



**SPECIFICATIONS  
AND  
FORMS OF CONTRACT AND BONDS  
FOR  
SCHEDULE A:  
WATER AND WASTEWATER MAIN INSTALLATIONS  
AT 27 LOCATIONS  
AND  
SCHEDULE B:  
WATER AND WASTEWATER IMPROVEMENTS  
IN  
MESQUITE HEIGHTS UNSERVED AREA**

**CONTRACT NO. 20-473/ 20-474**



### **PLEASE NOTE**

Sealed Bids for “**SCHEDULE A: WATER AND WASTEWATER MAIN INSTALLATIONS AT 27 LOCATIONS AND SCHEDULE B: WATER AND WASTEWATER IMPROVEMENTS IN MESQUITE HEIGHTS UNSERVED AREA, CONTRACT NO. 20-473/20-474**”, 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, June 11, 2021.*** Bid opening will be read ONLY online by the Purchasing Agent at ***2:00 p.m. on Friday, June 11, 2021, 2021.*** You may view this bid opening live by going to [www.dallascityhall.com](http://www.dallascityhall.com), click on watch city meetings online, and it will be live on DCN 95 live.

**Due to the COVID-19 Pandemic, the office of Procurement Services is unable to accept paper copies of bids or proposals. Please submit all bids or proposal as pdfs *until 1:00 p.m. on Friday, May 28, 2021* in Bonfire at: <https://dallascityhall.bonfirehub.com/login>. For any questions, please email [procurementAds@dallascityhall.com](mailto:procurementAds@dallascityhall.com).**

**Bid opening will be read ONLY online for this Bid due to COVID-19 precautions. You may view this bid opening live by going to [www.dallascityhall.com](http://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, June 11, 2021.* Bid opening will not be open for in-person viewing at this time.**

A PDF file version of plans, specifications, and forms can be obtained at the following City of Dallas Bonfire website: <https://dallascityhall.bonfirehub.com/projects/43735/details>.

## BUSINESS INCLUSION AND DEVELOPMENT POLICY

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

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

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

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

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

Construction: 32.00%

### ATTENTION

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

City of Dallas Pre-Bid/Proposal Cover Memo (BWI-FRM-622)  
City of Dallas Pre-Bid/Proposal Form (BWI-FRM-623)  
City of Dallas Ethnic 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  
(817) 299-0566  
(Toll Free) (866) 451-5997  
FAX (817) 299-0949

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



## **WORK WITH OWN FORCES**

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

For each previous project

Name of Project  
Location  
Contracting Agency  
Description of work performed

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

### **Work 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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- A 6. Proposal Tabulation
- A 7. Time
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Minority/Women Business Enterprise Program
- A 11. Drug-Free Jobsite on City Construction Projects
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- A 28. Environmental Policy and Occupational Safety and Health Program

STAY HOME STAY SAFE – RULES FOR THE CONSTRUCTION INDUSTRY

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## ADVERTISEMENT FOR BIDS

Sealed Bids for **“SCHEDULE A: WATER AND WASTEWATER MAIN INSTALLATIONS AT 27 LOCATIONS AND SCHEDULE B: WATER AND WASTEWATER IMPROVEMENTS IN MESQUITE HEIGHTS UNSERVED AREA, CONTRACT NO. 20-473/20-474”**, 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, June 11, 2021.** Bid opening will be read ONLY online by the Purchasing Agent at **2:00 P.M. on Friday, June 11, 2021.** You may view this bid opening live by going to [www.dallascityhall.com](http://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 Proposal can be obtained using the following City of Dallas Bonfire website: <https://dallascityhall.bonfirehub.com/projects/43735/details>, **Friday, May 14, 2021.** Look for **DWU Contract #CIZ-DWU-20 473/474.**

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](http://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 **10:00 AM on Friday, June 4, 2021.**  
**You may attend pre-bid conference by using the information provided below:**

To receive a calendar invite to the meeting, please email [DWUCapitalServices@dallascityhall.com](mailto:DWUCapitalServices@dallascityhall.com). A calendar invite will be sent upon receipt of your request.

**PART "A"**

**INFORMATION TO BIDDERS**

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**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](mailto:procurementAds@dallascityhall.com).

**A 2. LOCATION AND DESCRIPTION OF PROJECT**

This project consists of approximately:

Schedule A:

Location	Limits	LF W	LF WW	Proposed		Q Sheets Number
				Water	WW	
Capitol Avenue	from Peak Street to Kirby Street	1,700	1,691	12" PVC	8" PVC	411Q 0981, Sheet(s) 044-051
Morocco Avenue	from Darwin Street south	1,071	863	8" PVC	8" PVC	411Q 1902, Sheet(s) 178-180
Sidwin Street	from Ferguson Road to Sweetbriar Drive	628	N/A	8" PVC	N/A	411Q 1246, Sheet 170
Alley between Clary Drive and Northwest Parkway	from Easton Road to Baronne Circle	939	689	8" & 12" PVC	8" PVC	411Q 1761, Sheet(s) 178-179
Ferguson Road	from Sidwin Street to Pasteur Avenue	892	1,168	8" PVC	8" HDPE & PVC	411Q 1246, Sheet(s) 171-173

Healey Drive	from Ferguson Road west	891	785	8" PVC	8" PVC	411Q 1754, Sheet(s) 045-046
Hillgreen Circle	from Hillgreen Drive east	195	N/A	8" PVC	N/A	411Q 1696, Sheet 012
Hillgreen Drive	from Hillgreen Circle to Mockingbird Lane	226	N/A	8" PVC	N/A	411Q-1696, Sheet 03
Lawther Drive	from West Bay Circle to Branchfield Drive	660	150	8" PVC	8" PVC	411Q 1695, Sheet(s) 28-29
Lingo Lane	from Milmar Drive south	265	347	8" PVC	8" CIPP	411Q 1754, Sheet 047
Mockingbird Lane	from Greentree Lane to Hillgreen Drive	1,521	1,673	8" PVC	12" PVC & FUSIBLE PVC	411Q 1696, Sheet(s) 013-017
Garland Road (SH0078)	from Gaston Parkway to Garland Road	140	N/A	8" PVC	N/A	411Q-1250C Sheet 098
Chiswell Road	from Clearhurst Drive to Parkford Drive	1,786	1,881	8" PVC	8" PVC	411Q 1761, Sheet(s) 184-188
Ferndale Road	from Longmont Drive to Lakemere Drive	1,030	N/A	8" PVC	N/A	411Q 1761, Sheet(s) 176-177
Shoreview Road	from Shadydale Lane to Audelia Road	1,742	1,512	8" & 12" PVC	8" PVC & DI	411Q 1761, Sheet(s) 180-183
Alley between Anita Street and Ellsworth Avenue	from Greenville Avenue to Matilda Street	628	600	8" PVC	8" PVC	411Q 2001, Sheet(s) 483-484
Alley between Anita Street and Winton Street	from Worcola Street to Greenville Avenue	646	510	8" PVC	8" HDPE	411Q 2001, Sheet(s) 408-409
Alley between Delmar Avenue and Matilda Street	from Ravendale Lane northeast	N/A	1,145	N/A	8" PVC	411Q 696, Sheet(s) 22-24
Alley between Ellsworth Avenue and Matalae Avenue	from Worcola Street to Greenville Avenue	696	565	8" PVC	8" HDPE	411Q 0513, Sheet(s) 003-004

Fisher Road	from Abrams Road to Lovers Lane	1,304	N/A	12" PVC	N/A	411Q 1691, Sheet(s) 122-124
Greenville Avenue	from Alley north of Ellsworth Avenue north	307	N/A	12" PVC	N/A	411Q 2001, Sheet 482
La Vista Drive	from Mecca Street west	1,218	750	8" PVC	8" PVC	411Q 0249, Sheet(s) 003-005
Matilda Street	from Ellsworth Avenue north	122	N/A	8" PVC	N/A	411Q 2001, Sheet 485
Ravendale Lane	from Matilda Street east	583	N/A	8" PVC	N/A	411Q 696, Sheet(s) 25-26
Woodcrest Lane	from Delmar Avenue to Ravendale Lane	901	N/A	8" PVC	N/A	411Q 0696, Sheet(s) 19-21
Worcola Street	from Merrimac Avenue to Alley north of Anita Street	2,653	2,823	8" PVC	8" PVC, 8" & 10" HDPE	411Q 0271, Sheet(s) 004-010

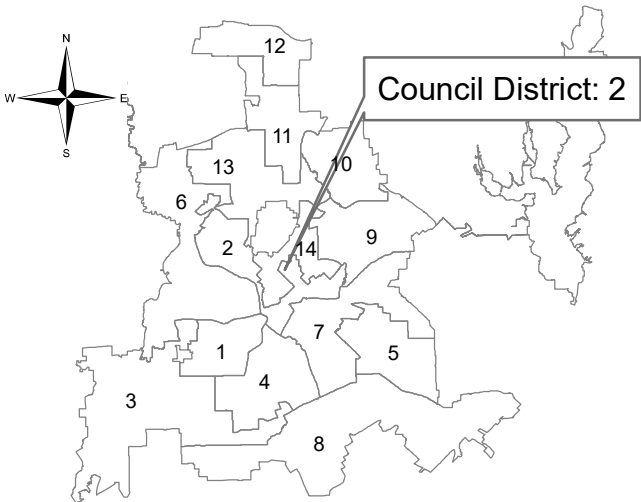
#### Schedule B:

Location	Limits	LF W	LF WW	Proposed		Q Sheets Number
				Water	WW	
Lindaloe Lane	from TRA Easement to Turnout Lane	1,367	1,559	8" PVC	12" PVC	411Q 1906, Sheet(s) 279-282
X-Ray Lane	from Lindaloe Lane to Camp Wisdom Road	1,630	288	8" PVC	12" PVC	411Q 1906, Sheet(s) 283-285
Prime Lane	from Lindaloe Lane to Mesquite Lane	1,177	683	8" PVC	8" PVC	411Q 1906, Sheet(s) 286-288
Mesquite Lane	from Prime Lane to Turnout Lane	361	N/A	8" PVC	N/A	411Q 1906, Sheet(s) 286-288
Turnout Lane	From Lindaloe Lane to Mesquite Lane	583	1,291	8" PVC	8" PVC	411Q 1906, Sheet(s) 289-291

