

SPECIFICATIONS

AND

FORMS OF CONTRACT AND BONDS

FOR

SCHEDULE A:

WATER AND WASTEWATER MAIN INSTALLATIONS

AT

32 LOCATIONS

AND

SCHEDULE B:

INSTALLATION

OF

24 INCH WASTEWATER MAIN

CONTRACT NO. 20-425/ 20-426



PLEASE NOTE

Sealed Bids clearly identified for "SCHEDULE A: WATER AND WASTEWATER MAIN INSTALLATIONS AT 32 LOCATIONS AND SCHEDULE B: INSTALLATION OF 24 INCH WASTEWATER MAIN, CONTRACT NO. 20-425/20-426", 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, November 5, 2021. Bid opening will be read ONLY online by the Purchasing Agent at 2:00 p.m. on Friday, November 5, 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 required bid documents (.pdf format), along with the Bid Proposal Spreadsheet (.xlsx format) <u>until 1:00 p.m. on Friday, November 5, 2021</u> in Bonfire at: https://dallascityhall.bonfirehub.com/login. For any questions, please email <u>procurementAds@dallascityhall.com</u>.

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, November 5, 2021. Bid opening will not be open for in-person viewing at this time.

"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.

<u>Bidder's Acknowledgement of Prohibition on Contracts with Foreign Terrorist Organizations</u>

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):

Construction	Architecture & Engineering	Professional Services	Other <u>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 <u>With Their Bid</u> the following Forms Completed and signed

City of Dallas Pre-Bid/Proposal Cover Memo (BWI-FRM-622)
City of Dallas Pre-Bid/Proposal Form (BWI-FRM-623)
City of Dallas Ethic Workforce Composition 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
 214-299-0566

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 Forces

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 workload, 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.

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AMERICAN IRON AND STEEL

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ADVERTISEMENT FOR BIDS

"SCHEDULE A: WATER AND Sealed Bids clearly identified for WASTEWATER MAIN INSTALLATIONS AT 32 LOCATIONS AND SCHEDULE B: INSTALLATION OF 24 INCH WASTEWATER MAIN, CONTRACT NO. 20-425/20-426", as detailed on Dallas Water Utilities plans and as described in the shall be submitted Contract Specifications, as pdfs in https://dallascityhall.bonfirehub.com/login. before 1:00 p.m. on Friday. November 5, 2021. Bid opening will be read ONLY online by the Purchasing Agent at 2:00 p.m. on Friday, November 5, 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 Forms along with the excel version of the Bid Proposal Spreadsheet can be obtained using Internet Explorer at the following City of Dallas Bonfire website: https://dallascityhall.bonfirehub.com/login, Friday, October 08, 2021. Click on CIZ-DWU- 20 425/426.

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.

There will be an online Pre-Bid Conference held at 1:00 PM on Tuesday, October 26, 2021. To receive a calendar invite to the meeting, please email DWUCapitalServices@dallascityhall.com. A calendar invite will be sent upon receipt of your request.

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. It is the goal of the City of Dallas that certain percentage of work under each Contract will be done by one or more M/WBEs. Following are the City Council M/WBE goals without consideration for specific ethnic or gender adopted on September 23, 2020 (Resolution Number 20-1430):

Construction	<u> A & E</u>	Other <u>Professional</u>	Other <u>Services</u>	<u>Goods</u>	
32.00%	34.00%	38.00%	23.80%	32.00%	

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 <u>150</u> 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 INSTALLATIONS

AT

32 LOCATIONS

AND

SCHEDULE B:
INSTALLATION

OF

24 INCH WATER MAIN

CONTRACT NO. 20-425/20-426

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

This project consists of approximately:

Schedule A: Water and Wastewater Main Installations at 32 Locations

Location	Limits	LF W	LF WW	Proposed		Q Sheet Numbers
Location				Water	ww	Q Sheet Numbers
Suffolk Avenue	from South Adams Street to South Bishop Avenue	542	N/A	8" PVC	8" PVC	411Q-3048, Sheet(s) 091 and 092
Canton Street (CBD)	from Akard Street to Harwood Street	2,000	1,500	12" DI	8",12" PVC	411Q-1599, Sheet(s) 212 thru 219
Easement between North Garret Avenue and Bennett Avenue	From north of Ross Avenue northwest	N/A	412	N/A	8" PVC	411Q-1976, Sheets(s) 040 and 041

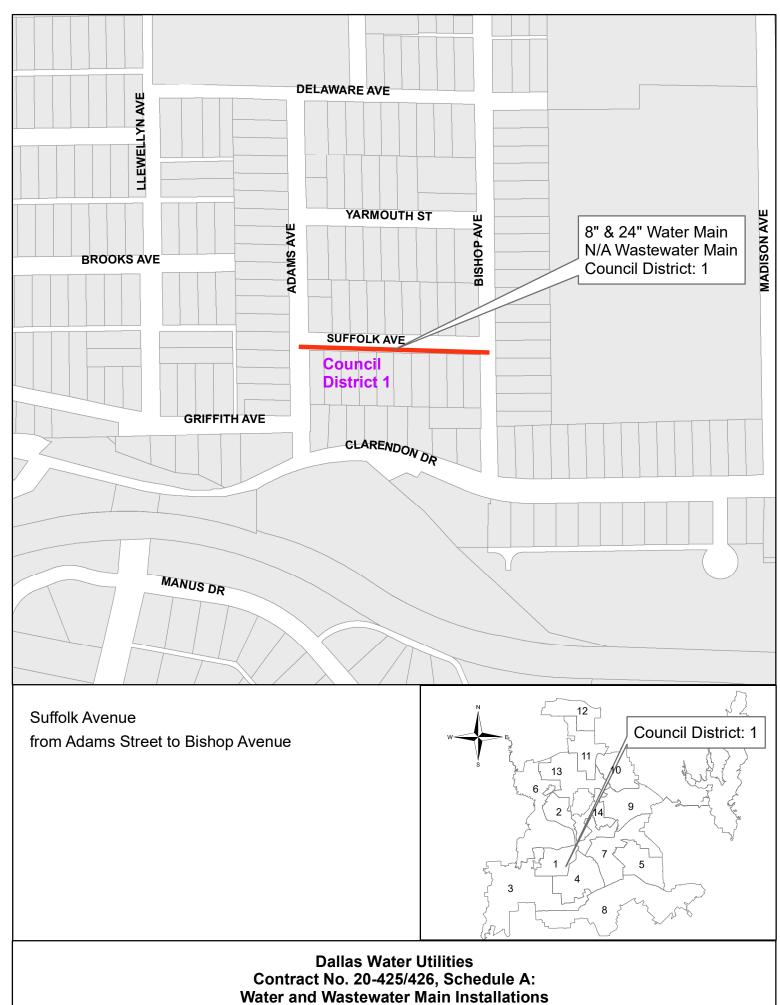
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Deere Street	from Peak Street to Carroll Avenue	790	N/A	8" PVC	N/A	411Q-3010, Sheet 102
Hawthorne Avenue	from Hartford Street to Cedar Springs Road	650	650	8" PVC	8"- PVC	411Q-0259, Sheet(s) 008 and 009
Mockingbird Lane	from Maple Avenue east	1,030	1,065	8" PVC	8" PVC	411Q-1297, Sheet(s) 003 thru 007
Stemmons Freeway north bound service road	from Inwood Road east	1,080	N/A	12" PVC	N/A	411Q-1212, Sheet(s) 287 thru 289
Summit Avenue	from Bell Avenue to Sears Street	240	N/A	8" PVC	N/A	411Q-1593, Sheet 033
Lasater Road	From Lawson Road northwest	970	N/A	12" PVC	N/A	411Q-1618, Sheet(s) 462 thru 464
Smoke Tree Lane	from Elk Creek Road to Sunview Drive	N/A	1,620	N/A	8" PVC	411Q-3019, Sheet(s) 073 thru 076
Lake Highlands Drive	Waterview Road to Hobart Street	570	570	8" PVC	8" PVC	411Q-3018, Sheet(s) 123 and 124
Flicker Lane	from Pelican Drive south	700	700	8" PVC	8" PVC	411Q-1563, Sheet(s) 100 and 101
Pelican Drive	from Flicker Lane to Whitewing Lane	650	660	8" PVC	8" PVC	411Q-1563, Sheet(s) 102 and 103
Whitewing Lane	from Pelican Drive south	700	700	8" PVC	8" PVC	411Q-1563, Sheet(s) 104 and 105
Alley south of McCree Road	from Whitewing Lane east	N/A	290	N/A	8" PVC	411Q-1563, Sheet 106
Pandora Drive	from Alley south of McCree Road south	250	440	8" PVC	8" PVC	411Q-1563, Sheet(s) 107 and 108
Alley between Lavendale Avenue and Lavendale Circle	from St. Michaels Drive to Hillcrest Road	N/A	2,685	N/A	8" PVC	411Q-1772, Sheet(s) 017 thru 023

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Alley between Ravenscroft Drive and Boedeker Street	from Woodthrush Drive north	N/A	640	N/A	8" PVC	411Q-1770, Sheet(s) 684 and 685
Alley between Belmont Avenue and Goliad Avenue	from Greenville Avenue to Concho Street	1,920	N/A	N/A	N/A	411Q-1877, Sheet(s) 008 thru 010
Alley between Greenville Avenue and Matilda Street	from University Boulevard north	N/A	1,400	N/A	8" PVC	411Q-1228, Sheet(s) 027 thru 030
Alley between Martel Avenue & Penrose Avenue	from Concho Street to Skillman Street	820	735	8" PVC	8" PVC	411Q-0529, Sheet(s) 003 and 004
Easement between Springbrook Street and Edgewater Drive	from Glenwood Avenue to Abbott Avenue	N/A	450	N/A	8" PVC	411Q-1528, Sheet 011
Hubert Street	from Live Oak Street to Hudson Street	N/A	932	N/A	10" PVC	411Q-0763, Sheet(s) 007 thru 009
Hudson Street	From Hubert Street east	650	1,010	8" PVC	8" PVC	411Q-1887, Sheet(s) 031 thru 034
Alley between Hudson Street and Live Oak Street	from Hudson Street to Lindell Avenue	800	820	8" PVC	8" PVC	411Q-0736, Sheet(s) 007 thru 009
Alley between Bryan Parkway and Live Oak Street	from Bryan Parkway to Glendale Street	910	900	8" PVC	8", 12" PVC	411Q-0733, Sheet(s) 015 thru 017
Live Oak Street	from Ross Avenue to alley south of Hudson Street	460	530	8" PVC	8",10" PVC	411Q-0381, Sheets 043 and 044
Martel Avenue	from Delmar Avenue to Concho Street	500	N/A	8" PVC	N/A	411Q-0686, Sheet 002
Concho Street	from Revere Place to Alley south of Penrose Avenue	450	N/A	8" PVC	N/A	411Q-0686, Sheet(s) 003 and 004
Ross Avenue	from Matilda Street to Hubert Street	570	N/A	8" PVC	N/A	411Q-089, Sheet 030

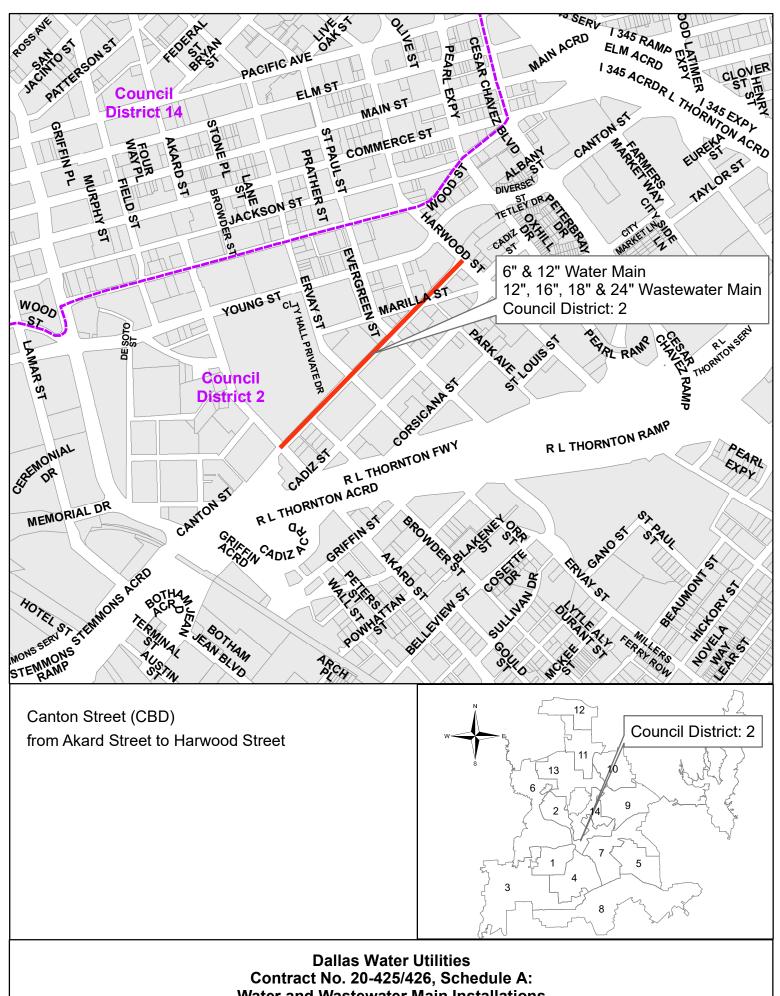
Schedule B: Installation of 24 Inch Wastewater Main

Melody Lane	from Shadybrook Lane to Skillman Street	N/A	7,299	N/A	8", 24" PVC	411Q-1770, Sheet(s) 629 thru 641
Shadybrook Lane	from Melody Lane South	N/A	157	N/A	24" PVC	411Q-1770, Sheet 642

