



CITY OF DALLAS

SPECIFICATIONS

AND

FORMS OF CONTRACT AND BONDS

FOR

SCHEDULE A:

WATER AND WASTEWATER MAIN REPLACEMENTS

AT VARIOUS LOCATIONS

AND

SCHEDULE B:

UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN INSTALLATION

AND

SCHEDULE C:

LUNA ROAD

FROM NORTHWEST HIGHWAY TO ROYAL LANE

WATER AND WASTEWATER MAIN REPLACEMENTS

CONTRACT NO. 20-505/ 20-506



dallas water utilities
city of dallas

PLEASE NOTE

Sealed Bids clearly identified on the envelope for “**SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS, AND SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN INSTALLATION, AND SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE WATER AND WASTEWATER MAIN REPLACEMENTS, CONTRACT NO. 20-505/20-506**”, as detailed on Dallas Water Utilities plans and as described in the Contract Specifications, shall be submitted as pdfs in Bonfire at: <https://dallascityhall.bonfirehub.com/login>, **before 1:00 p.m. on Friday, March 19, 2021.** Bid opening will be read ONLY online by the Purchasing Agent at **2:00 p.m. on Friday, March 19, 2021.** You may view this bid opening live by going to www.dallascityhall.com, click on watch city meetings online, and it will be live on DCN 95 live.

Due to the COVID-19 Pandemic, the office of Procurement Services is unable to accept paper copies of bids or proposals. Please submit all bids or proposal as pdfs until 1:00 p.m. on Friday, March 19, 2021 in Bonfire at: <https://dallascityhall.bonfirehub.com/login>. For any questions, please email procurementAds@dallascityhall.com.

Bid opening will be read ONLY online for this Bid due to COVID-19 precautions. You may view this bid opening live by going to www.dallascityhall.com, click on watch city meetings online, and it will be live on DCN 95 live at 2:00 p.m. on Friday, March 19, 2021. Bid opening will not be open for in-person viewing at this time.

A PDF file version of plans and specifications can be obtained using Internet Explorer at the following City of Dallas ftp website: <ftp://ftp.dallascityhall.com>. Locate and click on the folder for the appropriate 20-505/506 contract number.

**“FAILURE TO SIGN YOUR BID WILL RESULT IN A REJECTION OF
YOUR BID.**

**Bidder’s Acknowledgement of Prohibition on Contracts with Companies
Boycotting Israel**

Effective September 1, 2017, Bidder acknowledges, in accordance with Chapter 2270 of the Texas Government Code, that Bidder does not boycott Israel and will not boycott Israel during the term of any contract with the City of Dallas to provide goods and services to the City. Bidder further acknowledges that this provision is hereby incorporated by reference, as if written word for word, into any subsequent contract entered into between City and Bidder for goods and services.”

**“FAILURE TO SIGN YOUR BID WILL RESULT IN A REJECTION OF
YOUR BID.**

**Bidder’s Acknowledgement of Prohibition on Contracts with Foreign Terrorist
Organizations**

Effective September 1, 2017, Bidder acknowledges, in accordance with Chapter 2252 of the Texas Government Code, that (a) Bidder does not engage in business with Iran, Sudan or any foreign terrorist organization and (b) Bidder is not listed by the Texas Comptroller as a terrorist organization as defined by Chapter 2252 of the Texas Government Code. Bidder further acknowledges that this provision is hereby incorporated by reference, as if written word for word, into any subsequent contract entered into between City and Bidder for (1) professional or consulting services subject to the Professional Services Act - Chapter 2254 of the Texas Government Code, (2) general construction, (3) an improvement, (4) a service, (5) a public works project, or (5) for a purchase of supplies, materials or equipment.”

BUSINESS INCLUSION AND DEVELOPMENT POLICY

It is the policy of the City of Dallas to involve certified Minority and Women-Owned Business Enterprises (M/WBEs) to the greatest extent feasible on the City's construction, general services, and professional services contracts. It is the policy of the City of Dallas to encourage the growth and development of M/WBEs that can successfully compete for contracting opportunities. The City and its contractors shall not discriminate on the basis of race, age, color, ancestry, national origin, place of birth, religion, sex, sexual orientation, gender identity and expression, military or veteran status, genetic characteristics, or disability unrelated to job performance in the award and performance of contracts. In consideration of this policy, the City of Dallas has adopted the Business Inclusion and Development (BID) Policy for all City of Dallas contracts.

Following are the City of Dallas' adopted M/WBE goals without consideration for specific ethnicity or gender adopted on September 23, 2020 (Resolution Number 20-1430):

| <u>Construction</u> | <u>Architecture & Engineering</u> | <u>Professional Services</u> | <u>Other Services</u> | <u>Goods</u> |
|---------------------|---------------------------------------|------------------------------|-----------------------|--------------|
| 32.00% | 34.00% | 38.00% | N/A | 32.00% |

While minority business participation may vary from time to time in accordance with procurement specifications and the availability of minority enterprises in the marketplace, the City of Dallas believes the goals to be realistically obtainable.

In accordance with the City's Business Inclusion and Development Policy adopted on September 23, 2020, by Resolution No. 20-1430, as amended, the M/WBE participation on this contract is as follows:

Construction: 32.00%

ATTENTION

All bidders must submit With Their Bid the following Forms Completed and signed

City of Dallas Pre-Bid/Proposal Form (BWI-FRM-623)
City of Dallas Ethic Workforce Report (BWI-FRM-627)

Any firm listed as M/WBE must be certified by one of the following Certification Agencies:

- 1) North Central Texas Regional Certification Agency (NCTRCA)
616 Six Flags Drive, Suite 128
Arlington, Texas 76011
817-640-0606
- 2) Dallas Fort Worth Minority Business Council
2710 N. Stemmons Freeway
Dallas, Texas 75207
214-630-0747
- 3) The Women's Business Council – Southwest
2201 N. Collins, Suite 158
Arlington, Texas 76011
(817) 299-0566
(Toll Free) (866) 451-5997
FAX (817) 299-0949

A list of Minority/Women Owned Business Enterprises or other information or assistance can be obtained from the Business and Workforce Inclusion (BWI) Division of the Office of Economic Development, City Hall, 6DN, 1500 Marilla Street, Dallas, Texas, 75201, Phone: (214) 670-5010.

WORK WITH OWN FORCES

Where a Contractor indicates lower M/WBE participation than the City of Dallas typically sees for similar projects and the Contractor is indicating there are limited subcontracting opportunities as a result of the Contractor performing the remaining work with their own forces as their normal business practice the following information may be deemed adequate documentation.

For each previous project

Name of Project
Location
Contracting Agency
Description of work performed

For each specific item of work (i.e. hauling, concrete pavement, pipe installation, etc.)

Work Force

Documentation showing name and job classifications.

Which individuals actually performed the work?

If individuals were classified other than what the work called for, why? (i.e. Pipefitter performing concrete finishing work.)

List of extra individuals hired to do this work (temporary, day laborers, etc.) Is the same work force to be used on this project?

Note: If additional personnel are required, an M/WBE subcontracting opportunity exists; this includes, but is not limited to, M/WBE temporary personnel agencies, subcontractors, and suppliers.

Equipment

List equipment required for that specific item of work. Did the Contractor own the equipment? Is it available for use on this job?

Note: If equipment was rented, is not available for this job or if additional equipment will be required, an M/WBE subcontracting opportunity exists. This includes, but is not limited to, equipment rental or purchase from M/WBE firms.

Verification:

The Contractor must provide written verification from a representative of the contracting agency with knowledge of the project verifying that the Contractor did perform the work stated with its own forces.

For each area where specific work was subcontracted on previous jobs but the intent is to use the Contractor's own forces for the proposed job:

Reason for change in practice

If work load, provide documentation to prove

If new responsibilities for crews; provide documentation on training or reclassification, etc.

Note: Documented previous poor performance on the part of a subcontractor is a legitimate reason not to use that particular subcontractor again but does not eliminate the need to contact other qualified M/WBE firms for that work item.

INDEX TO SPECIFICATIONS

ADVERTISEMENT FOR BIDS

PART A - INFORMATION TO BIDDERS

SECTION A

- A 1. Time and Place for Receiving Proposals
- A 2. Location and Description of Project
- A 3. Special Provisions
- A 4. Bid Items
- A 5. Davis Bacon Wage Schedule
- A 6. Proposal Tabulation
- A 7. Time
- A 8. Specifications
- A 9. Addenda
- A 10. Business Inclusion and Development Policy
Minority/Women Business Enterprise Program
- A 11. Drug-Free Jobsite on City Construction Projects
- A 27. Cement Use on Public Projects
- A 28. Environmental Policy and Occupational Safety and Health Program

TEXAS WATER DEVELOPMENT BOARD SUPPLEMENTAL CONTRACT CONDITIONS

AMERICAN IRON AND STEEL

STAY HOME STAY SAFE – RULES FOR THE CONSTRUCTION INDUSTRY

PART T - TECHNICAL SPECIFICATIONS

CONTRACT BONDS AND FORMS

ADVERTISEMENT FOR BIDS

Sealed Bids clearly identified on the envelope for “**SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS, AND SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN INSTALLATION, AND SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE WATER AND WASTEWATER MAIN REPLACEMENTS, CONTRACT NO. 20-505/20-506**”, as detailed on Dallas Water Utilities plans and as described in the Contract Specifications, shall be submitted as pdfs in Bonfire at: <https://dallascityhall.bonfirehub.com/login>, **before 1:00 p.m. on Friday, March 19, 2021**. Bid opening will be read ONLY online by the Purchasing Agent at **2:00 p.m. on Friday, March 19, 2021**. You may view this bid opening live by going to www.dallascityhall.com, click on watch city meetings online, and it will be live on DCN 95 live.

A PDF file version of Plans, Specifications and Bid result Tabulations can be obtained using Internet Explorer at the following City of Dallas ftp website: <ftp://ftp.dallascityhall.com>, **Friday, February 19, 2021**. Look for **DWU Contract # 20-505/506**. Plan Holders list available at jose.becerra@dallascityhall.com, khon.eng@dallascityhall.com, or natalie.wilson@dallascityhall.com.

Bid opening will be read ONLY online for this Bid due to COVID-19 precautions. You may view this bid opening live by going to www.dallascityhall.com, click on watch city meetings online, and it will be live on DCN 95 live. Bid opening will not be open for in-person viewing at this time.

A PDF file version of Plans, Specifications and Bid result Tabulations can be obtained using Internet Explorer at the following City of Dallas ftp website: <ftp://ftp.dallascityhall.com>, **Friday, February 19, 2021**. Click on **DWU Contract # 20-505/20-506** or **Bid Tabs**. Plan Holders list available at jose.becerra@dallascityhall.com, khon.eng@dallascityhall.com or natalie.wilson@dallascityhall.com.

There will be an **online** Pre-Bid Conference held at **1:30 PM on Thursday, March 04, 2021**. **You may attend pre-bid conference by using the information provided below:**

March 04, 2021, 1:30 PM Meeting

Click on the link to Join the meeting (please contact daniel.atambo@dallascityhall.com for invitation to the meeting if needed)

Microsoft Teams meeting

Join on your computer or mobile app

[Click here to join the meeting](#)

Or call in (audio only)

+1 469-217-7604,,550283727# United States, Dallas

Phone Conference ID: 550 283 727#

[Find a local number](#) | [Reset PIN](#)

[Learn More](#) | [Meeting options](#)

Cashier's check or acceptable Bidder's Bond, payable to the City of Dallas in an amount of not less than five percent of total Bid submitted must accompany Bid. City reserves the right to reject any or all Bids.

All Bidders will be required to comply with Chapter 15B, Equal Opportunity Contract Compliance, of the Dallas City Code.

The successful Bidder will be required to furnish a Payment Bond and a Performance Bond, each in an amount equal to 100 percent of the Contract Price. Insurance shall be furnished according to Item 103.4 of the City of Dallas Addendum to North Central Texas Standard Specification for Public Works Construction, Latest Edition.

No Proposal may be withdrawn within a period of **150** days after the date fixed for opening Proposals.

PART "A"
INFORMATION TO BIDDERS

**SPECIFICATIONS
AND
FORMS OF CONTRACT AND BONDS
FOR
SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS
AT VARIOUS LOCATIONS
AND
SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN
INSTALLATION
AND
SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS.**

CONTRACT NO. 20-505/20-506

PART A - INFORMATION TO BIDDERS

A 1. TIME AND PLACE FOR RECEIVING PROPOSALS

Due to the COVID-19 Pandemic, the office of Procurement Services is unable to accept paper copies of bids or proposals. Please submit all bids or proposal as pdfs in Bonfire at: <https://dallascityhall.bonfirehub.com/login>. For any questions, please email procurementAds@dallascityhall.com.

A 2. LOCATION AND DESCRIPTION OF PROJECT

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

This project consists of approximately:

| Location | Limits | LF W | LF WW | Proposed | | Q Sheets Numbers |
|--|--------------------------------------|-------|-------|----------|--------|--------------------------------------|
| | | | | Water | WW | |
| Timberloam Drive | St. Augustine Drive East | 1,215 | N/A | 8" PVC | N/A | 411Q, 1618, Sheet(s) 459 thru 461 |
| Alley between Hollywood Avenue and Montreal Avenue | Brandon to Clarendon Drive | 1,150 | 113 | 6" PVC | 8" PVC | 411Q, 3035, Sheet(s) 72 thru 74 |
| Alley between Hollywood Avenue and Montreal Avenue | from Wilton Avenue to Brandon Street | 880 | 850 | 6" PVC | 8" PVC | 411Q, 3035, Sheet(s) 75 and 76 |
| Alley between Hendricks Avenue and Strickland Street | Denley Drive West | N/A | 1,070 | N/A | 8" PVC | 411Q, 1130, Sheet(s) 10 thru 12 |

| Location | Limits | LF W | LF WW | Proposed | | Q Sheets Numbers |
|--------------------|--|-------|-------|-------------|---------|----------------------------------|
| | | | | Water | WW | |
| Amherst Avenue | from Elsby Avenue West of Menier Street | N/A | 3,066 | N/A | 8" PVC | 411Q, 0972, Sheet(s) 32 thru 38 |
| Stanford Avenue | from Elsby Avenue to Menier Street | N/A | 2,761 | N/A | 8" PVC | 411Q, 0972, Sheet(s) 26 thru 31 |
| Purdue Avenue | from Elsby Avenue West of Menier Street | N/A | 2,312 | N/A | 8" PVC | 411Q, 0972, Sheet(s) 19 thru 24 |
| Summit Avenue | from Belmont Avenue to Richmond Avenue | 476 | N/A | 8" PVC | N/A | 411Q, 1761 Sheet 167 |
| Puget Street | from singleton Boulevard to Dennision Street | 1,107 | N/A | 8" PVC | N/A | 411Q, 1701, Sheet(s) 322 and 323 |
| Pueblo Street | from Puget Street West | 438 | 400 | 8" PVC | 8" PVC | 411Q, 1701 Sheet 324 |
| Park Central Place | from Northaven Road North | 1,961 | 1,538 | 8" PVC | 8" PVC | 411Q, 1773 Sheet(s) 105 thru 109 |
| Pembroke Avenue | East and West of Rockwood Street and North | 350 | 477 | 8" PVC | 8" PVC | 411Q, 794, Sheet 2 |
| Parkland Avenue | from Crestview Drive to Hudhall Street | 714 | 794 | 8', 12" PVC | 8" PVC | 411Q, 229 Sheet(s) 90 and 91 |
| DaVinci Drive | from Michaelangelo Drive to dead end | 230 | 350 | 8" PVC | 8" CIPP | 411Q, 1962, Sheet 642 |

SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN INSTALLATION

This project consists of approximately:

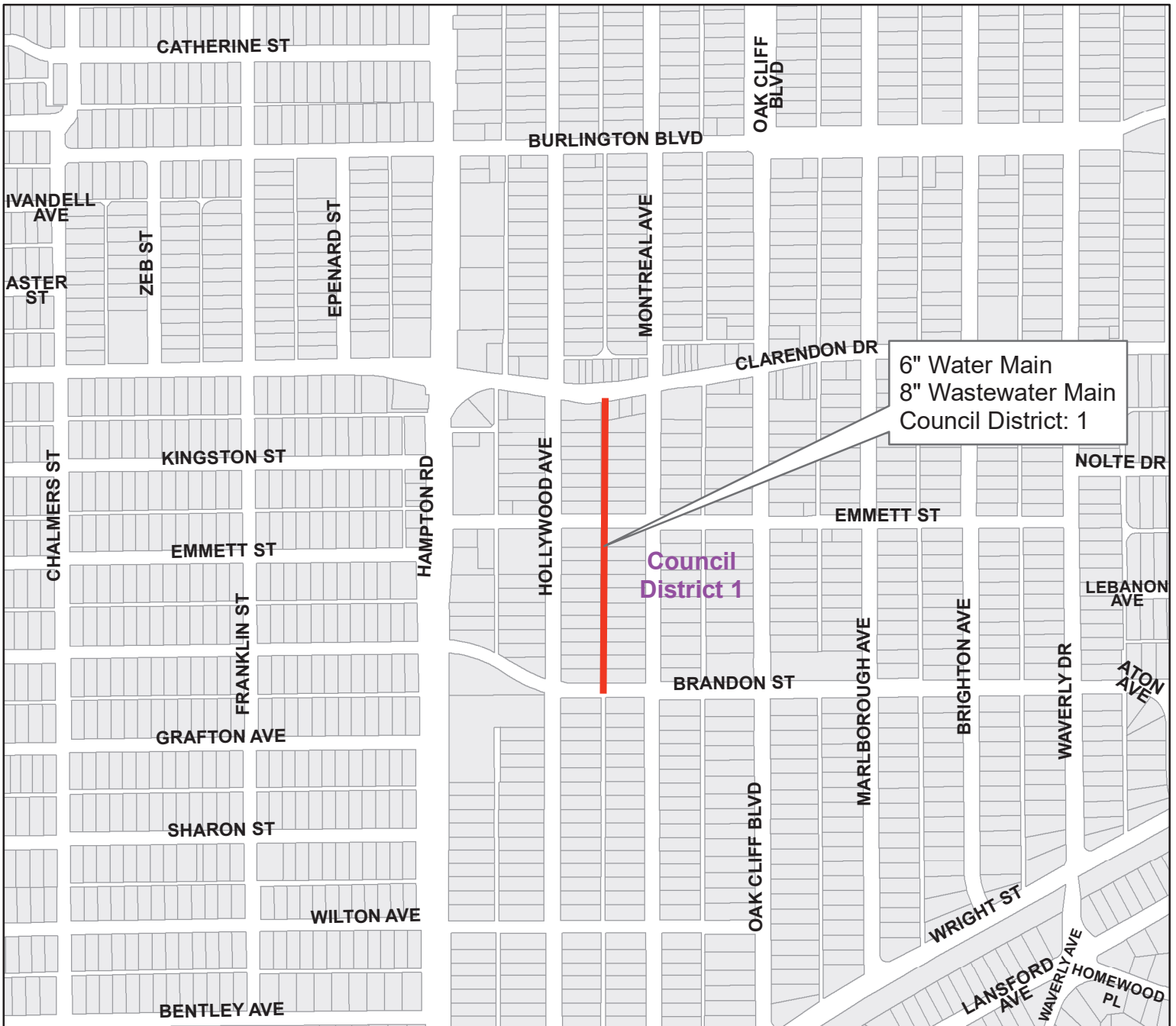
| Location | Limits | LF W | LF WW | Proposed | | Q Sheets Numbers |
|-----------------------------------|--|-------|-------|----------|------------------------------|--|
| | | | | Water | WW | |
| University Hills | from Wheatland Road North/ from University Hills Boulevard Northeast | N/A | 8,743 | N/A | 8", 10", 15" 18" and 21" PVC | 411Q, 1791B, Sheet(s) 003 thru 018 Sheet(s) 019 thru 024 |
| Killough Boulevard and Wasco Lane | from University Hills to Wasco Lane and from Killough Boulevard to Easement East of Wasco Lane | 2,040 | 1,500 | 8" PVC | 8" PVC | 411Q, 1722A, Sheet(s) 32 thru 38 |

SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE

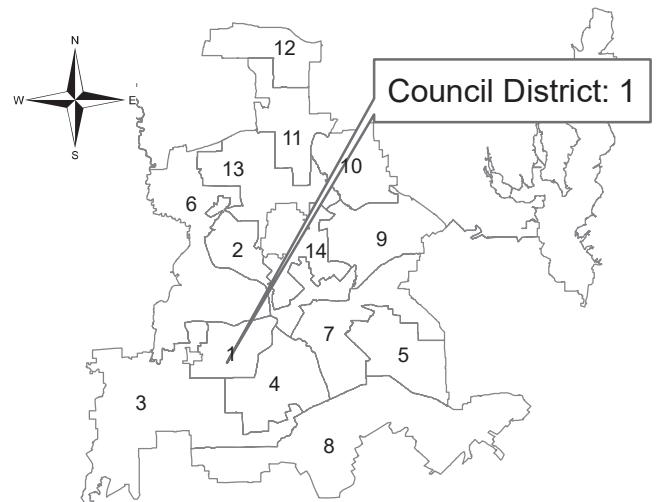
This project consists of approximately:

| Location | Limits | LF W | LF WW | Proposed | | Q Sheets Numbers |
|-----------|--|-------|-------|----------|--|------------------------------------|
| | | | | Water | WW | |
| Luna Road | from Loop 12 (Northwest Highway) to Royal Lane | 9,560 | 2,810 | 12" PVC | 8" PVC, 10", 15" and 18" CIPP | 411Q-1549 Sheet(s) 726 thru 750 |

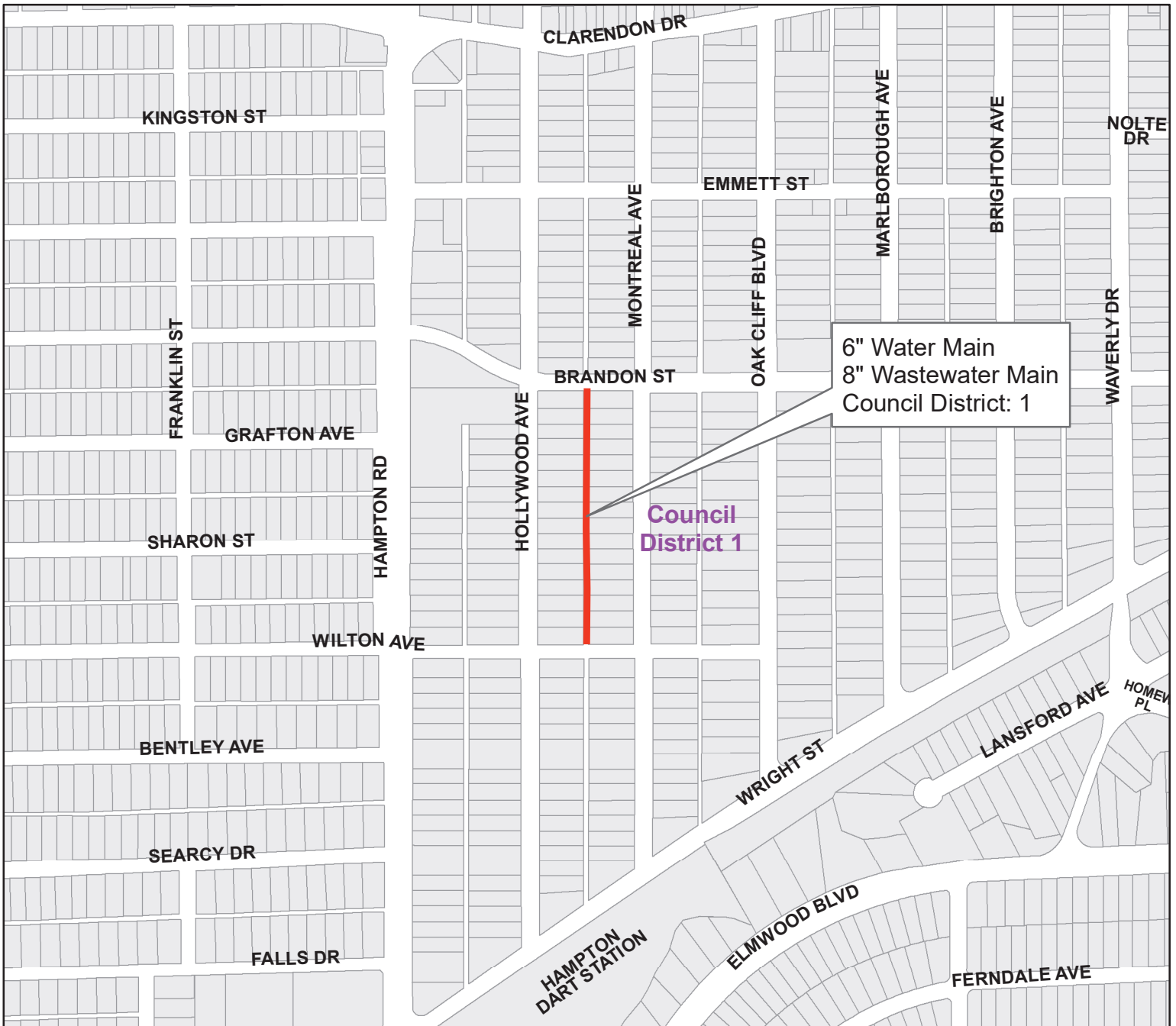
For details of locations and construction, see the above referenced maps and the applicable Standard Drawings.



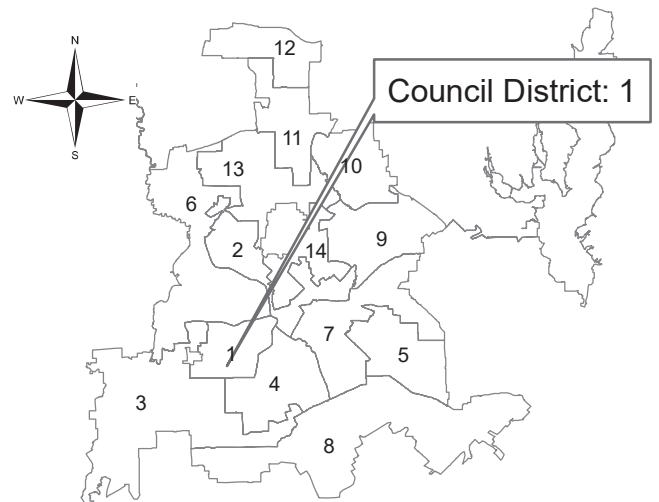
Alley between Hollywood Avenue and Montreal Avenue
from Brandon Street to Clarendon Drive



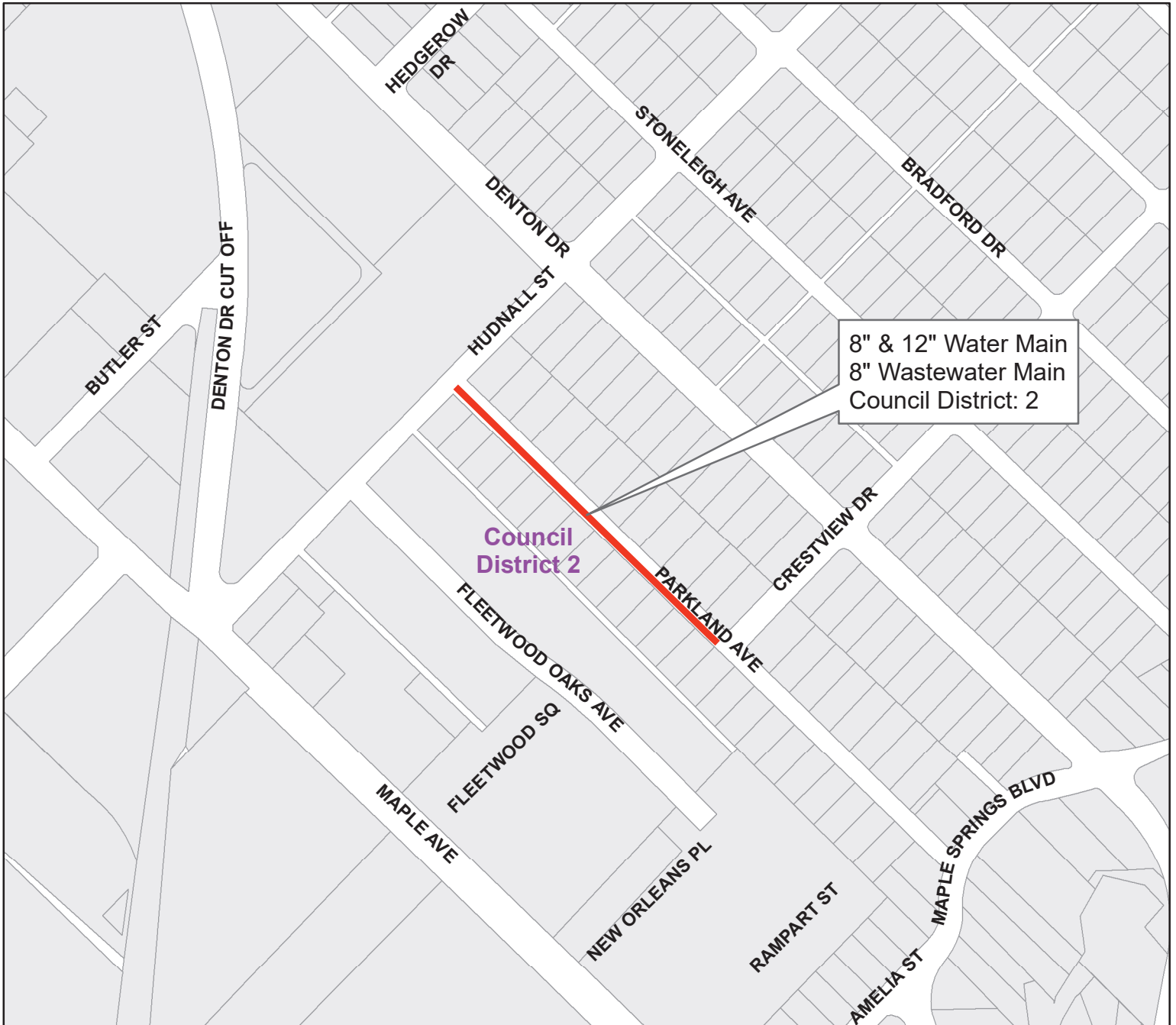
**Dallas Water Utilities
Contract No. 20-505/506
Water and Wastewater Main Installations
at 19 Locations**



Alley between Hollywood Avenue and Montreal Avenue
 from Wilton Avenue to Brandon Street



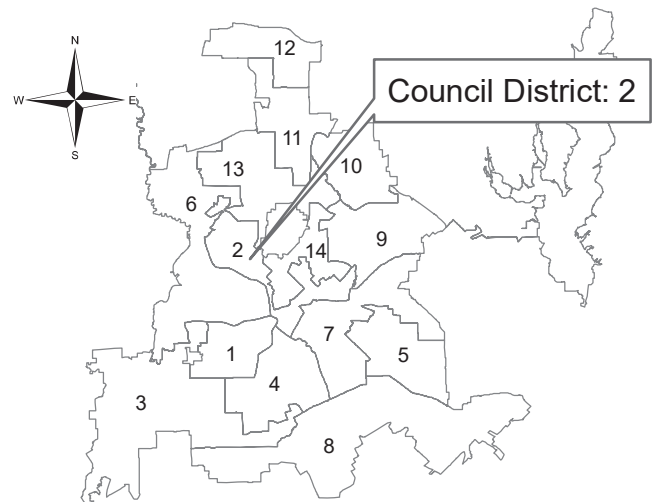
**Dallas Water Utilities
 Contract No. 20-505/506
 Water and Wastewater Main Installations
 at 19 Locations**



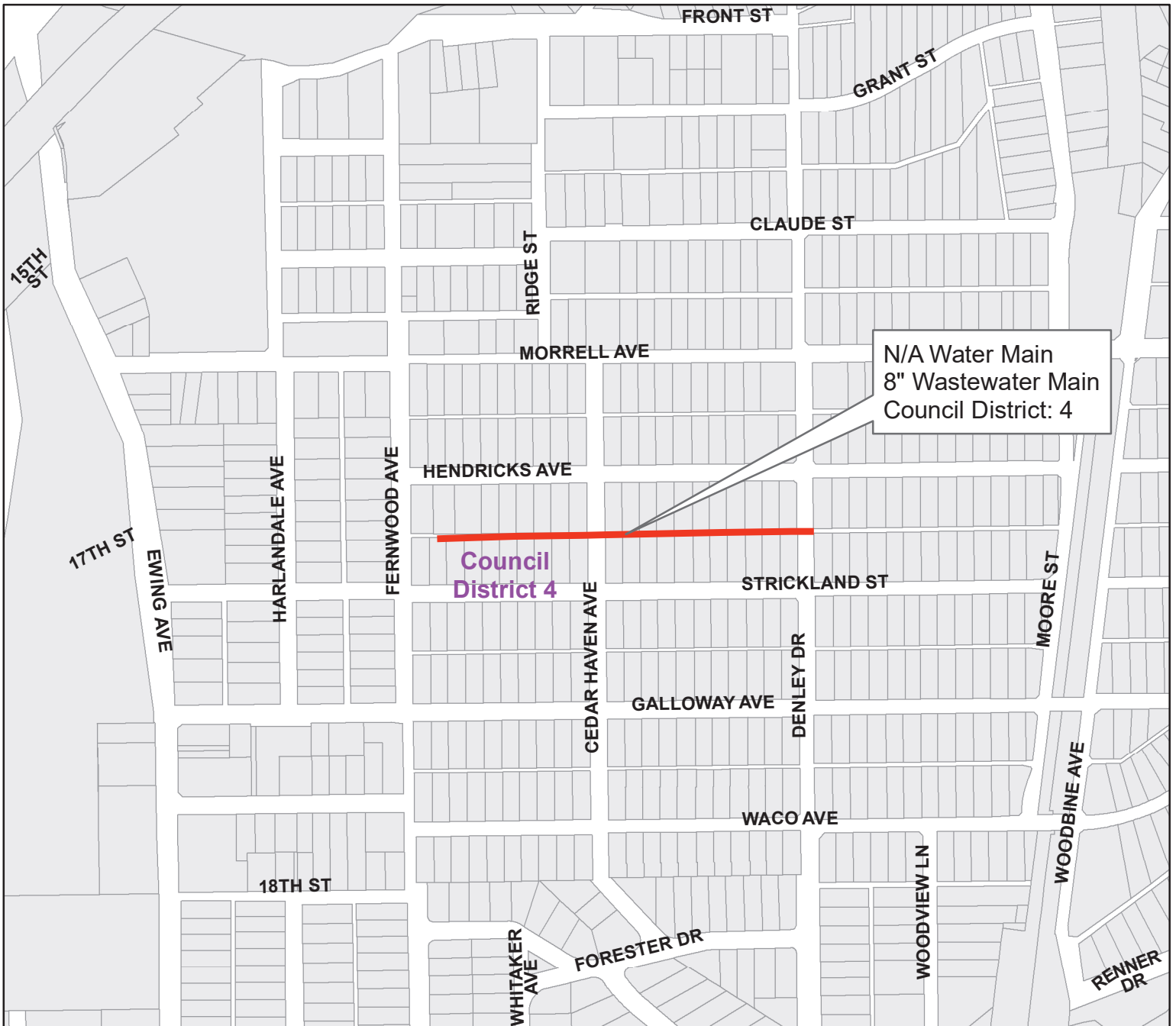
8" & 12" Water Main
 8" Wastewater Main
 Council District: 2

Council District 2

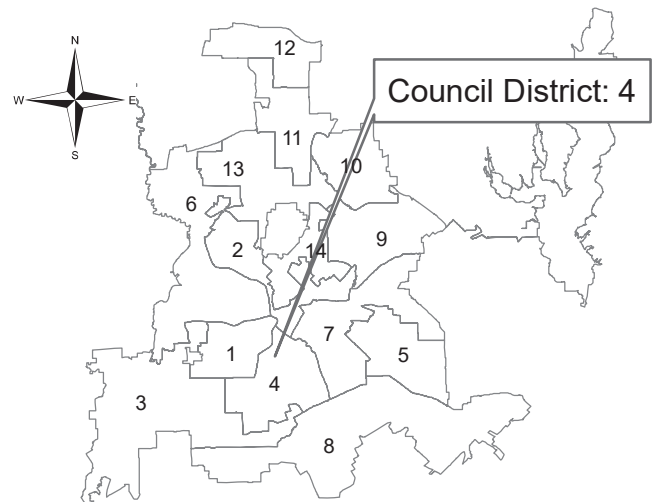
Parkland Avenue
 from Crestview Drive to Hudnall Street



**Dallas Water Utilities
 Contract No. 20-505/506
 Water and Wastewater Main Installations
 at 19 Locations**



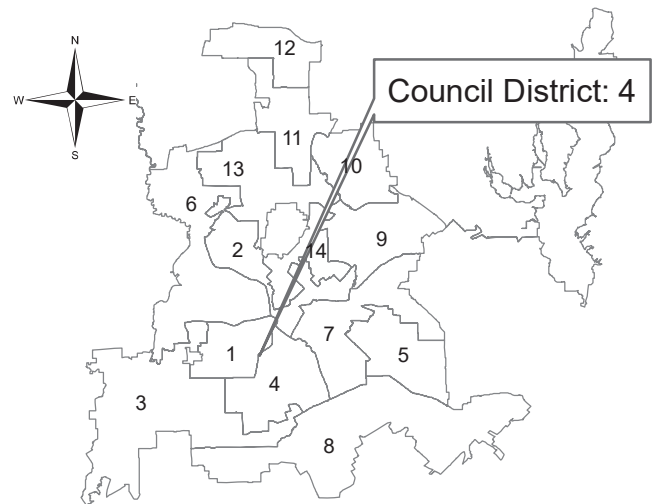
Alley between Hendricks Avenue and Strickland Street
from Denley Drive west