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

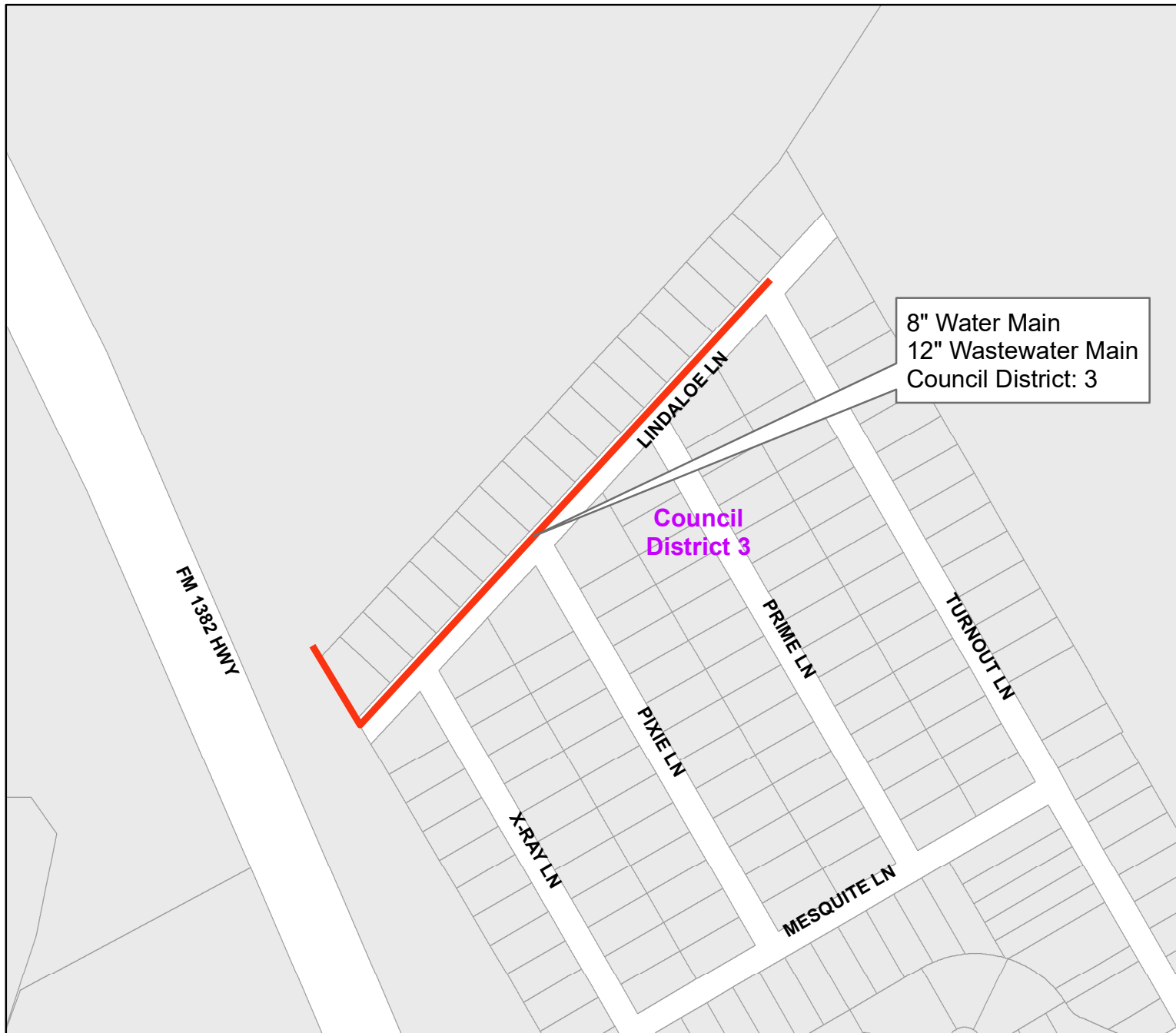


Capitol Avenue  
from Peak Street Street to Kirby Street

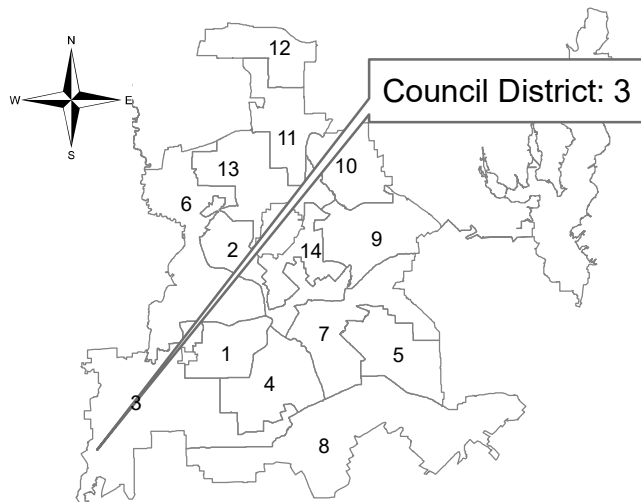


**Dallas Water Utilities  
Contract No. 20-473/474  
Water and Wastewater Main Installations  
at 32 Locations**

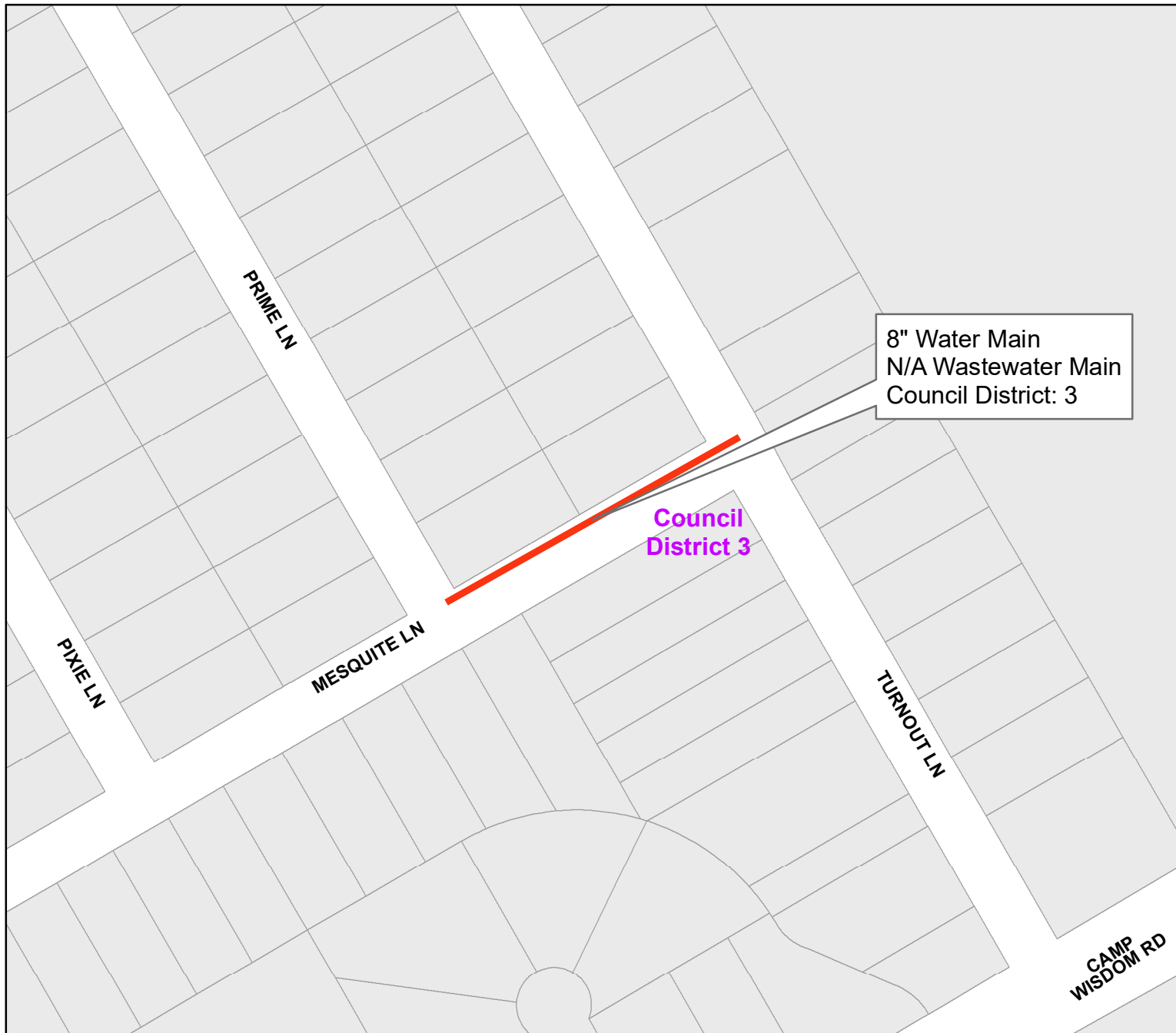




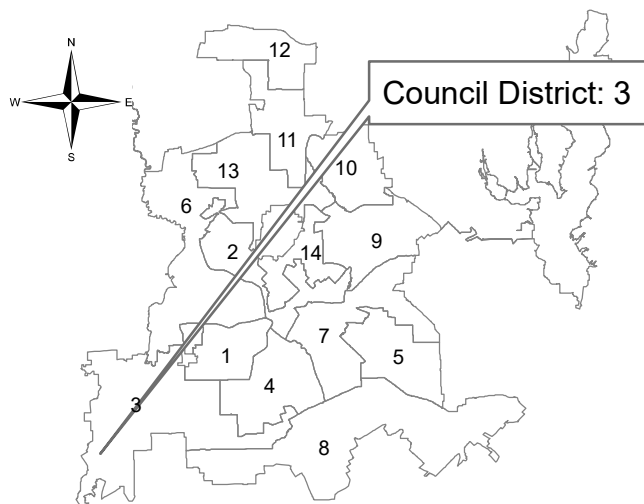
Lindaloe Lane  
from TRA Access to Turnout Lane



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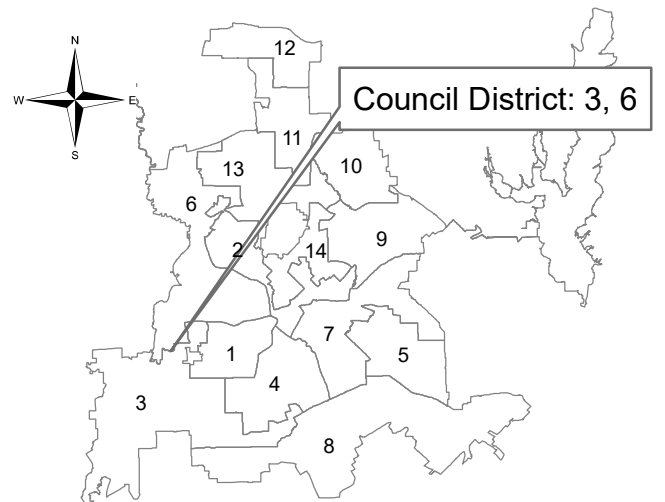
Mesquite Lane  
from Prime Lane to Turnout Lane



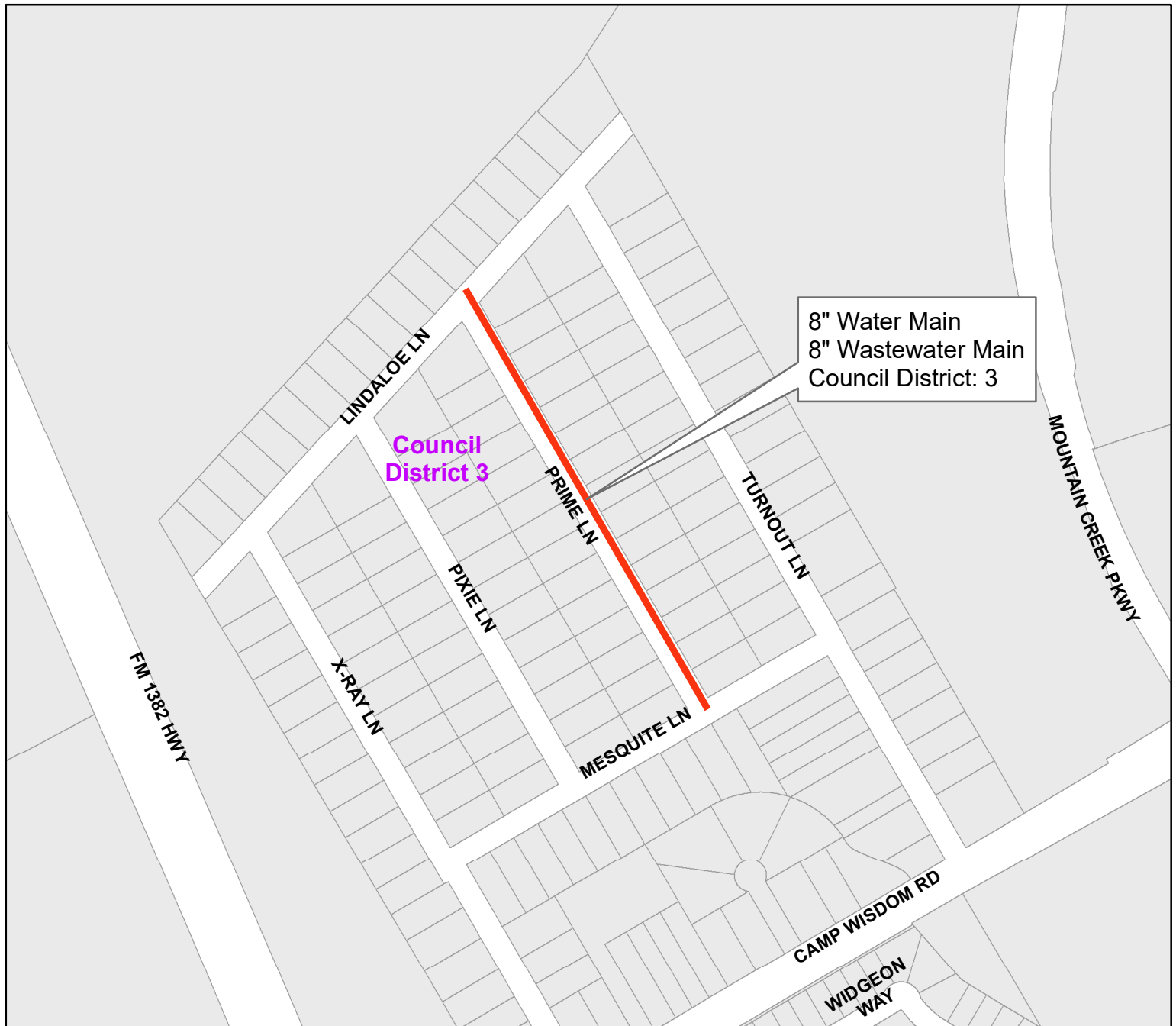
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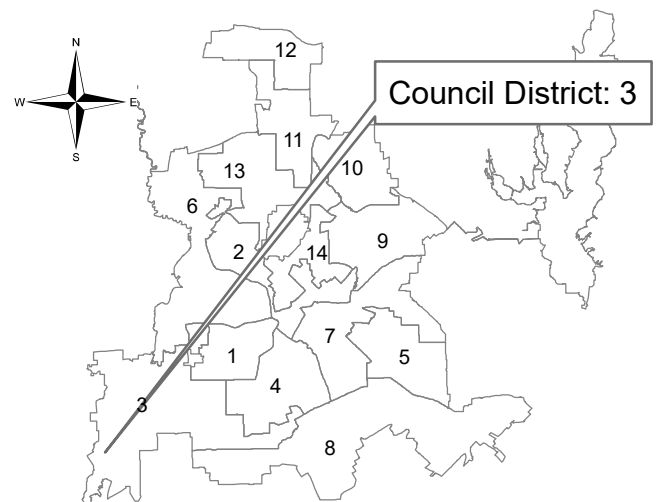
Morocco Avenue  
from Darwin Street south



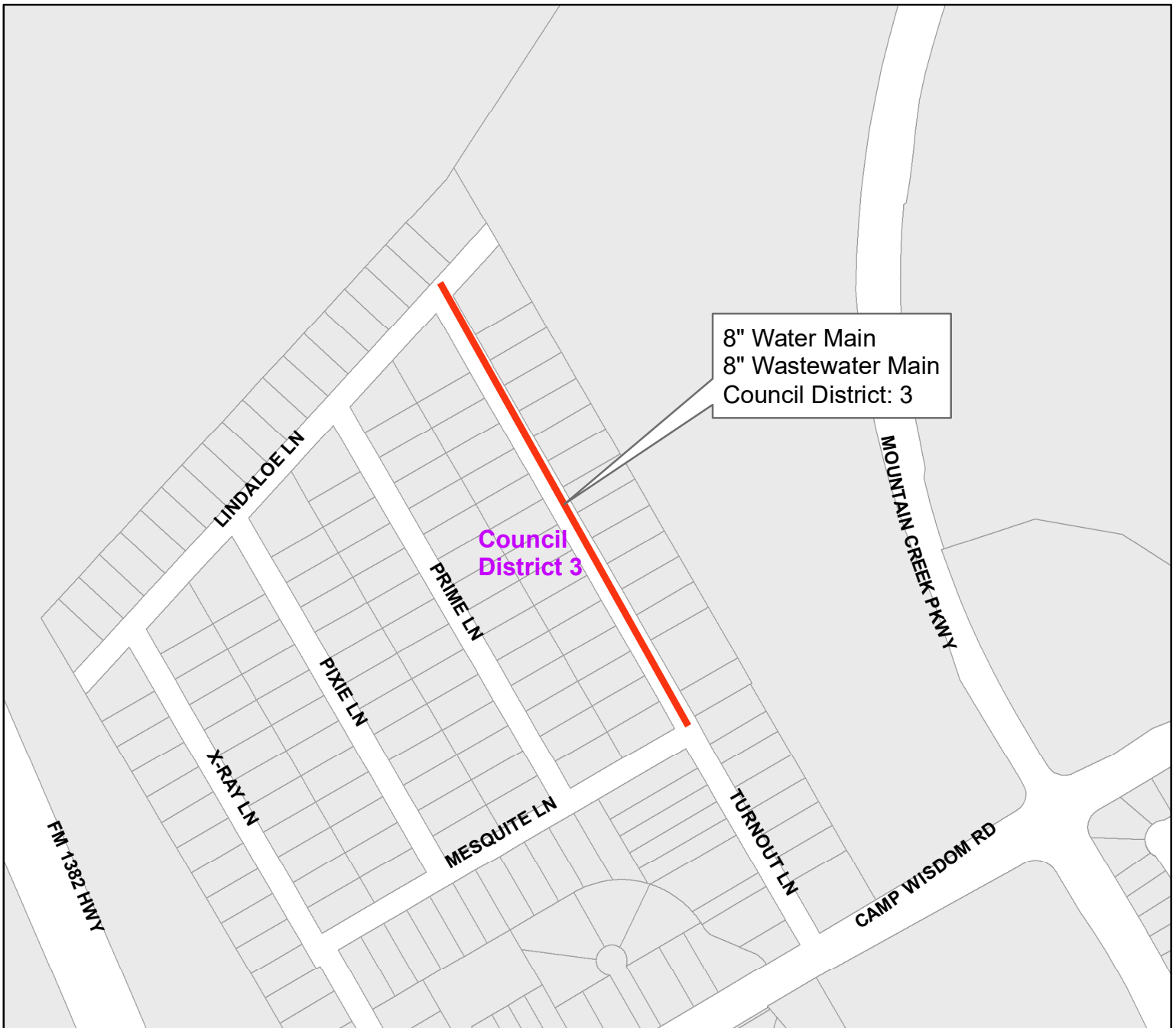
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Prime Lane  
from Lindaloe Lane to Mesquite Lane

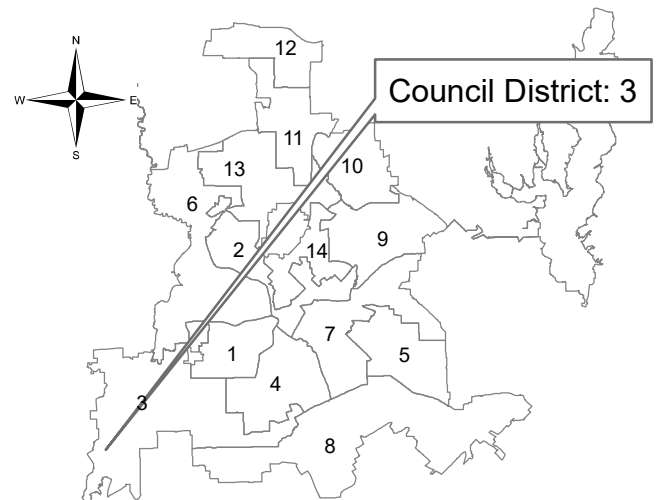


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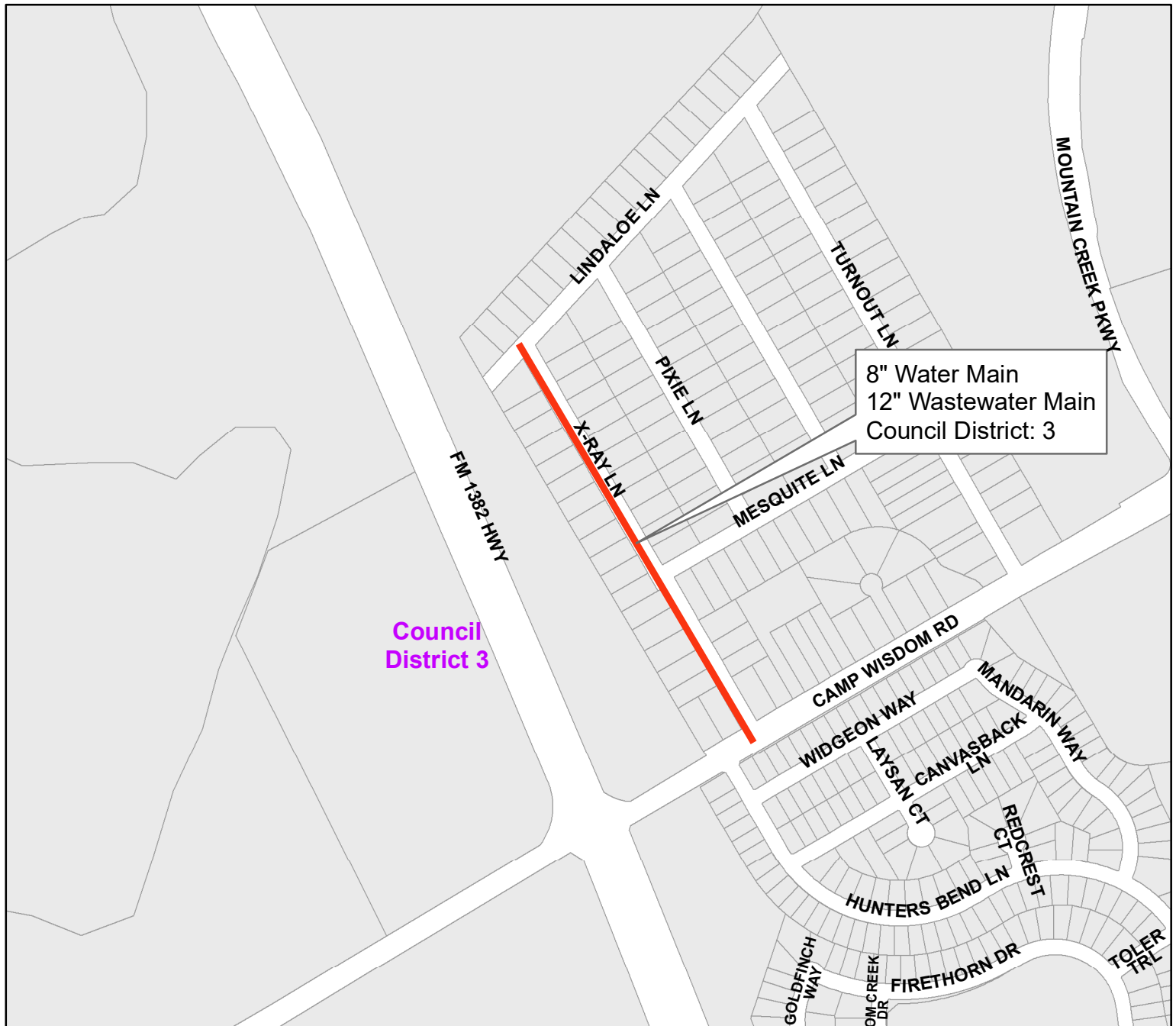


