion of more than one insured shall not operate to increase the insurer's limit of liability.
  - Provide a Waiver of Subrogation in favor of the City of Denton, its officials, agents, employees, and volunteers.
- ***Cancellation: City requires 30 day written notice should any of the policies described on the certificate be cancelled or materially changed before the expiration date.***

- Should any of the required insurance be provided under a claims made form, Contractor shall maintain such coverage continuously throughout the term of this contract and, without lapse, for a period of three years beyond the contract expiration, such that occurrences arising during the contract term which give rise to claims made after expiration of the contract shall be covered.
- Should any of the required insurance be provided under a form of coverage that includes a general annual aggregate limit providing for claims investigation or legal defense costs to be included in the general annual aggregate limit, the Contractor shall either double the occurrence limits or obtain Owners and Contractors Protective Liability Insurance.
- Should any required insurance lapse during the contract term, requests for payments originating after such lapse shall not be processed until the City receives satisfactory evidence of reinstated coverage as required by this contract, effective as of the lapse date. If insurance is not reinstated, City may, at its sole option, terminate this agreement effective on the date of the lapse.

#### **SPECIFIC ADDITIONAL INSURANCE REQUIREMENTS:**

***All insurance policies proposed or obtained in satisfaction of this Contract shall additionally comply with the following marked specifications, and shall be maintained in compliance with these additional specifications throughout the duration of the Contract, or longer, if so noted:***

**[X] A. General Liability Insurance:**

General Liability insurance with combined single limits of not less than **\$1,000,000.00** shall be provided and maintained by the Contractor. The policy shall be written on an occurrence basis either in a single policy or in a combination of underlying and umbrella or excess policies.

If the Commercial General Liability form (ISO Form CG 0001 current edition) is used:

- Coverage A shall include premises, operations, products, and completed operations, independent contractors, contractual liability covering this contract and broad form property damage coverage.
- Coverage B shall include personal injury.
- Coverage C, medical payments, is not required.

If the Comprehensive General Liability form (ISO Form GL 0002 Current Edition and ISO Form GL 0404) is used, it shall include at least:

- Bodily injury and Property Damage Liability for premises, operations, products and completed operations, independent contractors and property damage resulting from explosion, collapse or underground (XCU) exposures.
- Broad form contractual liability (preferably by endorsement) covering this contract, personal injury liability and broad form property damage liability.

**[X] Automobile Liability Insurance:**

Contractor shall provide Commercial Automobile Liability insurance with Combined Single Limits (CSL) of not less than **\$500,000** either in a single policy or in a combination of basic and umbrella or excess policies. The policy will include bodily injury and property damage liability arising out of the operation, maintenance and use of all automobiles and mobile equipment used in conjunction with this contract.

Satisfaction of the above requirement shall be in the form of a policy endorsement for:

- any auto, or
- all owned hired and non-owned autos.

**[X] Workers' Compensation Insurance**

Contractor shall purchase and maintain Workers' Compensation insurance which, in addition to meeting the minimum statutory requirements for issuance of such insurance, has Employer's Liability limits of at least \$100,000 for each accident, \$100,000 per each employee, and a \$500,000 policy limit for occupational disease. The City need not be named as an "Additional Insured" but the insurer shall agree to waive all rights of subrogation against the City, its officials, agents, employees and volunteers for any work performed for the City by the Named Insured. For building or construction projects, the Contractor shall comply with the provisions of Attachment 1 in accordance with §406.096 of the Texas Labor Code and rule 28TAC 110.110 of the Texas Workers' Compensation Commission (TWCC).

**[ ] Owner's and Contractor's Protective Liability Insurance**

The Contractor shall obtain, pay for and maintain at all times during the prosecution of the work under this contract, an Owner's and Contractor's Protective Liability insurance policy naming the City as insured for property damage and bodily injury which may arise in the prosecution of the work or Contractor's operations under this contract. Coverage shall be on an "occurrence" basis and the policy shall be issued by the same insurance company that carries the Contractor's liability insurance. Policy limits will be at least **\$500,000.00** combined bodily injury and property damage per occurrence with a **\$1,000,000.00** aggregate.

**[ ] Fire Damage Legal Liability Insurance**

Coverage is required if Broad form General Liability is not provided or is unavailable to the contractor or if a contractor leases or rents a portion of a City building. Limits of not less than \_\_\_\_\_ each occurrence are required.

**[ ] Professional Liability Insurance**

Professional liability insurance with limits not less than **\$1,000,000.00** per claim with respect to negligent acts, errors or omissions in connection with professional services is required under this Agreement.



[ ] **Builders' Risk Insurance**

Builders' Risk Insurance, on an All-Risk form for 100% of the completed value shall be provided. Such policy shall include as "Named Insured" the City of Denton and all subcontractors as their interests may appear.

[ ] **Environmental Liability Insurance**

Environmental liability insurance for \$1,000,000 to cover all hazards contemplated by this contract.

[ ] **Riggers Insurance**

The Contractor shall provide coverage for Rigger's Liability. Said coverage may be provided by a Rigger's Liability endorsement on the existing CGL coverage; through and Installation Floater covering rigging contractors; or through ISO form IH 00 91 12 11, Rigger's Liability Coverage form. Said coverage shall mirror the limits provided by the CGL coverage

[ ] **Commercial Crime**

Provides coverage for the theft or disappearance of cash or checks, robbery inside/outside the premises, burglary of the premises, and employee fidelity. The employee fidelity portion of this coverage should be written on a "blanket" basis to cover all employees, including new hires. This type insurance should be required if the contractor has access to City funds. Limits of not less than \$\_\_\_\_\_ each occurrence are required.

[ ] **Additional Insurance**

Other insurance may be required on an individual basis for extra hazardous contracts and specific service agreements. If such additional insurance is required for a specific contract, that requirement will be described in the "Specific Conditions" of the contract specifications.

**ATTACHMENT 1****[ ] Workers' Compensation Coverage for Building or Construction Projects for Governmental Entities****A. Definitions:**

Certificate of coverage ("certificate")-A copy of a certificate of insurance, a certificate of authority to self-insure issued by the commission, or a coverage agreement (TWCC-81, TWCC-82, TWCC-83, or TWCC-84), showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on a project, for the duration of the project.

Duration of the project - includes the time from the beginning of the work on the project until the contractor's/person's work on the project has been completed and accepted by the governmental entity.

Persons providing services on the project ("subcontractor" in §406.096) - includes all persons or entities performing all or part of the services the contractor has undertaken to perform on the project, regardless of whether that person contracted directly with the contractor and regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractors, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the project. "Services" include, without limitation, providing, hauling, or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

- B. The contractor shall provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all employees of the Contractor providing services on the project, for the duration of the project.
- C. The Contractor must provide a certificate of coverage to the governmental entity prior to being awarded the contract.
- D. If the coverage period shown on the contractor's current certificate of coverage ends during the duration of the project, the contractor must, prior to the end of the coverage period, file a new certificate of coverage with the governmental entity showing that coverage has been extended.
- E. The contractor shall obtain from each person providing services on a project, and provide to the governmental entity:
  - 1. a certificate of coverage, prior to that person beginning work on the

project, so the governmental entity will have on file certificates of coverage showing coverage for all persons providing services on the project; and

2. no later than seven days after receipt by the contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.
- F. The contractor shall retain all required certificates of coverage for the duration of the project and for one year thereafter.
- G. The contractor shall notify the governmental entity in writing by certified mail or personal delivery, within 10 days after the contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.
- H. The contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Workers' Compensation Commission, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.
- I. The contractor shall contractually require each person with whom it contracts to provide services on a project, to:
1. provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all of its employees providing services on the project, for the duration of the project;
  2. provide to the contractor, prior to that person beginning work on the project, a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project;
  3. provide the contractor, prior to the end of the coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project;
  4. obtain from each other person with whom it contracts, and provide to the contractor:
    - a. a certificate of coverage, prior to the other person beginning work on the project; and

- b. a new certificate of coverage showing extension of coverage, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the project;
- 5. retain all required certificates of coverage on file for the duration of the project and for one year thereafter;
- 6. notify the governmental entity in writing by certified mail or personal delivery, within 10 days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and
- 7. Contractually require each person with whom it contracts, to perform as required by paragraphs (1) - (7), with the certificates of coverage to be provided to the person for whom they are providing services.
- J. By signing this contract or providing or causing to be provided a certificate of coverage, the contractor is representing to the governmental entity that all employees of the contractor who will provide services on the project will be covered by workers' compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.
- K. The contractor's failure to comply with any of these provisions is a breach of contract by the contractor which entitles the governmental entity to declare the contract void if the contractor does not remedy the breach within ten days after receipt of notice of breach from the governmental entity.

**Exhibit E**  
**Certificate of Interested Parties Electronic Filing**

In 2015, the Texas Legislature adopted House Bill 1295, which added section 2252.908 of the Government Code. The law states that the City may not enter into this contract unless the Contractor submits a disclosure of interested parties (Form 1295) to the City at the time the Contractor submits the signed contract. The Texas Ethics Commission has adopted rules requiring the business entity to file Form 1295 electronically with the Commission.

**Contractor will be required to furnish a Certificate of Interest Parties before the contract is awarded, in accordance with Government Code 2252.908.**

The contractor shall:

1. Log onto the State Ethics Commission Website at :  
<https://www.ethics.state.tx.us/filinginfo/1295/>
2. Register utilizing the tutorial provided by the State
3. Print a copy of the completed Form 1295
4. Enter the Certificate Number on page 2 of this contract.
5. Complete and sign the Form 1295
6. Email the form to [purchasing@cityofdenton.com](mailto:purchasing@cityofdenton.com) with the contract number in the subject line.  
(EX: Contract 1234 – Form 1295)

The City must acknowledge the receipt of the filed Form 1295 not later than the 30th day after Council award. Once a Form 1295 is acknowledged, it will be posted to the Texas Ethics Commission's website within seven business days.

**EXHIBIT F**

		Pure Technologies US Inc	
Line #	Description	UOM	Unit Pricing
1	Group 1 -- Internal Tethered Leak and Gas Pocket Inspection with Video. <b>** Pricing is based on a single (one-day) inspection including mobilization, planning, execution, and letter report. The below pricing guidelines would be available for consecutive days: Mobilization = \$12,000.00 Inspection (Daily Rate) = \$10,000.00 Report with findings = \$5,500.00 Letter report for single inspections = \$2,500.00 Standby rate = \$8,500.00 per crew day</b>	Per Day	\$24,500.00
2	Group 2 -- Non-Flow Internal Tethered Leak and Gas Pocket Inspection with Video. <b>** Pricing is based on a single (one-day) inspection including mobilization, planning, execution, and letter report. The below pricing guidelines would be available for consecutive days: Mobilization = \$19,000.00 Inspection (Daily Rate) = \$15,000.00 Report with findings = \$5,500.00 Letter report for single inspections = \$2,500.00 Standby rate = \$8,500.00 per crew day</b>	Per Day	\$36,500.00
3	Group 3 -- Internal Non-Tethered Free-Swimming Leak and Gas Pocket Inspection. <b>** Pricing is based on inspecting up to 2 miles consecutively including mobilization, planning, execution, and report. For clarity, the below pricing guidelines would be available for longer segments inspected under one mobilization: Mobilization = \$20,000.00 Inspection (First 2 miles) = \$22,500.00 each Inspection (Next 2 miles) = \$10,000.00/mi Inspection (Next 3 miles) = \$9,000.00/mi Inspection (Next 3 miles) = \$8,000.00/mi Inspection (remaining mileage greater than 10 miles) = \$7,000.00/mi Mapping (X-Y Alignment) = \$6,500.00/mi Additional insertion(s) = \$6,000.00 Reporting = \$15,000.00 Standby rate = \$10,500.00 per crew day Hydrant Extraction equipment = \$3,000.00 Hydrant Insertion Flow support = \$TBD (Subcontractor)</b>	2 Miles	\$57,500.00
4	Group 4 -- Manned Electromagnetic Nondestructive Inspection. <b>** The above pricing is based on inspecting up to 2 miles in a single mobilization with a Technology Report only. For clarity, the below pricing guidelines would be available for longer segments inspected under one mobilization: Mobilization = \$44,000.00 Inspection (first 2 miles) = \$82,000.00 each Inspection (Next 2 miles) = \$39,000.00/mi Inspection (Next 3 miles) = \$36,000.00/mi Inspection (Next 3 miles) = \$30,000.00/mi Inspection (remaining mileage greater than 10 miles) = \$24,000.00/mi Expedited Pipe List = \$18,000.00 each (delivered in a 3-week turnaround) Technology Report alone = \$30,000.00 Technology Report with Engineering Evaluation/Report = \$45,000.00 Standby rate = \$13,125.00 per crew day</b>	2 Miles	\$156,000.00
5	Group 5 -- Internal Robotic Electromagnetic Nondestructive Inspection. <b>** The above pricing is based on inspecting up to 2 miles in a single mobilization and Technology Report only. For clarity, the below pricing guidelines would be available for longer segments inspected under one mobilization: Mobilization = \$58,000.00 Inspection (first 2 miles) = \$124,000.00 each Inspection (Next 2 miles) = \$62,000.00/mi Inspection (Next 3 miles) = \$59,000.00/mi Inspection (Next 3 miles) = \$55,000.00/mi Inspection (remaining mileage greater than 10 miles) = \$50,000.00/mi Expedited Pipe List = \$18,000.00 each (delivered in a 3-week turnaround) Technology Report alone = \$30,000.00 Technology Report with Engineering Evaluation/Report = \$45,000.00 Standby rate = \$18,900.00 per crew day</b>	2 Miles	\$212,000.00
6	Group 6 -- Internal Free-Swimming Electromagnetic Nondestructive Inspection Capable of Passing Butterfly Valves. <b>** The above pricing is based on inspecting up to 2 miles in a single mobilization, non-pressurized insertion and extraction of tool, and Technology Report only. For clarity, the below pricing guidelines would be available for longer segments inspected under one mobilization: Mobilization = \$78,750.00 Inspection (first 2 miles) = \$175,000.00 each Inspection (Next 2 miles) = \$87,000.00/mi Inspection (Next 3 miles) = \$84,000.00/mi Inspection (Next 3 miles) = \$80,000.00/mi Inspection (remaining mileage greater than 10 miles) = \$76,000.00/mi Pressurized Insertion ONLY = \$38,000.00 additionally Pressurized Insertion and Extraction = \$78,750.00 additionally Expedited Pipe List = \$18,000.00 each (delivered in a 3-week turnaround) Technology Report alone = \$30,000.00 Technology Report with Engineering Evaluation/Report = \$45,000.00 Standby rate = \$18,900.00 per crew day</b>	2 Miles	\$283,750.00
7	Group 7 -- Free Swimming Ultrasonic Inspection Technology. <b>** The above pricing is based on inspecting up to 2 miles in a single mobilization, non-pressurized insertion and extraction of tool, and Technology Report only. For clarity, the below pricing guidelines would be available for longer segments inspected under one mobilization: Mobilization = \$78,750.00 Inspection (first 2 miles) = \$128,000.00 each Inspection (Next 2 miles) = \$62,500.00/mi Inspection (Next 3 miles) = \$60,000.00/mi Inspection (Next 3 miles) = \$57,500.00/mi Inspection (remaining mileage greater than 10 miles) = \$55,000.00/mi Pressurized Insertion ONLY = \$38,000.00 additionally Pressurized Insertion and Extraction = \$78,750.00 additionally Expedited Pipe List = \$18,000.00 each (delivered in a 3-week turnaround) Technology Report alone = \$30,000.00 Technology Report with Engineering Evaluation/Report = \$45,000.00 Standby rate = \$18,900.00 per crew day</b>	2 Miles	\$269,750.00
8	Group 8 -- Remote Transient Pressure Monitoring. <b>** Listed in "Exhibit F"</b>	EA	\$12,602.00
9	Group 9 -- Acoustic Fiber Optic (AFO) Monitoring of PCCP. <b>** The above pricing is based on the installation and equipment sales for 2 miles of AFO in a single mobilization using an indoor single DAQ, 4-fiber cable as a wet install. For clarity, the below pricing guidelines should be followed for alternate lengths: AFO Equipment Sales: SoundPrint AFO Single Data Acquisition Unit (Standard - indoor) = \$353,500.00 SoundPrint AFO Single Data Acquisition Unit (Standalone - outdoor) = \$424,200.00 SoundPrint AFO Dual Data Acquisition Unit (Standard - indoor) = \$618,625.00 SoundPrint AFO Dual Data Acquisition Unit (Standalone - outdoor) = \$742,350.00 AFO cable supply: 4-fiber (Standard) = \$4.60 per foot AFO cable supply: 8-fiber = \$9.10 per foot Splice Point and Internal Hardware = \$13,500.00 per splice point AFO Installation Install of AFO cable (&lt; 2 miles) - standard = \$28.00 per foot (next 2 miles) &gt;2 to 4 miles = \$24.70 per foot (next 3 miles) &gt;4 to 7 miles = \$22.60 per foot (next 3 miles) &gt;7 to 10 miles = \$21.00 per foot (remaining mileage) &gt;10 miles = \$20.10 per foot AFO Design &amp; Project Setup (Dry) = \$63,000.00 each DAQ system AFO Design &amp; Project Setup (Wet) = \$73,500.00 each DAQ system Stand-by rate = \$10,500.00 per crew day AFO Monitoring from Year 1 Standard monitoring services (wire breaks) = \$2.52 per foot AFO Extended Warranty and Maintenance beyond Year 1 Warranty for Single Data Acquisition Unit and System Components = \$42,966.00 per year per DAQ system Warranty for Dual Data Acquisition Unit and System Components = \$78,120.00 per year per DAQ system Annual Inspection and Maintenance = \$10,000.00 per year</b>	2 Miles	\$797,867.20
10	Other Tasks Not Identified (please provide description of each) <b>** Listed in "Exhibit F"</b>	EA	\$200,000.00



## PROJECT APPROACH

Pure Technologies is proposing to address the City of Denton Transmission Mains Condition Assessment RFP as both a "Program" and multiple "Projects."

Given the City of Denton's intent to enter into a long-term Professional Services Agreement, we believe the over arching scope, planning and long-term scheduling to fall under the auspices a Program. Where as, the individual pipeline assessments/inspections will constitute a "Project". We have been working with Texas clients in a similar manner since 2001, including Dallas Water Utilities, North Texas Municipal Water District, Austin Water, Gulf Coast Water Authority and Tarrant Regional Water District.

Our first order of business would be to meet with the City of Denton to fully understand what is expected under the Program and what the City of Denton would like to achieve in the 3-to-5-year agreement period.

### Creating the Program Work Plan

The RFP indicates that the City of Denton will export GIS data containing facility ID's to Pure Technologies. As such, Pure Technologies would populate our geospatial GIS digital interface with all of the large diameter water mains to be addressed under the condition assessment Program.

Evan though the GIS may identify all large diameter water mains, Pure technologies and the City of Denton will need to define the pipeline assets according to how they can be assessed. Hence, our next step would be to conduct a gap analysis to determine what, if any, additional information may be required to complete an inventory designation for all large diameter pipelines and associated appurtenances. Although the initial inventory assignment will identify a defined length of large diameter pipeline - node-to-node, our end product will seek to refine the asset data base by defining each individual pipe as an asset. It is much easier to manage individual distressed pipes rather than simply replacing an entire pipeline. The EPA estimates that 70% to 90% of the pipes being removed for replacement projects are actually in good condition. We refer to this as "throwing the baby out with the bathwater."

Once we have identified all of the linear assets, Pure Technologies can work with the City of Denton to develop a risk ranking of the large diameter pipelines in the water delivery system. Although Pure Technologies can evaluate the Likelihood of Failure component of the risk ranking, the initial evaluation of risk will weigh heavily on Consequence of Failure (CoF), which the City of Denton will have a more intimate knowledge of. We also assume that the City of Denton may already have



in mind a number of potentially high-risk water mains they would like to assess. Such information would allow us to jump start the assessment "Projects."

Because operational and logistical support requirements can often affect the overall cost of a physical assessment as well as "availability" for inspecting (i.e., due to high demand periods, etc.), Pure Technologies would propose to conduct a "preliminary" evaluation of all large diameter water main assets in advance. The purpose of the preliminary evaluation is to:

- evaluate the alternative technologies, methodologies, and delivery platforms applicable to the pipe material, access, size, and configuration,
- understand logistical support requirements to operational and availability constraints, and
- provide a single page preliminary scope of work with budget costs that addresses both the assessment inspections and the logistical support requirements for each large diameter water main asset.

Once completed, the Program can be more clearly defined in terms of scope, costs, and schedule. This information will allow Pure Technologies and the City of Denton to understand what is achievable over the next 3 to 5 years.

Please rest assured that Pure Technologies does not anticipate this planning to require significant time or cost. We have included a not-to-exceed fee for the Pre-Planning tasks presented above in the Section titled "OTHER TASKS NOT IDENTIFIED".

Pure Technologies does not believe in spending money on desk top studies - we want the City of Denton to realize high value for their investment by providing "actionable" data through high resolution assessments of the water mains.

## Project Tasks and Schedule

We now have a working plan with Project task identified and scheduled for the Program that we can track and meet monthly to make certain the schedule remains on track and that Pure Technologies exceed the City of Denton expectations.

Using the relative risk ranking of the pipeline assets and understanding the logistical support requirements, availability of pipelines and projected costs, the City and Pure Technologies can lay out well defined quarterly and annual planning schedules.

Advanced planning will also allow Pure Technologies to move forward with detailed planning well in advance, whereby multiple projects are planned and





ready for assessment should there be any unexpected delays on a given pipeline. The funnel will always be full of planning documents at ready.

## Statement of Work and Authorization to Proceed

For the assessment of a given water main, Pure Technologies will evaluate the desired deliverables and submit a Statement of Work describing the technologies and methodologies to be used in accomplishing said task. The Statement of Work will include costs as established in the proposal's line items for each technology and engineering service and Pure Technologies will only initiate work upon receipt of written authorization to proceed on each Statement of Work. Similarly, any changes to the scope of services for a given project must be processed in a similar manner with understanding and approval by the City of Denton before authorizing us to proceed. Such a process has worked extremely well with other similar Programs we participate in with the other water utilities Programs in Texas.

### Project Planning

Upon authorization to proceed by the City of Denton to assess a linear asset, Pure Technologies will meet with the City of Denton water utilities and operations to verify the scope of work and discuss any applicable alternatives. In advance of said workshop, Pure Technologies will review available documents associated with the proposed pipeline, including pipe specifications, pipe manufacturer's lay drawings, plan, and profile as-builts or original drawings, information pertaining to any pipeline modifications, leak, failures, etc.

Pure Technologies will review the documents to understand the logistical support requirements and identify potential risk points associated with the proposed inspection(s).

Pure Technologies will request that the City of Denton provide personnel to accompany our team in conducting a site reconnaissance of the assigned pipeline. The purpose of the site reconnaissance is to:

- identify existing appurtenances on the pipeline that can provide access for deployment and extraction of the selected inspection technology(s) and delivery platform(s),
- identify locations to attach tracking sensors to track the travel of free-swimming inspection tools,
- collect GPS coordinates (mapping grade) of any exposed pipe and ALL appurtenances including in-line valves, air relief valves, blow-offs, etc.,
- measure flow velocities if applicable,
- collect photographic documentation,



- determine traffic control requirements for the proposed inspection(s), and
- walk the entire pipeline.

NOTE: As most inspections require operation and/or closure of in-line and/or lateral valves, Pure Technologies will require that all affected valves be assessed and operated prior to initiating any field inspection of a pipeline, as well as supporting the inspection teams during the pipeline inspection(s).

Pure Technologies / dba as Wachs Water Services (WWS) is available to assist with these services. As a division of Pure Technologies, WWS has been providing valve assessment and turning for nearly 25 years and is highly experienced and qualified to assist with initial valve assessments, minor and major valve repairs, and operating of valves in support of our inspection projects or other requests by the City of Denton.

Additional information regarding WWS's services, project references and fees are presented in the Section titled "OTHER TASKS NOT IDENTIFIED".

On completion of document review, site reconnaissance, take-off of the pipeline components, appurtenances and configuration, Pure Technologies will finalize a detailed project planning document that addresses the scope of work, deliverables, logistical support requirements, personnel, and schedule for presentation to the City of Denton for review.

After which, Pure Technologies will hold a workshop with the City to review the planning document and assure that all parties involved in the inspections(s) understand their roles and scheduling.

The planning document will also address any items of concern and identify any potential risks along with an accompanying contingency plan. Pure Technologies' will also incorporate our Safety Plan in the planning document.

If requested, Pure Technologies can de-water pipelines, install access for insertion and extraction of tools, and furnish traffic control and file necessary permits as required. When ever confined space entry is required, Pure Technologies will prepare a confined space permit and provide adequate top side support and a qualified Rescue and Safety Support team.



## Condition Assessment of Water Mains

The scope of work and deliverables will vary from pipeline to pipeline. Following is a listing of the field inspections and engineering services typically associated with a condition assessment for critical water mains.

Please keep in mind that not all pipelines may require the extent of high-resolution inspection technologies and engineering services described below, as it is important to understand the need for “the right tool for the right job” and if the cost of the resulting data corresponds to the asset value.

Typical Components of a Comprehensive Condition Assessment include:

- ✓ Client meeting to verify scope of work and collect available documentation and drawings.
- ✓ Site Reconnaissance.
- ✓ Project Planning Document and Client workshop.
- ✓ High Frequency Pressure monitoring to understand maximum operational and transient pressures. Can be temporary or permanent.
- ✓ Conducting a leak inspection of the pipeline using...
  - an external listening mics and correlators,
  - a tethered internal acoustic leak and gas (air) pocket inspection system (Sahara®) with CCTV camera viewing and recording, or
  - a free-swimming internal acoustic leak and gas (air) pocket inspection (SmartBall®)
- ✓ Performing a direct inspection of the pipeline wall to evaluate the structural integrity and overall condition of each pipe stick within the pipeline. This would include identifying and locating broken prestressing wires in PCCP, broken reinforcing bars and wall loss on the cylinder of BWP, wall loss on steel, ductile iron or cast iron pipe, etc.
- ✓ Performing a design check to verify if the pipe was designed and manufactured in accordance with applicable AWWA or Federal Specifications and Standards in place at the time the pipe was manufactured. Also evaluate the design of the pipe material as it compares to current Specifications and Standards that currently apply.



## Pipe Performance Risk Curves

While the inspection technologies described herein will provide data for wall loss on metallic cylinders and broken prestressing wires or reinforcing bars, **the challenge associated with assessing and managing either pipe material is determining how much cylinder corrosion and/or broken wires or bars creates an unacceptable level of risk** - thereby requiring repair and/or replacement actions.

Pure Technologies has developed an innovative approach for condition-based pipeline management using structural models along with hydraulic evaluation data, ultimately delivering a comprehensive decision-making tool - a Pipe Performance Risk Curve - for the management of pressure mains.

For pipes identified to be in distress (i.e., broken prestressing wires or reinforcing bar wraps, wall loss, etc.), Pure Technologies can utilize 3D finite element analysis (FEA) to develop Pipe Performance Risk Curves that identify when the distressed pipe may be reaching or exceeding a yield state, and identify those that represent a low to moderate LoF that can continue to be safely managed.

The 3D finite element analysis and Pipe Performance Risk Curves are developed by Pure Technologies Assessment Engineering Services Group. As a Registered Texas Board of Professional Engineering Firm (No. F-13679), our Assessment Engineering Services Group also conducts visual and sounding inspections of pipe, conducts forensic analysis of failed pipes, develops the Pipe Performance Risk Curves, reviews and performs QA/QC on all reports, make repair or replacement recommendations, monitors repairs and replacement of pipes, evaluates root cause of failure, conducts inspection and verification of distressed pipes, evaluated external loading conditions and can develop an estimate of remaining useful life. Additional information pertaining to the Assessment Engineering Services Group and associated fees is presented in the Section titled "OTHER TASKS NOT IDENTIFIED".

## Reporting

Technical inspection reports will be prepared and incorporated into the final Condition Assessment Report prepared by the Assessment Engineering Services Group for each inspection technology employed. The technical reports will present the data and findings provided by the inspection technology. An engineer within Pure Technologies' Assessment Engineering Services Group incorporates the technical data and findings within a comprehensive condition assessment report that pulls the entire assessment together.



The condition assessment report also includes the design check(s) of pipe material and can include the 3D FEA and Pipe Performance Risk Curve as may be applicable for distressed pipes that have been identified.

The report will include a risk ranking of the distressed pipes with respect to risk (LoF and CoF), and provide recommendations and alternatives for repair, rehabilitation and/or replacement for pipes of concern.

Pure Technologies will compile all data and findings to present in a pipe-by-pipe geospatial GIS shapefile deliverable compatible to the City of Denton’s GIS system. Each pipe stick is represented by a polygon that when clicked on presents a pop-up window sharing all information related to the pipe design and distress.

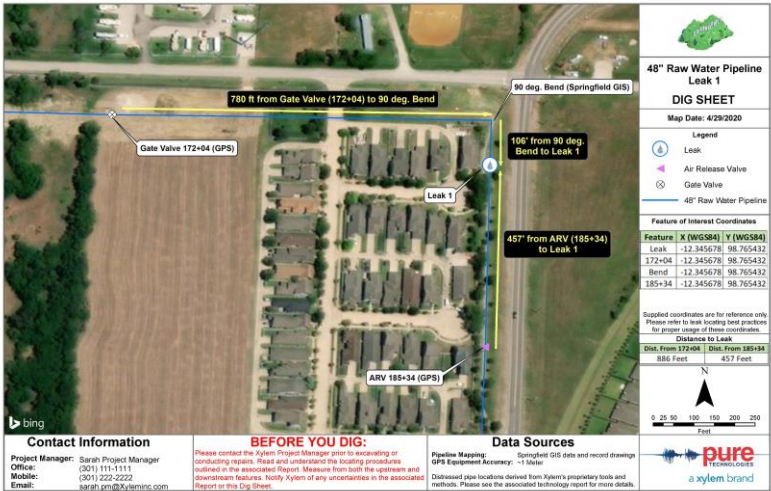
NOTE: Should the City of Denton elect, Pure Technologies Wachs Water Services Group can assess all valves and appurtenances associated with the water mains we assess, and we can include assessment of such control systems as part of our overall report. Wachs Water Services capabilities and fee schedule for valve assessments and repairs, external leak inspection, hydrant assessment and maintenance and uni-directional flushing are presented in the Section titled “OTHER TASKS NOT IDENTIFIED”.

Following submittal of all reports, Pure Technologies will meet with the City of Denton to review all inspection data and findings as well as the recommendations and alternatives for action items.

Pipe Verifications and Repairs.

Pure Technologies provides detailed “dig sheets” identifying the location of each distressed pipe (including leaks and air pockets) of concern and uses the dig sheets to mark the pipe locations.

Pure



Technologies’ engineer will be on site when the City of Denton excavates and



exposes the pipe to verify that the correct pipe is exposed before proceeding with any repair or replacement. Our engineer will also identify what the potential root cause of distress or failure may be and can also conduct a forensic evaluation of the pipe. Material samples including adjacent soil, groundwater if present, concrete core, metallic cylinder, prestressing wires or reinforcing bar wrap, pipe coatings, etc. can also be collected and maintained as control samples. The engineer will collect photographic documentation, collect GPS coordinates, and prepare a summary for inclusion in a written report to the client and incorporated in our pipe-by-pipe geospatial GIS digital interface.

### Long Term Management of Pipeline Assets

Pure Technologies will work with the City of Denton to establish a long-term management program specific to the life cycle analysis associated with each pipe stick and pipeline asset.

Pure Technologies can also incorporate distributed sensors to monitor the structural integrity of prestressed concrete cylinder pipe (PCCP) in near real time, identifying when an individual pipe may be trending towards failure and avoiding an unforeseen pipe rupture or failure – we call this a “forever” pipeline.

The high frequency pressure monitoring unit is also a distributed sensor system that supports the City of Denton’s pressure management throughout the water delivery system in real time. This technology is capable of alerting the City of Denton whenever an absolute pressure or standard deviation is exceeded (both positively and negatively). A proper pressure management program will extend the RUL of all pipeline assets.

Combined with the Client’s SCADA monitoring data, these distributed sensor applications offer a precursor to a digital transformation of the City of Denton’s water delivery system (focused solely on Pump Station to customer meters) addressing asset management and optimization of performance.

The Project Approach presented above addresses all of the requirements set forth in the City of Denton’s RFP for Project Scope Requirements. A more detailed description of each inspection technology and delivery platform identified by the City of Denton (as Groups 1 through 9) is presented below.

In evaluating the project approach, Pure Technologies approach to condition assessment of water mains closely emulates the practices recommended in the American Water Works Association’s (AWWA) M77 Manual of Water Supply Practices for the Condition Assessment of Water Mains.



Additional documents Pure Technologies may refer to when participating in a condition assessment program include:

The Environmental Protection Agency's (EPA) document titled "Condition Assessment Technologies for Water Transmission and Distribution Systems" [EPA/600/R-12/017, 2012].



EPA Report on "Condition Assessment of Ferrous Water Transmission and Distribution Systems" [EPA/600/R-09/055, 2009].

EPA Technology Report for Assessment of Force Mains [EPA 832-F-00-071].

EPA Report on "State of the Technology for Force Main Rehabilitation" [EPA/600/R-10/044, 2010].

It is also important to note that the condition assessment Program will address key components identified by AWWA and the EPA in their Partnership for Safe Water for the performance optimization in water distribution systems.



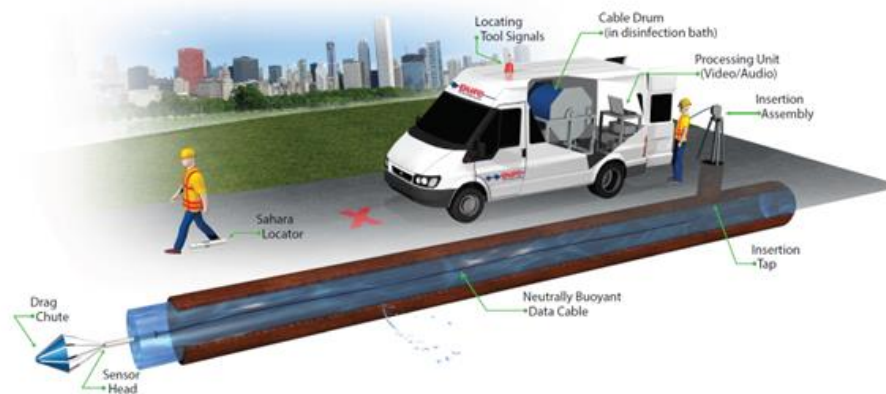
## GROUP 1 - REQUIREMENTS FOR INTERNAL TETHERED LEAK AND GAS POCKET INSPECTION WITH VIDEO

Pure Technologies' Internal Tethered Acoustic Leak and Gas Inspection Technology with Video is referred to as the Sahara® system.