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



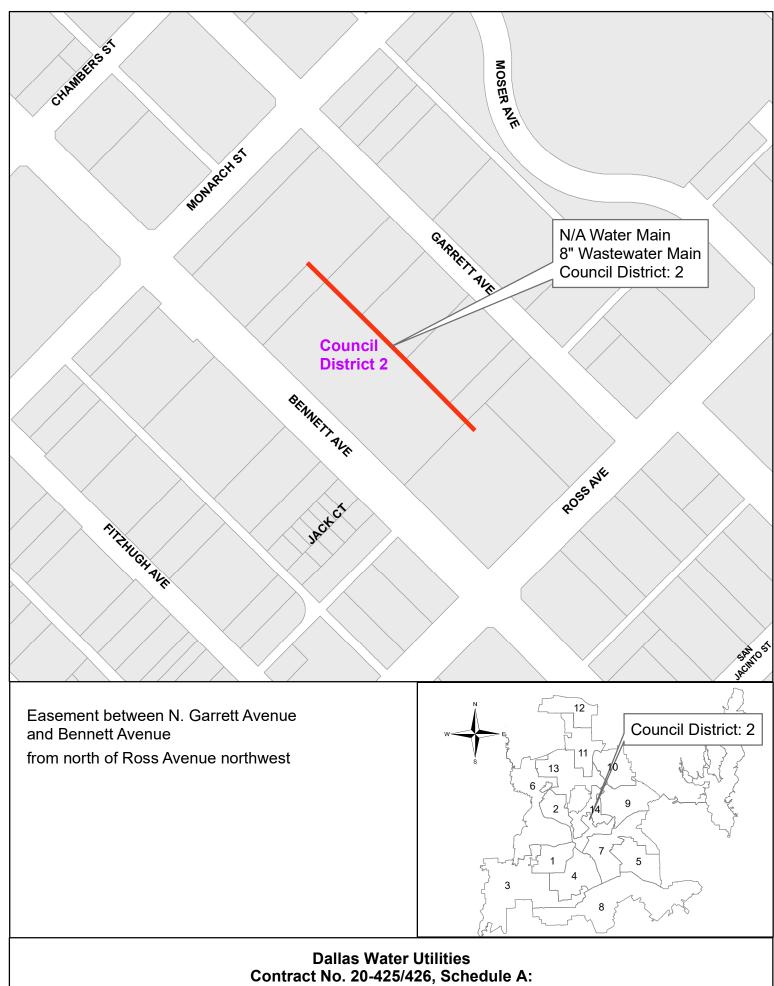
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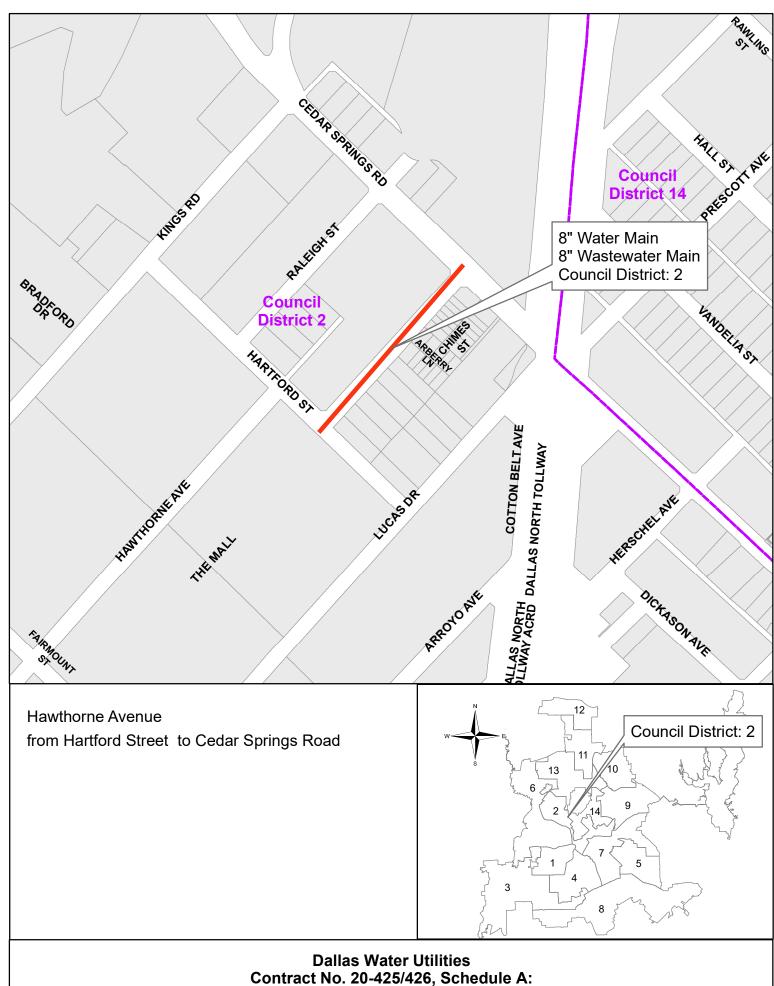




Dallas Water Utilities
Contract No. 20-425/426 Schedule A:
Water and Wastewater Main Installations
at 32 Locations

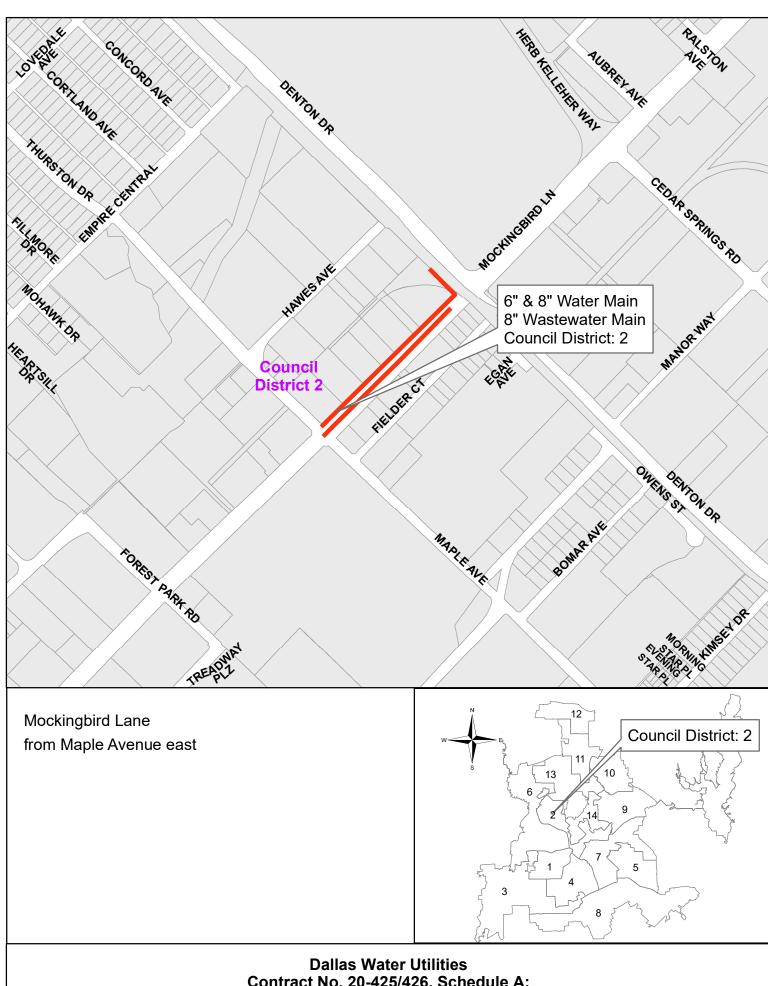
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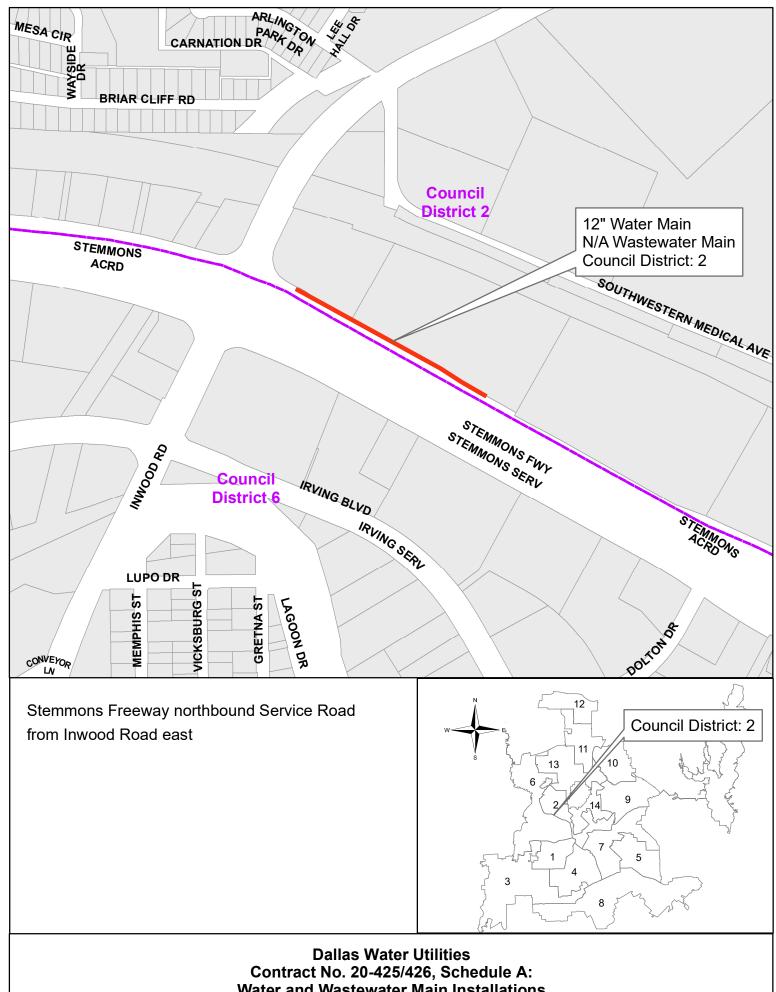


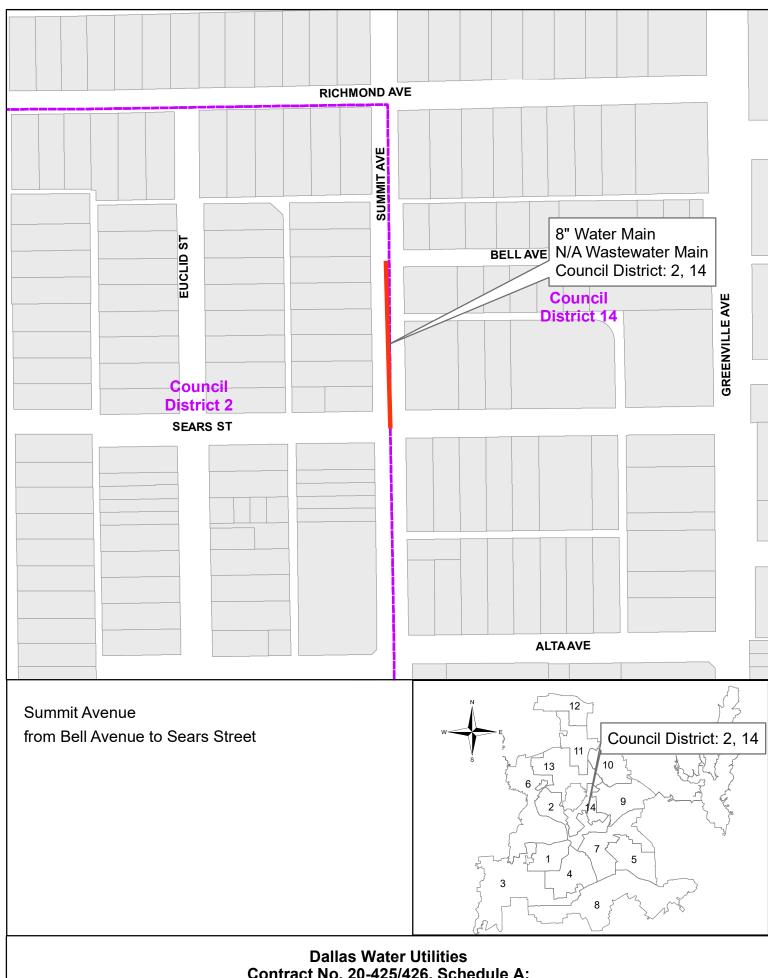
Dallas Water Utilities
Contract No. 20-425/426, Schedule A:
Water and Wastewater Main Installations
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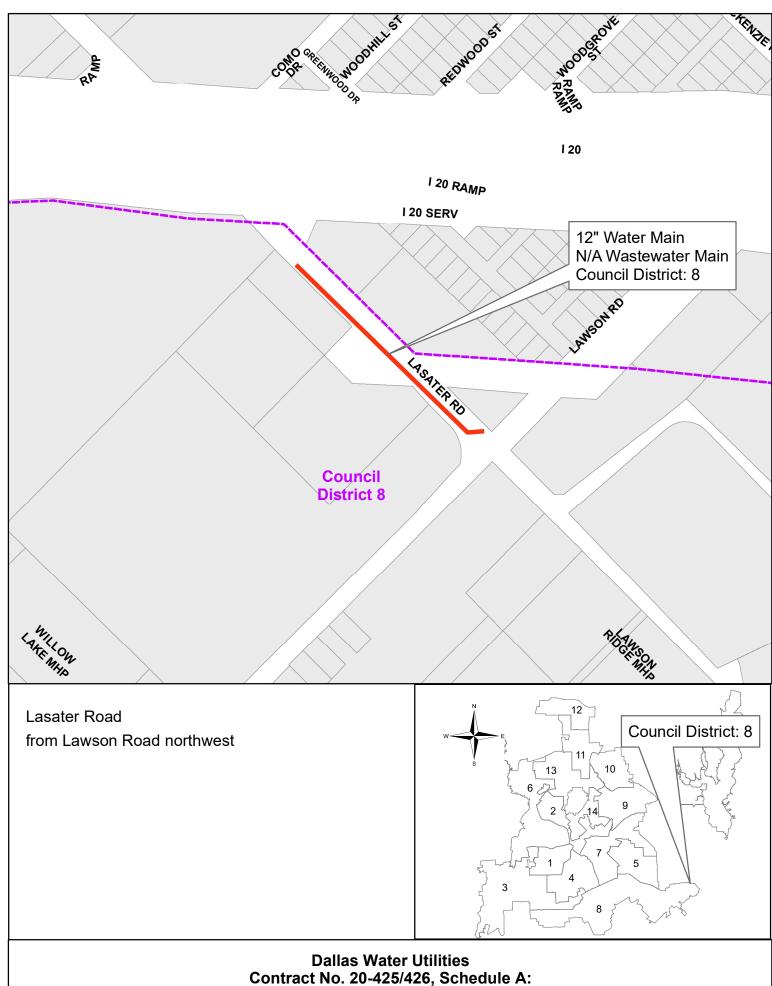