Turnout Lane

from Lindaloe Lane to Mesquite Lane

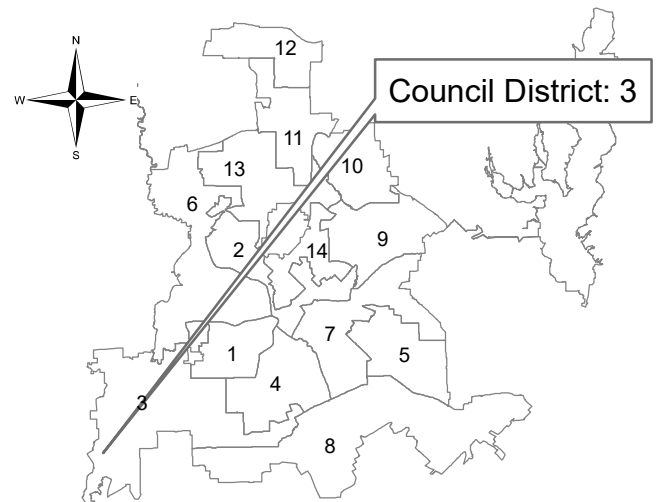


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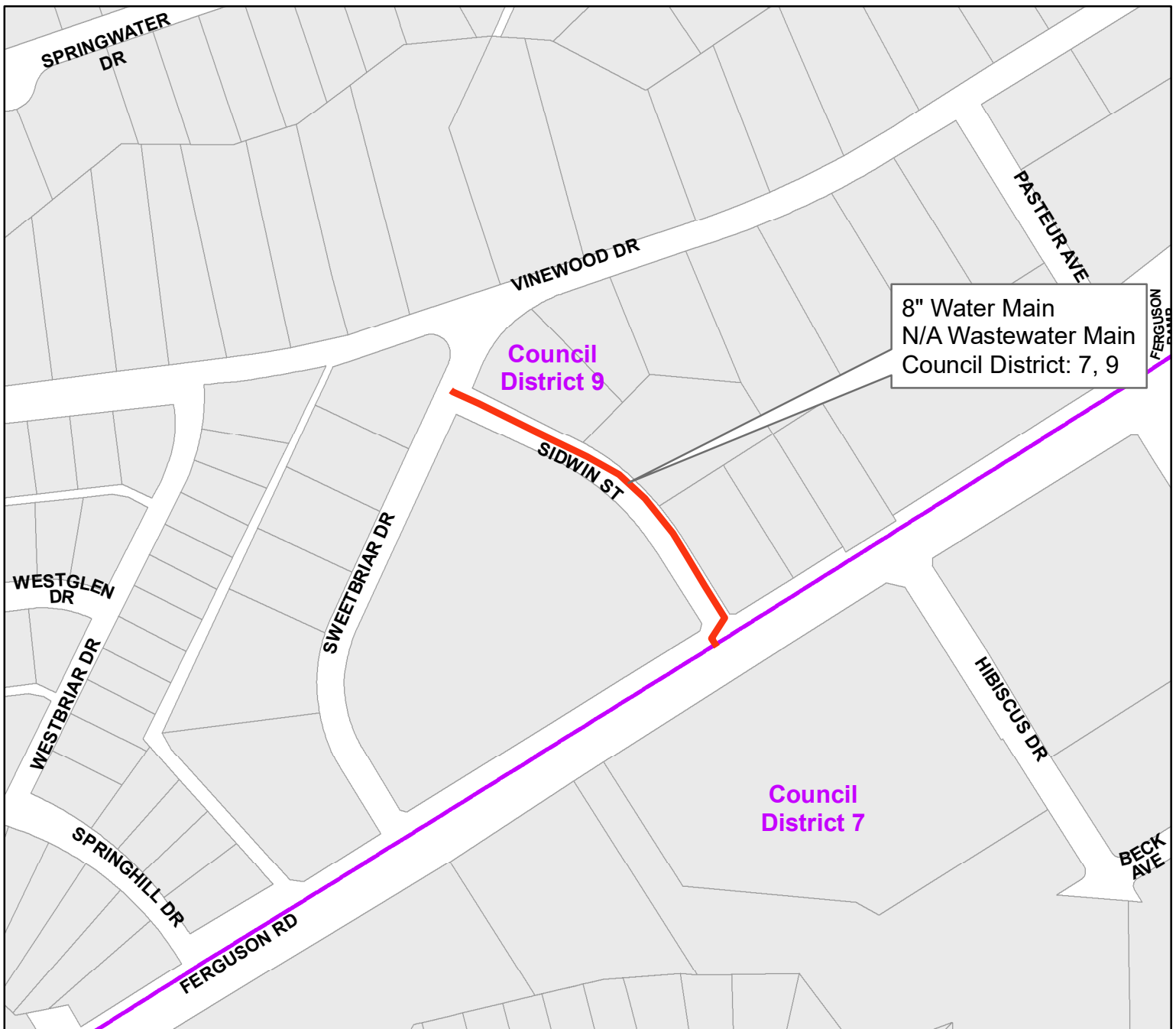


X-Ray Lane

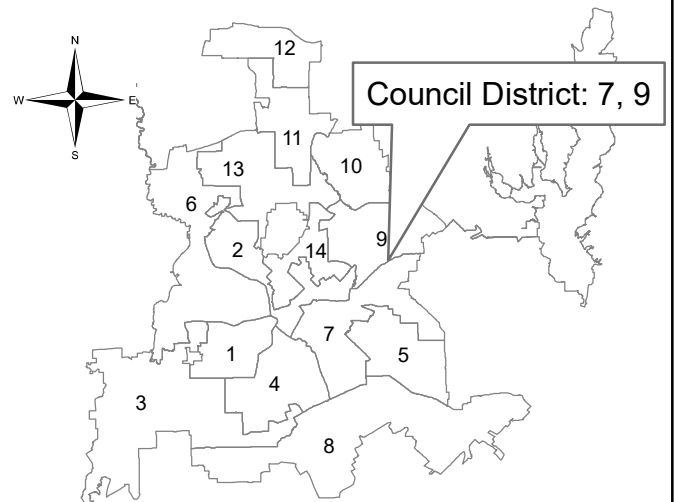
from Lindaloe Lane to Camp Wisdom Road



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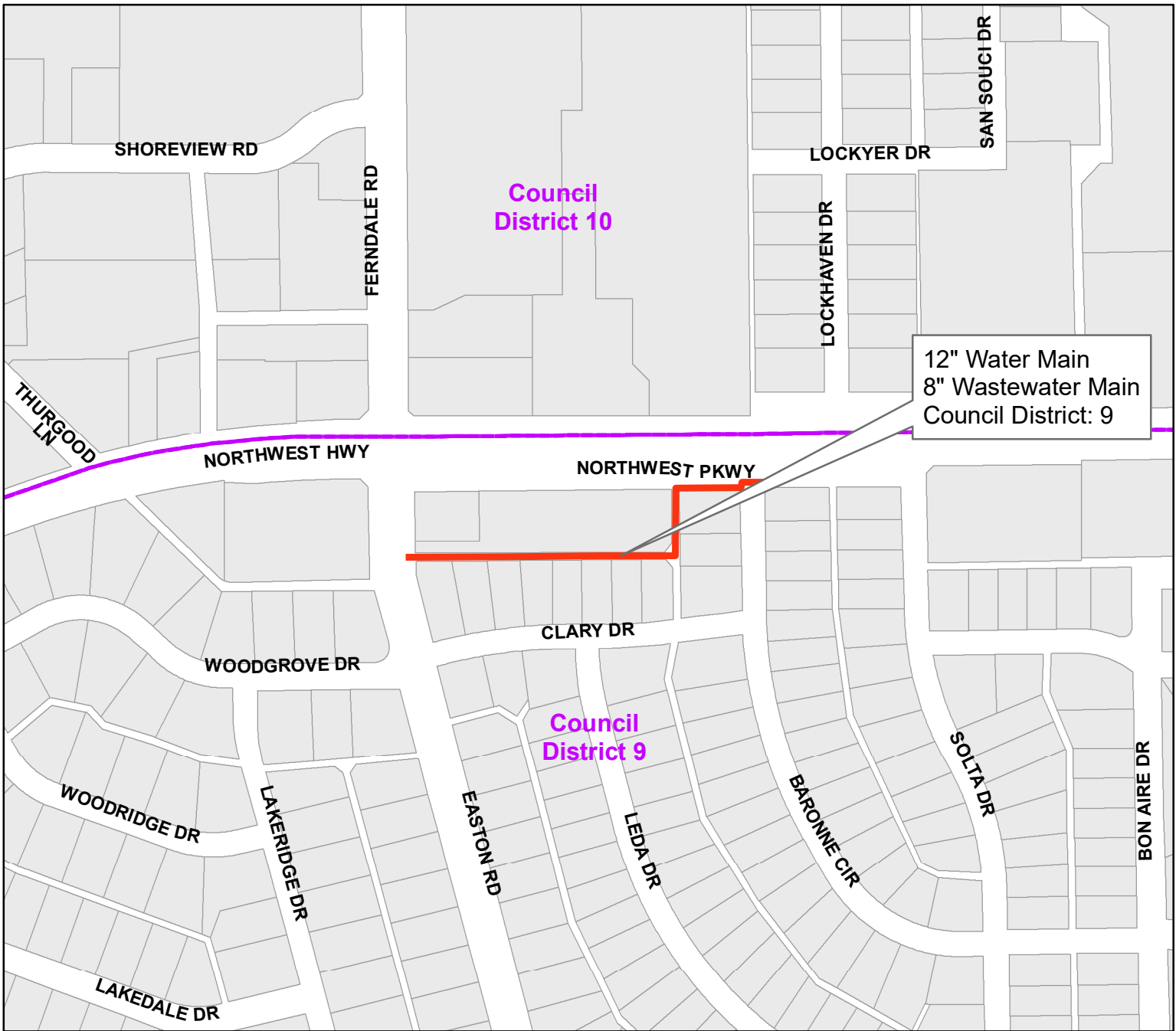


Sidwin Street  
from Ferguson Road to Sweetbriar Drive

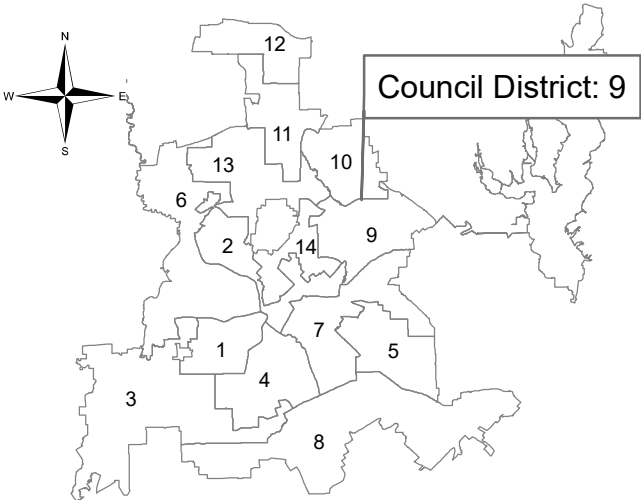


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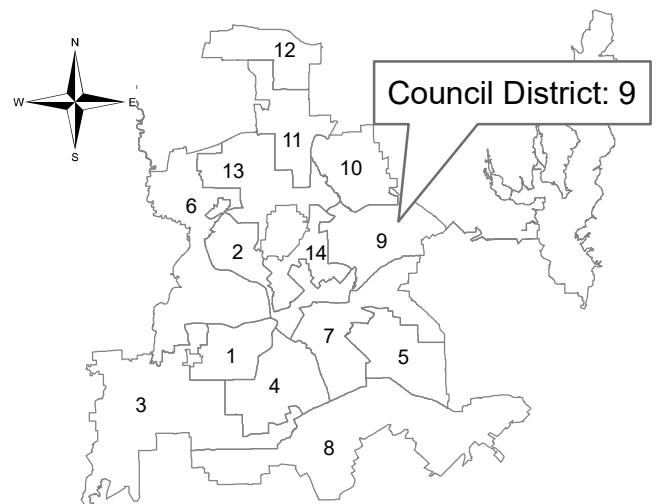
Alley between Clary Drive and Northwest Parkway  
from Easton Road to Baronne Circle



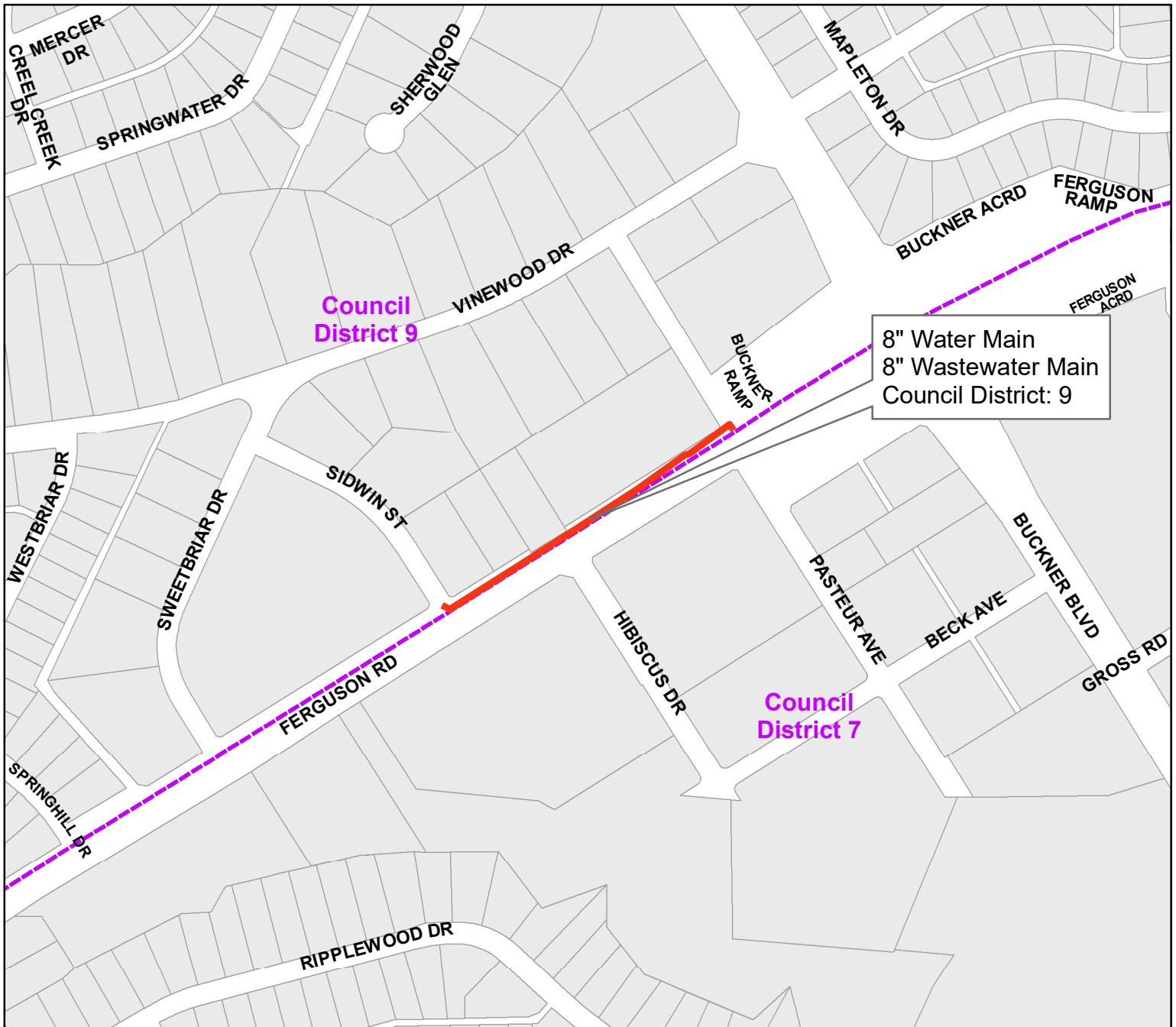




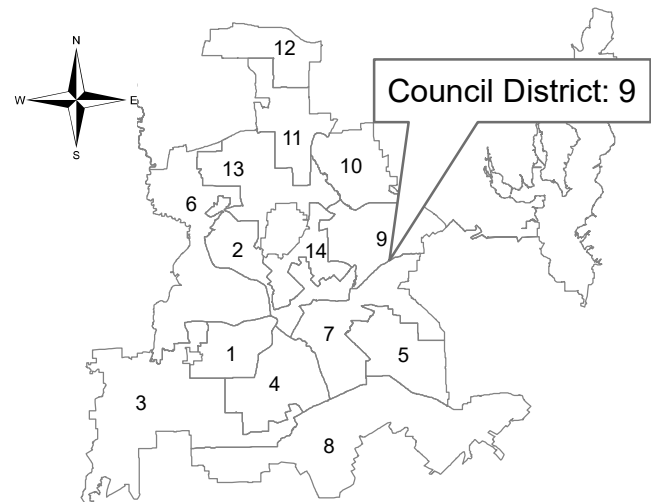
Easement south of Wyatt Street  
from Garland Road to Jupiter Road