### Sahara Technology Overview

The Sahara inspection platform is an acoustic-based, non-destructive condition assessment technology that detects acoustic activity associated with leaks or pockets of trapped air, and potential structural defects via CCTV in pressurized water pipelines (12-inches in diameter and larger) of all construction types and materials. The Sahara inspection platform is composed of the following:

- a sensor with acoustic and video components (including LED lighting)
- a system for tracking the sensor
- an insertion assembly for inserting the sensor into a live pipeline
- a cable drum containing the communication umbilical for the sensor
- a rack of electronic instrumentation for the processing of acoustic and visual data



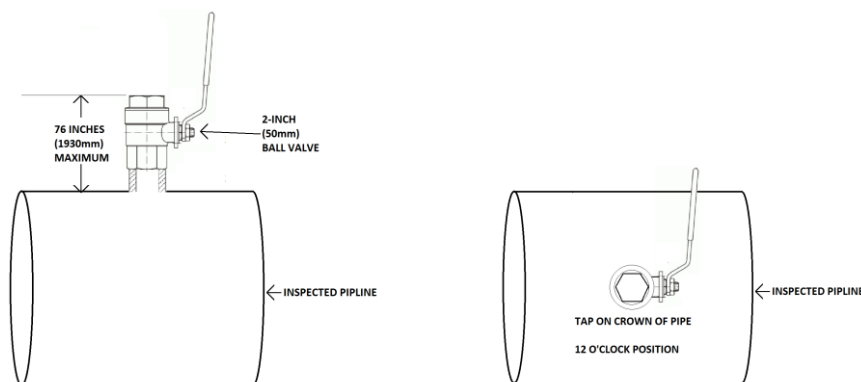
*Sahara System Overview Diagram*

The system is inserted into a live pipeline through a tap with a minimum diameter of 2-inch full bore clearance using the insertion assembly. The sensor is propelled by the water flow using a drag chute that carries the tethered sensor head through the pipe for distances up to 6,000 feet per insertion as the data cable is unreeled from the cable drum. Actual inspection distance will vary depending on flow rate (3 to 4 fps is optimal) and pipeline configuration (bends, in-line butterfly valves, etc.) The above figure depicts the typical Sahara system configuration.



## Typical Insertion Requirements

Sahara requires a standard full bore 2-inch valve at each insertion point. Alternatively, for valves larger than 2 inches, a blind flange tapped with 2-inch national pipe thread (NPT) female threads is required. The figure below shows the typical insertion set-up with a 2-inch ball valve.



*Typical Insertion Set-up: Profile and Plan View*

## Sahara Tracking System

The Sahara sensor is tracked from above ground during the inspection at set intervals and at select points of interest. The sensor is tracked using the Sahara Locator®. The Sahara Locator is an extremely low frequency (ELF) transmitter that is detected by the miniaturized receiver located on the Sahara sensor head within the pipeline. The frequency used allows accurate through-pipe communication, even within metallic mains with a ground cover of up to 33 feet.

While the Sahara Locator is capable of detecting the leak location to within 12-inches, location accuracy can be affected by the presence of large amounts of steel in or on the ground (such as railroad tracks, rebar, or unusually thick metallic pipe walls), steep slopes, or heavily wooded areas.

A technician follows the sensor head above ground, locating the sensor when requested by the Sahara operator – typically at a leak, air pocket, or other location of interest. The Sahara Locator can also be used to locate the sensor at set intervals to determine the alignment of a given section of pipeline.



*Sahara Locator*

## Locating Leaks and Air Pockets

The acoustic signal processor equipment and software provides the primary operator with the ability to monitor and analyze the data collected from the Sahara sensor in real time. This allows for near real-time reporting of acoustic and visual events found in the pressure pipeline. The acoustic signal processor software also converts the audio signal into visual form, displaying the signal amplitude, frequencies, head position, and velocity. The Sahara operator can isolate acoustic event locations, estimate leak magnitude qualitatively, and identify the limits of pockets of trapped air. The precise location of an acoustic event is identified by positioning the sensor within the pipe and simultaneously positioning the Sahara Locator directly above the sensor head, allowing for above ground location.

## Closed Circuit Televising (CCTV)

In addition, the operator can distinguish pipeline features or other points of interest using the Sahara platform's closed-circuit televising (CCTV) capability. As with leaks, the Sahara operator can indicate above ground the position of visual points of interest by positioning the sensor within the pipe and simultaneously positioning the Sahara Locator directly above the sensor head.

Clarity of the video can be affected negatively by high turbidity, turbulent flow, surface condition of the pipe wall, and when inspecting pipes over 48 inches in diameter.

## Confirmations | Clarifications | Submittals per RFP Requirements:

The Sahara inspection system is a non-destructive technology and is deployed into a fully flowing and pressurized pipeline. Minimum pressure of 15 psi is required. All inspection results are identified in real time and the location of interest is marked on the ground and GPS coordinates collected.

The Sahara system can identify all leaks within any pipe material including Prestressed Concrete Cylinder Pipe (PCCP), Reinforced Concrete Cylinder Pipe (RCCP), Asbestos Cement (AC) Pipe, Polyvinyl Chloride (PVC), High-Density Polyethylene (HDPE), Glass Reinforced Polymer (GRP), Steel, Cast Iron, and Ductile Iron Pipe.

With a standard perpendicular access on the crown of the pipe, the Sahara unit can be deployed via the 2-inch full bore outlet into pipe diameters of 12-inch or larger. For smaller pipes down to 6-inch diameter, the access will need to be installed at an angle or WYE fitting on the crown of the pipe.

The Sahara system can be deployed into pipelines with up to 250 psi pressure.

A representative from the City of Denton is invited to monitor the CCTV video screen and identify areas where closer evaluation may be warranted, instructing the Sahara operator to halt while personnel evaluate the CCTV view. At any time, the Sahara operator can advance, stop, or pull back the Sahara sensor and CCTV camera.

There is no need to interchange the acoustic leak detection technology with the CCTC video technology under separate deployments. Both inspection technologies are always deployed together.

The Sahara system will identify and locate multiple leaks (actually ALL leaks and air pockets) under a single deployment.

The Sahara system will track the sensor head from the surface in real-time during the inspection, providing surface locations with 3 foot accuracy along the length of the pipeline as well as laterally for cases where the exact pipe alignment is not known and collect GPS coordinate data.

The Sahara system can be deployed and operate within the pipeline at a minimum flow velocity of 1 foot per second (fps).

All Sahara equipment that contacts potable water is disinfected with a chlorine solution prior to being introduced inside the pipe. The cable is also spooled in a chlorine bath throughout the inspection. All equipment utilized by Pure Technologies for use in potable water pipelines is dedicated and certified to only be utilized in potable water lines. Devices previously deployed within wastewater piping systems are never utilized within potable water pipelines.

The Sahara system can detect leaks as small as 0.05 gallons per minute at 15 psi.

The Sahara tracking locator is capable of locating leaks within 12-inches of the leak or gas pocket location and will provide preliminary results on-site during the inspection.

Pure Technologies will respond to any request for emergency services within 48 hours. Our experience with most emergency situations is that it may require several days to arrest the existing issues and be available for us to have access to the pipeline. Hence, our initial rapid response is to meet with the City and conduct a site reconnaissance to understand what equipment and services are required and if the existing configuration can accommodate such services. Because our technologies may be deployed on other projects in Texas, availability of equipment and field personnel will need to be confirmed and communicated to the City for planning.

Pure Technologies will provide mapping grade GPS surface markings depicting the location of the pipeline every 300 feet and at each bend as requested, to allow accurate updating of the City's GIS databases.

Pure Technologies will provide a detailed report of pipeline segment(s) assessed within GIS format using mapping-grade GPS data. GIS data must be compatible with the City of Denton GIS system. The report will include the location and rating/size of each leak as (Small for < 2 gpm | Medium for 2 to 10 gpm | large for > 10 gpm) detected during the inspection.

The Sahara report and associated deliverables shall be submitted in hard copies (three copies) and electronic format with database, information viewable in ArcMap with all pertinent information. The report will include at minimum; an executive summary, a location map of the project, indicating the start and end of the project, the date started, and date completed, tables with pertinent information, photographs, videos of CCTV, and any other pertinent information necessary for the project. The conclusion shall be clear and concise depicting the condition of the pipe at the time of inspection and database tables will be named clearly identifying the information. The database will be the property of the City of Denton and information will not be shared without prior written approval from the City of Denton staff responsible for the project/inspection.

As requested in the RFP, Pure Technologies presents a list of comparable references, within the past 24 months, where pipelines were surveyed in a single deployment for distances of 3,500 feet or more using the Sahara system.

<sup>^</sup> *Inspections highlighted in gold were performed by the Pure Technologies Dallas office.*

Client Name	Project Manager	Name of Pipeline	Length (ft)
Baltimore City	Vennila Durai	Herring Run Main	4185
Brazos River Authority <sup>^</sup>	Stacie Sandmann	Intake	4225
City of Montreal	Hamid Goorkani	Lacordaire	3691
Dallas Water Utility <sup>^</sup>	George Schaaf	Jim Miller	3790
Dallas Water Utility <sup>^</sup>	George Schaaf	5720 walnut hill ln	3720
Dallas Water Utility <sup>^</sup>	George Schaaf	Williamson rd.	3560
Dallas Water Utility <sup>^</sup>	George Schaaf	McMillan and Vickery	3515
Dallas Water Utility <sup>^</sup>	George Schaaf	4675 Hwy 121	3457
Dallas Water Utility <sup>^</sup>	George Schaaf	Cedar Springs	3802
Dallas Water Utility <sup>^</sup>	George Schaaf	4700 Jim Miller	3684
Dallas Water Utility <sup>^</sup>	George Schaaf	W-4 Water Main	3620
Dallas Water Utility <sup>^</sup>	George Schaaf	2501 Web Chapel	3500
Dallas Water Utility <sup>^</sup>	George Schaaf	Corinth	3480
FENG XIAN WATER		21-Feng-4	3609
FENG XIAN WATER		21-Feng-4	3609
GCWA <sup>^</sup>	George Schaaf	42in	3730
Hampton Roads	Zachary Brenners	LCWM-3	3739
Hampton Roads	Zachary Brenners	LCWM-2	3500
Jacobs Engineering <sup>^</sup>	Leo Huang	24 inch Raw Water Main	4000
JIN SHAN WATER		21-Jin-1	3560
NTMWD <sup>^</sup>	Stacie Sandmann	Mesquite	3603
Philadelphia Water	Nathan Wilson	3rdST	3500
PWD	Nathan Wilson		3733
Reynolds Construction	CJ Roebuck	West Side Loop 2	4653
SFPUC	Brian Hext	San Antonio Pipeline	4255
Spat	Gustavo Valverde	Biritiba 1500 mm	5013
Spat	Gustavo Valverde	Itaquá-Arujá	4928
Spat	Gustavo Valverde	1800 mm PI-05	4062
Spat	Gustavo Valverde	SAM Leste Trecho IIA	3688
Spat	Gustavo Valverde	Guaio 2100 mm	3609
Spat	Gustavo Valverde	Mogi 900 mm	3583
Spat	Gustavo Valverde	Itaquá-Guarulhos	3530
Spat	Gustavo Valverde	Biritiba	3530
Spat	Gustavo Valverde	Sam Leste Trecho II	3510
Spat / Sabesp	Gustavo Valverde	SAM Leste Sul 1800mm	3648
SWI WATER		20-Min-13	3609
SWI WATER		20-Min-13	3609
SWI WATER		20-Chang-10	3539
Tighe & Bond	CJ Roebuck	30-inch CIP Finish Water	3690

As requested by the RFP, Pure Technologies presents the following summary documenting the successful performance of the Sahara system inspections by Pure Technologies and our licensed operators on more than 1,500 miles of pipeline and with more than 1,500 leaks found.

Year	Annual Inspection Distance (Miles)	Total Inspection Distance (Miles)
2013	31	31
2014	42	73
2015	35	108
2016	74	183
2017	138	320
2018	57	378
2019	53	431
2020	43	474
2021	46	520
2022	85	605
3rd Party Users	4329	4934
<b>TOTAL</b>		<b>8,058</b>

Year	Annual Leaks Detected	Total Leaks Detected
2013	91	91
2014	114	205
2015	91	296
2016	231	527
2017	434	961
2018	186	1147
2019	181	1328
2020	159	1487
2021	135	1622
2022	213	1835
3rd Party Users	1163	2998
<b>TOTAL</b>		<b>12,497</b>

## GROUP 2 - REQUIREMENTS FOR NO-FLOW INTERNAL TETHERED LEAK AND GAS POCKET INSPECTION WITH VIDEO

No-Flow Sahara applications typically address inspection in pipelines undergoing hydrostatic pressure tests where there are no flows in the pipeline and the contractor cannot pass the hydrostatic pressure test.

Dallas Water Utilities has also required contractors to conduct a 100% leak tightness testing using the Sahara No-Flow inspection technology following successful hydrostatic testing on newly installed large diameter water mains.

### Technical Specifications

#### Purpose

This technical specification describes the materials and procedures needed to carry out a Sahara Inspection under “No Flow” Conditions. A Sahara Inspection using the No Flow Condition may be used either in conjunction with or instead of a Hydrostatic Pressure Test to confirm leak tightness in a pipeline.

#### Terminology

The following terms are used in this specification:

**Sahara System:** Non-destructive, acoustic, condition assessment technology that identifies and locates leaks and gas pockets in large diameter (greater than 12-inches) pipelines and estimates the magnitude of the leaks.

**Insertion Site:** Location where the MuleTape and Sahara System are inserted into the pipeline.

**MuleTape:** High strength Kevlar tape used to pull the Sahara System through the pipeline.

**Sahara Locator:** Aboveground tool used to pinpoint the location of the Sahara System during the inspection

**Pull Site:** Location where the MuleTape is pulled to propel the Sahara System through the pipeline.

#### Material Requirements

The following materials are required to carry out a Sahara Inspection using the No Flow Condition:

**MuleTape** (manufactured by Neptco) – 5/8-inch wide, flat, woven, Aramid (Kevlar) material with a tensile strength of 2500 lbs.

Inspection Log - Handwritten log used to document all findings from the inspection.

Pipeline Access - A minimum 2-inch inner diameter, clear bore access with full port 2-inch ball valve is required on the crown of the pipe at each insertion and pull site.

Guide Tube - 1-inch poly water service tubing, cut at a length that ensures a minimum penetration into the pipe of 12-inches from the innermost weir.

Lars Pressure Diverting Manifold - Abbreviated LPDM; Installed with a sealing gland on top of the 2-inch ball valve at the insertion site. Allows the Sahara System to be inserted into the pipeline under full hydrostatic pressure (up to 300 psi).

PVC hoses - 2-inch diameter hoses attached to the LPDM. Used to divert pressure from the vault at the insertion site.

Guide Tube/Sealing Gland Component - Attach a 1-inch compression by 1-inch MIP NPT threaded brass coupling to one end of the guide tube. A 2-inch x 5-inch galvanized nipple is threaded onto the ball valve over the brass coupling, and then a 2-inch galvanized coupling is installed on the nipple. A 2-inch x ½-inch bushing is installed onto the coupling and then a special ½-inch electrical connector with a rubber tapered grommet, cut in half, is installed on the bushing.

Tethered Umbilical - 5/8-inch diameter cable with a polyurethane outer sheath. The interior of the cable contains four wires, a Kevlar tether and neutrally buoyant materials. The umbilical cable is capable of extending up to approximately 5,000 feet; however, the actual deployment length is dependent on the pipeline configuration.

Hydraulic Winch - Forces the umbilical into the pipe at the insertion site

Acoustic Sensor Head - 1-inch diameter hydrophone unit that is used to detect leaks. Attached to the MuleTape and the tethered umbilical.

Cable Drum - Stainless steel framed, hydraulically operated and completely encased spooling machine. Contains 1,000 ppm chlorinated water to disinfect the tethered umbilical cable.

Processing Unit - Unit where the Sahara operator can view the acoustic data being recorded by the sensor head.

Hydraulic Capstan - Installed at the pull site to extract the MuleTape.

Sahara Locator - Low Frequency transmitter used to locate the sensor head during the inspection.



## City of Denton Responsibilities

The City of Denton is required to provide the following:

- Plan and profile drawings of the section of the pipeline to be inspected.
- As-Built drawings, if available, including manhole access locations and details of the manhole openings and vaults.
- A complete set of drawings for any relocation or revision to the pipeline since its original construction that is not reflected on the plan and profile drawings.
- A full 2-inch inner diameter bore into the pipe, located on the crown, at the insertion site with a short riser (no more than 8-inches tall) and a full port 2-inch ball with 2-inch female NPT threads.
- Two 2-inch ports and 2-inch ball valves at intermediate locations with 2-inch female NPT threads
- Traffic control, if necessary.
- Access to allow delivery of equipment to insertion and pull sites.
- Personnel familiar with the pipeline to assist Pure Technologies personnel at the insertion site and with the Sahara Locator.
- The pipeline must be fully dewatered prior to installing the MuleTape
- If manned entry is required for installation of the MuleTape, proper equipment to allow manned access into the pipe shall be provided, as well as a confined space permit, top side and rescue support, and air ventilation.

## Safety Considerations and Requirements

Safety of all personnel involved in the inspection is of importance to the success of the project. When completing a Sahara Inspection using the No Flow Condition, consider the following safety requirements:

When manned entry is required, confined space entry procedures should be followed, including a confined space permit, proper top support and adequate. All personnel entering the pipe shall utilize personal air quality monitors.

The pipe must be fully dewatered prior to installing the MuleTape

Lock-out/Tag-out of all electrical equipment and in-line valves must be performed.

Traffic control must be provided.

All personnel entering the pipeline or any vault at the insertion or pull sites are required to wear personal protective equipment ("PPE") including, but not limited to a protective helmet, head lamp, air monitor, harness, steel toe hip boots/waders, Tyvek suit and gloves. PPE is required for all pipeline entrants.

Personnel remaining aboveground are also required to wear PPE including, including, but not limited to reflective vests, hard hats and steel toe boots.

### **Inspection Methodology**

To complete a Sahara Inspection using the No Flow Condition, the following procedure should be used:

Install the MuleTape between two defined access points in a dewatered pipeline via manned or robotic entry.

Fill and pressurize the pipeline as required.

Remove the sealing gland and bushing from the 2-inch ball valve on top of the LPDM.

Pre-load the sensor head and cable into the insertion tube and lower the insertion tube into the vault, next to the LPDM.

Attach the sensor head to the MuleTape using a standard fishing knot and half-hitch. Epoxy the knot.

Install the hydraulic winch, encoder cable, hydraulic hoses and support legs at the Insertion Site. At the Pull Site, install the hydraulic capstan, spooler, pit rollers, generator, and hydraulic power pack.

At the Pull Site, attach the MuleTape to the hydraulic capstan.

Thread the insertion tube onto the 2-inch valve located on top of the LPDM with as small amount of MuleTape slack as possible.

Open the ball valves on the bowl of the LPDM to divert the pressure out of the vault via 2-inch PVC hoses.

Open the top LPDM valve. As the lower LPDM valve is being opened, begin to pull the MuleTape slack at the Pull Site. This pressurizes the insertion tube.

Lower the piston tube into position using a hydraulic hand pump.

Turn on the computer, Sahara interface and electronics to prepare for deployment of the sensor head.

The Sahara Operator (Insertion Site) informs the Capstan Operator (Pull Site) to begin to pull the MuleTape, deploying the sensor head. Synchronization must be maintained between the Sahara Operator and the Capstan Operator to ensure that the MuleTape remains taut.

The operators should stop pulling at 1 meter intervals to listen for leaks until the sensor head reaches the pull site.

Dispatch the PipeHawk Operator to track the sensor head, locate and mark the leak location(s), gas pockets and pipeline intervals on the ground surface as may be required. Document all findings in the Inspection Log.

When the sensor head reaches the Pull Site, the Sahara Operator instructs the Capstan Operator to reconfigure for retrieval. At the Insertion Site, use the hydraulic winch to retrieve the cable and sensor head.

Once the sensor head has been retrieved and the inspection is complete, use the capstan equipment at the Pull Site to retrieve and re-spool the MuleTape.

### **Deliverables**

The Sahara Locator operator will mark all detected leaks, pockets of trapped gas and/or desired pipeline intervals on the ground surface during the inspection.

A set of GPS coordinates, which give the insertion point, end point and the locations of any detected leaks and/or gas pockets (PI) will be provided. If required, the Sahara Locator operator will flag the pipeline location at desired intervals and points of intersection (PI). GPS coordinates of the pipeline interval stations can be taken and recorded.

A written inspection report is provided to the client within two (2) weeks of the inspection.

### **Confirmations | Clarifications | Submittals per RFP Requirements:**

The leak assessment shall be performed internally while the pipeline remains in service or using a pull tape with no flow. A sensor head (tethered device) is inserted into a live pipeline carried by the flow of water or pulled by tape with no flow. The sensor will travel through the pipeline pinpointing the exact location of leak(s). Leaks are identified by the distinctive acoustic signals generated at the pipe wall.

Pure Technologies will perform the inspection in a non-destructive manner, while the pipeline is in service or under pressure of at least 15 psi, using real-time data to be able to inspect pipelines without flow.

The Sahara system is capable of inspecting multiple pipeline material types including Pre-stressed Concrete Cylinder Pipe (PCCP), Reinforced Concrete Cylinder Pipe (RCCP), Asbestos Cement (AC) Pipe, Polyvinyl Chloride (PVC), High-Density Polyethylene (HDPE), Glass Reinforced Polymer (GRP), Steel, Cast Iron, and Ductile Iron Pipe.

The no-flow Sahara inspection is capable of inspecting in pipelines that are 10-inch diameter and larger.

Assuming the tag lines are in place, the Sahara system can be inserted into static pressurized pipelines up to 200 psi.

The Sahara system operator can advance, stop, and/or retrieve the sensor head at any time during the inspection.

The Sahara system will identify and locate multiple leaks (actually ALL leaks and air pockets) under a single deployment.

The Sahara system will track the sensor head from the surface in real-time during the inspection, providing surface locations with 3 foot accuracy along the length of the pipeline as well as laterally for cases where the exact pipe alignment is not known and collect GPS coordinate data.

All Sahara equipment that contacts potable water is disinfected with a chlorine solution prior to being introduced inside the pipe. The cable is also spooled in a chlorine bath throughout the inspection. All equipment utilized by Pure Technologies for use in potable water pipelines is dedicated and certified to only be utilized in potable water lines. Devices previously deployed within wastewater piping systems are never utilized within potable water pipelines.

The Sahara no-flow inspection system can detect leaks as small as 0.01 gallons per minute at 90 psi of pressure and 0.1 gallons per minute at 25 psi.

The Sahara tracking locator is capable of locating leaks within 12-inches of the leak or gas pocket location and will provide preliminary results on-site during the inspection.

Be capable of providing preliminary results to City of Denton staff on-site during the inspection.

Pure Technologies will respond to any request for emergency services within 48 hours. Our experience with most emergency situations is that it may require several days to arrest the existing issues and be available for us to have access to the pipeline. Hence, our initial rapid response is to meet with the City and conduct a site reconnaissance to understand what equipment and services are required and if the existing configuration can accommodate such services. Because our technologies may be deployed on other projects in Texas, availability of equipment and field personnel will need to be confirmed and communicated to the City for planning.

Pure Technologies will provide mapping grade GPS surface markings depicting the location of the pipeline every 300 feet and at each bend as requested, to allow accurate updating of the City's GIS databases.

Pure Technologies will provide a detailed report of pipeline segment(s) assessed within GIS format using mapping-grade GPS data. GIS data must be compatible with the City of Denton GIS system. The report will include the location and rating/size of each leak as (Small for < 2 gpm | Medium for 2 to 10 gpm | large for > 10 gpm) detected during the inspection.

The Sahara no-flow inspection report and associated deliverables shall be submitted in hard copies (three copies) and electronic format with database, information viewable in ArcMap with all pertinent information. The report will include at minimum; an executive summary, a location map of the project, indicating the start and end of the project, the date started, and date completed, tables with pertinent information, photographs, videos of CCTV , and any other pertinent information necessary for the project. The conclusion shall be clear and concise depicting the condition of the pipe at the time of inspection and database tables will be named clearly identifying the information. The database will be the property of the City of Denton and information will not be shared without prior written approval from the City of Denton staff responsible for the project/inspection.

## GROUP 3 - REQUIREMENTS FOR INTERNAL NON-TETHERED FREE-SWIMMING LEAK AND GAS POCKET INSPECTION

This specification covers the requirements for conducting non-tethered free-swimming leak assessments. The leak assessment shall be performed internally while the pipeline remains in service. A free-swimming acoustic leak detection system is inserted into a live water main and carried by the flow of water. The device will travel through the pipeline detecting and locating leak(s) and gas (air) pockets.

Pure Technologies' Free-Swimming Internal Acoustic Leak and Gas Inspection Technology with Video is referred to as "SmartBall®".

### SmartBall Technology Overview

Internal acoustic leak detection systems have proven to be the most effective and reliable means for identifying leaks in larger diameter pipelines. Technological advances have resulted in the development of the SmartBall, a free-swimming acoustic leak detection device capable of surveying many miles of fully operating pipeline with a single deployment. The device can identify and locate small leaks in water pipelines 6-inches and larger, constructed of any pipe material. The device can also pass through in-line valves (including butterfly valves > 10-inches) and negotiate unlimited bends in the pipeline. These benefits provide a cost effective and timely approach to identifying and locating leaks in large diameter water pipelines and wastewater force mains.

### Background

Acoustic leak detection equipment identifies the sound or vibration induced by water escaping from pipes under pressure. When pressurized product leaks from a pipe, it creates a distinctive acoustic signal that travels through the water column flowing in the pipeline.

Recognizing the value offered by acoustic leak detection technology yet realizing some of the limitations associated with current leak detection technologies applicable to large diameter water transmission mains, a research and development program was undertaken by Pure Technologies in 2004 to develop a free-swimming (non-tethered) acoustic leak detection device. The goal of the program was to develop a technology that would provide operators with the ability to survey water transmission pipelines for which inspection was previously not practical.

## Water Pipelines

For water pipeline and sewer force main applications, the SmartBall consists of an outer foam ball that envelops a water-tight, aluminum sphere (approximately 2-1/2" in diameter) containing the sensitive acoustic instrumentation. The figure to the right shows a graphic representation of the instrumentation housed inside the aluminum core.



*Aluminum core containing instrumentation and battery power.*

The device is inserted into the pipeline and released to allow the flow to roll the SmartBall downstream. The compressible foam outer ball allows for insertion through existing 4-inch diameter outlets. If a dry or pressure tap is required, Pure Technologies requires that a 6-inch tap be provided. The outer ball also provides mass by which the device is pushed by the hydraulic flow of the water.

A photograph of the inner aluminum core and the outer foam ball is presented in the figure below. While the ball is traversing the pipeline, it continuously records all acoustic activity in the pipeline.



*Aluminum core and outer foam protective ball.*

Smartball Receiver (SBR) units are placed periodically along the pipeline at convenient surface access locations, whereby the movement of the device can be tracked. Once the ball has traversed the desired pipeline length, it is retrieved from the pipeline. The acoustic data can then be evaluated to determine the presence and location of any leaks and/or gas (air) pockets in the pipeline.



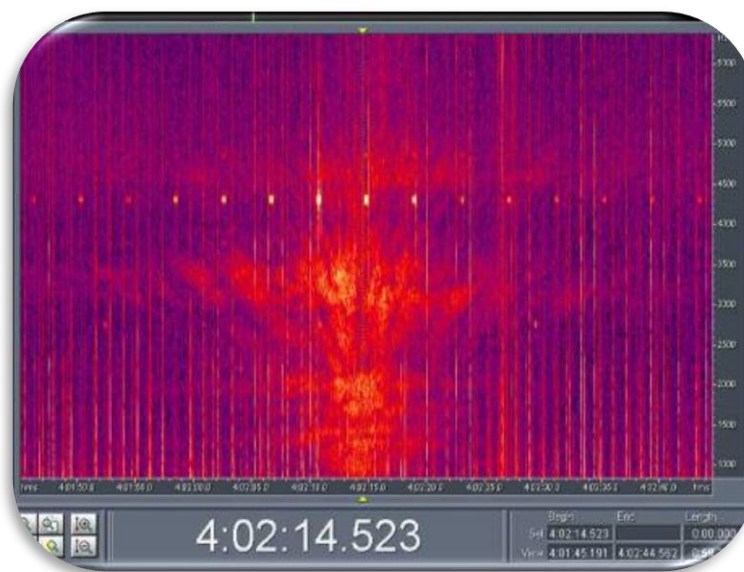
For water pipelines, the technology requires two access locations (4-inch or 6-inch diameter) equipped with a full port valve having a standard flange face (one each for insertion and extraction of the device).

Once deployed, the SmartBall can pass through open in-line valves (including butterfly valves greater than 10-inches), reducers and other fittings, as well as navigate unlimited bends and profile changes. The ball is propelled by the hydraulic flow of the water, requiring a minimum flow velocity of ½ fps, and will roll along the bottom of the pipeline. Greater flow rates (1 to 3 fps) may be required for significant pipeline profiles. At a flow velocity of 2 fps, the ball will typically flow vertically.

The device provides for thirty (30) hours of acoustic monitoring and recording. Based on a flow velocity of two feet per second, the Smartball can survey about 40 miles of pipeline via a single deployment. Larger cores are also available to accommodate longer inspection distances.

Depending on the ambient acoustic environment (the “noise floor”), leaks as small as 0.03 gallons per minute (gpm) have been detected at higher operating pressures. The leak detection limits are approximately 0.5 gpm at 15 psi, 0.1 gpm at 25 psi and 0.01 gpm at 90 psi.

A printout of an acoustic frequency spectrum display for a one (1) gallon per minute leak in a 48-inch water pipeline is presented below.



*Acoustic frequency displaying a 1 gpm leak in a 48-inch water pipeline.*



Two techniques are utilized to locate an identified leak in a pipeline. The primary technology utilizes the miniature ultrasonic transponder placed inside the sphere which emits a timed, high frequency, coded ping that allows the GPS based and synchronized SBR unit on the surface to track the device. The SBR utilizes a surface mounted tracking sensor that is attached to a metal interface or appurtenance that is in direct contact with the water column. This allows the receiver to detect the high frequency ultrasonic pings that travel through the water column at the speed of sound. By tracking the device as it travels through the pipeline, the relative position of the ball to the receiver can be calculated once the device passes the acoustic receiver unit. The SBR unit also provides a fixed reference point for both position and time.

The SBR has demonstrated an ability to track the device for more than one mile (1/2 mile in either direction). However, various factors can affect the distance to which the device can be detected. These include the pipeline configuration (bends, etc.), diameter of the pipe, the pipe material and lining condition, the presence of air pockets, debris, or sediment accumulation – all factor that may attenuate sound. By placing an SBR every 2,500 to 3,000 feet, Pure Technologies will locate detected leaks or gas pockets within 1 to 2 meters.

The SmartBall is the only free-swimming internal acoustic leak and gas pocket inspection device that can be tracked throughout an inspection run.

Standard reporting of identified leaks is broken down by Small (0 to 2 gpm), Medium (2 to 10 gpm) and Large (> 10 gpm).

The following presents a summary for a SmartBall inspection in Airdrie, Canada. References for SmartBall projects performed in Texas are also included herein.

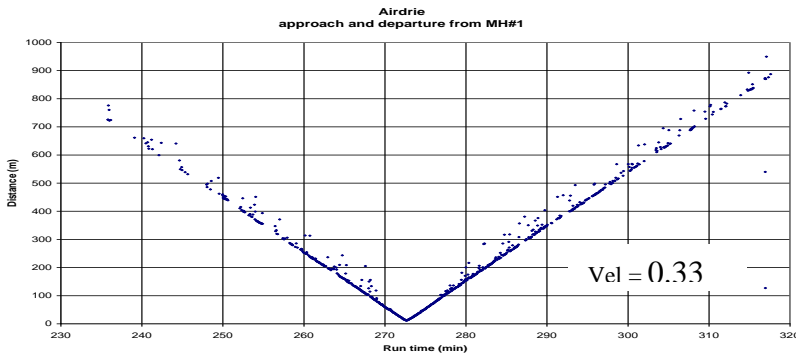
### Airdrie, Alberta, Canada

The SmartBall was deployed for the City of Airdrie to inspect a 36" water line that supplies the city with water. The line runs approximately 8 miles from the northern city limits of Calgary, past Balzac, to the Airdrie reservoir.

SBR tracking receivers were deployed at the insertion and retrieval locations, as well as at existing appurtenances (air relief valves and manholes) – resulting in a spacing of approximately 1/2 mile between acoustic tracking receivers. The yellow tacks shown in the figure 4 denote the location of the receivers.



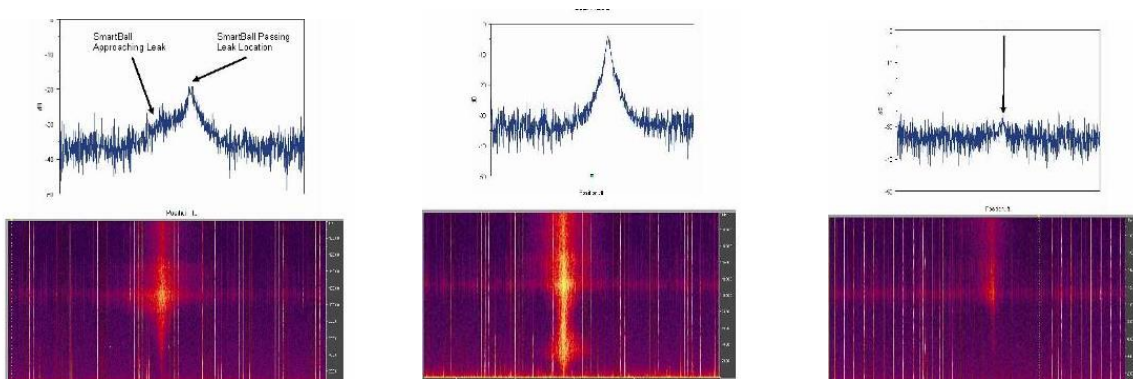
36-inch Airdrie Water Main



*SBR's were able to track the SmartBall  
½ mile in each direction.*

Rotation data from the on-board accelerometer is utilized to calculate the rate of rotation of the device as it traversed the pipeline, which allows for a velocity profile to be developed. Then, absolute position reference points obtained from the SBR's are applied to the time stamped data. The result is a position versus time relationship for the entire run of the tool.

Upon retrieval of the tool, the acoustic data recorded by the SmartBall was analyzed and cross-referenced with the position data from the SBR to determine location. Three leaks were detected during the tool run. The figures below display the leak intensity and accompanying acoustic frequency display associated with each of the three identified leaks.