Dallas Water Utilities
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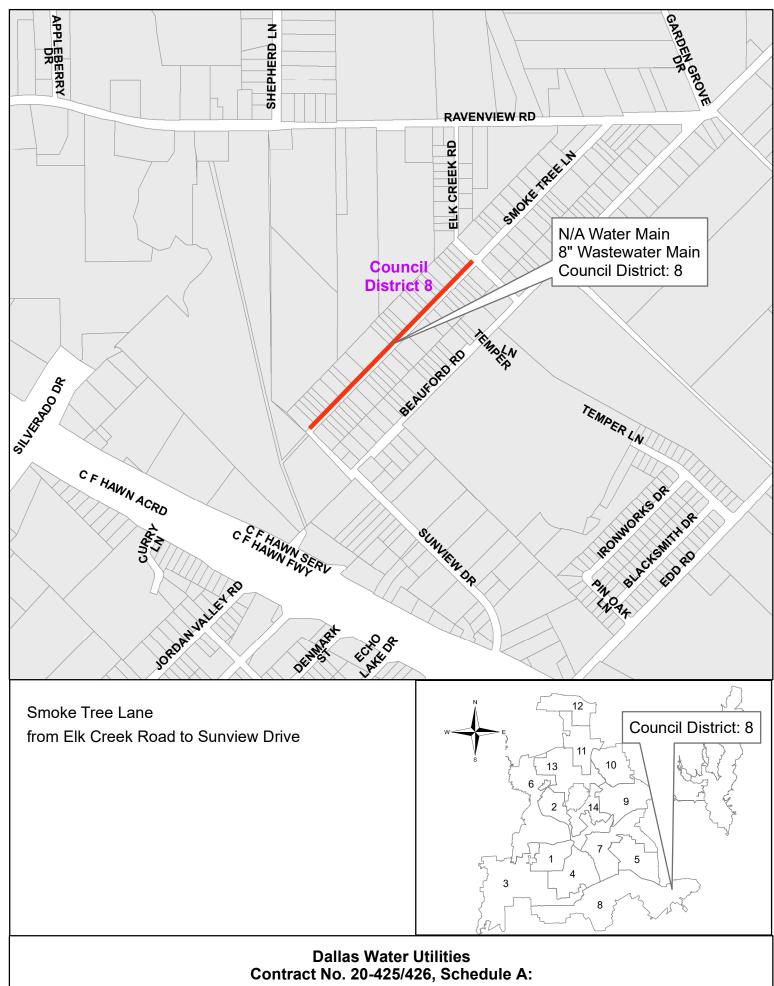


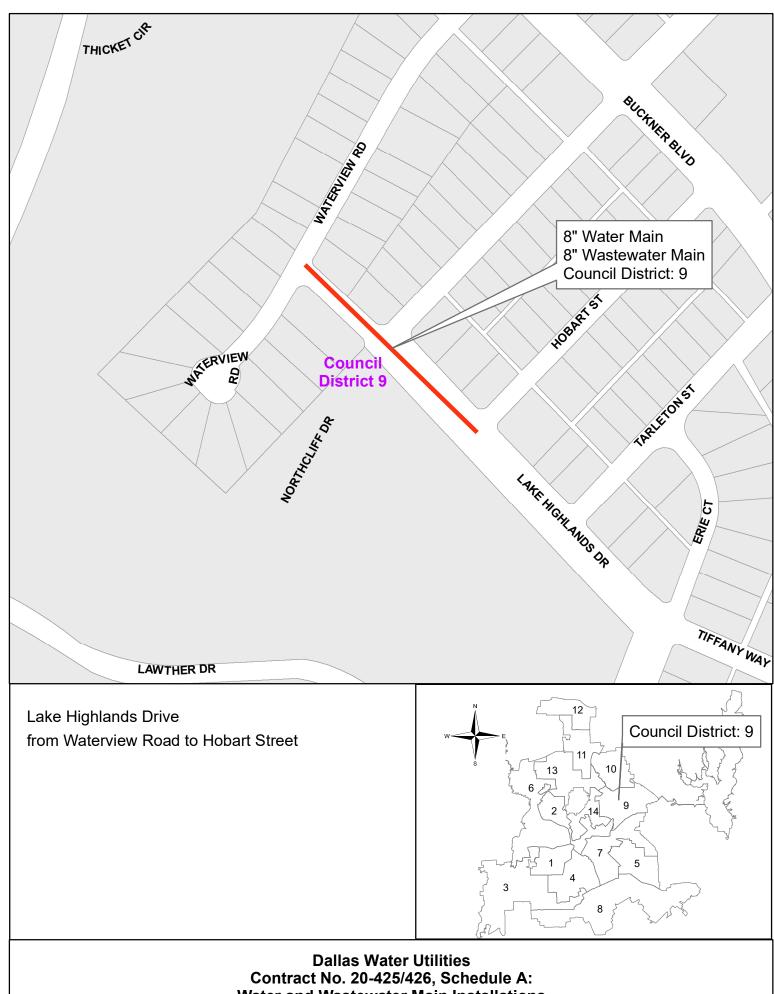


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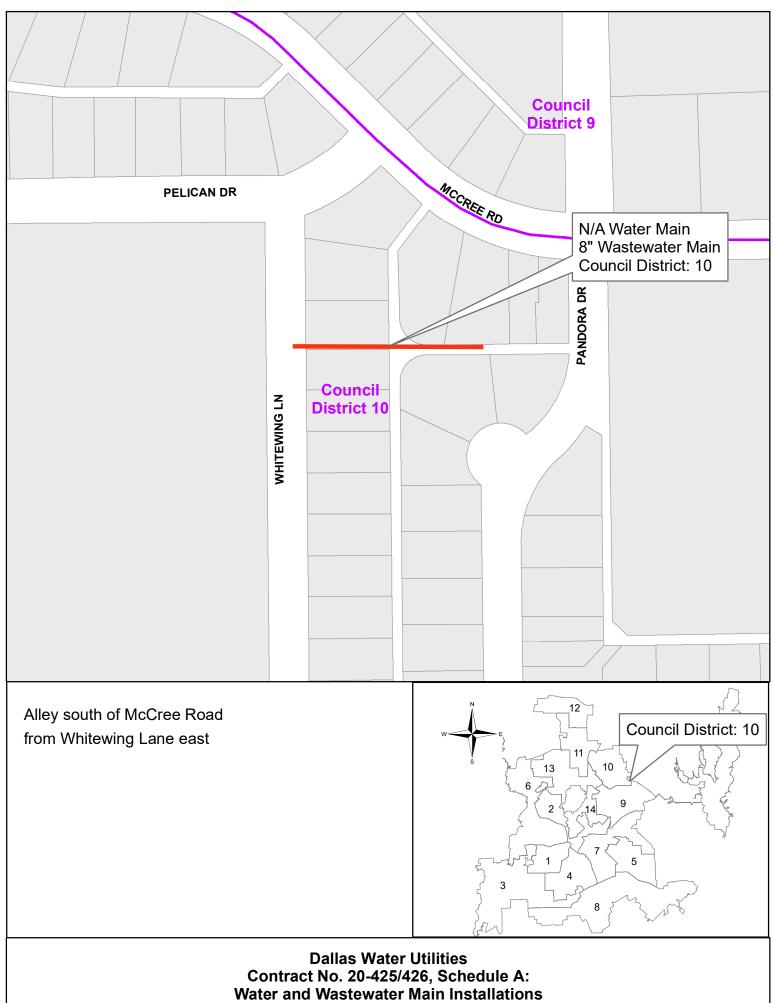


Dallas Water Utilities
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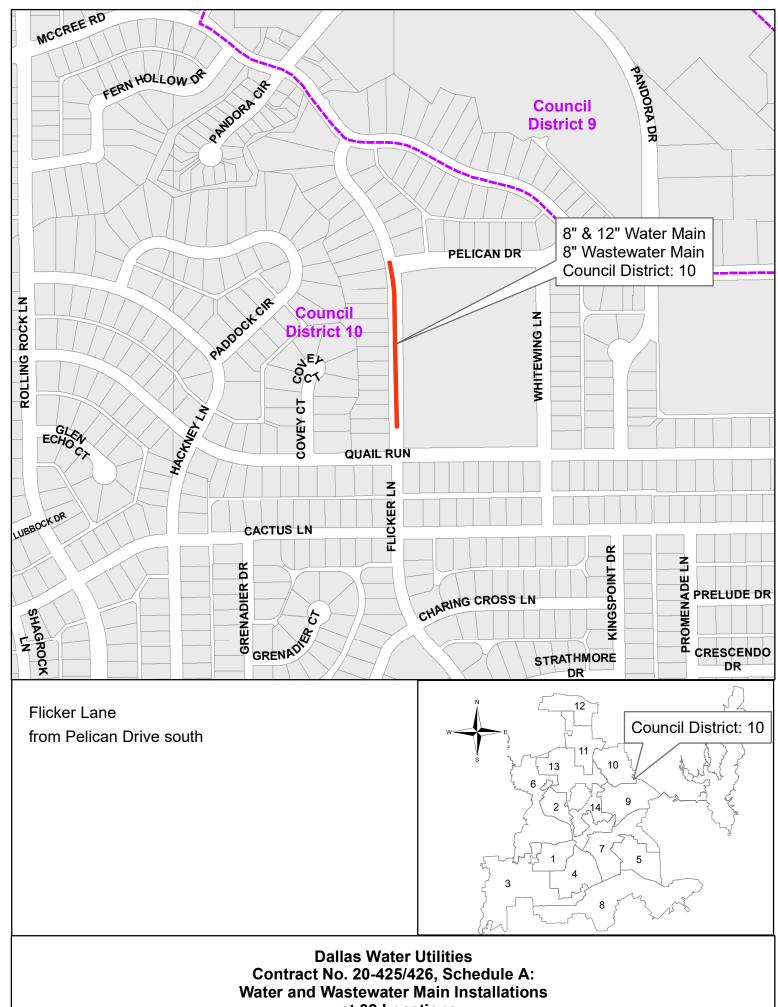




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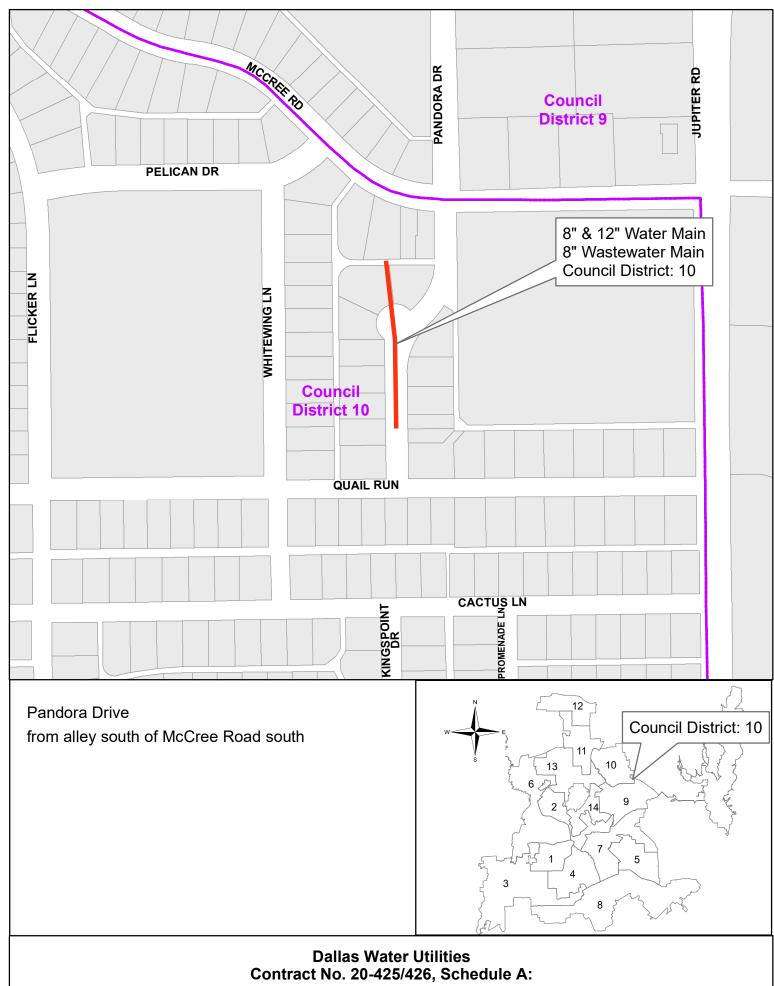