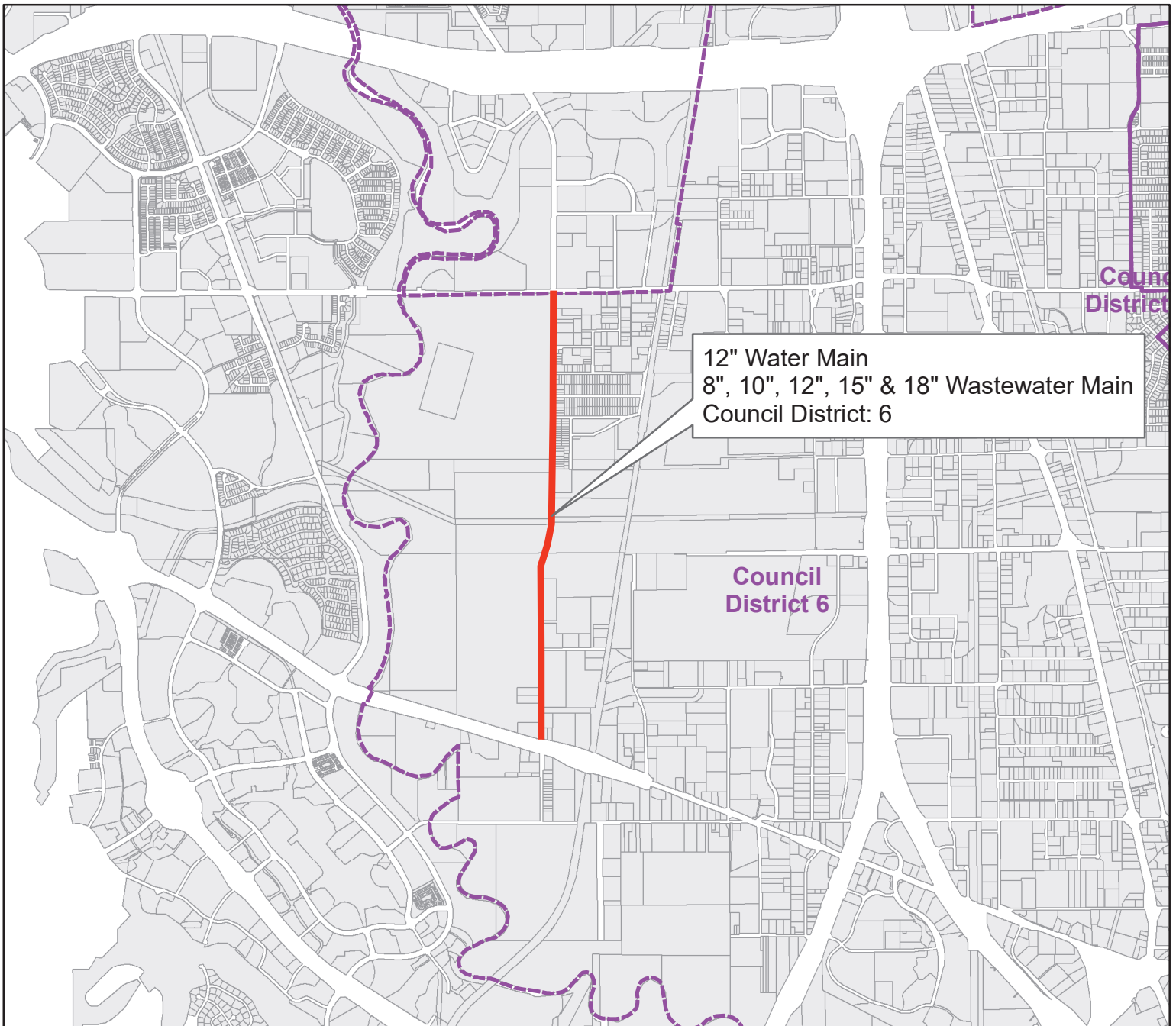
Dallas Water Utilities
Contract No. 20-505/506
Water and Wastewater Main Installations
at 19 Locations



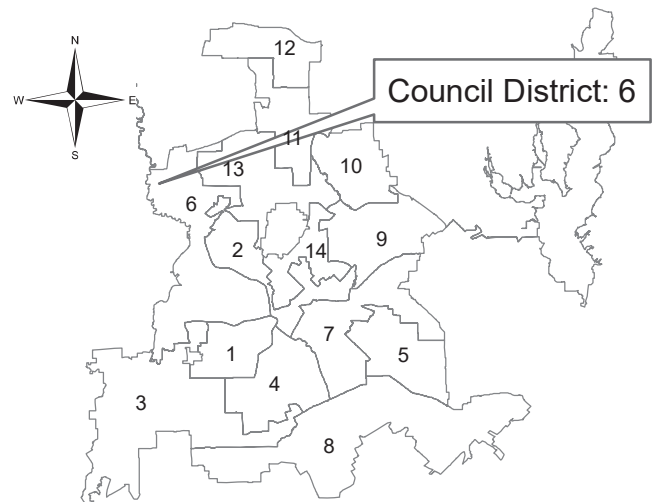
Pembroke Avenue
 East and west of Rockwood Street north;



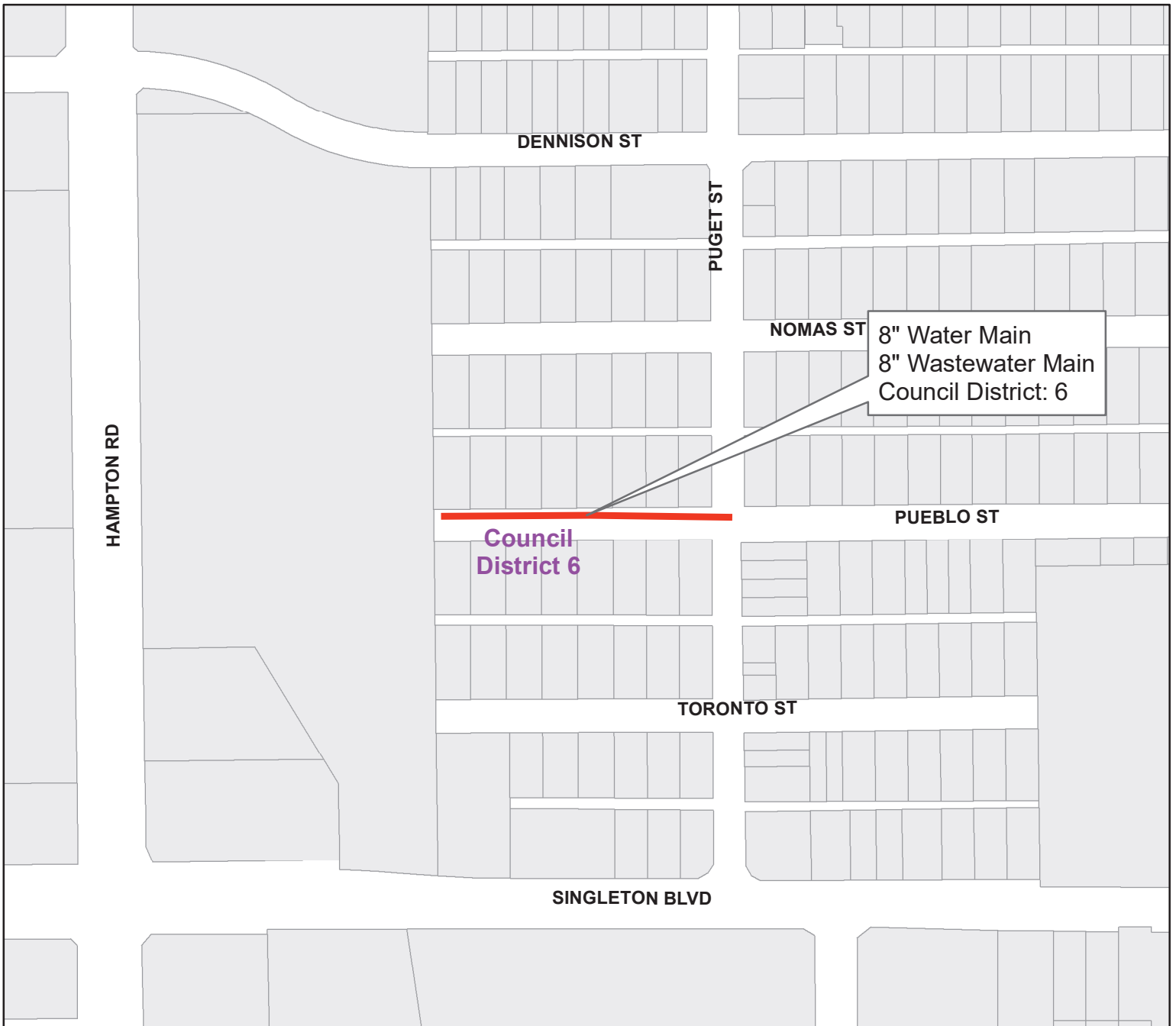
**Dallas Water Utilities
 Contract No. 20-505/506
 Water and Wastewater Main Installations
 at 19 Locations**



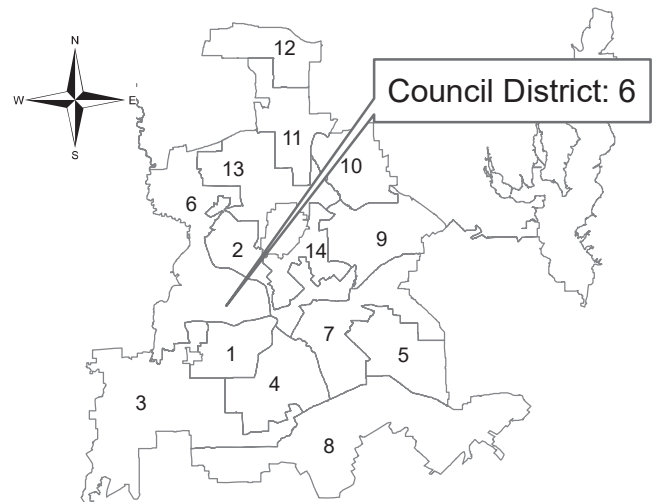
Luna Road
 from Loop 12 (Northwest Highway) to Royal Lane



**Dallas Water Utilities
 Contract No. 20-505/506
 Water and Wastewater Main Installations
 at 19 Locations**



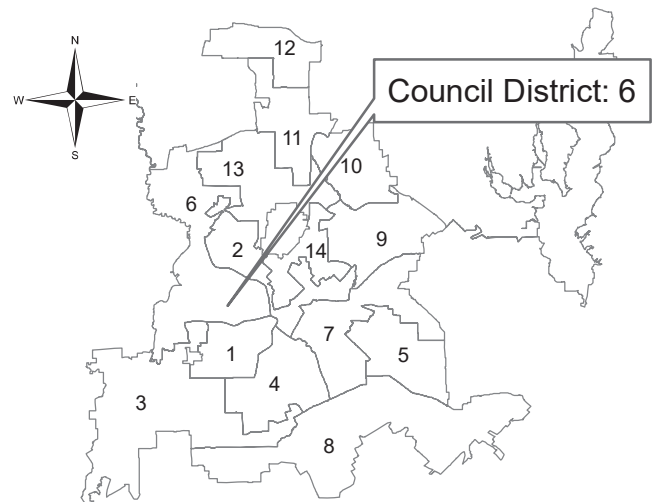
Pueblo Street
from Puget Street west



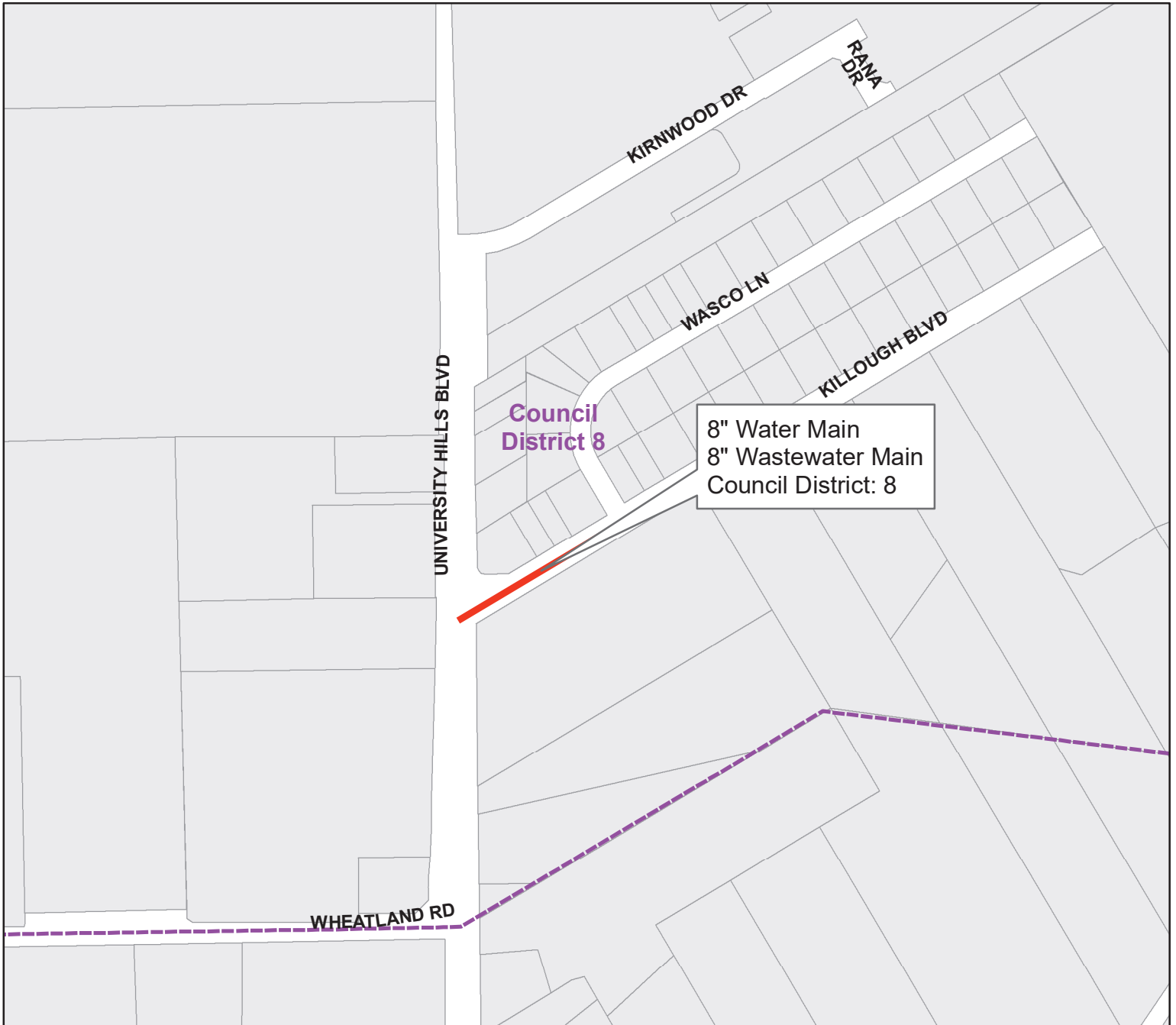
**Dallas Water Utilities
Contract No. 20-505/506
Water and Wastewater Main Installations
at 19 Locations**



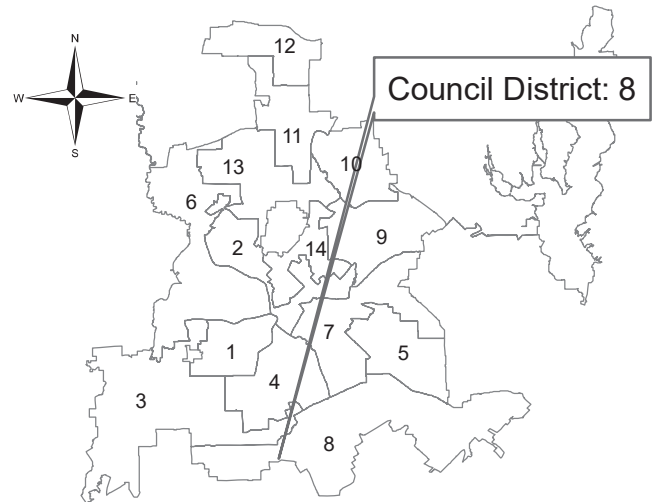
Puget Street
 from Singleton Boulevard to Dennison Street



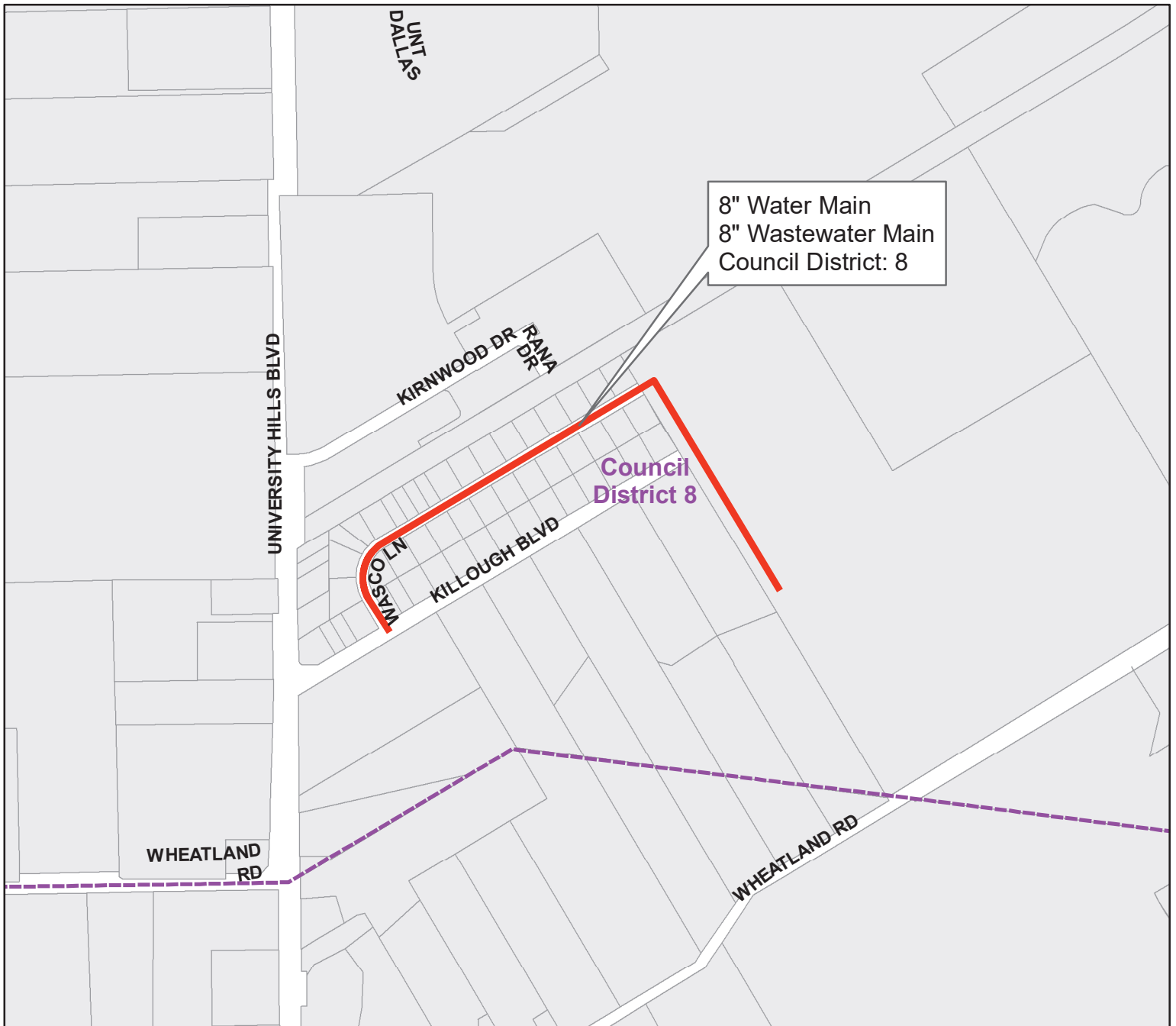
Dallas Water Utilities
Contract No. 20-505/506
Water and Wastewater Main Installations
at 19 Locations



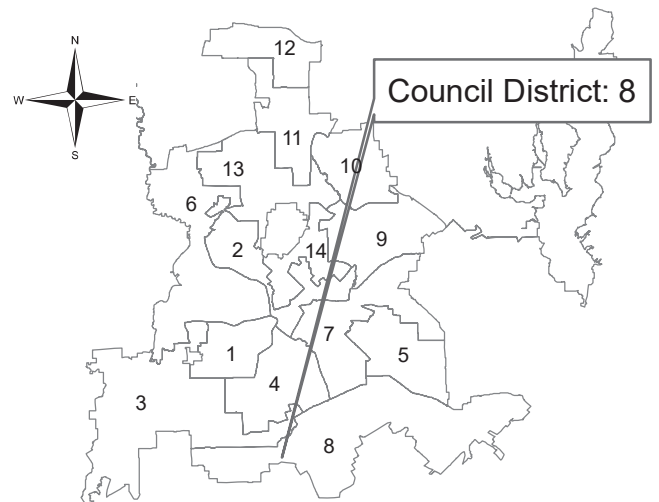
Killough Boulevard
 from University Hills Boulevard to Wasco Lane



**Dallas Water Utilities
 Contract No. 20-505/506
 Water and Wastewater Main Installations
 at 19 Locations**



Wasco Lane
from Killough Boulevard to Easement east
of Wasco Lane



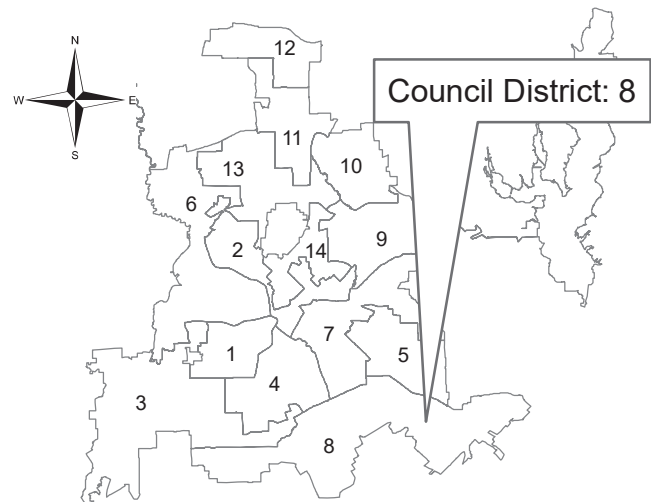
**Dallas Water Utilities
Contract No. 20-505/506
Water and Wastewater Main Installations
at 19 Locations**



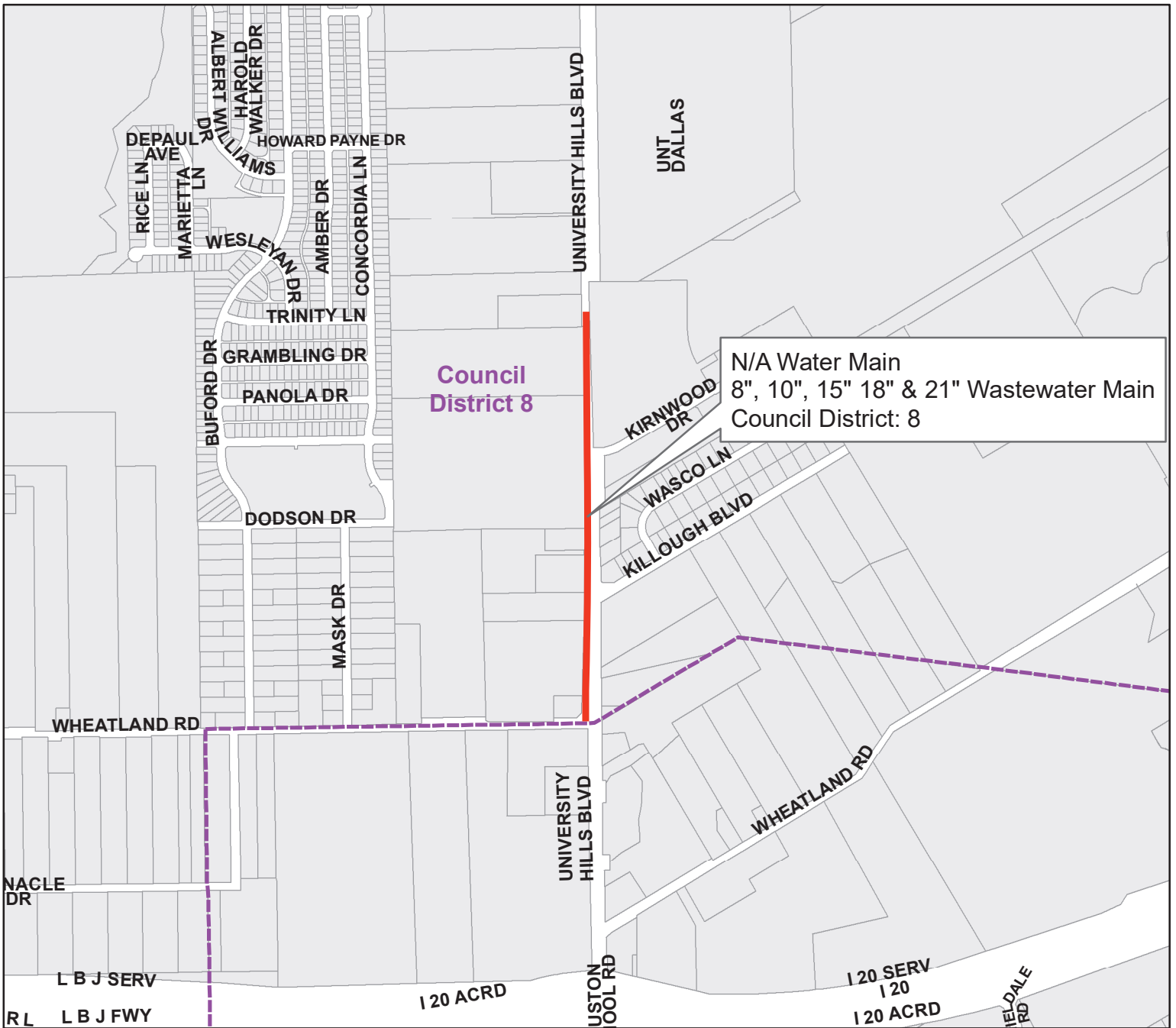
8" Water Main
 N/A Wastewater Main
 Council District: 8

Council District 8

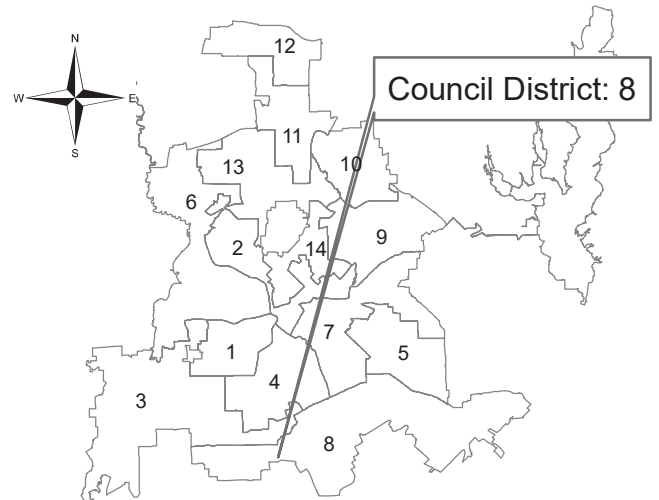
Timberloam Drive
 from St. Augustine Drive west



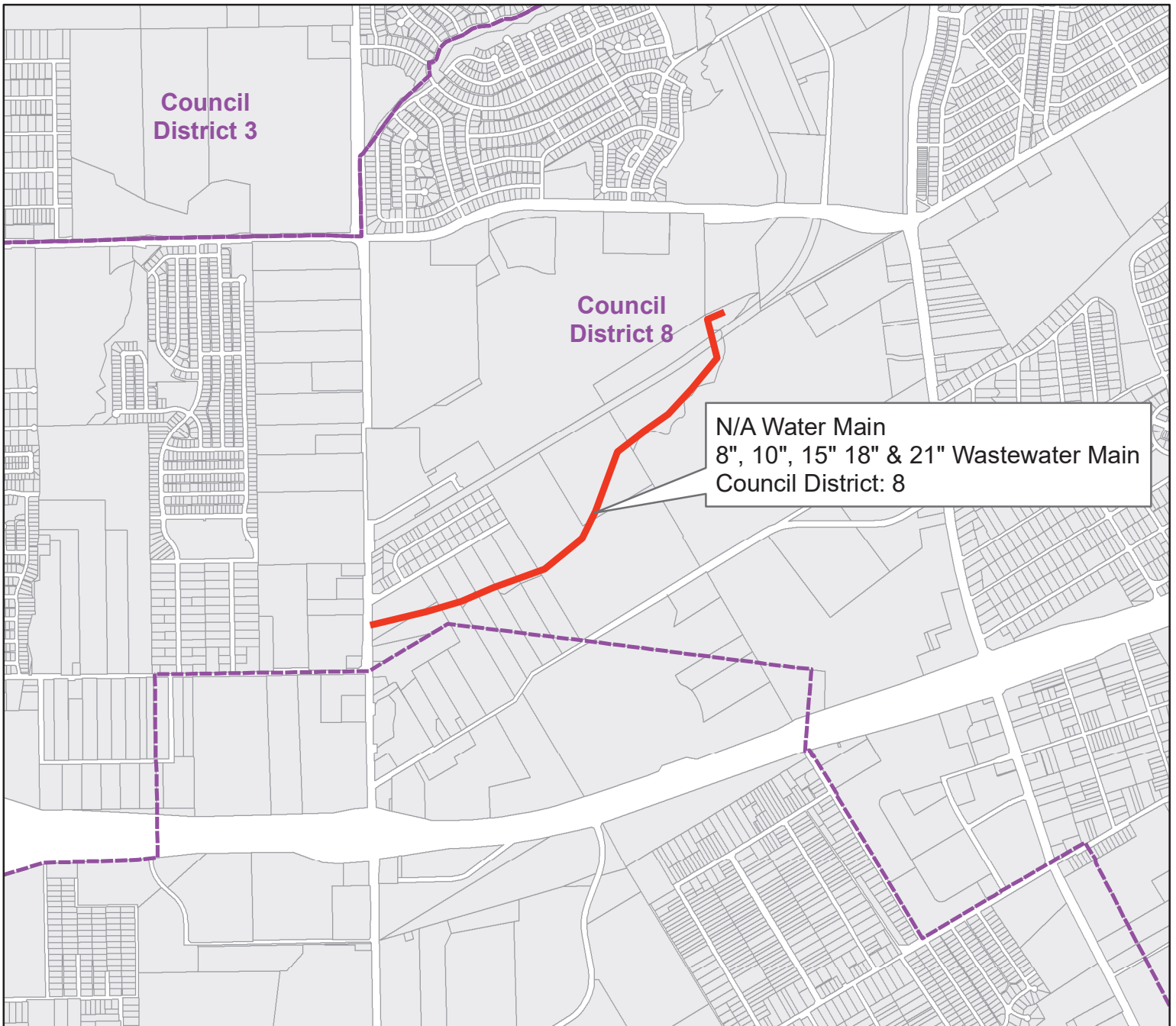
Dallas Water Utilities
Contract No. 20-505/506
Water and Wastewater Main Installations
at 19 Locations



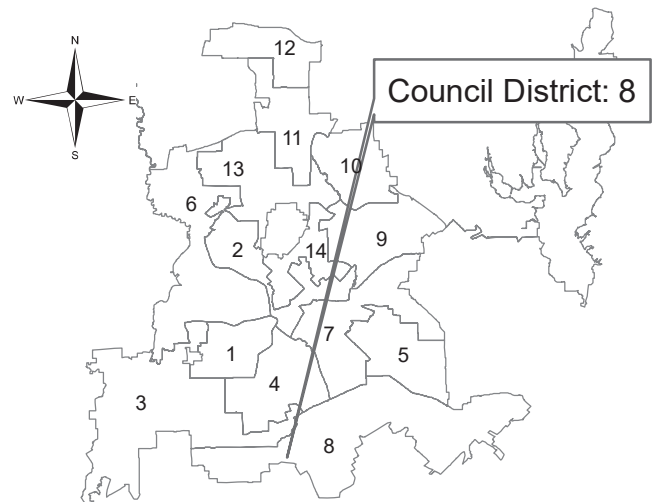
University Hills Boulevard
from Wheatland Road north



**Dallas Water Utilities
Contract No. 20-505/506
Water and Wastewater Main Installations
at 19 Locations**



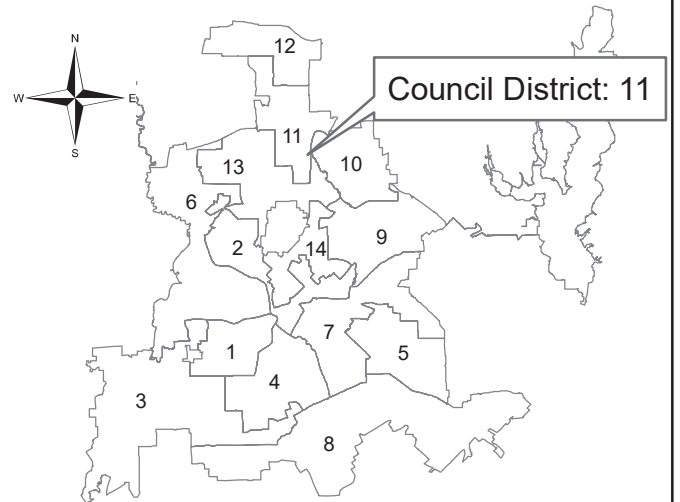
Easement east of University Hills Boulevard
 from Runyon Creek Greenbelt to
 University Hills Boulevard



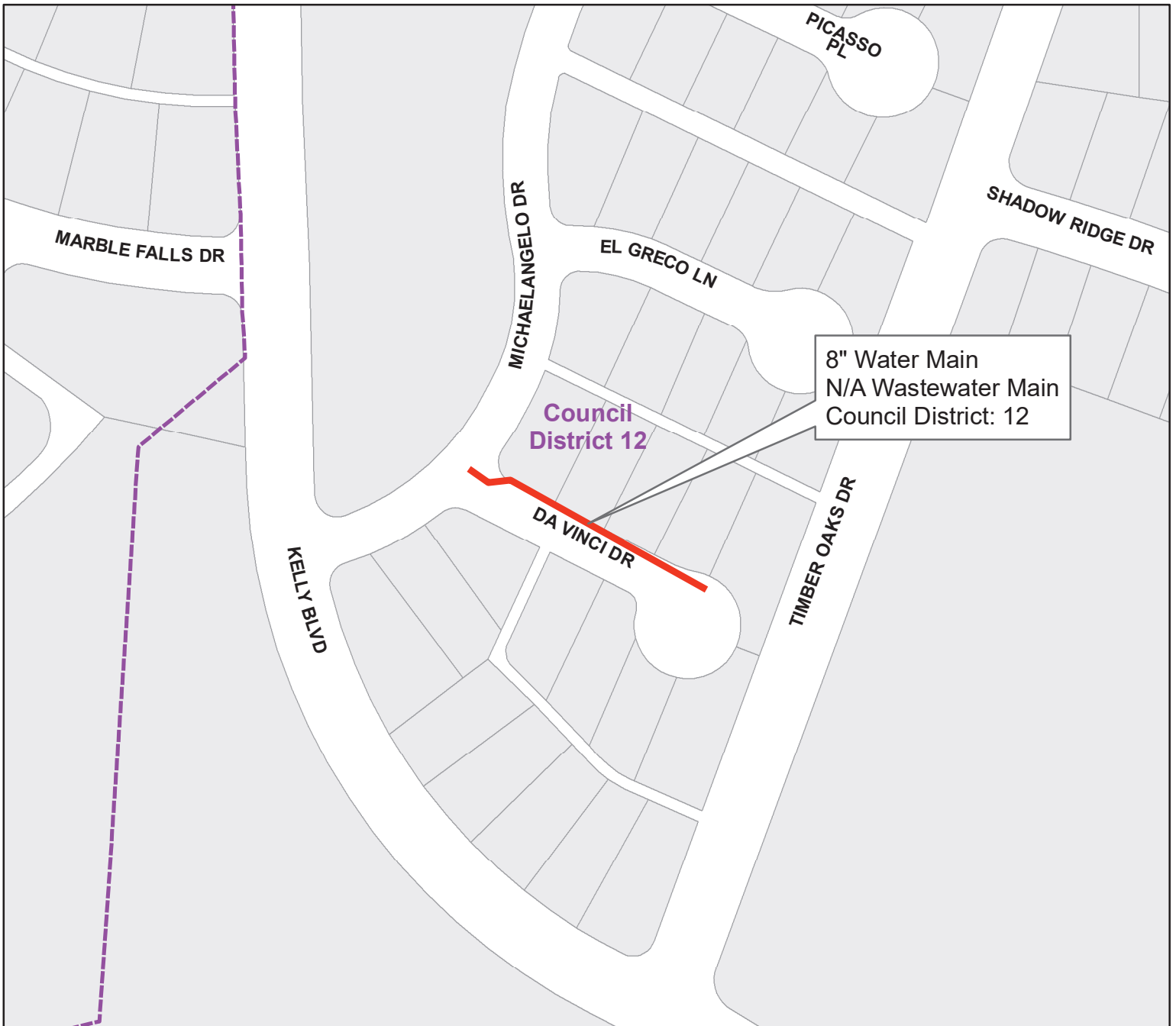
**Dallas Water Utilities
 Contract No. 20-505/506
 Water and Wastewater Main Installations
 at 19 Locations**



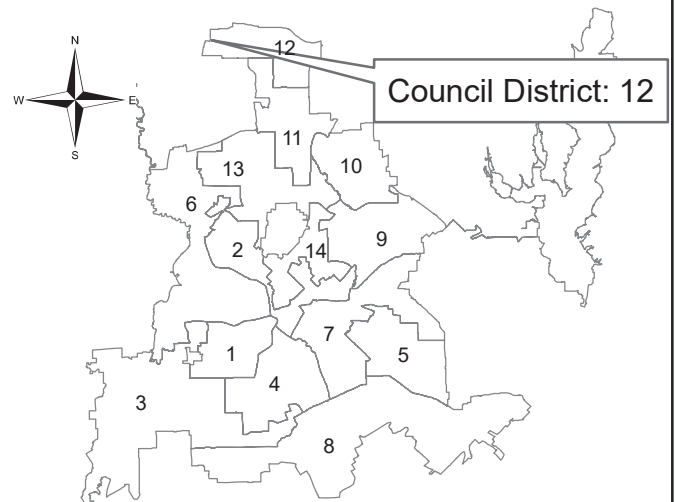
Park Central Place
from Northaven Road north



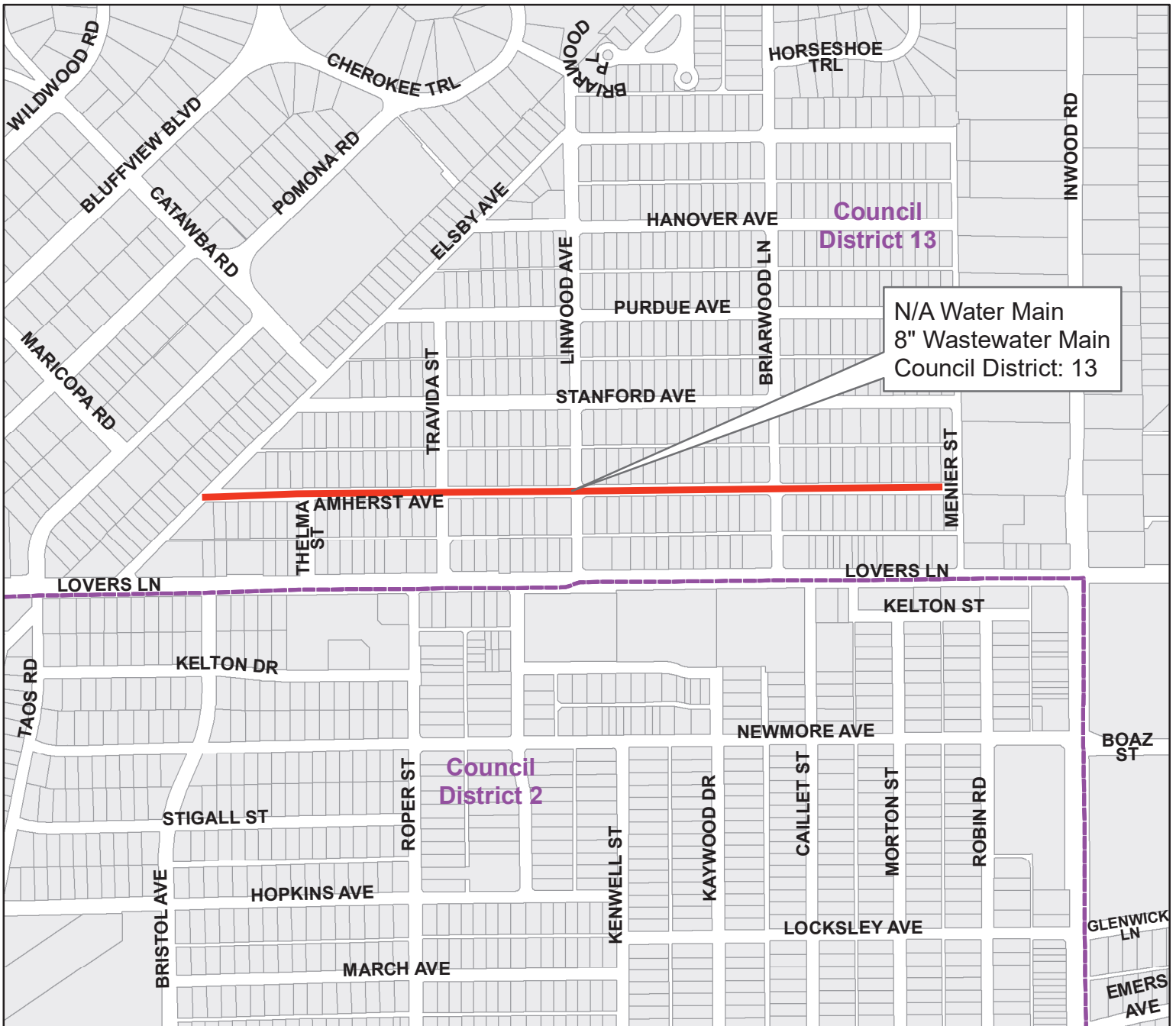
**Dallas Water Utilities
Contract No. 20-505/506
Water and Wastewater Main Installations
at 19 Locations**