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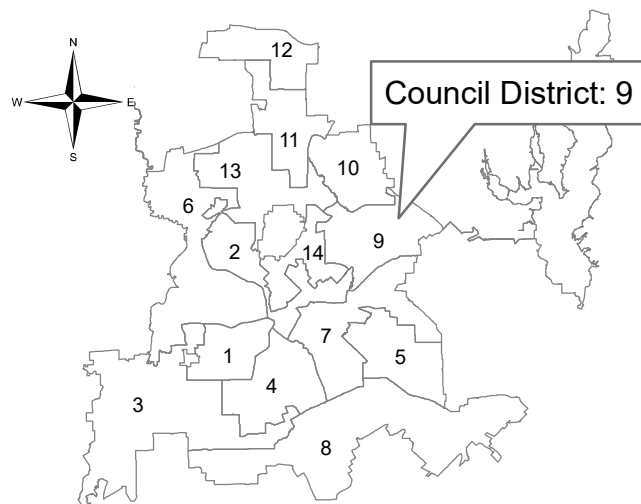
Ferguson Road  
from Sidwin Street to Pasteur Avenue



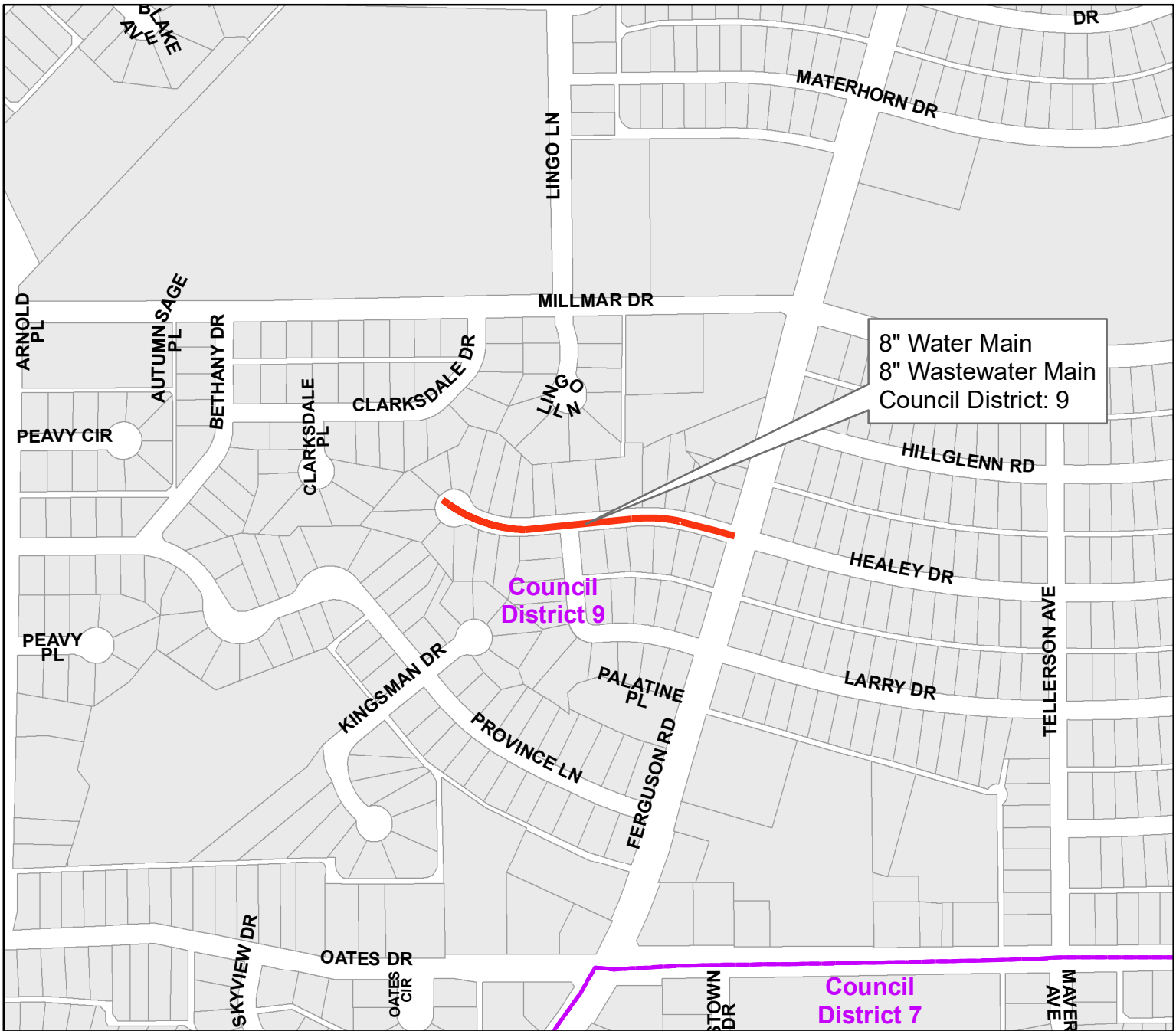
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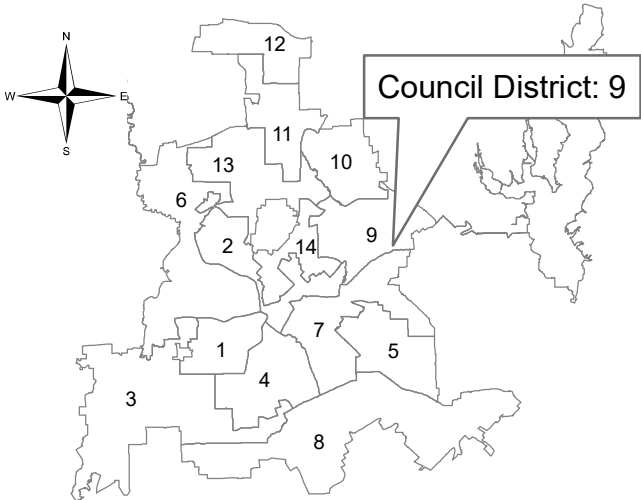
Garland Road (SH0078)  
from Gaston Parkway south



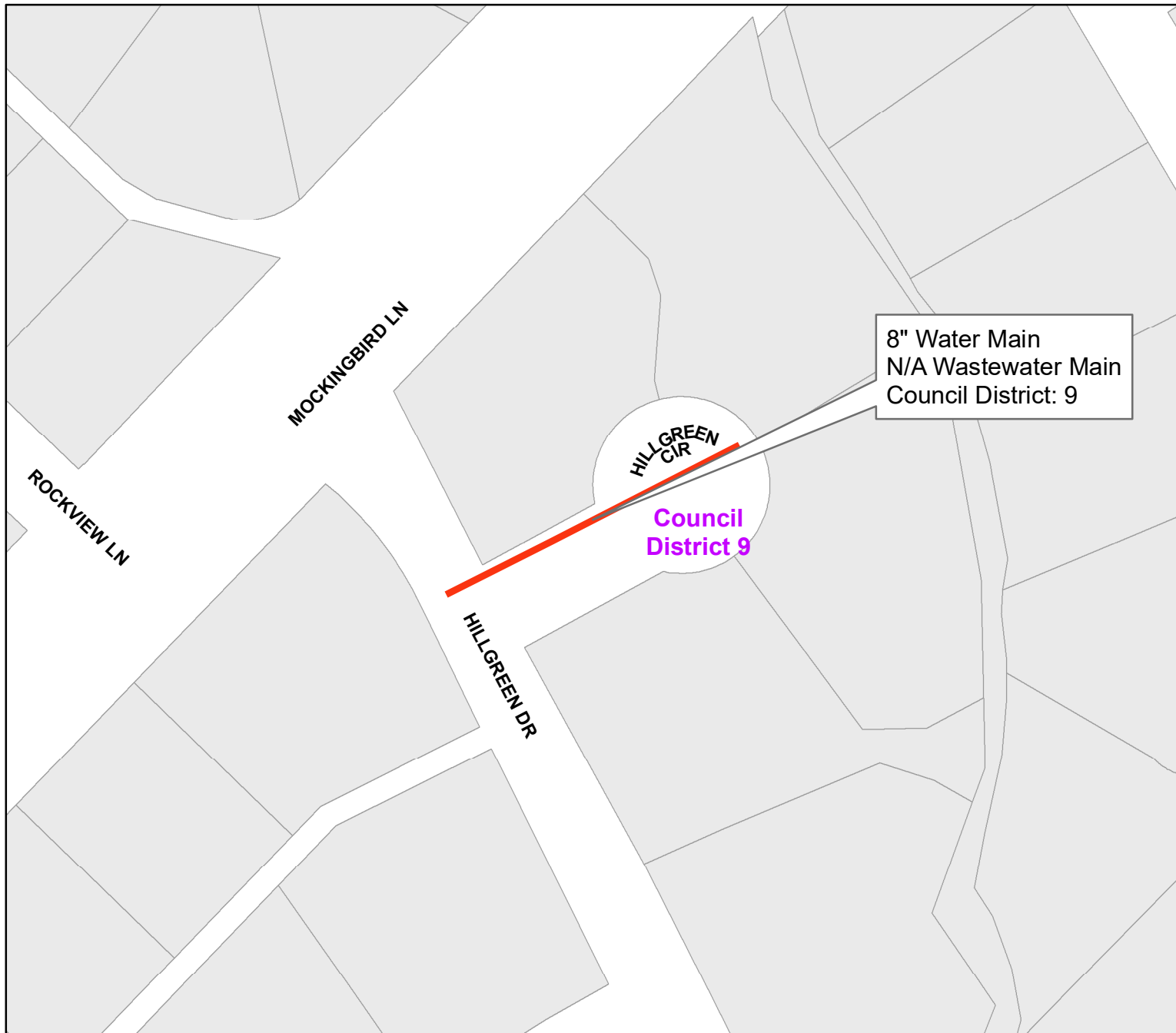
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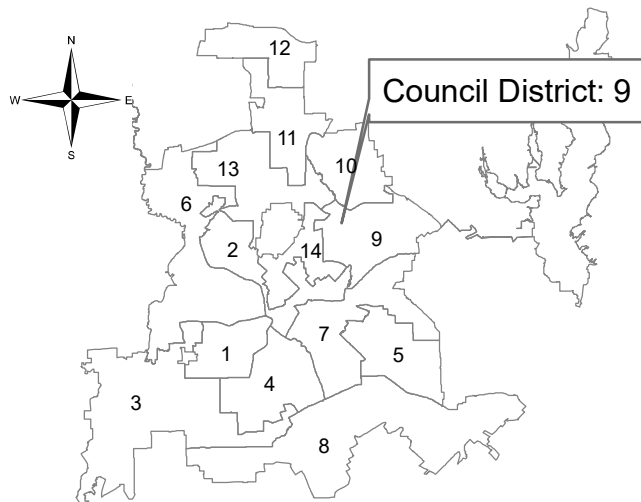
Healey Drive  
from Ferguson Road west



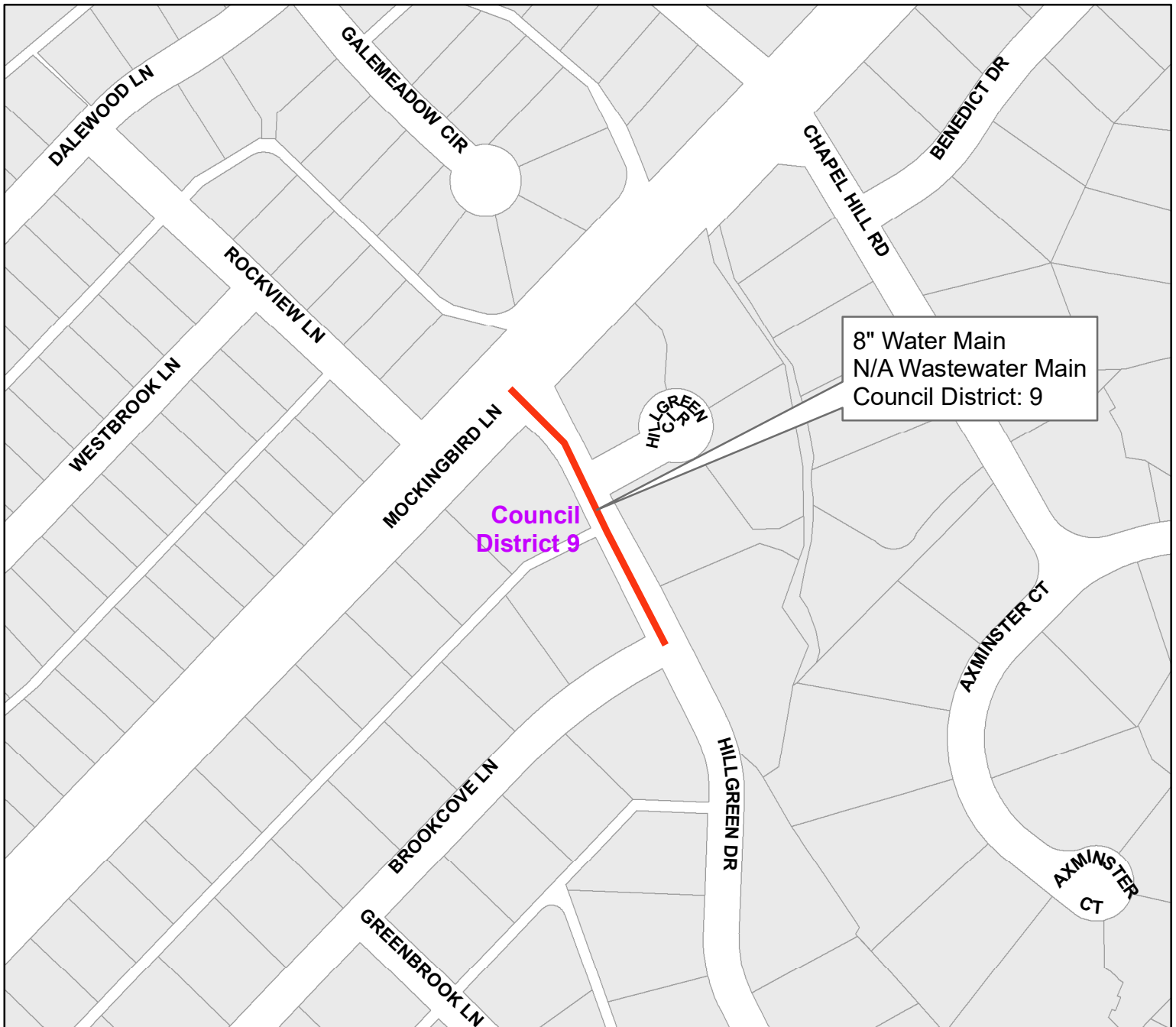
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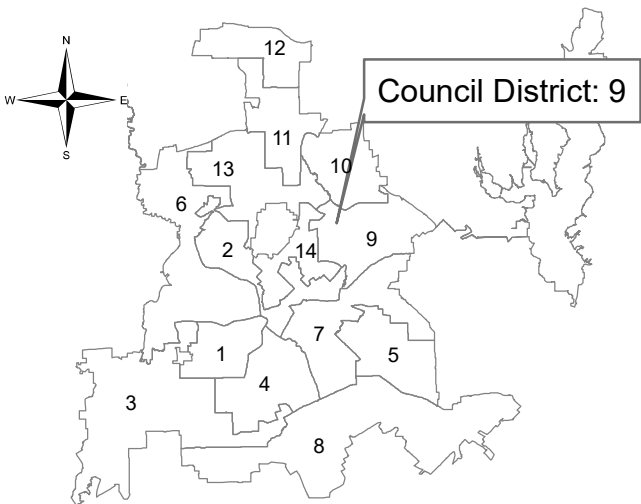
Hillgreen Circle  
from Hillgreen Drive east