at 32 Locations

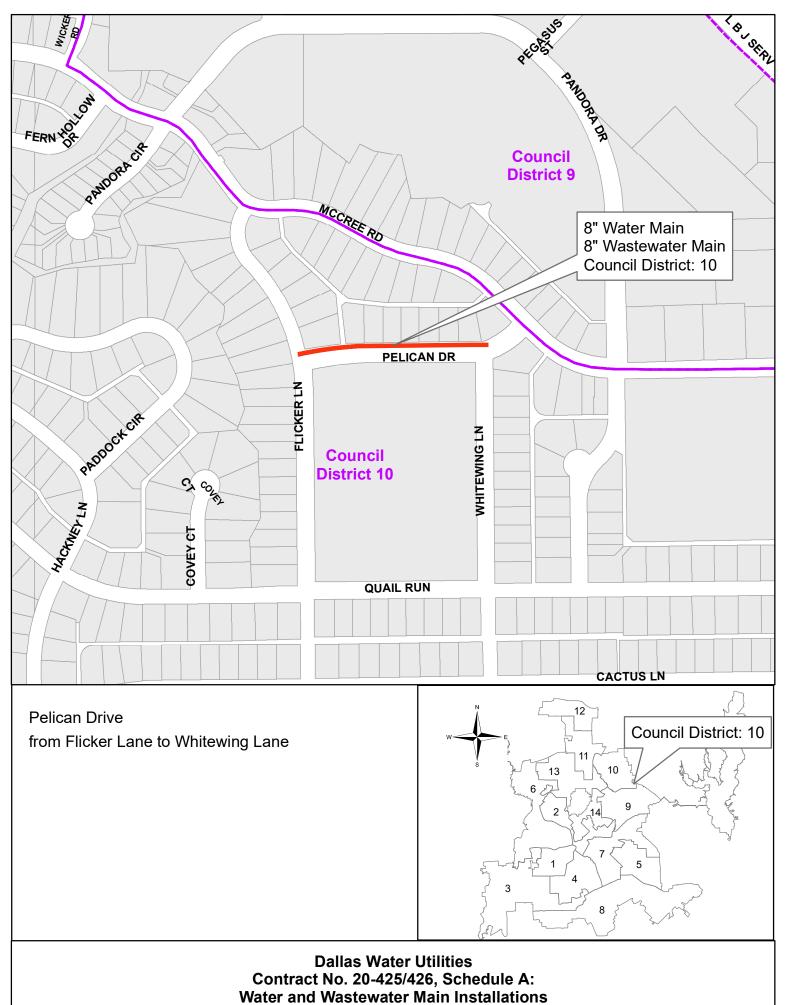


at 32 Locations

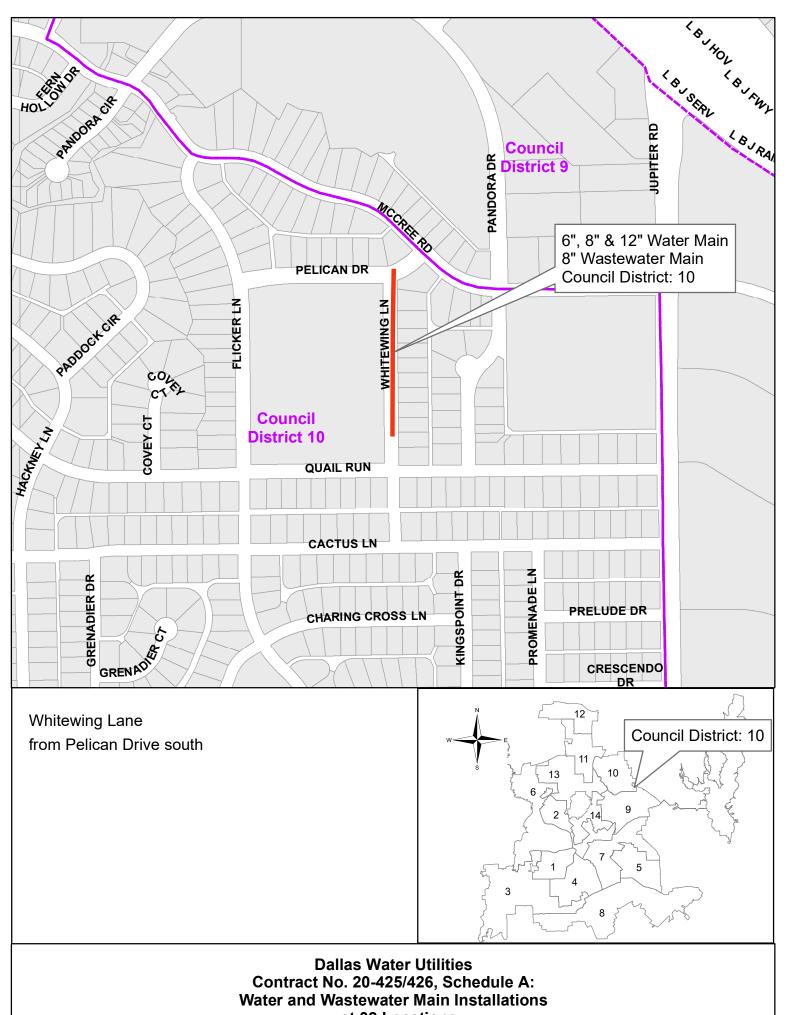
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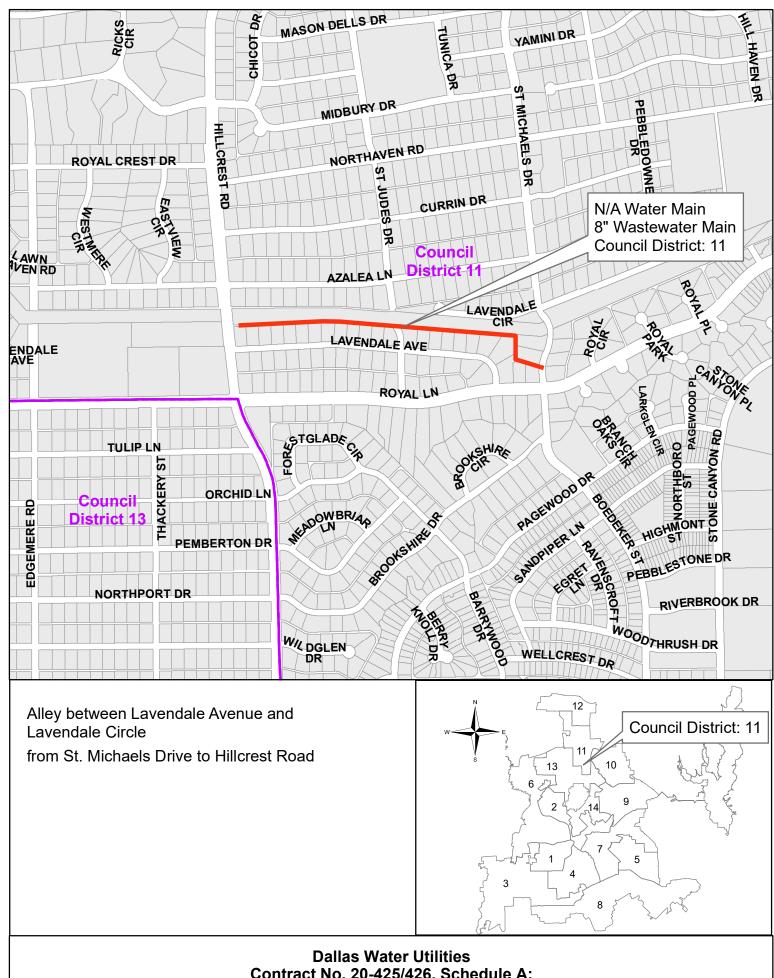


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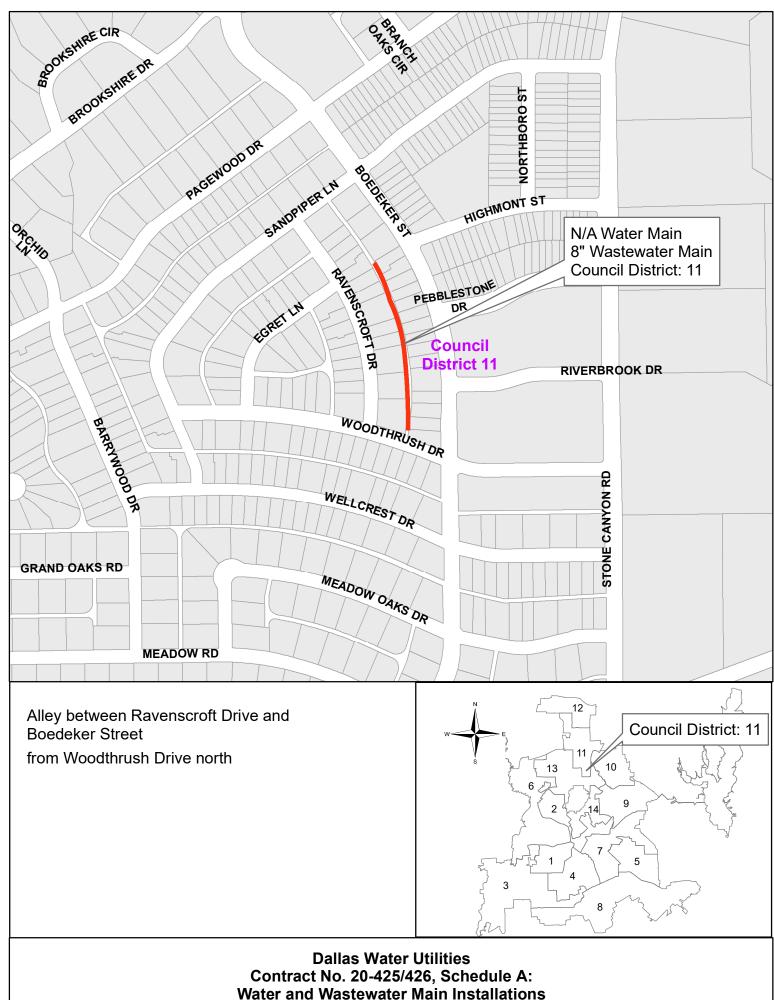


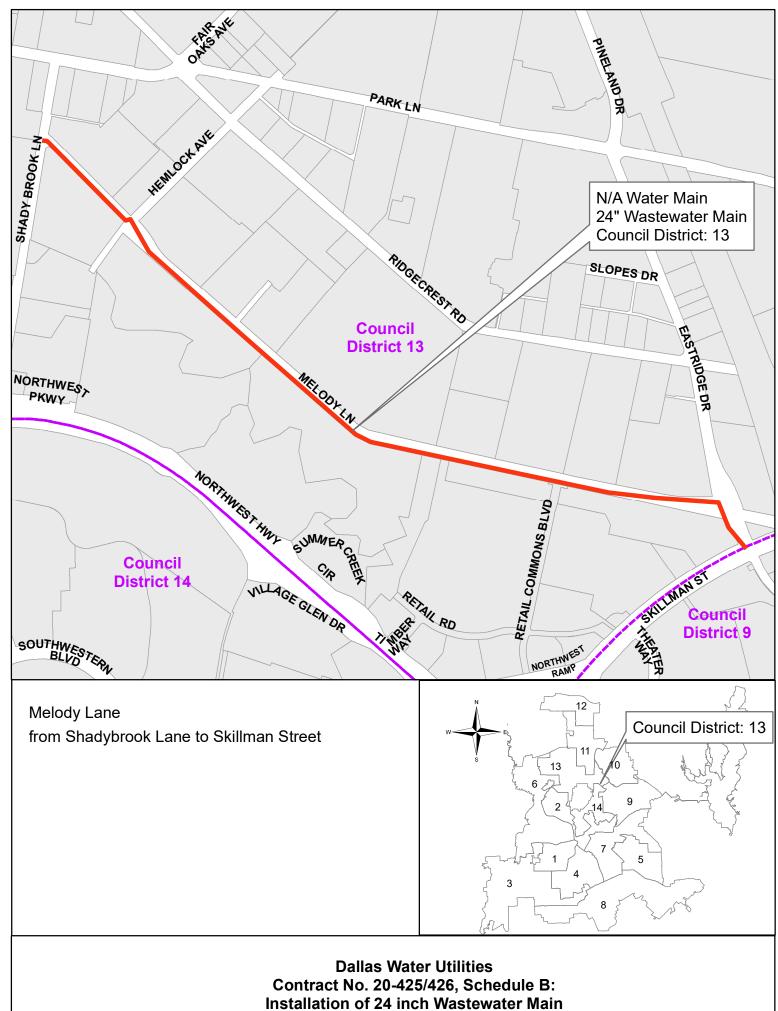
at 32 Locations

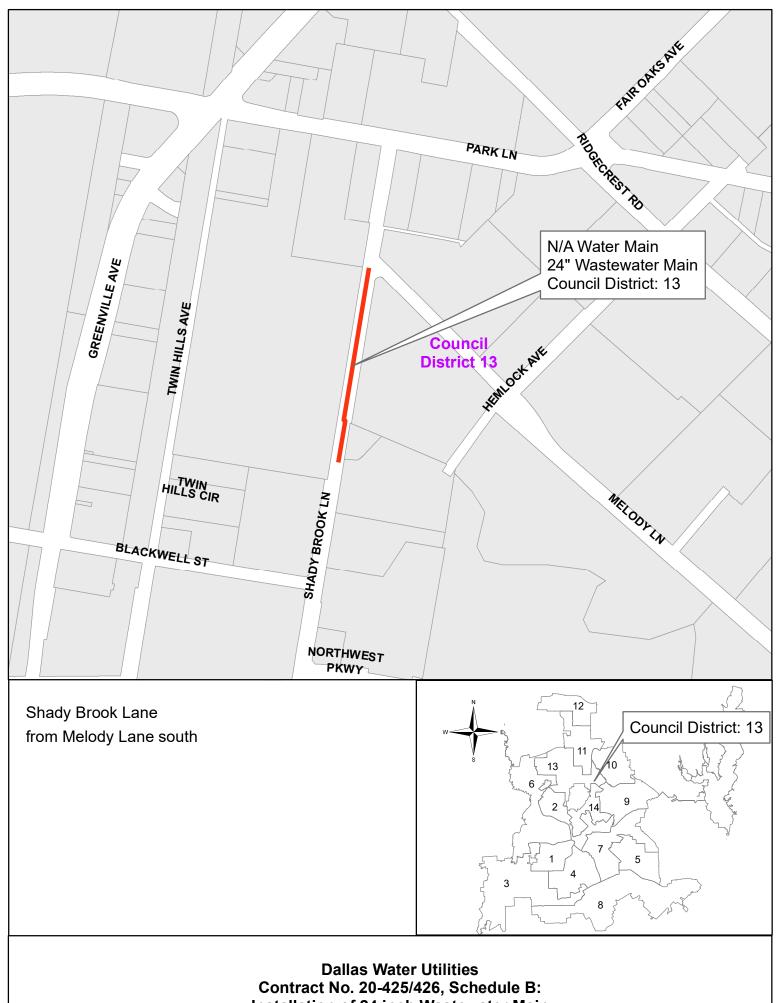
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Dallas Water Utilities
Contract No. 20-425/426, Schedule A:
Water and Wastewater Main Installations
at 32 Locations