*Identified Leaks (L to R) 5 gpm, 35 gpm and 0.8 gpm leaks.*

The City of Airdrie confirmed all three leaks. A photograph the 30 gpm leak source is shown below. Unbeknownst to Pure Technologies, the City had simulated the two (2) smaller leaks. However, the City was unaware of the large leak, as it occurred in a remote field and the water was not coming to the surface – rather running down the pipeline to an underground destination.



*35 gpm leak at 1/4-inch slit in the steel bell joint of the PCCP*

### Confirmations | Clarifications | Submittals per RFP Requirements:

All SmartBall inspections are performed internally while the pipeline remains in service. The free-swimming acoustic leak detection system is inserted into a live water main carried by the flow of water. The device will travel through the pipeline detecting "ALL" leak(s) and gas pockets in a single deployment.

The SmartBall can enter and exit a fully operating and flowing pipeline, while the pipeline remains in service and flowing at a velocity of one (1) foot per second or greater and the SmartBall will detect and locate multiple leaks and/or gas pockets over the entire length of a pipeline inspected under a single deployment.

The SmartBall can map the alignment of the pipeline being inspected. The pipeline alignment and suspected level of accuracy will be provided in a geodatabase and identifying pipeline alignment discrepancies between the recorded data and as-built pipeline drawings or existing GIS.

The SmartBall inspection is performed in a non-destructive manner and can survey pipelines with an inside diameter of six (6) inches or larger.

The SmartBall can operate inside a pipeline with a minimum flow velocity of one (1) foot per second and can be actively tracked throughout the duration of the inspection run. Note: a flow velocity of 2 fps may be required to traverse vertical risers.

The SmartBall can be tracked inside a pipeline a up to 3,000 feet between tracking sensors. The SmartBall Tracking technology will assist in verifying the instantaneous velocity of the device to predict the arrival time of the device at downstream pipeline features and identify changes in the velocity of the device between tracking sensors.

The SmartBall can inspect pipelines with partially open offtake valves, allowing restricted offtake service to continue throughout the inspection. The SmartBall can also be tracked as it approaches and passes such offtakes whereby the City can be notified when the device passes the lateral and the City can open the offtake valve fully, thereby minimizing the duration of restricted flow into the offtake.

The SmartBall is inserted into and extracted from the pipeline through a minimum access of four (4) inches equipped with a corresponding full port valve.

The SmartBall may be inserted and extracted via fire hydrants.

The SmartBall can record data for up to 24 hours and can be deployed into a pipeline operating at pressures up to 500 psi.

The SmartBall can record the pipeline operating pressure and water temperature (up to 150 degrees Fahrenheit) throughout the inspection and include such data in the final report.

The post-survey report shall include an executive summary, a location map of the project that indicates the start and end point, survey date(s), tables with pertinent information, photographs, any other information necessary for the project, and the location of leaks and gas pockets.

The SmartBall will detected leaks as originating from the pipe barrel, pipe joint, or a pipe feature and can perform in any type of pipe material types, including steel, cast iron, ductile iron, pre-stressed concrete cylinder pipe, bar wrapped pipe, asbestos cement, polyvinyl chloride, high-density polyethylene, and glass reinforced plastic.

All Pure Technologies field personnel are OSHA and confined space trained and certified and meet local and or national standards for confined space entry. Pure Technologies will furnish confined spec permits whenever the scope of work identifies work to be performed in confined space areas.

Pure Technologies personnel are always equipped with required safety equipment including calibrated gas monitors, lifting harnesses, safety lines, and all other required safety equipment to ensure their welfare while entering confined spaces.

Within 24 hours following extraction of the SmartBall, Pure Technologies will identify, report (letter report) and field verify (using external listening mics and

correlators) the location of any identified leaks estimated to be larger than two (2) gallons per minute.

Pure Technologies maintains sufficient equipment including the SmartBall devices and replacement components, tracking sensors and receivers, insertion stacks, and extraction stacks within our Dallas warehouse facility.

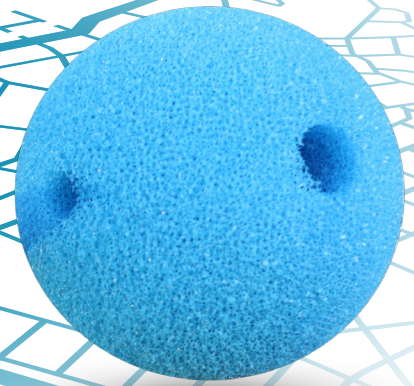
The following two (2) summaries presented below of SmartBall inspection distances and leaks found is in response to the RFP requirement to demonstrate that the SmartBall technology as successfully been utilized on a minimum of 7,000 miles of pipeline and reported 3,000 leaks.

SmartBall Inspection Summary		
Year	Annual Inspection Distance (Miles)	Total Inspection Distance (Miles)
2007	39	39
2008	131	170
2009	249	419
2010	315	734
2011	364	1098
2012	257	1355
2013	520	1875
2014	538	2413
2015	961	3374
2016	1266	4640
2017	959	5599
2018	748	6347
2019	750	7097
2020	574	7671
2021	650	8321
2022	1084	9405
<b>TOTAL</b>		<b>60,557 Miles</b> <b>319,740,960 feet</b>

### SmartBall Inspection Summary

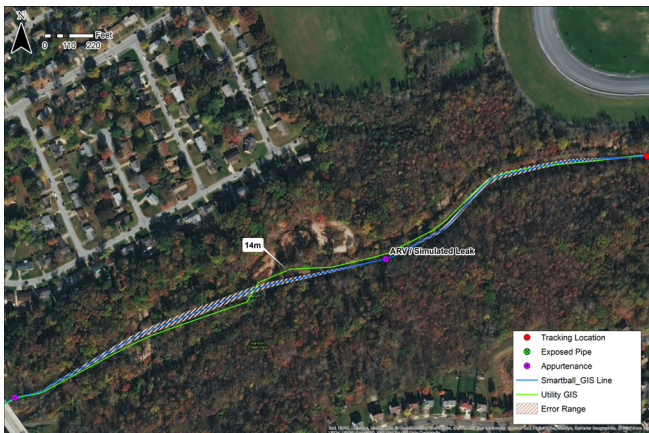
Year	Annual Leaks Detected	Total Leaks Detected
2007	6	6
2008	10	16
2009	44	60
2010	29	89
2011	42	131
2012	17	148
2013	8	156
2014	52	208
2015	315	523
2016	547	1070
2017	464	1534
2018	295	1829
2019	275	2104
2020	257	2361
2021	372	2733
2022	464	3197
<b>TOTAL</b>		<b>16,165</b>





# SmartBall® Mapping

INLINE FREE-SWIMMING PIPELINE INSPECTION AND MAPPING PLATFORM



## Why X and Y Mapping?

The SmartBall® platform is a free-swimming inspection tool used to detect leaks and gas pockets and map pipeline networks. Knowing the location of underground pipelines with certainty is a key component of pipeline management and a comprehensive condition assessment program. Confirming the location of buried assets helps pipeline managers evaluate their risk of failure, understand the alignment of pipes relative to nearby utilities, plan maintenance work more efficiently, reduce the likelihood of third-party damage, and conduct more accurate hydraulic modeling.

## How it Works

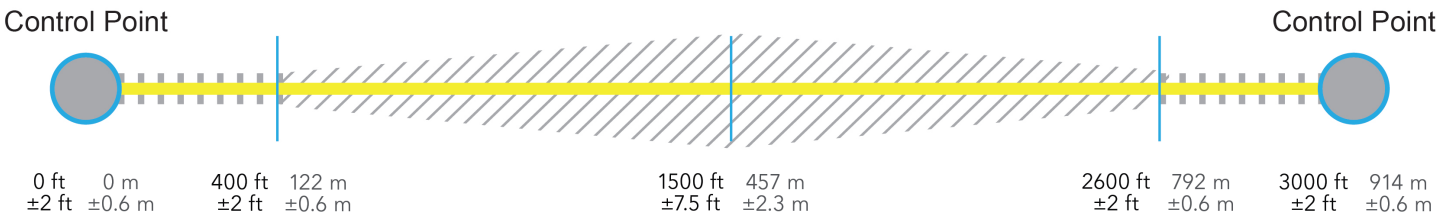
SmartBall Mapping combines the latest accelerometer and gyroscope technologies with advanced location algorithms to calculate pipeline directional data. With field-collected GPS points and pipeline bearing information, a geodatabase is created containing the X-Y alignment of the pipeline, known as the SmartBall Mapping Line.

Mapping Accuracy

The range of accuracy for SmartBall Mapping depends on the quality and frequency of control points and the consistency of the SmartBall tool’s rolling. Under ideal conditions, the expected accuracy is:

*Range of Accuracy = The greater of ±2 ft (0.6 m) or 0.5% of the distance from a control point.*

For example, the maximum expected error for an area with control points 3,000 feet (914 m) apart will be ±7.5 feet (±2.3 m). This maximum expected error occurs in the middle of the area, when the SmartBall tool is 1,500 feet (457 m) from either control point.



Using the SmartBall Mapping Line

The SmartBall Mapping Line is compared to available pipeline information, such as existing pipeline GIS and as-built drawings, to identify conflicts or confirm the assumed pipeline alignment. In areas where the SmartBall Mapping Line agrees with a utility’s records, the utility can feel more confident in the assumed location of the pipeline. If a conflict is identified, a targeted effort of exposing the pipeline, line finding, or surveying at these specific areas may be warranted depending on the location accuracy required for the subject pipeline.

Operational Requirements

Pipe Materials	Any pipe material
Flow Velocity	Pipeline flow must be between 1.5 and 3 feet per second (0.5 – 0.9 m/sec)
Flow Consistency	Flow changes should be minimized throughout the inspection
Tracking Locations and Control Points	Known features are required for GPS control points, including air release valves, inline valves, or other appurtenances. Potholes can be used when there are not enough known features.
GPS and Pipeline Bearing	Centimeter-grade GPS point and the pipeline directional bearing will be recorded at all control points
Number of Inspections	Two inspections are needed to create a complete deliverable with a geodatabase and report; a single inspection can provide a confirmation of alignment delivered in report format with no geodatabase.

For more information on how we can help you, contact us at: [puretech@xylem.com](mailto:puretech@xylem.com)



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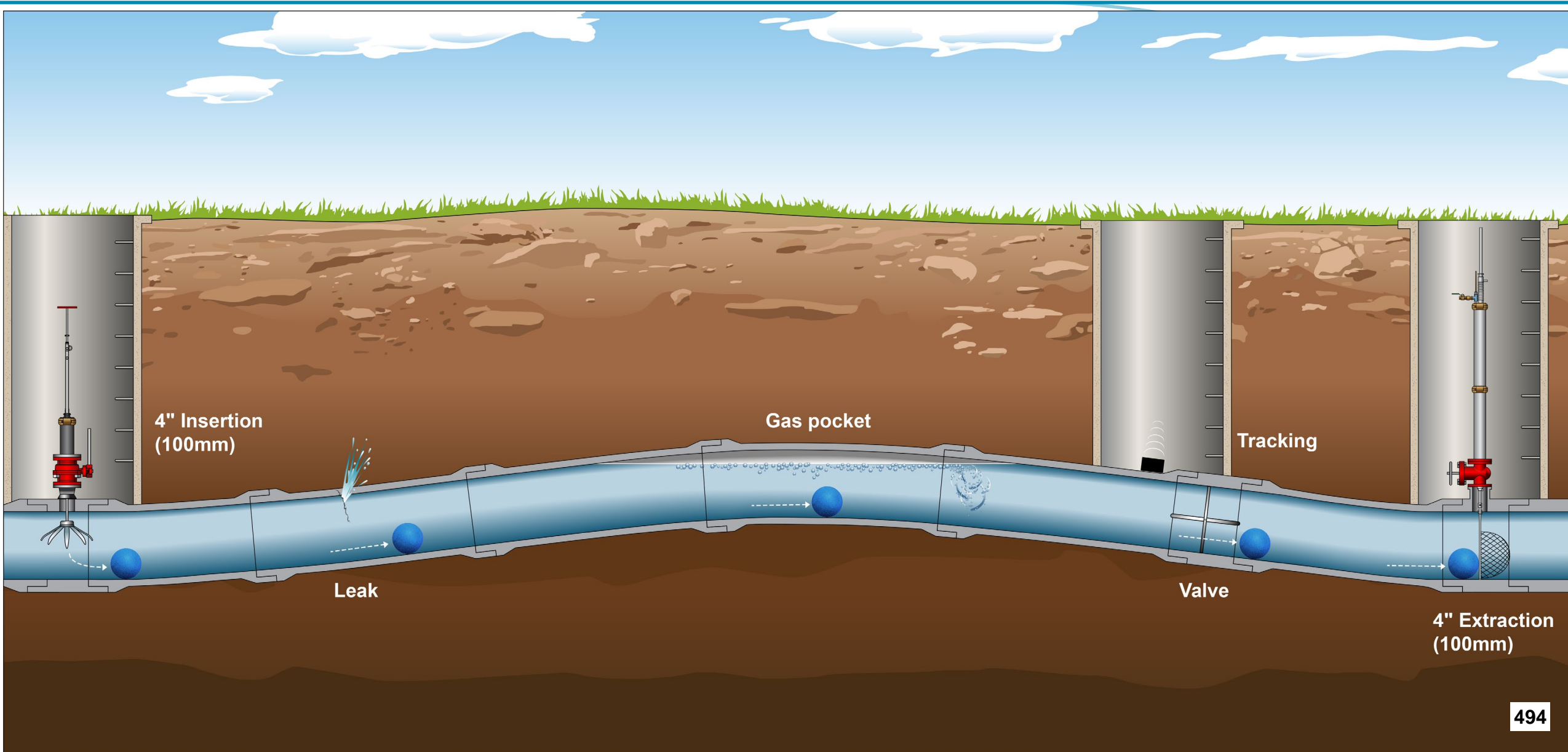


# SmartBall

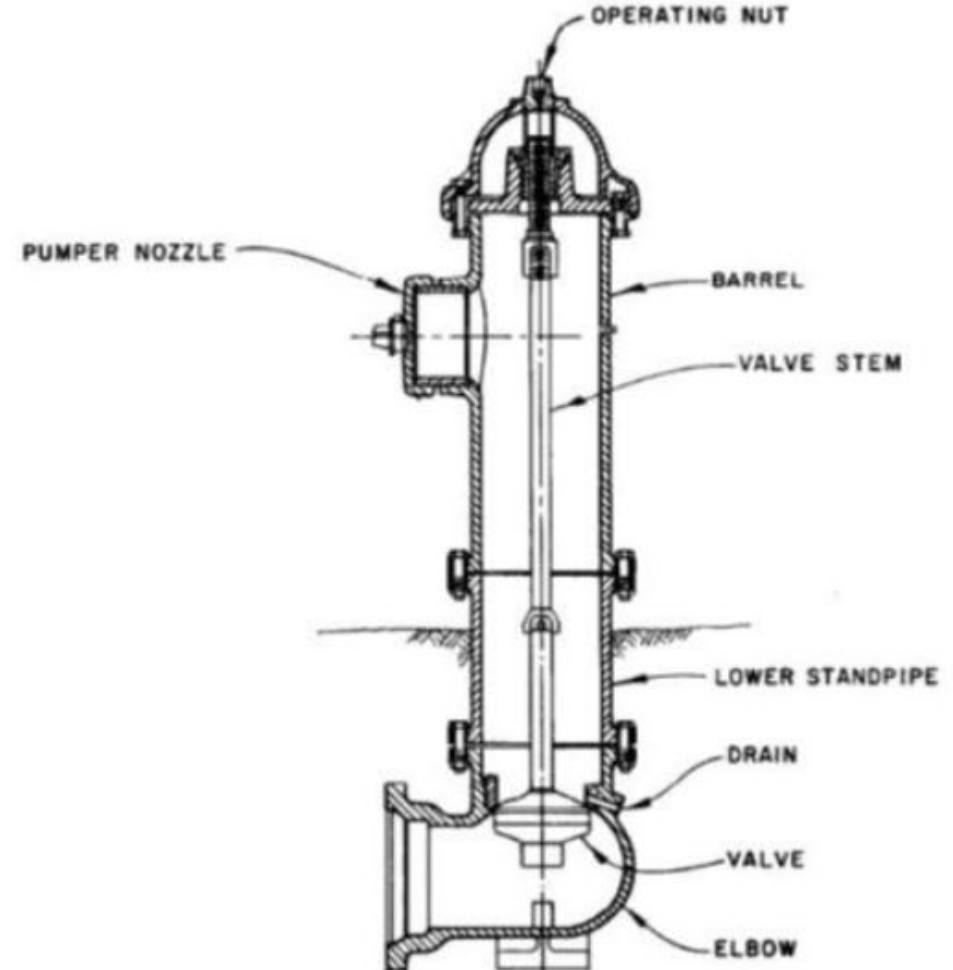
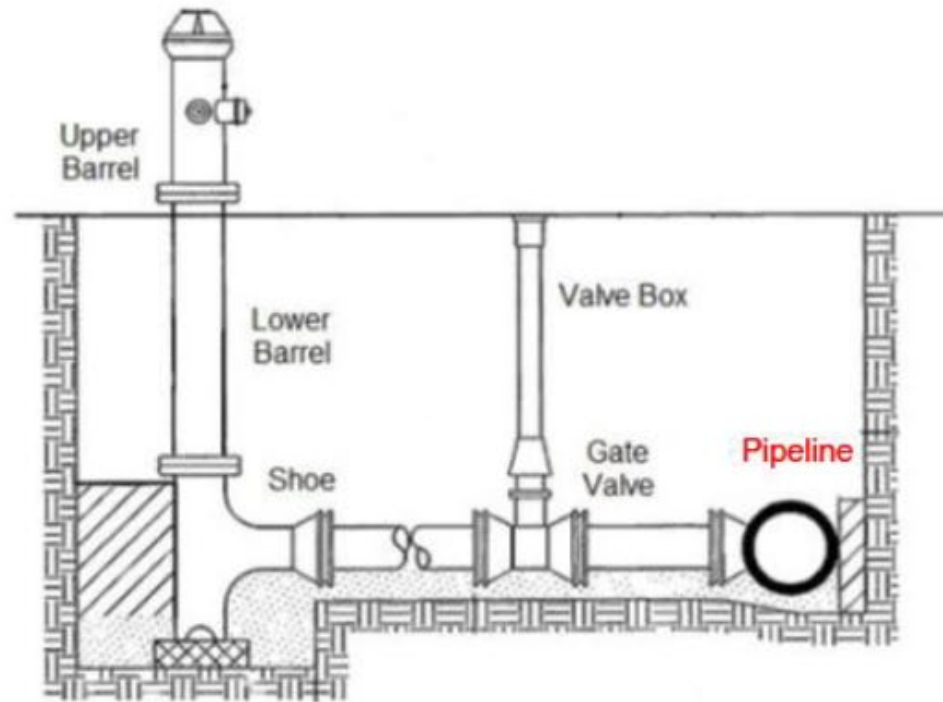
HYDRANT INSERTION AND EXTRACTION INTRODUCTION

APRIL 16, 2020

# SmartBall Overview



# Hydrant Overview



# Hydrant Insertion

## Basic Procedure

1. Isolate hydrant from the pipeline
2. Remove the dome, valve stem and operating nut
3. Insert SmartBall into the hydrant lateral
4. Re-install valve stem, dome and operating nut
5. Connect supplemental water source that has a higher pressure than the watermain to the hydrant
  - Firetruck
  - Upstream fire hydrant
6. Open hydrant valve and pressurize hydrant
7. Turn on supplemental water source and launch the SmartBall





# Hydrant Extraction

## Basic Procedure

1. Attach extraction equipment to hydrant
2. Setup extraction hose, diffuser, and dechlorinating tablets
3. Slowly open hydrant to achieve required flow rates
4. Track SmartBall and confirm when it is at the bottom of the hydrant
5. Isolate hydrant and remove valve stem etc
6. Slowly open the hydrant valve until the SmartBall comes to the surface
7. Reassemble hydrant

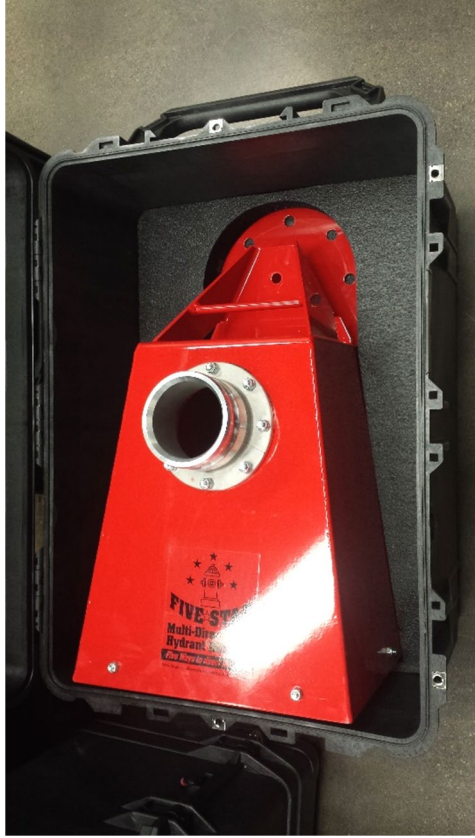


# Client Preparation Work

1. Provide CAD or GIS files
2. Identify hydrants to be used
3. Exercise all valves associated with the inspection to confirm operability (hydrant isolation valve and inline control valves for flow management)
4. Flush hydrant connection to remove debris
5. Confirm if local fire department can assist with insertion
6. Exercise and confirm the internal hydrant valve can be removed
7. Identify where water is going to be discharged when extraction hydrant is open









# Hydrant Experience

## Colorado Spring Project

- 10 inspections
- 54,000 feet
- 10" to 30"
- DIP

## Toledo Ohio

- 1 inspection
- 7 miles
- 18" to 24"
- PCCP and DIP

## GEFA

- 8 inspections
- 58,000 feet
- 10" to 30"
- PCCP and DIP





## GROUP 4 - REQUIREMENTS FOR MANNED EM NONDESTRUCTIVE INSPECTION

This specification covers the requirements for detecting and quantifying the number of broken wires within all types of Pre-stressed Concrete Cylinder Pipe (PCCP). The PCCP assessment involves an exciter coil that is used to induce a small electrical current in the steel wires and steel cylinder. The current in the steel wires then induces a small current in a second coil called the detector. The amplitude and phase of the signal received at the detector will change depending on if the steel wire is broken or not. The change in the detector signal is then analyzed and an estimate of the number of broken wires is given.

### Using Electromagnetic (EM) Inspections to Assess PCCP

Prestressed Concrete Cylinder Pipe (PCCP) designed and manufactured in accordance with AWWA Standard 301 and C304 relies on high strength steel prestressing wire helically wrapped around the pipe's concrete core under extremely high tension to provide its strength. Due to its vulnerability to corrosion, the wire is embedded in a cement rich mortar coating, which provides an alkaline environment (a very effective form of corrosion protection) that inhibits corrosion and provides an outer armor protection.



*Heavily corroded and broken  
prestressing wire*

Problems arise in PCCP when the cement mortar, and thus the alkaline environment, is compromised, leaving the wire susceptible to corrosion. When corrosion of the prestressing wire occurs, the wire eventually breaks - reducing the strength of the pipe at that location. If corrosion continues, multiple wire breaks may occur in the same region and can significantly reduce the pipe's strength, eventually to the point of failure. The above figure shows the springline of a PCCP pipe section with numerous broken wires in one location.

In addition to corrosion, a common failure mode of prestressing wire is due to a change in the manufacturing process during the 1970s. This process led to the production of wire with increased tensile strength but also a reduced ductility of the steel, making the wire susceptible to hydrogen embrittlement. The combination of low ductility in the wire and susceptibility to hydrogen embrittlement creates a higher probability of failure for PCCP versus other standard water main pipe materials.

Hydrogen embrittlement may also result from exposure to stray current and from improperly applied cathodic protection.

Failure of PCCP is usually a sudden, catastrophic event with no warning. Thus, the consequences associated with its failure not only severely disrupt operations and delivery of water to customers but can also increase significant risks associated with collateral damage.

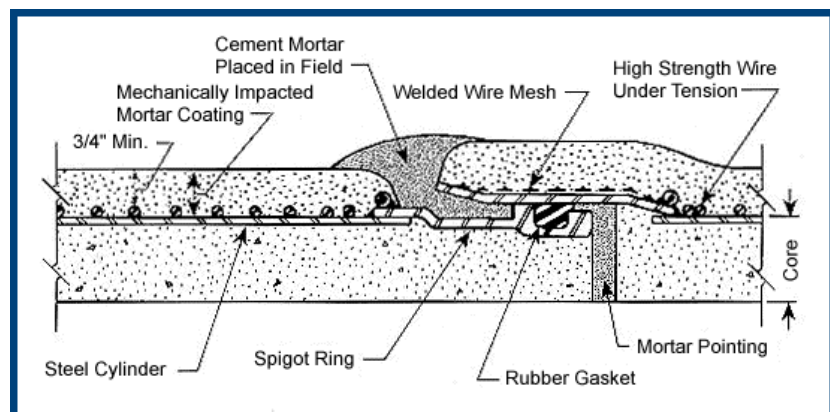
Assessing the condition of a PCCP buried pipeline is a challenging task that is best performed using state-of-the-art non-destructive testing technologies combined with sound engineering science and judgement. The primary goal of an assessment program is to provide an understanding of the condition of the structural component that provides the pipe's strength—the prestressing wire. An electromagnetic inspection provides a high resolution, non-destructive method of evaluating the existing condition of the prestressing wire, as it identifies the quantity and location of wire breaks for each pipe.

Pure Technologies has developed and owns the electromagnetic inspection technology (PureEM®) and would propose to use said technology to assess the condition of the PCCP water mains within the City of Denton water system.

There are several designs of PCCP in use in the United States. The most common types are AWWA C301-E (Embedded Cylinder Pipe) and C301-L (Lined Cylinder Pipe) as shown below. The figure on the right shows a cross-sectional view of the Lined Cylinder Pipe which is representative of the PCCP typically installed in the City of Denton water main system. Pure Technologies has been utilizing the EM inspection technology since 2001 and numerous excavations have confirmed the efficiency of the technology. As a result, this technology represents the most advanced solution for assessing PCCP water mains.

The EM technology can be deployed using any of three delivery platforms: manned, long-range robotic and free-swimming PipeDiver. The manned delivery platform requires that the water main be completely de-watered to allow for confined space entry.

*Cross Section  
at the  
Joint of L-301  
Lined PCCP*



## Manned EM Inspection

A manned EM inspection shall utilize a cart on which the equipment and power source are mounted. The components of the system are lowered through an access and assembled inside the pipeline. The cart is pushed through the pipeline and assisted by a rope support team in areas of steep slopes or slippery conditions. When an in-line butterfly valve or a reduction is encountered, the electromagnetic inspection cart must be disassembled, the components passed through the constriction, and then reassembled. Having the pipeline dewatered for the manned electromagnetic inspection allows for a concurrent visual and sounding inspection of the pipeline.

General requirements applicable for conducting an electromagnetic inspection using any of the three (3) delivery platforms include, but not limited to the following:

Pure Technologies' personnel shall be trained and certified to perform work in confined space conditions and equipped with calibrated air quality monitors, lifting harnesses, safety ropes, all other miscellaneous safety apparel to ensure the welfare of their personnel entering chambers.

Pure Technologies will identify proposed access manways for any of the delivery platforms when conducting a site reconnaissance and include as such in the project planning document.

If requested, Pure Technologies can excavate and expose any buried manways or pipeline accesses.

If requested, Pure Technologies can remove the access lid or blind flange to pipeline outlets. If the bolts need to be removed with a cutting torch or if bolts and nuts are in poor condition, Pure Technologies may be requested to replace the cover or blind flange when work is completed using a new gasket and new stainless-steel nuts and bolts.

The EM Inspection Report shall include an executive summary, location map of the project, indicating start and end points, date(s) started and completed, tables with pertinent information, photographs, log notes of the visual and sounding inspection if applicable, summary of all electromagnetic inspection results for each individual pipe, photographic documentation, video recording from CCTV cameras if applicable, pipe-by-pipe geospatial GIS deliverable via shapefile, and any other information necessary for the project.

If requested, Pure Technologies will furnish lifting equipment for removal of vault lids, existing ARV's and appurtenances, access lids or blind flanges and placing of EM inspection equipment into the pipeline.

Requirements for conducting a Manned EM and Visual and Sounding Inspection include, but are not limited, to the following:

Manned EM inspections may be performed on pipelines that are 36-inch diameter and larger.

Access for ingress/egress shall not be spaced more than one (1) mile apart.

Access openings for ingress/egress shall be a minimum of 20-inch diameter full clearance, with 24-inch and larger diameter preferable.

The pipeline must be fully de-watered to accommodate a visual and sounding inspection. If requested, Pure Technologies can de-water the pipeline. De-watering of the pipeline will also require Pure Technologies to develop a de-watering plan for submittal to and approval by the City. Any treated water containing chlorine residuals must be treated to eliminate the chlorine residual prior to releasing the water to the surrounding environment.

Manned inspections require that Pure Technologies adhere to all OSHA regulations addressing confined space activities. Pure Technologies will submit a confined space work plan and permit.

All personnel entering the pipeline or other areas considered to be a confined space will be confined space certified.

Pure Technologies shall furnish Top Side Attendants at manway accesses and Top Side Supervisor to monitor the manned EM inspection throughout. All top side personnel shall be confined space certified.

Pure Technologies shall furnish a Rescue and Safety Team to include three (3) qualified and certified Safety Technicians that can position themselves at each of the two (2) manholes defining an inspection leg, along with the third technician positioning and preparing themselves at the next downstream access. Rescue Team shall be equipped with gas monitors (H<sub>2</sub>S, CO, O<sub>2</sub> and LEL), tripods, a 4x4 support vehicle and a trailer mounted rescue kit.

Confined space certifications for all project personnel will be included in Pure Technologies' project planning document.

Pure Technologies shall confirm acceptable air quality in the pipeline or other confined space prior to allowing personnel to enter, and Pure Technologies shall maintain air quality throughout the duration of the project.

Pure Technologies will furnish air blowers and manway templates as needed to maintain air flow and air quality in the pipeline.

Prior to any personnel entering the pipeline, Pure Technologies and the City of Denton will perform “lock-out/tag-out” (LOTO) on all pumps and boundary valves associated with the pipeline. The City will furnish double isolation of closed valves on each end of the pipeline to be inspected and at lateral or boundary valves. If requested, Pure Technologies shall assess the condition of all in-line and lateral valves, close the valves and document said closure to the City. Pure Technologies shall provide documentation confirming the opening of said valves at the completion of work.

Pure Technologies will furnish and secure necessary ladders to accommodate ingress and egress.

Pure Technologies shall furnish tripods and harnesses to assist in ingress and egress of personnel and equipment.

Pure Technologies’ Visual and Sounding inspection will be performed by a 3-person team led by an engineer having more than five (5) years of documented experience with inspecting pressure pipelines.

Pure Technologies’ engineering inspection team will identify pipes that are deemed to be in the state of incipient failure. Should the engineering team identify such distressed pipes, the team will correlate with the corresponding EM inspection results and then meet with the City daily to advise accordingly.

Pure Technologies’ engineering inspection team will also document all pipes and features that support the development of a pipe-by-pipe geospatial as-built GIS deliverable; inspect all joints and document all distress and concerns identified, including photographic documentation.

When inspecting “Embedded” Cylinder PCCP, Pure Technologies will also sound the pipeline by impacting the interior pipe wall with a steel rod and listening for “hollow” areas that demonstrate a delamination of the concrete core from the steel cylinder. Such delamination is an indication that a pipe may be in a state of incipient failure. The delaminated area will be mapped out, carefully documented, correlated with the EM inspection findings and reported to the City.

### Confirmations | Clarifications | Submittals per RFP Requirements:

Pure Technologies will perform the EM inspection in a non-destructive manner.

Pure Technologies will submit results in a GIS format using mapping-grade GPS data and that is compatible with the City of Denton GIS system.

Assuming that a proper planning document including projected dates for inspection has been prepared and Workshop completed with the City, Pure

Technologies should be capability of mobilizing and beginning an inspection within 48 hours (or less) following authorization to proceed by the City of Denton.

Pure Technologies can conduct a manned EM inspection on pipe diameters greater than 36-inches.

Pure Technologies has the largest detailed library of EM signals based on different features, pipe diameters and pipe types which will allow us to make informed judgments on the condition of pipelines.

Pure Technologies can traverse tight bends and angles that are enveloped with water (tributary crossings) and earth.

Pure Technologies can utilize our V-tool delivery platform externally to inspect the PCCP for wire breaks.

Pure Technologies can track all versions of testing equipment delivery platforms from above ground during assessment.

Pure Technologies can compare results to previous Pure EM inspection results, using the same calibration curve for both data sets.

Pure Technologies will submit reports and deliverables in hard copies (three copies) and electronic format with database, information viewable in ArcMap with all pertinent information. Report will include at minimum; executive summary, location map of the project, indicating start and end of project, start and completion dates, tables with pertinent information, pictures, videos if it helps understand the condition, and any other information necessary for the project. Conclusions shall be clear and concise depicting the condition of pipe at the time of inspection. Database tables will be named clearly identifying the information. Database will be the property of the City of Denton and information will not be shared without prior written approval from the City of Denton staff responsible for the project/inspection.

If selected to perform the services requested herein, Pure Technologies will provide examples of calibration curves generated from various pipe types including LCP, ECP, and ECP with shorting straps. The vendor must be able to provide detailed data regarding how these curves are used to estimate the pipe damage with the bid packet.



## GROUP 5 - REQUIREMENTS FOR INTERNAL ROBOTIC EM NONDESTRUCTIVE INSPECTION

This specification covers the requirements for detecting and quantifying the number of broken wires within all types of Pre-stressed Concrete Cylinder Pipe (PCCP) and Bar-Wrapped Pipe (BWP) water lines and locating areas of concern in Metallic pipelines using a tethered robot fitted with multiple sensors and placed into a depressurized pipeline. As the inspection vehicle travels down the pipeline data from multiple sensors are collected. When the inspection is completed, the vehicle is pulled back via its tether or drives back by itself to the entry point. Data can include ovality/deflection, shape, diameter, corrosion/pipe wall loss, sediment volume, and slope, bend radius, condition of joints, and cracks. The currently approved brand is PureRobotics™ or approved equal.

The PureRobotics delivery platform incorporates both near-field and remote field eddy current EM inspection technologies. This allows Pure Technologies to identify broken prestressing wires on PCCP and broken reinforcing bars on bar wrapped pipe. The Robotic EM unit can also identify areas of wall loss on the BWP cylinder, as well as on steel pipe and ductile iron pipe.

The PureRobotics platform consists of a modular tethered robotic vehicle capable of numerous configuration options for inspection of small, medium, and large diameter “depressurized” pipelines. The PureRobotic unit can operate in fully submersible conditions.