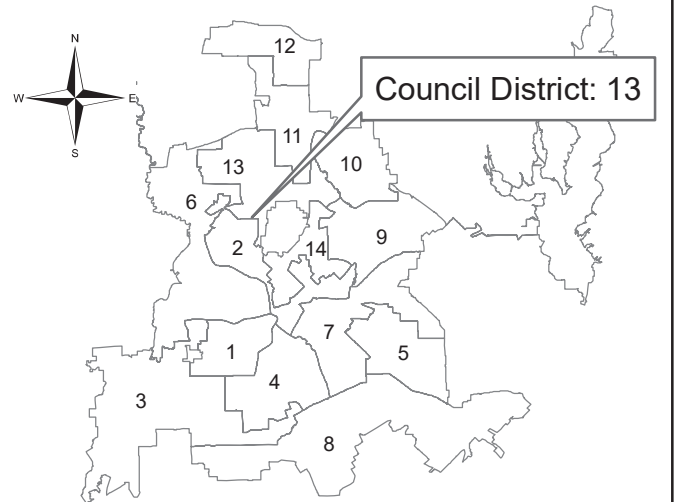
Da Vinci Drive
 from Michaelangelo Drive to dead end



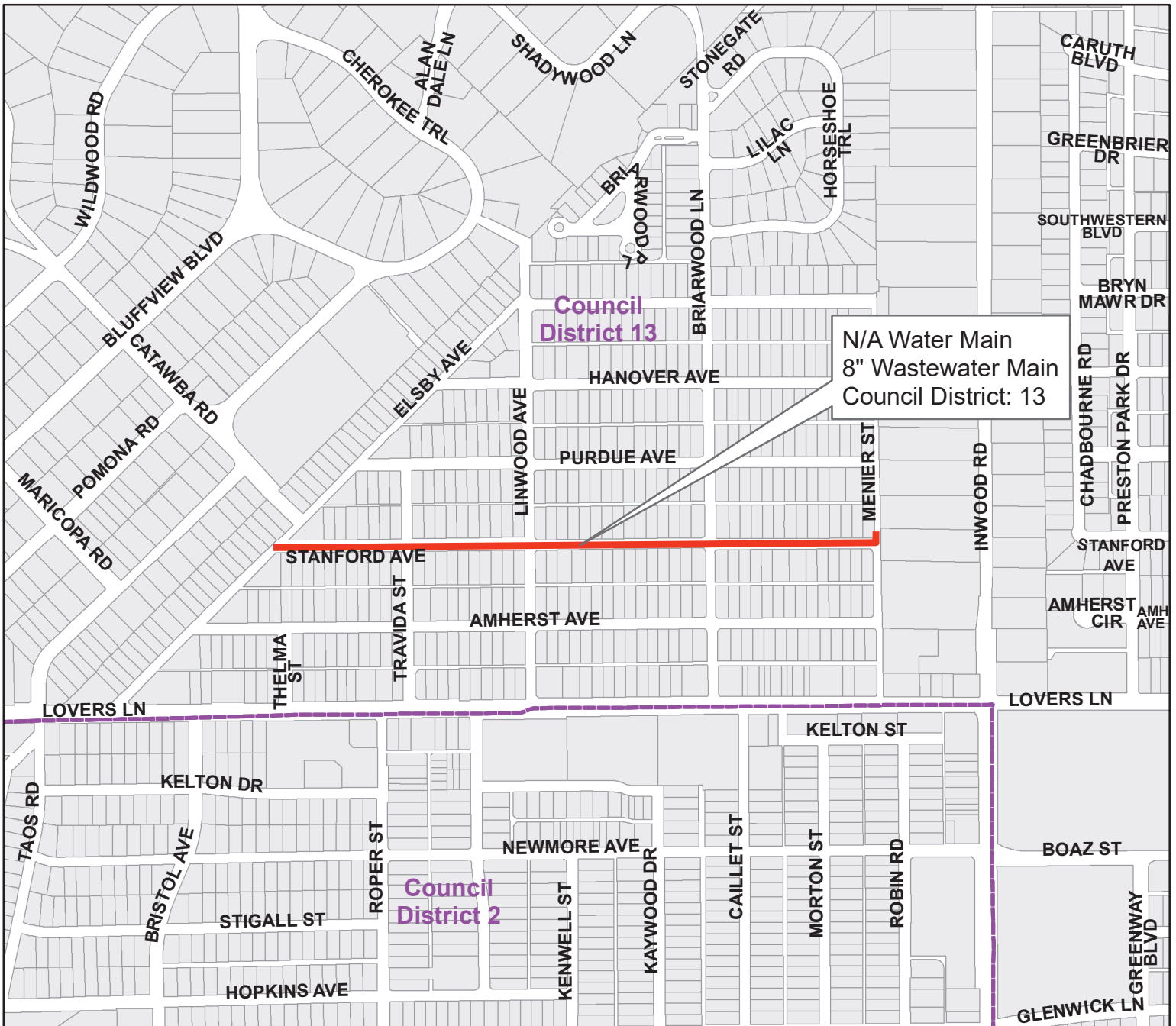
**Dallas Water Utilities
 Contract No. 20-505/506
 Water and Wastewater Main Installations
 at 19 Locations**



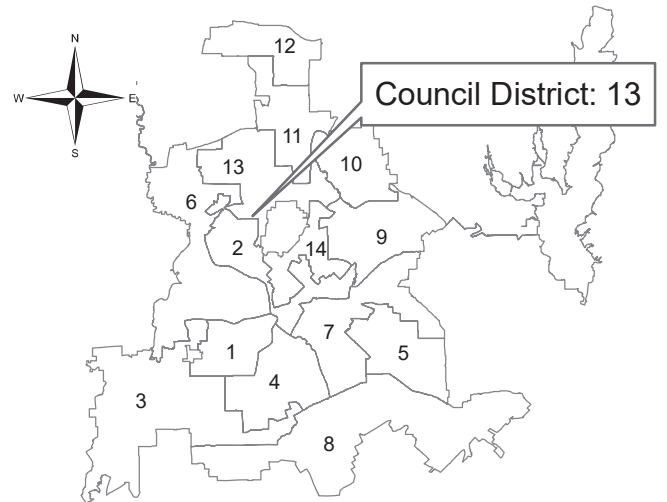
Amherst Avenue
 from Elsby Avenue to west of Menier Street



**Dallas Water Utilities
 Contract No. 20-505/506
 Water and Wastewater Main Installations
 at 19 Locations**



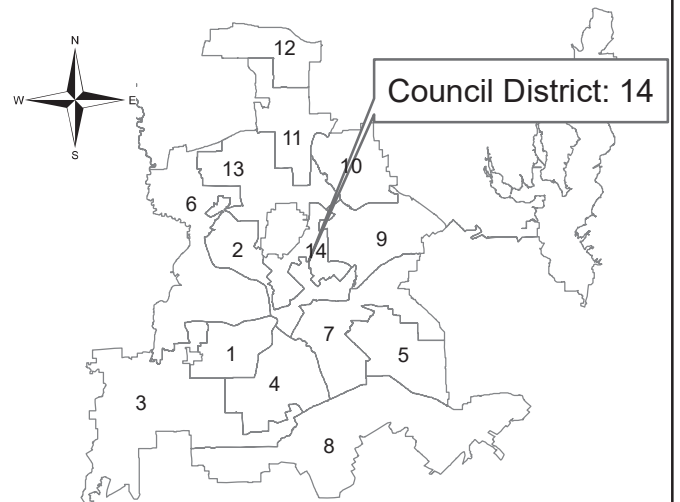
Stanford Avenue
from Elsbey Avenue to Menier Street



**Dallas Water Utilities
Contract No. 20-505/506
Water and Wastewater Main Installations
at 19 Locations**



Summit Avenue
from Belmont Avenue to Richmond Avenue



**Dallas Water Utilities
Contract No. 20-505/506
Water and Wastewater Main Installations
at 19 Locations**

A 3. SPECIAL PROVISIONS

S-1 PLAN HOLDERS LIST / BID RESULT TABULATIONS

If you download Specs, Plans, and Proposals from <ftp://ftp.dallascityhall.com> please e-mail jose.becerra@dallascityhall.com, khon.eng@dallascityhall.com, or natalie.wilson@dallascityhall.com so you can be placed on the Plan Holders List and be notified of any Addenda. Plan Holders / Bidders Lists may be obtained by e-mailing natalie.wilson@dallascityhall.com, jose.becerra@dallascityhall.com, or khon.eng@dallascityhall.com. Bid result tabulations as they become available are located at <ftp://ftp.dallascityhall.com> in folder titled Bid Tabulations.

S-2 INQUIRIES

All inquiries shall be directed to:

Daniel Atambo, P.E.
Dallas Water Utilities Department
2121 Main Street, Suite 300
Dallas, Texas 75201
Telephone: (214) 948-4521
FAX: (214) 243-1118
Email: daniel.atambo@dallascityhall.com

Project related questions shall be submitted in writing no later than 4:00PM on Monday, March 08, 2021.

S-3 **PRE-BID CONFERENCE**

There will be a Pre-Bid Conference held on **Thursday, March 4, 2021 at 1:30 pm virtually online**. Due to the COVID-19 Pandemic, no in-person pre-bid conference will be held. The Pre-Bid Conference will be held online using TEAMS and can be accessed using the following information.

Microsoft Teams meeting
Join on your computer or mobile app
[Click here to join the meeting](#)

Or enter below address into your browser:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_NTE1YjllZDQtNWNiNi00YmM5LWFjOWItZWUzZTg0NjFiNDlj%40thread.v2/0?context=%7b%22Tid%22%3a%222935709e-c10c-4809-a302-852d369f8700%22%2c%22Oid%22%3a%22215d5147-217a-4259-9191-98226b71fb03%22%7d

Or call in (audio only)

[+1 469-217-7604,,550283727#](tel:+14692177604550283727) United States, Dallas
Phone Conference ID: 550 283 727#

S-4 **BIDDING RESTRICTIONS**

No individual, partnership, corporation, holding company, or other business organization shall submit more than one Bid on this project. The submittal of multiple bids in the names of different Contractors by the same individual, partnership, corporation, holding company, or business is specifically prohibited.

S-5 **BID PACKET SUBMITTAL**

Contractors must provide the **Original** copy of their Bid Proposal in their Bid Packet submittal.

S-6 **QUANTITIES**

The quantities in all Unit Price bid items in the Proposal are approximate and may represent quantities in excess of those actually installed. Payment will be based on the actual quantities installed and paid in accordance with the applicable Specifications.

S-7 **MILESTONES\LIQUIDATED DAMAGES**

Bidder agrees that the work covered by the contract award will be completed in accordance with the following Milestones:

Milestone 1: Effective Start Date shall be no longer than 40 Calendar days after City Council award of this project. Liquidated Damages shall be \$ 500 Per Calendar Day.

Milestone 2: 16,000 linear feet of water/wastewater mains installed, backfilled, tested and temporary paving (if applicable) in place within 200 consecutive working days. Liquidated damages shall be \$500 Per Calendar Day.

Milestone 3: 32,000 linear feet of water/wastewater mains installed, backfilled, tested and temporary paving (if applicable) in place within 400 Consecutive Working Days. Liquidated damages shall be \$500 per calendar day.

Milestone 4: All water/wastewater work and site restoration completed within 604 Consecutive Working Days. Liquidated damages shall be \$500 per calendar day.

Project Prioritization

Schedule B – University Hills and Killough/Wasco shall be the first segments to start construction, unless directed otherwise by the Project Manager. The Project Manager will notify the Contractor within 10 working days after Notice to Proceed date of any changes to the scheduling for this segment (if any).

The city has the right to prioritize and release segments for construction in order to meet public needs and utility priorities.

S-8 **PROJECT SIGN**

This Contract requires work at more than one geographical location. A Project Sign will be required at each location of work from the period when work has started at that location until all work is complete at that location. The signs will be provided to the Contractor **at no charge**, however, delivery to the project site is not included and the Contractor will be required to pick the sign up when notified at Dallas Lite and Barricade, 1607 Fort Worth Avenue, Dallas, Texas, 75208. The Contractor will also be required to erect the sign at the project site and also to deliver the signs upon completion of the project site for re-use. The Contractor will be required to notify the Project Manager two (2) weeks prior to the placement of the signs. **NO PAY ITEM.**

S-9 **NOTIFICATION OF CONSTRUCTION OPERATIONS**

The **Contractor** shall be responsible for all Construction Staking associated with the Water and Wastewater Facilities on this project. Costs for Construction Staking is covered under Bid Items 8011 and 8012. Staking shall be performed by qualified personnel. Typed Cut-Sheets must be submitted to DWU Pipeline Inspection, 2121 Main Street, #300, Dallas, Texas 75201 (Phone - 214-671-9530; Fax - 214-670-3018) no later than 3:00P.M. the day prior to scheduled start of construction. (See example in Part T - Technical Specifications).

The Contractor is responsible for maintaining all staked controls and hubs in the construction area at all times and any costs for re-staking or re-establishing controls required shall be borne by the Contractor.

Inspection of work associated with the water and wastewater facilities will be done by Dallas Water Utilities (DWU) and shall be requested through the appropriate DWU Construction Superintendent a minimum of ten (10) days prior to the scheduled start of construction for each location. Actual start date is dependent upon approval and issuance of the "Public Relations" letter from the Project manager.

S-10 **PROJECT PARTNERING**

The Contractor is to participate in ongoing "Project Partnering" along with the Design Engineer and the Owner as described in the DWU Standard Technical Specifications for Water and Wastewater Construction, Latest Edition. The Contractor shall hire a 3rd party facilitator and all associated costs shall be included in Bid Item No. 6800. The Contractor will be paid 60% of Bid Item No. 6800 in the first estimate following completion of the initial one day partnering workshop.

The remaining balance will be paid after all work is completed and all claims against the Contractor are settled. The initial partnering workshops as well as quarterly partnering sessions should accommodate up to fifteen (15) Dallas Water Utilities and/or design consultant personnel in addition to Contractor's and Subcontractor's personnel. The Project Partnering shall be conducted at the beginning of the Project in accordance with the format detailed in the DWU Standard Technical Specifications for Water and Wastewater Construction, Latest Edition.

This is a **Contingent Item** to be used and paid for only as directed by the Project Manager. Partnering shall be conducted at a location within the City Limits of Dallas.

S-11 **SUBMITTALS**

The Contractor is required to furnish written submittals. The following additional information is required with all pay applications.

MONTHLY ESTIMATE:

PAYMENT REQUEST COVER LETTER
DESCRIPTION OF PAY ITEMS/QUANTITY INFORMATION
UPDATED PROJECT SCHEDULE
SCHEDULE OF WORK AND ACTUAL PAYMENT FORM
CONTRACTOR/SUBCONTRACTOR CERTIFIED PAYROLL REPORT
NEIGHBORHOOD JOB OPPORTUNITIES
CERTIFICATE OF LIABILITY INSURANCE
VERIFICATION OF PAYMENT FOR INSPECTORS OVERTIME
AFFIDAVIT OF SUBCONTRACTOR/SUPPLIER PAYMENT
BREAKDOWN OF STORED MATERIALS (IF APPLICABLE)
M/WBE PROPOSED CHANGES

FINAL ESTIMATE:

CONTRACTOR AFFIDAVIT OF SUBCONTRACTOR/SUPPLIER
PAYMENT
POST CONSTRUCTION CONTRACTOR EVALUATION (with final
application)
RELEASE OF CLAIMS (if applicable with final application)
M/WBE SUBCONTRACTOR/SUPPLIER EVALUATION(S)
INSPECTOR'S OVERTIME FEE PAID
SUBCONTRACTOR EXPLANATION OF VARIANCE FROM PAYMENT
SCHEDULE
WARRANTY(S) ORIGINAL(S)
CONSENT OF SURETY TO FINAL PAYMENT
NEIGHBORHOOD JOB OPPORTUNITIES FORM
WEEKLY CERTIFIED PAYROLLS THROUGH COMPLETION OF WORK
SWORN STATEMENT OF ACCOUNTS
DISPOSITION OF EXISTING ASSETS FORM

S-12 **APPROVED MATERIALS BY TRADE NAME**

The Owner maintains a list of approved materials by trade name as shown in the DWU Standard Technical Specifications for Water and Wastewater Construction, Latest Edition or as included in these specifications. The latest version provided by either the DWU Standard Technical Specifications or these specifications shall govern. Contractor shall use materials specified on Approved Materials List unless otherwise specified in this contract.

S-13 **OFF- SITE CONSTRUCTION AREA**

The Contractor is not permitted to use any public right-of-way as a staging area, yard, office, storage, etc. Should the Contractor require the use of private property as a staging area, yard, office, storage, etc. then he will submit that location along with a copy of the agreement from the Property Owner/Owners to the Project Manager.

S-14 **STABILIZED MATERIAL**

Item(s) **7044** and **7050** may be used interchangeably for various applications during construction at the discretion of the Engineer. There shall be no renegotiation of bid prices for any of these items due to quantity underruns or overruns.

S-15 **WATER METER BOXES**

Install new plastic type Water Meter Boxes on all new and reconnected existing water services shown on the Drawings and specified herein. Water Meter Boxes shall conform to Dallas Water Utilities Approved Materials List. Install Water Meter Boxes according to DWU Standard Drawings for Water and Wastewater Construction, Latest Edition, pages 201 thru 206A. All locations specified in this Contract are considered "Traffic Bearing Areas".

S-16 **TEMPORARY WATER MAINS (NO SEPARATE PAY ITEM)**

Temporary water mains of new or acceptable used 4" galvanized iron water pipe or other pipe material acceptable to the Engineer shall be installed as specified by the plans or as required by the Construction Engineer.

Valves shall be furnished and installed by the Contractor on the temporary mains at locations designated by the Construction Engineer, so that the temporary main can be shut off independently. 3/4" blow-off copper will be installed at the end of the temporary mains. In the event that temperatures fall, the Contractor shall take steps to prevent temporary mains and services from freezing. If flushing is done, the run-off shall be directed such that street icing does not occur.

Cold mix asphalt shall be used to mound over the 4" temporary water main at all driveways and at locations where the temporary mains cross vehicular traffic areas. The cold mix asphalt shall be removed after the removal of the temporary water mains.

The temporary 4" water mains will be chlorinated after installation. Services shall not be transferred to the temporary mains until the water in the temporary mains has been checked and approved by the Engineer. There will be no additional compensation for delays in obtaining approval to transfer services.

The temporary water system shall be maintained and repaired at all times by the Contractor.

The Contractor shall furnish, place, and connect temporary water services from the temporary mains to a point beyond each meter box. The services will consist of a service clamp, corporation cock, sufficient length of copper pipe to reach beyond each meter box, copper to iron pipe union, street ell and bushing. The temporary water services shall be a minimum of 3/4."

S-17 TRAFFIC RESTRICTIONS

The following traffic restrictions shall be enforced during construction.

1. Two-way traffic shall be maintained on all streets at all times. Flagmen should be used to maintain two-way traffic.
2. The Contractor will be responsible for barricading all projects. All barricades, warning signs, and traffic control devices shall conform as a minimum to the standards in the City of Dallas Traffic Barricade Manual and TxDOT *Texas Manual on Uniform Traffic Control Devices 2006* (Texas MUTCD).
3. When closing side streets, four working days notification is required for Fire and Police Departments. Contact Traffic Safety Coordinators Beth Adams at (214) 670-5896 or Gary Hughes at (214) 670-5662.

S-18 TRANSPORTATION/TRAFFIC CONTROL

The Contractor shall provide a Traffic Control Plan to assure two way traffic and uninterrupted access to properties at all times.

S-19 MANHOLE CORROSION PROTECTION

All proposed Wastewater Manholes require Raven Coating 405 or approved equal as stipulated in the DWU Standard Technical Specifications for Water and Wastewater Construction, Latest Edition. No Separate Pay Item.

S-20 POINT REPAIRS

The Contractor is advised that point repairs may be required on private property. Point repairs on private property shall be hand excavated using small equipment to cause as little damage as may be necessary to accomplish the work. If fences must be removed to accomplish the work, the Contractor shall install temporary fencing of like size and construction until permanent fence replacement is accomplished.

S-21 **TEMPORARY PAVING**

Temporary Paving will be placed over the compacted, backfilled ditch in paved areas and marked as Temporary Paving. The Temporary Paving shall consist of 6" minimum thickness flexible base and High Performance mix asphalt at the width and 2" minimum thickness as specified for payment in the bid items.

The Contractor may exceed these limits of measure for payment; however, all cost associated with this increase will be at the Contractor's expense. If the Contractor concludes the Temporary Pavement is not adequate in thickness or width for the conditions, this should be taken into account when preparing the bid.

Temporary surface shall be adequately compacted and sealed to prevent degradation of the repair during the temporary period. Any temporary surface shall be repaired or removed and replaced, as directed by the Engineer, at the Contractor's expense.

If an alternate route is required, the placement and removal of Flex Base and Asphalt Paving as approved by the Construction Engineer will be entirely at the Contractor's expense.

S-22 **POST CONSTRUCTION CONTRACTOR AND SUBCONTRACTOR/
SUPPLIER EVALUATION**

The Contractor will be evaluated by the Owner. The completed form will be submitted for the Contractor's signature prior to final payment.

The Contractor shall evaluate each Subcontractor and Supplier. The evaluation(s) will be furnished to the Owner prior to payment of the final estimate.

Examples of the evaluation forms are available at 2121 Main Street, Suite 400, Dallas, Texas 75201.

S-23 **CONTRACTOR ENVIRONMENTAL PACKET**

Contractor shall read and understand 107.27 of the City of Dallas NCTCOG Addendum, Latest Edition, and provide a signed “*Environmental Record Affidavit*” prior to start of construction.

S-24 **DENSITIES**

Densities shall be taken at the amount of three (3) per one hundred (100) feet of open cut trench excavation, equally spaced.

The density tests are to be conducted by DWU’s approved soil density labs. The depths of the samples and the approximate locations are to be coordinated and approved by the DWU Pipeline Field Inspector.

All densities shall meet the requirements set forth in the pavement Cut and Repair Standards Manual issued by the Department of Public Works and Transportation.

Payment for these services related to DWU’s Pipeline Program’s Capital Improvement Projects shall be borne by DWU’s Pipeline program.

S-25 **PERFORMANCE OF WORK BY THE CONTRACTOR**

Contractor Participation. Except as otherwise provided, the Contractor shall perform no less than 25 percent (25%) of the work with his own organization. The on-site production of materials produced by other than the Contractor's forces shall be considered as being subcontracted. If, during the progress of work hereunder, the Contractor requests a reduction in such participation percentage and the **OWNER** determines that it would be to the **OWNER'S** advantage, the percentage of work required to be performed by the Contractor may be reduced; provided, written approval of such reduction is obtained by the Contractor from the **OWNER**.

The organization of the Specifications into divisions, sections, and articles, and the arrangement and titles of project drawings shall not control the Contractor in dividing the work among subcontractors or in establishing the extent of work to be performed by any trade.

S-26 **DAMAGE TO EXISTING STRUCTURES AND OTHER UTILITIES**

Contractor shall take care to protect, and to not cause damage to, existing structures and other utilities as specified in 107.23, 203.1, and all Addenda thereto. If any utility structure, line, service, or any other structure or utility is damaged, contractor shall notify the structure or utility Owner or Operator immediately upon causing the damage incident as per local, state, and federal laws and regulations. Contractor shall notify DWU Inspector or Superintendent within one hour from the time of the damage incident. In case of service disruption to an individual or in case of an emergency, contractor shall also attempt to notify adjacent property owner of the damage incident. Contractor crew which caused the damage incident shall incur a one day mandatory shut-down for each occurrence of a failure to notify DWU Inspector or Superintendent within one hour of a damage incident. Contractor crews shut down as provided will not be prohibited from performing site cleanup or general maintenance on any mandatory shut down day. Contractor shall be responsible for all costs and delays incurred. **NO SEPARATE PAY ITEM.**

S-27 **PRE-CONSTRUCTION VIDEO**

The Contractor is required to furnish a pre-construction video of the segments prior to moving any equipment, material, or personnel to that location as stipulated in the DWU Standard Technical Specifications for Water and Wastewater Construction, Latest Edition. **NO SEPARATE PAY ITEM.**

S-28 **POST-CONSTRUCTION VIDEO**

The Contractor is required to furnish a post-construction video of the segments after all water/wastewater mains work and site restoration is complete as stipulated in the DWU Standard Technical Specifications for Water and Wastewater Construction, Latest edition. **NO SEPARATE PAY ITEM.**

S-29 **ENVIRONMENTALLY CONTAMINATED SOIL & GROUNDWATER**

Contaminated soil and groundwater have been encountered at three project locations in this contract; PID 1210, PID 1362, and PID 3141. The City of Dallas hired third-party environmental consultants who determined the extent of environmental contamination through laboratory testing and environmental analysis. The third-party consultants prepared a Soil and Groundwater Management Plans (SGMP) for each project location and these plans are included in the Contract documents. There is an SGMP for PID 1210 (Luna Road) and Groundwater Disposal Guidelines for Luna Road. There is a separate SGMP for PIDs 1362 and 3141 (Puget and Pueblo).

The SGMPs are:

Soil and Groundwater Management Plan

PID 1210 – Luna Road Water and Wastewater Main Replacement Project

Soil and Groundwater Management Plan

PID 1362 Puget Street from Singleton Boulevard to Dennison Street

PID 3141 Pueblo Street from Puget Street west Improvement Project

Contractor is responsible for creating and submitting to DWU a Health, Safety, and Monitoring Plan that meets the requirements of OSHA's Hazardous Waste Operations and Emergency Response (HAZWOPER) Standard, 29 CFR 1910 or 29 CFR 1926.65 for each project.

Health, Safety, and Monitoring Plans will be paid for through the following bid items:

PID 1210:

Schedule "C" – Bid Item 7768

PID 1362 & PID 3141:

Schedule "A" – Bid Item 7768

Contractor will be responsible for following the recommendations of the SGMPs for management and disposal of all contaminated soils. All necessary SGMP related activities with the exception of disposal of contaminated soils and groundwater will be covered under applicable Bid Item #7768 for Health, Safety, and Monitoring Plans.

Disposal of Contaminated Soils will be paid through the following bid items:

PID 1210:

Schedule "C" – Bid Item 7766

PID 1362 & PID 3141:

Schedule "A" – Bid Item 7766

Contractor will be responsible for the management and disposal of all contaminated water in accordance with the SGMP and the City of Dallas regulations for management of contaminated groundwater.

Contractor may not discharge contaminated groundwater to the ground surface or any natural or man-made drainage features per City of Dallas regulations.

Contractor may discharge contaminated groundwater to the sanitary sewer provided they complete the following:

1. Apply for and receive a disposal permit from DWU – PALS before disposing any groundwater into the sanitary sewer.
2. No Molybdenum or Tetramethylammonium Hydroxide (TMAH) is detected in the groundwater.

Contractor will test for Molybdenum and TMAH prior to starting construction.

Testing for Molybdenum and TMAH will be paid through the following bid items:

PID 1210:

Schedule "C" – Bid Item 7768

PID 1362 & PID 3141:

Schedule "A" – Bid Item 7768

Testing Locations:

PID: 1210:

2 – test wells 500 feet apart north of Station 78+00.0

3 – test wells between Stations 53+00.0 and 78+00.0

1 – test well 500 feet south of Station 53+00.0

PID 1362 & PID 3141

1 – test well near PID 1362 Station 10+00.0

1 – test well neat PID 1362 Station 2+00.0

If no Molybdenum or TMAH are detected in the groundwater, Contractor may discharge contaminated groundwater into the sanitary. There will be NO SEPARATE PAY ITEM for the cost of discharging into the sanitary sewer.

Discharge rates into manholes are as follows:

PID: 1210:

| Manhole Number | Discharge Rate - GPM |
|----------------|----------------------|
| 38003010001M | 75 |
| 38003010030M | 250 |
| 38003020001M | 200 |
| 38003020004M | 150 |
| 38003020049M | 150 |
| 38003020049M | 150 |
| TMP1520797M | 150 |
| 38003020006M | 150 |
| 38003020007M | 150 |
| 38003020013M | 150 |
| 38003020032M | 150 |
| 38003020034M | 150 |
| 38003020035M | 100 |
| 38003020037M | 100 |

PID 1362 & PID 3141

| Manhole Number | Discharge Rate - GPM |
|----------------|----------------------|
| 05089000070M | 75 |
| 05089000090M | 75 |
| 05089000011M | 75 |
| 05089000120M | 75 |

If Molybdenum or TMAH are detected in the groundwater, Contractor will provide an alternative disposal method/location in compliance with all local, state, and federal regulations for disposal of such materials. Contractor must keep record of delivery manifests, tickets, invoices, and other pertinent documents, and submit copies of documents to Owner upon request.

Disposal of Contaminate Groundwater will be paid through the following bid items:

PID 1210:

Schedule "C" – Bid Item 7767

PID 1362 & PID 3141:

Schedule "A" – Bid Item 7767

Groundwater Disposal Guidance - Luna Road

This information is for guidance only. This does not indicate approval to discharge.

A completed permit application along with the following information may be required to obtain discharge approval. This depends on the amount of discharge, time and pollutants.

1. A summary stating the need to discharge groundwater into the sanitary sewer system.
2. A copy of the Texas Commission on Environmental Quality (TCEQ) Administrative Order or Voluntary Cleanup Program.
3. A detailed description of the treatment system that includes method of remediation, rates of removal, type of equipment to be utilized, plumbing plan, pretreatment process flow and a date when remediation will be completed.
4. The frequency of discharge (average and maximum gallons per minute) and the estimated volume of discharge (monthly).
5. The location of the contaminated area on a plan view map along with the monitoring wells and recovery wells. A groundwater analytical report must be submitted for all monitoring wells identified on the map.
6. The location of the sampling site. An approved sample pad may have to be installed.
7. A description of an emergency spill plan describing the method of containment that will be used. The containment should be leak proof and of sufficient height to retain 110% of the volume of the contaminated water within the treatment compound.
8. Identify on the plan view map where you plan to connect to the sanitary sewer.
9. Analysis for Table II, III, and V parameters as found in 40 CFR 122. Analysis for City of Dallas Local Limits as found in Chapter 49, Section 49-43 of the Dallas City Code. All concentrations must comply with concentration standards established by Chapter 49 of the City Code, "Water and Wastewater" and/or maximum allowable concentration established by the City. All levels of treatable organic compounds shall be at or below detection limit and no analytical results shall ever exceed local ordinance limits. All pollutants of concern identified in the initial scan must be treated to or below detection limits and in no case shall exceed local ordinance limits.
10. Analysis for Molybdenum, and Tetramethylammonium hydroxide (TMAH) are also required for projects discharging to the Trinity River Authority Central Regional Wastewater System (TRA).
11. A waiver of analytical requirements of a pollutant may be authorized if the applicant demonstrates through initial sampling that the pollutant is neither present or expected to be present in the discharge. A waiver will not be granted for projects discharging to TRA.
12. Documentation of the laboratory Quality Assurance Program is required.
13. Certification statement of laboratory NELAP Accreditation.
14. A schedule of maintenance for the pretreatment system.

For the permit and discharge approvals certain parameters and flow rates will be required.

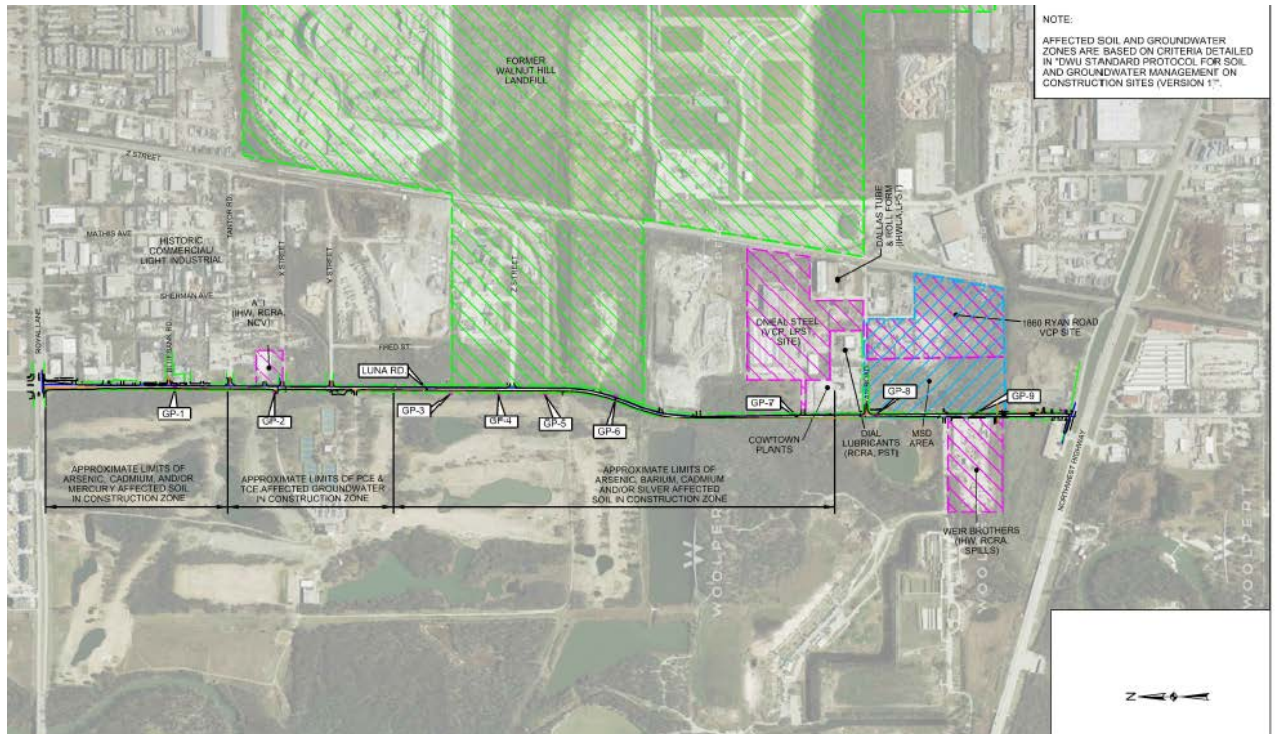
1. Parameters in numbers 9 and 10 above, limits will be identified and may be included.
2. Parameters for the CWWTP and TRA limits will be included.

| Local Limits | | | |
|----------------------------|---|---------------|------------|
| Daily Limits (mg/L) | | | |
| Pollutant | CWWTP | SSWWTP | TRA |
| Arsenic (As) | 0.07 | 0.50 | 0.20 |
| Cadmium (Cd) | 0.34 | 1.00 | 0.10 |
| Chromium (Cr) | 3.62 | 5.00 | 2.90 |
| Copper (Cu) | 4.00 | 4.00 | 2.30 |
| Cyanide (CN) | 0.71 | 1.60 | 0.50 |
| Lead (Pb) | 1.60 | 1.60 | 0.90 |
| Mercury (Hg) | 0.0006 | 0.01 | 0.0004 |
| Molybdenum (Mo) | N/A | N/A | 0.80 |
| Nickel (Ni) | 3.14 (Contributory) 0.0028 (Non-Contributory) | 5.58 | 4.60 |
| Oil & Grease (TOG) | 200.00 | 200.00 | 200.00 |
| pH | 5.5 - 10.5 | 5.5 - 10.5 | 5.5 - 11.0 |
| Selenium (Se) | 0.20 | 0.20 | 0.10 |
| Silver (Ag) | 0.36 | 3.04 | 0.80 |
| Sulfide | 10.00 | 10.00 | N/A |
| Total Toxic Organics (TTO) | N/A | N/A | 2.13 |
| Zinc (Zn) | 3.06 | 5.00 | 8.00 |

| Daily Limits (Celcius) | | | |
|-------------------------------|-------|-------|-------|
| Flash Cup | 60.00 | 60.00 | 60.00 |
| Temperature | 40.00 | 40.00 | 40.00 |

3. Flow rates for each of the manholes on the main.

| Manhole Number | Discharge Rate/Gallons Per Minute |
|----------------|-----------------------------------|
| 38003010001M | 75 |
| 38003010030M | 250 |
| 38003020001M | 200 |
| 38003020004M | 150 |
| 38003020049M | 150 |
| 38003020048M | 150 |
| TMP1520797M | 150 |
| 38003020006M | 150 |
| 38003020007M | 150 |
| 38003020013M | 150 |
| 38003020032M | 150 |
| 38003020034M | 100 |
| 38003020035M | 100 |
| 38003020037M | 100 |



S-30 **DISPOSAL OF EXCAVATED MATERIALS**

The Contractor must submit to the Owner a detailed list of disposal sites and materials to be disposed at each site for entire project prior to commencement of work. The Contractor is responsible for disposal of all spoil materials associated with this project. Once the detailed list of disposal sites is submitted and approved, no deviation is allowed without written approval. Contractor must keep record of delivery manifests, tickets, invoices, and other pertinent documents, and submit copies of documents to Owner upon request.

If any dump site is located on private property the submittal must include the following:

1. A letter from the property owner outlining the agreement for the use of the property.
2. If the private property is located within a designated flood plain, a copy of the City permit to dump in the flood plain must be attached with the letter from the property owner.
3. A signed release letter from the property owner stating final acceptance of the property condition. **NO SEPARATE PAY ITEM.**

S-31 **INSPECTION OVERTIME REIMBURSEMENTS**

The following paragraph in Item 105.9.3.COD: Inspection Overtime of the DWU Addendum to North Central Texas Standard Specifications for Public Works Construction shall be revised as follows:

Inspection overtime will be charged to the Contractor at the rate of **\$50.00** per hour per Inspector with the number of Inspectors to be determined by the Owner under the following overtime conditions:

1. Weekdays between the hours of midnight to 7:30am and 4:30pm to midnight.
2. Saturdays, Sundays and Holidays between the hours of midnight to midnight with a minimum of four (4) hours, at a rate of **\$50.00** per hour per Inspector and a minimum of **\$200** per day per Inspector.

S-32 HOT MIX ASPHALTIC CONCRETE PAVING

Contractor shall provide Hot Mix Asphaltic Concrete mix design submittal for review and approval prior to commencement of work. Mix design must have been previously approved for use by Texas Department of Transportation (TxDOT) and be performing satisfactorily. Submittal shall include a list of TxDOT projects where the mix was installed. Submittal shall include source of asphaltic materials, laboratory test results as specified in 302 of these Specifications and Addenda thereto, and equipment listing for spreaders, finishers and rollers to be used. Contractor shall submit a separate mix design, complete as specified hereto, for each permanent asphalt type required for the project. Owner shall, at owners discretion, perform materials testing to ensure control of materials and installation. Contractor shall notify Inspector no less than 24-hours prior to asphalt placement. These requirements shall be considered inclusive to the permanent paving pay items.