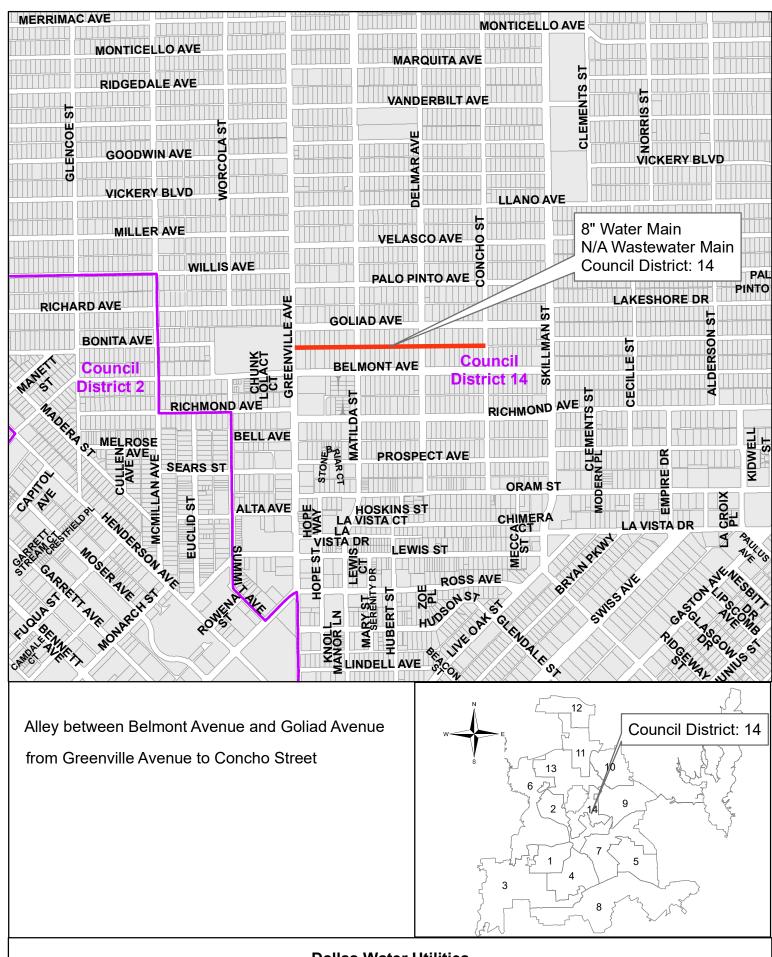




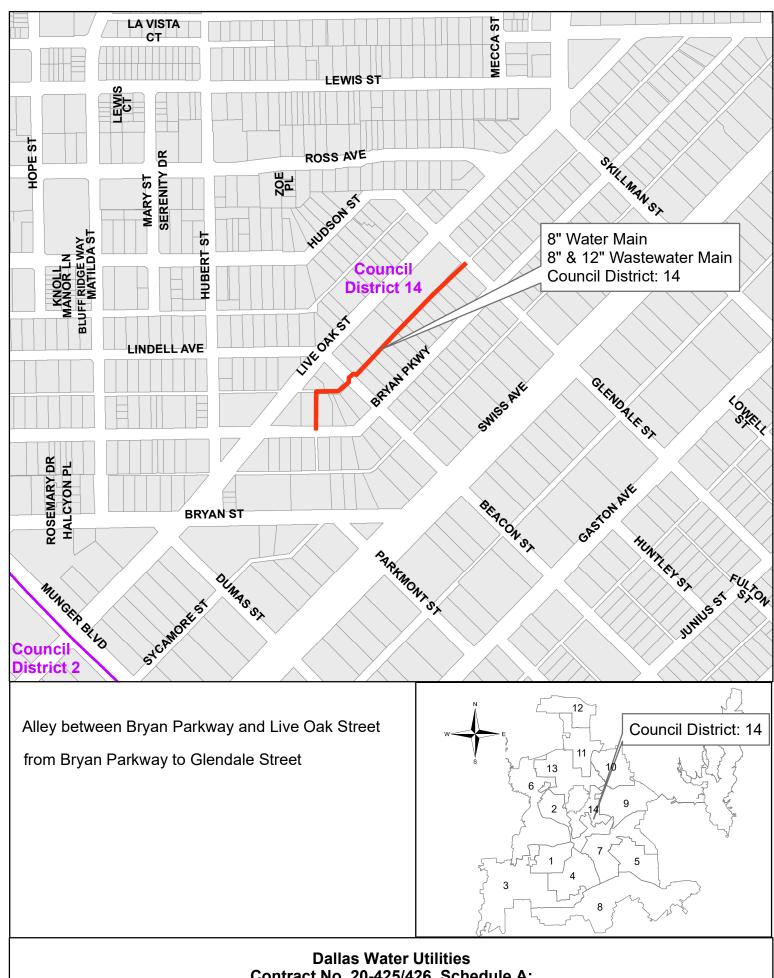


Installation of 24 inch Wastewater Main

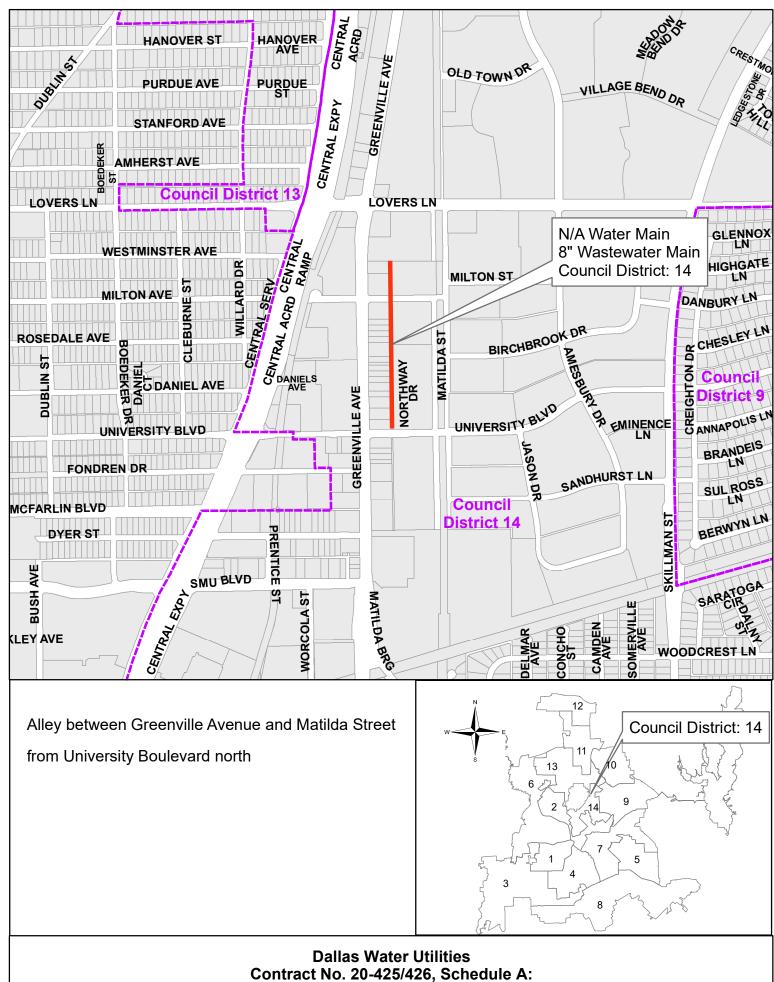
Segment 20 of 32



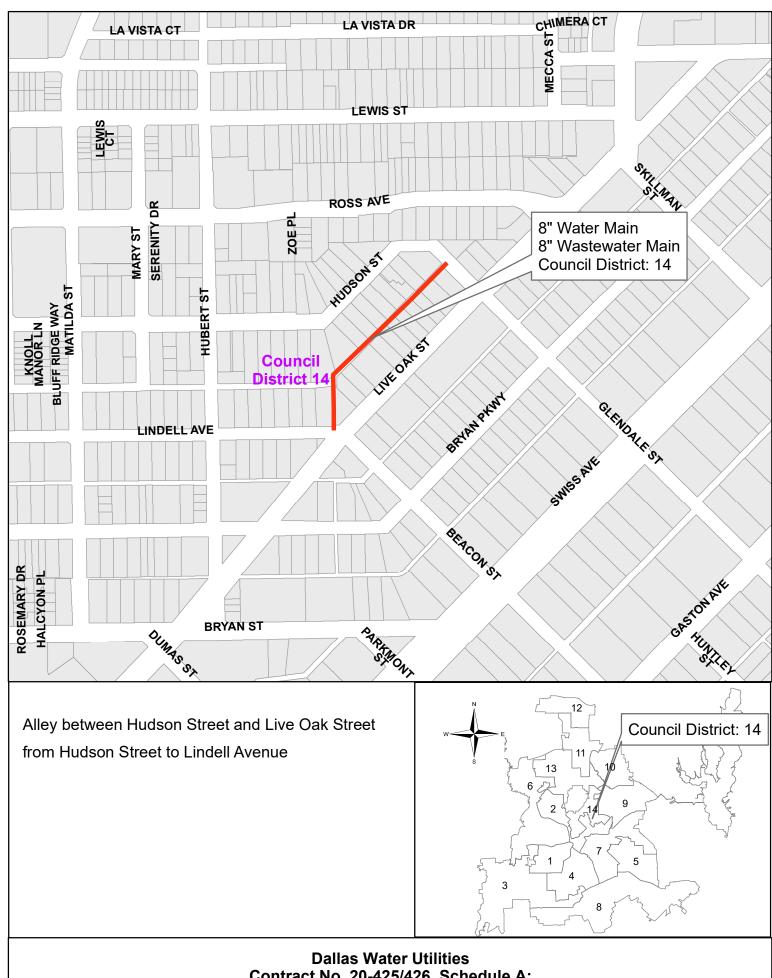
Dallas Water Utilities Contract No. 20-425/426, Schedule A: Water and Wastewater Main Installations at 32 Locations