The vehicle traverses the pipe using independently operable tracks to offer inspection deployments greater than one mile in both directions from a single access point. A trained operator navigates the vehicle and controls a high-definition pan-tilt-zoom camera with high-intensity LEDs for visual inspection. Simultaneously, an electromagnetics technician monitors electromagnetic (EM) data live and can direct a closer look at visual anomalies that may correlate with collected data.



PureRobotics EM Inspection  
Delivery Platform

Pure Technologies welcomes observers from the City of Denton to join the operators and monitor the live pan-tilt zoom CCTV camera images.

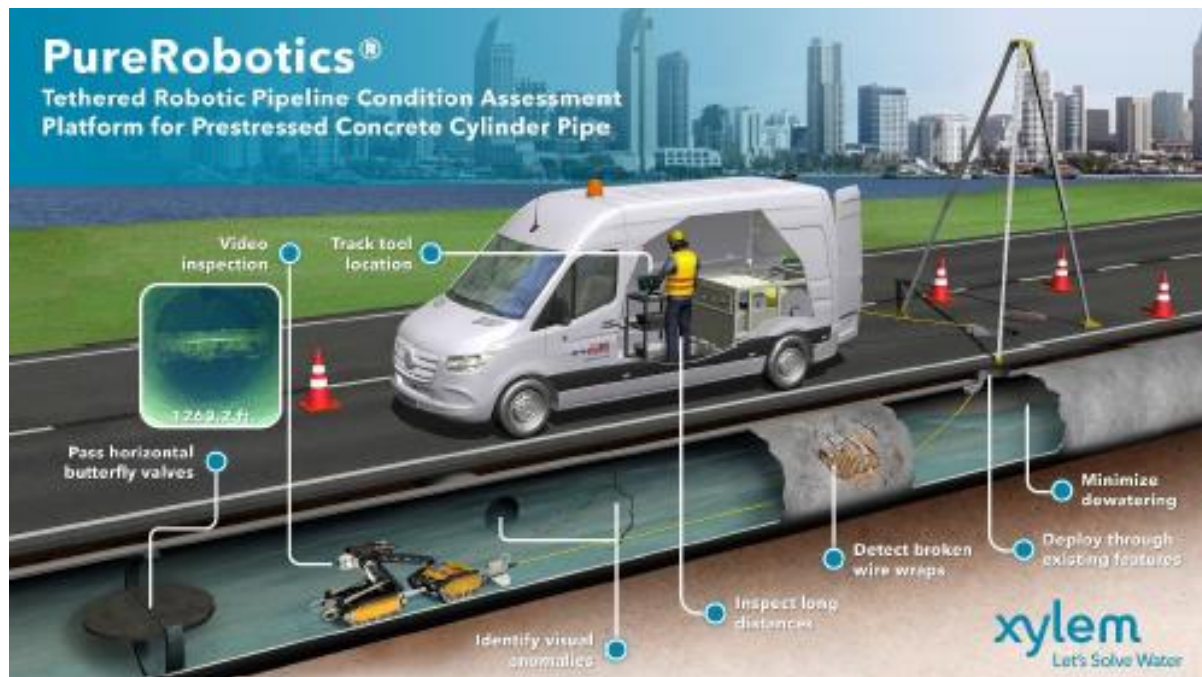
High-definition video and two sets of EM data (forward and reverse pass) are recorded for detailed post inspection analysis. Analysts then identify, quantify, and locate areas of distress. Broken prestressing wires and broken reinforcing bars are reported in an axial position on an individual pipe. Wall loss on metallic cylinders

(BWP, steel or DI) are reported on a 3D image of the pipe denoting the location of the wall loss in both an axial and circumferential location on the pipe.

Based on our experience working in water delivery systems similar to the City of Denton's, Pure Technologies anticipates that the Robotic EM system may represent the more appropriate EM inspection delivery platform. If there are any PCCP water mains longer than a few miles, the free-swimming PipeDiver delivery is a viable alternative. Manned EM inspections may be limited given the smaller diameters of pipelines, lack of access points and the need to de-water the pipeline.

From our experience successfully inspecting pipelines with the PureRobotics delivery platform, we have identified key factors for success when utilizing the robotic inspections to minimize risk and downtime associated with the inspection.

Since 2010, North American utilities have relied on the PureRobotics platform to inspect more than 600 miles of pipeline.



*Long Range, Multi-Sensor PureRobotics Inspection Platform*



## Confirmations | Clarifications | Submittals per RFP Requirements:

Confirmations, Clarifications and Submittals in response to RFP Requirements:

The PureRobotics EM unit is a non-destructive technology for assessing pipelines.

The PureRobotics can deploy via a single access, advancing down the pipeline and returning back through the access point. The robotics unit can also be directed in the opposite direction traveling out and back to the same access point – thus allowing the PureRobotics unit to potentially assess over 2 miles of pipeline from a single access point.

Please note that the actual inspection distance may be affected by pipeline configuration (i.e., bends, in-line butterfly valves, steep slopes, etc.) and conditions (i.e., significant debris or sediment accumulation, biofilm, etc.).

The PureRobotics unit can be inserted and extracted through an 18-inch or larger diameter access into a depressurized pipeline.

The PureRobotics Perform can operate in fully submerged conditions and up to an internal head pressure of 100 psi.

The PureRobotics unit can assess identify broken prestressing wires and reinforcing bars in 16-inch to 120-inch pipe diameters. The robotic unit currently is limited to using the remote field eddy current to identify wall loss in pipes from 16-inch to 48-inches.

The PureRobotics unit will collect digital video for visual assessment and support high accuracy mapping with inertial measurement unit (IMU) capabilities. SONAR and laser profiling are currently not available on the robotic unit.

Pure Technologies will collect the appropriate data to detect localized wall loss on the cylinder in BWP, DIP, Steel, and broken wraps in BWP and PCCP.

The Robotic EM inspection technology can detect a less than five (5) wire breaks but will conservatively report a minimum of five (5) consecutive broken wire wraps on PCCP and BWP. The Robotic EM unit can identify wall loss that is at least 3-inch diameter with a minimum 30% wall loss in the cylinder of steel, ductile iron, or BWP.

The PureRobotics unit can pass through gate valves but cannot pass through butterfly valves in pipe less than 48-inch diameter.

The PureRobotics unit can be tracked in real time from above ground during the inspection.

All of Pure Technologies field technicians are confined space trained and meet OSHA standards for confined space.

Pure Technologies will supply field personnel with all safety equipment necessary for the inspection such as calibrated gas detectors, lifting harnesses, communication devices, safety ropes and other pertinent personal protective equipment.

Pure Technologies analysts will classify anomalies found based on a detailed signal library as features, damage or other as applicable, quantify the extent of damage found, describe the location of the defect, and provide a ranking as relates to LoF.

Should the City select Pure Technologies to perform the requested services, Pure Technologies will provide examples of calibration curves generated from various pipe types including BWP, DIP, Steel, and PCCP. The vendor must be able to provide detailed data regarding how these curves are used to estimate the pipe damage.

Pure Technologies report will include at minimum; executive summary, location map of the project, indicating start and end of project, start and completion dates, tables with pertinent information, pictures, videos if it helps understand the condition, and any other information necessary for the project. Conclusion shall be clear and concise depicting the condition of pipe at the time of inspection. Database tables will be named clearly identifying the information.

# PureRobotics®

For metallic  
pressure pipe

## TETHERED ROBOTIC CONDITION ASSESSMENT PLATFORM FOR METALLIC WATER PIPELINES

### Operating Environment

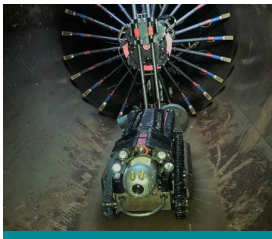
Pipe Materials	Steel, Ductile Iron, Cast Iron, and Bar-Wrapped Pipe (BWP)	
Minimum Metal Thickness	<ul style="list-style-type: none"> <li>0.20 inches (5.1 mm) - Steel, Ductile Iron, and Cast Iron</li> <li>0.11 inches (2.8 mm) - BWP (cylinder)</li> </ul>	
Maximum Metal Thickness	<ul style="list-style-type: none"> <li>0.50 inches (12.7 mm) - Steel, Ductile Iron, and BWP (cylinder)</li> <li>0.90 inches (22.9 mm) - Cast Iron</li> </ul>	
Tool Configurations	Small-Diameter Chassis	Standard Chassis
Pipeline Diameters	16 to 24 inches (400 to 600 mm)	24 to 48 inches (600 to 1200 mm)
Detection Threshold - BWP	5 broken bars	5 broken bars
Detection Threshold - Metallic	<ul style="list-style-type: none"> <li>3 inch x 3 inch (75 mm x 75 mm) by 30% wall loss</li> </ul>	<ul style="list-style-type: none"> <li>Pipes <math>\leq</math> 36 inches (900 mm): 3 inch x 3 inch (75 mm x 75 mm) by 30% wall loss</li> <li>Pipes <math>\geq</math> 37 inches (940 mm): 4 inch x 4 inch (100 mm x 100 mm) by 40% wall loss</li> </ul>
Minimum Access	<ul style="list-style-type: none"> <li>Same diameter as pipe or open pipe access</li> <li>No side insertions</li> </ul> <i>*Fully dewatered at access</i>	<ul style="list-style-type: none"> <li>Factory: 18 inches (450 mm)</li> <li>Tap: 20 inches (500 mm)</li> <li>Side insertions require review</li> </ul> <i>*Fully dewatered at access</i>
Maximum Lift and Overhead Clearance for Insertion	15 feet (4.6 m)	10 feet (3.0 m)
Insertion Methods		
Tripod	Yes	Yes
Crane	Yes <i>*recommended</i>	Yes <i>*recommended</i>
Backhoe	Yes	Yes

Operating Environment Continued

Number of Inspection Runs	<ul style="list-style-type: none"><li>1 run required for Steel, Ductile Iron, and Cast Iron</li><li>2 runs required for BWP (for bar and cylinder inspection)</li></ul>
Maximum Slope	Up slope - 15 degrees   Down slope - 25 degrees
Maximum Horizontal Bend	90 degrees
Traversable Features	Gate valves, when the valve is the same diameter as the pipeline
Non-Traversable Features	Butterfly valves, ball valves, vertical runs, reducers
Cumulative Bends	1,000 feet (300 m) or less - 270 degrees 2,000 feet (600 m) or less - 180 degrees 3,000 feet (900 m) or greater - 90 degrees

Specifications

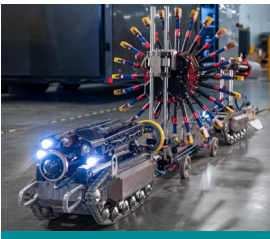
Add-On Sensors	Inertial Mapping System - combines data collected during an inspection with known above-ground locations and pipeline drawings to create a field-generated GIS map of a pipeline
Video System	<ul style="list-style-type: none"><li>Pan-tilt zoom camera or panoramic camera</li><li>LED lighting</li><li>Video quality is dependent on water turbidity and wall conditions</li><li>When included in the inspection package, the video file is delivered with anomalies noted as part of the final report</li></ul>
Tool Tracking	A line finder can be used to locate and mark the location of the robotic platform while it is in the pipeline
Sanitation	All components sanitized with 10,000 ppm sodium hypochlorite and water solution prior to insertion, as per AWWA C651-05 standard



PureRobotics Platform



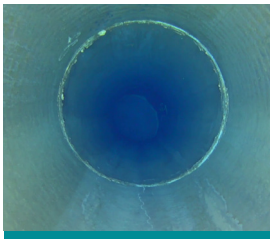
Wall Loss



Tool Preparation

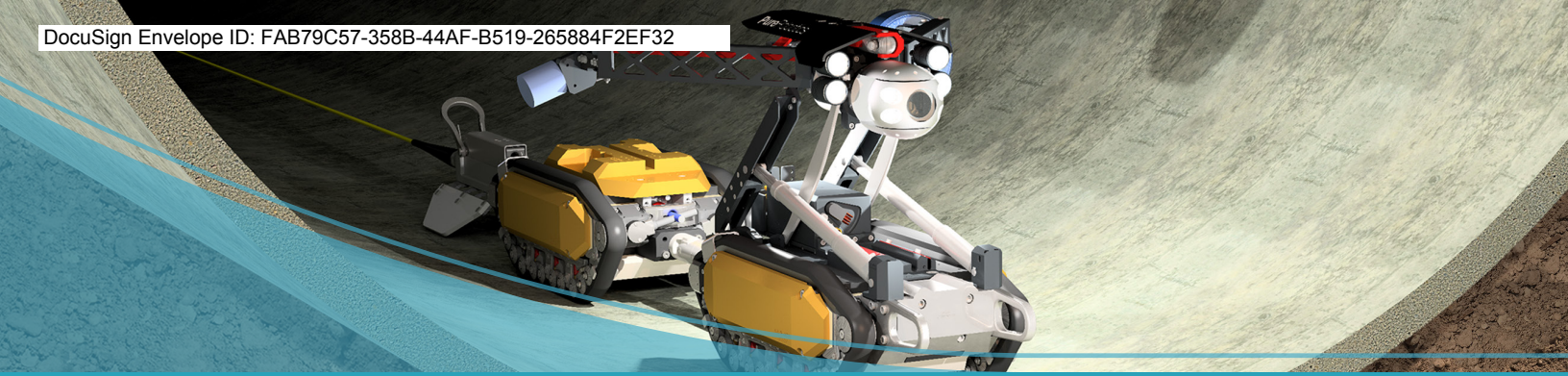


Tool Insertion



Video Inspection





# PureRobotics®

For concrete  
pressure pipe

## TETHERED ROBOTIC CONDITION ASSESSMENT PLATFORM FOR CONCRETE WATER PIPELINES

### Operating Environment

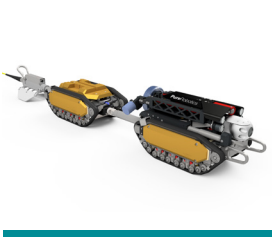
Pipe Materials	Prestressed Concrete Cylinder Pipe (PCCP)		
Number of Inspection Runs	1 run		
Detection Threshold	5 broken wire wraps		
Tool Configurations	Small-Diameter Chassis	Standard Chassis	Large-Diameter Chassis
Pipeline Diameters	16 to 48 inches (400 to 1200 mm)	24 to 120 inches (600 to 3050 mm)	78 to 120 inches (2000 to 3050 mm)
Minimum Access	14 inches (355 mm) No side insertion <i>*Diameter dependent</i>	Factory: 18 inches (450 mm) Tap: 20 inches (500 mm)	24 inches (600 mm)
Smallest Horizontal BFV Passage	30 inches (750 mm)	42 inches (1050 mm)	72 inches (1800 mm)
Maximum Lift and Overhead Clearance for Insertion	12 feet (3.6 m)	8 feet (2.4 m)	Short legs: 12 feet (3.6 m) Long legs: 15 feet (4.6 m)
Insertion Methods			
Tripod	Yes	Yes <i>* Recommended</i>	No
Crane	Yes <i>*Recommended</i>	Yes	Yes <i>*Recommended</i>
Backhoe	Yes	Yes	Yes
Maximum Horizontal Bend	90 degrees	90 degrees	Short legs: 70 degrees Long legs: 45 degrees

Operating Environment Continued

Maximum Slope	Up slope - 15 degrees   Down slope - 30 degrees <i>*Down slope can go up to 45 deg, depending on bends and distance before slope</i>
Traversable Features	Horizontal butterfly valves (minimum diameter defined above), gate valves, reducers
Non-Traversable Features	Vertical butterfly valves, ball valves, vertical runs
Cumulative Bends	1,000 feet (300 m) or less - 270 degrees 2,000 feet (600 m) or less - 180 degrees 3,000 feet (900 m) or greater - 90 degrees

Specifications

Add-On Sensor	Inertial Mapping System - combines data collected during an inspection with known above-ground locations and pipeline drawings to create a field-generated GIS map of a pipeline
Video System	<ul style="list-style-type: none"><li>• Pan-tilt zoom camera or panoramic camera</li><li>• LED lighting</li><li>• Video quality is dependent on water turbidity and wall conditions</li><li>• When included in the inspection package, the video file is delivered with anomalies noted as part of the final report</li></ul>
Tool Tracking	A line finder can be used to locate and mark the location of the robotic platform while it is in the pipeline
Sanitation	All components sanitized with 10,000 ppm sodium hypochlorite and water solution prior to insertion, as per AWWA C651-05 standard



PureRobotics Platform



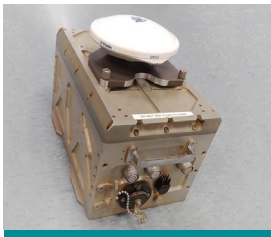
Broken Wire Wraps



Tool Preparation



Tool Insertion



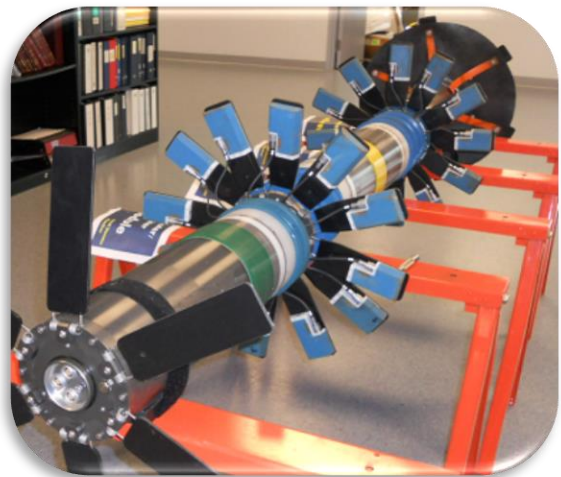
Inertial Mapping Unit

## GROUP 6 - REQUIREMENTS FOR INTERNAL FREE SWIMMING EM NONDESTRUCTIVE INSPECTION CAPABLE OF PASSING BUTTERFLY VALVES

This specification covers the requirements for detecting and quantifying the number of broken prestressing wires within all types of Prestressed Concrete Cylinder Pipe (PCCP) and reinforcing bar wraps in Bar-Wrapped Pipe (BWP); and locating areas of concern in Metallic pipelines using a non-destructive free-swimming delivery platform.

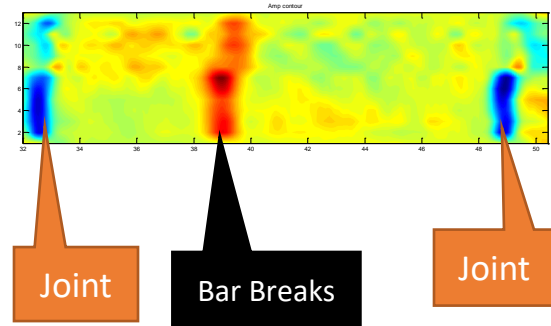
The PipeDiver delivery platform can accommodate both near-field and remote field eddy current EM configurations. The near field eddy current configuration employs an EM exciter that creates an electromagnetic field on the PCCP prestressing wires, or the BWP reinforcing bars and identifies broken wires and bars as it passes by - whereby our data analysts interpret signals that return to the on-board receivers or detectors. The EM signal includes both a phase and amplitude associated with the returning signal. As long as the prestressing wire or reinforcing bar is intact, the phase and amplitude signals will not vary and be displayed as a relatively consistent signal. When broken wire(s) are detected there will be a disruption or shift in the phase and amplitude of the EM signal. The analysts can use the disrupted signal to identify the break zone containing multiple breaks and apply calibration data to determine how many wires or bars are broken within the affected zone.

When inspecting for wall loss on the BWP steel cylinder, steel pipe or ductile iron pipe, the PipeDiver employs a remote field eddy current EM configuration that also uses a signal exciter to create the electromagnetic field; however, the PipeDiver (and the Robotic EM unit) typically utilize a 24-detector circumferential array spaced approximately three pipe diameters from the excitor. The remote EM field created by the excitor travels outside the metal cylinder and back in through the cylinder to the detectors. As long as the wall thickness of the metallic cylinder remains consistent, the amplitude and phase signal will remain relatively consistent.



*24D PipeDiver configured to assess a 24-inch steel pipeline - Note the 24 detectors on the tip of the petals that are distributed circumferentially*

However, when wall loss is present, the resulting phase and amplitude of the EM signal will be disrupted. The analysts will be able to estimate the size of the distressed area and the percentage of wall loss in the distressed area. The 24-detector array allows Pure Technologies to identify wall loss as small as a 3-inch square area with a minimum 30% wall loss. Pure Technologies will identify smaller areas and less wall loss if the distress is positioned directly over a receiving detector.



### Free-Swimming PipeDiver Delivery Platform

The free-swimming PipeDiver is typically deployed under temporarily de-pressurized conditions to allow for placement of the PipeDiver into the pipeline via an access. The PipeDiver is held in place, and once the pipeline is re-pressurized and flow established, the PipeDiver is released into the flow. The PipeDiver is captured downstream using a capture screen deployed at a second access location. The pipeline would again need to be temporarily de-pressurized to accommodate removal of the PipeDiver.

If the City of Denton is unable to de-pressurize the pipeline temporarily, Pure Technologies can deploy the PipeDiver using special Launch and Retrieval tubes. Such an approach requires greater logistical support (lifting equipment, valves for access, etc.) by the City, plus the added cost of the launch tubes.

### Confirmations | Clarifications | Submittals per RFP Requirements:

The PipeDiver EM inspection is a non-destructive inspection that is deployed through a fully operational and flowing pipeline.

Collect the appropriate data to detect localized wall loss on the cylinder in BWP, DIP, and steel pipe, as well as identifying broken wraps in BWP and broken prestressing wires in PCCP.

The PipeDiver platform incorporates fixed CCTV cameras that can be post analysed to accommodate a visual assessment. Quality of the video will vary depending on the clarity of the water.

The PipeDiver EM inspection technology can detect a less than five (5) wire breaks but will conservatively report a minimum of five (5) consecutive broken wire wraps on PCCP and BWP. The PipeDiver EM unit can identify wall loss that is at least 3-inch diameter with a minimum 30% wall loss in the cylinder of steel, ductile iron, or BWP.



The PipeDiver delivery platform can be used in pipes that are 18-inch and larger in diameter. The 24 detector array to assess wall loss is currently limited to pipe diameters that are 48-inch or smaller.

The PipeDiver delivery platform can pass butterfly valves, gate valves and other configurations common to water mains.

Pure Technologies will track the PipeDiver using the same tracking sensors and technology employed with tracking the free-swimming SmartBall. This tracking technology requires attaching tracking sensors every ½ miles or so, thereby allowing us to know the location of the PipeDiver at all times throughout the inspection.

All Pure Technologies' field personnel are confined space trained and meet OSHA standards for confined space. Certifications will be presented to City of Denton upon request.

Pure Technologies supplies all field personnel with all safety equipment necessary for the inspection such as calibrated gas detectors, lifting harnesses, communication devices, safety ropes and other pertinent personal protective equipment.

Pure technologies furnishes and supplies vehicles/equipment enabling the delivery of staff and testing equipment to project locations as necessary.

Pure Technologies houses the largest collection of calibration and historical data related to EM inspections that is available to assist in classifying anomalies found based on a detailed signal library as features, damage or other as applicable.

Pure Technologies' analysts will quantify the extent of damage found and provide the location of the defect.

Pure Technologies will compare results to previous inspections, where applicable, using the same calibration curve for both data sets.

Should the City select Pure Technologies to perform the requested services, Pure Technologies will provide examples of calibration curves generated from various pipe types including BWP, DIP, Steel, and PCCP. The vendor must be able to provide detailed data regarding how these curves are used to estimate the pipe damage.

Pure Technologies will submit results in a GIS format using mapping-grade GPS data and that is compatible with the City of Denton GIS system.

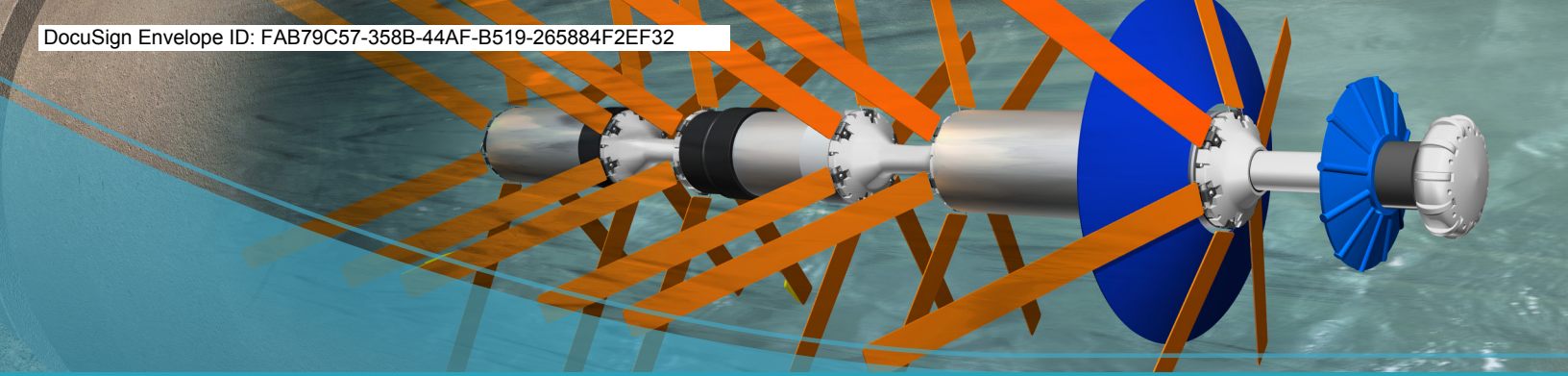
Pure Technologies reports and deliverables will be submitted as a pipe-by-pipe display in electronic version and with geo-database.

Pure technologies' reports will include at minimum; executive summary, location map of the project, indicating start and end of project, start and completion dates, tables with pertinent information, pictures, videos if it helps understand the condition, and any other information necessary for the project. Conclusion shall be clear and concise depicting the condition of pipe at the time of inspection. Database tables will be named clearly identifying the information. Database will be the property of the City of Denton and information will not be shared without prior written approval from the City of Denton staff responsible for the project/inspection.

A list of recent electromagnetic inspection including PipeDiver EM inspections that successfully passed butterfly valves is presented on the following page free swimming inspections projects where the tool is capable of passing butterfly valves and data quality and accuracy verified.

## Summary of Recent Electromagnetic Inspections and Verifications

Diameter (inches)	Pipe Type	Client	Pipeline Name	Inspection Date	Verification Date	Tool used in Original Inspection
42	PCCP (LCP)	City of Arlington	Green Oaks Potable Water Main	Apr-16	Jan-19	PipeDiver
42	PCCP (LCP)	City of Arlington	Green Oaks Potable Water Main	Apr-16	Jan-19	PipeDiver
42	PCCP (LCP)	City of Arlington	Green Oaks Potable Water Main	Apr-16	Jul-19	PipeDiver
42	PCCP (LCP)	WSSC	42-inch Montgomery Village	Oct-17	Oct-18	PureRobotics
42	PCCP (LCP)	WSSC	42-inch Montgomery Village	Oct-17	Oct-18	PureRobotics
42	PCCP (LCP)	WSSC	42-inch Montgomery Village	Oct-17	Oct-18	PureRobotics
42	PCCP (LCP)	WSSC	42-inch Montgomery Village	Oct-17	Oct-18	PureRobotics
48	PCCP (ECP)	City of Baltimore DPW	48-inch Towson East	Mar-17	Oct-18	PipeDiver
48	PCCP (ECP)	City of Baltimore DPW	48-inch Towson East	Mar-17	Oct-18	PipeDiver
48	PCCP (ECP)	City of Baltimore DPW	48-inch Towson East	Mar-17	Oct-18	PipeDiver
48	PCCP (LCP)	AWU	Westgate 48-inch Water Main	Jul-16	Oct-18	PipeDiver
54	PCCP (ECP)	Tampa Bay Water	Hillborough Main	Apr-13	Sep-18	PipeDiver
54	PCCP (ECP)	WSSC	Rock Creek	Sep-15	Feb-19	PipeWalker
94	PCCP (ECP)	Beijing Water Project	Langfang DN2400	Mar-21	Dec-21	PipeWalker
94	PCCP (ECP)	Beijing Water Project	Langfang DN2400	Mar-21	Jan-22	PipeWalker
48	Ductile Iron	SAWS	Hill Country 48" DIP	Dec-17	Mar-19	PipeDiver 24D
20	Ductile Iron	Village of Romeoville	Woods Force Main	Dec-19	Sep-20	PipeDiver 24D
36	Ductile Iron	Cobb County WA	Transmission Main	May-18	Jun-19	PipeDiver Ultra
32	Steel (Riveted)	City of Vancouver	Transmission Main	Oct-19	Jul-21	PipeDiver Ultra
30	Cast Iron	MWD	Santa Monica Feeder	Jan-20	Apr-21	PipeDiver Ultra
36	Ductile Iron	Syndicat des Eaux du Barrage d'Esch-sur-Sûre	Schankegracht-Nospelt Pipeline	Nov-20	Apr-21	PipeDiver Ultra
36	Steel	Syndicat des Eaux du Barrage d'Esch-sur-Sûre	Schankegracht-Nospelt Pipeline	Nov-20	Apr-22	PipeDiver Ultra
30	Ductile Iron	SW Water Authority	Southwest Pipeline (Section 1 and 2)	Mar-21	Mar-21	PipeDiver Ultra
30	Ductile Iron	WaterOne	Projects 45 and 157	Mar-21	Aug-21	PipeDiver Ultra



# PipeDiver<sup>®</sup>

For small-diameter  
concrete pipe

## FREE-SWIMMING CONDITION ASSESSMENT PLATFORM FOR CONCRETE WATER AND WASTEWATER PIPELINES

### Operating Environment

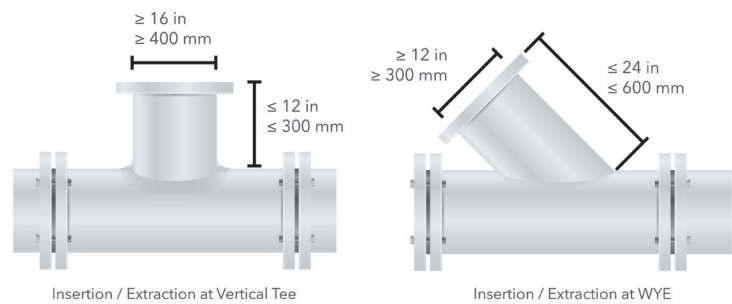
Pipe Materials	Prestressed Concrete Cylinder Pipe (PCCP), Bar-Wrapped Pipe (BWP - bars only), Noncylinder Pipe (NCP)
Detection Threshold	5 broken wire wraps in PCCP and NCP or 5 broken bars in BWP
Number of Inspection Runs	1 run <i>*pipelines can be 2 diameters with a maximum difference up to 12 inches (300 mm)</i>
Pipeline Diameters	16 to 60 inches (400 to 1520 mm)
Maximum Flow Velocity	3 feet/second (0.90 m/s)
Minimum Flow Velocity	0.5 foot/second (0.15 m/s)
Maximum Pressure	300 psi (20 bar)
Traversable Features	Butterfly valves, ball valves, gate valves, vertical sections, reducers
Minimum Butterfly Valve	24 inch (600 mm) flat plate
Maximum Bend Degree	Sharp 90 degrees in $\geq$ 18-inch (450-mm) pipe
Slopes	No restrictions
Maximum Deployment	<ul style="list-style-type: none"> <li>• With video: 20-30 hours of inspection time, depending on PipeDiver version</li> <li>• Without video: 30 hours of inspection time</li> </ul> <i>*Distance is dependent on flow rate</i>

### Insertion / Extraction Requirements

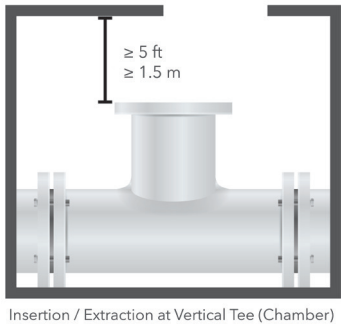
Insertion Methods (Depressurized)	Manhole access, open chamber, reservoir tank
Insertion Method (Pressurized)	PipeDiver Tubes - 24 to 48 inches (600 to 1200 mm) <i>*16-inch (400-mm) ANSI Class 150 flange recommended</i>

Insertion / Extraction Requirements Continued

Minimum Access Diameter

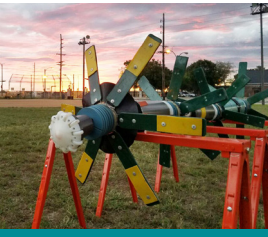


Minimum Clearance from Access Port



Specifications

Electromagnetic Sensors	<ul style="list-style-type: none"><li>Identify broken wire wraps and broken bars</li><li>Identify pipe features: outlets, valves, joints</li></ul>
Video System	<ul style="list-style-type: none"><li>Three cameras positioned to capture the pipe wall</li><li>LED lighting</li><li>Video quality dependent on water turbidity and wall conditions</li><li>Video deliverable (when part of the inspection package) – video file is provided with anomalies noted as part of the final report</li></ul>
Tool Tracking	Tracking units are pre-installed along the pipeline and monitored during the inspection to determine tool travel
Sanitation	All components sanitized with 10,000 ppm sodium hypochlorite and water solution prior to insertion, as per AWWA C651-05 standard



PipeDiver Platform



Broken Wire Wraps



Tool Preparation



Tool Insertion



Location Tracking



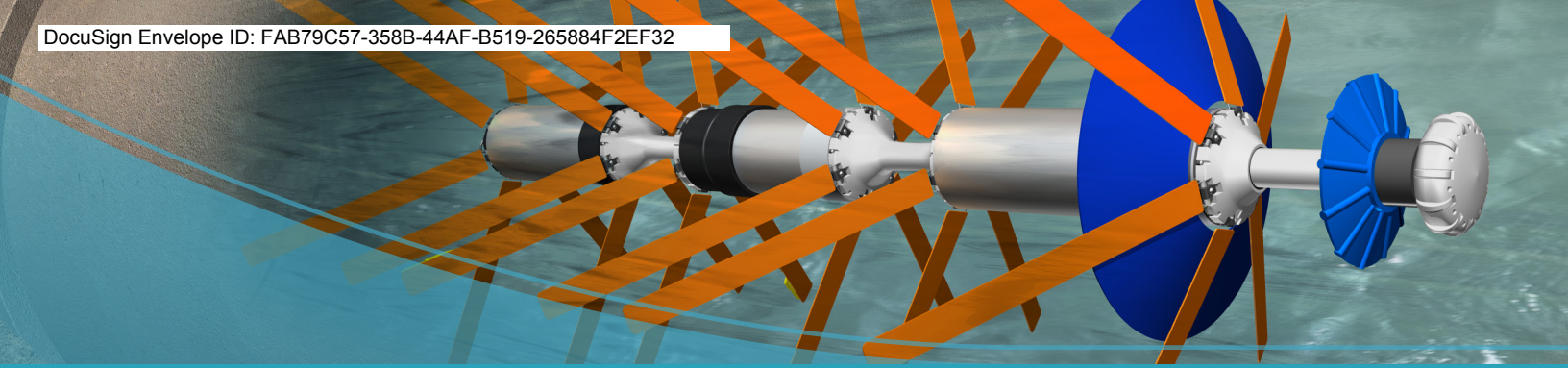
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# PipeDiver<sup>®</sup>