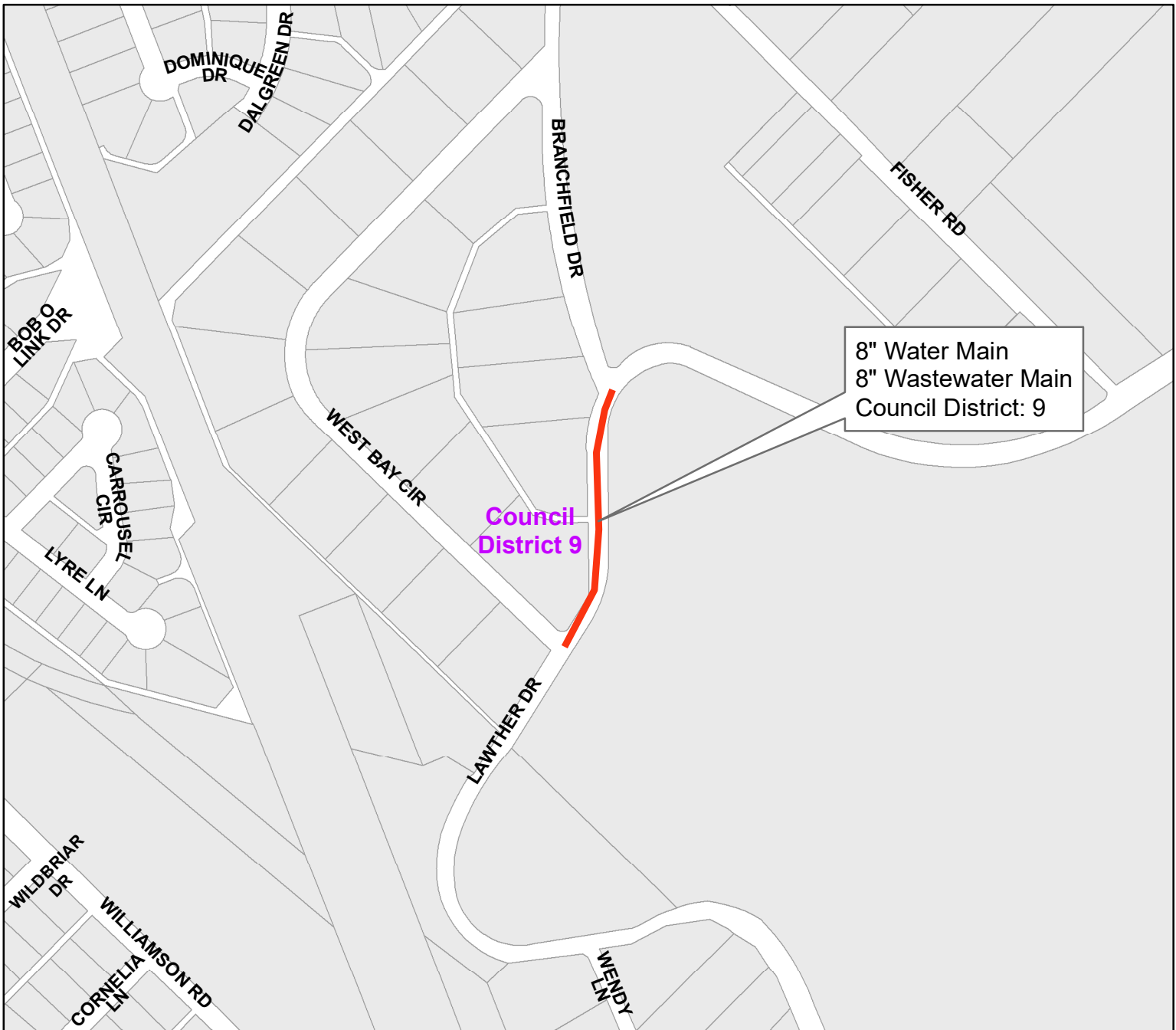
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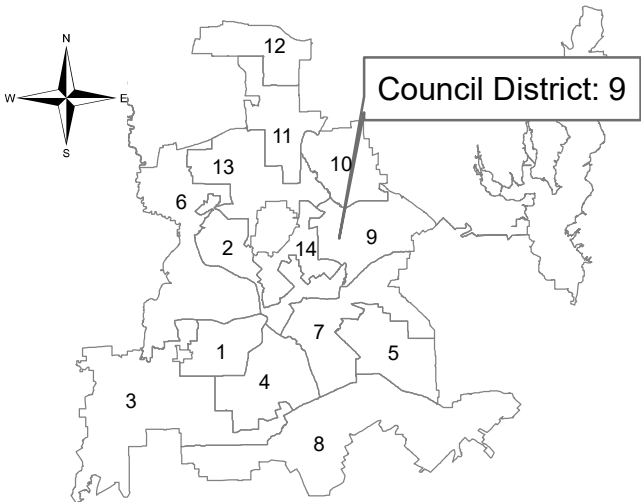
Hillgreen Drive  
from Brookcove Lane to Mockingbird Lane



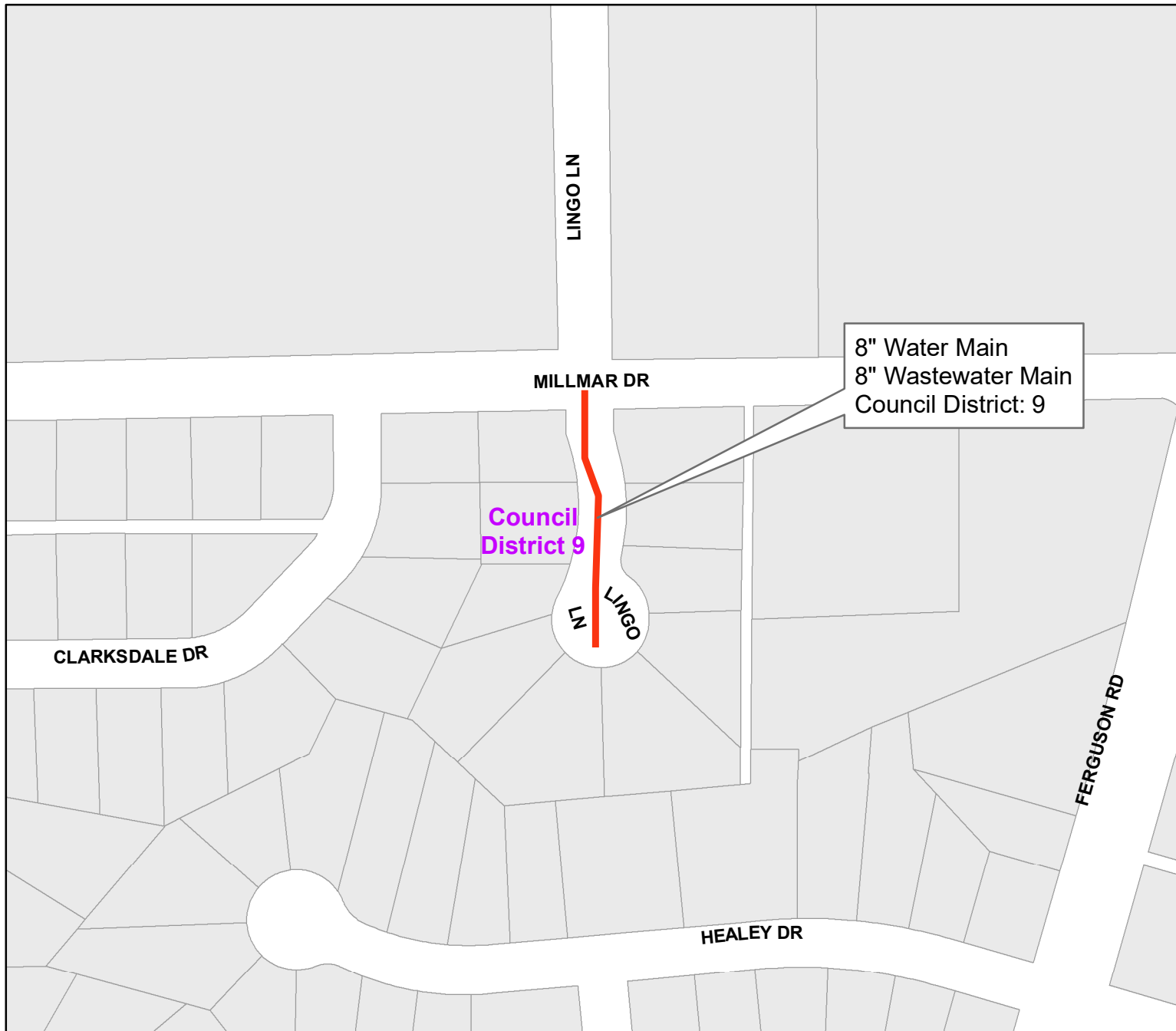
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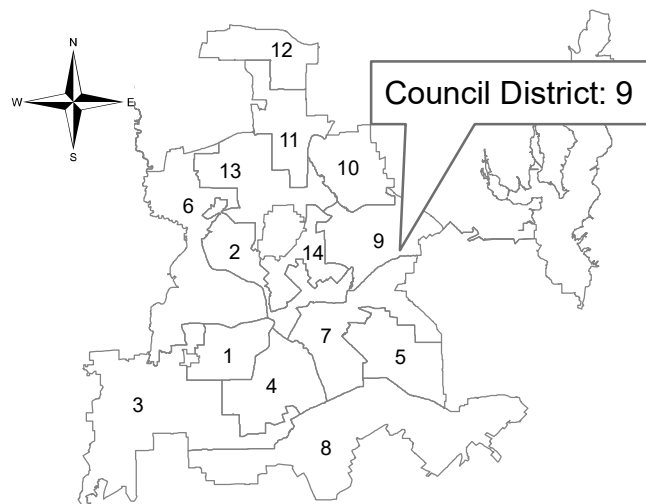
Lawther Drive  
from West Bay Cir to Branchfield Drive



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Lingo Lane  
from Millmar Drive south

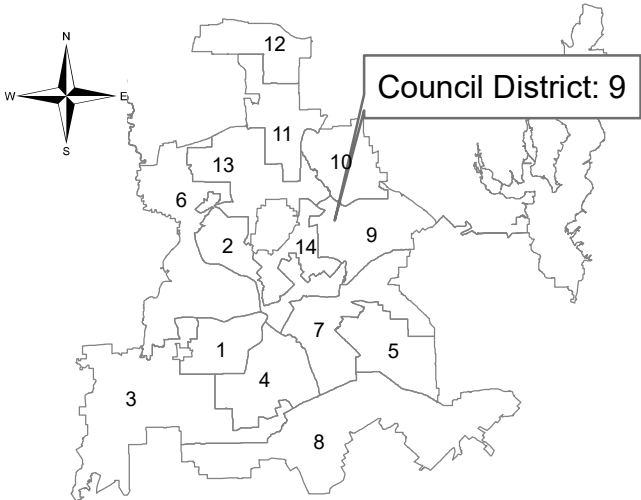


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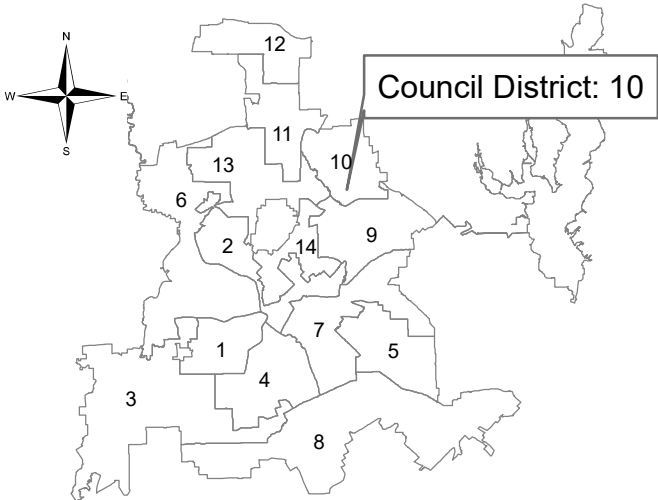
Mockingbird Lane  
from Greentree Lane to Hillgreen Drive



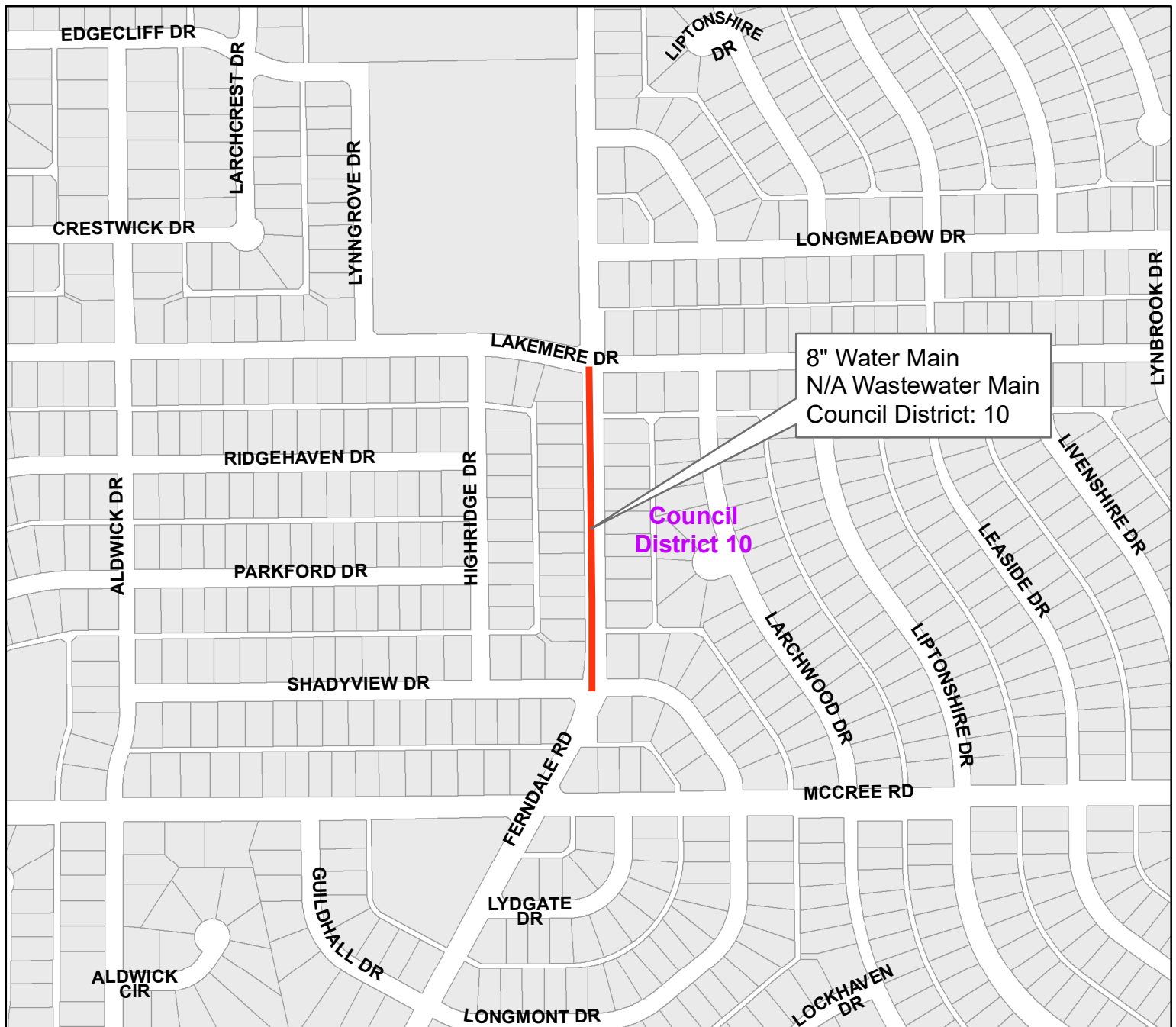
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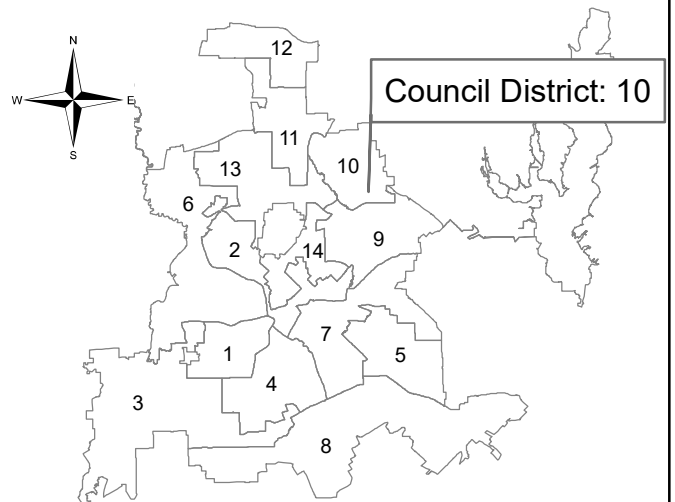
Chiswell Road  
from Clearhurst Drive to Parkford Drive