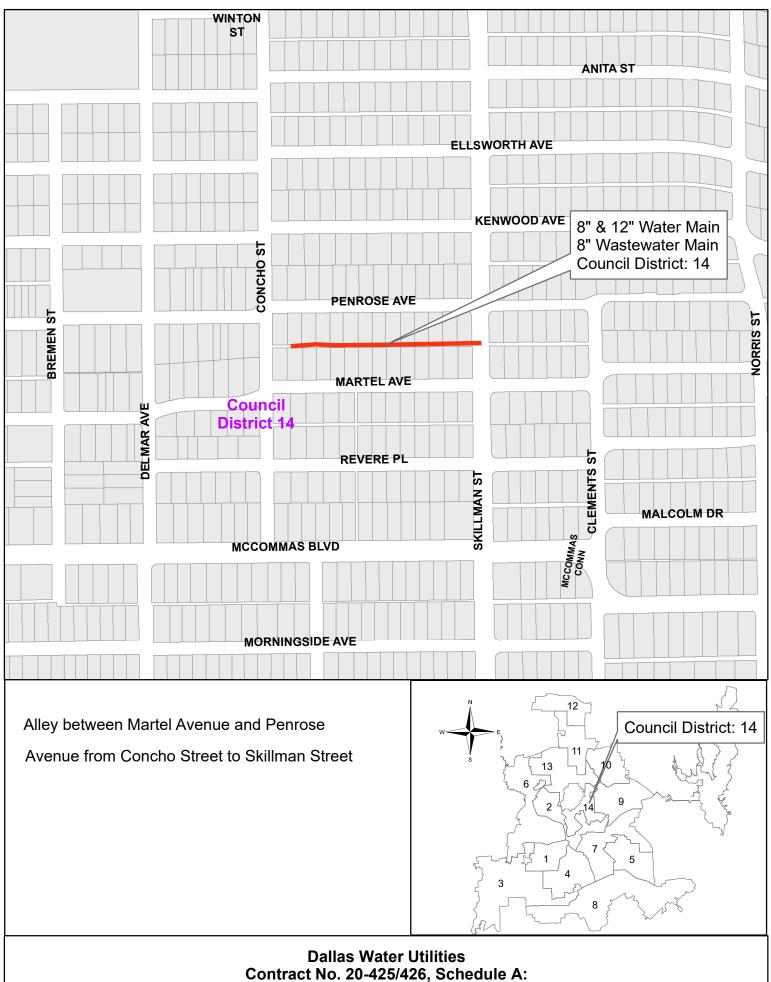
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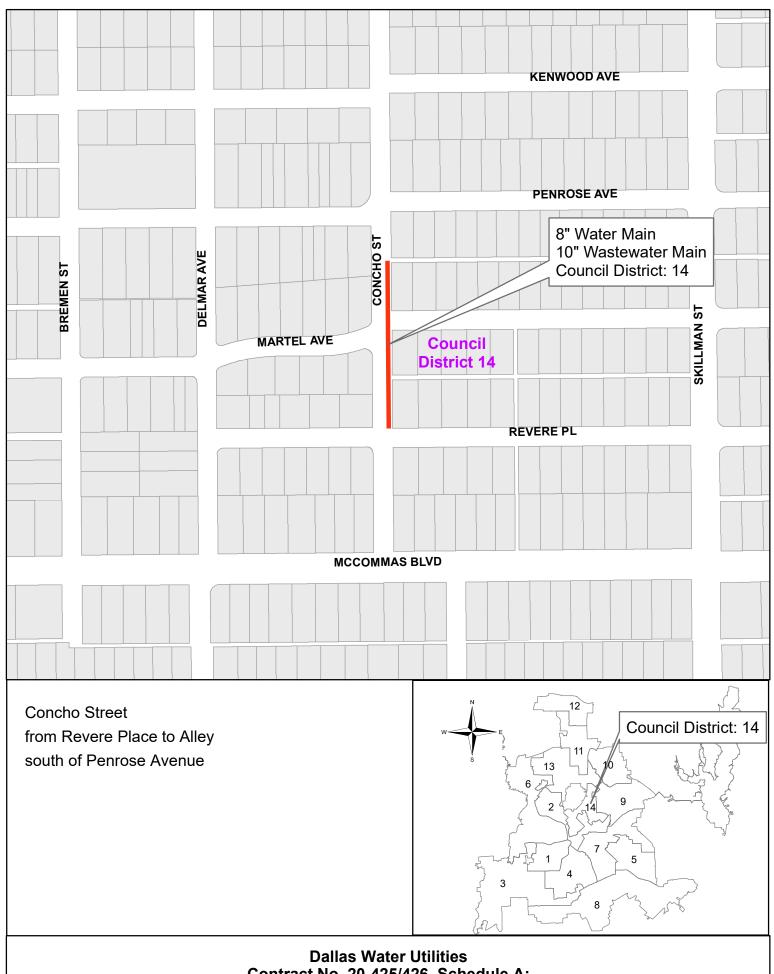
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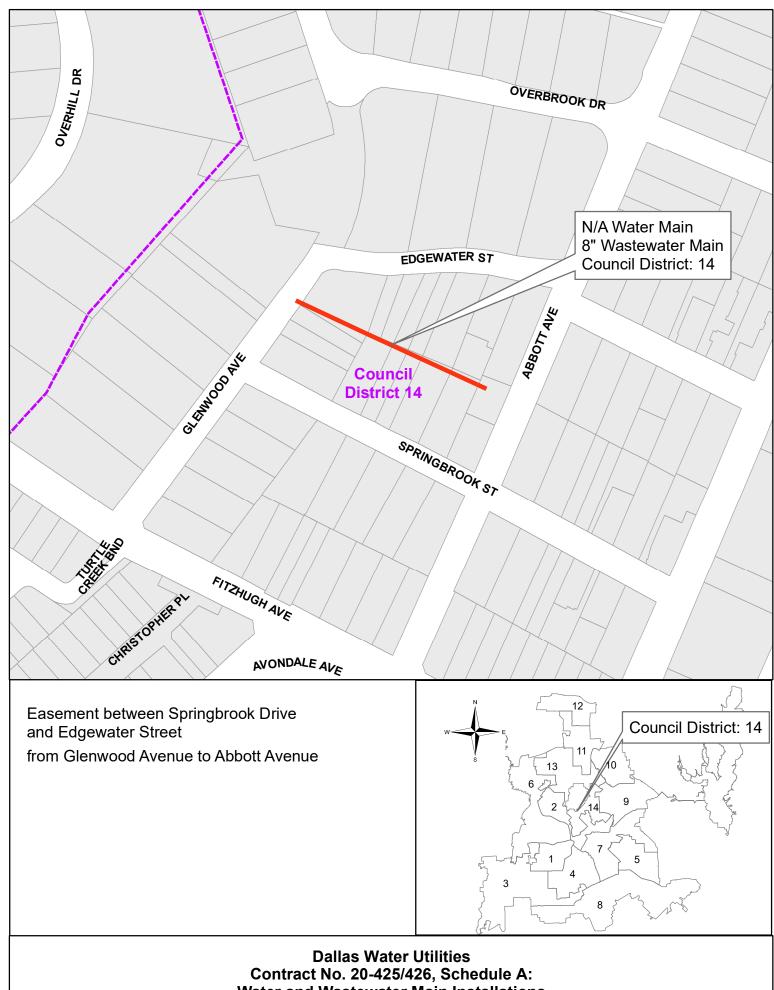
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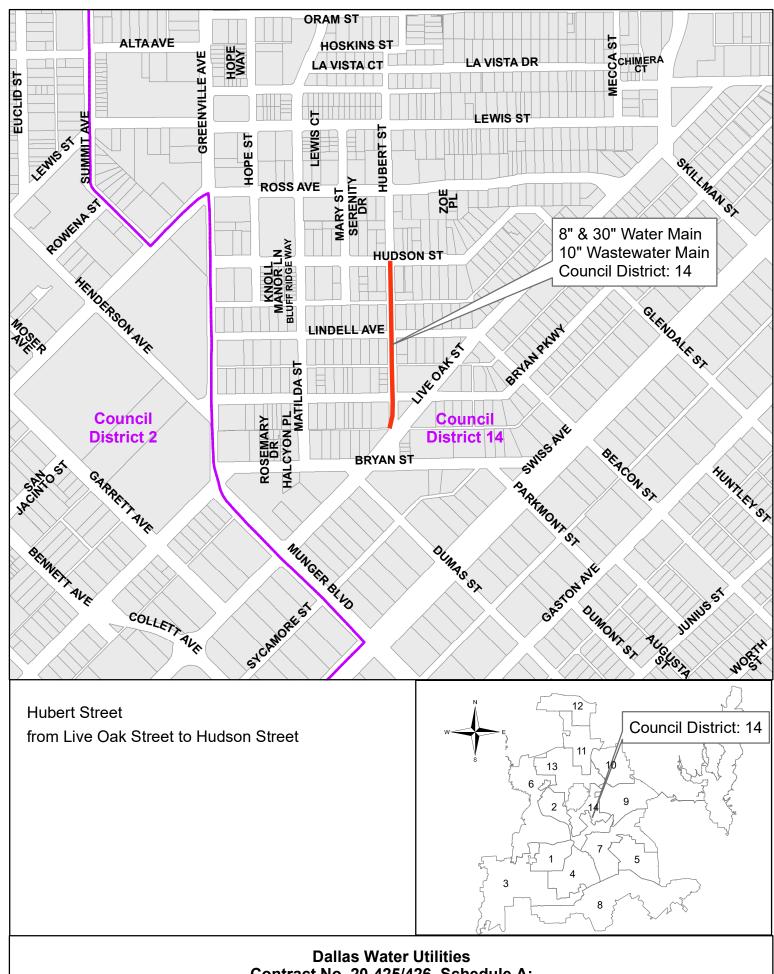
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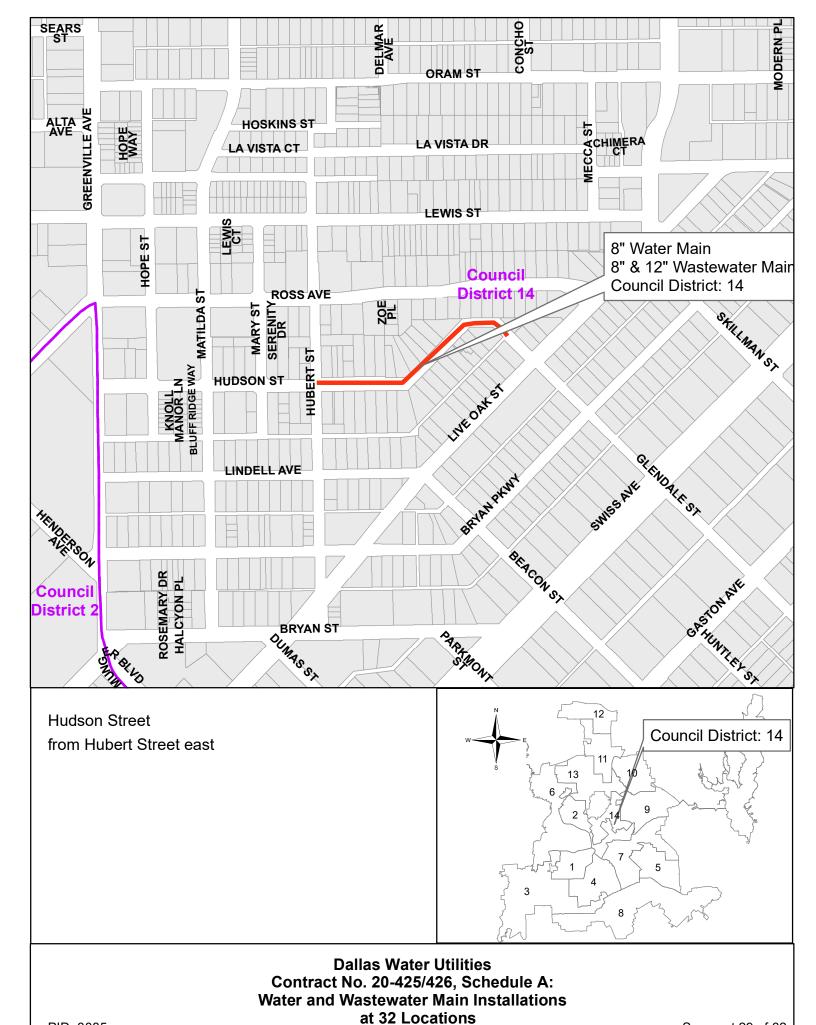
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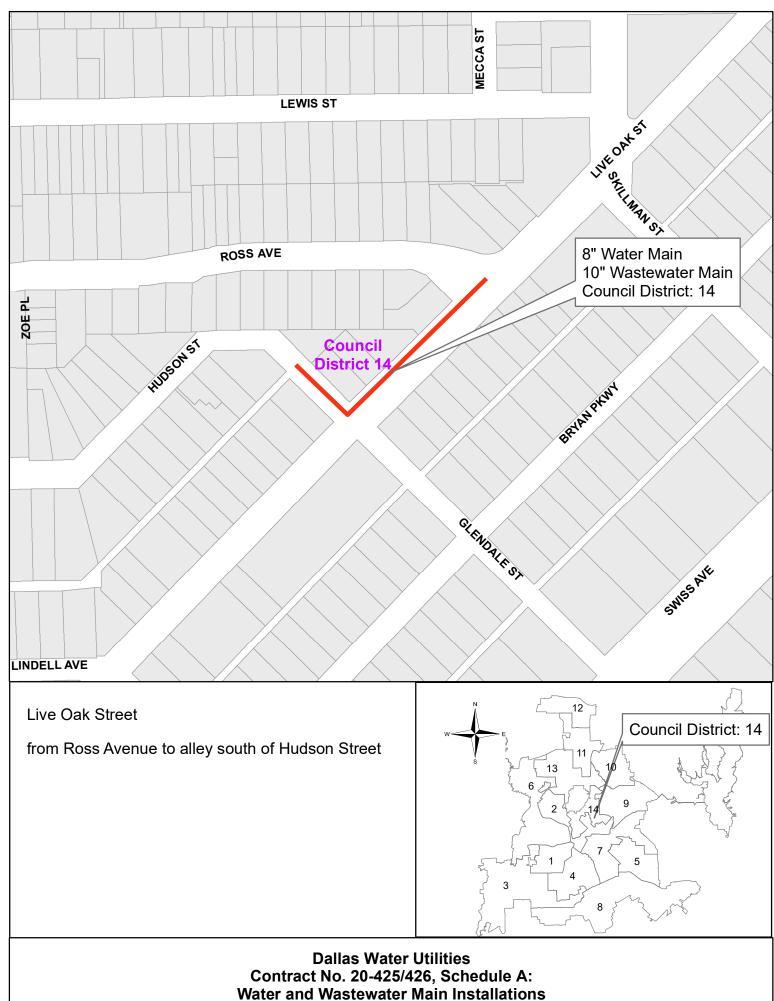
Water and Wastewater Main Installations at 32 Locations



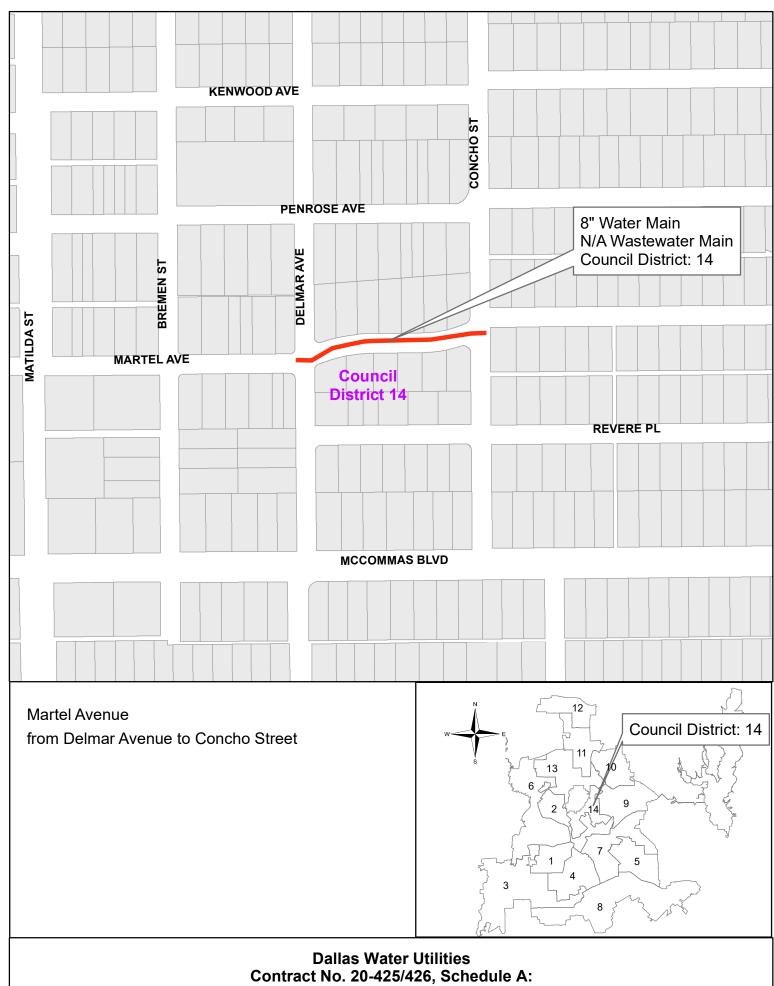
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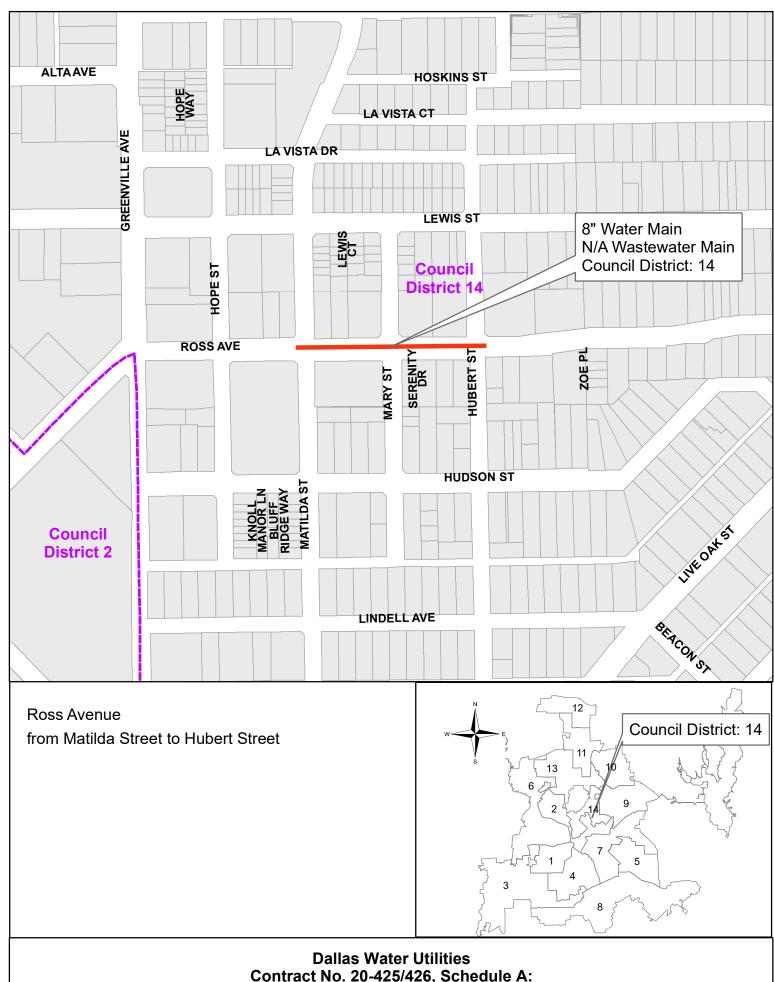
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Water and Wastewater Main Installations at 32 Locations



Dallas Water Utilities
Contract No. 20-425/426, Schedule A:
Water and Wastewater Main Installations
at 32 Locations

A 3. SPECIAL PROVISIONS

S-1 **INQUIRIES**

All inquiries shall be directed to:

Anthony Parker

Dallas Water Utilities Department 2121 Main Street, Suite 300 Dallas, Texas 75201

Telephone: (214) 948-4639

Email: anthony.parker@dallascityhall.com

Project related questions shall be submitted in writing no later than 4:00PM on Monday, November 1, 2021.

S-2 **PRE-BID CONFERENCE**

There will be an online Pre-Bid Conference held at **1:00 PM** on **Tuesday**, **October 26**, **2021**. To receive a calendar invite to the meeting, please email DWUCapitalServices@dallascityhall.com. A calendar invite will be sent upon receipt of your request.

S-3 **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-4 **BID PACKET SUBMITTAL**

Contractors must provide an electronic copy of their Bid Proposal Spreadsheet in Excel (.xls, .xlsx) format with their Bid Packet submittal in Bonfire.

S-5 **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-6 MILESTONE\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 <u>40</u> Calendar days after City Council award of this project. <u>Liquidated Damages shall be</u> <u>\$ 500 Per Calendar Day</u>.