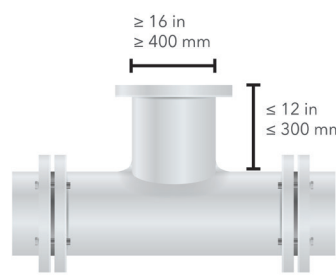
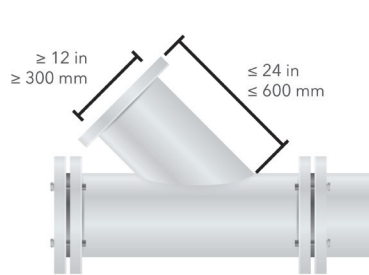
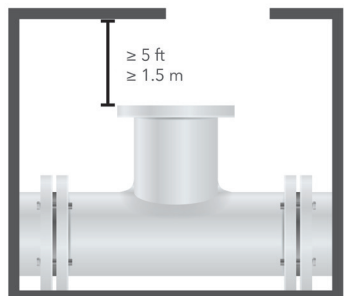
For small-diameter  
metallic pipe

## FREE-SWIMMING CONDITION ASSESSMENT PLATFORM FOR METALLIC WATER AND WASTEWATER PIPELINES

### Operating Environment

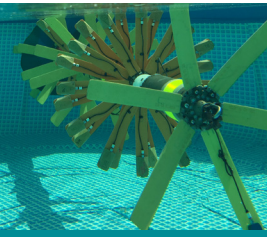
Pipe Materials	Steel, Ductile Iron, Cast Iron, and Bar-Wrapped Pipe (BWP - cylinder only)
Detection Threshold	<ul style="list-style-type: none"> <li>Pipes <math>\leq</math> 36-inch (900 mm): 3 inch x 3 inch (75 mm x 75 mm) by 30% wall loss</li> <li>Pipes <math>\geq</math> 37-inch (940 mm): 4 inch x 4 inch (100 mm x 100 mm) by 40% wall loss</li> </ul>
Number of Inspection Runs	2 runs
Pipeline Diameters	16 to 48 inches (400 to 1200 mm)
Minimum Metal Thickness	<ul style="list-style-type: none"> <li>0.20 inches (5.1 mm) - Steel, Ductile Iron, and Cast Iron</li> <li>0.11 inches (2.8 mm) - BWP (cylinder)</li> </ul>
Maximum Metal Thickness	<ul style="list-style-type: none"> <li>0.50 inches (12.7 mm) - Steel, Ductile Iron, and BWP (cylinder)</li> <li>0.90 inches (22.9 mm) - Cast Iron</li> </ul>
Minimum Lining Thickness	Lining is not required but improves sensitivity
Maximum Lining Thickness	All lining types up to 0.50 inches (12.7 mm)
Maximum Flow Velocity	1.5 feet/second (0.45 m/s)
Minimum Flow Velocity	0.5 foot/second (0.15 m/s)
Maximum Pressure	300 psi (20 bar)
Traversable Features	Butterfly valves, ball valves, gate valves, vertical sections, reducers
Minimum Butterfly Valve	24 inch (600 mm) flat plate
Maximum Bend Degree	Sharp 90 degrees in $\geq$ 24-inch (600-mm) pipe
Slopes	No restrictions
Maximum Deployment	<ul style="list-style-type: none"> <li>Water: 15 hours of inspection time</li> <li>Wastewater: 30 hours of inspection time</li> </ul> <p><i>*Distance is dependent on flow rate</i></p>

Insertion / Extraction Requirements

Minimum Access Diameter	Minimum Clearance from Access Port	
		
Insertion / Extraction at Vertical Tee	Insertion / Extraction at WYE	Insertion / Extraction at Vertical Tee (Chamber)
Insertion Methods (Depressurized)	Manhole access, open chamber, reservoir tank	
Insertion Method (Pressurized)	PipeDiver Tubes <i>*16-inch (400-mm) ANSI Class 150 flange recommended</i>	

Specifications

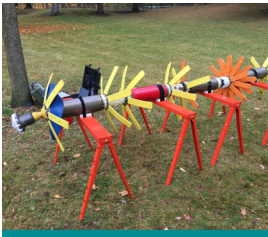
Electromagnetic Sensors	<ul style="list-style-type: none"><li>Identify and accurately locate wall loss within each pipe stick</li><li>Identify pipe features: outlets, valves, joints</li><li>Provide location from upstream joint</li></ul>
Tool Tracking	Tracking units are pre-installed along the pipeline and monitored during the inspection to determine tool travel
Sanitation	All components sanitized with 10,000 ppm sodium hypochlorite and water solution prior to insertion, as per AWWA C651-05 standard



PipeDiver Platform



Wall Loss



Tool Preparation



Tool Insertion



Location Tracking



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# PipeDiver<sup>®</sup> Tubes General Requirements

## Physical Dimensions and Inspection Specifications

### PARAMETERS

mm=millimeters

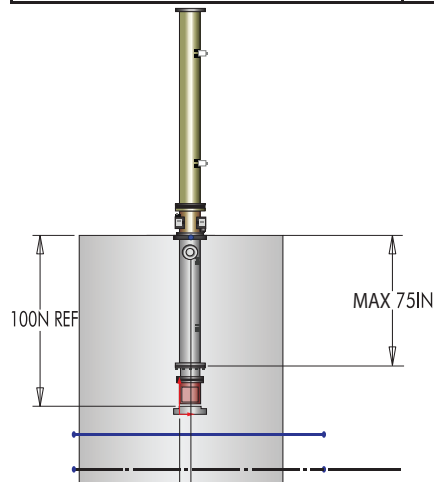
Pipe Materials*	PCCP, BWP
Maximum Pressure	200 psi (13.8 bar)
Minimum Pressure	25 psi (1.7 bar)
Pipeline Diameter	24-48 inches (610-1219 mm)
Flow Speed**	Up to 2 feet/second (0.6 meters/second)
Tube Weight	3500 pounds (1588 kilograms)
Tube Height on Transport Rails	22 feet (6.7 meters)
Tube Height off Transport Rails	18 feet (5.5 meters)

\*Only regular Mini PipeDiver can be used with the tubes (up to 12 detectors) \*BWP - Bar breaks only

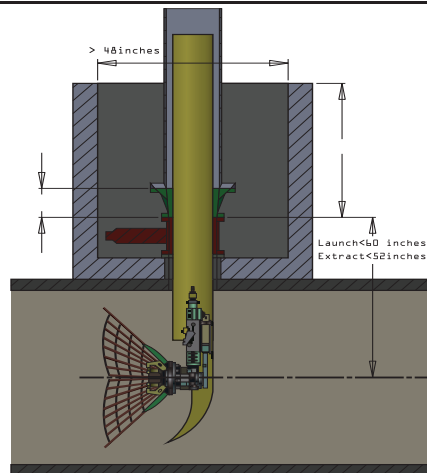
\*\*Clients should be able to reduce the flow to 1 foot/second (0.3 meters/second) for the extraction process

### HOT TAP REQUIREMENTS

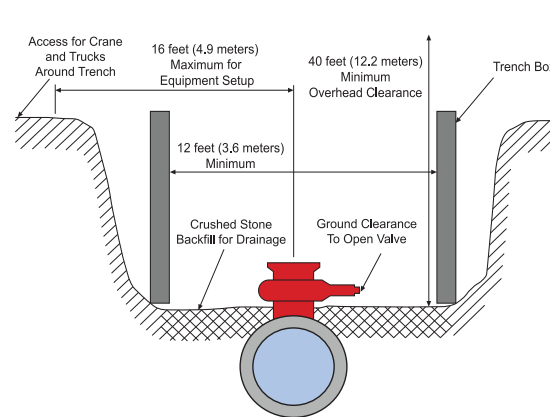
Level	Within 3°
Hot Tap Size	12, 14, or 16 inches (305, 356, or 406 mm) *Recommend 14 inches (356 mm) (ANSI class 150)
Features	No features within 24 inches (610 mm) radius around tap center
Flange to Pipe Centerline	Pipe diameter 24-36 inches (610-914 mm) : <60 inches (1524 mm) for both insertion and extraction tube Pipe diameter 42-48 inches (1067-1219 mm) : <60 inches (1524 mm) for insertion tube, <52 inches (1321 mm) for extraction
Distance from Adapter Flange to Chamber's Ceiling	Maximum 75 inches (1905 mm)



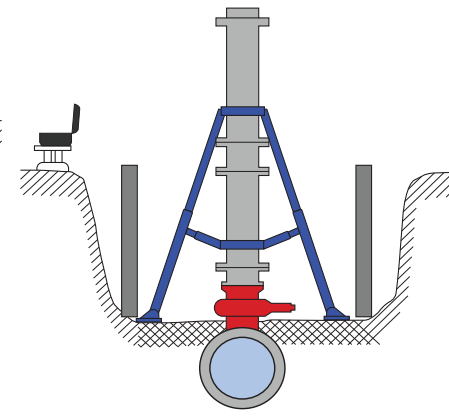
Chamber Hot Tap Requirements



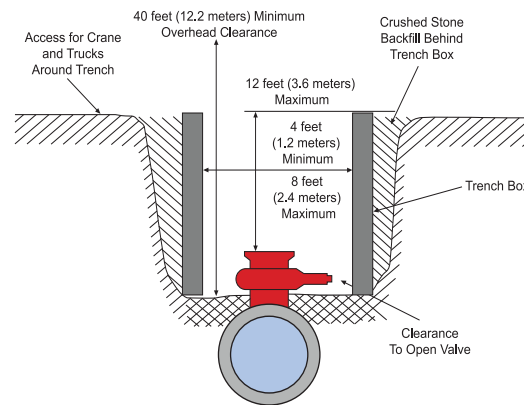
Flange to Pipe Centerline



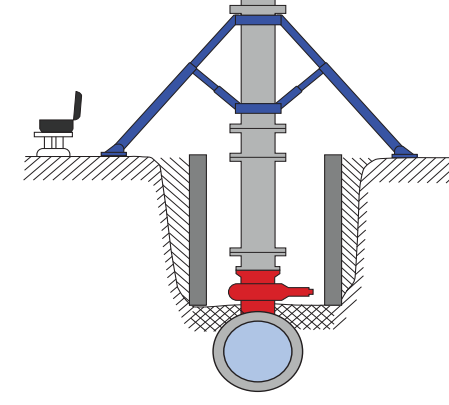
Wide Trench Box Access



Wide Trench Box Access



Narrow Trench Box Access



Narrow Trench Box Access



# PipeDiver<sup>™</sup> Tubes General Requirements

## Physical Dimensions and Inspection Specifications

### TRANSPORTATION

Truck	8x25 foot (2.4x7.6 meters) flat bed to accommodate both tubes and water tanks
-------	---



Typical Transportation

### CRANE SPECIFICATIONS

Minimum Lifting Load	3500 pounds (1588 kilograms)
Minimum Hook Height	25 feet (7.6 meters)
Minimum Reach	20 feet (6.1 meters)

\*A fork lift may be required to load and unload the tubes from the flat bed truck.  
Minimum lifting load: 3500 pounds (1588 kilograms)



Typical Crane

### EQUIPMENT STORAGE

Storage	Covered (climate controlled preferred), 50 square feet (4.6 square meters) Electrical source available, water source available
---------	--

### WATER SOURCE

Water	130 gallons U.S. (492 liters) of water for each tank (2)
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\*On-site access to water source, refer to below diagram (Water Source Fitting)



Water Tank



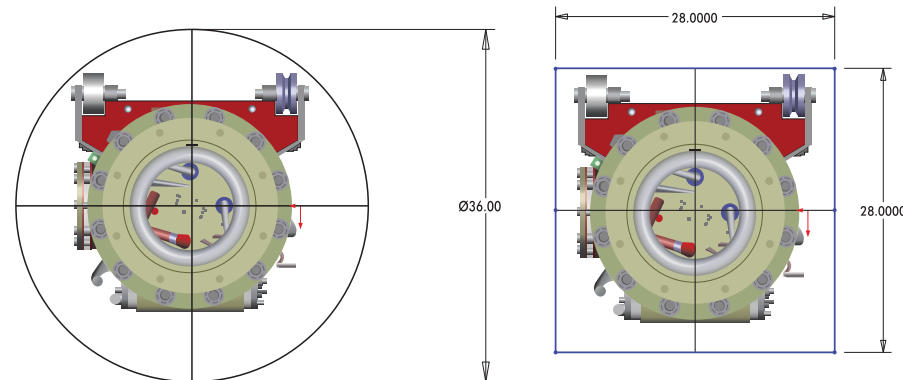
Water Source Fitting

### CHAMBER REQUIREMENTS

mm=millimeters

Circular Access	Minimum 36 inches (914 mm)*
Square Access	Minimum 28 inches (711 mm)*
Crane Clearance	Proximity of obstructions above or around the tap location could impede crane operations and need to be identified

\*Center of the tap should be centered with the chamber access.  
If they are off centered the listed requirements won't be sufficient for the tube installation.



Circular Access

Square Access

Chamber Access Dimensions

## GROUP 7 - REQUIREMENTS FOR FREE-SWIMMING PIPEDIVER ULTRASONIC INSPECTION TECHNOLOGY

This specification covers the requirements for using an ultrasonic inspection technology to assess the structural integrity of metallic pipe (ductile iron pipe (DIP), cast iron pipe (CIP) or steel pipe). Further, this specification covers the requirements for detecting and quantifying cylinder corrosion in metallic pipe (ductile iron pipe (DIP), cast iron pipe (CIP) or steel pipe). The current approved delivery platform is PipeDiver® Ultra.

**PipeDiver® Ultra** is a long-distance, free-swimming condition assessment tool for metallic water pipelines.

It directly measures pipe wall thickness using high-resolution ultrasonic technology. Building on the trusted PipeDiver platform, the tool inspects the pipeline while in service, navigating valves, sharp bends, and tees. It is inserted through existing pipe features, making it flexible and easy to deploy. The quality and quantity of data the PipeDiver Ultra platform collects enables utilities to make high-confidence repair and replacement decisions today and informs long-term asset management.

During an inspection, the PipeDiver Ultra platform collects three layers of pipeline condition data: wall loss, out-of-roundness, and internal visual information. Use the tabs above to explore each data layer and learn how threat layering gives utilities a more complete view of pipe condition.

Corrosion is a leading cause of metallic pipe failure. Any loss in wall thickness undermines the pipe's structural integrity. PipeDiver Ultra collects quantitative wall thickness measurements around the circumference of each pipe.

PipeDiver Ultra differentiates between interior and exterior defects to guide repair actions. With routine inspections, utilities can monitor corrosion growth over time. High-resolution data is available for each individual pipe stick. This helps utilities proactively and selectively manage their metallic assets to prevent leaks and failures. We report these features and metallic wall loss by pipe stick from the upstream joint and clocked to the pipe circumferentially.

When metallic pipelines lose their original round shape, it weakens their structural integrity. Out-of-roundness occurs due to a number of factors from poor installation to excessive loading to a lack of support. Out-of-roundness can lead to pipe lining and coating damage. It can also cause the pipe to crack or buckle under external pressure. Pipes with wall loss are more vulnerable to the threats caused

by out-of-roundness. PipeDiver Ultra identifies the maximum and average out-of-roundness on each inspected pipe stick.

The PipeDiver Ultra platform is equipped with high-definition cameras and a lighting system to capture and record video within the pipeline. The tool records a 360-degree view of the pipe wall as it travels the length of the inspection. Using video can help utilities locate air pockets, debris, outlets, cracks, and corrosion stains. The video is available after the inspection and provides additional context for the metal loss and out-of-roundness data collected.

Utilities receive a report summarizing the inspection, outlining the results, and providing recommendations. Visualize detailed wall-loss data as a heat map and within a geodatabase, along with out-of-roundness and visual points-of-interest. Xylem provides dig sheets with the report to help utilities accurately locate problematic pipe segments. Xylem offers additional support services to assist utilities in locating and verifying pipe damage.

Get more insights out of the PipeDiver Ultra data with a design review. We check whether the measured pipe wall thickness meets the latest design standards. We also offer structural evaluation services that can include three-dimensional, nonlinear finite element analysis (FEA). FEA performance curves help utilities better understand the structural significance of wall loss by modeling the level of distress that could cause the pipe to exceed its yield limits.

### Confirmations | Clarifications | Submittals per RFP Requirements:

Pure Technologies can perform the ultrasonic wall thickness measurements with a free-swimming inspection tool in a non-destructive manner.

The free-swimming ultrasonic inspection tool will pass butterfly valves.

The technology will differentiate between exterior and interior wall defects.

The technology will detect outlets or other appurtenances.

The technology will provide ovality data and identify liner defects.

Pure Technologies will submit results in a pipe-by-pipe geospatial GIS deliverable (geodatabase) that is compatible with the City of Denton's GIS system.

Pure Technologies will track the progress of the tool as it traverses the pipeline. The City of Denton will make provisions for Pure Technologies to install external sensors for tracking the free-swimming inspection device. Pure Technologies may be requested to install potholes via vacuum extraction to assist in tracking the device.

Pure Technologies will provide evidence that all of our personnel have been trained in accordance with OSHA safety and confined space requirements and shall provide such certification upon request.

Pure Technologies personnel will be equipped with calibrated gas monitors, lifting harnesses, safety ropes, and all other miscellaneous safety apparel to ensure the welfare of their personnel.

Pure Technologies furnishes all personnel with appropriate off-road vehicle/equipment enabling the delivery of staff and testing equipment to rural project locations.

Pure Technologies will advise City of Denton as to logistical support requirements including required rate of flow and operating pressure.

Pure Technologies will advise City of Denton with respect to insertion and extraction requirements.

Pure Technologies will maintain a comprehensive database of ultrasonic signals based on different features, pipe diameters and pipe types which will allow it to make informed judgments on the condition of pipelines.

City of Denton will accommodate insertion and retrieval of the free-swimming tool under de-pressurized conditions.

City of Denton will furnish minimum 12-inch diameter access for insertion and retrieval of the free-swimming tool. Pure Technologies may be requested to furnish and install access for deployment of the tool.

The ultrasonic inspection will serve as a high-resolution technology capable of identifying wall loss due to corrosion on the steel cylinder. On metallic pipe 52in and smaller in diameter, the ultrasonic inspection shall be capable of identifying and locating areas of corrosion 2 inches by 2 inches with 20% wall loss or greater, or provide a 1-inch by 1-inch with 40% wall loss or greater.

Pure Technologies will submit reports and deliverables in hard copies (two copies) and electronic format with database. Report should include at minimum; executive summary, location map of the project, indicating start and end of project, date started, and date completed tables with pertinent information, photographs and any other information necessary for the project. Conclusion shall be clear and concise depicting the condition of pipe. Database tables will be named clearly identifying the information. Data will be the property of CLIENT and information will not be shared without prior written approval from CLIENT.

As part of the proposal, the Pure Technologies will submit a minimum of five (5) comparable project references, within the past twelve (12) months, where

pipelines have been surveyed and the results reported. The Company must provide the contact information of the clients and name of respective agency with the bid packet.

If requested, the PipeDiver can be equipped with fixed CCTV cameras on the rear petals of the device, able to capture and record video from each of the three (3) cameras. Real time viewing is not available. A copy of the video recording will be submitted as part of the final report.

Evidence that the tool has been successfully proven and platform is included in the summary of the PipeDiver Ultra inspections included under Group 6 summary.

Pure Technologies shall develop a Pipe Performance Risk Curve based on 3D finite element analysis for each pipe design, or as may be required.

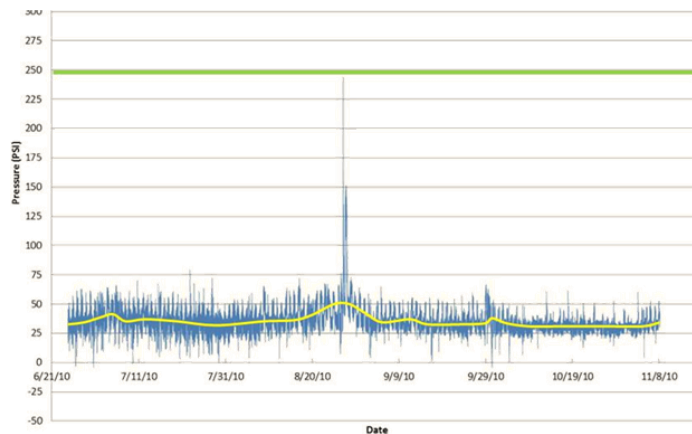
## GROUP 8 - REQUIREMENTS FOR REMOTE TRANSIENT PRESSURE MONITORING

This specification covers the requirements for monitoring and recording of pressures acting on a pipeline. The process involves the attachment of sensor to pipeline, transferring activities to data acquisition unit. The pressure is recorded at set intervals during steady state conditions and increases when a transient pressure is detected.

Hydraulic pressure transients occur in pipelines when the steady-state conditions of the system change due to pressure or flow disturbances (e.g., the rapid closure of a valve, pump start-up/shutdown, etc.). The magnitude of a transient is related to several factors including the flow rate within the pipeline, the time in which the change in the steady-state condition occurs, and pipe hoop rigidity. During the change, the kinetic energy of the flow momentum is converted into potential energy with a rise in pressure and strain energy in the pipe wall.

Conventional pressure monitors collect data in intervals of minutes while a pressure transient may occur in fractions of a second. When a transient occurs in the pipeline, it is important that a high rate of sampling be utilized to capture the true magnitude of the transient event. High frequency pressure monitoring equipment addresses the sampling frequency issue by continuously monitoring pressure at a high sample rate, while only recording data every few minutes under normal operating conditions (based on user defined parameters). When a transient or cyclical pressure anomaly is detected, data is recorded continuously at the high sample rate.

The figure below illustrates the difference between conventional and high frequency pressure monitoring.



*Comparison of Traditional (in yellow) and transient (in blue) Pressure monitoring data*



The yellow trend line in the figure shows the pressure data recorded at a sample rate of one reading per minute. Based on conventional pressure monitoring, the internal pipeline pressure ranges between 25 and 50 psi, which is well below the “operating +surge” design pressure of 250 psi (green horizontal line). However, when the high frequency pressure monitor data, recorded at a sample rate of more than 20 samples per second (blue trend line) is analyzed, a significant transient event can be seen that nearly reaches the 250-psi threshold.

Further evaluation of available pump station operational data indicated that the transient coincided with a rapid pump shutdown. If a pipeline owner/operator relies solely on conventional pressure monitoring, the actual pressures impacting a pipeline may not be detected, thereby limiting the data or information needed to support an accurate structural evaluation, condition assessment, and operational awareness.

### Why implement High Frequency Pressure Monitoring?

Collection of high frequency pressure data is critical in the hydraulic evaluation of a pipeline’s performance and can add significant value to the condition assessment. The occurrence of pressure transients within a pipeline can have adverse effects on the integrity of a pipe section. Damage from pressure transients can include cracking of mortar coating or lining, crack propagation, movement at joints, and structural fatigue. The impact of pressure transients can vary depending on the magnitude of the transient and current condition of the pipe. Accumulated damage of this nature can eventually decrease the structural integrity of the pipe.

Implementation of high frequency pressure monitoring also measures the true impact of various system operations on a pipeline and can help validate and calibrate a hydraulic or transient surge model.

#### Baloch’s SurgeWave™ “Defender” Transient Pressure Monitor

Pricing for the Blachoh Defender unit includes one-year warranty and cellular service. The system is a permanent mounted system, whereby the City will need to continue paying for the cellular service after Year 1. The City can purchase a warranty from Blacoh after Year 1.

All pressure data is delivered to a dedicated web-based site and a mobile app that is only accessible to designated personnel within the City. The web-based site includes a software program that will allow the City to view all time-based recorded pressure readings

Blacoh’s patented SurgeWave™ High Frequency Pressure Monitoring System solves the need for pipeline operators to detect and record transient pressure events occurring in water, wastewater, and petroleum pipelines. The system is

unique in that it employs a system of dynamic pressure transducers and digital technology to monitor pipelines for indefinite periods of time. When a transient such as a pressure surge, pressure spike or water hammer event is detected, the system activates a high-speed data recorder to record the event 100x/second.

Monitors Critical Pipelines and Associated Linear Assets Including:

- Actuated Valves, Pressure Reducing Valves, Pressure Relief Valves, Pump Control Valves, Air/Vacuum Valves, Check Valves
- Pump Suction/Discharge, Constant/Variable Speed
- Back Flow Preventers
- Surge Vessel and Pulsation Dampener Liquid Level

### SurgeWave DEFENDER™

Designed for locations with cellular service, the DEFENDER is ready to go with hard wired cable connections. All system data is stored on remote cloud servers and can be accessed anytime from anywhere via the Blacoh Surge website or mobile app.

- Cellular communication to web/mobile app
- Data stored to cloud servers
- 2 inputs
- Hard wired transducer cables
- Power: 500 mA @ 12 VDC
- Components:
- Pressure transducer
- Transducer cable
- Cellular antenna
- AC adapter



### Confirmations | Clarifications | Submittals per RFP Requirements:

Perform the analysis in a non-destructive manner. High frequency pressure monitoring units require a threaded outlet in which to install a pressure transducer that is in contact with the fluid column.

Pure Technologies can use a temporary Telog high frequency pressure monitor to install should the City of Denton require monitoring within 24 hours. It will not provide cellular communications, as data will need to be collected in the field and downloaded.

Be capable of increasing the sample rate up to 100 times per second when a transient event occurs within pipeline. High-rate sampling trigger should be individually programmable based on a user defined absolute change in pressure or standard deviation within a user defined period of time.



High frequency pressure monitoring units are battery powered and will require periodic changeout by the City of Denton. Solar panel housing configurations are available. Support mechanisms are securable with weather resistant cables.

Sensors will cover pressure range from -14.7 psi to 300 psi.

The high frequency pressure monitoring units can be installed while pipeline remains in service. City will need to furnish a TEE coming off of the valve to accommodate two (2) pressure sensors.

Pure Technologies will ensure adequate staffing is onsite during system installations. All data will be downloaded via cellular communications to the City of Denton. City of Denton will be responsible for communications. Pure Technologies will furnish software and training to receive and view data in real time.

Units shall be capable of remotely downloading data using wireless data transmission (cellular communications).

The high frequency pressure monitoring devices can be utilized on all pipe materials and sizes.

When applicable, reports and deliverables shall be submitted in hard copies (three copies) and electronic format with database, information viewable in ArcMap with all pertinent information. Report should include at minimum; executive summary, location map of the project, start and completion dates, tables with pertinent information, pictures, and any other information necessary for the project. Conclusion shall be clear and concise depicting findings. Database tables will be named clearly identifying the information. Database will be the property of the City of Denton and information will not be shared without prior written approval from the City of Denton staff responsible for the project/inspection.

Wireless transient pressure monitoring units may be allowed where installation site and application permit. Wireless transient pressure monitoring units shall be supplied as complete units, including integrated communications for use on existing wireless networks, with all wireless communication requirements (SIM card, data plan, data hosting, web portal) included in comprehensive package. Wireless units shall be supplied by a manufacturer who has been in business with a history of providing remote sensor units for a minimum of five (5) years.

All installations shall include a shut-off valve, and analog pressure gauge for verification of recorded pressures.

## FEE SCHEDULE: REMOTE TRANSIENT PRESSURE MONITORING

Assessment Engineering Services				
Item No.	Service Description	Unit	Unit Fee	Notes
TPM-1	Furnishing and installing a Permanent SurgeWave TPM "Defender" Unit, includes: <ul style="list-style-type: none"> <li>Cellular Communications and Service (Service for Year 1 only)</li> <li>High Frequency recording rate of 100 times per second</li> <li>Analog Input of 2 channels maximum, 0-5 VDC</li> <li>12 VDC Power (500 mA @ 12 VDC)</li> </ul>	EA	\$ 9,885	1
TPM-2	Pressure Transducer with Standard ¼" MNPT Cable (-1 to 30 Bar)	EA	\$ 472	
TPM-3	ATEX/IEC Flameproof, ¼" MNPT Cable (-1 to 30 Bar)	EA	\$ 2,335	
TPM-4	Cellular Antenna Extension with Magnetic Mount	EA	\$ 190	
TPM-5	12 VDC Battery Cable	EA	\$ 55	
TPM-6	Solar Panel System	EA	TBD	3
TPM-7	Fabricated junction box.	EA	TBD	1
TPM-8	Annual Service Fee after Year 1	Per Unit	\$ 685	

### Additional Notes:

1. Pricing does not include furnishing an enclosure. Assumes the unit can be mounted on an existing above grade structure.
2. Pure Technologies will furnish 3 sets of rechargeable batteries and on charger for each unit.
3. Pure Technologies can furnish and install a solar panel system if requested. Pricing to be determined.

## GROUP 9 - REQUIREMENTS FOR ACOUSTIC FIBER OPTIC (AFO) MONITORING OF PCCP

This specification covers requirements for the installation and operation of an Acoustic Fiber Optic (AFO) pipeline monitoring system in pre-stressed concrete cylinder pipelines (PCCP). An AFO System can be installed while the pipeline is dewatered or under full operational and flowing conditions and will continuously monitor the pipeline while in service. The AFO System is designed to detect energy signals that are generated by wire breaks as they occur. The system will identify and report these events to the City of Denton in near real-time.

Whereas an electromagnetic inspection will provide information as to the distressed PCCP (i.e., wire breaks) the analysis and data presents only a static report of the condition of pipes on the day of inspection. An initial electromagnetic inspection cannot provide information as to the deterioration rate of distressed pipes.

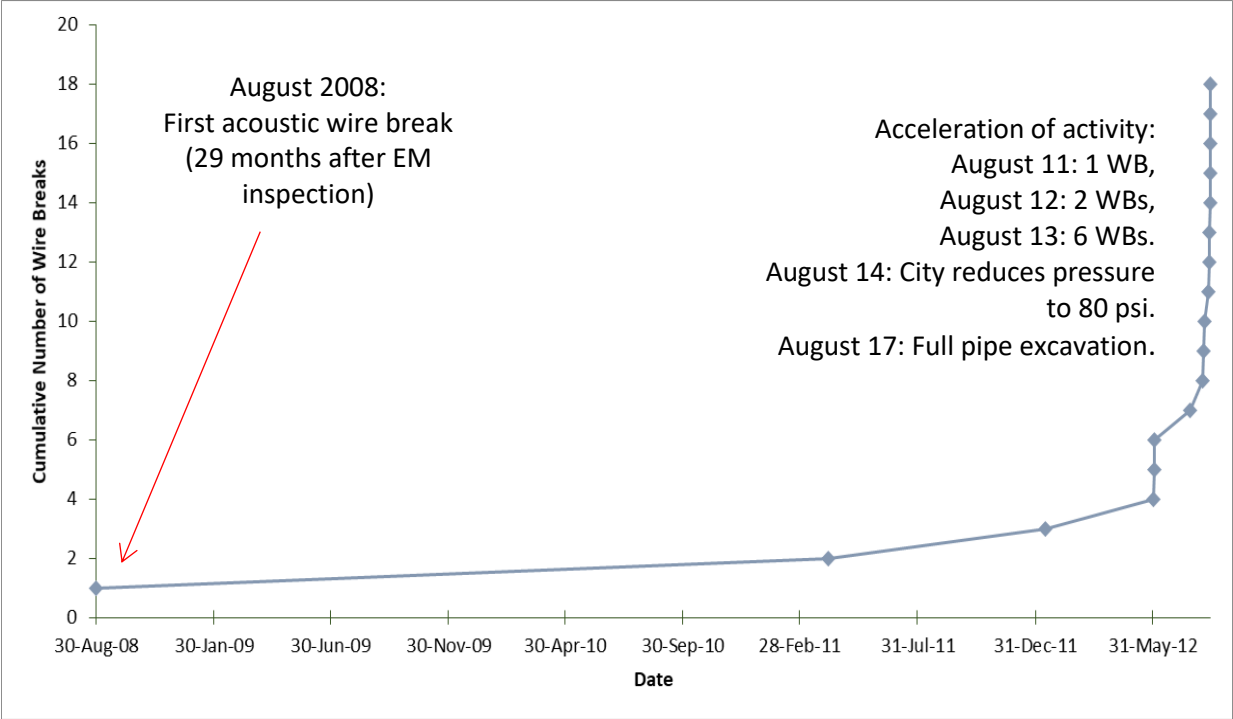
The benefit of re-inspections is to obtain future wire break data identifying significantly distressed pipes that may require immediate repair or replacement, as well as to compare new data against the baseline data on previously identified distressed pipes.

The difficulty in trying to predict a reasonable re-inspection schedule that is both cost effective and provides reliable data is that the wires on prestressed concrete cylinder pipe (PCCP) do not fail in a linear regression. Rather, wires breaks tend to occur in an exponential regression as they near failure, with a resulting failure of the pipe within a short duration once the exponential regression initiates.

Although periodic EM inspections are often recommended whereby a more accurate evaluation of pipe deterioration may be assumed such projections can be misleading as PCCP does not fail in a linear regression. Rather, the failure of prestressing wires tends to increase exponentially as the pipe trends to failure.

To avoid repetitive EM inspections and not be concerned with distressed PCCP failing between EM re-inspections, Pure Technologies offers a continuous (24/7) acoustic fiber optic (AFO) monitoring system that detects and locates on which pipe a wire breaks. Employing a 3D Pipe Performance Curve based on finite element analysis of pipe designs allows the City to monitor distressed pipes and cost effectively intervene when a pipe may trend to exceeding its yield state. The AFO system may not prevent the wire breaks but most certainly will advise when a failure is imminent and needs to be addressed – thereby avoiding significant pipe ruptures, loss of service to customers and costs associated with collateral damage.

The figure below displays an exponential regression of wire breaks on a pipe in a water transmission main that was trending towards failure. This pipe was being continuously monitored 24/7 at the time utilizing Pure Technologies’ Soundprint acoustic fiber optic (AFO) monitoring system. When the pipe experienced the significant increase in wire break activity, the client was immediately notified and the pressure in the line reduced until it could be shut down for excavation, validation, and repair/replacement - avoiding the loss of service to customers as well as a potentially catastrophic rupture resulting in collateral damage requiring emergency response.



The photographs shown on the following page were taken of the excavated and exposed pipe presented in the above wire break regression.