S-33 MACHINE FINISH PERMANENT PAVING

Unless otherwise specified or approved by owner, permanent paving restoration of cuts greater than eight (8) feet width in asphalt requires machine spreading and machine finishing, and greater than eight (8) feet width in concrete requires machine finishing, per 302.9.6.6 and 303.5.6, of these specifications, respectively and addenda thereto. These requirements shall be considered inclusive to the permanent paving pay items.

S-34 **PERMANENT PAVEMENT RESTORATION COMMENCEMENT**

As a condition of the street cut permit, issued on behalf of Contractor and per Dallas City Code Chapter 43 by Ordinance 24495, amended by Ordinance 25409 and then amended by Ordinance 29993: Contractor is notified that permanent paving restoration shall commence no later than 14 calendar days after paving release is issued. **Liquidated Damages shall be \$500.00 per calendar day.**

S-35 **CITY OF DALLAS ORDINANCE 29993**

Ordinance 29993, amending the street cut permit conditions and requirements of the City Code, went into effect as a result of Council action on 1/27/2016 by Resolution 16-0193, and is made part of this contract as per 107.16 of these specifications and addenda thereto.

S-36 **PERMANENT PAVING REPAIR LIMITS**

City of Dallas Pavement Cut and Repair Standards establish the minimum repair standard required and rules for determining actual extent necessary. Some project locations require the extent of paving repairs in excess of the minimum repair extent, up to and including the full width of the street. Quantities for these locations have been calculated and included in the contract. Final determination of paving limits will be made by the City of Dallas at these locations prior to release to contractor for final paving repairs. All paving repairs are considered Contract Work. Compensation will be at the bid unit rates established for the bid items, as applicable. Repairs necessitated as a result of contractor's inadequate construction means and methods, or due to contractor damage to adjacent property are non-compensatory repairs.

S-37 **PONDS ON PRIVATE PROPERTY**

The Contractor may not drain or remove water from any pond for any purpose without written permission of the City of Dallas. Any agreement between the Contractor and Property Owner for the use of the water or draining must be submitted to and approved by the Project Manager prior to execution. The Contractor shall ensure that no trash or debris from construction activities is deposited in any pond. The Contractor shall be responsible for any damages that occur to any pond and will restore ponds to equal or better than pre-construction condition.

S-38 **TREES OUTSIDE EASEMENT LIMITS**

The Contractor may not remove any trees outside the easement limits without the written permission of the Property Owner. Any agreement between the Contractor and Property Owner for the removal of trees outside of easements must be submitted to and approved by the Project Manager. Any tree outside the easements that is damaged or destroyed by construction activities shall be made whole at the Contractor's expense and to the satisfaction of the Property Owner. Item **6240 TREE** is a contingency item that will only be paid at the direction of the Project Manager, and will not apply to any tree planted as part of an agreement between the Contractor and Property Owner, or to replace trees outside the easement damaged by construction activities.

S-39 **TEXAS WATER DEVELOPMENT BOARD LOAN**

TWDB requires that bidders be aware of the following:

1. "Any contract or contracts awarded under this Invitation for Bids are expected to be funded in part by a loan from the Texas Water Development Board and shall be referred to as Project Numbers DWSRF 62741 CWSRF 73757. Neither the State of Texas nor any of its departments, agencies, or employees is or will be a party to this Invitation for Bids or any resulting contract."
2. This project is subjected to the American Iron and Steel (AIS) requirements of Section 608 of the Federal Water Pollution Control Act, Including federal appropriation acts. All Iron and steel products for construction, alteration, maintenance, or reports Incorporated in these plans must be produced in the United States.
3. Pipeline crossings of all potential waters of the U.S. will performed using trenchless technology or If open trench in compliance with Nationwide Permit 12-Utility Line Activities. If project activities within potential waters of the U.S. would not quality under a nationwide permit, then the appropriate permit from the U.S. Army Corps of Engineers would be required prior to clearing or construction activities.
4. Prior to construction activities within any 100-year floodplain, a flood plain permit, or exemption must be obtained from the local Floodplain Administrator (National Insurance Program).
5. The project must also comply with the following conditions:
 - Standard emergency condition for the discovery of cultural resources.
 - Standard emergency condition for the discovery of threatened and endangered species.

S-40 **STAY HOME STAY SAFE – RULES FOR THE CONSTRUCTION INDUSTRY**

The City of Dallas adopted the Dallas County Amended Emergency Order dated March 29, 2020 (County Order) as part of Dallas' Third Amended Emergency Regulations with certain "exceptions and additions."

One of the Sections of the County's Order the City adopted is the Stay Home Stay Safe Rules for the Construction Industry. These rules provide guidelines that construction businesses must follow.

Dallas has also adopted Section 2(b)(Xi) (Construction) of the County Order. Construction contractors will find pertinent additional information regarding construction activities contractors must follow.

See attached Memo.



Stay Home Stay Safe

Rules for the Construction Industry

This document provides guidance for persons and business associated with the building and construction industries and trades on the meaning and application of Order issued by Dallas County Judge Clay Jenkins on March 29, 2020 (the "Order").

Reason for Construction Rules. The purpose of these rules is to outline the steps that every employer and employee must take to reduce the risk of exposure to COVID-19. The rules describe how to prevent worker exposure to coronavirus, protective measures to be taken on the jobsite, and cleaning and disinfecting procedures.

Construction as Critical Infrastructure. The Order classified construction for public works, residential, commercial, and schools as critical infrastructure. Elective additions and maintenance are prohibited.

Requirements for Construction. All employers involved in construction activity must follow the requirements set forth in the COVID-19 Safety Recommendations issued by the Construction Industry Safety Coalition, including the rules below:

1. Mandatory temperature checks of all workers before they leave home. If a worker has a temperature above 99.6 degrees Fahrenheit, then they are prohibited from going to work and must remain at their residence;
2. Temperature checks of all workers with a forehead thermometer at the construction site before they may begin work. If an employee or contractor has a temperature above 99.6 degrees Fahrenheit, then they are to be sent home immediately;
3. Implement shift work;
4. Limit crossover of subcontractors;
5. Prohibit gatherings during meals or breaks;
6. Keep a 6 foot distance between people at all times, unless the work being performed requires multiple individuals for the safety of the workers;
7. Do not use a common water cooler. Provide individual water bottles or instruct workers to bring their own;



8. Allow non-essential personnel to work from home when possible;
9. Provide soap and water and hand sanitizer in the workplace, including all restrooms. Ensure that adequate supplies are maintained;
10. Mandatory handwashing of at least twenty (20) seconds for workers during the following:
 - a. Before workers begin work;
 - b. After workers remove gloves;
 - c. Before and after the use of shared items such as tools or multi-user devices;
 - d. Before and after any meal or restroom breaks; and
 - e. After a worker's shift or work time ends.
11. Mandatory rest breaks of at least fifteen (15) minutes for every four (4) hours worked so workers may follow hygiene guidelines;
12. Provide one (1) working flushing toilet for every fifteen (15) workers on site or one (1) outdoor portable toilet for every 10 workers on site;
13. No adverse action taken against an employee who has been quarantined, or advised to self-quarantine, due to possible exposure to coronavirus; and
14. Designate a COVID-19 safety monitor on each site who has the authority to enforce these rules.

Enforcement. Failure to strictly comply with this Order can result in penalties described below. Additionally, the general contractor and non-compliant subcontractor can be removed from the essential business list.

S-41 **MWBE COMPLIANCE MANAGEMENT SYSTEM REPORTING**

Effective September 2020, upon receipt of each payment from the City of Dallas, in addition to paper submittals, the awarded vendor is required to report payment data in the City's contract compliance system. Sub-contractors will be prompted to confirm payment data as reported by the prime in the City's contract compliance system. The City of Dallas M/WBE Diversity Compliance website can be found at <https://dallas.diversitycompliance.com>. There is no cost to contractors to use the System. System training is available on the website. If you require technical assistance during the login process or when using the System, please use the online support form.

S-42 **NEIGHBORHOOD JOB OPPORTUNITIES**

Notice is hereby given to all prospective Bidders for City of Dallas construction projects, pursuant to City Council Resolution 90-1961, that all construction Bid Proposals received by the City of Dallas after October 1, 1990, shall comply with the following City of Dallas Policy:

The goal of the Neighborhood Job Opportunities Program is to encourage "BID" in hiring unemployed Dallas residents. The Contractor agrees to make a "BID" to promote the City's Job opportunity program regardless of the jurisdictional location of the project.

The Bidder certifies by submission of his bid that if awarded the contract the Bidder will:

1. Post signs at the job site, providing information on employment opportunities, the location of the employment office, the telephone number, and the name of the contact person.
2. Make BID Plan to hire unemployed Dallas residents when hiring new employees.
3. Provide monthly reports indicating the number of employees hired during the month on all contracts and the number of Dallas residents hired, and
4. The Contractor shall establish an on-site employment office/center on contracts in excess of \$5,000,000.00. In those cases where the construction site lies outside the City limits of Dallas, the Contractor may establish an employment office/center inside the City limits of Dallas in lieu of the on-site location.

The following form shall be utilized for the monthly report in accordance with Item 3 above:

**PRE-BID INQUIRIES AND PRE-BID INSPECTION INQUIRIES
FOR
CONTRACT NO. 20-505/506**

QUESTIONS

ALL PRE-BID INQUIRIES MUST BE SUBMITTED IN WRITING. ONLY WRITTEN QUESTIONS WILL RECEIVE A RESPONSE. A RESPONSE WILL BE ISSUED BY ADDENDUM TO ALL WRITTEN QUESTIONS SUBMITTED. FAX, EMAIL OR MAIL PRE-BID INQUIRIES AS APPROPRIATE TO PERSON LISTED IN PART A - INFORMATION TO BIDDERS; **SPECIAL PROVISION S-2.**

Example Format:

Company Name: _____
 Project Name: Schedule A: Water and Wastewater Main Replacements at Various Locations, and
 Schedule B: University Hills Boulevard Wastewater Main Installation
 Contract No.: 20 505/506
 Question(s) By: _____
 Date Submitted: _____

| Question No. | Question | Plan Sheet and/or Spec. Reference |
|--------------|----------|-----------------------------------|
| 1. | | |
| 2. | | |
| 3. | | |
| 4. | | |
| 5. | | |
| 6. | | |

A 4. BID ITEMS

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 1100F 4" TEMPORARY WATER MAIN

This item consists of furnishing and placing approximately **1,950** Linear Feet of **4"** Galvanized Water Pipe in accordance with **Item 501.10. Seamless Copper Tubing, Item 506. Open Cut – Water Conduit Installation, Item 506.5.COD: Hydrostatic Test, Item 506.6.COD: Connections To Existing Water Conduits, Item 506.6.1.COD: Water Main Tie-In During Off Hours, Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger, Item 506.7.3.2.COD: Flushing Method, Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water, Item 506.7.1.COD: Preliminary Flushing, Item 506.7.2.COD: Chlorination, Item 506.7.3.COD: Flushing, Item 506.7.4.COD: Disposal of Flushing Water, Item 506.7.5.4.COD: Sampling, Item 506.7.6.COD: Indemnification, and Item 506.8.1.COD: Cut and Plugs** of these specifications and addenda thereto.

This item to include all valves, **4"** blow-off coppers, temporary water service connection, asphalt paving, and barricading necessary to protect the main from traffic. This item to include the removal of the **4"** water pipe and asphalt paving when the new **4"** water main is placed in service. The removed system will become the property of the Contractor.

Measurement and payment will be in accordance with **Item 506.9. Measurement and Payment** of these specifications.

ITEM NO. 1800F 4" PVC WATER PIPE

This item consists of furnishing and placing approximately **10** Linear Feet of **4"** Polyvinyl Chloride Water Pipe (C-900) in accordance with **Item 506. Open Cut – Water Conduit Installation, Item 506.5.COD: Hydrostatic Test, Item 506.6.COD: Connections To Existing Water Conduits, Item 506.6.1.COD: Water Main Tie-In During Off Hours, Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger, Item 506.7.3.2.COD: Flushing Method, Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water, Item 506.7.1.COD: Preliminary Flushing, Item 506.7.2.COD: Chlorination, Item 506.7.3.COD: Flushing, Item 506.7.4.COD: Disposal of Flushing Water, Item 506.7.5.4.COD: Sampling, Item 506.7.6.COD: Indemnification, Item 506.8.1.COD: Cut and Plugs, Item 501.14. Polyvinyl Chloride (PVC) Water Pipe, Item 501.14.5.COD: Fittings, and Item 501.14.6.COD: NSF 61 Compliance** of these specifications and addenda thereto.

This item includes fittings, polywrap for fittings, mechanical tamping, diagonal utilities, barricading and all embedment materials.

Measurement and payment will be in accordance with **Item 506.9. Measurement and Payment** of these specifications.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 1800H 6" PVC WATER PIPE

This item consists of furnishing and placing approximately **2,190** Linear Feet of **6"** Polyvinyl Chloride Water Pipe (C-900) in accordance with **Item 506. Open Cut – Water Conduit Installation, Item 506.5.COD: Hydrostatic Test, Item 506.6.COD: Connections To Existing Water Conduits, Item 506.6.1.COD: Water Main Tie-In During Off Hours, Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger, Item 506.7.3.2.COD: Flushing Method, Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water, Item 506.7.1.COD: Preliminary Flushing, Item 506.7.2.COD: Chlorination, Item 506.7.3.COD: Flushing, Item 506.7.4.COD: Disposal of Flushing Water, Item 506.7.5.4.COD: Sampling, Item 506.7.6.COD: Indemnification, Item 506.8.1.COD: Cut and Plugs, Item 501.14. Polyvinyl Chloride (PVC) Water Pipe, Item 501.14.5.COD: Fittings, and Item 501.14.6.COD: NSF 61 Compliance** of these specifications and addenda thereto.

This item includes fittings, polywrap for fittings, mechanical tamping, diagonal utilities, barricading and all embedment materials.

Measurement and payment will be in accordance with **Item 506.9. Measurement and Payment** of these specifications.

ITEM NO. 1800J 8" PVC WATER PIPE

This item consists of furnishing and placing approximately **4,780** Linear Feet of **8"** Polyvinyl Chloride Water Pipe (C-900) in accordance with **Item 506. Open Cut – Water Conduit Installation, Item 506.5.COD: Hydrostatic Test, Item 506.6.COD: Connections To Existing Water Conduits, Item 506.6.1.COD: Water Main Tie-In During Off Hours, Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger, Item 506.7.3.2.COD: Flushing Method, Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water, Item 506.7.1.COD: Preliminary Flushing, Item 506.7.2.COD: Chlorination, Item 506.7.3.COD: Flushing, Item 506.7.4.COD: Disposal of Flushing Water, Item 506.7.5.4.COD: Sampling, Item 506.7.6.COD: Indemnification, Item 506.8.1.COD: Cut and Plugs, Item 501.14. Polyvinyl Chloride (PVC) Water Pipe, Item 501.14.5.COD: Fittings, and Item 501.14.6.COD: NSF 61 Compliance** of these specifications and addenda thereto.

This item includes fittings, polywrap for fittings, mechanical tamping, diagonal utilities, barricading and all embedment materials.

Measurement and payment will be in accordance with **Item 506.9. Measurement and Payment** of these specifications.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 1800L 12" PVC WATER PIPE

This item consists of furnishing and placing approximately 80 Linear Feet of 12" Polyvinyl Chloride Water Pipe (C-900) in accordance with Item 506. Open Cut – Water Conduit Installation, Item 506.5.COD: Hydrostatic Test, Item 506.6.COD: Connections To Existing Water Conduits, Item 506.6.1.COD: Water Main Tie-In During Off Hours, Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger, Item 506.7.3.2.COD: Flushing Method, Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water, Item 506.7.1.COD: Preliminary Flushing, Item 506.7.2.COD: Chlorination, Item 506.7.3.COD: Flushing, Item 506.7.4.COD: Disposal of Flushing Water, Item 506.7.5.4.COD: Sampling, Item 506.7.6.COD: Indemnification, Item 506.8.1.COD: Cut and Plugs, Item 501.14. Polyvinyl Chloride (PVC) Water Pipe, Item 501.14.5.COD: Fittings, and Item 501.14.6.COD: NSF 61 Compliance of these specifications and addenda thereto.

This item includes fittings, polywrap for fittings, mechanical tamping, diagonal utilities, barricading and all embedment materials.

Measurement and payment will be in accordance with Item 506.9. Measurement and Payment of these specifications.

ITEM NO. 1801H 6" PVC WATER PIPE WITH NITRILE GASKETS

This item consists of furnishing and placing approximately 80 Linear Feet of 6" Polyvinyl Chloride Water Pipe (C-900) with nitrile gaskets in accordance with Item 506. Open Cut – Water Conduit Installation, Item 506.5.COD: Hydrostatic Test, Item 506.6.COD: Connections To Existing Water Conduits, Item 506.6.1.COD: Water Main Tie-In During Off Hours, Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger, Item 506.7.3.2.COD: Flushing Method, Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water, Item 506.7.1.COD: Preliminary Flushing, Item 506.7.2.COD: Chlorination, Item 506.7.3.COD: Flushing, Item 506.7.4.COD: Disposal of Flushing Water, Item 506.7.5.4.COD: Sampling, Item 506.7.6.COD: Indemnification, Item 506.8.1.COD: Cut and Plugs, Item 501.14. Polyvinyl Chloride (PVC) Water Pipe, Item 501.14.5.COD: Fittings, and Item 501.14.6.COD: NSF 61 Compliance of these specifications and addenda thereto.

This item includes fittings, polywrap for fittings, mechanical tamping, diagonal utilities, barricading and all embedment materials.

Measurement and payment will be in accordance with Item 506.9. Measurement and Payment of these specifications.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 1801J 8" PVC WATER PIPE WITH NITRILE GASKETS

This item consists of furnishing and placing approximately **1,680** Linear Feet of **8"** Polyvinyl Chloride Water Pipe (C-900) with nitrile gaskets in accordance with **Item 506. Open Cut – Water Conduit Installation, Item 506.5.COD: Hydrostatic Test, Item 506.6.COD: Connections To Existing Water Conduits, Item 506.6.1.COD: Water Main Tie-In During Off Hours, Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger, Item 506.7.3.2.COD: Flushing Method, Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water, Item 506.7.1.COD: Preliminary Flushing, Item 506.7.2.COD: Chlorination, Item 506.7.3.COD: Flushing, Item 506.7.4.COD: Disposal of Flushing Water, Item 506.7.5.4.COD: Sampling, Item 506.7.6.COD: Indemnification, Item 506.8.1.COD: Cut and Plugs, Item 501.14. Polyvinyl Chloride (PVC) Water Pipe, Item 501.14.5.COD: Fittings, and Item 501.14.6.COD: NSF 61 Compliance** of these specifications and addenda thereto.

This item includes fittings, polywrap for fittings, mechanical tamping, diagonal utilities, barricading and all embedment materials.

Measurement and payment will be in accordance with **Item 506.9. Measurement and Payment** of these specifications.

ITEM NO. 1805Q 16" PVC WATER PIPE

This item consists of furnishing and placing approximately **110** Linear Feet of **16"** Polyvinyl Chloride Water Pipe (C-905) in accordance with **Item 506. Open Cut – Water Conduit Installation, Item 506.5.COD: Hydrostatic Test, Item 506.6.COD: Connections To Existing Water Conduits, Item 506.6.1.COD: Water Main Tie-In During Off Hours, Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger, Item 506.7.3.2.COD: Flushing Method, Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water, Item 506.7.1.COD: Preliminary Flushing, Item 506.7.2.COD: Chlorination, Item 506.7.3.COD: Flushing, Item 506.7.4.COD: Disposal of Flushing Water, Item 506.7.5.4.COD: Sampling, Item 506.7.6.COD: Indemnification, Item 506.8.1.COD: Cut and Plugs, Item 501.14. Polyvinyl Chloride (PVC) Water Pipe, Item 501.14.5.COD: Fittings, and Item 501.14.6.COD: NSF 61 Compliance** of these specifications and addenda thereto.

This item includes fittings, polywrap for fittings, mechanical tamping, diagonal utilities, barricading and all embedment materials.

Measurement and payment will be in accordance with **Item 506.9. Measurement and Payment** of these specifications.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 3110J 8" PVC PRESSURE RATED WASTEWATER PIPE

This item consists of furnishing and placing approximately **13,350** Linear Feet of **8"** Polyvinyl Chloride Pressure Rated Wastewater Pipe conforming to ASTM D2241 (DR 26) Minimum Pressure Rating of 160 PSI and ASTM D3139 joints, and in accordance with **Item 507. Open Cut – Wastewater Conduit Installation, Item 507.5.1.1.COD: Infiltration Test, and Item 501.15. Polyvinyl Chloride (PVC) Pressure-Rated Pipe (SDR Series)** of these specifications and addenda thereto.

This item to include barricading and all embedment materials.

Measurement and payment will be in accordance with **Item 507.6. Measurement and Payment For Wastewater Conduit Installation** of these specifications.

ITEM NO. 3110L 12" PVC PRESSURE RATED WASTEWATER PIPE

This item consists of furnishing and placing approximately **20** Linear Feet of **12"** Polyvinyl Chloride Pressure Rated Wastewater Pipe conforming to ASTM D2241 (DR 26) Minimum Pressure Rating of 160 PSI and ASTM D3139 joints, and in accordance with **Item 507. Open Cut – Wastewater Conduit Installation, Item 507.5.1.1.COD: Infiltration Test, and Item 501.15. Polyvinyl Chloride (PVC) Pressure-Rated Pipe (SDR Series)** of these specifications and addenda thereto.

This item to include barricading and all embedment materials.

Measurement and payment will be in accordance with **Item 507.6. Measurement and Payment For Wastewater Conduit Installation** of these specifications.

ITEM NO. 3111J 8" PVC PRESSURE RATED WASTEWATER PIPE WITH NITRILE GASKETS

This item consists of furnishing and placing approximately **400** Linear Feet of **8"** Polyvinyl Chloride Pressure Rated Wastewater Pipe with nitrile gaskets conforming to ASTM D2241 (DR 26) Minimum Pressure Rating of 160 PSI and ASTM D3139 joints, and in accordance with **Item 507. Open Cut – Wastewater Conduit Installation, Item 507.5.1.1.COD: Infiltration Test, and Item 501.15. Polyvinyl Chloride (PVC) Pressure-Rated Pipe (SDR Series)** of these specifications and addenda thereto.

This item to include barricading and all embedment materials.

Measurement and payment will be in accordance with **Item 507.6. Measurement and Payment For Wastewater Conduit Installation** of these specifications.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 3520H REHABILITATION OF EXISTING 6" WASTEWATER MAIN

This item consists of the Rehabilitation of approximately **600** Linear Feet of **6"** Wastewater Main in accordance with the **DWU Standard Technical Specifications Manual, Latest Edition**. This item to include all labor, materials, equipment, barricading, and incidentals required to complete the rehabilitation of the wastewater main in accordance with these specifications and addenda thereto.

Measurement shall be the actual Linear Footage of main rehabilitated. Payment shall be at the contract Unit Price per Linear Foot complete in place.

ITEM NO. 3520J REHABILITATION OF EXISTING 8" WASTEWATER MAIN

This item consists of the Rehabilitation of approximately **350** Linear Feet of **8"** Wastewater Main in accordance with the **DWU Standard Technical Specifications Manual, Latest Edition**. This item to include all labor, materials, equipment, barricading, and incidentals required to complete the rehabilitation of the wastewater main in accordance with these specifications and addenda thereto.

Measurement shall be the actual Linear Footage of main rehabilitated. Payment shall be at the contract Unit Price per Linear Foot complete in place.

ITEM NO. 3540H POINT REPAIR OF 6" WASTEWATER MAIN

This item consists of approximately **3** point repair(s) of **6"** Wastewater Main as necessary to facilitate rehabilitation.

This item to include all labor, materials, equipment, and incidentals required to complete the repairs; including, but not limited to: excavation, trench safety and support, barricading, furnishing and installing pipe material, connection to existing main, by-pass pumping, and all backfill and embedment materials. This shall be a **contingent item** and shall only be used if directed by the Construction Engineer. Each point repair shall consist of up to twenty (20) linear feet of pipe.

Measurement shall be per each point repair complete and accepted at the contract Unit Price.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 3540J POINT REPAIR OF 8" WASTEWATER MAIN

This item consists of approximately 1 point repair(s) of 8" Wastewater Main as necessary to facilitate rehabilitation.

This item to include all labor, materials, equipment, and incidentals required to complete the repairs; including, but not limited to: excavation, trench safety and support, barricading, furnishing and installing pipe material, connection to existing main, by-pass pumping, and all backfill and embedment materials. This shall be a **contingent item** and shall only be used if directed by the Construction Engineer. Each point repair shall consist of up to twenty (20) linear feet of pipe.

Measurement shall be per each point repair complete and accepted at the contract Unit Price.

ITEM NO. 5020 EXTRA IRON FITTINGS

This item consists of furnishing and placing approximately 11 Tons of Iron Fittings in accordance with **Item 501.7.4.COD: Fittings and Item 502.5.2.COD: All Other Fittings** of these specifications and addenda thereto.

This is a **Contingency** item and is intended to provide compensation for extra fittings not called for on the plans, which are required for changes in horizontal or vertical alignment of water mains, as approved by the Construction Engineer, to avoid conflicts with existing utilities. The use of Ductile Iron Compact fittings for this item is prohibited.

Measurement and payment will be per ton of fittings installed at the CONTRACT unit price.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 5050 WATER SERVICE

This item consists of furnishing and placing approximately **200** Each Water Service on an existing or new water main. This item includes all sizes of water services, 3/4" through 2", water meter boxes and meters, 5/8" through 2". This item does not include Commercial Water Meter Vaults. This item includes tapping of the existing or new water main, removing the existing meter box and lid and old service line and replacing with a new meter box and approved lid, transferring the water service to the meter, adjusting the meter box and meter vertically and horizontally as required, and installing a new service line from the new meter box to the property line in accordance with **Item 502.10.3.2. Services and Bullheads, Item 502.10.3.2.1.COD: Procedures for Transferring Service, Item 502.10.3.2.1.1.COD: IN ADVANCE OF PAVING or Item 502.10.3.2.2.COD: NOT IN ADVANCE OF PAVING, Item 502.10.3.4.COD: NSF 61 Compliance and Item 504.2.3.6.COD: OPEN CUT WASTEWATER LATERAL AND WATER SERVICES** of these specifications and addenda thereto, and the applicable Standard Drawings.

The new meter box and lid shall be replaced to the proper grade and relocated to the correct location on a sand cushion. The disturbed area around the meter box will be replaced with sod in accordance with **Item 202.5. Sodding**, or concrete in accordance with **Item 305.2. Concrete Sidewalks, Driveway Approaches, and Barrier Free Ramps, and Item 305.2.2.2.COD: Reinforcement** to match the existing surface. If the meter is determined by the Project Manager to be defective, it will be replaced with a new meter, furnished by the City.

This bid item will also be utilized to provide a water service to a vacant lot where no meter transfer is involved. It will be the Contractor's responsibility to relocate the existing backflow prevention devices on the existing water service between the meter and property line to a proper location as directed by the Project Manager. Should any additional services be found necessary, they will be added to the contract at the same Unit Price. Likewise, should any of the listed services not be necessary, they will be removed from the contract without having any effect on the Unit Price. The provisions of **Item 104.2.1. Increased Or Decreased Quantities of Work** of the specifications regarding negotiating for revised consideration for over/underruns **do not** apply to this item.

Measurement and payment will be in accordance with **Item 502.10.3.2.2. Measurement and Payment** of these specifications and will include any costs for pipe, copper, equipment, materials and labor, all boring, tapping, crossing diagonal utilities, costs for barricading, trench safety and support for these services, encasement, embedment, and all temporary paving related items (saw-cut, base, asphalt, concrete, sidewalk, driveways, curb and/or gutter, sod), and all other work associated with this item.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 5091 INSTALL FIRE HYDRANT

This item consists of furnishing and placing approximately 11 Each Fire Hydrant in accordance with **Item 502.3. Fire Hydrants, Item 502.3.1.COD: Materials, Item 502.3.1.2.COD: Breakable Type Hydrants, Item 502.3.1.3.COD: Main Valve Seats, Item 502.3.1.4.COD: Nozzle Cap Chains, Item 502.3.1.5.COD: Flanges, Item 502.3.1.6.COD: Operating Stems, Item 502.3.1.7.COD: O-Rings, Item 502.3.1.8.COD: Provisions For Extension, Item 502.3.1.11.COD: Upperstem thread Lubrication, Item 502.3.1.12.COD: Tests and Affidavit of Compliance, Item 502.3.1.14.COD: Rejection, Item 502.3.1.15.COD: Protection of Stem Threads, Item 502.2.2.COD: Installation, Item 502.3.17.COD: Hydrant Approval** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.3.3.COD: Measurement and Payment** of these specifications and will include all items necessary to furnish and install a fire hydrant; including barricading, all paving removal and replacement, saw-cut, embedment, and concrete blocking required. This item does not include any of the fire hydrant lead. That pipe will be paid for under the appropriate 6" D.I. or 6" PVC Water Pipe bid item.

ITEM NO. 5092 REMOVING EXISTING FIRE HYDRANT

This item consists of Removing, in the most economical manner, approximately 7 Each Existing Fire Hydrant. If the Project Manager determines the fire hydrant is to be salvaged and paid for under Item No. 5093, the Contractor must take necessary precautions to insure the fire hydrant is not damaged. A cap or plug on the existing fire hydrant lead is included with this item.

ITEM NO. 5093 DELIVER FIRE HYDRANT

This item consists of delivering approximately 7 Each Existing Fire Hydrant.

This item to include loading and hauling the fire hydrant to the Dallas Water Utilities Yard located at 2863 Municipal St. The Contractor shall contact Distribution 24-48 hours prior to delivery.

This item is a **contingent item** and payment will be made only if directed by the Project Manager. If delivery is not directed, the fire hydrant shall become the property of the Contractor.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 5100H 6" GATE VALVE

This item consists of furnishing and placing approximately **14** Each **6"** Gate Valve in accordance with **Item 502.6.6.COD: Line Valve Installation and Item 502.6.1.COD: Double Disk, Metal Seated Gate Valves For Ordinary Waterworks Service Or Item 502.6.2.COD: Resilient-Seated Gate Valves For Ordinary Waterworks Service** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.6.8.COD: Measurement and Payment** of these specifications.

ITEM NO. 5100J 8" GATE VALVE

This item consists of furnishing and placing approximately **25** Each **8"** Gate Valve in accordance with **Item 502.6.6.COD: Line Valve Installation and Item 502.6.1.COD: Double Disk, Metal Seated Gate Valves For Ordinary Waterworks Service Or Item 502.6.2.COD: Resilient-Seated Gate Valves For Ordinary Waterworks Service** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.6.8.COD: Measurement and Payment** of these specifications.

ITEM NO. 5100L 12" GATE VALVE

This item consists of furnishing and placing approximately **2** Each **12"** Gate Valve in accordance with **Item 502.6.6.COD: Line Valve Installation and Item 502.6.1.COD: Double Disk, Metal Seated Gate Valves For Ordinary Waterworks Service Or Item 502.6.2.COD: Resilient-Seated Gate Valves For Ordinary Waterworks Service** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.6.8.COD: Measurement and Payment** of these specifications.

ITEM NO. 5100Q 16" GATE VALVE

This item consists of furnishing and placing approximately **4** Each **16"** Gate Valve in accordance with **Item 502.6.6.COD: Line Valve Installation and Item 502.6.1.COD: Double Disk, Metal Seated Gate Valves For Ordinary Waterworks Service Or Item 502.6.2.COD: Resilient-Seated Gate Valves For Ordinary Waterworks Service** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.6.8.COD: Measurement and Payment** of these specifications.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 5101H 6" GATE VALVE WITH NITRILE GASKETS

This item consists of furnishing and placing approximately 3 Each 6" Gate Valve with nitrile gaskets in accordance with **Item 502.6.6.COD: Line Valve Installation and Item 502.6.1.COD: Double Disk, Metal Seated Gate Valves For Ordinary Waterworks Service Or Item 502.6.2.COD: Resilient-Seated Gate Valves For Ordinary Waterworks Service** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.6.8.COD: Measurement and Payment** of these specifications.

ITEM NO. 5101J 8" GATE VALVE WITH NITRILE GASKETS

This item consists of furnishing and placing approximately 11 Each 8" Gate Valve with nitrile gaskets in accordance with **Item 502.6.6.COD: Line Valve Installation and Item 502.6.1.COD: Double Disk, Metal Seated Gate Valves For Ordinary Waterworks Service Or Item 502.6.2.COD: Resilient-Seated Gate Valves For Ordinary Waterworks Service** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.6.8.COD: Measurement and Payment** of these specifications.

ITEM NO. 5110QxH 16" x 6" TAPPING SLEEVE

This item consists of furnishing and placing approximately 1 Each 16" x 6" Tapping Sleeve in accordance with **Item 502.6.1.17. Tapping Valves and Item 502.10.2.3. Tapping Sleeves** of these specifications and addenda thereto.

Measurement and payment will be in accordance with **Item 502.5.3.COD: Measurement and Payment** of these specifications.

ITEM NO. 5600 CUT AND PLUG EXISTING WATER MAIN

This item consists of approximately 1 Each Cut and Plug Existing Water Main as indicated on the plans. The cast iron plug and barricading shall be incidental to this bid item.

Measurement and payment will be per each complete in place and shall include all labor, materials, and equipment necessary to Cut and Plug Existing Water Main.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 5610 CUT AND PLUG WATER MAIN FOR TEST

This item consists of 7 Each Cut and Plug Water Main for Test.

This is a contingent item to be used if approved by the Project Manager, in the event pressure testing of the newly constructed main proves unsatisfactory because of leaks in the existing system. In such case, the Contractor must isolate the new construction, perform the required test, and then tie the newly constructed main to the existing water main.

Measurement and payment will be per each complete in place and shall include all labor, materials, and equipment necessary to Cut and Plug Existing Water Main for Test.

ITEM NO. 5750D 2" FLUSH POINT

This item consists of furnishing and placing approximately 1 Each 2" Flush Point, complete, in accordance with **Item 502.10.3. Water Conduit Connections, Item 502.10.3.1.1.COD: Taps, Item 502.10.3.1.2.COD: Tap Assemblies, and Item 502.10.3.1.4.COD: Tapping Ductile Iron Pipe, Item 502.10.3.1.5.COD: Tapping Concrete Pipe, or Item 502.10.3.1.7.COD: Tapping of PVC Pipe** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.10.3.1.8. Measurement and Payment** of these specifications.

ITEM NO. 5755D 2" AUTOMATED FLUSH POINT

This item consists of furnishing and placing approximately 2 Each 2" Automated Flush Point, complete, in accordance with **Item 502.10.3. Water Conduit Connections, Item 502.10.3.1.1.COD: Taps, Item 502.10.3.1.2.COD: Tap Assemblies, and Item 502.10.3.1.4.COD: Tapping Ductile Iron Pipe, Item 502.10.3.1.5.COD: Tapping Concrete Pipe, or Item 502.10.3.1.7.COD: Tapping of PVC Pipe** of these specifications and addenda thereto, and the applicable Standard Drawings. This item includes the service saddle and tap, copper pipe, ball valve, meter box, automated flushing device and pedestal, and any other incidental work and materials. This item does not include the wastewater lateral and connection.

Measurement and payment will be in accordance with **Item 502.10.3.1.8. Measurement and Payment** of these specifications.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 6060 WASTEWATER LATERAL

This item consists of furnishing and placing approximately **450** Each Wastewater Lateral on an existing or new wastewater main. This item will include street, alley, and easement laterals with cleanouts, with or without caps in accordance with **Item 502.10.4. Wastewater Conduit Connections, Item 502.10.4.1.COD: Service Connection, and Item 504.2.3.6.COD: OPEN CUT WASTEWATER LATERAL AND WATER SERVICES** of these specifications and addenda thereto, and the applicable Standard Drawings.

Laterals will be replaced with the same size and type as the existing lateral or as indicated on the plans, with a minimum of 6" diameter pipe required. This item will include, if required, Polyvinyl Chloride Pressure Rated Laterals conforming to ASTM D2241 (DR 26), minimum pressure rating of 160 PSI and ASTM D3139 joints. If a deep cut connection is required, the costs will be included in this item.

The replacement shall include removal of the existing lateral, plugging the existing lateral near the main, installing a new lateral with cleanout by removing a portion of the existing main, installing a wye, connecting to the existing main with adapters for 6" and 8" mains and by tapping mains 10" and larger, installing a new lateral with cleanout and connection to the existing house lateral. Should a private wastewater lateral not exist, a wastewater mainline lateral shall be installed with a cleanout and cap, or a cap only as indicated on the plans. The disturbed area around the cleanout will be replaced with sod in accordance with **Item 202.5. Sodding**, or concrete or asphalt in accordance with **Item 305.2. Concrete Sidewalks, Driveway Approaches, and Barrier Free Ramps, and Item 305.2.2.2.COD: Reinforcement** to match the existing surface. The Contractor shall furnish a cleanout casting if lost, stolen, or damaged due to Contractor's negligence. Should any additional laterals be found necessary, they will be added to the contract at the same Unit Price. Likewise, should any of the listed laterals not be necessary, they will be removed from the contract without having any effect on the unit price. The provisions of **Item 104.2.1. Increased Or Decreased Quantities of Work** of the specifications regarding negotiating for revised consideration for over/underruns do not apply to this item

Measurement and payment will be in accordance with **Item 502.10.4.3. Measurement and Payment** of these specifications, and will include any costs for pipe, equipment, materials and labor, deep cut connections, all boring, encasement, crossing diagonal utilities, costs for barricading, trench safety and support for these laterals, embedment, and all temporary paving related items (saw-cut, base, asphalt, concrete, sidewalk, driveways, curb and/or gutter, sod) and all other work associated with this item.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 6100 WASTEWATER ACCESS DEVICE

This item consists of furnishing and placing approximately **10** Each Wastewater Access Device in accordance with the plans and Standard Drawings.

Removal of any existing conflicting manhole or cleanout, if required, will be included in this item. This item shall include barricading.

Measurement and payment will be paid for at contract Unit Price per Each, complete in place, as shall be the total compensation for the furnishing of all labor, materials, tools and equipment and incidentals necessary to complete the work, including each excavation, disposal of surplus materials, and backfill all in accordance with the plans and specifications.

ITEM NO. 6110AE 48" DIAMETER DROP CONNECTION MANHOLE

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately **1** Each **48"** Diameter Drop Connection Manhole in accordance with **Item 502.1. Manholes, Item 502.1.2.COD: Wastewater Manhole Adjustments, Item 502.1.4.8.COD: Wastewater Manhole Frame Seals, Item 502.1.4.9.COD: Interior Coatings For Manholes, and Item 502.1.7.COD: Manhole Backfill** of these specifications and addenda thereto, and the applicable Standard Drawings.

Removal of any existing conflicting manhole, if required, will be included in this item. Nonshrink grout shall be used in place of mortar. This item shall include barricading.

Measurement and payment will be in accordance with **Item 502.1.6.COD: Measurement and Payment of Manholes** of these specifications.

ITEM NO. 6130AE 48" DIAMETER WASTEWATER MANHOLE

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately **36** Each **48"** Diameter Manhole in accordance with **Item 502.1. Manholes, Item 502.1.2.COD: Wastewater Manhole Adjustments, Item 502.1.4.8.COD: Wastewater Manhole Frame Seals, Item 502.1.4.9.COD: Interior Coatings For Manholes, and Item 502.1.7.COD: Manhole Backfill** of these specifications and addenda thereto, and the applicable Standard Drawings.