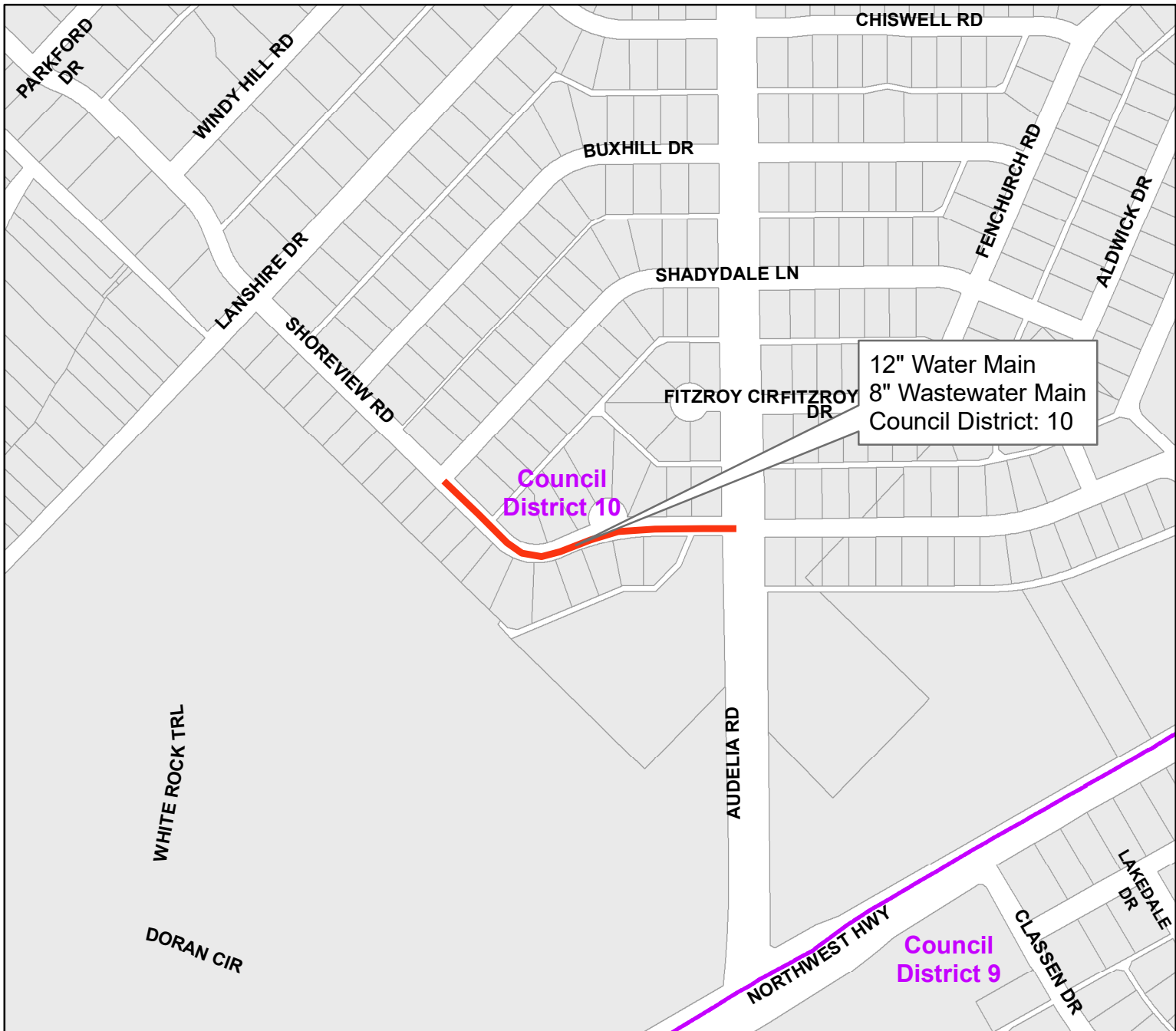
**Dallas Water Utilities  
Contract No. 20-473/474  
Water and Wastewater Main Installations  
at 32 Locations**



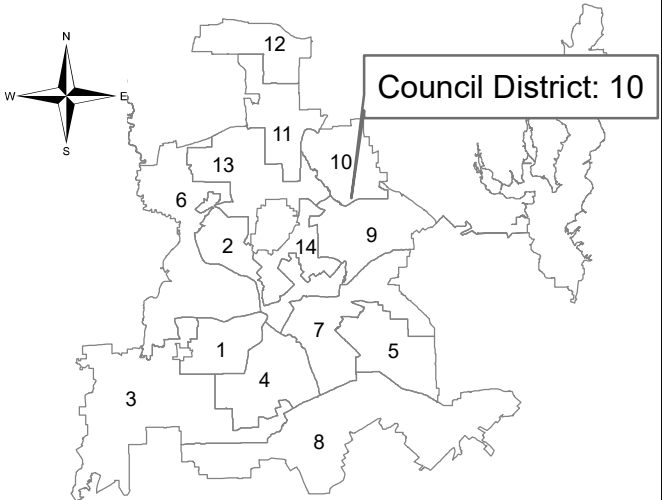
Ferndale Road  
from Longmont Drive to Lakemere Drive



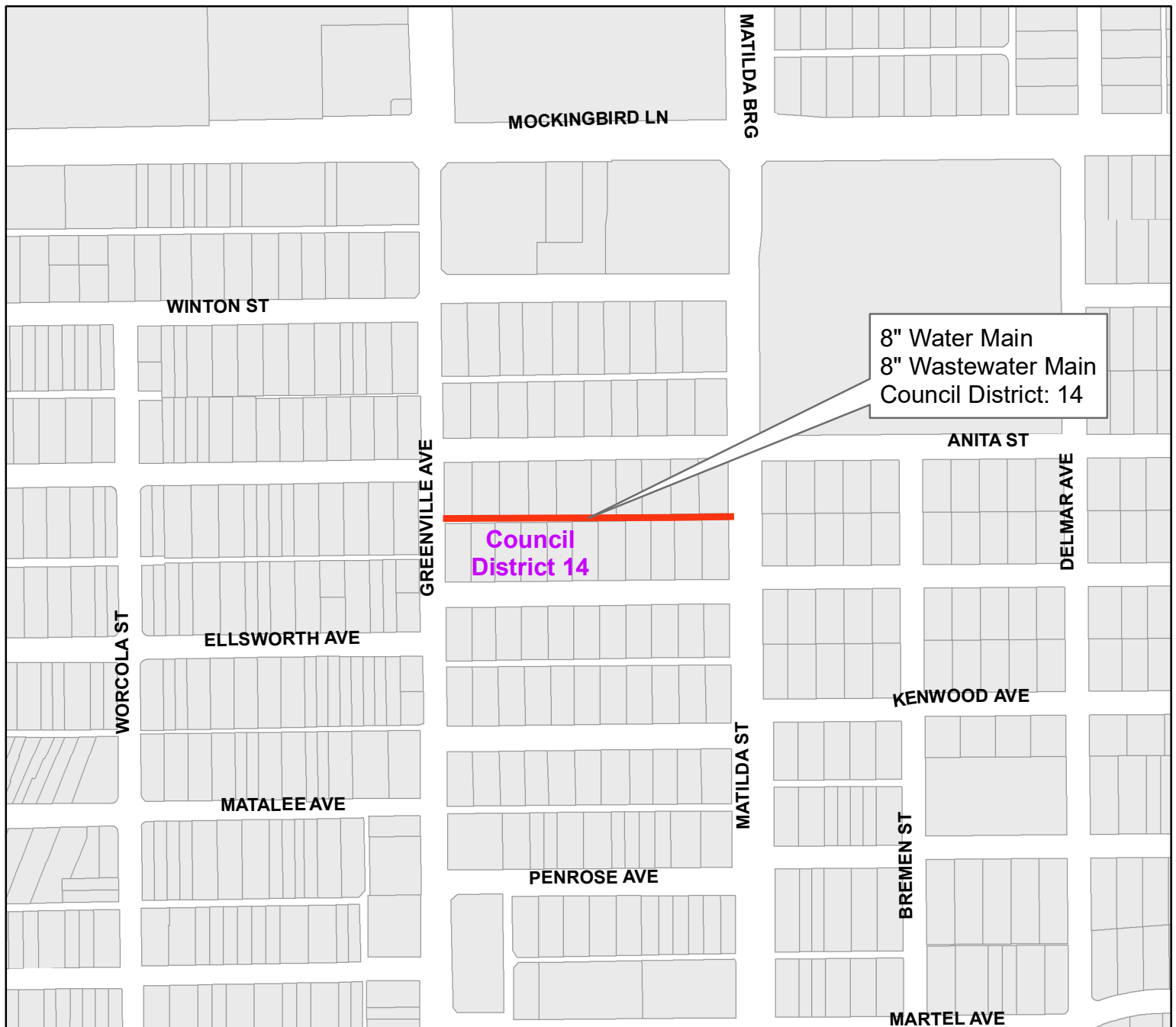
**Dallas Water Utilities  
Contract No. 20-473/474  
Water and Wastewater Main Installations  
at 32 Locations**



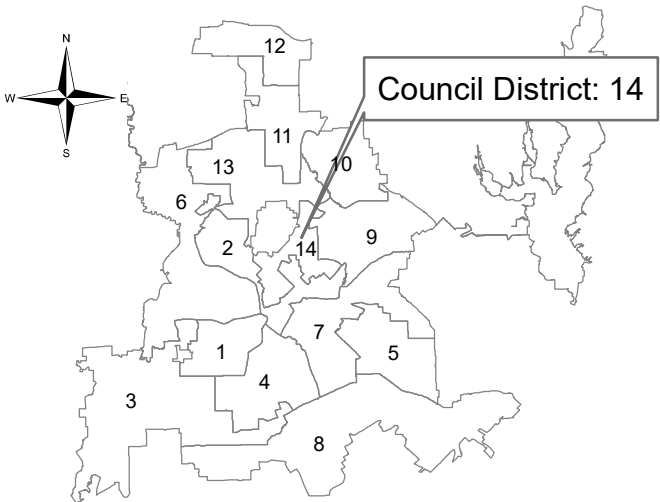
Shoreview Road  
from Shadydale Lane to Audelia Road



**Dallas Water Utilities  
Contract No. 20-473/474  
Water and Wastewater Main Installations  
at 32 Locations**

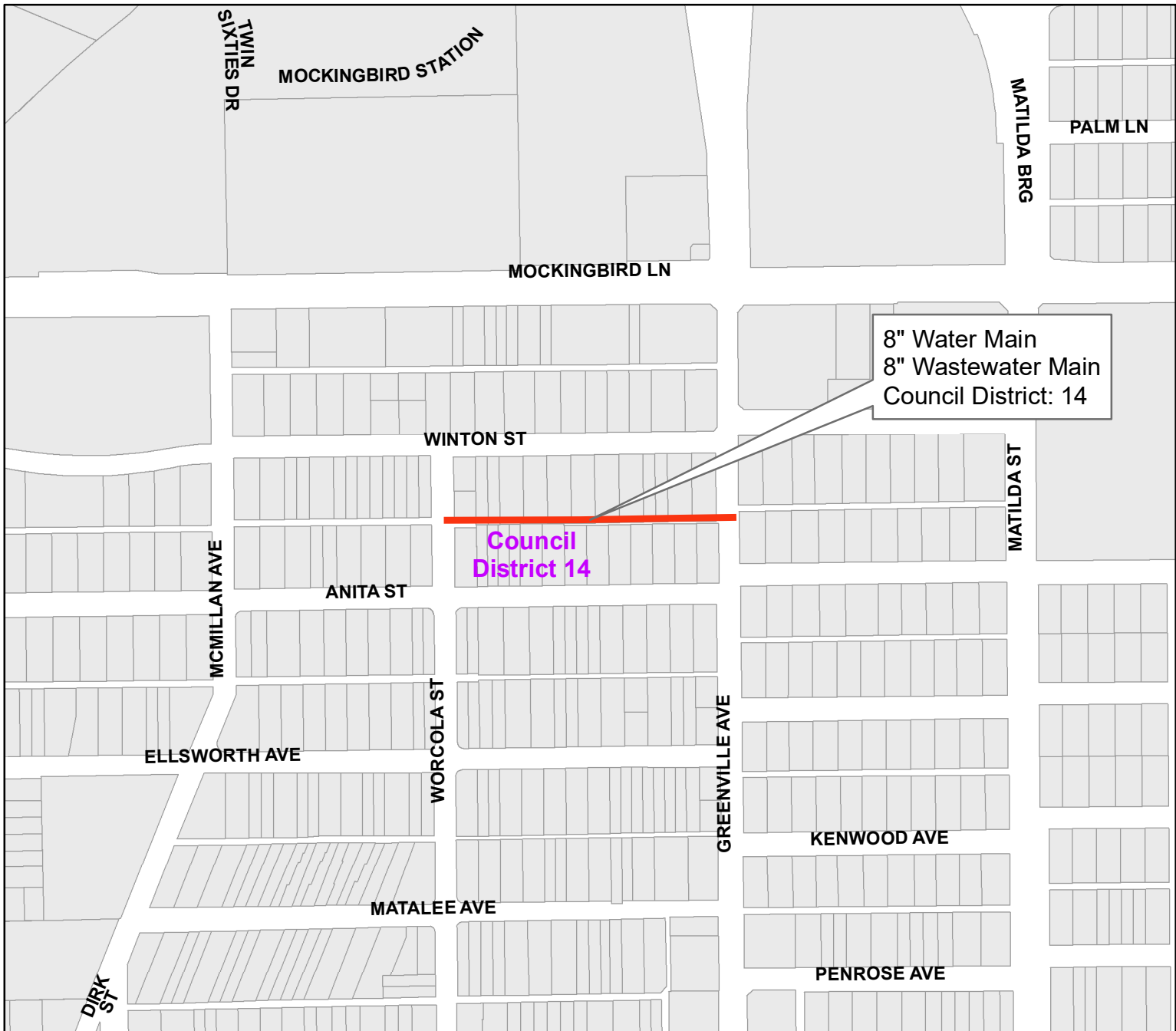


Alley between Anita Street and Ellsworth Avenue  
from Greenville Avenue to Matilda Street

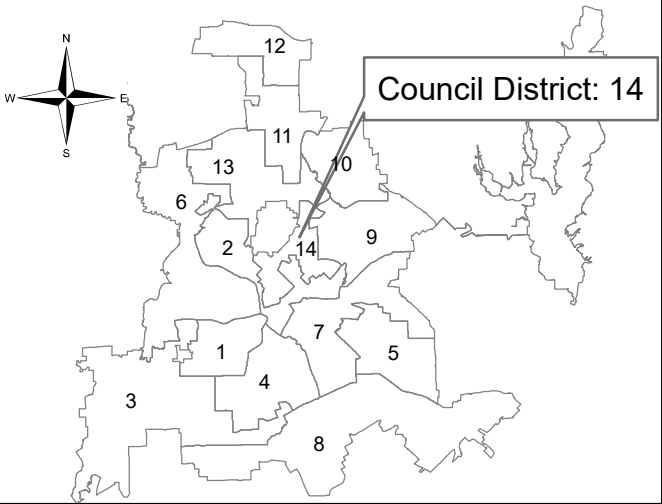


**Dallas Water Utilities**  
**Contract No. 20-473/474**  
**Water and Wastewater Main Installations**  
**at 32 Locations**

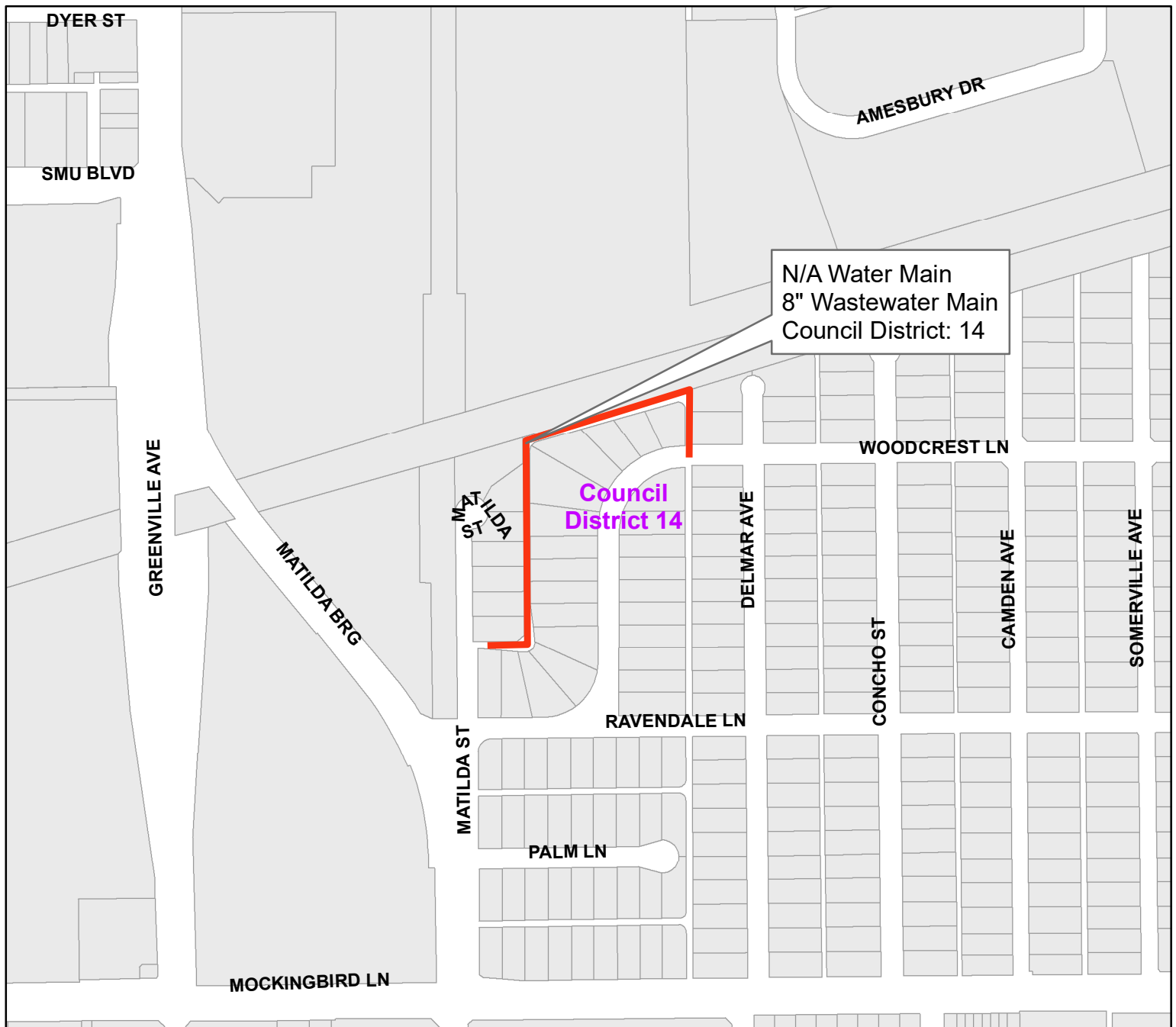




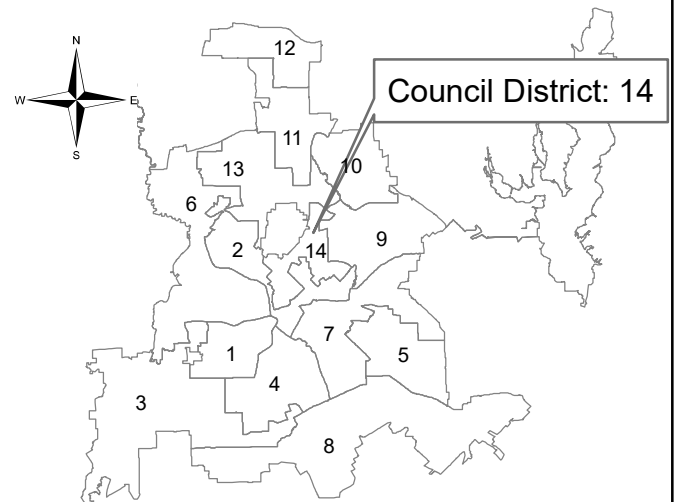
Alley between Anita Street and Winton Street  
from Worcola Street to Greenville Avenue