Excavation



Damage evident



Inspecting the damage



Wire Breaks



Damage concentrated in 9' section



Damage

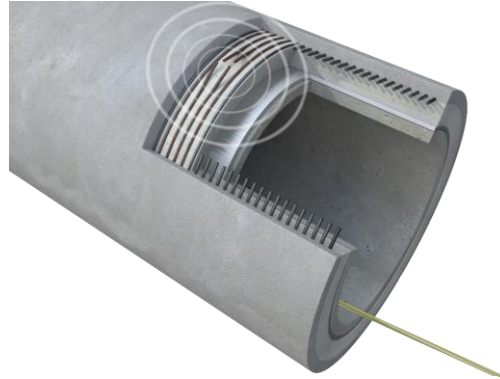
AFO monitoring systems have also documented increased wire break activity associated with the de-pressurization and re-pressurization of a PCCP water main, further demonstrating that pressure and flow management are important to effective management of water mains.

Pure Technologies Scope of Work with respect to furnishing, installing, and monitoring an AFO Monitoring System is presented below.

### SoundPrint® AFO

Most structural failures in prestressed concrete cylinder pipes (PCCP) result from a breakdown of the exterior mortar coating leading to corrosion of the prestressing wires or hydrogen embrittlement, a condition resulting from loss of ductility in the prestressing wires. As wire breaks continue to increase, the pipe eventually ruptures.

The SoundPrint Acoustic Fiber Optic (AFO) monitoring system detects and locates these wire breaks. SoundPrint AFO is a proven solution that leverages more than 15 years of experience to monitor wire breaks reliably and continuously in PCCP, the primary indicator of degradation in this pipe type. With this advanced warning system and a dedicated support team, utilities can determine the condition of critical pipelines and take preventive action to avoid large-scale failures.



*Acoustic Fiber Optic cable detects the energy released when a prestressing wire fails*

The SoundPrint AFO acoustic monitoring system consists of a data acquisition system (DAQ) connected to single-mode optical fibers that are bundled in a reinforced "AFO cable." Lasers are used to project light down the fibers, whereby the DAQ system monitors reflections generated by the acoustic activity in a pipeline.

The acoustically sensitive SoundPrint AFO cable acts as a sensor throughout its length of deployment; the source of the noise activity (i.e., wire breaks) is never further away than a pipe diameter. With the distinctive high frequency noise signature generated by a wire break and the sensor's proximity, the SoundPrint AFO system reliably detects wire breaks as they occur in reported in near real-time. Up to approximately 12.5 miles of pipeline can be monitored from a single DAQ location and 25 miles using a 'dual' DAQ.

Wire break events are located to within +/- 5 feet along the fiber optic cable and reported the next business day following QA/QC review by our data analysts. The analysts identify the pipe on which a wire break occurs, incorporates this information into the web-based pipe-by-pipe GIS display and dispatches a notification to the client.

This precise and prompt knowledge of wire break deterioration on individual pipes within a pipeline will allow the City to focus response actions on pipes trending to failure, thereby optimizing your capital budget and maximizing the life of linear assets. Near-real-time data collection will empower the City to proactively manage assets with greater confidence, reducing the risk of dangerous and expensive failures resulting in loss of service to critical customers and unplanned operational expenses.

Implementing the SoundPrint AFO monitoring system features two distinct project phases:

1. Furnishing and Installation of the system, often paired with an electromagnetic inspection to establish the existing baseline of deterioration, will typically take from three to six months from the notice to proceed and will conclude with the system commissioning.
2. Monitoring and Warranty will commence once the system is commissioned and will continue for as long as the operator desires the service.

## SoundPrint AFO System Deployment

### System Installation

#### Planning and Mobilization

Once a notice to proceed is received, Pure Technologies will begin an iterative design process to optimize the AFO system for the given pipelines.

The planning process is an integral part of our work. It allows Pure Technologies to identify features of the site and/or the pipeline to ensure a successful installation and mitigate any potential risk. Pure Technologies will require all documents and drawings to assist in the planning and site reconnaissance phase. Based on this information and site visits, we will provide the City with a detailed Project Planning Document prior to commencing work for review and feedback - followed by an in-person Workshop.

The planning process will include the following:

- Review of all available information on the pipeline and layout a preliminary design.
- Performing a site visit to review suitability of critical locations and meeting with the City operations staff to discuss any additional considerations.
- Revise system design and develop drawing package and installation plan.
- Submit planning document to the City for review and comment.
- Incorporate comments and hold in-person Workshop to finalize the planning document.

The Project Planning Document will describe execution of the installation process and any necessary support (equipment and personnel) needed to ensure the safe deployment of the AFO system.



The Planning Document improves preparation and communications with all involved parties and is an important aspect of a successful project. Pure Technologies is dedicated to exceeding the City's requirements and expectations and will work with the City to fulfill all submittal requirements.

A system drawing package will also be provided. The system drawing package will include the location of the DAQ and each splice point along the pipeline. These splice points will be detailed in the drawing package, showing any required appurtenance modifications and equipment that will be installed at that location.

The City shall review and provide comments or approval of the Project Planning Document and System Drawing Package prior to mobilization.

### Soundprint AFO System Installation Approach

The AFO cable can be installed in either a fully dewatered pipeline or into a flowing and operational pipeline.

As described further herein, a dewatered installation will require an extended outage in each of the pipelines, along with confined space oversight. However, the dewatered installation will also accommodate a manned electromagnetic (EM) inspection combined with a comprehensive visual and sounding inspection of the pipeline that includes photographic and video documentation. The dry installation also will allow Pure Technologies to install protective sleeves around the cable in locations of concern where the cable may rub against the pipe wall or be affected by flows at large openings.

Alternatively, the AFO cable can be installed under fully flowing and operational conditions and a baseline EM inspection performed using Pure Technologies' free-swimming PipeDiver delivery platform.

However, at some point in the immediate future, it will be necessary to access the pipeline under localized de-watered conditions to install stainless steel sleeves to protect the AFO cable from rubbing on the pipeline at selected locations. This is especially important where there are large laterals or outlets, as they would typically need to be addressed within a month or so after commissioning.

Both installation options are further detailed on the following pages.

### Dewatered ("Dry") Installation Methodology

The AFO cable will be installed once the pipe has been removed from service and completely dewatered. The AFO cable is manually laid in the pipe in multiple runs. Run boundaries are determined by valve locations on the pipeline and maximum distance criteria. The points between the runs of cable are called "splice points".



The AFO cable is spliced together outside of the pipeline and the splices are housed in junction boxes in a chamber.

The spool of fiber is staged at one splice point then manually deployed through the pipe by Pure Technologies' personnel to the next splice point. The cable is unanchored in the pipe except where pipeline geometry requires internal anchoring and/or protective stainless steel sleeves to protect the cable. Features that could potentially damage the cable include large outlets, offset bends, mitered bends over 45 degrees and WYES or TEES.

To exit the pipeline, the cable must extend to the crown of the pipe and out of the access provided. The cable is protected through this transition into the access using flexible stainless-steel tubing. On exiting the access, the cable is anchored and sealed from the pressure of the pipe in a plumbing stack that incorporates a blowout preventer (BOP), that employs a pinch valve that does not damage the cable.

On exiting the plumbing stack, the cable is spliced to the cable extending from the adjacent portion of the pipeline and the additional cable is coiled and placed in a junction box. The splice points and associated junction boxes are typically mounted to the wall of the vaults or chambers at the access location. The junction boxes have two compartments: an inner compartment to protect the splices and stripped fibers, and an outer compartment to protect and store the additional AFO cable required to allow splicing to be completed outside of the chamber.

### Live Installation Methodology

With a fully operating pipeline, the live installation method allows the line to remain in service and does not require confined space certified personnel to enter the pipeline. However, the method may not be used in extremely high or low flow conditions, in pipelines with numerous bends, or where chambers are not suitable or cannot be modified for wet installation.

Additional clearance considerations are required to mount temporary pressure stacks for the installation equipment on top of the AFO plumbing stacks. These consist of 3-inch diameter Victaulic pipes mounted to a Victaulic nipple on top of the BOP. Typically, ten (10) feet of overhead clearance from the top of the BOP is required to accommodate the necessary piping and hardware to accommodate insertion of the AFO cable under live conditions. As most vaults or chambers in which the access is located may not have sufficient clearance due to the vault or chamber lid, either the lids will need to be removed or an 8-inch core through the chamber lid centered directly above the BOP will be required.

Installing and extracting fiber optic cable into and out of a live pipeline is a complex task with many elements, including:

Inserting a parachute attached to a tag line into the live pipeline at the upstream end of a cable run.

Allowing the flow of the water to carry the parachute downstream where it can be retrieved and pulled out at run's extraction site.

Catching and extracting the parachute downstream.

Attaching the AFO cable to the tag line at the upstream location.

Setting up a hydraulic winch downstream, known as a capstan, to attach to the tag line and pull the cable into and through the pipeline run.

### System Calibration and Commissioning

The SoundPrint AFO system determines the location of an acoustic event based on its distance along the AFO cable from the Data Acquisition System (DAQ). Commissioning impacts are performed to calibrate locations to a specific pipeline station and pipe stick. Performing commissioning impacts involves striking a known location, typically at each BOP wiper and other intermediate appurtenances, and recording its distance from the DAQ. Each commissioning impact requires a minimum of five strikes at each location, to provide redundancy and to eliminate extraneous results. At a minimum, impacts are conducted at all splice points. Whenever possible, commissioning impacts are completed at a maximum distance of 2,500 feet apart to ensure reporting accuracy within the system.

Each DAQ is built and tested in Pure Technologies' AFO production facility prior to delivering on site, then disassembled to ship the sensitive components. Onsite, technicians will remount all the DAQ hardware on the rack and connect the wiring harnesses and the newly installed fiber optic cable. Once assembled and started up, the monitoring specialist team will remotely test and calibrate the full system to monitor the connected AFO cable.

As the AFO cable is only anchored at the splice points, any additional slack that remained in the cable due to friction during the installation will slowly shift downstream with the flow of water. This slack will negatively affect the map accuracy, as well as introduce the risk of cable movement wearing the cable jacket at a higher rate. To address this slack, Pure Technologies will remobilize approximately four (4) weeks following commissioning of the system to pull out the slack and re-tension the cable. Additional impact testing will be performed and the web-based pipe-by-pipe GIS map updated. The slack and cable tension will also

be assessed and corrected as part of an annual maintenance program offered by Pure Technologies herein.

## Soundprint AFO Monitoring, Notifications and Reporting

### Monitoring

Once installed and commissioned, the AFO system will commence monitoring the pipeline. This is facilitated by a team of Monitoring Specialists and Data Analysts working together to ensure that the system is performing to the expected standards and delivering actionable data back to the City.

To ensure that the SoundPrint AFO monitoring system is functioning properly, several automated system tests are incorporated into the standard operation of the system. First, a component within the DAQ plays the recorded sound of an actual wire break every hour. The sound file includes a distinctive feature at the end that ensures the event is not mistakenly classified as a wire break. This simulated wire break can be set to a variety of total energy sizes to test and optimize the sensitivity of the system based on the site specific pipeline noise conditions.

The location of events is determined using an optical time-domain reflectometry (OTDR) technique. This technique, utilizing an ultra-high-speed A/D conversion, allows location resolution within 3 feet.

Given the sensitivity of the system, processing and analysis of data is accomplished in two phases. The first phase is automated and takes place within the DAQ system, whereby hardware and software filters are applied to incoming raw data. By analyzing the characteristics of events of interest, the filters can be configured to reject most acoustic events that are not of interest. This reduces the quantity of data requiring secondary processing. Secondary processing utilizes a combination of automated and manual analysis and classification.

The DAQ uses the AFO cable to identify acoustic events along the AFO cable, saves the event data, and transfers relevant data to Pure Technologies via the internet for analysis. When an event has been analyzed and classified as a wire break, an email notification is sent to concerned parties with the time and location information. The data will also be available on a secure website, accessible only to the City.

### Notifications and Reporting

Daily communications regarding the extent of data collected each day are transmitted to assigned parties via e-mail the next business day. Should a wire break event occur, designated individuals will be notified immediately via e-mail and/or text message. The notification will identify on which pipe the wire break

occurred and time of occurrence. The wire break will also be updated on the web-based monitoring site.

Notification and communication protocols will be determined and documented in the Operations Manual delivered at the end of the installation phase. Typically, designated personnel within the City will receive e-mail notifications of wire breaks the following business day. The wire break will also be posted on the AFO website.

Standard notifications include wire break alerts, three pipe alarm, and finite element analysis alarm:

**Wire Break Alert Emails** provide the details of a wire break event and include snapshots from the AFO website showing information for the affected pipe. All the information from the email is immediately available on the website by clicking on the link at the bottom of the email and logging in.

The **Three Pipe Alarm** is generated when three wire breaks are identified and reported on any of three adjacent pipes within 24 hours. This is meant to identify concerning activity in a concentrated area.

A **Finite Element Analysis Alarm** is generated when a Structural Pipe Performance Risk Curve exists for the class of pipe and the total number of wire breaks exceeds 80% of yield limit at operating pressure.

Pipe sections that are highly distressed or have seen an increase in the rate of wire breaks can be classified as a pipe of concern. The pipe continues to be monitored at regular intervals, but if any wire breaks are detected there is additional communication to the City, typically via telephone communications to designated individuals within the City.

### Web-Based Portal

Hosted by Pure Technologies, the AFO website is securely accessible through a web browser and provides four main menu options:

- View pipeline location and wire break activity in GIS map
- Provide comprehensive information for a Pipeline, and its pipe sections
- Query pipe information by pipeline, by time or by a user specified watch list
- Search pipe numbers to quickly locate information

Using proprietary analysis software, a detailed pipe-by-pipe GIS map is built from plan and profile drawings, pipe manufacturer's lay sheets, electromagnetic inspection results and in-pipe measurement. The locations gathered during the commissioning impacts will be used to calibrate the map. Pipeline acoustic event locations are linearly interpolated between the impact locations. AFO web

includes details on each specific pipe sticks including the number of wire breaks from previous EM inspections as well as those detected by AFO.

Pipe Performance Risk Curves developed using 3D FEA analysis are also incorporated into the web-based data to identify and rank the risk associated with the likelihood of failure (LoF) associated with each individual pipe.

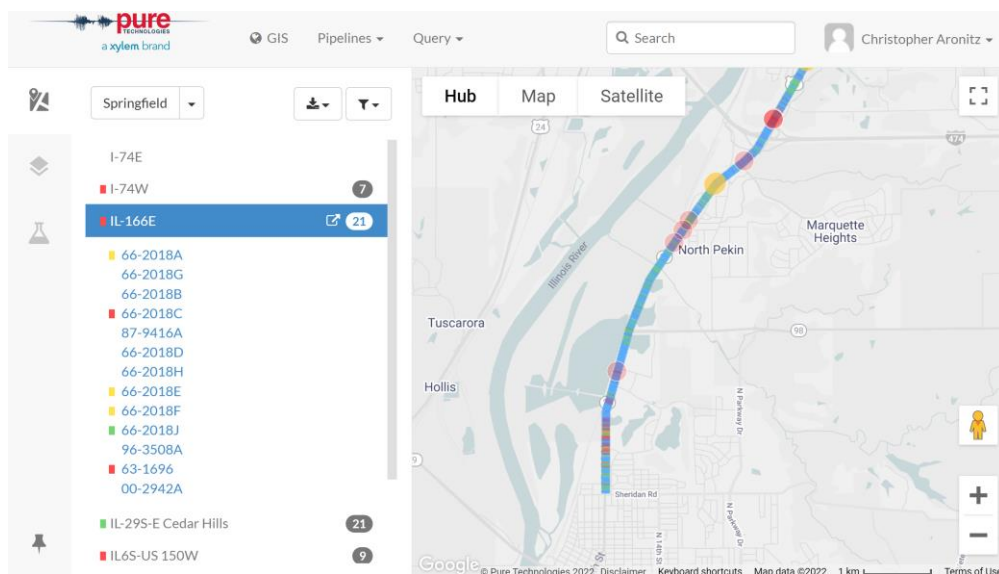
If requested, Pure Technologies can also incorporate our proprietary RiskView® asset management program that will incorporate a Consequence of Failure (CoF) component to establish a comprehensive risk ranking associated with each pipe.

The web-based portal offers display, reporting and alert options to the City. Pure Technologies would be pleased to present a live demonstration of the web-based portal on request.

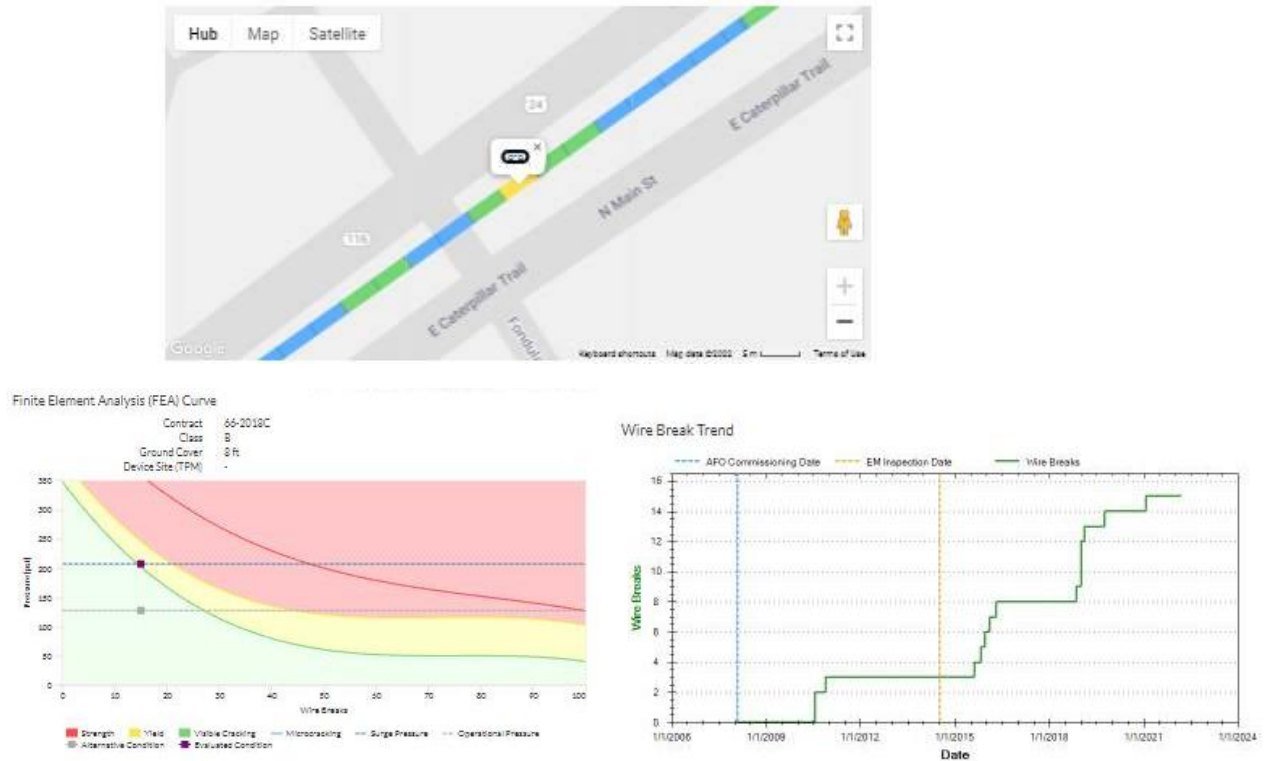
The AFO website is a user-friendly pipeline data management tool that provides a pipeline GIS (geographic information system) that includes such data as baseline condition, rate of deterioration, design specifications, laying schedule, pressure, FEA performance curves, etc.

Information on pipe properties is also included and any FEA performance curves that have been performed for classes of pipe along the pipeline are included with the number of wire breaks reflected. Transient pressure data can also be integrated and displayed on the Web Portal.

Samples of a digital interface screenshots from the web-based portal are displayed below.



Web Portal Screenshot Examples



## SoundPrint AFO Warranty & Maintenance

System warranties are provided for the first year of operation with the option to extend long term. The warranty allows Pure Technologies to respond rapidly to onsite equipment issues, and ensure system longevity via regular preventative maintenance and as needed upgrades.

During the regular monitoring of the site, the AFO Monitoring Specialists may identify issues requiring an onsite presence. After exhausting possibilities for identifying and resolving the issues remotely, the Monitoring Specialist will request a qualified technician to visit the site for troubleshooting and remediation.

On an annual basis, Pure Technologies will coordinate with the City to schedule a maintenance visit. At a minimum, the maintenance for each AFO system addresses the following items:

Maintenance of the DAQ unit to include inspection, testing, and upgrades as required for all DAQ components.

AFO cable integrity checks that includes fiber optic cable testing with optical time domain reflectometer to identify light loss which can negatively affect the monitoring.



Maintenance of hardware including inspection of the BOP and plumbing stacks for leaks and corrosion.

Remove slack from the AFO cable if present.

Re-calibrate the system using impact testing to verify the pipeline mapping is accurate to ensure quality location information.

### City of Denton Responsibilities

It is expected that the activities and logistical support listed below will be provided by the City. **Where noted (^), Pure Technologies can performance said tasks as an Optional Service.** Requirements will be determined in more detail during the inspection planning process.

#### General

Provide information about the pipelines at least four (4) weeks prior to the inspection date including, but not limited to, plan and profile drawings, lay sheets, shop drawings, manufacturing details, and details of access structures and appurtenances – if available.

Designate a site for the DAQ unit with access to the transmission main and electrical supply and provide access to the DAQ site during the monitoring period

Furnish traffic control as necessary. ^

Perform valve assessments in advance and operate valves as required to accommodate the applicable installation methodology. ^

Manage pump operations accommodate the applicable installation methodology, maintaining the required flow velocities as may be required for a wet installation.

Provide and maintain safe and reasonable access to all work sites throughout the installation and obtain permits as required. ^

Prepare and/or modify existing pipeline fittings and structures as indicated by Pure Technologies to accommodate installation of the equipment as outlined in the Planning Document and system drawing package. ^

Provide a minimum of 36" clearance in the manway or ARV chambers above the access flange on which the upstream plumbing and BOP stack is attached and a minimum of 54-inch clearance for the downstream plumbing and BOP stack.

Ensure the access chambers are available for the duration of the monitoring period.

Obtain any required legal right-of-entry on the property and notify landowners of access required.

Provide support personnel during the inspection for locating the access structures, traffic control, valve operation, pump operation, and other support as necessary. ^

Provide and maintain safe and reasonable access to all work sites throughout the inspection and obtain permits as required.

Render confined space areas safe for the services, including lockout tagout of pumps, valves, and motors; dewatering chambers and vaults to permit movement of persons and equipment; and vector and rodent control as necessary. ^

Excavate, dewater, shore up, and/or provide scaffolding of job area and other civil activity as necessary in compliance with OSHA/local standards and regulations. ^

Operate the pipeline in a manner that will achieve the required flow velocity indicated in the Planning Document throughout the inspection.

Conduct any civil activities required to provide access into the pipeline, including, but not limited to excavation, tapping, shoring, valve and pump operation, maintenance of traffic, provisions for rope support, as well as other activities providing access to the necessary valves and appurtenances identified as being critical to the performance of the project. In the instance these services cannot be carried out by the City, Pure Technologies can procure these additional services on your behalf. ^

### **Live Installation**

Manage pump operations to provide an acceptable and consistent flow velocity for deployment of the tag line under fully flowing conditions.

Provide Pure Technologies with the typical flow velocities and pressures for pipeline operation, and the expected minimum and maximum values for each. If this data is unavailable, Pure Technologies would like the opportunity to verify flow velocities recommended prior to performing the inspection.

Provide adequate overhead clearance above access valve for the BOP stacks. May require removal of the access vault lid or coring a hole through the vault lid.

For live installation provide Pure Technologies with the typical flow velocities and pressures for pipeline operation, and the expected minimum and maximum values for each. If this data is unavailable, Pure Technologies would like the opportunity to verify flow velocities recommended prior to performing the installation.

Operate the pipeline in a manner that will achieve the minimum required flow velocity indicated in the Planning Document throughout the inspection.

Furnish and install scaffolding to provide safe access when inserting and extracting the tag line and AFO cable at each end of the runs. ^



## Dry Installation

If a dry installation of the AFO cable is to be performed, completely de-water the pipelines. ^

Render confined space areas safe for the services, including lockout tagout of pumps, valves, and motors; dewatering chambers and vaults to permit movement of persons and equipment. ^

Prepare and post confined space permit. Provide personnel that are OSHA and Confined Space Certified to provide top side confined space support (Supervisor and two Attendants). ^

## Confirmations | Clarifications | Submittals per RFP Requirements:

Pure Technologies AFO Monitoring System provides continuous, twenty-four (24) hour monitoring of acoustic events of the City of Denton' pipeline at the specified site.

Pure Technologies AFO Monitoring System will remain operational for a period of not less than 95% aggregate time on an annual basis, excluding power outages or other events outside the control of the vendor. System uptime is to be calculated as the successful percentage of the simulated verifications captured that are played by the system once per hour each day.

Pure Technologies AFO Monitoring System will allow remote operation of the AFO System to enable continuous recording of acoustic events.

Operation of the AFO System will include hourly simulated verifications, daily remote site checks, and an annual site visit.

Pure Technologies AFO Monitoring System will provide continuous downloading of data to a Vendor-based central server. All data will be downloaded the following business day.

Pure Technologies will provide continuous event processing by our data processing department as long as internet connection to the system is available.

Pure Technologies will include monitoring and warranty with each system as presented in the proposed fees.

Pure Technologies AFO Monitoring System will detect and locate wire breaks that emit a signal greater than 10 kHz, to a degree of accuracy within plus or minus three (3) feet.

The City of Denton will be notified of wire breaks by email within one (1) business day of the event occurring.



Notification of the location and extent of any abnormal activity detected within the monitoring system will be provided to the City of Denton within one (1) business day of the occurrence.

Pure Technologies will provide remote support to City of Denton Utilities for onsite activities during the identification and repair or replacement of pipe sections, including the necessary remapping of the AFO cable, in accordance with the proposed fees.

Pure Technologies will furnish and install software upgrades for the AFO System as they become available.

**CONFLICT OF INTEREST QUESTIONNAIRE -****FORM CIQ****For vendor or other person doing business with local governmental entity****This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.**

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a) and by City of Denton Ethics Code, Ordinance 18-757.

By law this questionnaire must be filed with the records administrator of the local government entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

**1 Name of vendor who has a business relationship with local governmental entity.**

PURE TECHNOLOGIES US INC.

**2 ☐ Check this box if you are filing an update to a previously filed questionnaire.**

(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7<sup>th</sup> business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

**3 Name of local government officer about whom the information in this section is being disclosed.**\_\_\_\_\_  
Name of Officer

Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. This section, (item 3 including subparts A, B, C & D), must be completed for each officer with whom the vendor has an employment or other business relationship as defined by Section 176.001(1-a), Local Government Code. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer named in this section receiving or likely to receive taxable income, other than investment income, from the vendor?

☐

Yes

☐

No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer named in this section AND the taxable income is not received from the local governmental entity?

☐

Yes

☐

No

C. Is the filer of this questionnaire employed by a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership of one percent or more?

☐

Yes

☐

No

D. Describe each employment or business and family relationship with the local government officer named in this section.

**4 ☒ I have no Conflict of Interest to disclose.****5** DocuSigned by:

Mike Saraci

5/8/2023

\_\_\_\_\_  
Signature of vendor doing business with the governmental entity\_\_\_\_\_  
Date

## CONFLICT OF INTEREST QUESTIONNAIRE

### For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at [http://www.statutes.legis.state.tx.us/ Docs/LG/htm/LG.176.htm](http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm). For easy reference, below are some of the sections cited on this form.

**Local Government Code § 176.001(1-a):** "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

- (A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;
- (B) a transaction conducted at a price and subject to terms available to the public; or
- (C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

**Local Government Code § 176.003(a)(2)(A) and (B):**

(A) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

(2) the vendor:

- (A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds \$2,500 during the 12-month period preceding the date that the officer becomes aware that
  - (i) a contract between the local governmental entity and vendor has been executed; or
  - (ii) the local governmental entity is considering entering into a contract with the vendor;
- (B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than \$100 in the 12-month period preceding the date the officer becomes aware that:
  - (i) a contract between the local governmental entity and vendor has been executed; or
  - (ii) the local governmental entity is considering entering into a contract with the vendor.

**Local Government Code § 176.006(a) and (a-1)**

- (a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:
  - (1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);
  - (2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or
  - (3) has a family relationship with a local government officer of that local governmental entity.
- (a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:
  - (1) the date that the vendor:
    - (A) begins discussions or negotiations to enter into a contract with the local governmental entity; or
    - (B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or
  - (2) the date the vendor becomes aware:
    - (A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);
    - (B) that the vendor has given one or more gifts described by Subsection (a); or
    - (C) of a family relationship with a local government officer.

### **City of Denton Ethics Code Ordinance Number 18-757**

**Definitions:**

**Relative:** a family member related to a City Official within the third 3<sup>rd</sup> degree of affinity (marriage) or consanguinity (blood or adoption)

**City Official:** for purpose of this article, the term consists of the Council Members, Department Heads, or member of the Board of Ethics, Planning and zoning Commission Members, Board of Adjustment, Historic Landmark Commission, or Public Utilities Board

**Vendor:** a person who provides or seeks to provide goods, services, and/or real property to the City in exchange for compensation. This definition does not include those property owners from whom the City acquires public right-of-way or other real property interests for public use.

Per the City of Denton Ethics Code, Section 2-273. – Prohibitions

- (3) It shall be a violation of this Article for a Vendor to offer or give a Gift to City Official exceeding fifty dollars (\$50.00) per gift, or multiple gifts cumulatively valued at more than two hundred dollars (\$200.00) per a single fiscal year.

Per the City of Denton Ethics Code, Section 2-282. – Disposition (b), (5) Ineligibility

If the Board of Ethics finds that a Vendor has violated this Article, the Board may recommend to the City Manager that the Vendor be deemed ineligible to enter into a City contract or other arrangement for goods, services, or real property, for a period of one (1) year.

**Certificate Of Completion**

Envelope Id: FAB79C57358B44AFB519265884F2EF32

Status: Sent

Subject: Please DocuSign: City Council Contract 8181 Transmission Mains Condition Assessment

Source Envelope:

Document Pages: 128

Signatures: 4

Certificate Pages: 6

Initials: 1

AutoNav: Enabled

Envelope Stamping: Enabled

Time Zone: (UTC-06:00) Central Time (US &amp; Canada)

Envelope Originator:

Crystal Westbrook

901B Texas Street

Denton, TX 76209

crystal.westbrook@cityofdenton.com

IP Address: 198.49.140.10

**Record Tracking**

Status: Original

5/4/2023 10:43:48 AM

Holder: Crystal Westbrook

crystal.westbrook@cityofdenton.com

Location: DocuSign

**Signer Events**

Crystal Westbrook

crystal.westbrook@cityofdenton.com

Senior Buyer

City of Denton

Security Level: Email, Account Authentication  
(None)**Electronic Record and Signature Disclosure:**

Not Offered via DocuSign

Lori Hewell

lori.hewell@cityofdenton.com

Purchasing Manager

City of Denton

Security Level: Email, Account Authentication  
(None)**Electronic Record and Signature Disclosure:**

Not Offered via DocuSign

Marcella Lunn

marcella.lunn@cityofdenton.com

Mack Reinwand City Attorney

City of Denton

Security Level: Email, Account Authentication  
(None)**Electronic Record and Signature Disclosure:**

Not Offered via DocuSign

Mike Garaci

mike.garaci@xylem.com

Director, Business Development

Security Level: Email, Account Authentication  
(None)**Electronic Record and Signature Disclosure:**

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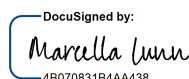
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Sent: 5/4/2023 10:51:40 AM

Viewed: 5/5/2023 10:37:00 AM

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Signed: 5/8/2023 8:05:34 AM

Signer Events	Signature	Timestamp
Stephen D. Gay stephen.gay@cityofdenton.com Director, Security Level: Email, Account Authentication (None)	DocuSigned by:  9EBFF5658E56492...  Signature Adoption: Pre-selected Style Using IP Address: 198.49.140.10	Sent: 5/8/2023 8:05:40 AM Viewed: 5/8/2023 8:16:07 AM Signed: 5/8/2023 8:25:35 AM

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Cheyenne Defee  
cheyenne.defee@cityofdenton.com  
Procurement Administration Supervisor  
City of Denton  
Security Level: Email, Account Authentication (None)

Sent: 5/8/2023 8:25:40 AM

**Electronic Record and Signature Disclosure:**  
Not Offered via DocuSign

Sara Hensley  
sara.hensley@cityofdenton.com  
Security Level: Email, Account Authentication (None)

**Electronic Record and Signature Disclosure:**  
Not Offered via DocuSign

Jesus Salazar  
jesus.salazar@cityofdenton.com  
Security Level: Email, Account Authentication (None)

**Electronic Record and Signature Disclosure:**  
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Editor Delivery Events	Status	Timestamp
Agent Delivery Events	Status	Timestamp
Intermediary Delivery Events	Status	Timestamp
Certified Delivery Events	Status	Timestamp
Carbon Copy Events	Status	Timestamp

Cheyenne Defee  
cheyenne.defee@cityofdenton.com  
Procurement Administration Supervisor  
City of Denton  
Security Level: Email, Account Authentication (None)

Sent: 5/4/2023 10:51:40 AM

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Carbon Copy Events	Status	Timestamp
Gretna Jones gretna.jones@cityofdenton.com Legal Secretary City of Denton Security Level: Email, Account Authentication (None) <b>Electronic Record and Signature Disclosure:</b> Not Offered via DocuSign  City Secretary Office citysecretary@cityofdenton.com Security Level: Email, Account Authentication (None) <b>Electronic Record and Signature Disclosure:</b> Not Offered via DocuSign  Tyler Dawson tyler.dawson@cityofdenton.com Security Level: Email, Account Authentication (None) <b>Electronic Record and Signature Disclosure:</b> Accepted: 5/1/2023 10:18:02 AM ID: ed6e348e-80d0-4226-b553-800f5064c01e  Jewel Lanning jewel.lanning@cityofdenton.com Security Level: Email, Account Authentication (None) <b>Electronic Record and Signature Disclosure:</b> Not Offered via DocuSign	<div>COPIED</div>	Sent: 5/8/2023 8:25:40 AM Viewed: 5/8/2023 11:58:34 AM
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Notary Events	Signature	Timestamp
Envelope Summary Events	Status	Timestamps
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Payment Events	Status	Timestamps
Electronic Record and Signature Disclosure		

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### **Withdrawing your consent**

If you decide to receive notices and disclosures from us electronically, you may at any time change your mind and tell us that thereafter you want to receive required notices and disclosures only in paper format. How you must inform us of your decision to receive future notices and disclosure in paper format and withdraw your consent to receive notices and disclosures electronically is described below.

### **Consequences of changing your mind**

If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. To indicate to us that you are changing your mind, you must withdraw your consent using the DocuSign 'Withdraw Consent' form on the signing page of your DocuSign account. This will indicate to us that you have withdrawn your consent to receive required notices and disclosures electronically from us and you will no longer be able to use your DocuSign Express user account to receive required notices and consents electronically from us or to sign electronically documents from us.