Milestone 2: <u>20,000</u> linear feet of water/wastewater mains installed, backfilled, tested and temporary paving (if applicable) in place within <u>200</u> consecutive working days. <u>Liquidated damages shall be \$500 Per Calendar Day.</u>

Milestone 3: 40,000 linear feet of water/wastewater mains installed, backfilled, tested and temporary paving (if applicable) in place within 300 Consecutive Working Days. <u>Liquidated damages shall be \$500 per</u> calendar day.

Milestone 4: All water/wastewater work and site restoration completed within 400 Consecutive Working Days. <u>Liquidated damages shall be \$500</u> per calendar day.

All water/wastewater work and site restoration associated with the following pipe segments shall be prioritized and initiated prior to any other segments:

• PID 4926 and 4924 (24" Wastewater Main): The contractor must turn in a schedule and Workplan for this location before prior to work start to the Project Manager for approval per Section 105.5 COG. Please note that this segment has extensive tunneling work that's located in a residential area. Contractor must be prepared to use a tunneling technique that will allow him or her to complete work within a year without causing adverse impact to the community (ex. Hand Tunneling, etc). No exceptions

S-7 **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-8 NOTIFICATION OF CONSTRUCTION OPERATIONS

The <u>Contractor</u> shall be responsible for all Construction <u>Staking</u> associated with the Water and Wastewater Facilities on this project. <u>Costs for Construction Staking is covered under Bid Items 8011 and 8012</u>. 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-9 **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-10 **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-11 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-12 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-13 **STABILIZED MATERIAL**

Item(s) <u>7040</u>, <u>7041</u>, <u>7044</u>, <u>7050</u> and <u>7053</u> 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-14 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-15 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 the Traffic Safety Coordinator Gary Hughes at (214) 670-5662.

S-16 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-17 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-18 **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-19 **TEMPORARY PAVING**

Temporary Paving will be placed over the compacted, backfilled ditch in paved areas. 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-20 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-21 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-22 **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-23 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-24 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-25 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-26 **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-27 ENVIRONMENTALLY CONTAMINATED SOIL

In the possible event where environmentally contaminated soil is encountered at any project site; the City of Dallas will hire a third party environmental consultant who will determine the extent of environmental contamination through laboratory testing and environmental analysis. The third party consultant will be responsible for:

- Site reconnaissance and environmental study,
- Soil borings and evaluation,
- Determination of site specific chemicals,
- Development of environmental soil and ground water management plan,
- On-site environmental inspection of waterline installation,
- Loading, transport and disposal of environmentally contaminated soil to appropriate landfill.

The cost associated with the items above will be paid by the City.

Contractor is instructed to immediately contact the Owner Representative when environmental issues arise so that arrangements can be made. Contractor will coordinate with the third party environmental consultant as necessary for the compliance of environmental requirements.

Any delay of the project due to environmentally contaminated soil will be adjusted in contract milestones. City will not provide any additional compensation to the contractor due to the delay caused by encountering environmentally contaminated soil.

S-28 **PERMITS**

In addition to other provisions in this contract, the Contractor shall adhere to the requirements of Owner contained within permits in Section A 12. The provisions of these permits shall be considered necessary to complete the work and shall be included by the Contractor at no additional cost to the Owner. **NO SEPARATE PAY ITEM.**

S-29 **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-30 **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.

If the Contractor plans to work on a weekend, or holiday, the Contractor must make request by noon on Thursday, prior to that weekend or holiday.

S-31 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-32 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-33 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-34 **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-35 **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-36 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

S-37 TEXAS WATER DEVELOPMENT BOARD LOAN

TWDB requires that bidders be aware of the following:

- "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-38 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. Subcontractors 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-39 WORK RESTRICTIONS FOR CENTRAL BUSINESS DISTRICT

Contractor shall assume workspace allowed and work hours allowed will be heavily limited. No more than one main lane of traffic at a time may be reduced during work activity. Contractor may only work 9am to 3pm, Monday through Friday, subject to an acceptable work plan and an approved Traffic Control Plan. Night work is subject to noise ordinance and cannot be considered permissible. Pavement cuts may not remain open outside allowed work hours or when not actively working. All lanes must be restored to traffic use outside permitted work hours. Contractor shall expect schedule impacts for needing to coordinate periodically with others working in the area, and scheduled parades and events.

Contractor shall be required to perform item 20500 investigations with approval of DWU Inspector for locating existing utilities shown on plans to identify alignment and elevation changes necessary to avoid conflicts and complete the work. Adjustments shall be considered consistent to the intent of contract work, and shall be coordinated with the Engineer for approval. Compensation for construction of approved adjustments shall be limited only to additional bid item units determined necessary by the Engineer.

Contractors shall incorporate costs of parking meter hoods, including permit fee and reimbursement of lost revenue payment to the City. Calculation is based on number of meters to be bagged by their hourly rate for parking and the duration of the hood permits, to be billed and paid directly by contractor monthly to maintain permitting status, at no separate cost to the owner.

Contractor shall provide off duty officers to direct traffic, additional or special traffic control barricades, and appropriate pedestrian and vehicular safety implements, subject to approval, to accommodate the pursuit of work area impacts other than as specified herein. Impacts must be demonstrated as beneficial as a condition to consider for approval. Any costs to implement and maintain shall be considered as driven by choice of contractor for contractor's convenience and shall be at no separate cost to Owner

S-40 **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:

Employment		FEN	IALE			ALE			
Classification	Hispanic	Black	Other	White	Hispanic	Black	Other	White	
Construction Mgrs.									
oreman									
Skilled									
lelpers									
aborers									
/lanagers									
dministrators									
Professionals									
Tolessionals									
echnicians									
Foressionals Fechnicians Office & Clerical Grand Total FOTAL UNEMPLOYED (CITY OF DALLAS RI	ESIDENTS H	HIRED						
echnicians Office & Clerical Frand Total OTAL UNEMPLOYED	CITY OF DALLAS RI		HIRED			M	ALE		
echnicians Office & Clerical Frand Total OTAL UNEMPLOYED (CITY OF DALLAS RI			White	Hispanic	M Black	ALE Other	White	
echnicians Office & Clerical Grand Total OTAL UNEMPLOYED (Employment Classification		FEM	IALE	White	Hispanic			White	
echnicians Office & Clerical Grand Total OTAL UNEMPLOYED (Employment Classification Construction Mgrs.		FEM	IALE	White	Hispanic			White	
echnicians Office & Clerical Frand Total COTAL UNEMPLOYED Comployment Classification Construction Mgrs. Foreman		FEM	IALE	White	Hispanic			White	
echnicians Office & Clerical Frand Total FOTAL UNEMPLOYED (Employment Classification Construction Mgrs. Foreman Skilled		FEM	IALE	White	Hispanic			White	
echnicians Office & Clerical Grand Total COTAL UNEMPLOYED Comployment Classification Construction Mgrs. Foreman Skilled Helpers		FEM	IALE	White	Hispanic			White	
echnicians Office & Clerical Grand Total OTAL UNEMPLOYED Comployment Classification Construction Mgrs. Foreman Skilled Helpers aborers		FEM	IALE	White	Hispanic			White	
echnicians Office & Clerical Grand Total COTAL UNEMPLOYED Comployment Classification Construction Mgrs. Foreman Skilled Helpers Laborers Managers		FEM	IALE	White	Hispanic			White	
echnicians Office & Clerical Grand Total		FEM	IALE	White	Hispanic			White	
rechnicians Office & Clerical Frand Total FOTAL UNEMPLOYED Comployment Classification Construction Mgrs. Foreman Skilled Helpers Laborers Managers Administrators Professionals		FEM	IALE	White	Hispanic			White	
echnicians Office & Clerical Grand Total COTAL UNEMPLOYED Complement Classification Construction Mgrs. Foreman Skilled Helpers Laborers Managers Administrators		FEM	IALE	White	Hispanic			White	

PRE-BID INQUIRIES AND PRE-BID INSPECTION INQUIRIES FOR CONTRACT NO. 20-425/426

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-1**.

Example Format:

Co	mpany Name	: Schedule A: Water and Wastewater Main Installations at 32 Locations and Installation of 24 Inch Wastewater Main	E Cobodulo Br
Pro	oject Name: _	Installation of 24 Inch Wastewater Main	Scriedule B.
Co	ntract No.:	20-425/426	<u> </u>
Qu	estion(s) By:		_
Da	te Submitted:		_
Questior No.	ı	Question and/	n Sheet or Spec. erence
1.			
2.			
3.			
4.			
5.			
6.			

A 4. BID ITEMS

SCHEDULE A: WATER AND WASTEWATER MAIN INSTALLATIONS AT 32 LOCATIONS

ITEM NO. 1500F 4" DUCTILE IRON WATER PIPE

This item consists of furnishing and placing approximately 50 Linear Feet of 4" Ductile Iron Water Pipe 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 Item 501.7.COD: Ductile-Iron Pressure Pipe and Fittings of these specifications and addenda thereto.

This item includes all fittings, polywrap (AWWA C105-99), barricading, and all embedment materials.

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

ITEM NO. 1500H 6" DUCTILE IRON WATER PIPE

This item consists of furnishing and placing approximately 200 Linear Feet of 6" Ductile Iron Water Pipe 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 Item 501.7.COD: Ductile-Iron Pressure Pipe and Fittings of these specifications and addenda thereto.

This item includes all fittings, polywrap (AWWA C105-99), barricading, and all embedment materials.

ITEM NO. 1500J 8" DUCTILE IRON WATER PIPE

This item consists of furnishing and placing approximately 50 Linear Feet of 8" Ductile Iron Water Pipe 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 Item 501.7.COD: Ductile-Iron Pressure Pipe and Fittings of these specifications and addenda thereto.

This item includes all fittings, polywrap (AWWA C105-99), barricading, and all embedment materials.

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

ITEM NO. 1500L 12" DUCTILE IRON WATER PIPE

This item consists of furnishing and placing approximately 2,300 Linear Feet of 12" Ductile Iron Water Pipe 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 Item 501.7.COD: Ductile-Iron Pressure Pipe and Fittings of these specifications and addenda thereto.

This item includes all fittings, polywrap (AWWA C105-99), barricading, and all embedment materials.

ITEM NO. 1500Q 16" DUCTILE IRON WATER PIPE

This item consists of furnishing and placing approximately 50 Linear Feet of 16" Ductile Iron Water Pipe 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 Item 501.7.COD: Ductile-Iron Pressure Pipe and Fittings of these specifications and addenda thereto.

This item includes all fittings, polywrap (AWWA C105-99), barricading, and all embedment materials.

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

ITEM NO. 1500Y 30" DUCTILE IRON WATER PIPE

This item consists of furnishing and placing approximately 70 Linear Feet of 30" Ductile Iron Water Pipe 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 Item 501.7.COD: Ductile-Iron Pressure Pipe and Fittings of these specifications and addenda thereto.

This item includes all fittings, polywrap (AWWA C105-99), barricading, and all embedment materials.

ITEM NO. 1800H 6" PVC WATER PIPE

This item consists of furnishing and placing approximately 600 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 506.7.1.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 14,000 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.

ITEM NO. 1800K 10" PVC WATER PIPE

This item consists of furnishing and placing approximately 10 Linear Feet of 10" 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 506.7.1.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. 1800L 12" PVC WATER PIPE

This item consists of furnishing and placing approximately 3,800 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.

ITEM NO. 3100J 8" PVC WASTEWATER PIPE

This item consists of furnishing and placing approximately 3,400 Linear Feet of 8" 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. 3110J 8" PVC PRESSURE RATED WASTEWATER PIPE

This item consists of furnishing and placing approximately 9,900 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 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 1,975 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 **1tem 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 1,650 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

Measurement and payment will be in accordance with Item **1tem 507.6. Measurement and Payment For Wastewater Conduit Installation** of these specifications.

ITEM NO. 3110Q 16" PVC PRESSURE RATED WASTEWATER PIPE

This item consists of furnishing and placing approximately **300** Linear Feet of **16"** 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 **1tem 507.6. Measurement and Payment For Wastewater Conduit Installation** of these specifications.

materials.

ITEM NO. 3120R 18" PVC PRESSURE RATED WASTEWATER PIPE

This item consists of furnishing and placing approximately **750** Linear Feet of **18**" Polyvinyl Chloride Pressure Rated Wastewater Pipe conforming to ASTM C905 (DR 25) Minimum Pressure Rating of 165 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. 3520H REHABILITATION OF EXISTING 6" WASTEWATER MAIN

This item consists of the Rehabilitation of approximately **360** 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. 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.

ITEM NO. 3570HxJ PIPE BURSTING OF EXISTING 6" WASTEWATER MAIN WITH 8" WASTEWATER MAIN

This item consists of Pipe Bursting approximately **1,530** Linear Feet of **6"** Wastewater Main with **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 pipe bursting replacement of the wastewater main in accordance with these specifications and addenda thereto.

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

ITEM NO. 3570JxJ PIPE BURSTING OF EXISTING 8" WASTEWATER MAIN WITH 8" WASTEWATER MAIN

This item consists of Pipe Bursting approximately **170** Linear Feet of **8"** Wastewater Main with **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 pipe bursting replacement of the wastewater main in accordance with these specifications and addenda thereto.

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

ITEM NO. 5020 EXTRA IRON FITTINGS

This item consists of furnishing and placing approximately 13 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. 5050 WATER SERVICE

490 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.

ITEM NO. 5066FxF 4" CLOSED FIRELINE SERVICE WITH 4" DETECTOR CHECK DEVICE

This item consists of installing **1** Each new **4**" Closed Fireline Service with **4**" Detector Check Device in accordance with the specifications and addenda thereto, and the Standard Drawings.

The City will furnish the new **4**" detector check device and the vault access hatch cover to the Contractor for the new **4**" Closed Fireline Service.

Measurement and payment will be per Each and will include all work to install the **4**" Closed Fireline Service; to include **4**" detector check device, installation of the new vault, vault floor, piping, blocking, disposal of excess material, boring, crossing diagonal utilities, and all temporary and permanent paving, and 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 bypass piping will not be included in this item. This pipe will be paid under the bid item for the appropriate water pipe.

ITEM NO. 5066HxH 6" CLOSED FIRELINE SERVICE WITH 6" DETECTOR CHECK DEVICE

This item consists of installing **1** Each new **6**" Closed Fireline Service with **6**" Detector Check Device in accordance with the specifications and addenda thereto, and the Standard Drawings.

The City will furnish the new **6**" detector check device and the vault access hatch cover to the Contractor for the new **6**" Closed Fireline Service.

Measurement and payment will be per Each and will include all work to install the **6**" Closed Fireline Service; to include **6**" detector check device, installation of the new vault, vault floor, piping, blocking, disposal of excess material, boring, crossing diagonal utilities, and all temporary and permanent paving, and 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 bypass piping will not be included in this item. This pipe will be paid under the bid item for the appropriate water pipe.