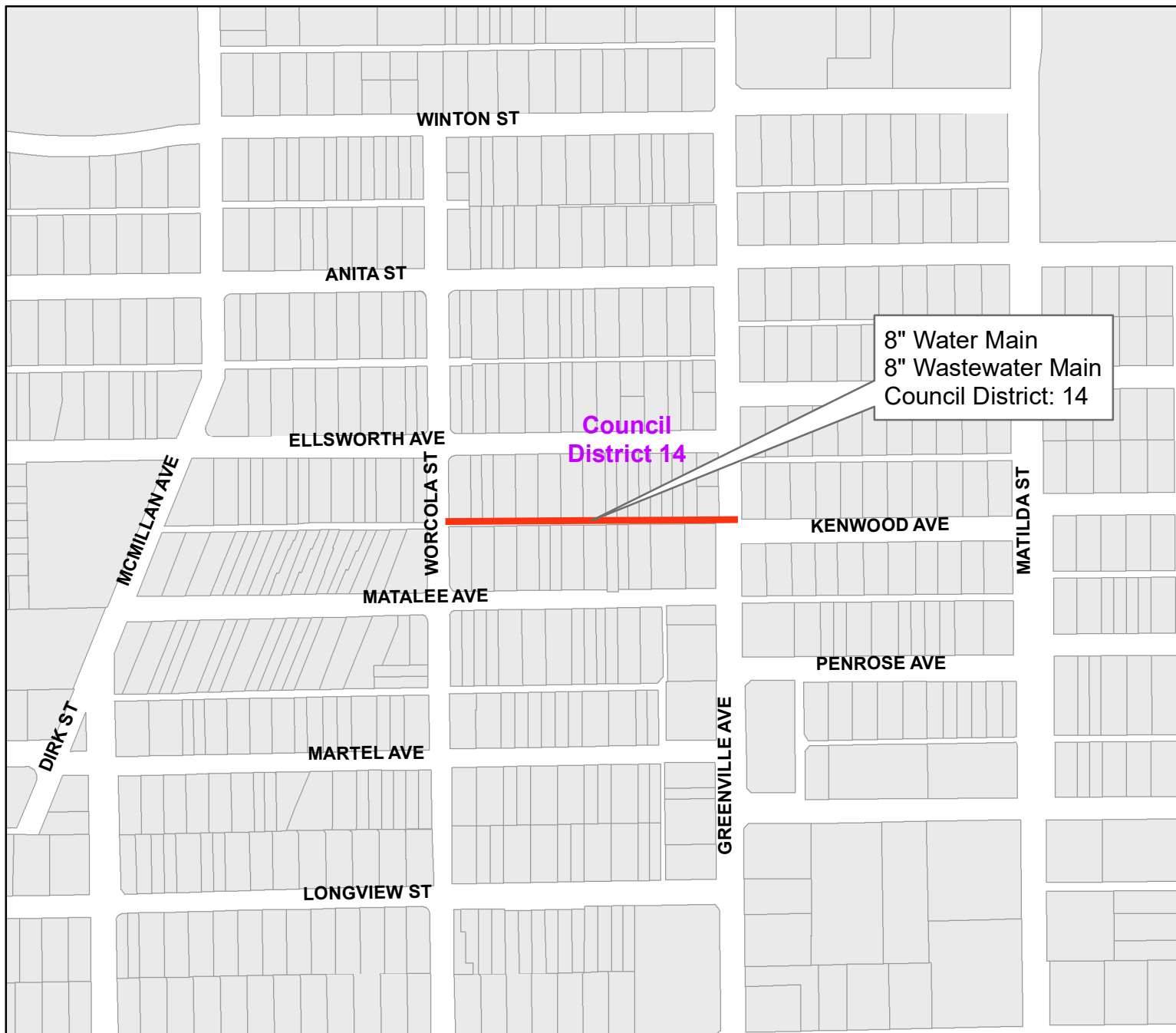
**Dallas Water Utilities**  
**Contract No. 20-473/474**  
**Water and Wastewater Main Installations**  
**at 32 Locations**



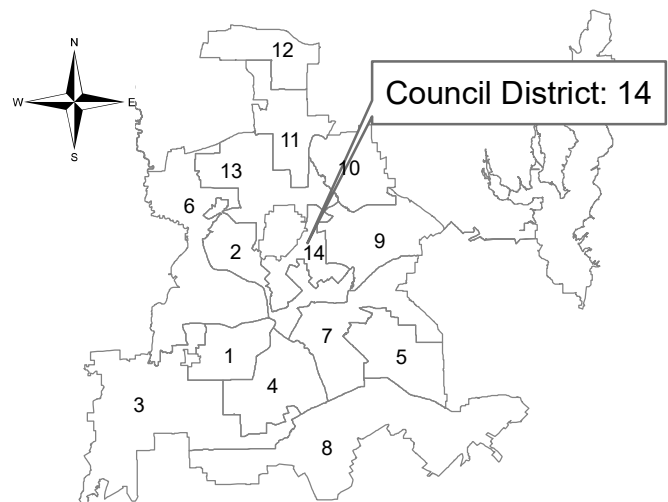
Alley between Delmar Avenue and Matilda Street  
from Ravendale Lane northeast



**Dallas Water Utilities  
Contract No. 20-473/474  
Water and Wastewater Main Installations  
at 32 Locations**

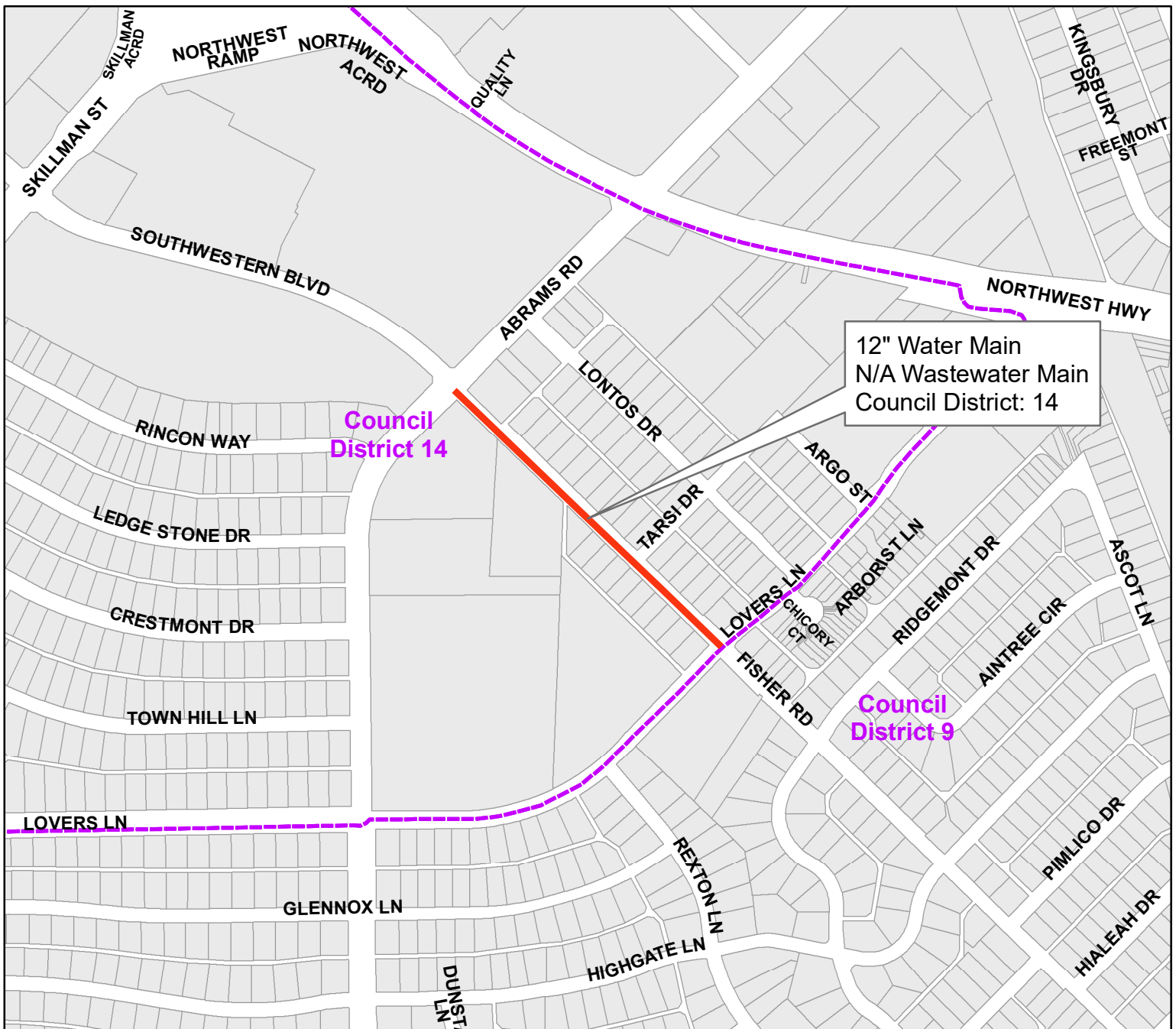


Alley between Ellsworth Avenue and Matallee Avenue  
from Worcola Street to Greenville Avenue

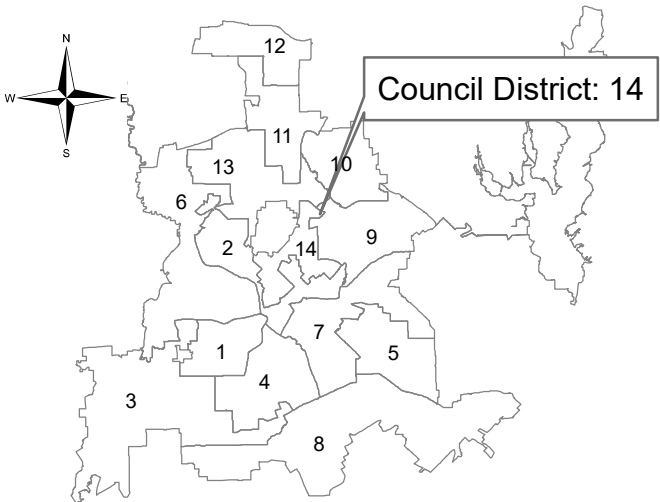


**Dallas Water Utilities**  
**Contract No. 20-473/474**  
**Water and Wastewater Main Installations**  
**at 32 Locations**

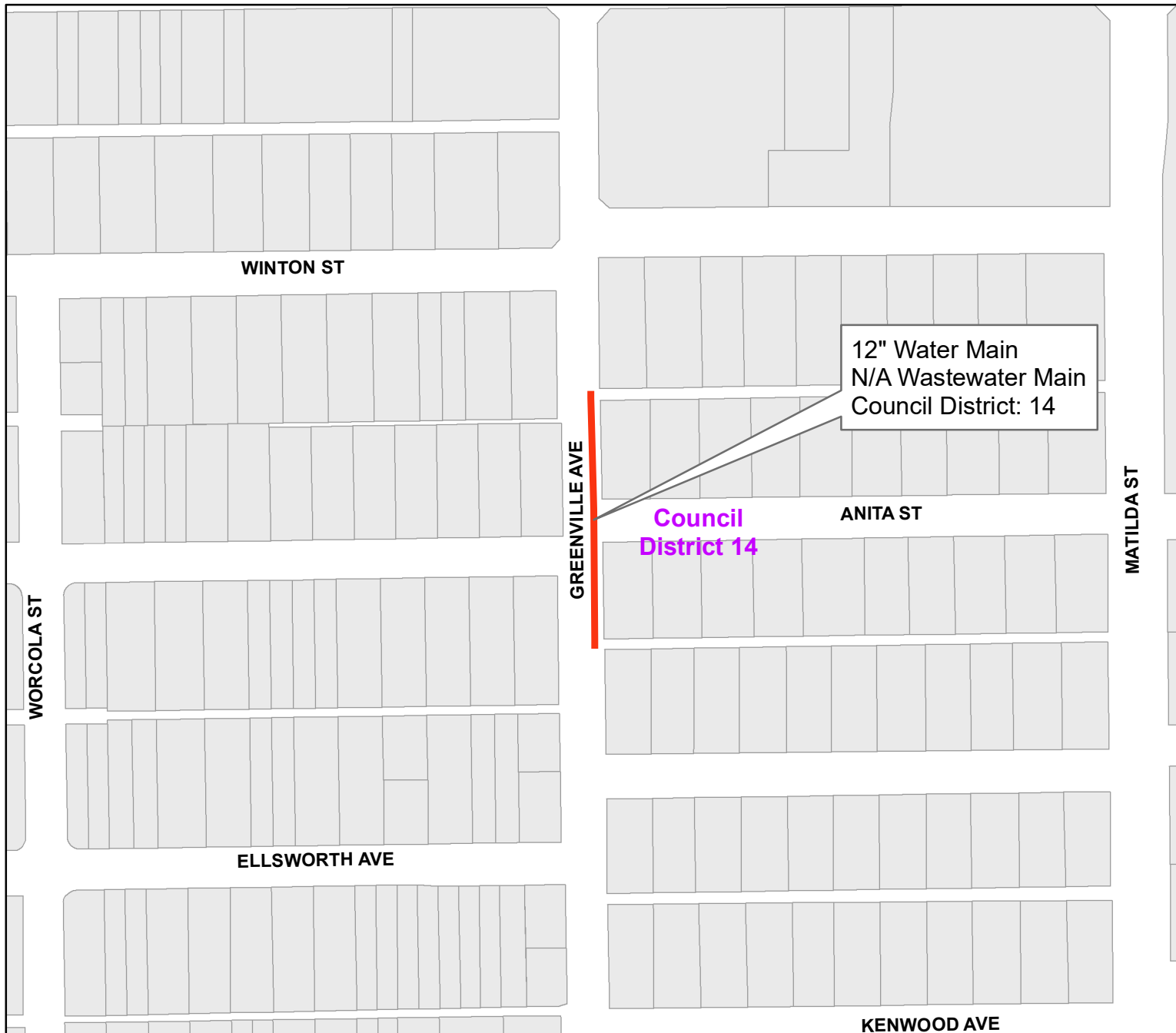




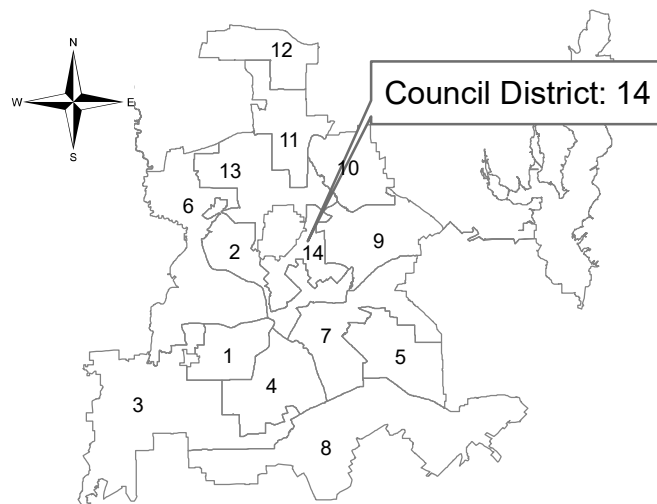
Fisher Road  
from Abrams Road to Lovers Lane