Removal of any existing conflicting manhole, if required, will be included in this item. Nonshrink grout and precast concrete grade rings shall be used for adjustments of the ring and cover. This item is to include Wastewater Manhole Frame Seals for each manhole installed as per the **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition**. This item shall also include trench safety and barricades.

Measurement and payment will be in accordance with **Item 502.1.6.COD: Measurement and Payment of Manholes** of these specifications.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 6140 ABANDON EXISTING MANHOLE

This item consists of abandoning approximately **2** Each Existing Manhole, backfilling the manhole with granular material at 95% standard proctor dry density, and removing and salvaging the frame and cover as per the applicable Standard Drawing.

This item to also include the cleaning, loading, hauling, and unloading the frame and cover at the Stores Division, Yard #2, 2901 Municipal Street. The Contractor will be charged new item replacement cost for any amount lost, stolen, or broken due to the Contractor's negligence prior to delivery into Water Utilities Department Salvage Yard. This item shall also include barricading.

Measurement and payment shall be at the contract Unit Price per Each completed and accepted abandonment.

ITEM NO. 6141 VACUUM TEST FOR WASTEWATER MANHOLE

This item consists of performing approximately **37** Each Vacuum Test for Wastewater Manhole in accordance with **Item 502.1.5.2 Vacuum Testing Manholes and Item 507.5. Tests and Inspections** of these specifications.

This item shall include all materials, equipment, labor, and incidentals required to complete the test as specified. This item is a **contingent item** and payment will be made only if directed by the DWU Construction Superintendent. Should any of the listed tests not be necessary, they will be removed from the contract without having any effect on the Unit Price.

Measurement and payment shall be in accordance with **Item 502.1.5.2.1.COD: Measurement and Payment of Vacuum Testing Wastewater Manholes** of these specifications and addenda thereto.

ITEM NO. 6150AE 48" DIAMETER MANHOLE REHABILITATION

This item consists of rehabilitating approximately **1** Each **48"** Diameter Manhole with Epoxy Lining or other approved method in accordance with these specifications and addenda thereto, the applicable Standard Drawings and the **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition**.

This item includes barricading, pavement removal, replacement, and all other work required to complete the rehabilitation.

Measurement and payment shall be at contract Unit Price for complete and accepted work.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 6800 PROJECT PARTNERING

This item is intended for compensating the Contractor for all costs to implement Project Partnering as detailed in the **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition**.

This item to include hiring a third party facilitator, travel and lodging expenses, meeting room rental, program materials, reproduction costs and all costs associated with Contractor's own personnel, Subcontractors and Suppliers participating in partnering.

This is a **Contingent Item** and payment will be made, as directed by the Project Manager.

Payment for this item shall be Lump Sum.

ITEM NO. 6902 PLACEMENT OF BLOCK SODDING

This item consists of furnishing and placing approximately **720** Square Yards of Block Sodding in accordance with **Item 202.5.1. Description, Item 202.5.2. Materials, and Item 202.5.3.2. Solid Sodding** of these specifications and addenda thereto.

This is a contingent item and payment will be made, if placement is directed by the Project Manager.

Measurement will be specified ditch width with the length measured in Linear Feet.

Payment will be in accordance with **Item 202.5.4.COD: Measurement and Payment** of these Specifications.

ITEM NO. 6920 TELEVISION INSPECTION

This item consists of performing a Television Inspection on approximately **14,740** Linear Feet of Wastewater Main in accordance with **Item 507.5.2. Television Inspection** of these specifications and addenda thereto, and the **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition**.

Payment will be allowed only for inspections made to a particular section of main in accordance with **Item 507.5.2.4.COD: Measurement And Payment For Television Inspection On City Contracts**.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 6925 TRENCH EXCAVATION SAFETY AND SUPPORT

This item consists of Trench Excavation Safety and Support for approximately **22,310** Linear Feet of trench in accordance with the Occupational Safety and Health Administration Standards 1926.652 "Requirements for Protective Systems".

Trench Excavation Safety and Support shall be measured along the centerline of the trench where trench is sloped to maintain angle of repose, a trench box is utilized or trench is shored.

Payment shall be allowed for all section of trench regardless of depth.

ITEM NO. 7030 ROCK FOUNDATION

This item consists of furnishing and placing approximately **160** Cubic Yards of Rock Foundation at locations approved by the Project Manager, in accordance with **Item 504.3.2. Foundation** and **Item 504.2.2.4. Crushed Stone For Foundation** of these specifications and addenda thereto.

This is a **Contingent Item** and payment will be made as directed by the Project Manager.

Measurement and payment will be in accordance with **Item 504.3.2.1. Foundation Measurement** and **Item 504.3.2.2. Foundation Payment** of these specifications.

ITEM NO. 7050 SAND BACKFILL

This item consists of furnishing and placing approximately **300** Cubic Yards of Sand Backfill at locations approved by the Project Manager, in accordance with **Item 504.6.5. Sand Backfill** and **Item 504.2.2.6. Sand** of these specifications and addenda thereto.

This is a **Contingent Item** and payment will be made as directed by the Project Manager.

Measurement and payment will be in accordance with **Item 504.7.2.2. Final Trench Backfill** of these specifications. The price per unit of volume will remain the same, regardless of the volume used.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 7053 CEMENT STABILIZED SAND BACKFILL

This item consists of furnishing and placing approximately **100** Cubic Yards of Cement Stabilized Sand Backfill in accordance with the **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition. See 107.27.COD: Environmental Compliance.**

Measurement and payment above the pipe shall be at the trench width in accordance with **Item 504.7.1. Measurement of Backfill Material and Item 504.7.2. Payment of Backfill Material** of these specifications and the addenda thereto. Measurement and payment in other areas where placement is directed will be at the contract Unit Price per Cubic Yard of completed and accepted work.

ITEM NO. 7071 CLASS "B" CONCRETE

This item consists of furnishing and placing approximately **100** Cubic Yards of Class "B" Concrete in accordance with **Item 504.3.2. Foundation, Item 502.4.1. Concrete Blocking, and Item 702.2. Mix Design and Mixing Concrete For Structures** of these specifications and addenda thereto, and the applicable Standard Drawings. **See 107.27.COD: Environmental Compliance.**

Measurement and payment will be in accordance with **Item 504.3.2.1. Foundation Measurement and Item 504.3.2.2. Foundation Payment or Item 502.4.4. Measurement and Payment** of these specifications.

ITEM NO. 7520 TEMPORARY PAVING (HOT MIX OR HIGH PERFORMANCE MIX)

This item consists of furnishing, placing, and removing approximately **600** Tons of Hot or High Performance Mix Asphalt Pavement for Temporary Paving, as authorized by the Engineer. Hot Mix Asphalt shall conform to **Item 302.9. Hot-Mix Asphalt Pavement and 403.2.3. Hot-Mix, Cold-Laid Asphaltic Concrete (Cold Mix)** of these specifications. Hot or High Performance Mix shall be placed in accordance with **Item 402.4. Replacing Paved Surfaces** of these specifications and addenda thereto.

The method of measurement for payment will be in Tons (2,000 pounds) of material in place and accepted. The basis of payment will be based on the maximum permissible width of ditch as specified for type or kind of conduit to be constructed as shown on the plans or Standard Drawings, and a compacted thickness of 2" over flexible base.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 7525 FLEX BASE (CRUSHED ROCK) ALLEY SURFACE

This item consists of removing existing alley surface, furnishing and placing approximately **420** Cubic Yards of Crushed Rock (Flexible Base) for final alley driving surface as authorized by the Project Manager in accordance with **Item 402.4.Replacing Paved Surfaces, and 301.5. Flexible Subbase Or Base (Crushed Stone/Concrete)** of these specifications and addenda thereto.

This item also includes haul off of spoil, grading, blading, hauling, spreading, and compacting the material. **Item 104.2.1. Increased Or Decreased Quantities of Work** of these specifications **does not** apply to this bid item.

The basis of payment will be based on the maximum permissible depth of 8" of compacted stone by approximately 10' wide or as specified by the Project Manager.

ITEM NO. 7530 CONCRETE CURB AND/OR GUTTER

This item consists of furnishing and placing approximately **1,100** Linear Feet of Concrete Curb and/or Gutter in accordance with **Item 402.4.3. Replacing Curb, Gutter, Sidewalks, Driveways, Etc. and Item 305.1. Concrete Curb and Gutter** of these specifications and addenda thereto. **See 107.27.COD: Environmental Compliance.**

Measurement and payment will be in accordance with **Item 402.4.3.1. Measurement For Replacement of Curb, Gutter, Sidewalks, Driveways, Etc. and Item 402.4.10. Payment For Pavement Replacement** of these specifications.

ITEM NO. 7540 CONCRETE CURB

This item consists of furnishing and placing approximately **3,990** Linear Feet of Concrete Curb in accordance with **Item 402.4.3. Replacing Curb, Gutter, Sidewalks, Driveways, Etc. and Item 305.1. Concrete Curb and Gutter** of these specifications and addenda thereto. **See 107.27.COD: Environmental Compliance.**

Measurement and payment will be in accordance with **Item 402.4.3.1. Measurement For Replacement of Curb, Gutter, Sidewalks, Driveways, Etc. and Item 402.4.10. Payment For Pavement Replacement** of these specifications.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 7560 CRUSHED ROCK FOR TEMPORARY PAVING BASE

This item consists of furnishing and placing approximately **880** Cubic Yards of Crushed Rock (Flexible Base) for Temporary Paving Base material in accordance with **Item 402.4.COD: Replacing Paved Surfaces and Item 301.5. Flexible Subbase Or Base (Crushed Stone/Concrete)** of these specifications and addenda thereto.

Measurement and payment will be in accordance with **Item 402.4.10. Payment For Pavement Replacement** of these specifications.

ITEM NO. 7570 REINFORCED CONCRETE PAVING

This item consists of furnishing and placing approximately **3,960** Cubic Yards of Reinforced Concrete Paving in accordance with **Item 402.4.4. Replacing Reinforced Concrete Pavement, Item 303. Portland Cement Concrete Pavement and Item 303.2.1.3.2.COD: Gradation** of these specifications and addenda thereto. **See 107.27.COD: Environmental Compliance.**

This item shall also include removal and disposal of existing pavement, if it lies outside of trench width plus two feet.

Measurement and payment will be in accordance with **Item 402.4.4.1. Measurement of Reinforced Concrete Pavement and Item 402.4.10. Payment For Pavement Replacement** of these specifications.

ITEM NO. 7575 TYPE 3K-2 REINFORCED CONCRETE PAVING

This item consists of furnishing and placing approximately **100** Cubic Yards of Type 3K-2 Reinforced Concrete Paving in accordance with **Item 402.4.4. Replacing Reinforced Concrete Pavement, Item 303. Portland Cement Concrete Pavement and Item 303.2.1.3.2.COD: Gradation** of these specifications, Dallas Street Cut Standard Manual, and addenda thereto. **See 107.27.COD: Environmental Compliance.**

This item shall also include removal and disposal of existing pavement, if it lies outside of trench width plus two feet.

Measurement and payment will be in accordance with **Item 402.4.4.1. Measurement of Reinforced Concrete Pavement and Item 402.4.10. Payment For Pavement Replacement** of these specifications.

This is a **contingent item** and placement shall be made only as directed by the Project Manager. The price per unit of volume will remain the same, regardless of the volume used.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 7580 REINFORCED CONCRETE SIDEWALK

This item consists of furnishing and placing approximately **340** Square Yards of Reinforced Concrete Sidewalk in accordance with **Item 402.4.COD: Replacing Paved Surfaces, Item 305.2. Concrete Sidewalks, Driveway Approaches, and Barrier Free Ramps, and Item 305.2.2.2.COD: Reinforcement** of these specifications and addenda thereto. **See 107.27.COD: Environmental Compliance.**

This item shall also include removal and disposal of existing sidewalk, if it lies outside of trench width plus two feet.

Measurement and payment will be in accordance with **Item 402.4.3.1. Measurement For Replacement of Curb, Gutter, Sidewalks, Driveways, Etc. and Item 402.4.10. Payment For Pavement Replacement** of these specifications.

ITEM NO. 7583 REINFORCED CONCRETE DRIVEWAY

This item consists of furnishing and placing approximately **770** Square Yards of Reinforced Concrete Driveway in accordance with **Item 402.4.COD: Replacing Paved Surfaces, Item 303. Portland Cement Concrete Pavement and Item 303.2.1.3.2.COD: Gradation** of these specifications and addenda thereto. **See 107.27.COD: Environmental Compliance.** This item also includes removal and disposal of existing pavement, if it lies outside of trench width plus two feet.

Measurement and payment will be in accordance with **Item 402.4.3.1. Measurement for Replacement of Curb, Gutter, Sidewalks, Driveways, Etc. and Item 402.4.10. Payment for Pavement Replacement** of these specifications. This item requires the concrete be set at 4500 PSI strength if hand finished or 4000 PSI strength if machine finished.

ITEM NO. 7590 REINFORCED CONCRETE DRIVEWAY

This item consists of furnishing and placing approximately **30** Cubic Yards of Reinforced Concrete Driveway in accordance with **Item 402.4.COD: Replacing Paved Surfaces , Item 305.2. Concrete Sidewalks, Driveway Approaches, and Barrier Free Ramps, and Item 305.2.2.2.COD: Reinforcement** of these specifications and addenda thereto. **See 107.27.COD: Environmental Compliance.**

This item shall also include removal and disposal of existing pavement, if it lies outside of trench width plus two feet.

Measurement and payment will be in accordance with **Item 402.4.3.1. Measurement For Replacement of Curb, Gutter, Sidewalks, Driveways, Etc. and Item 402.4.10. Payment For Pavement Replacement** of these specifications.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 7600 REINFORCED CONCRETE BASE

This item consists of furnishing and placing approximately **1,840** Cubic Yards of Reinforced Concrete Base in accordance with **Item 402.4.COD: Replacing Paved Surfaces, Item 402.4.11.COD: Replacing Asphaltic Concrete Pavement with A Concrete Base, Item 303. Portland Cement Concrete Pavement and Item 303.2.1.3.2.COD: Gradation** of these specifications and addenda thereto. See **107.27.COD: Environmental Compliance**.

This item shall also include removal and disposal of existing pavement, if it lies outside of trench width plus two feet.

Measurement and payment will be in accordance with **Item 402.4.5.1. Measurement of Concrete Pavement and Asphalt Overlay and Item 402.4.10. Payment For Pavement Replacement** of these specifications.

ITEM NO. 7655 HOT MIX ASPHALT CONCRETE PAVEMENT

This item consists of furnishing and placing approximately **1,550** Tons of Hot Mix Asphalt Concrete Pavement in accordance with **Item 402.4.COD: Replacing Paved Surfaces, Item 402.4.11.COD: Replacing Asphaltic Concrete Pavement with A Concrete Base, and Item 302.9. Hot-Mix Asphalt Pavement** of these specifications and addenda thereto. A prime coat shall be applied to a completed granular base course as described in **Item 302.7. Prime Coat and Item 302.9. Hot-Mix Asphalt Pavement**, at a rate of 0.25 gallons per square yard. A tack coat shall be applied to a surface of concrete, brick, or asphalt at a rate of 0.10 gallons per square yard. Prime coat and tack coat shall be not be measured for payment, but will be subsidiary to this bid item.

This item shall also include removal and disposal of existing pavement, if it lies outside of trench width plus two feet.

Measurement and payment will be in accordance with **Item 402.4.5.1. Measurement of Concrete Pavement and Asphalt Overlay, Item 402.4.6.1. Measurement For Full Depth Hot-Mix Asphalt Pavement, or Item 402.4.7.1. Measurement For Hot-Mix Asphalt Pavement On A Flexible Base, Item 402.4.10. Payment For Pavement Replacement, and Item 402.4.11.1.COD: Measurement of Asphaltic Concrete Pavement with A Concrete Base** of these specifications.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 7712 STORM WATER POLLUTION PREVENTION PLAN

This item is to reimburse the Contractor for costs to develop, implement, and maintain the Storm Water Pollution Prevention Plan. Modification to the SWPPP or additional control items required by the Engineer will be at no additional cost.

This item to include all equipment, materials, labor, and maintenance necessary to control storm water pollution.

This is a lump sum item and payment shall be based on the percentage of construction for complete, in place, maintained, removed, and accepted work.

ITEM NO. 7730 DISPOSAL OF HEAVILY CHLORINATED WATER MAIN FLUSHING WATER

This item consists of Disposal of Heavily Chlorinated Water Main Flushing Water after sterilization or re-sterilization in accordance with the requirements of the EPA [40 C.F.R. 122.26], and **Item 506.7.3.3.COD: Disposal of Flushing Water.**

Measurement and payment will be Lump Sum, complete to include all labor, materials, and equipment necessary to dispose of the heavily chlorinated water main flushing water after sterilization or re-sterilization.

ITEM NO. 7766 DISPOSAL OF CLASS II NON-HAZARDOUS INDUSTRIAL WASTE

This item is to reimburse the Contractor for costs to handle and dispose of **400** Cubic Yards of Class II Non-hazardous Industrial Waste Soils.

This item shall include all equipment, materials, permits, approvals, treatment, transportation fees, disposal fees, labor, and all other costs necessary to handle and dispose of Class II Non-hazardous Industrial Waste Soils.

This is a contingent item and payment will only be made if directed by the Construction Engineer. Basis for payment shall be per Cubic Yard of Class II Non-hazardous Industrial Waste Soils.

ITEM NO. 7767 DISPOSAL OF CONTAMINATED GROUNDWATER

This item is to reimburse the Contractor for costs to handle and dispose of **10,000** Gallons of hazardous contaminated groundwater.

This item shall include all equipment, materials, permits, approvals, pumping to holding tank prior to testing, holding tank, treatment, transportation fees, disposal fees, labor, and all other costs necessary to handle, transport, and dispose of contaminated groundwater.

This is a contingent item and payment will only be made if directed by the Construction Engineer. Basis for payment shall be per gallon of contaminated groundwater that is disposed.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 7768 HEALTH, SAFETY, AND MONITORING PLAN

The contractor must reference the Project-Specific Soil & Groundwater Management Plan (SGMP) prepared by DWU and prepare a Health, Safety, and Monitoring (HSM) Plan that meets the requirements of OSHA's Hazardous Waste Operations and Emergency Response (HAZWOPER) Standard, 29 CFR 1910.120 or 29 CFR 1926.65, paragraph (b)(4). Contractor must provide copy of HSM Plan to DWU.

The item includes all equipment, materials, labor, testing and maintenance to meet the SGMP requirements including monitoring for potentially hazardous waste material in areas specified.

The item includes all equipment, materials, labor, testing and reporting necessary to test for Molybdenum and Tetramethylammonium Hydroxide (TMAH).

Payment will be lump sum.

ITEM NO. 8011 CONSTRUCTION SURVEYING AND STAKING OF PROPOSED WATER & WASTEWATER MAINS

This item consists of providing Construction Surveying and Staking by the Contractor's qualified personnel for approximately **23,100** Linear Feet of Proposed Water and Wastewater Main installations shown on the plan drawings and in accordance with **Item 105.4.COD: Construction Stakes** of the NCTCOG Specifications and addenda thereto.

This item shall include establishment of all horizontal and vertical controls, horizontal and vertical alignments per plan drawings, and cut depths for all proposed mains shown on the plan drawings with specific grades, elevations and profiles.

Measurement and payment will be per Linear Foot of proposed water and per Linear Foot of proposed wastewater main including instrumentation and equipment, staking materials, notes and cut sheets in final form and any other associated costs, such as barricading and traffic control for these services. Payment will be made when surveying is complete from point of beginning to point of end as shown on the plan drawings and upon submission and approval of survey data (see **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition** for approved data format). The Contractor is responsible for maintaining all staked controls and hubs in the construction area at all times and any costs for re-staking or re-establishing controls required shall be borne by the Contractor.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 8012 CONSTRUCTION SURVEYING AND STAKING OF PROPOSED STREET AND ALLEY PAVING

This item consists of providing Construction Surveying and Staking by the Contractor's qualified personnel for approximately **18,510** Linear Feet of Proposed Alley and/or Street Pavement Replacement shown on the plan drawings and in accordance with **Item 105.4.COD: Construction Stakes** of the NCTCOG Specifications and addenda thereto.

This item shall include establishment of all horizontal and vertical controls, horizontal and vertical alignments, and cut/fill depths for all proposed street and/or alley pavement replacement.

Measurement and payment will be per Linear Foot of proposed pavement including instrumentation and equipment, staking materials, notes and cut sheets in final form, and any other associated costs, such as barricading and traffic control for these services. Payment will be made when surveying is complete for the full street/alley width from point of beginning to point of end as shown on the plan drawings and upon submission and approval of survey data (see **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition** for approved data format). This item does not include pavement repairs and patches, nor does it include pavement replacement associated with bid item 7570. The Contractor is responsible for maintaining all staked controls and hubs in the construction area at all times and any costs for re-staking or re-establishing controls required shall be borne by the Contractor.

SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS

ITEM NO. 20500 INVESTIGATION

This item consists of excavating at approximately **26** each locations to a specific infrastructure(s) to determine type, size, location, elevation, and/or condition as determined by the Engineer. The disturbed area will be replaced with compacted backfill in accordance with **Item 504. Open Cut – Backfill and Item 504.6.1. Excavated Material** of these specifications and addenda thereto.

In paved areas, the pavement will be replaced with a compacted 8" thick base of Crushed Rock in accordance with **Item 402.4.COD: Replacing Paved Surfaces, and 301.5. Flexible Subbase Or Base (Crushed Stone/Concrete)**, and a compacted 2" thick surface of Hot or Cold Mix asphalt pavement for temporary paving in accordance with **Item 402.4.COD: Replacing Paved Surfaces, and Item 302.9. Hot-Mix Asphalt Pavement**.

This item is complete and includes all equipment, materials and labor, saw-cut, pavement, base, and sub-base removal, excavation, backfill, compaction, disposal of excess materials, all temporary and permanent paving, and paving related items, sidewalk, curb and/or gutter, driveways, sod, costs for barricading, trench safety and support, support for existing utilities, and all other work associated with this item.

Payment will not be made under this item if the infrastructure is to be adjusted, abandoned, or replaced prior to the placement of backfill. If the investigation is for more than one infrastructure in the same excavation, payment shall be made for only one investigation.

Measurement and payment will be per each complete in place.

END SCHEDULE A: WATER AND WASTEWATER MAIN REPLACEMENTS AT VARIOUS LOCATIONS.

A 4. BID ITEMS

SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN INSTALLATION, KILLOUGH BOULEVARD & WASCO LANE WATER & WASTEWATER

ITEM NO. 1800H 6" PVC WATER PIPE

This item consists of furnishing and placing approximately **10** Linear Feet of **6"** Polyvinyl Chloride Water Pipe (C-900) in accordance with **Item 506. Open Cut – Water Conduit Installation, Item 506.5.COD: Hydrostatic Test, Item 506.6.COD: Connections To Existing Water Conduits, Item 506.6.1.COD: Water Main Tie-In During Off Hours, Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger, Item 506.7.3.2.COD: Flushing Method, Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water, Item 506.7.1.COD: Preliminary Flushing, Item 506.7.2.COD: Chlorination, Item 506.7.3.COD: Flushing, Item 506.7.4.COD: Disposal of Flushing Water, Item 506.7.5.4.COD: Sampling, Item 506.7.6.COD: Indemnification, Item 506.8.1.COD: Cut and Plugs, Item 501.14. Polyvinyl Chloride (PVC) Water Pipe, Item 501.14.5.COD: Fittings, and Item 501.14.6.COD: NSF 61 Compliance** of these specifications and addenda thereto.

This item includes fittings, polywrap for fittings, mechanical tamping, diagonal utilities, barricading and all embedment materials.

Measurement and payment will be in accordance with **Item 506.9. Measurement and Payment** of these specifications.

ITEM NO. 1800J 8" PVC WATER PIPE

This item consists of furnishing and placing approximately **2,180** Linear Feet of **8"** Polyvinyl Chloride Water Pipe (C-900) in accordance with **Item 506. Open Cut – Water Conduit Installation, Item 506.5.COD: Hydrostatic Test, Item 506.6.COD: Connections To Existing Water Conduits, Item 506.6.1.COD: Water Main Tie-In During Off Hours, Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger, Item 506.7.3.2.COD: Flushing Method, Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water, Item 506.7.1.COD: Preliminary Flushing, Item 506.7.2.COD: Chlorination, Item 506.7.3.COD: Flushing, Item 506.7.4.COD: Disposal of Flushing Water, Item 506.7.5.4.COD: Sampling, Item 506.7.6.COD: Indemnification, Item 506.8.1.COD: Cut and Plugs, Item 501.14. Polyvinyl Chloride (PVC) Water Pipe, Item 501.14.5.COD: Fittings, and Item 501.14.6.COD: NSF 61 Compliance** of these specifications and addenda thereto.

This item includes fittings, polywrap for fittings, mechanical tamping, diagonal utilities, barricading and all embedment materials.

Measurement and payment will be in accordance with **Item 506.9. Measurement and Payment** of these specifications.

**SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN
INSTALLATION, KILLOUGH BOULEVARD & WASCO LANE
WATER & WASTEWATER**

ITEM NO. 3100N 15" PVC WASTEWATER PIPE

This item consists of furnishing and placing approximately **1,320** Linear Feet of **15"** Polyvinyl Chloride Wastewater Pipe in accordance with **Item 507. Open Cut – Wastewater Conduit Installation, Item 507.5.1.1.COD: Infiltration Test, and Item 501.2. Clay Wastewater Pipe** of these specifications and addenda thereto.

This item to include all embedment materials and barricading.

Measurement and payment will be in accordance with **Item 507.6. Measurement and Payment For Wastewater Conduit Installation** of these specifications.

ITEM NO. 3100R 18" PVC WASTEWATER PIPE

This item consists of furnishing and placing approximately **1,390** Linear Feet of **18"** Polyvinyl Chloride Wastewater Pipe in accordance with **Item 507. Open Cut – Wastewater Conduit Installation, Item 507.5.1.1.COD: Infiltration Test, and Item 501.2. Clay Wastewater Pipe** of these specifications and addenda thereto.

This item to include all embedment materials and barricading.

Measurement and payment will be in accordance with **Item 507.6. Measurement and Payment For Wastewater Conduit Installation** of these specifications.

ITEM NO. 3100U 21" PVC WASTEWATER PIPE

This item consists of furnishing and placing approximately **3,820** Linear Feet of **21"** Polyvinyl Chloride Wastewater Pipe in accordance with **Item 507. Open Cut – Wastewater Conduit Installation, Item 507.5.1.1.COD: Infiltration Test, and Item 501.2. Clay Wastewater Pipe** of these specifications and addenda thereto.

This item to include all embedment materials and barricading.

Measurement and payment will be in accordance with **Item 507.6. Measurement and Payment For Wastewater Conduit Installation** of these specifications.

SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN INSTALLATION, KILLOUGH BOULEVARD & WASCO LANE WATER & WASTEWATER

ITEM NO. 3110J 8" PVC PRESSURE RATED WASTEWATER PIPE

This item consists of furnishing and placing approximately **3,990** Linear Feet of **8"** Polyvinyl Chloride Pressure Rated Wastewater Pipe conforming to ASTM D2241 (DR 26) Minimum Pressure Rating of 160 PSI and ASTM D3139 joints, and in accordance with **Item 507. Open Cut – Wastewater Conduit Installation, Item 507.5.1.1.COD: Infiltration Test, and Item 501.15. Polyvinyl Chloride (PVC) Pressure-Rated Pipe (SDR Series)** of these specifications and addenda thereto.

This item to include barricading and all embedment materials.

Measurement and payment will be in accordance with **Item 507.6. Measurement and Payment For Wastewater Conduit Installation** of these specifications.

ITEM NO. 3110K 10" PVC PRESSURE RATED WASTEWATER PIPE

This item consists of furnishing and placing approximately **880** Linear Feet of **10"** Polyvinyl Chloride Pressure Rated Wastewater Pipe conforming to ASTM D2241 (DR 26) Minimum Pressure Rating of 160 PSI and ASTM D3139 joints, and in accordance with **Item 507. Open Cut – Wastewater Conduit Installation, Item 507.5.1.1.COD: Infiltration Test, and Item 501.15. Polyvinyl Chloride (PVC) Pressure-Rated Pipe (SDR Series)** of these specifications and addenda thereto.

This item to include barricading and all embedment materials.

Measurement and payment will be in accordance with **Item 507.6. Measurement and Payment For Wastewater Conduit Installation** of these specifications.

ITEM NO. 3560 CONNECTION TO EXISTING MANHOLE

This item consists of furnishing and placing approximately **1** Each Connection to an Existing Manhole, in accordance with **Item 502.1. Manholes, Item 502.1.2.COD: Wastewater Manhole Adjustments, Item 502.1.4.8.COD: Wastewater Manhole Frame Seals, and Item 502.1.7.COD: Manhole Backfill** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be per each in place in accordance with **Item 502.1.6.COD: Measurement and Payment of Manholes** of these specifications.

**SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN
INSTALLATION, KILLOUGH BOULEVARD & WASCO LANE
WATER & WASTEWATER**

ITEM NO. 3700NX 15" EXTRA DEPTH WASTEWATER PIPE (+20')

This item consists of additional excavation of **15"** Wastewater Pipe Extra Depth for **650** Linear Feet. This item is supplementary to the pipe item for extra depth exceeding twenty vertical feet and shall be paid per Linear Foot for the distance where depth is greater than twenty vertical feet measured to the bottom of the embedment zone.

Measurement and Payment will be per Linear Foot for the distance where depth is greater than twenty vertical feet measured to the bottom of the embedment zone and will include any equipment, materials, and labor, crossing diagonal utilities, costs for barricading, and trench safety and support for these mains.

ITEM NO. 3700RX 18" EXTRA DEPTH WASTEWATER PIPE (+20')

This item consists of additional excavation of **18"** Wastewater Pipe Extra Depth for **1,390** Linear Feet. This item is supplementary to the pipe item for extra depth exceeding twenty vertical feet and shall be paid per Linear Foot for the distance where depth is greater than twenty vertical feet measured to the bottom of the embedment zone.

Measurement and Payment will be per Linear Foot for the distance where depth is greater than twenty vertical feet measured to the bottom of the embedment zone and will include any equipment, materials, and labor, crossing diagonal utilities, costs for barricading, and trench safety and support for these mains.

ITEM NO. 3700UX 21" EXTRA DEPTH WASTEWATER PIPE (+20')

This item consists of additional excavation of **21"** Wastewater Pipe Extra Depth for **3,670** Linear Feet. This item is supplementary to the pipe item for extra depth exceeding twenty vertical feet and shall be paid per Linear Foot for the distance where depth is greater than twenty vertical feet measured to the bottom of the embedment zone.

Measurement and Payment will be per Linear Foot for the distance where depth is greater than twenty vertical feet measured to the bottom of the embedment zone and will include any equipment, materials, and labor, crossing diagonal utilities, costs for barricading, and trench safety and support for these mains.

**SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN
INSTALLATION, KILLOUGH BOULEVARD & WASCO LANE
WATER & WASTEWATER**

ITEM NO. 5020 EXTRA IRON FITTINGS

This item consists of furnishing and placing approximately **3** Tons of Iron Fittings in accordance with **Item 501.7.4.COD: Fittings and Item 502.5.2.COD: All Other Fittings** of these specifications and addenda thereto.

This is a **Contingency** item and is intended to provide compensation for extra fittings not called for on the plans, which are required for changes in horizontal or vertical alignment of water mains, as approved by the Construction Engineer, to avoid conflicts with existing utilities. The use of Ductile Iron Compact fittings for this item is prohibited.

Measurement and payment will be per ton of fittings installed at the CONTRACT unit price.

ITEM NO. 5091 INSTALL FIRE HYDRANT

This item consists of furnishing and placing approximately **1** Each Fire Hydrant in accordance with **Item 502.3. Fire Hydrants, Item 502.3.1.COD: Materials, Item 502.3.1.2.COD: Breakable Type Hydrants, Item 502.3.1.3.COD: Main Valve Seats, Item 502.3.1.4.COD: Nozzle Cap Chains, Item 502.3.1.5.COD: Flanges, Item 502.3.1.6.COD: Operating Stems, Item 502.3.1.7.COD: O-Rings, Item 502.3.1.8.COD: Provisions For Extension, Item 502.3.1.11.COD: Upperstem thread Lubrication, Item 502.3.1.12.COD: Tests and Affidavit of Compliance, Item 502.3.1.14.COD: Rejection, Item 502.3.1.15.COD: Protection of Stem Threads, Item 502.2.2.COD: Installation, Item 502.3.17.COD: Hydrant Approval** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.3.3.COD: Measurement and Payment** of these specifications and will include all items necessary to furnish and install a fire hydrant; including barricading, all paving removal and replacement, saw-cut, embedment, and concrete blocking required. This item does not include any of the fire hydrant lead. That pipe will be paid for under the appropriate 6" D.I. or 6" PVC Water Pipe bid item.

**SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN
INSTALLATION, KILLOUGH BOULEVARD & WASCO LANE
WATER & WASTEWATER**

ITEM NO. 5100H 6" GATE VALVE

This item consists of furnishing and placing approximately 1 Each 6" Gate Valve in accordance with **Item 502.6.6.COD: Line Valve Installation and Item 502.6.1.COD: Double Disk, Metal Seated Gate Valves For Ordinary Waterworks Service Or Item 502.6.2.COD: Resilient-Seated Gate Valves For Ordinary Waterworks Service** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.6.8.COD: Measurement and Payment** of these specifications.

ITEM NO. 5100J 8" GATE VALVE

This item consists of furnishing and placing approximately 5 Each 8" Gate Valve in accordance with **Item 502.6.6.COD: Line Valve Installation and Item 502.6.1.COD: Double Disk, Metal Seated Gate Valves For Ordinary Waterworks Service Or Item 502.6.2.COD: Resilient-Seated Gate Valves For Ordinary Waterworks Service** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.6.8.COD: Measurement and Payment** of these specifications.

ITEM NO. 5110LxJ 12" x 8" TAPPING SLEEVE

This item consists of furnishing and placing approximately 1 Each 12" x 8" Tapping Sleeve in accordance with **Item 502.6.1.17. Tapping Valves and Item 502.10.2.3. Tapping Sleeves** of these specifications and addenda thereto.

Measurement and payment will be in accordance with **Item 502.5.3.COD: Measurement and Payment** of these specifications.

ITEM NO. 5755D 2" AUTOMATED FLUSH POINT

This item consists of furnishing and placing approximately 1 Each 2" Automated Flush Point, complete, in accordance with **Item 502.10.3. Water Conduit Connections, Item 502.10.3.1.1.COD: Taps, Item 502.10.3.1.2.COD: Tap Assemblies, and Item 502.10.3.1.4.COD: Tapping Ductile Iron Pipe, Item 502.10.3.1.5.COD: Tapping Concrete Pipe, or Item 502.10.3.1.7.COD: Tapping of PVC Pipe** of these specifications and addenda thereto, and the applicable Standard Drawings. This item includes the service saddle and tap, copper pipe, ball valve, meter box, automated flushing device and pedestal, and any other incidental work and materials. This item does not include the wastewater lateral and connection.

Measurement and payment will be in accordance with **Item 502.10.3.1.8. Measurement and Payment** of these specifications.

**SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN
INSTALLATION, KILLOUGH BOULEVARD & WASCO LANE
WATER & WASTEWATER**

ITEM NO. 5990N 15" WASTEWATER MAIN (BOTOC)

This item consists of approximately **58** Linear Feet of **15"** Wastewater Main to be installed By Other Than Open Cut in accordance with **Item 503.3. Methods of Jacking, Boring Or Tunneling, Item 503.3.2.COD: Materials, Item 503.3.3.COD: Construction Methods, and Item 503.3.3.1.COD: General** of these specifications and addenda thereto.

The **15"** carrier pipe is not to be included in this item. The encasement pipe, if required, is included in this item.

Measurement and payment will be in accordance with **Item 503.4. Measurement and Payment** of these specifications.

ITEM NO. 5990U 21" WASTEWATER MAIN (BOTOC)

This item consists of approximately **31** Linear Feet of **21"** Wastewater Main to be installed By Other Than Open Cut in accordance with **Item 503.3. Methods of Jacking, Boring Or Tunneling, Item 503.3.2.COD: Materials, Item 503.3.3.COD: Construction Methods, and Item 503.3.3.1.COD: General** of these specifications and addenda thereto.

The **21"** carrier pipe is not to be included in this item. The encasement pipe, if required, is included in this item.

Measurement and payment will be in accordance with **Item 503.4. Measurement and Payment** of these specifications.

**ITEM NO. 6020U RAILROAD CROSSING FOR 21" WASTEWATER MAIN
(BOTOC)**

This item consists of approximately **119** Linear Feet of Railroad Crossing for the proposed **21"** Wastewater Main By Other Than Open Cut in accordance with **Item 509.4.COD: Railroad Crossings, Item 503.3. Methods of Jacking, Boring Or Tunneling, Item 503.3.2.COD: Materials, Item 503.3.3.COD: Construction Methods, and Item 503.3.3.1.COD: General** of these specifications and addenda thereto, and the applicable Standard Drawings.

This item to include the manhole, if shown on the plans. The **21"** carrier pipe is not to be included in this item. The encasement pipe is included in this item.

Measurement and payment will be in accordance with **Item 509.6. Measurement and Payment of Crossings** of these specifications.

**SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN
INSTALLATION, KILLOUGH BOULEVARD & WASCO LANE
WATER & WASTEWATER**

ITEM NO. 6060 WASTEWATER LATERAL

This item consists of furnishing and placing approximately 1 Each Wastewater Lateral on an existing or new wastewater main. This item will include street, alley, and easement laterals with cleanouts, with or without caps in accordance with **Item 502.10.4. Wastewater Conduit Connections, Item 502.10.4.1.COD: Service Connection, and Item 504.2.3.6.COD: OPEN CUT WASTEWATER LATERAL AND WATER SERVICES** of these specifications and addenda thereto, and the applicable Standard Drawings.

Laterals will be replaced with the same size and type as the existing lateral or as indicated on the plans, with a minimum of 6" diameter pipe required. This item will include, if required, Polyvinyl Chloride Pressure Rated Laterals conforming to ASTM D2241 (DR 26), minimum pressure rating of 160 PSI and ASTM D3139 joints. If a deep cut connection is required, the costs will be included in this item.

The replacement shall include removal of the existing lateral, plugging the existing lateral near the main, installing a new lateral with cleanout by removing a portion of the existing main, installing a wye, connecting to the existing main with adapters for 6" and 8" mains and by tapping mains 10" and larger, installing a new lateral with cleanout and connection to the existing house lateral. Should a private wastewater lateral not exist, a wastewater mainline lateral shall be installed with a cleanout and cap, or a cap only as indicated on the plans. The disturbed area around the cleanout will be replaced with sod in accordance with **Item 202.5. Sodding**, or concrete or asphalt in accordance with **Item 305.2. Concrete Sidewalks, Driveway Approaches, and Barrier Free Ramps, and Item 305.2.2.2.COD: Reinforcement** to match the existing surface. The Contractor shall furnish a cleanout casting if lost, stolen, or damaged due to Contractor's negligence. Should any additional laterals be found necessary, they will be added to the contract at the same Unit Price. Likewise, should any of the listed laterals not be necessary, they will be removed from the contract without having any effect on the unit price. The provisions of **Item 104.2.1. Increased Or Decreased Quantities of Work** of the specifications regarding negotiating for revised consideration for over/underruns do not apply to this item

Measurement and payment will be in accordance with **Item 502.10.4.3. Measurement and Payment** of these specifications, and will include any costs for pipe, equipment, materials and labor, deep cut connections, all boring, encasement, crossing diagonal utilities, costs for barricading, trench safety and support for these laterals, embedment, and all temporary paving related items (saw-cut, base, asphalt, concrete, sidewalk, driveways, curb and/or gutter, sod) and all other work associated with this item.

**SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN
INSTALLATION, KILLOUGH BOULEVARD & WASCO LANE
WATER & WASTEWATER**

ITEM NO. 6080 STANDARD MAINLINE CLEANOUT

This item consists of furnishing and placing approximately **15** Each Standard Mainline Cleanout in accordance with **Item 502.2. Wastewater Main Cleanouts** of these specifications and addenda thereto, and the applicable Standard Drawings.

This item shall include barricading
Measurement and payment will be in accordance with **Item 502.2.3. Measurement and Payment of Cleanouts** of these specifications.

ITEM NO. 6110AE 48" DIAMETER DROP CONNECTION MANHOLE

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately **2** Each **48"** Diameter Drop Connection Manhole in accordance with **Item 502.1. Manholes, Item 502.1.2.COD: Wastewater Manhole Adjustments, Item 502.1.4.8.COD: Wastewater Manhole Frame Seals, Item 502.1.4.9.COD: Interior Coatings For Manholes, and Item 502.1.7.COD: Manhole Backfill** of these specifications and addenda thereto, and the applicable Standard Drawings.

Removal of any existing conflicting manhole, if required, will be included in this item. Nonshrink grout shall be used in place of mortar. This item shall include barricading.

Measurement and payment will be in accordance with **Item 502.1.6.COD: Measurement and Payment of Manholes** of these specifications.

ITEM NO. 6110AG 60" DIAMETER DROP CONNECTION MANHOLE

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately **2** Each **60"** Diameter Drop Connection Manhole in accordance with **Item 502.1. Manholes, Item 502.1.2.COD: Wastewater Manhole Adjustments, Item 502.1.4.8.COD: Wastewater Manhole Frame Seals, Item 502.1.4.9.COD: Interior Coatings For Manholes, and Item 502.1.7.COD: Manhole Backfill** of these specifications and addenda thereto, and the applicable Standard Drawings.

Removal of any existing conflicting manhole, if required, will be included in this item. Nonshrink grout shall be used in place of mortar. This item shall include barricading.

Measurement and payment will be in accordance with **Item 502.1.6.COD: Measurement and Payment of Manholes** of these specifications.

**SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN
INSTALLATION, KILLOUGH BOULEVARD & WASCO LANE
WATER & WASTEWATER**

ITEM NO. 6120AG 60" DIAMETER PRESSURE TYPE MANHOLE

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately **3** Each **60"** Diameter Pressure Type Manhole in accordance with **Item 502.1. Manholes, Item 502.1.2.COD: Wastewater Manhole Adjustments, Item 502.1.4.8.COD: Wastewater Manhole Frame Seals, Item 502.1.4.9.COD: Interior Coatings For Manholes, and Item 502.1.7.COD: Manhole Backfill** of these specifications and addenda thereto, and the applicable Standard Drawings.

Removal of any existing conflicting manhole, if required, will be included in this item. Nonshrink grout shall be used in place of mortar. This item shall include barricading.

Measurement and payment will be in accordance with **Item 502.1.6.COD: Measurement and Payment of Manholes** of these specifications.

ITEM NO. 6130AE 48" DIAMETER WASTEWATER MANHOLE

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately **18** Each **48"** Diameter Manhole in accordance with **Item 502.1. Manholes, Item 502.1.2.COD: Wastewater Manhole Adjustments, Item 502.1.4.8.COD: Wastewater Manhole Frame Seals, Item 502.1.4.9.COD: Interior Coatings For Manholes, and Item 502.1.7.COD: Manhole Backfill** of these specifications and addenda thereto, and the applicable Standard Drawings.

Removal of any existing conflicting manhole, if required, will be included in this item. Nonshrink grout and precast concrete grade rings shall be used for adjustments of the ring and cover. This item is to include Wastewater Manhole Frame Seals for each manhole installed as per the **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition**. This item shall also include trench safety and barricades.

Measurement and payment will be in accordance with **Item 502.1.6.COD: Measurement and Payment of Manholes** of these specifications.

**SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN
INSTALLATION, KILLOUGH BOULEVARD & WASCO LANE
WATER & WASTEWATER**

ITEM NO. 6130AG 60" DIAMETER WASTEWATER MANHOLE

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately 7 Each 60" Diameter Manhole in accordance with **Item 502.1. Manholes, Item 502.1.2.COD: Wastewater Manhole Adjustments, Item 502.1.4.8.COD: Wastewater Manhole Frame Seals, Item 502.1.4.9.COD: Interior Coatings For Manholes, and Item 502.1.7.COD: Manhole Backfill** of these specifications and addenda thereto, and the applicable Standard Drawings.

Removal of any existing conflicting manhole, if required, will be included in this item. Nonshrink grout and precast concrete grade rings shall be used for adjustments of the ring and cover. This item is to include Wastewater Manhole Frame Seals for each manhole installed as per the **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition**. This item shall also include trench safety and barricades.

Measurement and payment will be in accordance with **Item 502.1.6.COD: Measurement and Payment of Manholes** of these specifications.

ITEM NO. 6141 VACUUM TEST FOR WASTEWATER MANHOLE

This item consists of performing approximately 32 Each Vacuum Test for Wastewater Manhole in accordance with **Item 502.1.5.2 Vacuum Testing Manholes and Item 507.5. Tests and Inspections** of these specifications.

This item shall include all materials, equipment, labor, and incidentals required to complete the test as specified. This item is a **contingent item** and payment will be made only if directed by the DWU Construction Superintendent. Should any of the listed tests not be necessary, they will be removed from the contract without having any effect on the Unit Price.

Measurement and payment shall be in accordance with **Item 502.1.5.2.1.COD: Measurement and Payment of Vacuum Testing Wastewater Manholes** of these specifications and addenda thereto.

**SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN
INSTALLATION, KILLOUGH BOULEVARD & WASCO LANE
WATER & WASTEWATER**

ITEM NO. 6240 TREE

This item consists of furnishing and placing approximately 1 Each Tree at locations approved by the Project Manager, in accordance with the **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition.**

Measurement and payment will be in accordance with the **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition.**

ITEM NO. 6260 CLEARING AND GRUBBING

This item consists of required Clearing and Grubbing within the limits shown on the plans and in accordance with **Item 202.1. Removal, Protection, and Replacement of Trees, Shrubbery, Plants, Sod, and Other Vegetation and Item 202.1.1.COD: Trees** of these specifications and addenda thereto.

Payment will be Lump Sum at contract bid price.

ITEM NO. 6905 PLACEMENT OF SEED

This item consists of furnishing and placing approximately 32,681 Square Yards of Seed in accordance with **Item 202.6.1. General., Item 202.6.3. Planting Season and Application Rates, Item 202.6.4.1. General and Item 202.6.4.6. Watering, Maintaining, and Finishing Seeded Areas** of these specifications and addenda thereto.

Measurement and payment will be in accordance with **Item 202.6.5.COD: Measurement and Payment** of these Specifications.

ITEM NO. 6920 TELEVISION INSPECTION

This item consists of performing a Television Inspection on approximately 11,390 Linear Feet of Wastewater Main in accordance with **Item 507.5.2. Television Inspection** of these specifications and addenda thereto, and the **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition.**

Payment will be allowed only for inspections made to a particular section of main in accordance with **Item 507.5.2.4.COD: Measurement And Payment For Television Inspection On City Contracts.**

**SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN
INSTALLATION, KILLOUGH BOULEVARD & WASCO LANE
WATER & WASTEWATER**

ITEM NO. 6925 TRENCH EXCAVATION SAFETY AND SUPPORT

This item consists of Trench Excavation Safety and Support for approximately **12,850** Linear Feet of trench in accordance with the Occupational Safety and Health Administration Standards 1926.652 "Requirements for Protective Systems".

Trench Excavation Safety and Support shall be measured along the centerline of the trench where trench is sloped to maintain angle of repose, a trench box is utilized or trench is shored. Payment shall be allowed for all section of trench regardless of depth.

ITEM NO. 7030 ROCK FOUNDATION

This item consists of furnishing and placing approximately **176** Cubic Yards of Rock Foundation at locations approved by the Project Manager, in accordance with **Item 504.3.2. Foundation and Item 504.2.2.4. Crushed Stone For Foundation** of these specifications and addenda thereto.

This is a **Contingent Item** and payment will be made as directed by the Project Manager.

Measurement and payment will be in accordance with **Item 504.3.2.1. Foundation Measurement and Item 504.3.2.2. Foundation Payment** of these specifications.

ITEM NO. 7044 FOUR "F" FLOWABLE BASE - HIGH STRENGTH, FAST SET

This item consists of furnishing and placing approximately **60** Cubic Yards of Four "F" Flowable Base-High Strength, Fast Set in accordance with **Item IV.3.d of the Department of Public Works Pavement Cut and Repair Standards Manual, latest edition** of these specifications and addenda thereto.

This is a **Contingent Item** and payment will be made as directed by the Project Manager. **See 107.27.COD: Environmental Compliance.**

Measurement and payment shall be at the contract Unit Price per Cubic Yard for completed and accepted work. The price per unit of volume will remain the same, regardless of the volume used.

**SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN
INSTALLATION, KILLOUGH BOULEVARD & WASCO LANE
WATER & WASTEWATER**

ITEM NO. 7050 SAND BACKFILL

This item consists of furnishing and placing approximately **300** Cubic Yards of Sand Backfill at locations approved by the Project Manager, in accordance with **Item 504.6.5. Sand Backfill and Item 504.2.2.6. Sand** of these specifications and addenda thereto.

This is a **Contingent Item** and payment will be made as directed by the Project Manager.

Measurement and payment will be in accordance with **Item 504.7.2.2. Final Trench Backfill** of these specifications. The price per unit of volume will remain the same, regardless of the volume used.

ITEM NO. 7071 CLASS "B" CONCRETE

This item consists of furnishing and placing approximately **10** Cubic Yards of Class "B" Concrete in accordance with **Item 504.3.2. Foundation, Item 502.4.1. Concrete Blocking, and Item 702.2. Mix Design and Mixing Concrete For Structures** of these specifications and addenda thereto, and the applicable Standard Drawings. **See 107.27.COD: Environmental Compliance.**

Measurement and payment will be in accordance with **Item 504.3.2.1. Foundation Measurement and Item 504.3.2.2. Foundation Payment or Item 502.4.4. Measurement and Payment** of these specifications.

**ITEM NO. 7520 TEMPORARY PAVING (HOT MIX OR HIGH
PERFORMANCE MIX)**

This item consists of furnishing, placing, and removing approximately **226** Tons of Hot or High Performance Mix Asphalt Pavement for Temporary Paving, as authorized by the Engineer. Hot Mix Asphalt shall conform to **Item 302.9. Hot-Mix Asphalt Pavement and 403.2.3. Hot-Mix, Cold-Laid Asphaltic Concrete (Cold Mix)** of these specifications. Hot or High Performance Mix shall be placed in accordance with **Item 402.4. Replacing Paved Surfaces** of these specifications and addenda thereto.

The method of measurement for payment will be in Tons (2,000 pounds) of material in place and accepted. The basis of payment will be based on the maximum permissible width of ditch as specified for type or kind of conduit to be constructed as shown on the plans or Standard Drawings, and a compacted thickness of 2" over flexible base.

**SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN
INSTALLATION, KILLOUGH BOULEVARD & WASCO LANE
WATER & WASTEWATER**

ITEM NO. 7525 FLEX BASE (CRUSHED ROCK) ALLEY SURFACE

This item consists of removing existing alley surface, furnishing and placing approximately **50** Cubic Yards of Crushed Rock (Flexible Base) for final alley driving surface as authorized by the Project Manager in accordance with **Item 402.4.Replacing Paved Surfaces, and 301.5. Flexible Subbase Or Base (Crushed Stone/Concrete)** of these specifications and addenda thereto.

This item also includes haul off of spoil, grading, blading, hauling, spreading, and compacting the material. **Item 104.2.1. Increased Or Decreased Quantities of Work** of these specifications **does not** apply to this bid item.

The basis of payment will be based on the maximum permissible depth of 8" of compacted stone by approximately 10' wide or as specified by the Project Manager.

ITEM NO. 7530 CONCRETE CURB AND/OR GUTTER

This item consists of furnishing and placing approximately **20** Linear Feet of Concrete Curb and/or Gutter in accordance with **Item 402.4.3. Replacing Curb, Gutter, Sidewalks, Driveways, Etc. and Item 305.1. Concrete Curb and Gutter** of these specifications and addenda thereto. **See 107.27.COD: Environmental Compliance.**

Measurement and payment will be in accordance with **Item 402.4.3.1. Measurement For Replacement of Curb, Gutter, Sidewalks, Driveways, Etc. and Item 402.4.10. Payment For Pavement Replacement** of these specifications.

ITEM NO. 7560 CRUSHED ROCK FOR TEMPORARY PAVING BASE

This item consists of furnishing and placing approximately **159** Cubic Yards of Crushed Rock (Flexible Base) for Temporary Paving Base material in accordance with **Item 402.4.COD: Replacing Paved Surfaces and Item 301.5. Flexible Subbase Or Base (Crushed Stone/Concrete)** of these specifications and addenda thereto.

Measurement and payment will be in accordance with **Item 402.4.10. Payment For Pavement Replacement** of these specifications.

**SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN
INSTALLATION, KILLOUGH BOULEVARD & WASCO LANE
WATER & WASTEWATER**

ITEM NO. 7570 REINFORCED CONCRETE PAVING

This item consists of furnishing and placing approximately **885** Cubic Yards of Reinforced Concrete Paving in accordance with **Item 402.4.4. Replacing Reinforced Concrete Pavement, Item 303. Portland Cement Concrete Pavement and Item 303.2.1.3.2.COD: Gradation** of these specifications and addenda thereto. **See 107.27.COD: Environmental Compliance.**

This item shall also include removal and disposal of existing pavement, if it lies outside of trench width plus two feet.

Measurement and payment will be in accordance with **Item 402.4.4.1. Measurement of Reinforced Concrete Pavement and Item 402.4.10. Payment For Pavement Replacement** of these specifications.

ITEM NO. 7580 REINFORCED CONCRETE SIDEWALK

This item consists of furnishing and placing approximately **24** Square Yards of Reinforced Concrete Sidewalk in accordance with **Item 402.4.COD: Replacing Paved Surfaces, Item 305.2. Concrete Sidewalks, Driveway Approaches, and Barrier Free Ramps, and Item 305.2.2.2.COD: Reinforcement** of these specifications and addenda thereto. **See 107.27.COD: Environmental Compliance.**

This item shall also include removal and disposal of existing sidewalk, if it lies outside of trench width plus two feet.

Measurement and payment will be in accordance with **Item 402.4.3.1. Measurement For Replacement of Curb, Gutter, Sidewalks, Driveways, Etc. and Item 402.4.10. Payment For Pavement Replacement** of these specifications.

ITEM NO. 7600 REINFORCED CONCRETE BASE

This item consists of furnishing and placing approximately **33** Cubic Yards of Reinforced Concrete Base in accordance with **Item 402.4.COD: Replacing Paved Surfaces, Item 402.4.11.COD: Replacing Asphaltic Concrete Pavement with A Concrete Base, Item 303. Portland Cement Concrete Pavement and Item 303.2.1.3.2.COD: Gradation** of these specifications and addenda thereto. **See 107.27.COD: Environmental Compliance.**

This item shall also include removal and disposal of existing pavement, if it lies outside of trench width plus two feet.

Measurement and payment will be in accordance with **Item 402.4.5.1. Measurement of Concrete Pavement and Asphalt Overlay and Item 402.4.10. Payment For Pavement Replacement** of these specifications.

**SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN
INSTALLATION, KILLOUGH BOULEVARD & WASCO LANE
WATER & WASTEWATER**

ITEM NO. 7655 HOT MIX ASPHALT CONCRETE PAVEMENT

This item consists of furnishing and placing approximately **22** Tons of Hot Mix Asphalt Concrete Pavement in accordance with **Item 402.4.COD: Replacing Paved Surfaces, Item 402.4.11.COD: Replacing Asphaltic Concrete Pavement with A Concrete Base, and Item 302.9. Hot-Mix Asphalt Pavement** of these specifications and addenda thereto. A prime coat shall be applied to a completed granular base course as described in **Item 302.7. Prime Coat and Item 302.9. Hot-Mix Asphalt Pavement**, at a rate of 0.25 gallons per square yard. A tack coat shall be applied to a surface of concrete, brick, or asphalt at a rate of 0.10 gallons per square yard. Prime coat and tack coat shall be not be measured for payment, but will be subsidiary to this bid item.

This item shall also include removal and disposal of existing pavement, if it lies outside of trench width plus two feet.

Measurement and payment will be in accordance with **Item 402.4.5.1. Measurement of Concrete Pavement and Asphalt Overlay, Item 402.4.6.1. Measurement For Full Depth Hot-Mix Asphalt Pavement, or Item 402.4.7.1. Measurement For Hot-Mix Asphalt Pavement On A Flexible Base, Item 402.4.10. Payment For Pavement Replacement, and Item 402.4.11.1.COD: Measurement of Asphaltic Concrete Pavement with A Concrete Base** of these specifications.

ITEM NO. 7712 STORM WATER POLLUTION PREVENTION PLAN

This item is to reimburse the Contractor for costs to develop, implement, and maintain the Storm Water Pollution Prevention Plan. Modification to the SWPPP or additional control items required by the Engineer will be at no additional cost.

This item to include all equipment, materials, labor, and maintenance necessary to control storm water pollution.

This is a lump sum item and payment shall be based on the percentage of construction for complete, in place, maintained, removed, and accepted work.

**SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN
INSTALLATION, KILLOUGH BOULEVARD & WASCO LANE
WATER & WASTEWATER**

**ITEM NO. 8011 CONSTRUCTION SURVEYING AND STAKING OF
PROPOSED WATER & WASTEWATER MAINS**

This item consists of providing Construction Surveying and Staking by the Contractor's qualified personnel for approximately **13,500** Linear Feet of Proposed Water and Wastewater Main installations shown on the plan drawings and in accordance with **Item 105.4.COD: Construction Stakes** of the NCTCOG Specifications and addenda thereto.

This item shall include establishment of all horizontal and vertical controls, horizontal and vertical alignments per plan drawings, and cut depths for all proposed mains shown on the plan drawings with specific grades, elevations and profiles.

Measurement and payment will be per Linear Foot of proposed water and per Linear Foot of proposed wastewater main including instrumentation and equipment, staking materials, notes and cut sheets in final form and any other associated costs, such as barricading and traffic control for these services. Payment will be made when surveying is complete from point of beginning to point of end as shown on the plan drawings and upon submission and approval of survey data (see **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition** for approved data format). The Contractor is responsible for maintaining all staked controls and hubs in the construction area at all times and any costs for re-staking or re-establishing controls required shall be borne by the Contractor.

**SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN
INSTALLATION, KILLOUGH BOULEVARD & WASCO LANE
WATER & WASTEWATER**

**ITEM NO. 8012 CONSTRUCTION SURVEYING AND STAKING OF
PROPOSED STREET AND ALLEY PAVING**

This item consists of providing Construction Surveying and Staking by the Contractor's qualified personnel for approximately **13,500** Linear Feet of Proposed Alley and/or Street Pavement Replacement shown on the plan drawings and in accordance with **Item 105.4.COD: Construction Stakes** of the NCTCOG Specifications and addenda thereto.

This item shall include establishment of all horizontal and vertical controls, horizontal and vertical alignments, and cut/fill depths for all proposed street and/or alley pavement replacement.

Measurement and payment will be per Linear Foot of proposed pavement including instrumentation and equipment, staking materials, notes and cut sheets in final form, and any other associated costs, such as barricading and traffic control for these services. Payment will be made when surveying is complete for the full street/alley width from point of beginning to point of end as shown on the plan drawings and upon submission and approval of survey data (see **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition** for approved data format). This item does not include pavement repairs and patches, nor does it include pavement replacement associated with bid item 7570. The Contractor is responsible for maintaining all staked controls and hubs in the construction area at all times and any costs for re-staking or re-establishing controls required shall be borne by the Contractor.

**SCHEDULE B: UNIVERSITY HILLS BOULEVARD WASTEWATER MAIN
INSTALLATION, KILLOUGH BOULEVARD & WASCO LANE
WATER & WASTEWATER**

ITEM NO. 20500 INVESTIGATION

This item consists of excavating at approximately **5** each locations to a specific infrastructure(s) to determine type, size, location, elevation, and/or condition as determined by the Engineer. The disturbed area will be replaced with compacted backfill in accordance with **Item 504. Open Cut – Backfill and Item 504.6.1. Excavated Material** of these specifications and addenda thereto.

In paved areas, the pavement will be replaced with a compacted 8" thick base of Crushed Rock in accordance with **Item 402.4.COD: Replacing Paved Surfaces, and 301.5. Flexible Subbase Or Base (Crushed Stone/Concrete)**, and a compacted 2" thick surface of Hot or Cold Mix asphalt pavement for temporary paving in accordance with **Item 402.4.COD: Replacing Paved Surfaces, and Item 302.9. Hot-Mix Asphalt Pavement**.

This item is complete and includes all equipment, materials and labor, saw-cut, pavement, base, and sub-base removal, excavation, backfill, compaction, disposal of excess materials, all temporary and permanent paving, and paving related items, sidewalk, curb and/or gutter, driveways, sod, costs for barricading, trench safety and support, support for existing utilities, and all other work associated with this item.

Payment will not be made under this item if the infrastructure is to be adjusted, abandoned, or replaced prior to the placement of backfill. If the investigation is for more than one infrastructure in the same excavation, payment shall be made for only one investigation.

Measurement and payment will be per each complete in place.

**END SCHEDULE B: UNIVERSITY HILLS BOULEVARD
WASTEWATER MAIN INSTALLATION KILLOUGH BOULVARD
& WASCO LANE WATER AND WASTEWATER**

A 4.BID ITEMS

SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE WATER AND WASTEWATER MAIN REPLACEMENTS

ITEM NO. 1600H 6" STEEL WATER PIPE

This item consists of furnishing and placing approximately 130 Linear Feet of 6" Steel Water Pipe (C200) in accordance with **Item 506. Open Cut – Water Conduit Installation**, **Item 506.5.COD: Hydrostatic Test**, **Item 506.6.COD: Connections To Existing Water Conduits**, **Item 506.6.1.COD: Water Main Tie-In During Off Hours**, **Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger**, **Item 506.7.3.2.COD: Flushing Method**, **Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water**, **Item 506.7.1.COD: Preliminary Flushing**, **Item 506.7.2.COD: Chlorination**, **Item 506.7.3.COD: Flushing**, **Item 506.7.4.COD: Disposal of Flushing Water**, **Item 506.7.5.4.COD: Sampling**, **Item 506.7.6.COD: Indemnification**, **Item 506.8.1.COD: Cut and Plugs** and the DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition of these specifications and addenda thereto.

This item includes all fittings, coatings, liners, barricading, and all embedment materials.

Measurement and payment will be in accordance with **Item 506.9. Measurement and Payment** of these specifications.

ITEM NO. 1600J 8" STEEL WATER PIPE

This item consists of furnishing and placing approximately 40 Linear Feet of 8" Steel Water Pipe (C200) in accordance with **Item 506. Open Cut – Water Conduit Installation**, **Item 506.5.COD: Hydrostatic Test**, **Item 506.6.COD: Connections To Existing Water Conduits**, **Item 506.6.1.COD: Water Main Tie-In During Off Hours**, **Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger**, **Item 506.7.3.2.COD: Flushing Method**, **Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water**, **Item 506.7.1.COD: Preliminary Flushing**, **Item 506.7.2.COD: Chlorination**, **Item 506.7.3.COD: Flushing**, **Item 506.7.4.COD: Disposal of Flushing Water**, **Item 506.7.5.4.COD: Sampling**, **Item 506.7.6.COD: Indemnification**, **Item 506.8.1.COD: Cut and Plugs** and the DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition of these specifications and addenda thereto.

This item includes all fittings, coatings, liners, barricading, and all embedment materials.

Measurement and payment will be in accordance with **Item 506.9. Measurement and Payment** of these specifications.

**SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS**

ITEM NO. 1600L 12" STEEL WATER PIPE

This item consists of furnishing and placing approximately **2,640** Linear Feet of **12"** Steel Water Pipe (C200) in accordance with **Item 506. Open Cut – Water Conduit Installation, Item 506.5.COD: Hydrostatic Test, Item 506.6.COD: Connections To Existing Water Conduits, Item 506.6.1.COD: Water Main Tie-In During Off Hours, Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger, Item 506.7.3.2.COD: Flushing Method, Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water, Item 506.7.1.COD: Preliminary Flushing, Item 506.7.2.COD: Chlorination, Item 506.7.3.COD: Flushing, Item 506.7.4.COD: Disposal of Flushing Water, Item 506.7.5.4.COD: Sampling, Item 506.7.6.COD: Indemnification, Item 506.8.1.COD: Cut and Plugs and the DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition** of these specifications and addenda thereto.

This item includes all fittings, coatings, liners, barricading, and all embedment materials.

Measurement and payment will be in accordance with **Item 506.9. Measurement and Payment** of these specifications.

ITEM NO. 1801H 6" PVC WATER PIPE WITH NITRILE GASKETS

This item consists of furnishing and placing approximately **230** Linear Feet of **6"** Polyvinyl Chloride Water Pipe (C-900) with nitrile gaskets in accordance with **Item 506. Open Cut – Water Conduit Installation, Item 506.5.COD: Hydrostatic Test, Item 506.6.COD: Connections To Existing Water Conduits, Item 506.6.1.COD: Water Main Tie-In During Off Hours, Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger, Item 506.7.3.2.COD: Flushing Method, Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water, Item 506.7.1.COD: Preliminary Flushing, Item 506.7.2.COD: Chlorination, Item 506.7.3.COD: Flushing, Item 506.7.4.COD: Disposal of Flushing Water, Item 506.7.5.4.COD: Sampling, Item 506.7.6.COD: Indemnification, Item 506.8.1.COD: Cut and Plugs, Item 501.14. Polyvinyl Chloride (PVC) Water Pipe, Item 501.14.5.COD: Fittings, and Item 501.14.6.COD: NSF 61 Compliance** of these specifications and addenda thereto.

This item includes fittings, polywrap for fittings, mechanical tamping, diagonal utilities, barricading and all embedment materials.

Measurement and payment will be in accordance with **Item 506.9. Measurement and Payment** of these specifications.

**SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS**

ITEM NO. 1801J 8" PVC WATER PIPE WITH NITRILE GASKETS

This item consists of furnishing and placing approximately **140** Linear Feet of **8"** Polyvinyl Chloride Water Pipe (C-900) with nitrile gaskets in accordance with **Item 506. Open Cut – Water Conduit Installation, Item 506.5.COD: Hydrostatic Test, Item 506.6.COD: Connections To Existing Water Conduits, Item 506.6.1.COD: Water Main Tie-In During Off Hours, Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger, Item 506.7.3.2.COD: Flushing Method, Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water, Item 506.7.1.COD: Preliminary Flushing, Item 506.7.2.COD: Chlorination, Item 506.7.3.COD: Flushing, Item 506.7.4.COD: Disposal of Flushing Water, Item 506.7.5.4.COD: Sampling, Item 506.7.6.COD: Indemnification, Item 506.8.1.COD: Cut and Plugs, Item 501.14. Polyvinyl Chloride (PVC) Water Pipe, Item 501.14.5.COD: Fittings, and Item 501.14.6.COD: NSF 61 Compliance** of these specifications and addenda thereto.

This item includes fittings, polywrap for fittings, mechanical tamping, diagonal utilities, barricading and all embedment materials.

Measurement and payment will be in accordance with **Item 506.9. Measurement and Payment** of these specifications.

ITEM NO. 1801L 12" PVC WATER PIPE WITH NITRILE GASKETS

This item consists of furnishing and placing approximately **6,410** Linear Feet of **12"** Polyvinyl Chloride Water Pipe (C-900) with nitrile gaskets in accordance with **Item 506. Open Cut – Water Conduit Installation, Item 506.5.COD: Hydrostatic Test, Item 506.6.COD: Connections To Existing Water Conduits, Item 506.6.1.COD: Water Main Tie-In During Off Hours, Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger, Item 506.7.3.2.COD: Flushing Method, Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water, Item 506.7.1.COD: Preliminary Flushing, Item 506.7.2.COD: Chlorination, Item 506.7.3.COD: Flushing, Item 506.7.4.COD: Disposal of Flushing Water, Item 506.7.5.4.COD: Sampling, Item 506.7.6.COD: Indemnification, Item 506.8.1.COD: Cut and Plugs, Item 501.14. Polyvinyl Chloride (PVC) Water Pipe, Item 501.14.5.COD: Fittings, and Item 501.14.6.COD: NSF 61 Compliance** of these specifications and addenda thereto.

This item includes fittings, polywrap for fittings, mechanical tamping, diagonal utilities, barricading and all embedment materials.

Measurement and payment will be in accordance with **Item 506.9. Measurement and Payment** of these specifications.

**SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS**

**ITEM NO. 3111J 8" PVC PRESSURE RATED WASTEWATER PIPE WITH
NITRILE GASKETS**

This item consists of furnishing and placing approximately **660** Linear Feet of **8"** Polyvinyl Chloride Pressure Rated Wastewater Pipe with nitrile gaskets conforming to ASTM D2241 (DR 26) Minimum Pressure Rating of 160 PSI and ASTM D3139 joints, and in accordance with **Item 507. Open Cut – Wastewater Conduit Installation, Item 507.5.1.1.COD: Infiltration Test, and Item 501.15. Polyvinyl Chloride (PVC) Pressure-Rated Pipe (SDR Series)** of these specifications and addenda thereto.

This item to include barricading and all embedment materials.

Measurement and payment will be in accordance with **Item 507.6. Measurement and Payment For Wastewater Conduit Installation** of these specifications.

**ITEM NO. 3520K REHABILITATION OF EXISTING 10" WASTEWATER
MAIN**

This item consists of the Rehabilitation of approximately **450** Linear Feet of **10"** Wastewater Main in accordance with the **DWU Standard Technical Specifications Manual, Latest Edition**. This item to include all labor, materials, equipment, barricading, and incidentals required to complete the rehabilitation of the wastewater main in accordance with these specifications and addenda thereto.

Measurement shall be the actual Linear Footage of main rehabilitated. Payment shall be at the contract Unit Price per Linear Foot complete in place.

**ITEM NO. 3520N REHABILITATION OF EXISTING 15" WASTEWATER
MAIN**

This item consists of the Rehabilitation of approximately **570** Linear Feet of **15"** Wastewater Main in accordance with the **DWU Standard Technical Specifications Manual, Latest Edition**. This item to include all labor, materials, equipment, barricading, and incidentals required to complete the rehabilitation of the wastewater main in accordance with these specifications and addenda thereto.

Measurement shall be the actual Linear Footage of main rehabilitated. Payment shall be at the contract Unit Price per Linear Foot complete in place.

**SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS**

**ITEM NO. 3520R REHABILITATION OF EXISTING 18" WASTEWATER
MAIN**

This item consists of the Rehabilitation of approximately **1,130** Linear Feet of **18"** Wastewater Main in accordance with the **DWU Standard Technical Specifications Manual, Latest Edition**. This item to include all labor, materials, equipment, barricading, and incidentals required to complete the rehabilitation of the wastewater main in accordance with these specifications and addenda thereto.

Measurement shall be the actual Linear Footage of main rehabilitated. Payment shall be at the contract Unit Price per Linear Foot complete in place.

ITEM NO. 3540K POINT REPAIR OF 10" WASTEWATER MAIN

This item consists of approximately **2** point repair(s) of **10"** Wastewater Main as necessary to facilitate rehabilitation.

This item to include all labor, materials, equipment, and incidentals required to complete the repairs; including, but not limited to: excavation, trench safety and support, barricading, furnishing and installing pipe material, connection to existing main, by-pass pumping, and all backfill and embedment materials. This shall be a **contingent item** and shall only be used if directed by the Construction Engineer. Each point repair shall consist of up to twenty (20) linear feet of pipe.

Measurement shall be per each point repair complete and accepted at the contract Unit Price.

**SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS**

ITEM NO. 3540N POINT REPAIR OF 15" WASTEWATER MAIN

This item consists of approximately **2** point repair(s) of **15"** Wastewater Main as necessary to facilitate rehabilitation.

This item to include all labor, materials, equipment, and incidentals required to complete the repairs; including, but not limited to: excavation, trench safety and support, barricading, furnishing and installing pipe material, connection to existing main, by-pass pumping, and all backfill and embedment materials. This shall be a **contingent item** and shall only be used if directed by the Construction Engineer. Each point repair shall consist of up to twenty (20) linear feet of pipe.

Measurement shall be per each point repair complete and accepted at the contract Unit Price.

ITEM NO. 3540R POINT REPAIR OF 18" WASTEWATER MAIN

This item consists of approximately **4** point repair(s) of **18"** Wastewater Main as necessary to facilitate rehabilitation.

This item to include all labor, materials, equipment, and incidentals required to complete the repairs; including, but not limited to: excavation, trench safety and support, barricading, furnishing and installing pipe material, connection to existing main, by-pass pumping, and all backfill and embedment materials. This shall be a **contingent item** and shall only be used if directed by the Construction Engineer. Each point repair shall consist of up to twenty (20) linear feet of pipe.

Measurement shall be per each point repair complete and accepted at the contract Unit Price.

**SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS**

ITEM NO. 5050 WATER SERVICE

This item consists of furnishing and placing approximately **14** Each Water Service on an existing or new water main. This item includes all sizes of water services, 3/4" through 2", water meter boxes and meters, 5/8" through 2". This item does not include Commercial Water Meter Vaults. This item includes tapping of the existing or new water main, removing the existing meter box and lid and old service line and replacing with a new meter box and approved lid, transferring the water service to the meter, adjusting the meter box and meter vertically and horizontally as required, and installing a new service line from the new meter box to the property line in accordance with **Item 502.10.3.2. Services and Bullheads, Item 502.10.3.2.1.COD: Procedures for Transferring Service, Item 502.10.3.2.1.1.COD: IN ADVANCE OF PAVING or Item 502.10.3.2.2.COD: NOT IN ADVANCE OF PAVING, Item 502.10.3.4.COD: NSF 61 Compliance and Item 504.2.3.6.COD: OPEN CUT WASTEWATER LATERAL AND WATER SERVICES** of these specifications and addenda thereto, and the applicable Standard Drawings.

The new meter box and lid shall be replaced to the proper grade and relocated to the correct location on a sand cushion. The disturbed area around the meter box will be replaced with sod in accordance with **Item 202.5. Sodding**, or concrete in accordance with **Item 305.2. Concrete Sidewalks, Driveway Approaches, and Barrier Free Ramps, and Item 305.2.2.2.COD: Reinforcement** to match the existing surface. If the meter is determined by the Project Manager to be defective, it will be replaced with a new meter, furnished by the City.

This bid item will also be utilized to provide a water service to a vacant lot where no meter transfer is involved. It will be the Contractor's responsibility to relocate the existing backflow prevention devices on the existing water service between the meter and property line to a proper location as directed by the Project Manager. Should any additional services be found necessary, they will be added to the contract at the same Unit Price. Likewise, should any of the listed services not be necessary, they will be removed from the contract without having any effect on the Unit Price. The provisions of **Item 104.2.1. Increased Or Decreased Quantities of Work** of the specifications regarding negotiating for revised consideration for over/underruns **do not** apply to this item.

Measurement and payment will be in accordance with **Item 502.10.3.2.2. Measurement and Payment** of these specifications and will include any costs for pipe, copper, equipment, materials and labor, all boring, tapping, crossing diagonal utilities, costs for barricading, trench safety and support for these services, encasement, embedment, and all temporary paving related items (saw-cut, base, asphalt, concrete, sidewalk, driveways, curb and/or gutter, sod), and all other work associated with this item.

**SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS**

**ITEM NO. 5061FxF 4" DOMESTIC SERVICE WITH 4" METER AND
TRANSFER**

This item consists of installing **1** Each new **4"** Domestic Service with **4"** Meter, removing the existing vault and existing meter, and transferring service in accordance with the specifications and addenda thereto, and the Standard Drawings.

The City will furnish the new **4"** meter and the meter access hatch cover to the Contractor for the new **4"** Domestic Service.

The Contractor will remove and salvage the existing **4"** meter and deliver it to the Large Meter Repair Shop, 2821 Municipal Street. If the existing **4"** meter is damaged during removal, the Contractor will be liable for the replacement cost. If the **4"** meter is determined by the Engineer to be defective or damaged prior to any work by the Contractor, the Contractor will not be liable for replacement cost.

Measurement and payment will be per Each and will include all work to install the **4"** Domestic Service; to include **4"** gate valves, meter, installation of the new vault, vault floor, piping, blocking, disposal of excess material, boring, crossing diagonal utilities, and all temporary and permanent paving related items (saw-cut, base, asphalt, concrete, sidewalk, driveways, curb and/or gutter, sod, etc.), and any costs for barricading, trench safety and support for these services.

The water pipe from the new main to the first fitting of the by-pass piping will not be included in this item. This pipe will be paid under the bid item for the appropriate water pipe.

ITEM NO. 5091 INSTALL FIRE HYDRANT

This item consists of furnishing and placing approximately **18** Each Fire Hydrant in accordance with **Item 502.3. Fire Hydrants, Item 502.3.1.COD: Materials, Item 502.3.1.2.COD: Breakable Type Hydrants, Item 502.3.1.3.COD: Main Valve Seats, Item 502.3.1.4.COD: Nozzle Cap Chains, Item 502.3.1.5.COD: Flanges, Item 502.3.1.6.COD: Operating Stems, Item 502.3.1.7.COD: O-Rings, Item 502.3.1.8.COD: Provisions For Extension, Item 502.3.1.11.COD: Upperstem thread Lubrication, Item 502.3.1.12.COD: Tests and Affidavit of Compliance, Item 502.3.1.14.COD: Rejection, Item 502.3.1.15.COD: Protection of Stem Threads, Item 502.2.2.COD: Installation, Item 502.3.17.COD: Hydrant Approval** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.3.3.COD: Measurement and Payment** of these specifications and will include all items necessary to furnish and install a fire hydrant; including barricading, all paving removal and replacement, saw-cut, embedment, and concrete blocking required. This item does not include any of the fire hydrant lead. That pipe will be paid for under the appropriate 6" D.I. or 6" PVC Water Pipe bid item.

**SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS**

ITEM NO. 5092 REMOVING EXISTING FIRE HYDRANT

This item consists of Removing, in the most economical manner, approximately **13** Each Existing Fire Hydrant. If the Project Manager determines the fire hydrant is to be salvaged and paid for under Item No. 5093, the Contractor must take necessary precautions to insure the fire hydrant is not damaged. A cap or plug on the existing fire hydrant lead is included with this item.

ITEM NO. 5093 DELIVER FIRE HYDRANT

This item consists of delivering approximately **13** Each Existing Fire Hydrant.

This item to include loading and hauling the fire hydrant to the Dallas Water Utilities Yard located at 2863 Municipal St. The Contractor shall contact Distribution 24-48 hours prior to delivery.

This item is a **contingent item** and payment will be made only if directed by the Project Manager. If delivery is not directed, the fire hydrant shall become the property of the Contractor.

ITEM NO. 5101H 6" GATE VALVE WITH NITRILE GASKETS

This item consists of furnishing and placing approximately **21** Each **6"** Gate Valve with nitrile gaskets in accordance with **Item 502.6.6.COD: Line Valve Installation and Item 502.6.1.COD: Double Disk, Metal Seated Gate Valves For Ordinary Waterworks Service Or Item 502.6.2.COD: Resilient-Seated Gate Valves For Ordinary Waterworks Service** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.6.8.COD: Measurement and Payment** of these specifications.