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**How to contact City of Denton:**

You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:

To contact us by email send messages to: [purchasing@cityofdenton.com](mailto:purchasing@cityofdenton.com)

**To advise City of Denton of your new e-mail address**

To let us know of a change in your e-mail address where we should send notices and disclosures electronically to you, you must send an email message to us at [melissa.kraft@cityofdenton.com](mailto:melissa.kraft@cityofdenton.com) and in the body of such request you must state: your previous e-mail address, your new e-mail address. We do not require any other information from you to change your email address..

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To inform us that you no longer want to receive future notices and disclosures in electronic format you may:

- i. decline to sign a document from within your DocuSign account, and on the subsequent page, select the check-box indicating you wish to withdraw your consent, or you may;
- ii. send us an e-mail to [purchasing@cityofdenton.com](mailto:purchasing@cityofdenton.com) and in the body of such request you must state your e-mail, full name, US Postal Address, telephone number, and account number. We do not need any other information from you to withdraw consent.. The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process..

**Required hardware and software**

Operating Systems:	Windows2000? or WindowsXP?
Browsers (for SENDERS):	Internet Explorer 6.0? or above
Browsers (for SIGNERS):	Internet Explorer 6.0?, Mozilla FireFox 1.0, NetScape 7.2 (or above)
Email:	Access to a valid email account
Screen Resolution:	800 x 600 minimum
Enabled Security Settings:	<ul style="list-style-type: none"><li>•Allow per session cookies</li><li>•Users accessing the internet behind a Proxy Server must enable HTTP 1.1 settings via proxy connection</li></ul>

\*\* These minimum requirements are subject to change. If these requirements change, we will provide you with an email message at the email address we have on file for you at that time providing you with the revised hardware and software requirements, at which time you will have the right to withdraw your consent.

**Acknowledging your access and consent to receive materials electronically**

To confirm to us that you can access this information electronically, which will be similar to other electronic notices and disclosures that we will provide to you, please verify that you were able to read this electronic disclosure and that you also were able to print on paper or electronically save this page for your future reference and access or that you were able to e-mail this disclosure and consent to an address where you will be able to print on paper or save it for your future reference and access. Further, if you consent to receiving notices and disclosures exclusively in electronic format on the terms and conditions described above, please let us know by clicking the 'I agree' button below.

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# City of Denton

City Hall  
215 E. McKinney St.  
Denton, Texas 76201  
[www.cityofdenton.com](http://www.cityofdenton.com)

## Legislation Text

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**File #:** PUB23-100, **Version:** 1

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### AGENDA CAPTION

#### Management Reports:

1. Future Agenda Items
2. New Business Action Items

# Future Public Utilities Board Agenda Items

Note: This is a working draft of pending PUB items and is subject to change without notice.

Meeting Date	Item	Dept
June 12, 2023	Utility Budgets & Rates Work Session	Finance
June 26, 2023	Utility Budgets, CIP Budgets & Rates Work Session Follow Up	Finance
July 10, 2023	Utility Rates (includes Customer Service)	Finance
July 24, 2023	Utilities Budget Approval for Solid Waste, Water, Wastewater, Electric and Customer Service	Finance
August 14, 2023		
August 28, 2023		
September 11, 2023		
September 25, 2023		
October 9, 2023		
October 23, 2023		
November 13, 2023		
December 11, 2023		

Codes: Work Session WS, Consent Agenda CA, Individual Consideration IC

**PUBLIC UTILITIES BOARD - NEW BUSINESS ACTION ITEMS**

	DATE REQUESTED	REQUESTOR	ITEM	DEPT	STATUS
1.	3/27/23	Taylor	Debt Load Trends	Finance	Complete 5/8/23
2.	5/8/23	Cheek	Update on Winter Storm Uri	DME	6/12/23



# City of Denton

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**File #:** PUB23-023, **Version:** 1

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### **AGENDA CAPTION**

Receive a report, hold a discussion, and give staff direction regarding the FY 2023-24 Utility Budget Forecasts.



# City of Denton

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215 E. McKinney Street  
Denton, Texas  
[www.cityofdenton.com](http://www.cityofdenton.com)

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## AGENDA INFORMATION SHEET

**DEPARTMENT:** Finance

**ACM:** Cassey Ogden

**DATE:** May 22, 2023

### **SUBJECT**

Receive a report, hold a discussion, and give staff direction regarding the FY 2023-24 Utility Budget Forecasts.

### **BACKGROUND**

The purpose of this work session and additional work sessions during the months of June and July is to provide the Public Utilities Board (PUB) details regarding the preliminary FY 2023-24 Utility Operating and Capital Budgets. This work session will include a review of the forecast(s) for each utility, which will directly impact each utility's operating budget. The City's budget emphasis continues to be focused on cost containment, financial transparency, long-term maintenance of utility assets, and system reliability.

### **EXHIBITS**

1. Agenda Information Sheet
2. Presentation

Respectfully submitted:  
Aimee Kaslik  
Interim Director of Finance  
(940) 349-7899

Prepared By:  
Danielle Stanford  
Budget Manager  
(940) 349-7507

# Utility Forecast Presentation

May 22, 2023, PUB 23-023





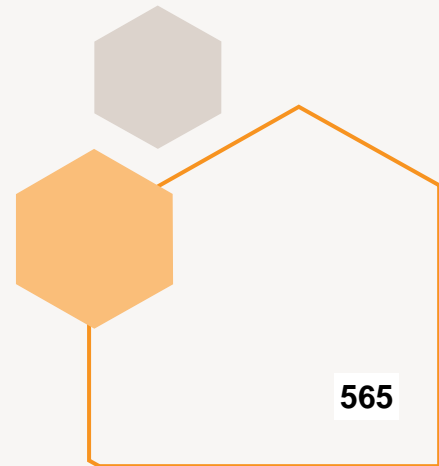
# Agenda

## FY 2022-2023 Budget Process Overview

## Growth Forecasts

- Solid Waste
- Water
- Wastewater
- Electric

## Next Steps



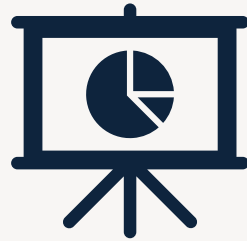
# FY 2023-24 Budget Cycle



**January**  
Budget  
Kickoff



**March-May**  
Budget  
Development  
and Planning



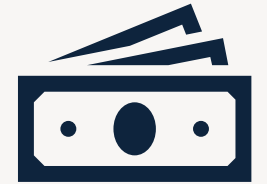
**June-July**  
City Council  
Budget  
Presentations



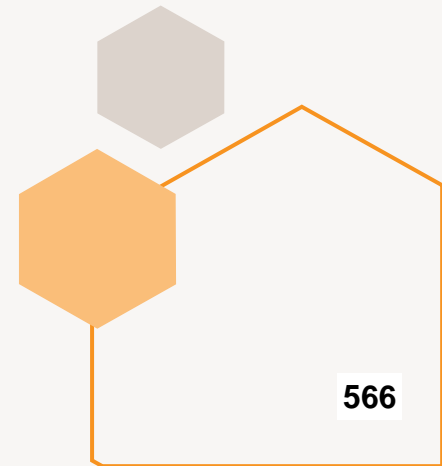
**August**  
Budget  
Workshop



**September**  
Public  
Hearings



**September**  
Adopt Budget  
and Rates



The slide features a decorative graphic on the left side consisting of four hexagons: a large orange one at the top, a light blue one at the bottom, a white one on the left, and a central hexagon containing a photograph of a building. The building has a sign that reads 'ARTS' and another that says 'CAMPBELL'S'.

# Utility Forecasts

# Financial Assumptions

## All Utilities

- Hunter/Cole Development accounted for starting in FY 2024

## Solid Waste

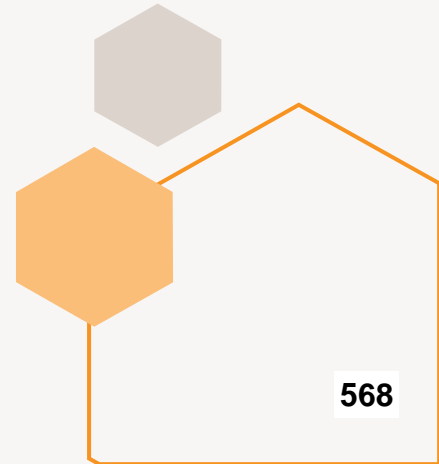
- Forecast is based on customer counts, tonnage, and service frequency

## Water/Wastewater

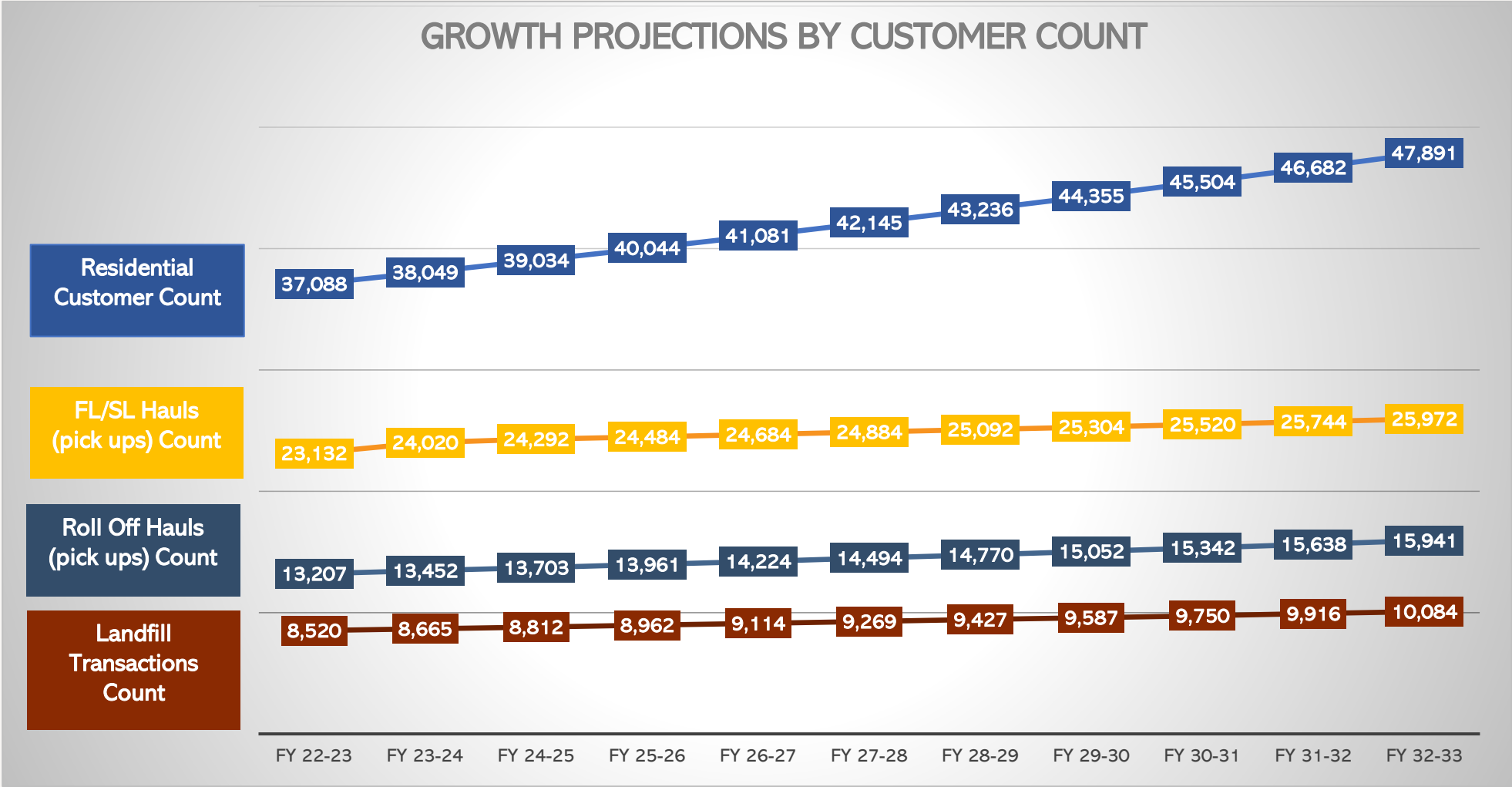
- Volume-based forecast
- Continue to seek alternative funding sources
- Lake Ray Roberts plant expansion accounted for starting in 2024

## Electric

- Forecast is based on retail sales (MWH – Megawatt-hour)

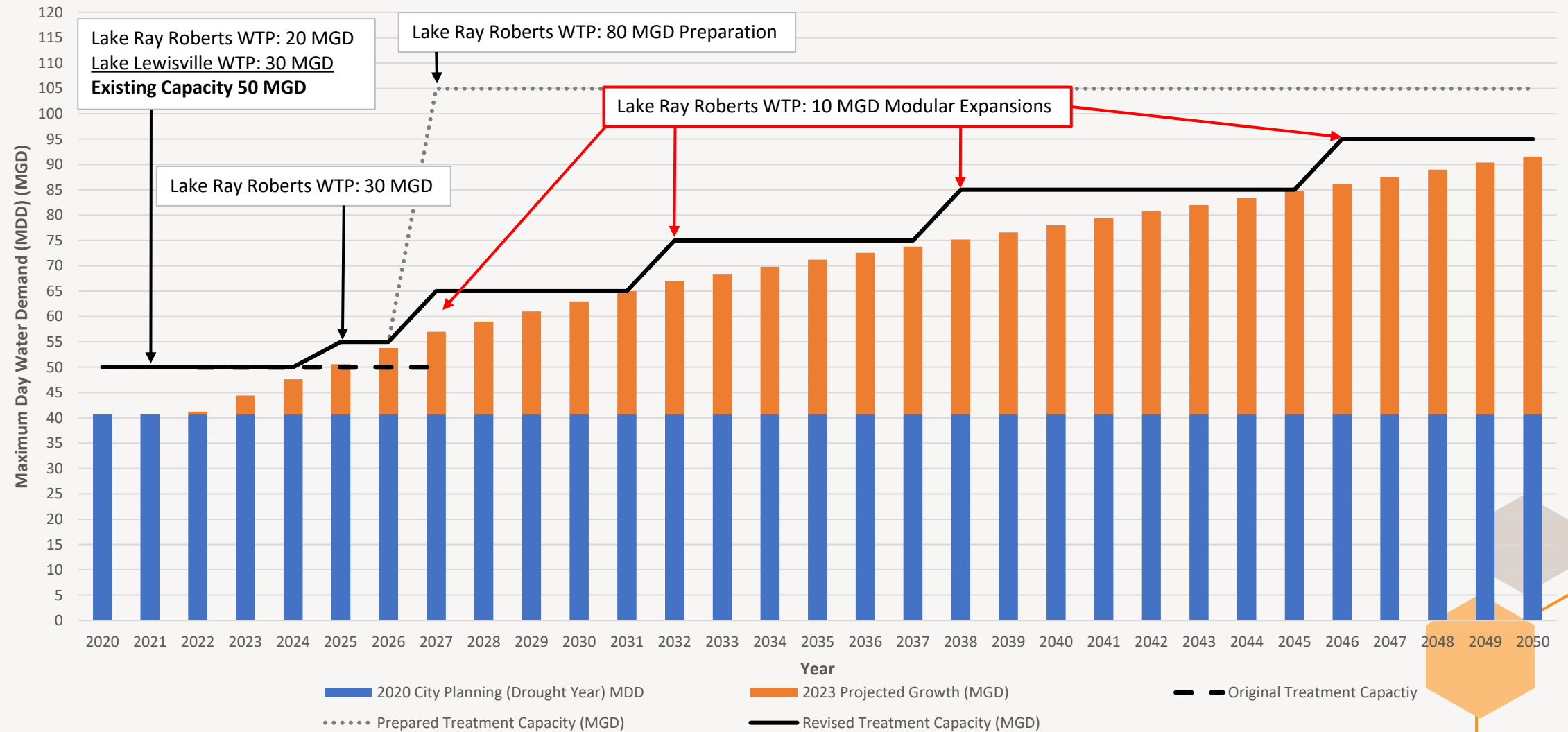


# Solid Waste Forecast



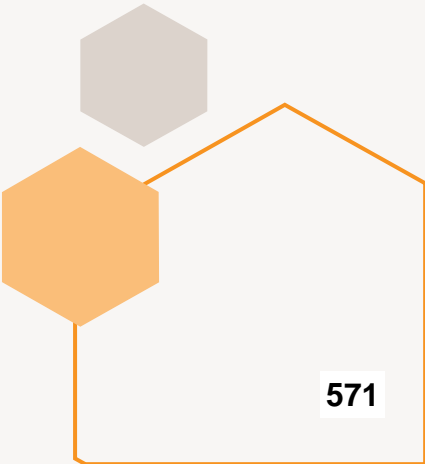
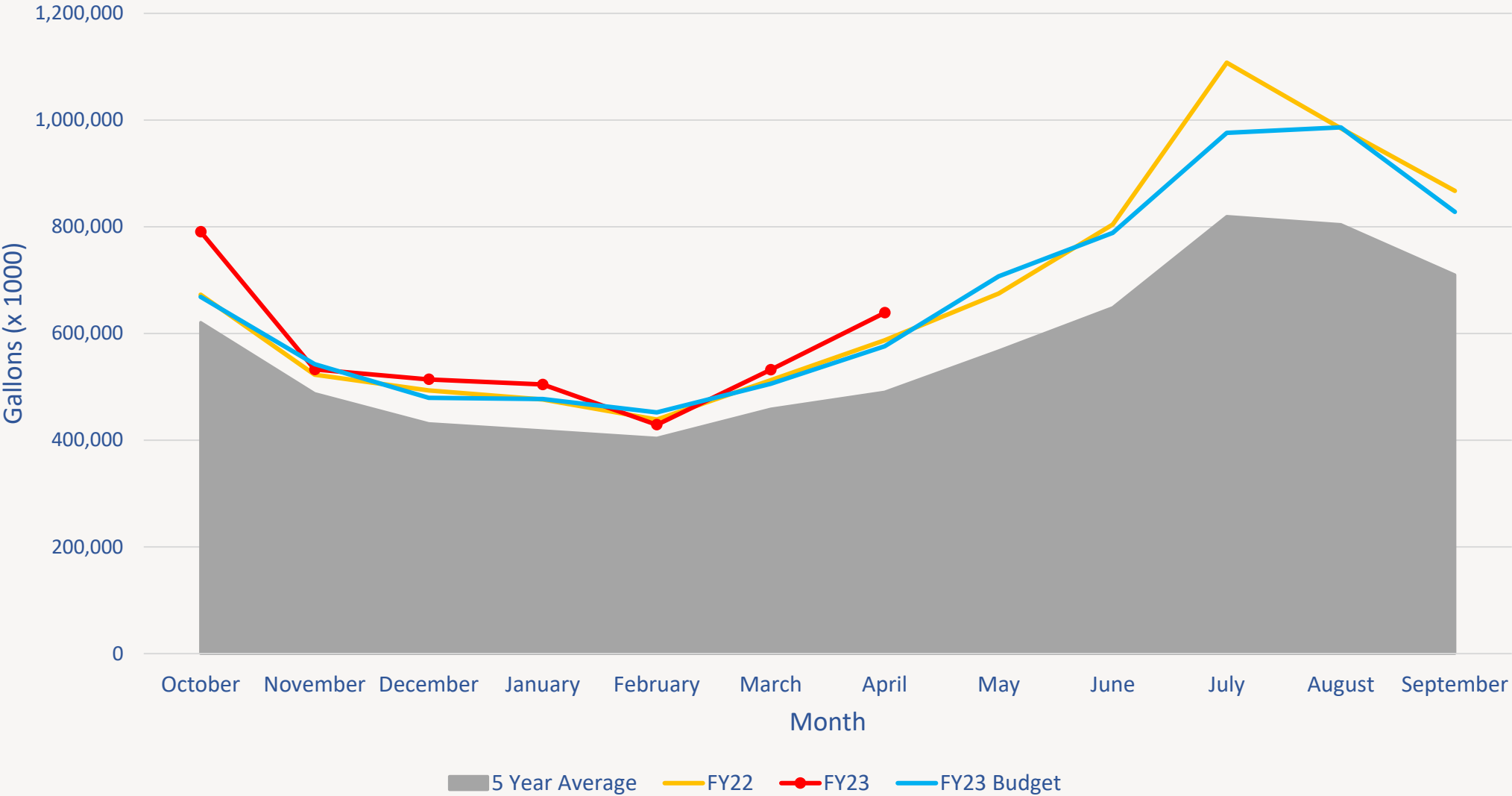
# Water & Wastewater Forecast

Water Volume Forecast

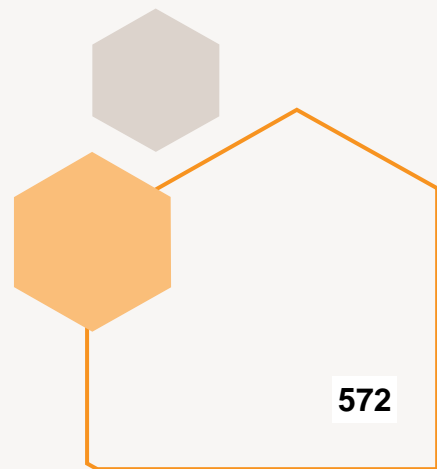
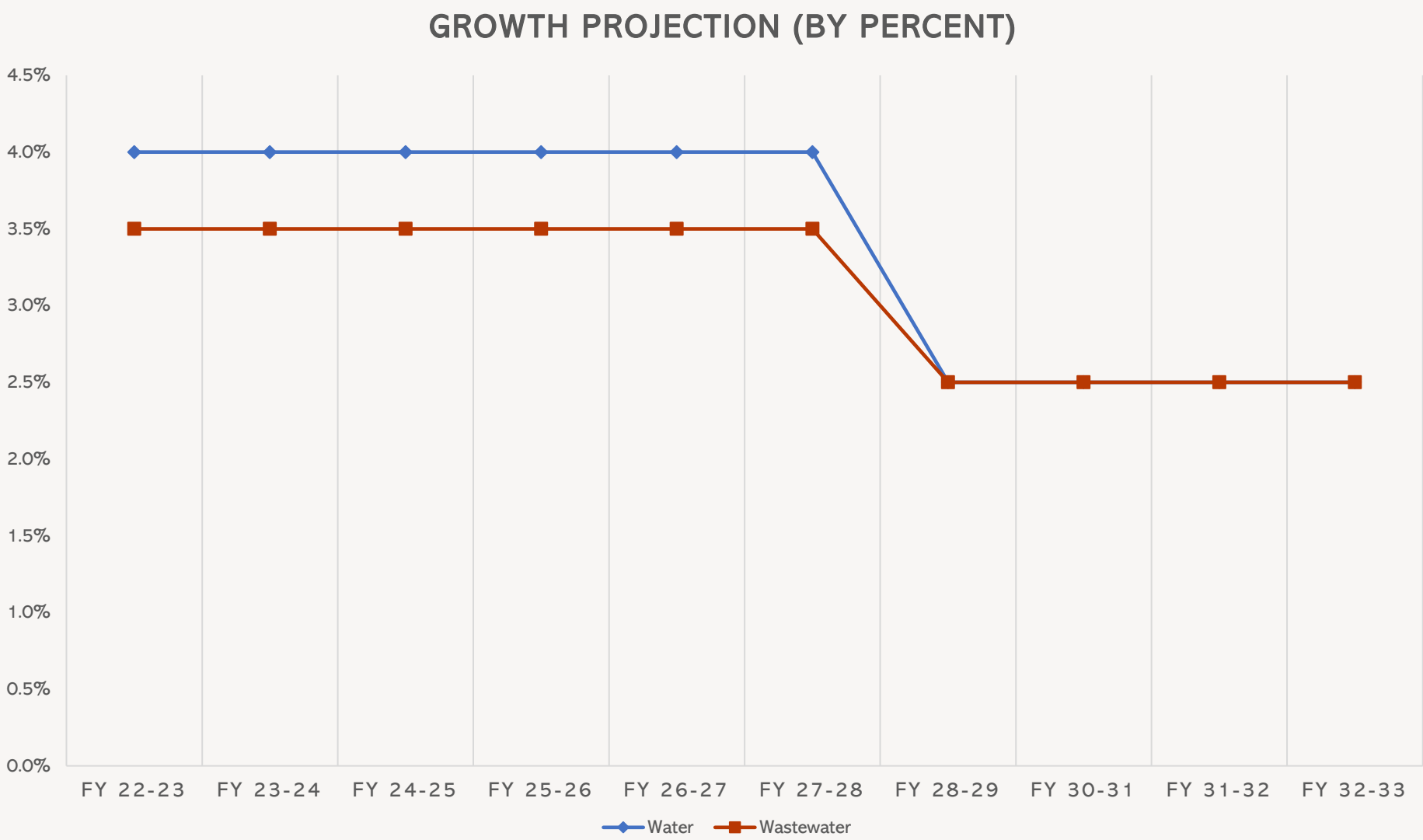


# Water Production

FY 2023 Water Production



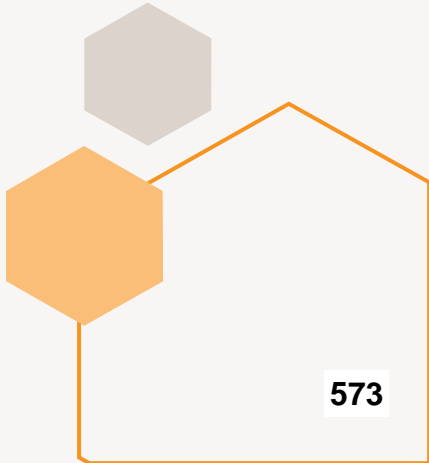
# Water Demand



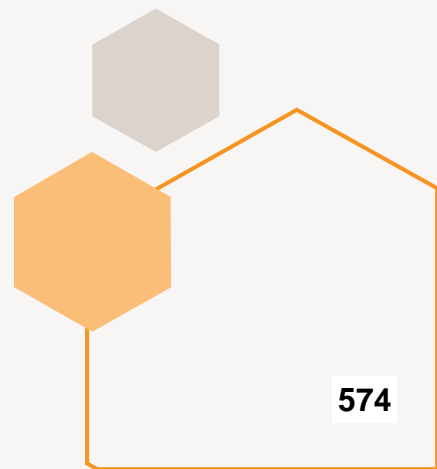
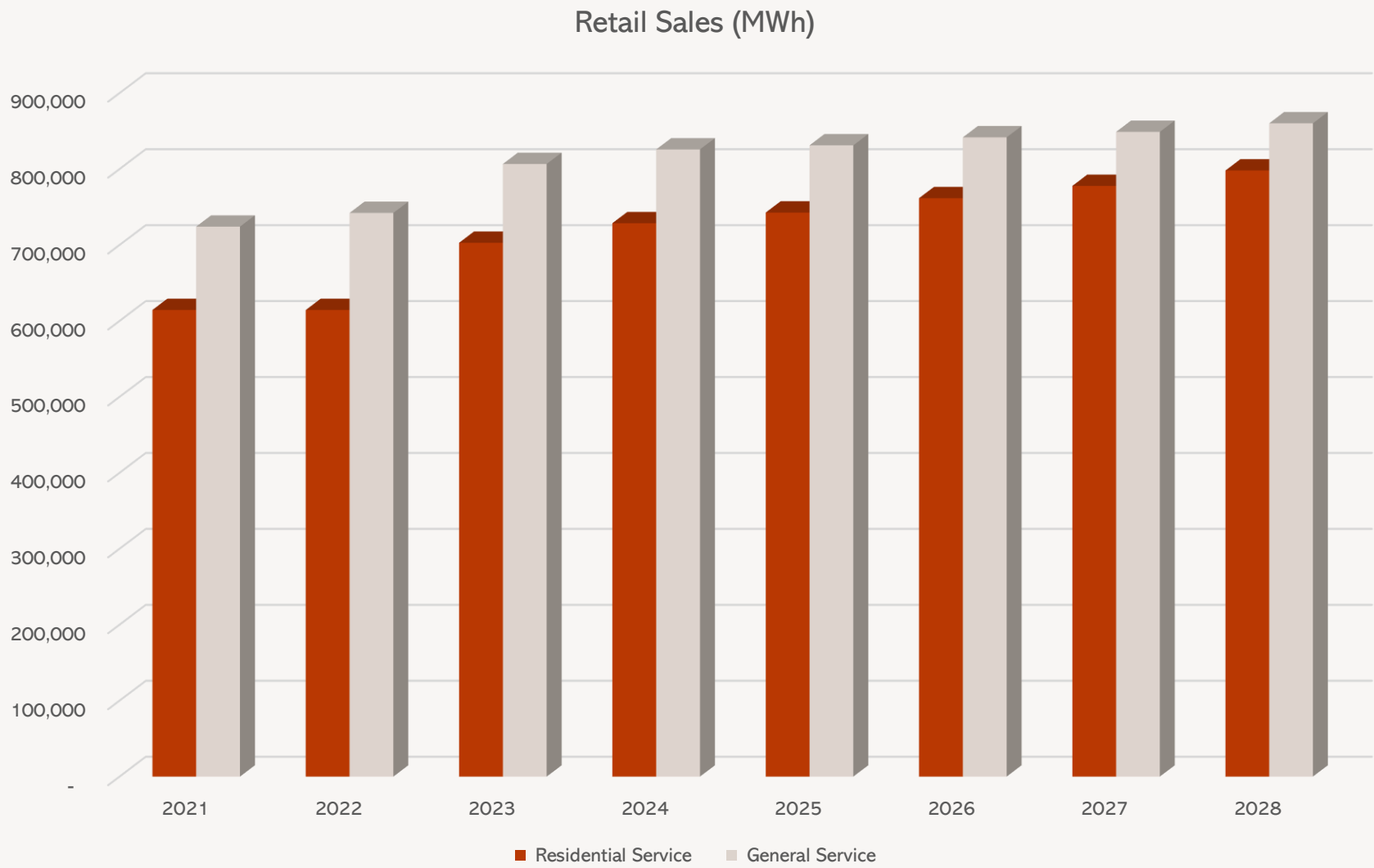


# Electric Forecast – Retail Sales

Year	Residential Service	General Service
2021	614,366	724,145
2022	641,738	718,207
2023	702,882	806,664
2024	728,664	825,809
2025	742,669	831,176
2026	761,617	841,749
2027	777,824	848,941
2028	798,064	860,177



# Electric Forecast



# Next Steps

Date	Body	Action
June 12, 2023	PUB	Utility Budgets & Rates Work Session
June 26, 2023	PUB	Utility Budgets & Rates Follow-Up
July 18, 2023	City Council	Utility Budgets & Rates Work Session
July 24, 2023	PUB	Utility Budgets & Rates Approval
July 25, 2023	City Council	Utility Budgets & Rates Follow-Up
August 5, 2023	City Council	Budget Workshop
September 19, 2023	City Council	Public Hearings
September 26, 2023	City Council	Budget Adoption

# Questions?





# City of Denton

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## Legislation Text

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**File #:** PUB23-036, **Version:** 1

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### **AGENDA CAPTION**

Receive a report, hold a discussion, and give staff direction regarding an update on the Wastewater Master Plan.  
[Estimated Presentation/Discussion Time: 45 minutes]



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## AGENDA INFORMATION SHEET

**DEPARTMENT:** Water Utilities

**ACM:** Frank Dixon

**DATE:** May 22, 2023

### **SUBJECT**

Receive a report, hold a discussion, and give staff direction regarding an update on the Wastewater Master Plan.

### **BACKGROUND**

Approved on 6/22/2021 by Council, Water Utilities staff will present an update on the Wastewater Master Plan. The City of Denton Wastewater Master Plan has been under analysis and has passed the 60% completion mark.

The City's Consultant will provide a big-picture view of the potential treatment requirements, costs, capacities, and solutions for the City's Wastewater Service Area as it expands due to future growth.

Staff intends this presentation to provide a preview of the potential results, requirements, and opportunities suggested by the Wastewater Master Plan.

The presentations will support understanding the purpose and status of the Wastewater Master Plan.