ITEM NO. 5066JxJ 8" CLOSED FIRELINE SERVICE WITH 8" DETECTOR CHECK DEVICE

This item consists of installing **1** Each new **8"** Closed Fireline Service with **8"** Detector Check Device in accordance with the specifications and addenda thereto, and the Standard Drawings.

The City will furnish the new **8**" detector check device and the vault access hatch cover to the Contractor for the new **8**" Closed Fireline Service.

Measurement and payment will be per Each and will include all work to install the **8**" Closed Fireline Service; to include **8**" detector check device, installation of the new vault, vault floor, piping, blocking, disposal of excess material, boring, crossing diagonal utilities, and all temporary and permanent paving, and 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 bypass 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 24 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 **22** 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 21 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. 5100F 4" GATE VALVE

This item consists of furnishing and placing approximately 1 Each 4" 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. 5100H 6" GATE VALVE

This item consists of furnishing and placing approximately 38 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.

ITEM NO. 5100J 8" GATE VALVE

This item consists of furnishing and placing approximately 68 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 33 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. 5100V 24" GATE VALVE

This item consists of furnishing and placing approximately 2 Each 24" 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. 5110LxL 12" x 12" TAPPING SLEEVE

This item consists of furnishing and placing approximately 1 Each 12" 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.

ITEM NO. 5110VxJ 24" x 8" TAPPING SLEEVE

This item consists of furnishing and placing approximately 1 Each 24" 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. 5120Q REMOVE, SALVAGE, AND DELIVER 16" VALVE

This item consists of Removing, Salvaging, and delivering approximately **2** Each **16"** Valve. This item to include cleaning, loading, hauling and unloading the valve at Dallas Water Utilities Yard located at 4120 Scottsdale Road. If the Contractor has damaged the valve, after unloading and in the opinion of the Project Manager, no payment on this item will be made, and the Contractor will be charged the replacement cost of the valve.

ITEM NO. 5500J 8" WATER MAIN (BOTOC)

This item consists of approximately 146 Linear Feet of 8" 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 **8**" 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. 5500L 12" WATER MAIN (BOTOC)

This item consists of approximately 18 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.

ITEM NO. 5550J 8" WATER MAIN CROSSING (BOTOC)

This item consists of approximately **180** Linear Feet of **8"** Water Main to be installed By Other Than Open Cut in accordance with **Item 509.3**. **Street and Alley Crossings** of these specifications and addenda thereto.

The **8**" 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.

ITEM NO. 5560J 8" WATER MAIN CROSSING (BY OPEN CUT)

This item consists of approximately **180** Linear Feet of **8"** Water Main Crossing to be installed by Open Cut in accordance with **Item 509.3**. **Street and Alley Crossings** of these specifications and addenda thereto.

The **8**" 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.

ITEM NO. 5560S 20" WATER MAIN CROSSING (BY OPEN CUT)

This item consists of approximately **10** Linear Feet of **20**" Water Main Crossing to be installed by Open Cut in accordance with **Item 509.3**. **Street and Alley Crossings** of these specifications and addenda thereto.

The **20**" 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.

ITEM NO. 5600 CUT AND PLUG EXISTING WATER MAIN

This item consists of approximately **70** 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.

ITEM NO. 5610 CUT AND PLUG WATER MAIN FOR TEST

This item consists of 10 Each Cut and Plug Water Main for

Test.

each.

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. 5650 REMOVAL OF LEAD PIPE JOINTS

This item consists of cutting and removal of **2** Each of lead pipe joint(s) on iron pipes in order to facilitate the tie-in of new piping onto the pre-existing iron pipe. The limit for each joint removal is 20 linear feet.

This item shall include only the labor and equipment required to cut, remove and dispose of the lead joints and connecting the existing iron pipe to the new pipe. This item does not include payment for any materials or incidentals necessary to complete the work. 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.

This item is a contingent item and payment will be made only if directed by the DWU Construction Superintendent.

Measure and Payment shall be at the Contract Unit Price per

ITEM NO. 5750B 1" FLUSH POINT

This item consists of furnishing and placing approximately 1 Each 1" 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.

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.

ITEM NO. 5770J STANDARD 8" WATER MAIN LOWERING

This item consists of constructing **2** Each **8"** Water Main Lowering in accordance with the specifications and addenda thereto, and a Standard Drawing and Standard Drawings,

This item is to include all required 8" water pipe, including bends, fittings and polywrap 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 Item 501.7.COD: Ductile-Iron Pressure Pipe and Fittings or Item 501.14. Polyvinyl Chloride (PVC) Water Pipe. This item also is to include the required concrete blocking, pipe embedment, backfill, temporary and permanent paving.

Measurement and payment will per each completed and accepted work and shall include all cost for labor and equipment, barricading, trench safety, all temporary and permanent paving related items (saw-cut, base, asphalt, sidewalk, driveway, curb and/or gutter, sod, etc.) and all other work associated with this item.

This item is a contingent item and payment will be made only if work is directed by the Project Manager. The bid price for this item will not be subject to renegotiation due to quantity overrun or underrun limitation as set forth in the specifications.

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

This item consists of approximately 20 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.

ITEM NO. 6050R 18" WASTEWATER MAIN CROSSING (BY OPEN CUT)

This item consists of approximately **10** Linear Feet of **18**" Wastewater Main to be installed By Open Cut in accordance with **Item 509.3**. **Street and Alley Crossings** of these specifications and addenda thereto.

The **18**" carrier pipe is not to be included in this item. The encasement pipe is included in this item.

ITEM NO. 6060

WASTEWATER LATERAL

This item consists of furnishing and placing approximately 410 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.

ITEM NO. 6061 WASTEWATER LATERAL WITH CLEANOUT

This item consists of furnishing and placing approximately 70 Each Wastewater Lateral with Cleanout on an existing or new wastewater main. This item will include street, alley, and easement laterals. This item includes connection to the existing or new wastewater main and installing a new service line to the property line, not to exceed fifteen (15) linear feet in service line length, 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 Drawings and Standard Appurtenance Sheets. 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 installing a new lateral 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 to the property line with cleanout. The disturbed area 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.

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, 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 and permanent paving related items (sawcut, base, asphalt, concrete, sidewalk, driveways, curb and/or gutter, sod) and all other work associated with this item.

Measurement and Payment of permanent paving requirements, imposed by the Public Works Pavement Repair Manual and beyond the ditch width plus two (2) feet, will be paid under Item No. 7570 or 7655 as applicable.

ITEM NO. 6080 STANDARD MAINLINE CLEANOUT

This item consists of furnishing and placing approximately 1 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

ITEM NO. 6100 WASTEWATER ACCESS DEVICE

This item consists of furnishing and placing approximately **20**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 4 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 72" DIAMETER DROP CONNECTION MANHOLE

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately 10 Each 72" 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.

ITEM NO. 6111AJX 72" DIAMETER DROP CONNECTION MANHOLE – EXTRA DEPTH (+20')

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately 1 Each 72" 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. 6120AE 48" DIAMETER PRESSURE TYPE MANHOLE

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately 7 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.

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 64 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.

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 16 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.

ITEM NO. 6130AJ 72" DIAMETER WASTEWATER MANHOLE

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately 1 Each 72" 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. 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 **102** 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. 6142 DROP CONNECTION TO EXISTING MANHOLE

This item consists of furnishing and placing approximately 1 Each Drop Connection to 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.

Removal of any existing conflicting drop connection, if required, will be included in this item. This item shall include barricading.

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.

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.

ITEM NO. 6270

FENCE REPLACEMENT

This item consists of installing **500** Linear Feet of various types of Fence to replace existing fences within the limits described on the plans.

Fences shall be installed plumb. They shall be constructed of new materials of like kind and same construction as the existing fences to be replaced. Replacement fences shall abut adjacent fences to maintain the completeness of previously enclosed areas. This item shall include any posts and footings, gates, and all accessory objects necessary to install and match the individual types of existing fences to be replaced.

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

Basis for payment shall be per Linear Foot of fence replaced.

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 3,000 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 26,300 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.

ITEM NO. 6925 TRENCH EXCAVATION SAFETY AND SUPPORT

This item consists of Trench Excavation Safety and Support for approximately **35,010** 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 **620** 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. 7040 STABILIZED BACKFILL

This item consists of furnishing and placing approximately 410 Cubic Yards of Stabilized Backfill in accordance with Item 504.6.2. Stabilized Backfill of these specifications and addenda thereto, and as shown on the plans and detailed on the applicable Standard Drawings.

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 will be in accordance with Item 504.7. Measurement and Payment of Backfill, Item 504.7.1. Measurement of Backfill Material, and Item 504.7.2. Payment of Backfill Material of these specifications.

ITEM NO. 7041 FLOWABLE BACKFILL

This item consists of furnishing and placing approximately 800 Cubic Yards of Flowable Backfill in accordance with Item 504.6.6. Flowable Backfill and Item 504.2.3.4. Flowable Backfill 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.

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

This item consists of furnishing and placing approximately **1,000** 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.

ITEM NO. 7050 SAND BACKFILL

This item consists of furnishing and placing approximately 620 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. 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 160 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 1,941 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. 7525 FLEX BASE (CRUSHED ROCK) ALLEY SURFACE

This item consists of removing existing alley surface, furnishing and placing approximately **1,200** 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 300 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 2,650 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 Payement Replacement** of these specifications.

ITEM NO. 7570 REINFORCED CONCRETE PAVING

This item consists of furnishing and placing approximately 4,000 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 500 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.

ITEM NO. 7580 REINFORCED CONCRETE SIDEWALK

This item consists of furnishing and placing approximately 1,000 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 1,000 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. 7584 SLURRY SEAL SURFACE TREATMENT

This item consists of furnishing and placing approximately **100** Square Yards of Slurry Seal Surface Treatment in accordance with **Item 404.3.7.COD: Limitations** of the Dallas Water Utilities Addendum to the North Central Texas Standard Specifications for Slurry Seal.

This is a contingent item. Placement and payment shall be made only as directed by the Project Manager.

Slurry Seal shall be measured and paid for at the contract Unit Price per Square Yard on surface area of completed and accepted work.

ITEM NO. 7585 BARRIER FREE RAMP

This item consists of constructing approximately **5** Each Concrete Barrier Free (wheelchair) Ramps as specified herein and in conformity with the **Public Works Standard Details for Construction (251-D)** and any special details.

This item shall include all necessary saw-cut, removal of existing sidewalk, curb and gutter, excavation and backfill, subgrade preparation, furnishing and placing all materials; including expansion joint materials, asphalt replacement needed to adjacent to new gutter area, and any related work for manipulation, labor, tools, equipment and incidentals. See 107.27.COD: Environmental Compliance.

Measurement and payment shall be at unit contract price for complete and accepted work.

ITEM NO. 7590 REINFORCED CONCRETE DRIVEWAY

This item consists of furnishing and placing approximately 1,000 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.

ITEM NO. 7600 REINFORCED CONCRETE BASE

This item consists of furnishing and placing approximately 6,555 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 3,900 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. 7713 EROSION CONTROL

This item is to reimburse the Contractor for costs to install pollution control devices to prevent sediment from entering the storm water system or waterway. Modifications or additions to the control measures used as directed 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.

Payment will be Lump Sum 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. 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 **37,190** 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 **24,670** 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.

ITEM NO. 20500 INVESTIGATION

This item consists of excavating at approximately **30** 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.

SCHEDULE B: INSTALLATION OF 24 INCH WASTEWATER MAIN

ITEM NO. 3100J 8" PVC WASTEWATER PIPE

This item consists of furnishing and placing approximately 61 Linear Feet of 8" 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. 3120V 24" PVC PRESSURE RATED WASTEWATER PIPE

This item consists of furnishing and placing approximately 5,974 Linear Feet of 24" Polyvinyl Chloride Pressure Rated Wastewater Pipe conforming to ASTM C905 (DR 25) Minimum Pressure Rating of 165 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

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.

materials.

ITEM NO. 3700VX 24" EXTRA DEPTH WASTEWATER PIPE (+20')

This item consists of additional excavation of **24**" Wastewater Pipe Extra Depth for **200** 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. 5990V 24" WASTEWATER MAIN (BOTOC)

This item consists of approximately **5,579** Linear Feet of **24**" 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 **24**" carrier pipe is not to be included in this item. The encasement pipe, if required, is included in this item.

ITEM NO. 6060

WASTEWATER LATERAL

This item consists of furnishing and placing approximately 5 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.

ITEM NO. 6100

WASTEWATER ACCESS DEVICE

This item consists of furnishing and placing approximately **2**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. 6110AG 60" DIAMETER DROP CONNECTION MANHOLE

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately 7 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.

ITEM NO. 6111AJX 72" DIAMETER DROP CONNECTION MANHOLE – EXTRA DEPTH (+20')

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately 1 Each 72" 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.

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 4 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.

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 12 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 **24** 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. 6902 PLACEMENT OF BLOCK SODDING

This item consists of furnishing and placing approximately 500 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 5,974 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.

ITEM NO. 7030 ROCK FOUNDATION

This item consists of furnishing and placing approximately **50** 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 100 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.

ITEM NO. 7050 SAND BACKFILL

This item consists of furnishing and placing approximately 100 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. 7520 TEMPORARY PAVING (HOT MIX OR HIGH PERFORMANCE MIX)

This item consists of furnishing, placing, and removing approximately **500** 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. 7530 CONCRETE CURB AND/OR GUTTER

This item consists of furnishing and placing approximately 2,000 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 300 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 Payement Replacement** of these specifications.

ITEM NO. 7570 REINFORCED CONCRETE PAVING

This item consists of furnishing and placing approximately 2,000 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 500 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.

ITEM NO. 7580 REINFORCED CONCRETE SIDEWALK

This item consists of furnishing and placing approximately 1,000 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 1,000 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. 7585 BARRIER FREE RAMP

This item consists of constructing approximately **5** Each Concrete Barrier Free (wheelchair) Ramps as specified herein and in conformity with the **Public Works Standard Details for Construction (251-D)** and any special details.

This item shall include all necessary saw-cut, removal of existing sidewalk, curb and gutter, excavation and backfill, subgrade preparation, furnishing and placing all materials; including expansion joint materials, asphalt replacement needed to adjacent to new gutter area, and any related work for manipulation, labor, tools, equipment and incidentals. **See 107.27.COD: Environmental Compliance.**

Measurement and payment shall be at unit contract price for complete and accepted work.

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. 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 **6,035** 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. 20500 INVESTIGATION

This item consists of excavating at approximately **10** 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.