ITEM NO. 5101J 8" GATE VALVE WITH NITRILE GASKETS

This item consists of furnishing and placing approximately **3** Each **8"** Gate Valve with nitrile gaskets in accordance with **Item 502.6.6.COD: Line Valve Installation and Item 502.6.1.COD: Double Disk, Metal Seated Gate Valves For Ordinary Waterworks Service Or Item 502.6.2.COD: Resilient-Seated Gate Valves For Ordinary Waterworks Service** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.6.8.COD: Measurement and Payment** of these specifications.

**SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS**

ITEM NO. 5101L 12" GATE VALVE WITH NITRILE GASKETS

This item consists of furnishing and placing approximately **41** Each **12"** Gate Valve with nitrile gaskets in accordance with **Item 502.6.6.COD: Line Valve Installation and Item 502.6.1.COD: Double Disk, Metal Seated Gate Valves For Ordinary Waterworks Service Or Item 502.6.2.COD: Resilient-Seated Gate Valves For Ordinary Waterworks Service** of these specifications and addenda thereto, and the applicable Standard Drawings.

Measurement and payment will be in accordance with **Item 502.6.8.COD: Measurement and Payment** of these specifications.

ITEM NO. 5110QxL 16" x 12" TAPPING SLEEVE

This item consists of furnishing and placing approximately **1** Each **16" x 12"** Tapping Sleeve in accordance with **Item 502.6.1.17. Tapping Valves and Item 502.10.2.3. Tapping Sleeves** of these specifications and addenda thereto.

Measurement and payment will be in accordance with **Item 502.5.3.COD: Measurement and Payment** of these specifications.

ITEM NO. 5160AG 60" DIAMETER WATER MANHOLE

This item consists of furnishing and placing approximately **2** Each **60"** Diameter Manhole in accordance with **Item 502.1. Manholes, Item 502.1.2.COD: Wastewater Manhole Adjustments, Item 502.1.4.8.COD: Wastewater Manhole Frame Seals, and Item 502.1.7.COD: Manhole Backfill** of these specifications and addenda thereto, and the applicable Standard Drawings.

Barricading is included in this item. Nonshrink grout shall be used in place of mortar.

Measurement and payment will be in accordance with **Item 502.1.6.COD: Measurement and Payment of Manholes** of these specifications per each complete in place.

ITEM NO. 5300 DEEP ANODE CATHODIC PROTECTION SYSTEM

This item consists of furnishing and placing **2** each Deep Anode Cathodic Protection System as per **DWU Standard Drawings and DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Editions**. This item includes all materials, equipment, labor, rectifier fencing (if needed), and any incidentals required to furnish and install a Deep Anode Cathodic Protection System.

Payment will be per each as set forth in the contract.

**SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS**

ITEM NO. 5310 CORROSION CONTROL TEST STATION

This item consists of furnishing and placing **3** each Corrosion Control Test Station as per **DWU Standard Drawings and DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Editions**. This item includes all materials, equipment, labor and any incidentals required to furnish and install a Corrosion Control Test Station.

Payment will be per each as set forth in the contract.

ITEM NO. 5500L 12" WATER MAIN (BOTOC)

This item consists of approximately **84** Linear Feet of **12"** Water Main to be installed By Other Than Open Cut in accordance with **Item 503.3. Methods of Jacking, Boring Or Tunneling, Item 503.3.2.COD: Materials, Item 503.3.3.COD: Construction Methods, and Item 503.3.3.1.COD: General** of these specifications and addenda thereto, and as shown the plans.

The **12"** carrier pipe is not to be included in this item. The encasement pipe is included in this item and shall have an inside diameter of at least **6"** greater than the largest outside bell diameter of the carrier pipe. The size indicator for this item is the size of the carrier pipe, not the encasement pipe.

Measurement and payment will be in accordance with **Item 503.4. Measurement and Payment** of these specifications.

ITEM NO. 5600 CUT AND PLUG EXISTING WATER MAIN

This item consists of approximately **2** Each Cut and Plug Existing Water Main as indicated on the plans. The cast iron plug and barricading shall be incidental to this bid item.

Measurement and payment will be per each complete in place and shall include all labor, materials, and equipment necessary to Cut and Plug Existing Water Main.

**SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS**

ITEM NO. 5610 CUT AND PLUG WATER MAIN FOR TEST

This item consists of **1** Each Cut and Plug Water Main for Test.

This is a contingent item to be used if approved by the Project Manager, in the event pressure testing of the newly constructed main proves unsatisfactory because of leaks in the existing system. In such case, the Contractor must isolate the new construction, perform the required test, and then tie the newly constructed main to the existing water main.

Measurement and payment will be per each complete in place and shall include all labor, materials, and equipment necessary to Cut and Plug Existing Water Main for Test.

ITEM NO. 5990J 8" WASTEWATER MAIN (BOTOC)

This item consists of approximately **40** Linear Feet of **8"** Wastewater Main to be installed By Other Than Open Cut in accordance with **Item 503.3. Methods of Jacking, Boring Or Tunneling, Item 503.3.2.COD: Materials, Item 503.3.3.COD: Construction Methods, and Item 503.3.3.1.COD: General** of these specifications and addenda thereto.

The **8"** carrier pipe is not to be included in this item. The encasement pipe, if required, is included in this item.

Measurement and payment will be in accordance with **Item 503.4. Measurement and Payment** of these specifications.

**SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS**

ITEM NO. 6060 WASTEWATER LATERAL

This item consists of furnishing and placing approximately 4 Each Wastewater Lateral on an existing or new wastewater main. This item will include street, alley, and easement laterals with cleanouts, with or without caps in accordance with **Item 502.10.4. Wastewater Conduit Connections, Item 502.10.4.1.COD: Service Connection, and Item 504.2.3.6.COD: OPEN CUT WASTEWATER LATERAL AND WATER SERVICES** of these specifications and addenda thereto, and the applicable Standard Drawings.

Laterals will be replaced with the same size and type as the existing lateral or as indicated on the plans, with a minimum of 6" diameter pipe required. This item will include, if required, Polyvinyl Chloride Pressure Rated Laterals conforming to ASTM D2241 (DR 26), minimum pressure rating of 160 PSI and ASTM D3139 joints. If a deep cut connection is required, the costs will be included in this item.

The replacement shall include removal of the existing lateral, plugging the existing lateral near the main, installing a new lateral with cleanout by removing a portion of the existing main, installing a wye, connecting to the existing main with adapters for 6" and 8" mains and by tapping mains 10" and larger, installing a new lateral with cleanout and connection to the existing house lateral. Should a private wastewater lateral not exist, a wastewater mainline lateral shall be installed with a cleanout and cap, or a cap only as indicated on the plans. The disturbed area around the cleanout will be replaced with sod in accordance with **Item 202.5. Sodding**, or concrete or asphalt in accordance with **Item 305.2. Concrete Sidewalks, Driveway Approaches, and Barrier Free Ramps, and Item 305.2.2.2.COD: Reinforcement** to match the existing surface. The Contractor shall furnish a cleanout casting if lost, stolen, or damaged due to Contractor's negligence. Should any additional laterals be found necessary, they will be added to the contract at the same Unit Price. Likewise, should any of the listed laterals not be necessary, they will be removed from the contract without having any effect on the unit price. The provisions of **Item 104.2.1. Increased Or Decreased Quantities of Work** of the specifications regarding negotiating for revised consideration for over/underruns do not apply to this item

Measurement and payment will be in accordance with **Item 502.10.4.3. Measurement and Payment** of these specifications, and will include any costs for pipe, equipment, materials and labor, deep cut connections, all boring, encasement, crossing diagonal utilities, costs for barricading, trench safety and support for these laterals, embedment, and all temporary paving related items (saw-cut, base, asphalt, concrete, sidewalk, driveways, curb and/or gutter, sod) and all other work associated with this item.

**SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS**

ITEM NO. 6120AE 48" DIAMETER PRESSURE TYPE MANHOLE

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately **8** Each **48"** Diameter Pressure Type Manhole in accordance with **Item 502.1. Manholes, Item 502.1.2.COD: Wastewater Manhole Adjustments, Item 502.1.4.8.COD: Wastewater Manhole Frame Seals, Item 502.1.4.9.COD: Interior Coatings For Manholes, and Item 502.1.7.COD: Manhole Backfill** of these specifications and addenda thereto, and the applicable Standard Drawings.

Removal of any existing conflicting manhole, if required, will be included in this item. Nonshrink grout shall be used in place of mortar. This item shall include barricading.

Measurement and payment will be in accordance with **Item 502.1.6.COD: Measurement and Payment of Manholes** of these specifications.

ITEM NO. 6120AG 60" DIAMETER PRESSURE TYPE MANHOLE

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately **2** Each **60"** Diameter Pressure Type Manhole in accordance with **Item 502.1. Manholes, Item 502.1.2.COD: Wastewater Manhole Adjustments, Item 502.1.4.8.COD: Wastewater Manhole Frame Seals, Item 502.1.4.9.COD: Interior Coatings For Manholes, and Item 502.1.7.COD: Manhole Backfill** of these specifications and addenda thereto, and the applicable Standard Drawings.

Removal of any existing conflicting manhole, if required, will be included in this item. Nonshrink grout shall be used in place of mortar. This item shall include barricading.

Measurement and payment will be in accordance with **Item 502.1.6.COD: Measurement and Payment of Manholes** of these specifications.

**ITEM NO. 6125AE 48" DIAMETER PRESSURE TYPE DROP CONNECTION
MANHOLE**

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately **1** Each **48"** Diameter Pressure Type Drop Connection Manhole in accordance with **Item 502.1. Manholes, Item 502.1.2.COD: Wastewater Manhole Adjustments, Item 502.1.4.8.COD: Wastewater Manhole Frame Seals, Item 502.1.4.9.COD: Interior Coatings For Manholes, and Item 502.1.7.COD: Manhole Backfill** of these specifications and addenda thereto, and the applicable Standard Drawings.

Removal of any existing conflicting manhole, if required, will be included in this item. Nonshrink grout shall be used in place of mortar. This item shall include barricading.

Measurement and payment will be in accordance with **Item 502.1.6.COD: Measurement and Payment of Manholes** of these specifications.

**SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS**

ITEM NO. 6140 ABANDON EXISTING MANHOLE

This item consists of abandoning approximately **2** Each Existing Manhole, backfilling the manhole with granular material at 95% standard proctor dry density, and removing and salvaging the frame and cover as per the applicable Standard Drawing.

This item to also include the cleaning, loading, hauling, and unloading the frame and cover at the Stores Division, Yard #2, 2901 Municipal Street. The Contractor will be charged new item replacement cost for any amount lost, stolen, or broken due to the Contractor's negligence prior to delivery into Water Utilities Department Salvage Yard. This item shall also include barricading.

Measurement and payment shall be at the contract Unit Price per Each completed and accepted abandonment.

ITEM NO. 6141 VACUUM TEST FOR WASTEWATER MANHOLE

This item consists of performing approximately **11** Each Vacuum Test for Wastewater Manhole in accordance with **Item 502.1.5.2 Vacuum Testing Manholes and Item 507.5. Tests and Inspections** of these specifications.

This item shall include all materials, equipment, labor, and incidentals required to complete the test as specified. This item is a **contingent item** and payment will be made only if directed by the DWU Construction Superintendent. Should any of the listed tests not be necessary, they will be removed from the contract without having any effect on the Unit Price.

Measurement and payment shall be in accordance with **Item 502.1.5.2.1.COD: Measurement and Payment of Vacuum Testing Wastewater Manholes** of these specifications and addenda thereto.

ITEM NO. 6920 TELEVISION INSPECTION

This item consists of performing a Television Inspection on approximately **2,798** Linear Feet of Wastewater Main in accordance with **Item 507.5.2. Television Inspection** of these specifications and addenda thereto, and the **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition**.

Payment will be allowed only for inspections made to a particular section of main in accordance with **Item 507.5.2.4.COD: Measurement And Payment For Television Inspection On City Contracts**.

**SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS**

ITEM NO. 6925 TRENCH EXCAVATION SAFETY AND SUPPORT

This item consists of Trench Excavation Safety and Support for approximately **10,284** Linear Feet of trench in accordance with the Occupational Safety and Health Administration Standards 1926.652 "Requirements for Protective Systems".

Trench Excavation Safety and Support shall be measured along the centerline of the trench where trench is sloped to maintain angle of repose, a trench box is utilized or trench is shored.

Payment shall be allowed for all section of trench regardless of depth.

ITEM NO. 7030 ROCK FOUNDATION

This item consists of furnishing and placing approximately **40** Cubic Yards of Rock Foundation at locations approved by the Project Manager, in accordance with **Item 504.3.2. Foundation** and **Item 504.2.2.4. Crushed Stone For Foundation** of these specifications and addenda thereto.

This is a **Contingent Item** and payment will be made as directed by the Project Manager.

Measurement and payment will be in accordance with **Item 504.3.2.1. Foundation Measurement** and **Item 504.3.2.2. Foundation Payment** of these specifications.

ITEM NO. 7050 SAND BACKFILL

This item consists of furnishing and placing approximately **50** Cubic Yards of Sand Backfill at locations approved by the Project Manager, in accordance with **Item 504.6.5. Sand Backfill** and **Item 504.2.2.6. Sand** of these specifications and addenda thereto.

This is a **Contingent Item** and payment will be made as directed by the Project Manager.

Measurement and payment will be in accordance with **Item 504.7.2.2. Final Trench Backfill** of these specifications. The price per unit of volume will remain the same, regardless of the volume used.

**SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS**

ITEM NO. 7053 CEMENT STABILIZED SAND BACKFILL

This item consists of furnishing and placing approximately **160** Cubic Yards of Cement Stabilized Sand Backfill in accordance with the **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition. See 107.27.COD: Environmental Compliance.**

Measurement and payment above the pipe shall be at the trench width in accordance with **Item 504.7.1. Measurement of Backfill Material and Item 504.7.2. Payment of Backfill Material** of these specifications and the addenda thereto. Measurement and payment in other areas where placement is directed will be at the contract Unit Price per Cubic Yard of completed and accepted work.

ITEM NO. 7071 CLASS "B" CONCRETE

This item consists of furnishing and placing approximately **35** Cubic Yards of Class "B" Concrete in accordance with **Item 504.3.2. Foundation, Item 502.4.1. Concrete Blocking, and Item 702.2. Mix Design and Mixing Concrete For Structures** of these specifications and addenda thereto, and the applicable Standard Drawings. **See 107.27.COD: Environmental Compliance.**

Measurement and payment will be in accordance with **Item 504.3.2.1. Foundation Measurement and Item 504.3.2.2. Foundation Payment or Item 502.4.4. Measurement and Payment** of these specifications.

ITEM NO. 7095 FURNISH AND PLACE DRY RIP RAP (TYPE A)

This item consists of furnishing and placing approximately **70** Square Yards of Rip Rap in accordance with **Item 803.3. Riprap, Item 803.3.3.2. Dry Riprap, Type A and Type B** of these specifications and addenda thereto, and the applicable Standard Drawings.

This is not to include Stabilized Backfill, which is a separate bid item.

Measurement and payment will be in accordance with **Item 803.3.4.COD: Measurement and Payment** of these specifications and addenda thereto.

**SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS**

**ITEM NO. 7520 TEMPORARY PAVING (HOT MIX OR HIGH
PERFORMANCE MIX)**

This item consists of furnishing, placing, and removing approximately **300** Tons of Hot or High Performance Mix Asphalt Pavement for Temporary Paving, as authorized by the Engineer. Hot Mix Asphalt shall conform to **Item 302.9. Hot-Mix Asphalt Pavement and 403.2.3. Hot-Mix, Cold-Laid Asphaltic Concrete (Cold Mix)** of these specifications. Hot or High Performance Mix shall be placed in accordance with **Item 402.4. Replacing Paved Surfaces** of these specifications and addenda thereto.

The method of measurement for payment will be in Tons (2,000 pounds) of material in place and accepted. The basis of payment will be based on the maximum permissible width of ditch as specified for type or kind of conduit to be constructed as shown on the plans or Standard Drawings, and a compacted thickness of 2" over flexible base.

ITEM NO. 7560 CRUSHED ROCK FOR TEMPORARY PAVING BASE

This item consists of furnishing and placing approximately **575** Cubic Yards of Crushed Rock (Flexible Base) for Temporary Paving Base material in accordance with **Item 402.4.COD: Replacing Paved Surfaces and Item 301.5. Flexible Subbase Or Base (Crushed Stone/Concrete)** of these specifications and addenda thereto.

Measurement and payment will be in accordance with **Item 402.4.10. Payment For Pavement Replacement** of these specifications.

ITEM NO. 7570 REINFORCED CONCRETE PAVING

This item consists of furnishing and placing approximately **70** Cubic Yards of Reinforced Concrete Paving in accordance with **Item 402.4.4. Replacing Reinforced Concrete Pavement, Item 303. Portland Cement Concrete Pavement and Item 303.2.1.3.2.COD: Gradation** of these specifications and addenda thereto. **See 107.27.COD: Environmental Compliance.**

This item shall also include removal and disposal of existing pavement, if it lies outside of trench width plus two feet.

Measurement and payment will be in accordance with **Item 402.4.4.1. Measurement of Reinforced Concrete Pavement and Item 402.4.10. Payment For Pavement Replacement** of these specifications.

**SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS**

ITEM NO. 7583 REINFORCED CONCRETE DRIVEWAY

This item consists of furnishing and placing approximately **25** Square Yards of Reinforced Concrete Driveway in accordance with **Item 402.4.COD: Replacing Paved Surfaces, Item 303. Portland Cement Concrete Pavement and Item 303.2.1.3.2.COD: Gradation** of these specifications and addenda thereto. **See 107.27.COD: Environmental Compliance.** This item also includes removal and disposal of existing pavement, if it lies outside of trench width plus two feet.

Measurement and payment will be in accordance with **Item 402.4.3.1. Measurement for Replacement of Curb, Gutter, Sidewalks, Driveways, Etc. and Item 402.4.10. Payment for Pavement Replacement** of these specifications. This item requires the concrete be set at 4500 PSI strength if hand finished or 4000 PSI strength if machine finished.

ITEM NO. 7600 REINFORCED CONCRETE BASE

This item consists of furnishing and placing approximately **4,300** Cubic Yards of Reinforced Concrete Base in accordance with **Item 402.4.COD: Replacing Paved Surfaces, Item 402.4.11.COD: Replacing Asphaltic Concrete Pavement with A Concrete Base, Item 303. Portland Cement Concrete Pavement and Item 303.2.1.3.2.COD: Gradation** of these specifications and addenda thereto. **See 107.27.COD: Environmental Compliance.**

This item shall also include removal and disposal of existing pavement, if it lies outside of trench width plus two feet.

Measurement and payment will be in accordance with **Item 402.4.5.1. Measurement of Concrete Pavement and Asphalt Overlay and Item 402.4.10. Payment For Pavement Replacement** of these specifications.

**SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS**

ITEM NO. 7655 HOT MIX ASPHALT CONCRETE PAVEMENT

This item consists of furnishing and placing approximately **3,000** Tons of Hot Mix Asphalt Concrete Pavement in accordance with **Item 402.4.COD: Replacing Paved Surfaces, Item 402.4.11.COD: Replacing Asphaltic Concrete Pavement with A Concrete Base, and Item 302.9. Hot-Mix Asphalt Pavement** of these specifications and addenda thereto. A prime coat shall be applied to a completed granular base course as described in **Item 302.7. Prime Coat and Item 302.9. Hot-Mix Asphalt Pavement**, at a rate of 0.25 gallons per square yard. A tack coat shall be applied to a surface of concrete, brick, or asphalt at a rate of 0.10 gallons per square yard. Prime coat and tack coat shall be not be measured for payment, but will be subsidiary to this bid item.

This item shall also include removal and disposal of existing pavement, if it lies outside of trench width plus two feet.

Measurement and payment will be in accordance with **Item 402.4.5.1. Measurement of Concrete Pavement and Asphalt Overlay, Item 402.4.6.1. Measurement For Full Depth Hot-Mix Asphalt Pavement, or Item 402.4.7.1. Measurement For Hot-Mix Asphalt Pavement On A Flexible Base, Item 402.4.10. Payment For Pavement Replacement, and Item 402.4.11.1.COD: Measurement of Asphaltic Concrete Pavement with A Concrete Base** of these specifications.

ITEM NO. 7712 STORM WATER POLLUTION PREVENTION PLAN

This item is to reimburse the Contractor for costs to develop, implement, and maintain the Storm Water Pollution Prevention Plan. Modification to the SWPPP or additional control items required by the Engineer will be at no additional cost.

This item to include all equipment, materials, labor, and maintenance necessary to control storm water pollution.

This is a lump sum item and payment shall be based on the percentage of construction for complete, in place, maintained, removed, and accepted work.

**ITEM NO. 7730 DISPOSAL OF HEAVILY CHLORINATED WATER MAIN
FLUSHING WATER**

This item consists of Disposal of Heavily Chlorinated Water Main Flushing Water after sterilization or re-sterilization in accordance with the requirements of the EPA [40 C.F.R. 122.26], and **Item 506.7.3.3.COD: Disposal of Flushing Water.**

Measurement and payment will be Lump Sum, complete to include all labor, materials, and equipment necessary to dispose of the heavily chlorinated water main flushing water after sterilization or re-sterilization.

**SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS**

**ITEM NO. 7766 DISPOSAL OF CLASS II NON-HAZARDOUS INDUSTRIAL
WASTE**

This item is to reimburse the Contractor for costs to handle and dispose of **3,200** Cubic Yards of Class II Non-hazardous Industrial Waste Soils.

This item shall include all equipment, materials, permits, approvals, treatment, transportation fees, disposal fees, labor, and all other costs necessary to handle and dispose of Class II Non-hazardous Industrial Waste Soils.

This is a contingent item and payment will only be made if directed by the Construction Engineer. Basis for payment shall be per Cubic Yard of Class II Non-hazardous Industrial Waste Soils.

ITEM NO. 7767 DISPOSAL OF CONTAMINATED GROUNDWATER

This item is to reimburse the Contractor for costs to handle and dispose of **10,000** Gallons of hazardous contaminated groundwater.

This item shall include all equipment, materials, permits, approvals, pumping to holding tank prior to testing, holding tank, treatment, transportation fees, disposal fees, labor, and all other costs necessary to handle, transport, and dispose of contaminated groundwater.

This is a contingent item and payment will only be made if directed by the Construction Engineer. Basis for payment shall be per gallon of contaminated groundwater that is disposed.

ITEM NO. 7768 HEALTH, SAFETY, AND MONITORING PLAN

The contractor must reference the Project-Specific Soil & Groundwater Management Plan (SGMP) prepared by DWU and prepare a Health, Safety, and Monitoring (HSM) Plan that meets the requirements of OSHA's Hazardous Waste Operations and Emergency Response (HAZWOPER) Standard, 29 CFR 1910.120 or 29 CFR 1926.65, paragraph (b)(4). Contractor must provide copy of HSM Plan to DWU.

The item includes all equipment, materials, labor, testing and maintenance to meet the SGMP requirements including monitoring for potentially hazardous waste material in areas specified.

The item includes all equipment, materials, labor, testing and reporting necessary to test for Molybdenum and Tetramethylammonium Hydroxide (TMAH).

Payment will be lump sum.

**SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS**

**ITEM NO. 8011 CONSTRUCTION SURVEYING AND STAKING OF
PROPOSED WATER & WASTEWATER MAINS**

This item consists of providing Construction Surveying and Staking by the Contractor's qualified personnel for approximately **10,220** Linear Feet of Proposed Water and Wastewater Main installations shown on the plan drawings and in accordance with **Item 105.4.COD: Construction Stakes** of the NCTCOG Specifications and addenda thereto.

This item shall include establishment of all horizontal and vertical controls, horizontal and vertical alignments per plan drawings, and cut depths for all proposed mains shown on the plan drawings with specific grades, elevations and profiles.

Measurement and payment will be per Linear Foot of proposed water and per Linear Foot of proposed wastewater main including instrumentation and equipment, staking materials, notes and cut sheets in final form and any other associated costs, such as barricading and traffic control for these services. Payment will be made when surveying is complete from point of beginning to point of end as shown on the plan drawings and upon submission and approval of survey data (see **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition** for approved data format). The Contractor is responsible for maintaining all staked controls and hubs in the construction area at all times and any costs for re-staking or re-establishing controls required shall be borne by the Contractor.

**ITEM NO. 8012 CONSTRUCTION SURVEYING AND STAKING OF
PROPOSED STREET AND ALLEY PAVING**

This item consists of providing Construction Surveying and Staking by the Contractor's qualified personnel for approximately **9,113** Linear Feet of Proposed Alley and/or Street Pavement Replacement shown on the plan drawings and in accordance with **Item 105.4.COD: Construction Stakes** of the NCTCOG Specifications and addenda thereto.

This item shall include establishment of all horizontal and vertical controls, horizontal and vertical alignments, and cut/fill depths for all proposed street and/or alley pavement replacement.

Measurement and payment will be per Linear Foot of proposed pavement including instrumentation and equipment, staking materials, notes and cut sheets in final form, and any other associated costs, such as barricading and traffic control for these services. Payment will be made when surveying is complete for the full street/alley width from point of beginning to point of end as shown on the plan drawings and upon submission and approval of survey data (see **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition** for approved data format). This item does not include pavement repairs and patches, nor does it include pavement replacement associated with bid item 7570. The Contractor is responsible for maintaining all staked controls and hubs in the construction area at all times and any costs for re-staking or re-establishing controls required shall be borne by the Contractor.

**SCHEDULE C: LUNA ROAD FROM NORTHWEST HIGHWAY TO ROYAL LANE
WATER AND WASTEWATER MAIN REPLACEMENTS**

ITEM NO. 20500 INVESTIGATION

This item consists of excavating at approximately **16** each locations to a specific infrastructure(s) to determine type, size, location, elevation, and/or condition as determined by the Engineer. The disturbed area will be replaced with compacted backfill in accordance with **Item 504. Open Cut – Backfill and Item 504.6.1. Excavated Material** of these specifications and addenda thereto.

In paved areas, the pavement will be replaced with a compacted 8" thick base of Crushed Rock in accordance with **Item 402.4.COD: Replacing Paved Surfaces, and 301.5. Flexible Subbase Or Base (Crushed Stone/Concrete)**, and a compacted 2" thick surface of Hot or Cold Mix asphalt pavement for temporary paving in accordance with **Item 402.4.COD: Replacing Paved Surfaces, and Item 302.9. Hot-Mix Asphalt Pavement**.

This item is complete and includes all equipment, materials and labor, saw-cut, pavement, base, and sub-base removal, excavation, backfill, compaction, disposal of excess materials, all temporary and permanent paving, and paving related items, sidewalk, curb and/or gutter, driveways, sod, costs for barricading, trench safety and support, support for existing utilities, and all other work associated with this item.

Payment will not be made under this item if the infrastructure is to be adjusted, abandoned, or replaced prior to the placement of backfill. If the investigation is for more than one infrastructure in the same excavation, payment shall be made for only one investigation.

Measurement and payment will be per each complete in place.

**END SCHEDULE C: LUNA ROAD FROM NORTHWEST
HIGHWAY AND ROYAL LANE WATER AND WASTEWATER
MAIN REPLACEMENTS**

A 5.

DAVIS BACON WAGE SCHEDULE

tx18

"General Decision Number: TX20200018 01/03/2020

Superseded General Decision Number: TX20190018

State: Texas

Construction Type: Heavy

Counties: Collin, Dallas, Denton, Ellis, Kaufman and Rockwall Counties in Texas.

Water and Sewer Lines/Utilities (Including Related Tunneling Where the Tunnel is 48" or Less in Diameter)

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date
0 01/03/2020

* PLUM0100-002 11/01/2017

| | Rates | Fringes |
|-------------------------------|----------|---------|
| Plumbers and Pipefitters..... | \$ 30.84 | 11.51 |

SUTX1991-004 09/23/1991

| | Rates | Fringes |
|--------------|----------|---------|
| Laborers: | | |
| Common..... | \$ 7.25 | |
| Utility..... | \$ 7.467 | |

| | | |
|--------------------------------------|-----------|------|
| Pipelayer..... | \$ 7.828 | tx18 |
| Power equipment operators: | | |
| Backhoe..... | \$ 10.804 | |
| Crane..... | \$ 10.942 | |
| Front End Loader..... | \$ 9.163 | |
| Tunneling Machine (48" or less)..... | \$ 9.163 | |
| TRUCK DRIVER..... | \$ 8.528 | |

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number

tx18

where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a wage and hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests

tx18

for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

with regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

.. END OF GENERAL DECISION

A 5. MINIMUM WAGE SCHEDULE

SCHEDULE B **(12-2099)**
Highway/Heavy Construction Prevailing Wage Rates 2012

| Classification | Prevailing Rate |
|--|------------------------|
| Asphalt Distributor Operator | \$15.32 |
| Asphalt Paving Machine Operator | \$13.99 |
| Asphalt Raker | \$12.69 |
| Broom or Sweeper Operator | \$11.74 |
| Concrete Finisher – Paving and Structures | \$14.12 |
| Concrete Paving Finishing Machine | \$16.05 |
| Concrete Paving Saw Operator | \$14.48 |
| Crane Operator, Lattice Boom 80 Tons or Less | \$17.27 |
| Crane Operator, Lattice Boom over 80 Tons | \$20.52 |
| Crane, Hydraulic 80 Tons or Less | \$18.12 |
| Crawler Tractor | \$14.07 |
| Electrician | \$19.80 |
| Excavator, 50,000 Pounds or Less | \$17.19 |
| Excavator, over 50,000 Pounds | \$16.99 |
| Flagger | \$10.06 |
| Form Builder/Setter, Structures | \$13.84 |
| Form Setter - Paving & Curb | \$13.16 |
| Foundation Drill Operator, Crawler Mount | \$17.99 |
| Foundation Drill Operator, Truck Mount | \$21.07 |
| Front End Loader 3 CY or Less | \$13.69 |
| Front End Loader, over 3 CY | \$14.72 |
| Laborer – Common | \$10.72 |
| Laborer - Utility | \$12.32 |
| Loader / Backhoe | \$15.18 |
| Mechanic | \$17.68 |
| Milling Machine | \$14.32 |
| Motor Grader, Fine Grade | \$17.19 |
| Motor Grader, Rough | \$16.02 |
| Pavement Marking Machine | \$13.63 |
| Pipe Layer | \$13.24 |
| Reclaimer / Pulverizer | \$11.01 |
| Roller, Asphalt | \$13.08 |
| Roller, Other | \$11.51 |
| Scraper | \$12.96 |
| Servicer | \$14.58 |
| Small Slipform Machine | \$15.96 |
| Spreader Box | \$14.73 |

SCHEDULE B - Prevailing Wage Rates

Page 2

| | |
|--|---------|
| Steel Worker (Reinforcing) | \$16.18 |
| Truck Driver - Lowboy - Float | \$16.24 |
| Truck Driver - Off Road Hauler | \$12.25 |
| Truck Driver - Single Axle | \$12.31 |
| Truck Driver - Single or Tandem Axle Dump Truck | \$12.62 |
| Truck Driver - Tandem Axle Tractor with Semi Trailer | \$12.86 |
| Truck Driver - Transit Mix | \$14.14 |
| Tunnel Boring Machine Operator (greater than 48") | \$13.61 |
| Tunneling Machine Operator (48" or less) | \$ 9.16 |
| Welder | \$14.84 |
| Work Zone Barricade Servicer | \$11.68 |

If the construction project involves the expenditure of federal funds of \$2,000 or more, the minimum wages to be paid various classes of laborers and mechanics will be based upon the wages that will be determined by the Secretary of Labor to be prevailing for the corresponding classes of laborers and mechanics employed on the project of a character similar to the contract work in the City of Dallas.

Except for work on legal holidays, the "General Prevailing Rate of Per Diem Wage" for the various crafts or type of workers or mechanics is the product of (A) the number of hours worked per day, except for overtime hours, times (B) the above respective rate per hour.

For legal holidays, the "General Prevailing Rate of Per Diem Wage" for the various crafts or type of workers or mechanics is the product of (A) one and one-half times the above respective rate per hour times (B) the number of hours worked on the legal holiday.

The "General Prevailing Rate for Overtime Work" for the crafts or type of workers or mechanics is one and one-half times the above respective rate per hour.

Under the provisions of Chapter 2258 of the Government Code, the contractor shall forfeit as a penalty to the entity on whose behalf the contract is made or awarded, sixty dollars (\$60.00) for each laborer, worker or mechanic employed, for each calendar day, or portion thereof, such laborer, worker or mechanic is paid less than the said stipulated rates for any work under the contract, by him, or by any subcontractor under him.

A 6. PROPOSAL TABULATION:

Proposals for the project will be tabulated only as shown on the Summary at the end of the Proposal.

A 7. TIME:

Time is the essence of the Contract. The time allotted for the completion of this Contract is **As Specified Per Special Provision S-7**.

A 8. SPECIFICATIONS:

Besides this Part A, the following are a part of this Contract:

1. Part "T", Technical Specifications (where this part is required). A copy of the DWU Standard Technical Specifications for Water & Wastewater Construction, October 2017 (or Latest Edition) which includes a link to the website for the DWU Approved Materials List for Water and Wastewater Construction, May 2019, in the Preface (P-2) can be obtained at:
http://dallascityhall.com/departments/waterutilities/Pages/dwu_design_standards.aspx.
2. Part "T", Technical Specifications (where this part is required). A copy of the DWU Approved Materials List for Water and Wastewater Construction, May 2019, can be obtained at:
http://dallascityhall.com/departments/waterutilities/Pages/dwu_design_standards.aspx.
3. DWU American Iron and Steel Approved Materials List for Texas Water Development Board Water Construction – January 2019
http://dallascityhall.com/departments/waterutilities/Pages/dwu_design_standards.aspx.
4. Contracts and Bond Forms
5. Drawings
6. Proposal
7. Standard Specifications for Public Works Construction - North Central Texas Council of Governments (Fourth Edition - 2004), A copy may be obtained from the North Central Texas Council of Governments, 616 Six Flags Dr., Arlington, Texas 76005, Telephone: (817) 640-3300.
8. City of Dallas 2011 ADDENDUM to the Public Works Construction - North Central Texas Council of Governments - Fourth Edition – October 2004, October 1, 2011, (or Latest Edition). A copy of the City of Dallas ADDENDUM to the NCTCOG General Specifications can be obtained at
http://dallascityhall.com/departments/waterutilities/Pages/dwu_design_standards.aspx.

9. Dallas Water Utilities Standard Drawings for Water & Wastewater Construction, October, 2017 (or Latest Edition). - A copy of the City of Dallas Standard Drawings can be obtained at http://dallascityhall.com/departments/waterutilities/Pages/dwu_design_standards.aspx.
10. Occupational Safety and Health Standards - Excavation, 29 CFR Part 1926, effective January 2, 1990.
11. City of Dallas Business Inclusion and Development BID Policy (BID Policy) – September 23, 2020 (last modification). A copy of the Policy may be obtained at Dallas City Hall, the Business and Workforce Inclusion (BWI) Division of the Office of Economic Development, 1500 Marilla Street, 6DN, Dallas, Texas 75201, 214-670-5010.
12. A revised copy with Ordinance 29993 attached amending the Department of Public Works and Transportation Pavement Cut and Repair Standards Manual (October 2003 or latest edition) may be purchased from the Office of the Director of Public Works and Transportation, Public Works and Transportation Department, 320 E. Jefferson Boulevard, Room 102, Dallas, Texas 75203.
13. City of Dallas Department of Public Works Standard Construction Details 251D-1, September 2002, or latest edition. A copy can be obtained at <http://dallascityhall.com/departments/public-works/pages/constructionstandards.aspx>.

A 9. ADDENDA:

All Bidders are required to acknowledge receipt of all Addenda.

A 10. Business Inclusion and Development Policy – M/WBE PARTICIPATION

Overview

On September 23, 2020, the City Council adopted the following amendments to the Business Inclusion and Development Plan:

- Changed the name from Business Inclusion and Development (BID) Plan to Business Inclusion and Development (BID) Policy.
- Business and Workforce Inclusion (BWI) will strengthen the program by:
 - Reviewing specifications for large contracts prior to the issuance of a request for proposal or request for a bid to determine and/or identify unbundling opportunities to increase M/WBE participation.
 - Reviewing project specifications for opportunities to remove barriers and restrictive language.
 - Tracking and monitoring payments to prime contractors from the City and payments from prime contractors to subcontractors with emphasis on prompt payment as outlined in Government Code Section 2251.022.
 - Performing regular site visits based on project type, award amount or stakeholder concerns to ensure compliance with BID Policy.
 - Monitoring compliance of prime contractors and subcontractors and recommend measures to deal with prime and sub-contractors deemed to be non-compliant with BID Policy criteria.
 - Developing an owner-controlled insurance policy owned by the City of Dallas.
 - Maintaining a public sector group to provide recommendations on industry best practices focusing on new programs, small business resources, and contracting opportunities that have historically been overlooked.

Policy Statement

It is the policy of the City of Dallas to involve Minority and Women-Owned Business Enterprises (M/WBEs) to the greatest extent feasible on the City's construction, procurement and professional services contracts. It is the policy of the City of Dallas to encourage the growth and development of M/WBEs that can successfully compete for contracting opportunities. The City and its contractors shall not discriminate on the basis of race, color, religion, national origin, or sex in the award and performance of contracts. In consideration of this policy, the City of Dallas has adopted the Business Inclusion and Development (BID) Policy for all City of Dallas contracts.

Scope of BID Policy

The BID Policy shall apply to all contracts for the purchase of goods or services over \$50,000 with special emphasis on those contracts with first tier subcontracting opportunities. The provision of the BID Policy takes precedence over any departmental plans or procedures in conflict herewith, except for specific requirements mandated by the terms or conditions of agreements in force between the City and the Federal Government or the State of Texas that require different procedures than those described in the BID Policy.

The BID Policy Goals

The BID Policy establishes standard requirements for all prospective City of Dallas bidders/proposers to ensure a reasonable degree of participation by M/WBEs in all City contracts. It is the goal of the City that a certain percentage of work under each contract be performed by one or more M/WBEs.

On September 23, 2020, the City Council approved the following M/WBE participation goals (Council Resolution #201430). These goals were adopted without consideration for ethnicity or gender.

- Construction: 32.00%
- Architectural & Engineering: 34.00%
- Professional Services: 38.00%
- Other Services: N/A
- Goods: 32.00%

Prospective bidders/proposers are required to make a "good faith effort" to meet the established participation goals and must document their good faith effort to include M/WBEs in the contract.

Definitions of a M/WBE

- A. Minority/Women Business Enterprise means a business:
1. Which is at least 51% owned and controlled by one or more socially and economically disadvantaged individuals, or in the case of any publicly owned business, of which at least 51% of the stock is owned by one or more socially and economically disadvantaged individuals;
- B. "Socially and economically disadvantaged individuals" means those individuals who are citizens of the United States (or lawfully admitted permanent residents) who are:
1. African American (persons having origins in any of the Black racial tribes of Africa);
 2. Hispanic Americans (persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race);
 3. Native Americans (persons who are American Indians, Eskimos, Aleuts or Native Hawaiians);
 4. Asian Pacific Americans (persons whose origins are from Japan, China, Guam, the U.S. Trust Territories of the Pacific and the Northern Marianas);
 5. Asian-Indian Americans (persons whose origins are from India, Pakistan, and Bangladesh);
 6. Women (regardless of race, ethnicity or origin); or
 7. Any other minorities or individuals found to be disadvantaged by the Small Business Act.
 8. Disabled will be evaluated on a case-by-case basis

- C. The phrase “owned and controlled” as used in this definition means a business is:
1. a sole proprietorship legitimately owned by an individual who is a minority or a female;
 2. a partnership or joint venture controlled by minority individuals and/or females, and in which at least 51% of the beneficial ownership interests legitimately are held by minority and/or female individuals; or
 3. a corporation or other entity controlled by a minority or women, or both, and in which at least 51% of the voting interests and 51% of the beneficial ownership interests are legitimately held by minority individuals or women, or both. In addition, these persons must control the management and operation of the business on a day-to-day basis.