### **EXHIBITS**

1. Agenda Information Sheet
2. Presentation

Respectfully submitted:  
Stephen Gay  
Director of Water Utilities



# **WASTEWATER MASTER PLAN PROJECT UPDATE**

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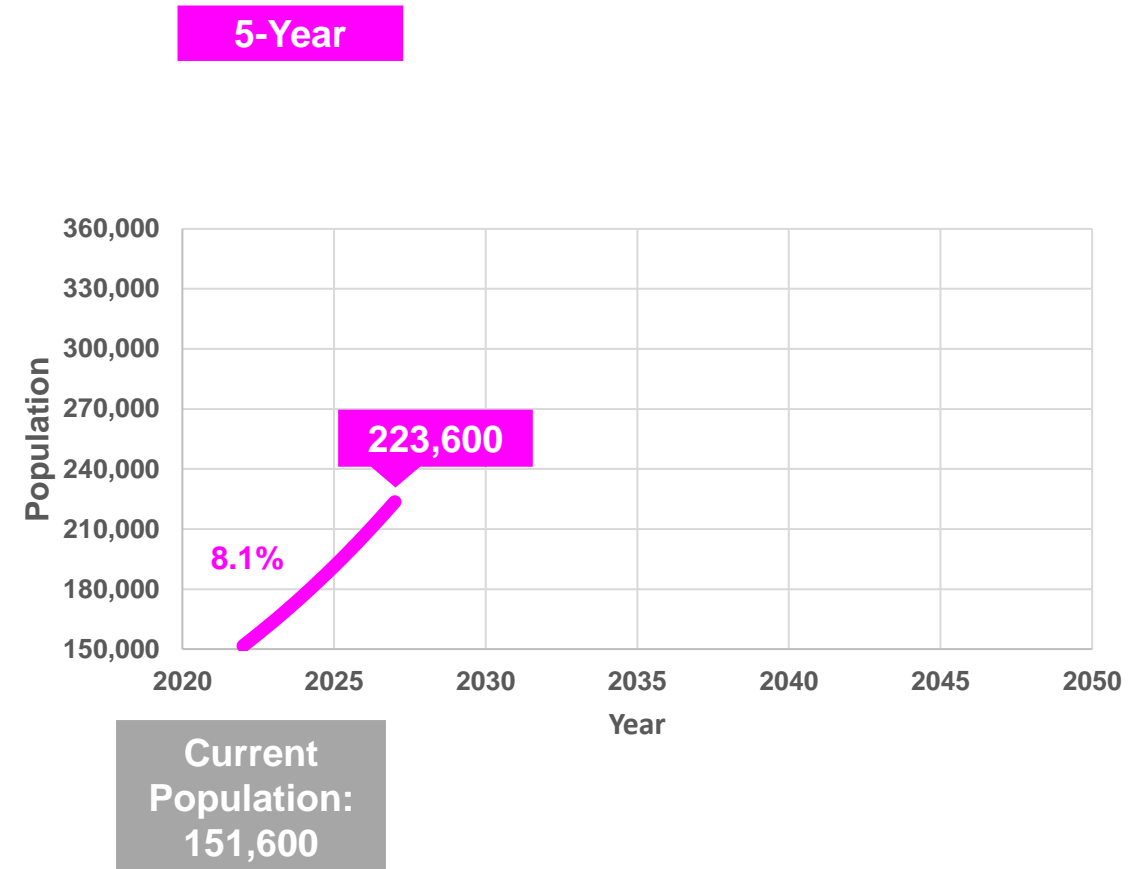
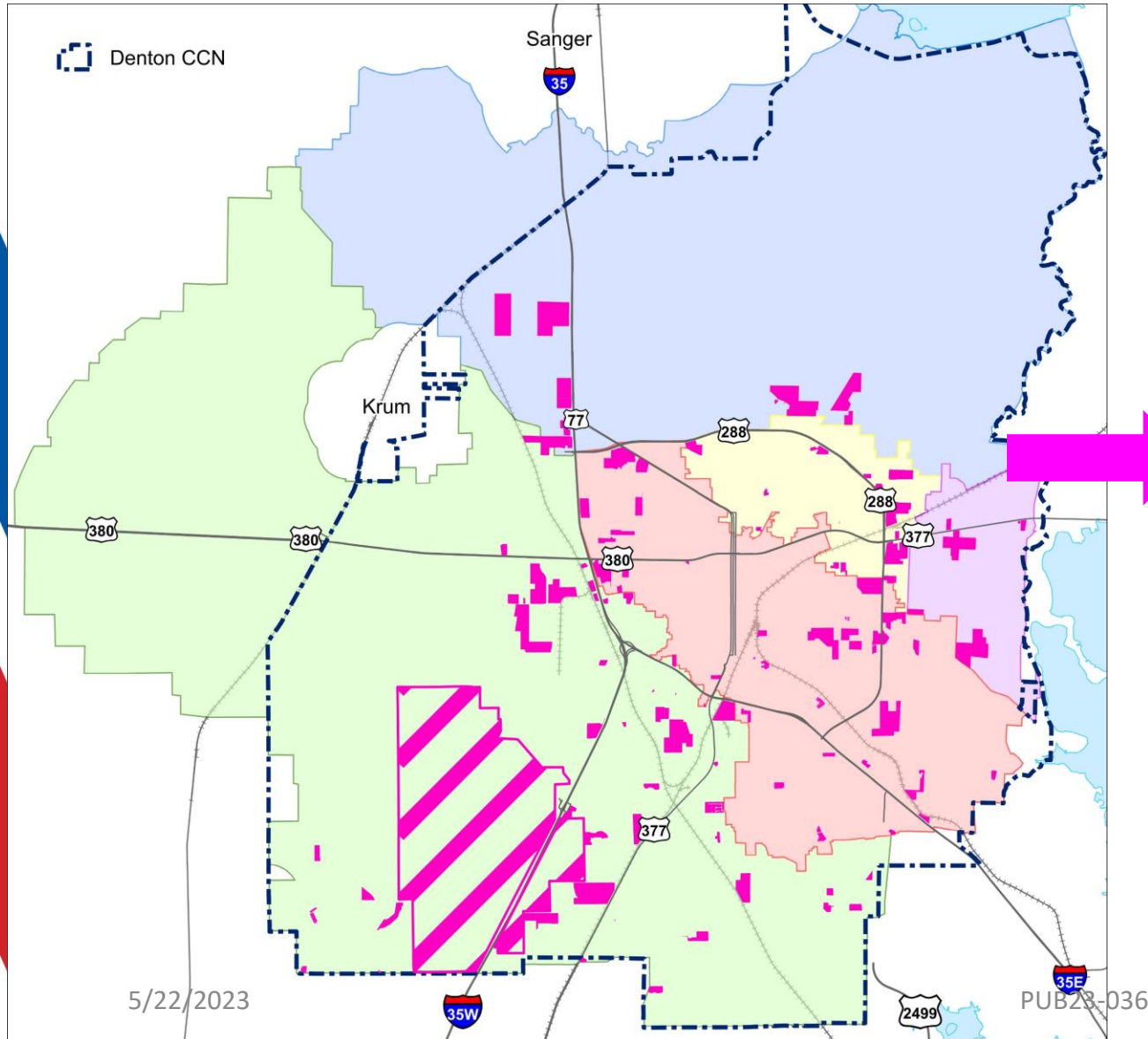
May 22, 2023

# WASTEWATER MASTER PLAN PROJECT UPDATE

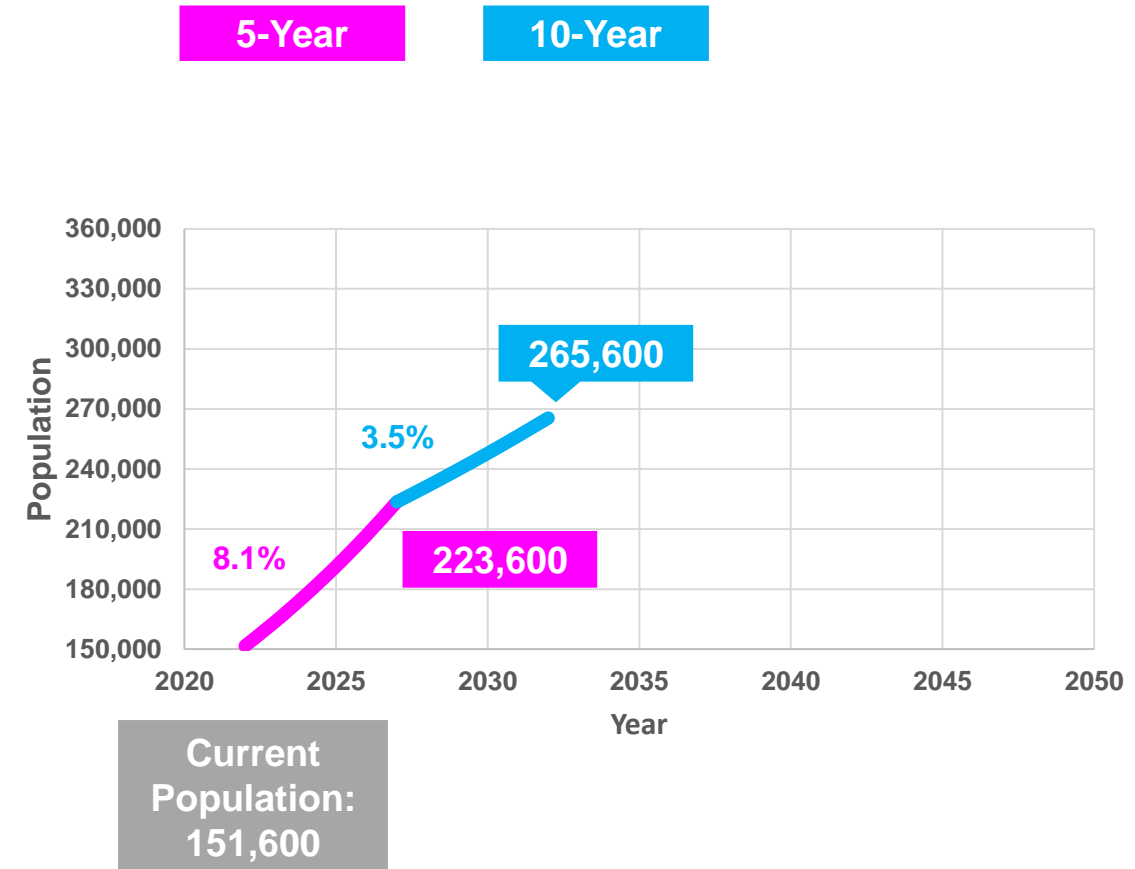
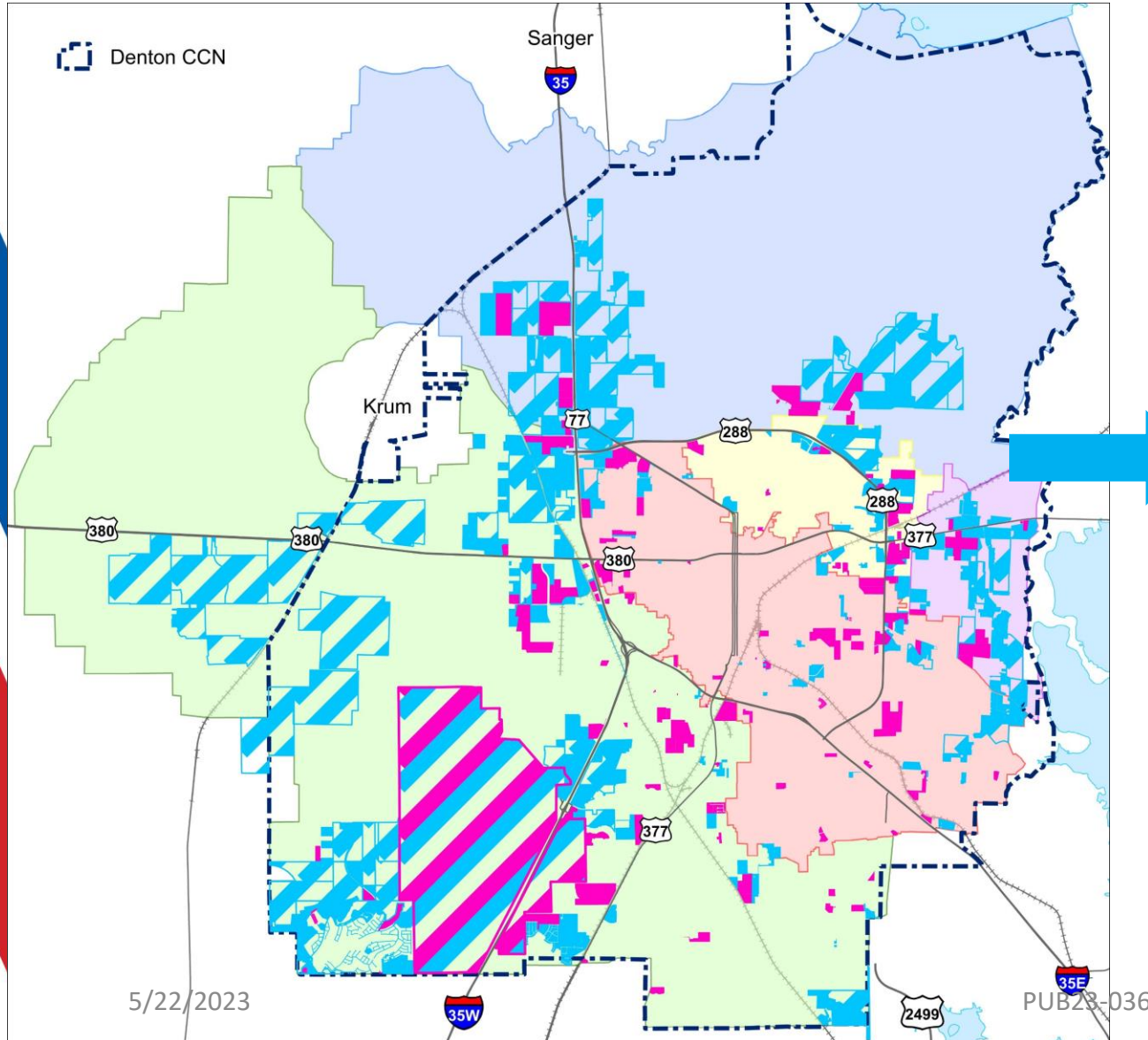
- Phasing & Growth
- 5-Year Capital Improvement Projects
  - Hickory Basin
  - Clear Creek Basin
- Next Steps



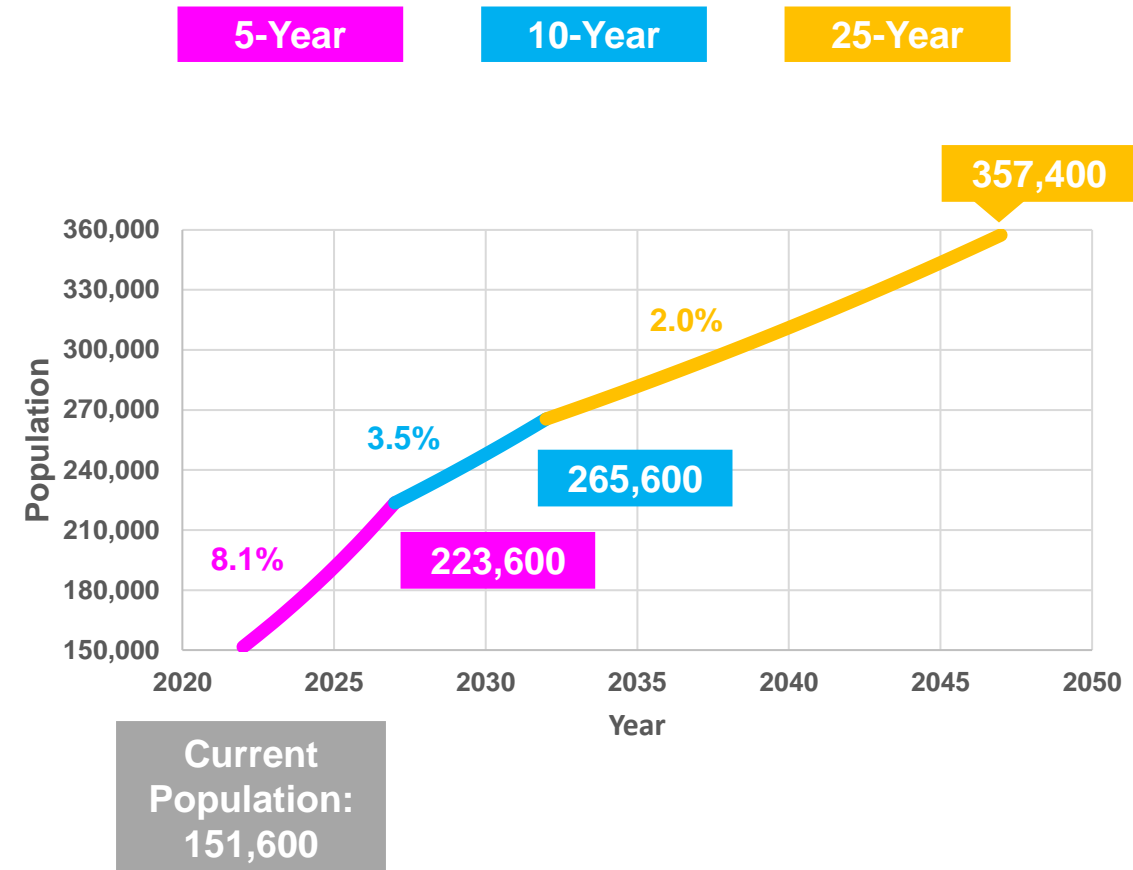
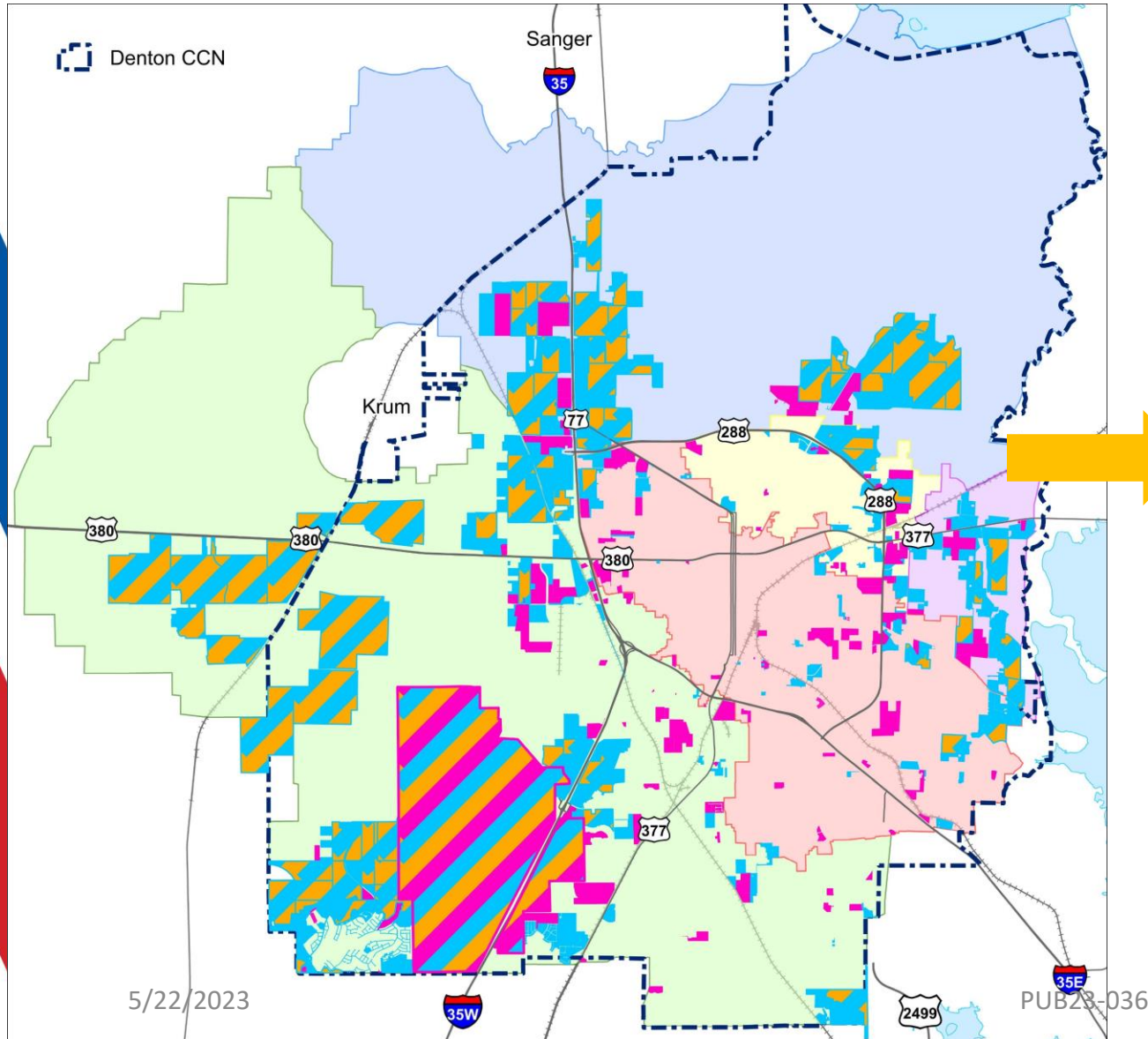
# PHASING & GROWTH



# PHASING & GROWTH



# PHASING & GROWTH





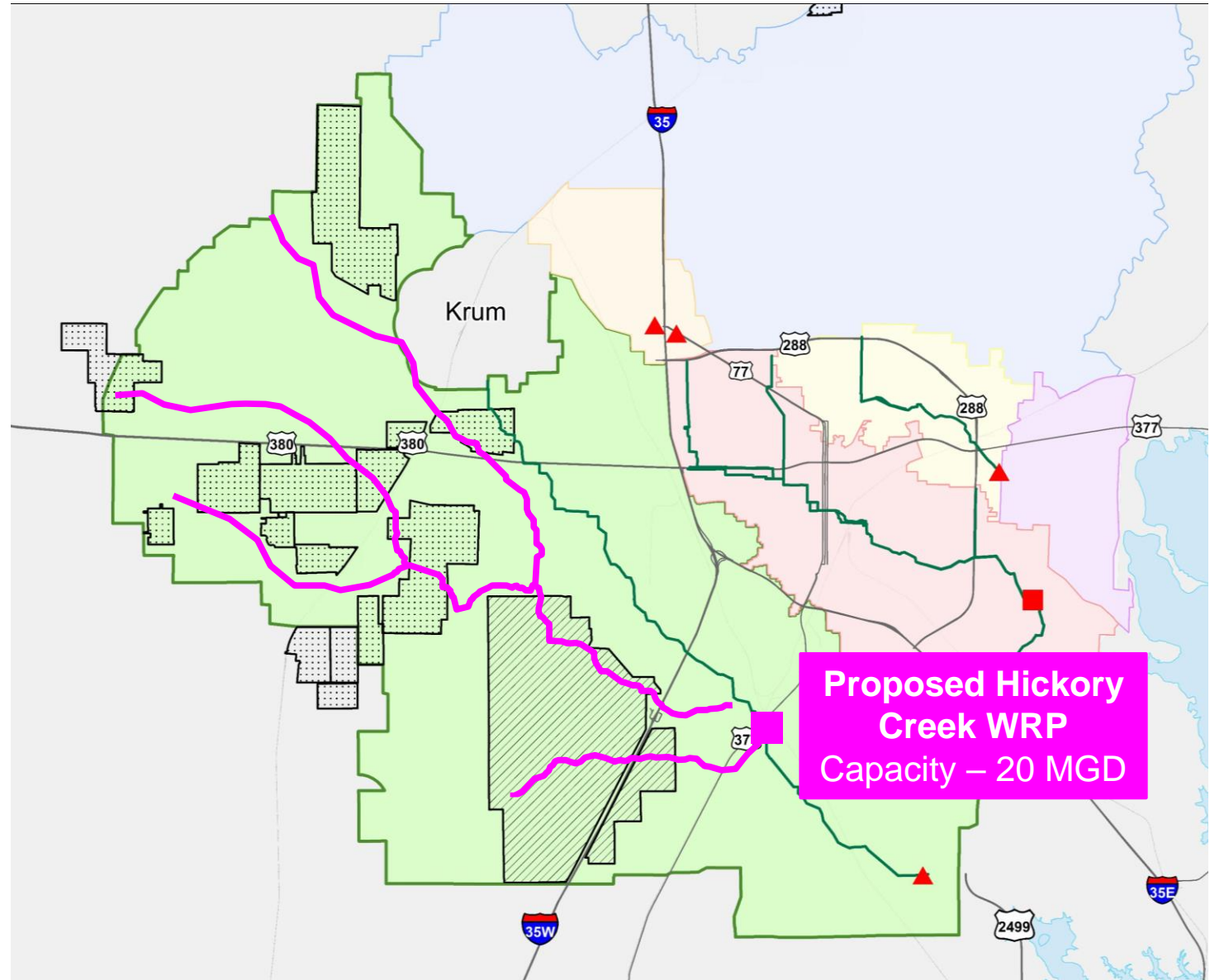
October 2022 Data

# HICKORY CREEK BASIN IMPROVEMENTS

*Hickory Creek  
Improvements needed to  
serve Developments*

## PROJECT COSTS

Conveyance	\$0.22B
Treatment	\$1.05B
<hr/>	
Total	\$1.27B



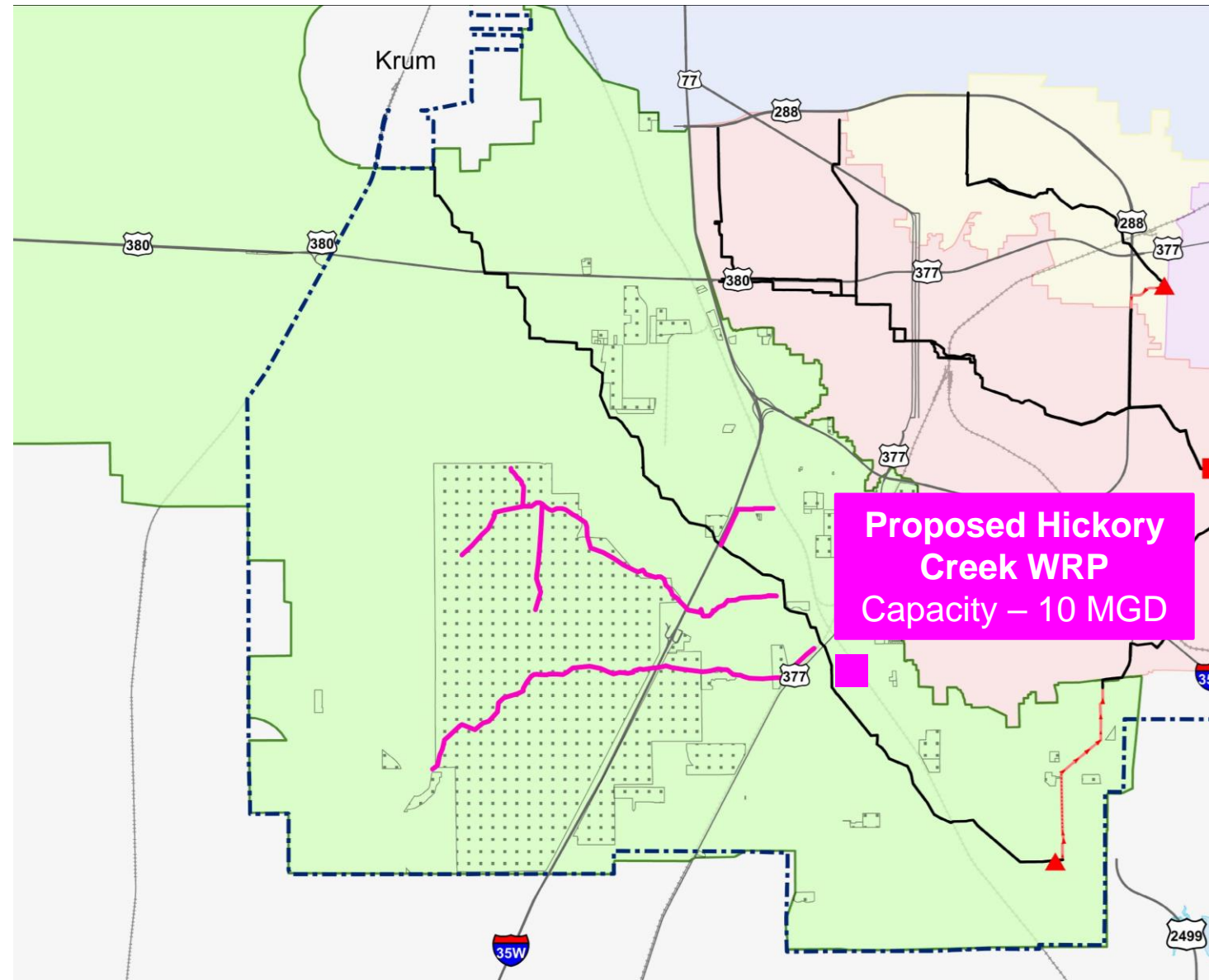
May 2023 Data

# HICKORY CREEK BASIN IMPROVEMENTS

*5 year Improvements*

## PROJECT COSTS

Conveyance	\$151M
Treatment	\$423M
<hr/>	
Total	\$574M



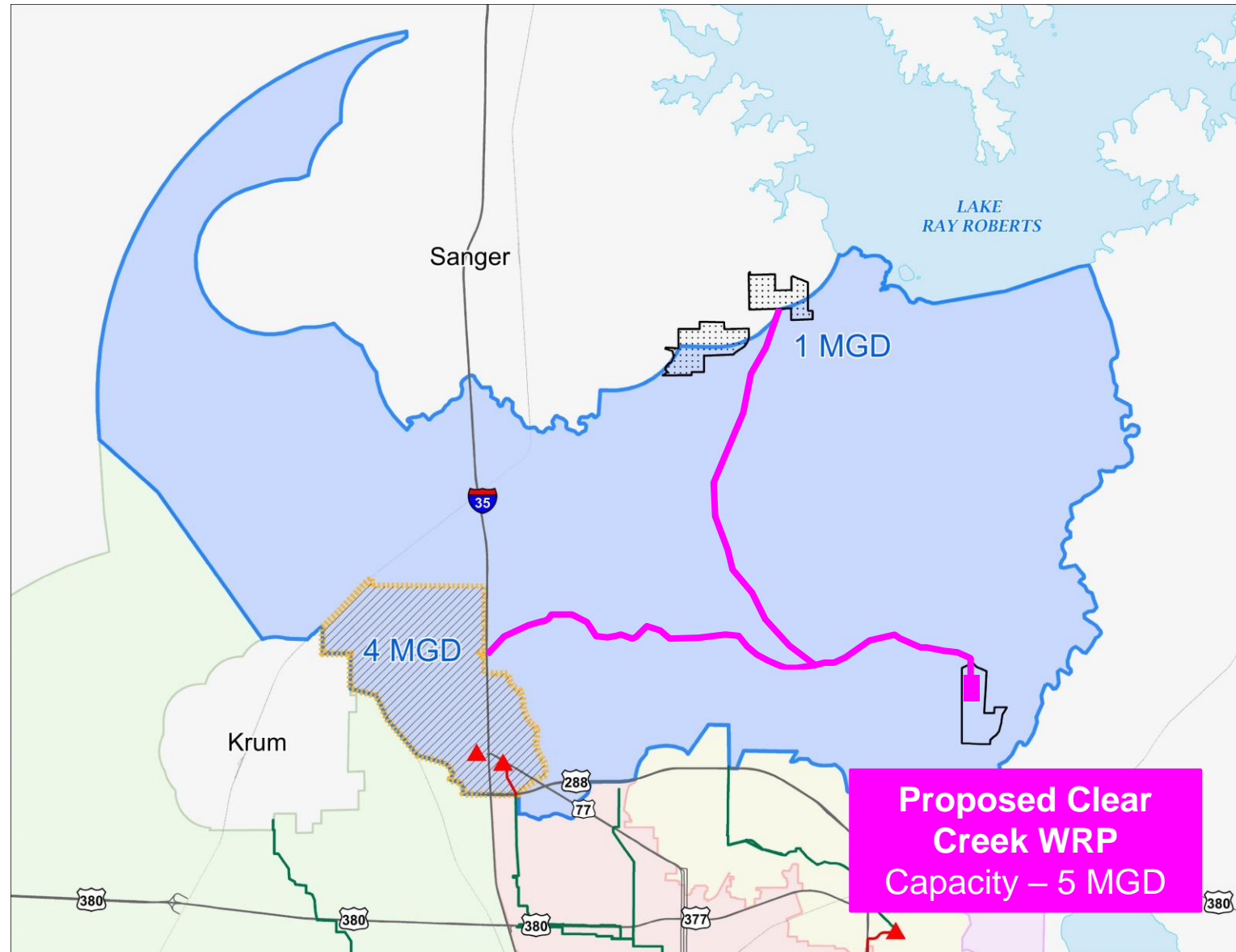
October 2022 Data

# CLEAR CREEK BASIN IMPROVEMENTS

*Clear Creek  
Improvements needed to  
serve Developments*

## PROJECT COSTS

Conveyance	\$95M
Treatment	\$250M
<hr/>	
Total	\$345M



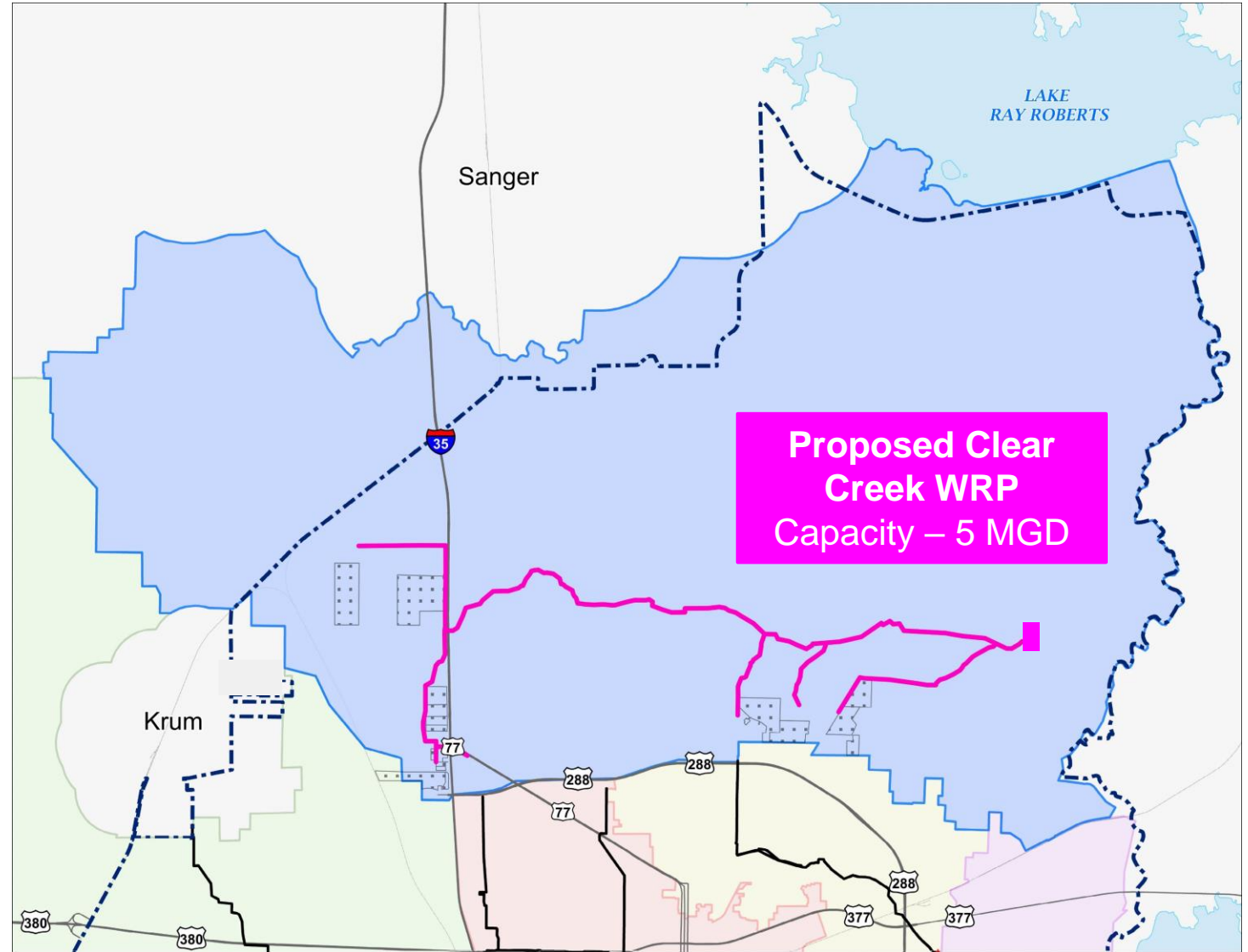
May 2023 Data

# CLEAR CREEK BASIN IMPROVEMENTS

*5 year Improvements*

## PROJECT COSTS

Conveyance	\$142M
Treatment	\$250M
<hr/>	
Total	\$392M





# HICKORY CREEK AND CLEAR CREEK IMPROVEMENTS

5-YEAR CAPITAL IMPROVEMENTS			
	Hickory	Clear Creek	Total
Conveyance	\$151M	\$142M	\$293M
Treatment	\$423M	\$250M	\$673M
Grand Total	\$574M	\$392M	\$966M



# NEXT STEPS

- Complete 5-, 10-, and 25-year Capital Improvement Plans (CIP)
- Financial Analysis
- Review meetings with Staff, PUB and City Council
- Complete report
- Final approval by PUB and City Council



# QUESTIONS?

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