Responsibilities of the City and M/WBEs in the Bidding/Proposal Process

A. M/WBE Directory

1. The City of Dallas will maintain a directory to identify M/WBEs relevant to general contracting requirements and to particular bid/proposal solicitations. The directory will consist of certified M/WBEs who are also registered City of Dallas vendors. BDPS will make the M/WBE Directory available to potential contract awardees to assist in efforts to meet BID goals and requirements.
2. The following information will be maintained on each M/WBE firm listed in the M/WBE Directory: name of business, address, telephone number, email address, services and products of the firm. The directory will include M/WBEs who manufacture, produce, lease, sell, distribute or produce equipment or professional services procured by the City. This information will be used to notify M/WBEs of opportunities for participation in City contracts and to provide other business enterprises with contacts for subcontracting and joint ventures with M/WBEs.

B. Certification of M/WBEs Desiring to Participate in the City’s M/WBE Certification Program

1. The City of Dallas is a member of the North Central Texas Regional Certification Agency (NCTRCA). The agency certifies ownership and control of M/WBEs and provides a centralized M/WBE certification service for public agencies and municipalities. M/WBEs seeking certification can utilize NCTRCA for certification purposes. Copies of application forms for certification are available from BDPS and from the NCTRCA website: www.nctrca.org However, the City of Dallas, upon authorization from the Director of BDPS, will accept certification of M/WBEs from agencies of similar guidelines whether from private certification agencies,

municipalities, state or federal government entities. All businesses wishing to be certified as an M/WBE business will be required to provide documentation needed by the City to certify such firms as M/WBEs.

Compliance Procedures

A. Description of BID Documentation Forms

Forms are provided to all apparent low bidders/most advantageous proposers for use in documenting M/WBE subcontractor participation and compliance with the BID Policy. As a prerequisite for City Council award, all primes who have been identified as the apparent low bidder/most advantageous proposer must complete the appropriate forms.

All bid documents and proposal packages must include the signed BID affidavit confirming the bidder/proposer's intent to comply with the City's BID Policy. No other BID documentation will be required at time of bid.

1. BID Affidavit

This form is turned in with the bid packet or proposal package and certifies that the bidder/proposer agrees to comply with the City's BID Policy.

2. Schedule of Work and Actual Payment Form

This form provides information on:

- a. Verification of the prime contractor's use of 100% of its own workforce to complete the contract (if applicable);
- b. First tier subcontractors, suppliers or sub consultants participating with the prime contractor on the contract;
- c. Payments made to the subcontractor, supplier or sub consultant through the term of the contract;
- d. Contracts over \$1M report payments on a monthly basis; contracts under \$1M report payments on a quarterly basis.

3. Ethnic Workforce Composition Report

This form provides information on the ethnic and gender composition of the prime's workforce.

4. Subcontractor Intent Form

This form is to be completed by the apparent low bidder/most advantageous proposer and all M/WBE subcontractors, suppliers or sub consultants participating on the anticipated contract. One form for each M/WBE subcontractor, supplier or sub consultant will be required.

5. BID Documentation Form

This form is to be completed by the apparent low bidder/most advantageous proposer who will NOT meet the applicable BID goal. The form documents a bidder's/proposer's BID efforts to obtain M/WBEs for subcontracting or sub consulting opportunities in compliance with the BID Policy.

6. Change of M/WBE Subcontractor/Supplier Form

This form is to be completed by prime contractors to document subcontractor, supplier or sub consultant changes during the term of the contract.

B. Submission of BID Documentation Forms

BID forms are submitted by the apparent low bidder/most advantageous proposer. The apparent low bidder/most advantageous proposer has up to five (5) business days after the City has issued notification of intent to award the contract. The apparent low bidder / most advantageous proposer shall submit BID forms to Business Development and Procurement Services (BDPS).

1. Prime contractors who will meet or exceed the BID goal must submit the following forms:
 - a. Schedule of Work and Actual Payment Form
 - b. Ethnic Composition Workforce Report
 - c. Subcontractor Intent Form(s)
2. Prime contractors who will not meet the BID goal must submit the following forms:
 - a. Schedule of Work and Actual Payment Form
 - b. Subcontractor Intent Form(s)
 - c. Ethnic Composition Workforce Report
 - d. BID Documentation

C. Changes to the Schedule of Work

Once a contract has been approved by City Council, the prime contractor is expected to utilize M/WBE subcontractors or suppliers or listed on the Schedule of Work. In making a M/WBE subcontractor or supplier change, the prime contractor must make a BID to replace the subcontractor or supplier with a M/WBE subcontractor or supplier. Failure to comply with the City's BID Plan in subcontractor, supplier or sub consultant substitutions may result in sanctions. During the course of contract performance, valid reasons to make changes or substitutions to the Schedule of Work are:

1. An increase or decrease in the scope of work;
2. Poor performance by the M/WBE subcontractor or supplier;
3. M/WBE subcontractor, supplier or sub consultant is unable or unwilling to perform the work;
4. M/WBE subcontractor, supplier or sub consultant does not have the equipment or workforce to perform the work; or
5. Other documented reasons

D. All M/WBE subcontractor or supplier changes require submission of a Change of M/WBE Subcontractor/Supplier Form. The prime contractor must submit the following documentation to the City of Dallas project manager prior to any changes in the Schedule of Work:

1. Completed Change of Subcontractor/Supplier Form (signed by the City's project manager) including documentation of BID made to obtain M/WBE subcontractor.
2. Revised Schedule of Work reflecting the revised participation percentages.
3. Subcontractor Intent Form(s) signed by the new M/WBE subcontractor, supplier or sub consultant.
4. Other BID documentation deemed necessary to adequately justify the proposed change and to document the prime contractor's efforts to obtain M/WBE participation.

Acts of Business Inclusion and Development

Determination of BID Policy compliance is based on the apparent low bidder's /most advantageous proposer's documented efforts to obtain M/WBE participation. BID documentation must be submitted and approved by the Office of Economic Development, Business and Workforce Inclusion Division, prior to award of the contract by City Council. To determine whether BID Policy criteria was followed to obtain M/WBE participation, an apparent low bidder/most advantageous proposer that does not meet the established BID goal must demonstrate that a sufficient reasonable effort was made to obtain M/WBE participation in their bid/proposal.

A. Documented efforts include:

1. Contact with the Office of Economic Development, Business and Workforce Inclusion for assistance in locating M/WBE subcontractors
2. Methods used to identify M/WBE subcontractors:
 - a. Industry relationships
 - b. City of Dallas M/WBE Directory
 - c. Written notices sent to certified M/WBEs
 - d. Assistance from other City Staff (provide names and departments)
 - e. Other (provide appropriate documentation)
3. Communication with a minimum of five or 5% (whichever is greater), of M/WBE companies listed on the City's M/WBE Directory:
 - a. Copy of email communication between prime contractor and solicited subcontractor, supplier or sub consultant
 - b. Documented phone conversation including name and number of contacts
 - c. Other documentation supporting contacts
4. Copy of type of information provided to M/WBE firms contacted
 - a. Plans and specifications
 - b. Scope of work and project schedule
 - c. Industry certification requirements or
 - d. Equipment requirements

If the apparent low bidder/most advantageous proposer does not receive a response from the contacted M/WBE, the apparent low bidder/most advantageous proposer must advise BWI that no response has been received.

5. The apparent low bidder/most advantageous proposer must consider all sub-bids, quotes and proposals received from M/WBEs and cannot reject M/WBEs as unqualified without sound reasons based on a thorough understanding of their capabilities. If a subcontract is not awarded to an M/WBE because the quote was not competitive, the apparent low bidder/most advantageous proposer must be able to demonstrate that the sub-bid or price quote was not competitive. The apparent low bidder/most advantageous proposer must also show that the sub-bid, price quote or proposal accepted was for the same work or supply of materials as quoted by the M/WBE. M/WBE subcontractors, suppliers or sub consultants who repeatedly fail to respond to requests for sub-bids, price quotes or proposals will be removed from the M/WBE Directory.

Commercially Useful Function

A prime contractor may count towards its M/WBE participation only expenditures to M/WBEs that perform a commercially useful function in the work of a contract. A M/WBE is considered to perform a commercially useful function when it is responsible for execution of a distinct element of the work of a contract and carrying out its responsibilities by actually performing, managing, and supervising the work involved. To determine whether a M/WBE is performing a commercially useful function, the City will take into account the amount of work subcontracted, industry practices, and other relevant factors.

Consistent with normal industry practice, M/WBE subcontractors may subcontract a portion of their work. If a M/WBE contractor subcontracts a significantly greater portion of the work than would be expected on the basis of normal industry practices, the M/WBE will be presumed to not be performing a commercially useful function. The M/WBE may present evidence to the City to rebut this presumption.

Only payments to M/WBEs that perform a Commercially Useful Function (CUF) under the City's contract will count toward the BID goals. A firm is considered to perform a CUF when:

- A. It is responsible for the execution of a distinct element of work on the contract;
- B. It carries out its responsibilities by actually performing, managing, and supervising the work involved; and
- C. The M/WBE owners control the operation of the business.

BID Policy Credit (Local vs. Non-local)

BID goals for M/WBE subcontracting are set by the City Council based on the availability of M/WBEs within a designated market area. Only first tier, local (within City of Dallas limits) M/WBE participation can be counted toward achieving the goals. Participation of M/WBEs located outside City of Dallas limits will be considered as evidence of compliance with the BID Policy, but are not counted towards the determination of whether the goal was achieved.

Counting M/WBE Participation

An M/WBE's certification must be kept current for the entire term of the contract for the City to continue to count the M/WBE's participation toward the BID goals. If an M/WBE's certification lapses during the performance of the contract, only payments received by the M/WBE prior to its de-certification will be counted toward the BID goals. If the M/WBE is re-certified during the term of the contract, 100% of the M/WBE's participation will be counted for the full term of the contract.

Only first tier subcontractors, suppliers or sub consultants will be counted towards the BID goal.

First tier Definition

Only local certified M/WBE subcontractors, suppliers or subconsultants with a direct contractual relationship with the prime contractor will count toward the BID goal. A prime contractor is a company or firm who is awarded a City contract by either the City Council or by Administrative Action. Contracts awarded by the City Council or by Administrative Action that are assigned to a construction manager are also considered prime contractors, with their subcontractors, suppliers and sub consultants counted as first tier.

In addition, first tier subcontractors, suppliers or subconsultants can utilize subcontractors/suppliers consistent with normal industry practice. If, however, the arrangement erodes the ownership, control or independence of the subcontractor/supplier or does not meet the commercially useful function requirement, the contractor shall receive no credit toward the City's BID goal. Also, prime contractors who have subcontractors, suppliers or sub consultants that do not perform a commercially useful function or first tier subcontractors, suppliers or sub consultants that do not perform the majority (51% of the subcontract amount, or normal industry practice) of the work on a contract will not be given credit toward the BID goal.

On contracts for alternative delivery methods for facility construction, (e.g. construction manager at risk, design build, or construction manager-agent), each construction package awarded will be required to fulfill the BID requirements for subcontractor/ supplier participation. Only the first-tier subcontracts within the awarded construction packages will be counted towards the BID goals.

Prompt Payment to the Subcontractor

State Law, V.T.C.A., Government Code Section 2251.022, requires prime contractors to pay subcontractors within ten (10) days from receipt of payment from the City.

Right to Audit

In accordance with its contracting policy, the City reserves the right to audit/review any or all parts of a project at any time. Such an audit/review may include information from the prime contractor and any subcontractors, suppliers or sub consultants.

Complaints

All complaints regarding the administration of or compliance with the City's BID Plan will be directed to City of Dallas Department of Business Development and Procurement Services. Formal complaints should be filed with the City Auditor's Office for thorough investigation.

Sanctions for Failure to Comply with BID Requirements

The failure of a contractor to adequately comply with the BID Policy shall be considered by the City in the award of future contracts.

- A. A contractor who fails to adequately document that a BID Policy was made to subcontract with M/WBE firms or to purchase significant material supplies from M/WBE firms may be denied award of the contract by the City on the grounds of nonresponsibility.

- B. If, during the performance of the contract, the contractor is found not to be fulfilling commitments to utilize M/WBE subcontractors/sub consultants and no acceptable justification has been offered by the prime, this failure to fulfill commitments may be considered in the award of future contracts and may result in the denial of such future contracts to the prime contractor.

- C. A prime contractor may be disqualified for contract awards for a three-year period upon the City Council's determination that the contractor:
 - 1. Is non-responsible based upon poor performance
 - 2. Is engaged in pass-through brokering
 - 3. Is engaged in payrolling

A 11.

**DRUG-FREE JOBSITE
ON CITY CONSTRUCTION PROJECTS**

- I. In the interest of job safety and to protect the general public, other Contractors and the Owner's employees from the consequences of accidents that are caused by Worker abuse of controlled substances on City construction projects, the Bidder certifies by submission of its bid that it will make a good faith effort to maintain a drug-free jobsite, and also certifies that to further this objective it will:
 - (a) Establish a controlled substance abuse program that will test for controlled substance use:
 - (1) Employees utilized by the Bidder on this project in safety-sensitive positions; for purposes of this provision a "safety sensitive" position is a position performed at the jobsite, which if performed by a person impaired by the effects of a controlled substance, would or could:
 - (i) Pose a serious risk of death or personal injury to the employee, fellow employees or other persons in the vicinity; or
 - (ii) Compromise the quality of construction in such manner as would impose a significant public safety risk in the use or operation of the City improvement in question;
 - (2) Employees when there is a reasonable suspicion that an employee is using a controlled substance on the jobsite, or off the jobsite in a manner that affects jobsite performance;
 - (3) Employees as part of a voluntary drug testing program; or
 - (4) Employees as part of or as a follow-up to counseling for or rehabilitation from abuse of a controlled substance;
 - (b) Establish a program that will test an employee utilized by the Bidders on this project in a safety-sensitive position when there is a reasonable suspicion that the employee is impaired by the effects of alcohol on the jobsite; for purposes of this provision, a safety-sensitive position is a position performed at the jobsite which, if performed by a person impaired by the effects of alcohol, would or could:
 - (1) Pose a serious risk of death or personal injury to the employee, fellow employees or other persons in the vicinity; or

- (2) Compromise the quality of construction in such manner as should impose a significant public safety risk in the use or operation of the City improvement in question.
 - (c) Publish a statement notifying employees that the unlawful manufacture, distribution, selling, dispensing, possession or use of controlled substance is prohibited on the jobsite and specifying the actions that will be taken against employees for violations of such prohibitions,
 - (d) Establish a drug-free awareness program to inform employees about the danger of drug abuse on the jobsite, about the Bidder's policy regarding a drug-free jobsite, about available counseling and rehabilitation programs, and about the penalties that may be imposed upon employees for drug abuse violations occurring on the jobsite; and
 - (e) Provide a copy of the statement required by subsection (c) to all employees of the Bidders who will be involved in performance of the Contract.
- II Employees who test positive for controlled substance use in one of the tests conducted pursuant to paragraph I.(a), or who are impaired by the effects of alcohol on the jobsite pursuant to paragraph I.(b), shall be considered unfit for purposes of Item 108.4 of the Standard Specifications for Public Works Construction, Fourth Edition, As Amended
- III For purposes of Section I. above, the term "controlled substance" means a drug substance or immediate precursor listed in Schedules I through V of Subchapter 2 or Penalty Groups 1 through 4 of Subchapter 4 of the Controlled Substances Act, Article 4476-15; Texas Revised Civil Statutes.
- IV The Bidder shall be solely responsible for the maintenance and administration of the program required in Section I above. Nothing in these provisions shall be construed on the Owner's part, as authorizing, permitting or requiring the Bidder to engage in conduct that is otherwise illegal or that otherwise constitutes an unreasonable or unlawful invasion of privacy under Texas or Federal law.

A 12.

PERMITS

**CONSTRUCTION AGREEMENT AND
CONTRACTOR'S RIGHT OF ENTRY**

THIS AGREEMENT ("Agreement"), by and between DALLAS AREA RAPID TRANSIT ("DART"), a regional transportation authority created and existing pursuant to Chapter 452, Texas Transportation Code, and hereinafter called "Contractor", whose mailing address is

1. For the period not to extend beyond _____, DART hereby permits Contractor to enter upon DART property ("Property") on a tract of right of way of the _____ Line located _____, Mile Post _____, (Latitude: _____, Longitude: _____) in _____, Dallas County, Texas, as may be necessary in connection with installation of the installation of one _____-inch waste water line encased in a _____-inch steel casing pipe to be performed on the Property by Contractor under an agreement between Contractor and the City of Dallas, a Texas municipality, (the "Contract"), and for no other purpose. Contractor understands that this Contract and all work to be performed thereunder is subject to the terms and conditions contained in the Supplemental Agreement No. 1 To Master Interlocal Agreement Planning and Development, dated the 25th day of July, 1990, issued by DART to the City of Dallas, which is incorporated herein by reference.

2. Contractor shall:
 - (a) Perform that portion of the work on the Property in accordance with plans and specifications approved by DART and Fort Worth and Western Railroad (the "Railroad") in such manner and at such times as shall not endanger or interfere with DART's or Railroad's operations nor with any improvements located on, above or below the Property. Contractor shall submit to DART and Railroad, for approval, all construction details, falsework and other incidentals not detailed in plans, insofar as they affect DART and Railroad. Contractor shall be responsible for any damages to the Property caused by Contractor's use or entry thereon (including without limitation, to improvements on, above or below the surface), and shall repair, restore or replace (at DART's discretion), damaged improvements on the Property.

 - (b) Maintain, at Contractor's expense, flagger(s) who are representatives of the Railroad, qualified on the Railroad's operating and safety rules to protect DART's and the Railroad's interests while upon the Property. Contractor will not perform any work within 25 feet of any DART track (also referred to as "the foul zone") or perform any work in which an event could cause equipment, people or materials to enter into the foul zone unless flagger(s) are present.

 - (c) Ensure, at Contractor's expense, that all personnel working under Contractor's control engaged in any activity that requires flagger(s), as described above, have within the last 365 days from the date the work is to be performed, attended a creditable Roadway Worker Protection course and have successfully passed all required examinations associated with that course and will provide proof of course completion upon request from DART or their representative. Railroad or DART shall determine whether or not the above mentioned Roadway Worker Protection course is creditable.

 - (d) (A) Notify Railroad in writing at least fifteen (15) working days before commencing work on the Property and (B) notify DART and Railroad in writing within five (5) working days after such work is completed.

 - (e) Keep all equipment, tools and materials stored at least twenty-five (25) feet from the center line of any railroad track. Explosives or other highly inflammable substances or any hazardous materials shall not be stored on the Property without the prior written approval of DART.

- (f) Remove Contractor's tools, equipment and materials and all debris created by Contractor from the Property promptly upon completion of work, restoring the Property to the same state and condition as when Contractor entered thereon.
 - (g) Reimburse DART and Railroad for all costs and expenses incurred by DART and/or Railroad in connection with said work, including without limitation the expense of furnishing such inspectors, watchmen and flagmen as DART or Railroad deem necessary, the installation and removal of falsework beneath tracks, and restoration of the Property to the same condition as when Contractor entered thereon, or to a condition satisfactory to DART.
 - (h) Remove any lien against the Property arising from entry or performance of work hereunder by Contractor or an agent or subcontractor of Contractor.
3. **Contractor agrees to release, defend and indemnify DART and Railroad, from and against all loss, damage, claims, costs, expenses, including attorney's fees, and liability for bodily injury to or death of any persons and loss of or damage to any property and loss of use thereof arising out of or in any way connected with Contractors entry on the Property or activity thereon, including entry or activity by Contractor's employees, subcontractors, agents or invitees. In the event any part of the provisions of this section are determined by any statutory enactment or judicial decision to be void or unenforceable, then this section shall not fail in its entirety but will be enforceable to the extent permitted by law. For the purposes of this section, the term "Railroad" shall include any other railroad company using the Property with DART's consent and any affiliate, subsidiary or lessor of DART.**
4. Prior to entry on or start of work or occupancy of the Property, Contractor agrees to procure and maintain at its sole cost and expense, the following types and amounts of insurance with form of coverage and insurers satisfactory to DART:

Commercial general and automobile liability insurance with contractual liability endorsement and products and completed operations hazards included, which shall provide coverage for combined single limits of not less than \$2,000,000, as further outlined below. This insurance shall be primary and non-contributory.

All insurance coverage's required by this Agreement shall provide the following as a minimum standard:

- (a) Commercial General Liability With Contractual Liability Endorsement.

- Per occurrence limit of at least \$2,000,000.

- DART, Railroad **and all affiliated companies and organizations** are named as additional insureds without any qualifications or restrictions.

- DART must have 30 days notice of cancellation or modification.

- (b) Commercial Automobile Liability Policy

- Combined single limit of at least \$2,000,000.

- DART and Railroad are named as additional insureds without any qualifications or restrictions.

- DART must have 30 days notice of cancellation or modification.

(c) Workers' Compensation Insurance

-Providing Statutory Benefits under the Workers' Compensation Act of the State of Texas and/or any other State or Federal Law or Laws applicable to the Contractor's employees performing the work under this Agreement.

-Employer's Liability Insurance with limits of liability of not less than \$500,000 each accident, \$500,000 each employee for disease and \$500,000 policy limit for disease.

-Endorsed with a Waiver of Subrogation Endorsement, waiving the carrier's right of recovery under subrogation or otherwise from DART and the Railroad.

(d) Contractor agrees to furnish DART Certificates of Insurance and copies of Endorsements for Additional Insured, Waiver of Subrogation and Contractual Liability Railroads (or, as and when DART may direct, copies of the actual insurance policies) as evidence of the coverage's outlined in (a), (b) and (c) above, and this section (d). Approval will be expedited if all required coverage's and the following endorsements are included on the Certificates:

-Endorsement showing DART and its affiliate companies and organizations named as additional insureds. The certificate must specify that the endorsement is applicable to the General Liability and Auto Liability Policies.

-Contractual liability endorsement.

-Endorsement removing exclusions from contractual liability coverage for operations within 50 feet of a railroad or the purchase of a Railroad Protective Liability Policy with limits of no less than \$2,000,000 per occurrence and \$6,000,000 aggregate.

-Endorsement removing exclusions for XCU hazards.

-Waiver of subrogation endorsement specific to Workers' Compensation.

5. All policies should contain a cross liability endorsement reading as follows:

"It is agreed that the inclusion of more than one person, corporation, organization, firm or entity as insured under this policy shall not in any way affect the rights of any such person, corporation, organization, firm or entity with respect to any claim, demand, suit or judgment made, brought or recovered by or in favor of any other insured. This policy shall protect each person, corporation, organization, firm or entity in the same manner as though a separate policy had been issued to each; provided that this endorsement shall not operate to increase the company's limits of liability as set forth elsewhere in this policy."

6. The permission herein given shall not be assigned by Contractor without the prior written consent of DART, except in the case of subcontractors of Contractor who shall be deemed agents of Contractor and subject to the terms of this Agreement.

7. No vehicular crossing over DART's track shall be installed or used by Contractor without prior written permission of DART.

- 8. No work shall be done between the hours of 6:00 p.m. and 6:00 a.m., nor on Saturdays, Sundays or legal holidays without prior written permission of DART and Railroad.
- 9. **At DART's or Railroad's request, Contractor shall remove from the Property any employee of Contractor or any subcontractor who fails to conform to the instructions of DART or Railroad in connection with entry or work on the Property, and any right of Contractor to enter upon the Property shall be suspended until such request of DART or Railroad is met. Contractor shall indemnify, defend and hold DART and Railroad harmless against any claim arising from the removal of any such employee from the Property.**
- 10. Company-issued photo identification is required of all contractors and subcontractors working on the Property.
- 11. Notification of Railroad shall be by telephone to:

Bill Parker, General Director of Planning, at 817.201.4450

Notification of DART for all other purposes, shall be by telephone to:

Eshandra Davis, Senior ROW Representative, at 214.749.3619
- 12. The parties may execute this Agreement in multiple originals and when taken together, those originals constitute a whole that shall be effective on the date last signed.

DALLAS AREA RAPID TRANSIT

By _____
 MAUREEN MCCOLE
 Vice President, Commuter Rail
 & Railroad Management

Date Signed: _____

By _____

Printed Name: _____

Title: _____

Date Signed: _____

A 27.

CEMENT USE ON PUBLIC PROJECTS

A 27. CEMENT USE ON PUBLIC PROJECTS

Item **303.3.6.COD: Cement Used on Public Projects - Sustainable Air Quality**, as shown in the *City of Dallas Addendum to the North Central Texas Council of Governments Public Works Construction Standards (Fourth Edition, October 2004), Latest Edition*, is hereby replaced with the following:

(Page 303-14. Add the following:)

303.3.6.COD: CEMENT USED ON PUBLIC PROJECTS – SUSTAINABLE AIR QUALITY:

(A) Pursuant to Section 271.907 of the Texas Local Government Code, as amended, the OWNER will give a bid preference to the Bid of a CONTRACTOR who certifies in the Bid that, in the purchase of concrete or other products using Portland cement in construction of the Project, the CONTRACTOR will utilize Portland Cement from manufacturers who:

- (1) are in compliance with all applicable state and federal environmental standards relating to the emission of NOx, including all applicable TCEQ and EPA rules and regulations; and
- (2) operate kilns with emissions that exceed the standards for NOx emissions set out in 30 Tex. Admin. Code § 117.3110(a)(1)-(4) (as provided presently and as may be amended in the future) by the following percentage amounts:
 - (a) for each long wet kiln, 10 percent lower than the standard for long wet kilns located in Ellis County, Texas as set out in 30 Tex Admin Code § 117.3110(B);
 - (b) for each long dry kiln, 20 percent lower than the standard for long dry kilns located in Ellis County, Texas, as set out in 30 Tex. Admin. Code § 117.3110(a)(2);
 - (c) for each preheater kiln, 20 percent lower than the standard for preheater kilns located in Ellis County, Texas, as set out in 30 Tex. Admin. Code § 117.3110(a)(3); and
 - (d) for each preheater-precalciner or precalciner kiln, 35 percent lower than the standard for preheater-precalciner and precalciner kilns located in Ellis County, Texas, as set out in 30 Tex. Admin. Code § 117.3110(a)(4). *[Reference: City Council Resolution No. 11-0657, passed by the Dallas City Council on March 9, 2011.]*

- (B) The preference shall apply only to the extent that the CONTRACTOR'S Bid, as certified, is not greater than 105 percent of the lowest responsible Bid of a CONTRACTOR who does not or cannot certify that it will utilize Portland cement from a cement kiln meeting the above-mentioned emission standards. The OWNER reserves the right to pursue any remedies it has under the CONTRACT Documents in the event the CONTRACTOR falsely certifies to the requirements stated above, including but not limited to termination of the CONTRACT, adverse evaluation at final completion of the CONTRACT, or debarment from participation in future construction contracts the OWNER may advertise or award. The OWNER also reserves the right to reject any load or item of Portland cement, concrete, or other product containing Portland cement delivered in the event it is discovered that the Portland cement used in the load or item was not manufactured as certified.
- (C) When a bidding preference has been granted as provided herein and any load or item of Portland cement, concrete, or other product which contains Portland cement is delivered to the Project site for use, the CONTRACTOR shall obtain and present to the OWNER a sworn-to certification, using a certification form approved by the OWNER, from the Portland cement or concrete manufacturer that the load or item delivered contains no Portland cement other than Portland cement meeting the requirements as specified in Paragraph (A). The CONTRACTOR shall also obtain a manifest for each Portland cement or concrete load showing the quantity of Portland cement or concrete delivered and the location of the manufacture of the Portland cement, along with the name of a designated representative of the Portland cement manufacturer for purposes of contact by the OWNER if necessary. On a monthly basis or other frequency desired by the OWNER, the CONTRACTOR shall furnish for inspection by the OWNER of a copy of the delivery manifests obtained. The CONTRACTOR shall certify in writing that the manifests are true and correct to the best of the CONTRACTOR'S knowledge. Notwithstanding the manufacturer's certification, the CONTRACTOR will be held responsible in the event the OWNER discovers that the cement used was not manufactured in accordance with the requirements of Paragraph (A).
- (D) The OWNER reserves the right to pursue any remedies it has under the CONTRACT Documents in the event the CONTRACTOR fails to comply with this materials specification, including but not limited to termination of the CONTRACT, adverse evaluation at final completion of the CONTRACT, or debarment from participation in future construction contracts the OWNER may advertise or award. The OWNER also reserves the right to reject any load or item of Portland cement, concrete, or other product containing Portland cement delivered in the event it is discovered that the Portland cement used in the load or item was not manufactured as certified.
- (E) Copies of the required forms are found on the following pages:

CEMENT PREFERENCE CERTIFICATION

I, _____, the _____ [state title of officer of company] of _____ [legal name of bidder company], do hereby certify that my bid for concrete products utilizes Portland cement produced by vendors who:

- (1) are in compliance with all applicable state and federal environmental standards relating to the emission of NOx, including all applicable TCEQ and EPA rules and regulations; and
- (2) operate kilns with emissions that exceed the standards for NOx emissions set out in 30 Tex. Admin. Code § 117.3110(a)(1)-(4) (as provided presently and as may be amended in the future) by the following percentage amounts:
 - (a) for each **long wet kiln**, 10 percent lower than the standard for long wet kilns located in Ellis County, Texas as set out in 30 Tex. Admin. Code § 117.310(a)(1)(B) **[As of 3-9-11, wet kiln NOx emissions can NOT exceed 3.6 lbs per ton of clinker produced.];**
 - (b) for each **long dry kiln**, 20 percent lower than the standard for long dry kilns located in Ellis County, Texas, as set out in 30 Texas. Admin. Code § 117.3110(a)(2) **[As of 3-9-11, dry kiln NOx emissions can NOT exceed 4.1 lbs per ton of clinker produced.];**
 - (c) for each **preheater kiln**, 20 percent lower than the standard for preheater kilns located in Ellis County, Texas, as set out in 30 Tex. Admin. Code § 117.3110(a)(3) **[As of 3-9-11, preheater kiln NOx emissions can NOT exceed 3.0 lbs per ton of clinker produced.];** and
 - (d) for each **preheater-precalciner or precalciner kiln**, 35 percent lower than the standard for preheater-precalciner and precalciner kilns located in Ellis County, Texas, as set out in 30 Tex. Admin. Code § 117.3110(a)(4) **[As of 3-9-11, preheater-precalciner or precalciner kiln NOx emissions can NOT exceed 1.8 lbs per ton of clinker produced.].**

BIDDER:

Print Name and Title

SUBSCRIBED and SWORN TO before me this ____ day of _____, 20__.

[Seal]

Notary Public, State of Texas
My commission expires: _____

CONCRETE/CEMENT DELIVERY CERTIFICATION

I, _____, the _____ [state title of officer of company] of _____ [legal name of Portland cement or concrete manufacturer], do hereby certify that the concrete/cement products delivered between _____ and _____ to the City of Dallas project known as _____ utilizes Portland cement produced by vendors who:

- (1) are in compliance with all applicable state and federal environmental standards relating to the emission of NOx, including all applicable TCEQ and EPA rules and regulations; and
- (2) operate kilns with emissions that exceed the standards for NOx emissions set out in 30 Tex. Admin. Code § 117.3110(a)(1)-(4) (as provided presently and as may be amended in the future) by the following percentage amounts:
 - (a) for each **long wet kiln**, 10 percent lower than the standard for long wet kilns located in Ellis County, Texas as set out in 30 Tex. Admin. Code §117.310(a)(1)(B) **[As of 3-9-11, wet kiln NOx emissions can NOT exceed 3.6 lbs per ton of clinker produced.];**
 - (b) for each **long dry kiln**, 20 percent lower than the standard for long dry kilns located in Ellis County, Texas, as set out in 30 Texas. Admin. Code §117.3110(a)(2) **[As of 3-9-11, dry kiln NOx emissions can NOT exceed 4.1 lbs per ton of clinker produced.];**
 - (c) for each **preheater kiln**, 20 percent lower than the standard for preheater kilns located in Ellis County, Texas, as set out in 30 Tex. Admin. Cod §117.3110(a)(3) **[As of 3-9-11, preheater kiln NOx emissions can NOT exceed 3.0 lbs per ton of clinker produced.];** and
 - (d) for each **preheater-precalciner or precalciner kiln**, 35 percent lower than the standard for preheater-precalciner and precalciner kilns located in Ellis County, Texas, as set out in 30 Tex. Admin. Code §117.3110(a)(4) **[As of 3-9-11, preheater-precalciner or precalciner kiln emissions can NOT exceed 1.8 lbs per ton of clinker produced.].**

CONCRETE/CEMENT MANUFACTURER:

_____ Print Name and Title

SUBSCRIBED and SWORN TO before me this ____ day of _____, 20__.

[Seal]

_____ Notary Public, State of Texas

My commission expires: _____

A 28.

**ENVIRONMENTAL POLICY
&
OCCUPATIONAL SAFETY
&
HEALTH PROGRAM**



Environmental Policy

The City of Dallas is committed to a clean, safe, and healthy environment. As such, we will exercise environmental stewardship in our dealings with employees, other governments, citizens, City contractors, business and others in the community for our world today as well as for future generations. Caring for the environment is one of our core values, and this is demonstrated by ensuring our activities are in harmony with the natural world around us.

This commitment is embodied by the following actions:

- ❖ Implementation of programs and procedures with an intent to meet or exceed all applicable environmental laws and regulations.
- ❖ Continual improvement of our environmental performance through proactive environmental management and self-assessments and/or third-party assessments.
- ❖ Prevention of pollution at its source through implementation of best management practices and resource conservation measures to reuse, reclaim, and recycle materials we generate.
- ❖ Utilization of Environmental Management Systems, as appropriate for our operations, to provide a framework for systematically reviewing and reducing our environmental footprint.
- ❖ Employees will abide by all environmental regulations and demonstrate environmental compliance in their daily work practices.
- ❖ Educate City employees on Dallas' environmental policies and motivate and encourage employees to practice environmental stewardship by raising awareness and sensitivity to environmental issues through City policies, regulations, training, and interactive dialogue.
- ❖ Outreach to the citizens and businesses of our community by communication of this Policy and education on the importance of environmental stewardship for clean air and water and sustainable development for the City of Dallas.

Approved by Dallas City Council January 26, 2005.

Signed


T.C. Broadnax
City Manager



Política Ambiental

La Ciudad de Dallas tiene el compromiso de mantener un medio ambiente limpio, seguro y sano. Y por ende atenderemos al cuidado ambiental en nuestras relaciones con los empleados, otros gobiernos, ciudadanos, contratistas de la Ciudad, negocios y otros individuos de la comunidad, para bien de nuestro mundo de hoy y de las futuras generaciones. El cuidado del medio ambiente es uno de nuestros valores esenciales, y eso se demuestra asegurando que nuestras actividades estén en armonía con el mundo natural que nos rodea.

Este compromiso se manifiesta en las siguientes medidas:

- ❖ Puesta en práctica de programas y procedimientos con la intención de cumplir con, o rebasar en el cumplimiento de, todas las leyes y reglamentaciones ambientales pertinentes.
- ❖ Mejora continua de nuestro desempeño ambiental a través de control ambiental proactivo y de autoevaluaciones y/o evaluaciones de terceros.
- ❖ Prevención de la contaminación en su origen mediante la puesta en práctica de las mejores prácticas de control y de medidas de conservación de recursos para reutilizar, recuperar y reciclar materiales que generamos.
- ❖ Utilización de Sistemas de Control Ambiental (Environmental Management Systems), según sea apropiado para nuestras operaciones, a fin de proveer una estructura para revisar y reducir de forma sistemática las huellas que dejamos en el medio ambiente.
- ❖ Los empleados deberán respetar todas las reglamentaciones ambientales y demostrar cumplimiento con lo establecido respecto al medio ambiente en sus prácticas laborales diarias.
- ❖ Educar a los empleados de la Ciudad con relación a las políticas ambientales de Dallas, y motivar y exhortar a los empleados a practicar el cuidado del medio ambiente a través de la elevación de la conciencia y la sensibilidad respecto a los asuntos ambientales mediante políticas, reglamentaciones, capacitación y diálogo interactivo por parte de la Ciudad.
- ❖ Llegar a los ciudadanos y negocios de nuestra comunidad a través de la comunicación de esta Política y de educación sobre la importancia del cuidado del medio ambiente para tener aire y agua limpios y desarrollo sostenible de la Ciudad de Dallas.

Aprobado por el Concejo de la Ciudad de Dallas el 26 de enero de 2005.

Firmado por 
T.C. Broadnax
Administradora de la Ciudad

City of Dallas

Occupational Safety and Health Policy

The City of Dallas strives to demonstrate excellence in protecting people and property, and minimizing exposure to financial loss. Every employee, contractor, and visitor or guest to our facilities will be encouraged to take personal responsibility for Safety by adhering to the following principles:

- **Safety:** Maintain a Safe workplace, plan our work, perform it safely and ensure accountability for the Safety of ourselves, co-workers, and guests.
- **Health:** Commitment to prevention of injuries and ill health within our workplace and community.
- **Compliance:** Achieve and comply with applicable legal requirements to which the City subscribes that relate to its Occupational Safety and Health hazards.
- **Community:** Maintain open, proactive and constructive relationships with our employees, neighbors, regulators, and other stakeholders.
- **Continual Improvement:** Make continual improvements in Occupational Safety and Health performance.

The Occupational Safety and Health program will undergo an annual review of the City's progress on meeting its goals and adherence to this policy and be sensitive to financial responsibility when reviewing compliance objectives.


T.C. Broadnax, City Manager

2/1/17
Date



Approved by Dallas City Council 02/11/09

Rev. 3


Ciudad de Dallas

Política de salud y seguridad ocupacional

La ciudad de Dallas se esfuerza en demostrar la excelencia en la protección de personas y bienes y minimizar la exposición a pérdidas financieras. Cada empleado, contratista y visitante o invitado a nuestras instalaciones se verán alentados a asumir la responsabilidad personal de seguridad adhiriéndose a los principios siguientes:

- **Seguridad:** Mantener un lugar de trabajo seguro, planificar nuestro trabajo, realizar de manera segura y asegurar la responsabilidad por la seguridad de nosotros mismos, colaboradores e invitados.
- **Salud:** Compromiso con la prevención de lesiones y problemas de salud en nuestro lugar de trabajo y comunidad.
- **Cumplimiento de normas:** Lograr y cumplir con requisitos legales aplicables que suscribe la ciudad que se relacionan con sus riesgos de seguridad y salud ocupacionales.
- **Comunidad:** Mantener relaciones abiertas, proactivas y constructivas con nuestros empleados, vecinos, reguladores y otras partes interesadas.
- **La mejora continua:** Continúas mejoras en el desempeño de seguridad y salud ocupacional.

El programa de seguridad y salud ocupacional a someterse a un examen anual de progreso de la ciudad en el cumplimiento de sus metas y el cumplimiento de esta política y ser sensible a la responsabilidad financiera al revisar los objetivos de cumplimiento.



T.C. Broadnax, administrador de la ciudad

2/1/17

Fecha



Aprobado por el Concejo Municipal de Dallas 11/02/09

3 Rev