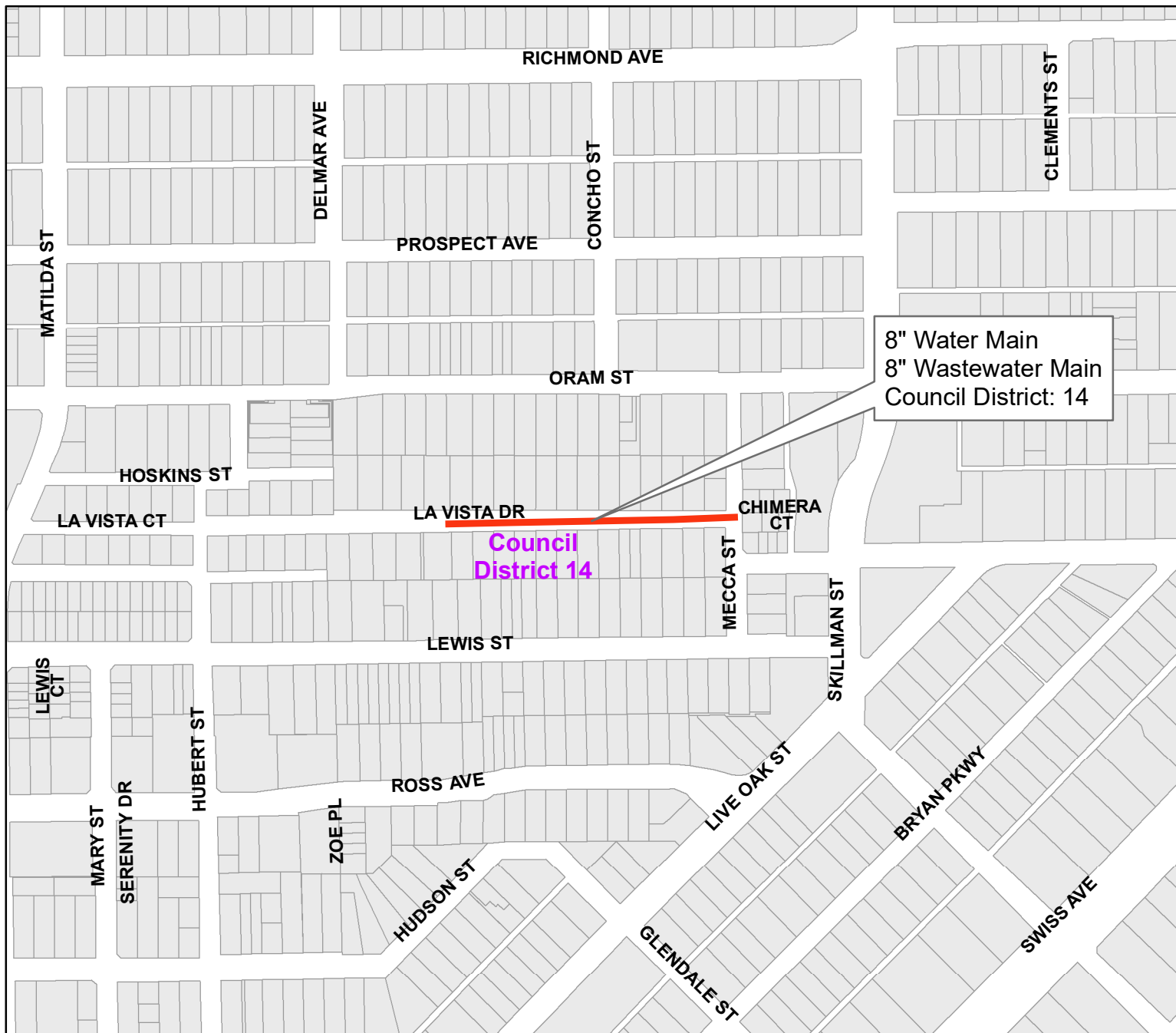
**Dallas Water Utilities  
Contract No. 20-473/474  
Water and Wastewater Main Installations  
at 32 Locations**



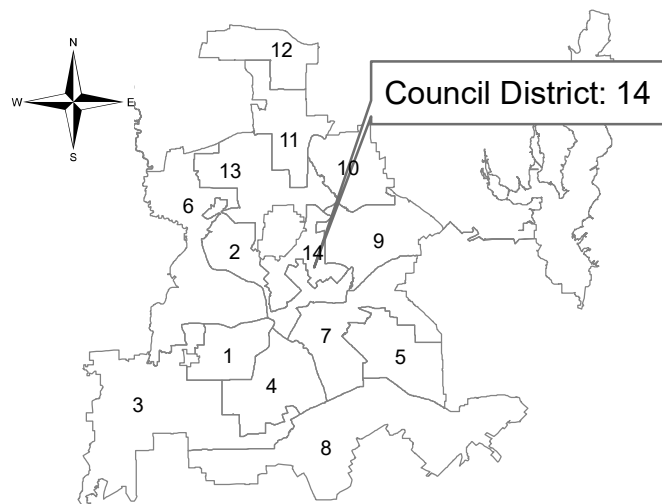
Greenville Avenue  
from Alley north of Ellsworth Avenue north



**Dallas Water Utilities**  
**Contract No. 20-473/474**  
**Water and Wastewater Main Installations**  
**at 32 Locations**



La Vista Drive  
from Mecca Street west



**Dallas Water Utilities  
Contract No. 20-473/474  
Water and Wastewater Main Installations  
at 32 Locations**

ANITA ST

8" Water Main  
N/A Wastewater Main  
Council District: 14

Council  
District 14

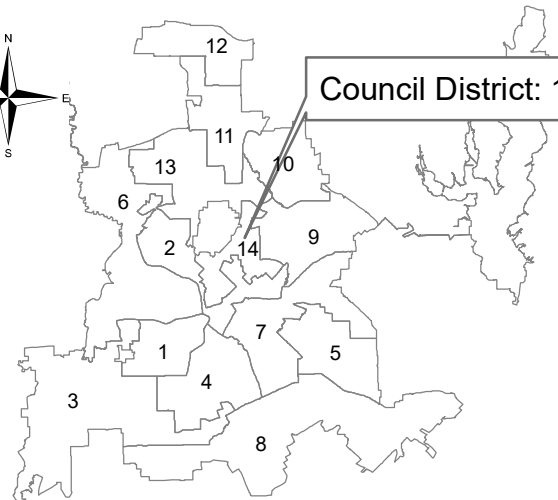
ELLSWORTH AVE

MATILDA ST

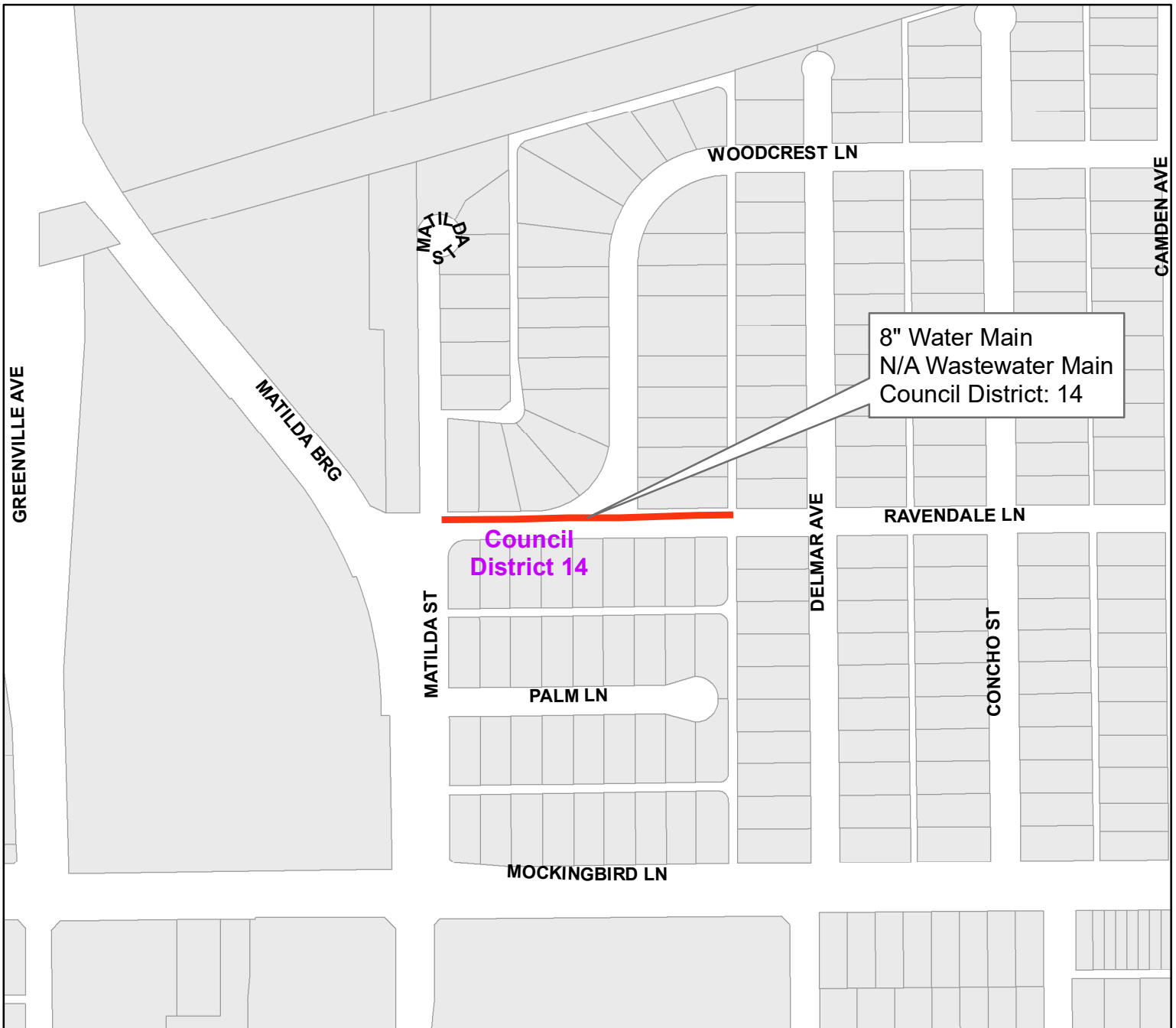
Matilda Street  
from Ellsworth Avenue north



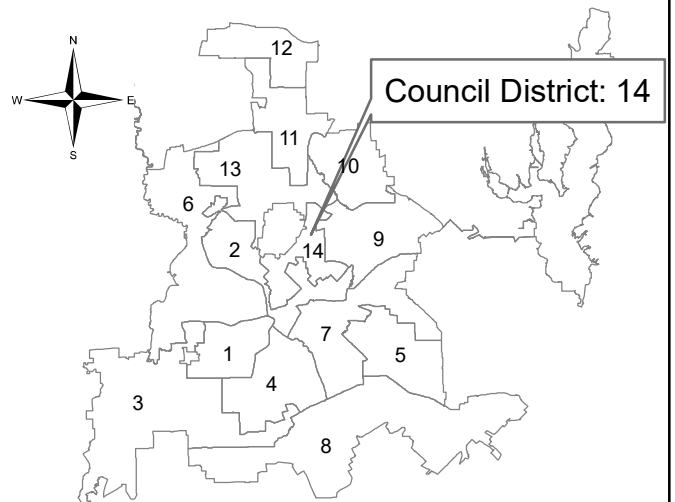
Council District: 14



**Dallas Water Utilities  
Contract No. 20-473/474  
Water and Wastewater Main Installations  
at 32 Locations**



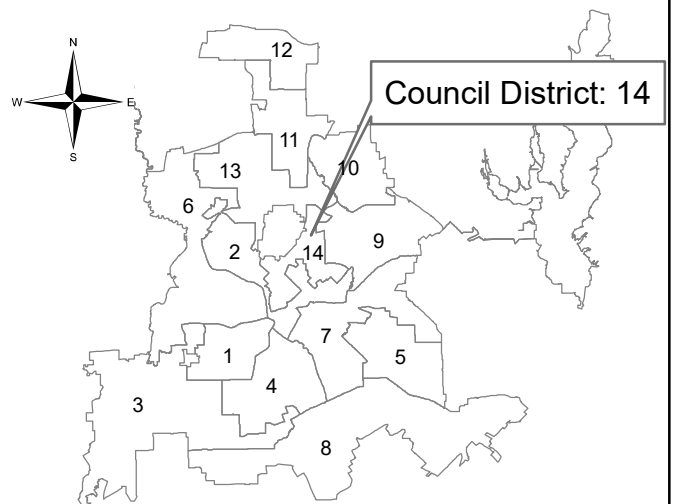
Ravendale Lane  
from Matilda Street east



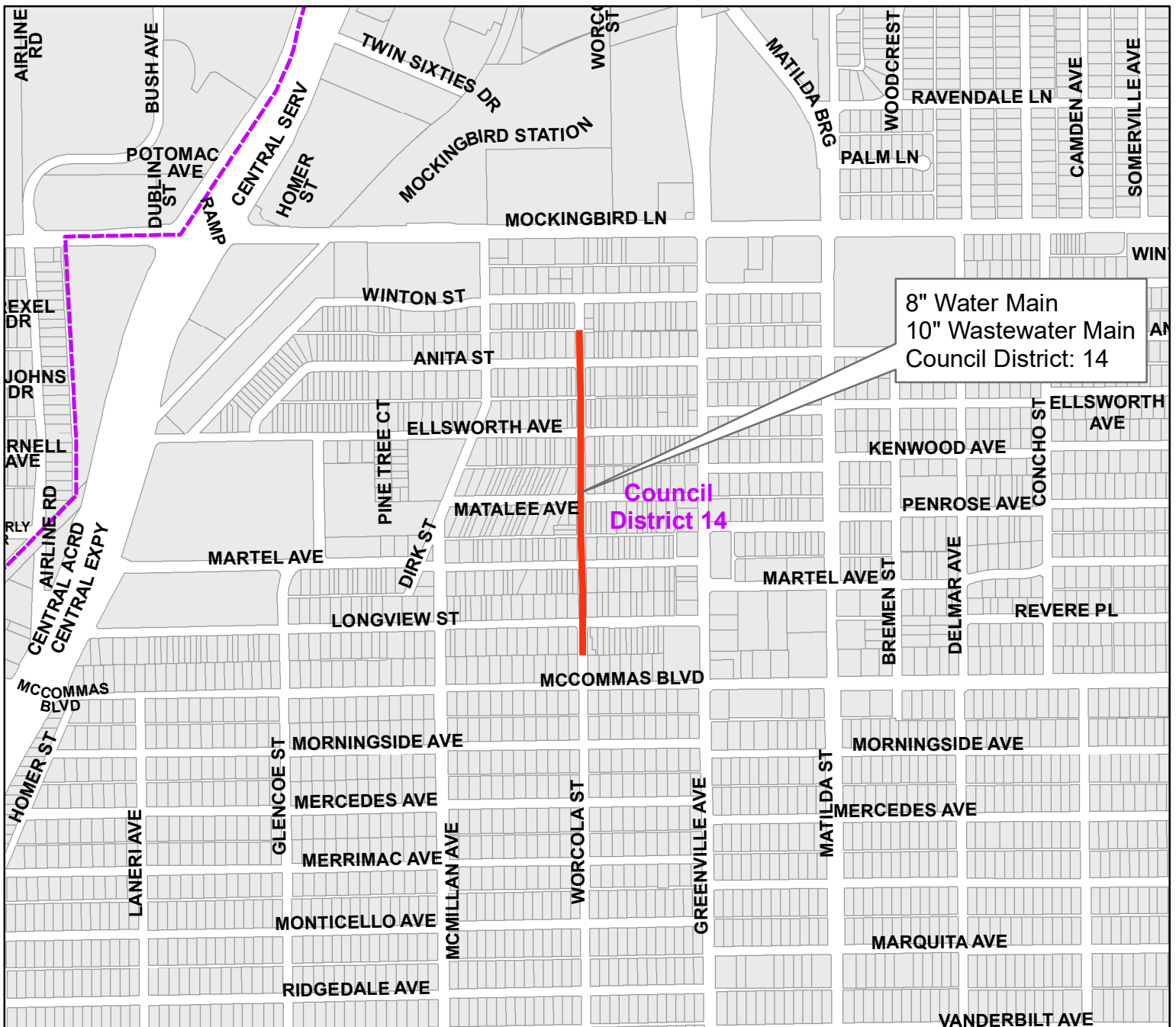
**Dallas Water Utilities  
Contract No. 20-473/474  
Water and Wastewater Main Installations  
at 32 Locations**



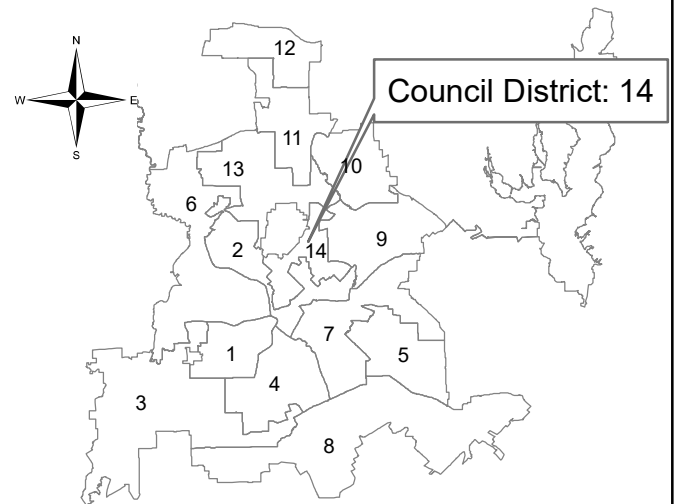
Woodcrest Lane  
from Delmar Avenue to Ravendale Lane



**Dallas Water Utilities  
Contract No. 20-473/474  
Water and Wastewater Main Installations  
at 32 Locations**



Worcola Street  
from south of Longview Street north



**Dallas Water Utilities**  
**Contract No. 20-473/474**  
**Water and Wastewater Main Installations**  
**at 32 Locations**

**A 3. SPECIAL PROVISIONS**

**S-1 INQUIRIES**

All inquiries shall be directed to:

**Rakesh Chaubey, P.E.**

Dallas Water Utilities Department

2121 Main Street, Suite 300

Dallas, Texas 75201

Telephone: (214) 671-9538

Email: [rakesh.chaubey@dallascityhall.com](mailto:rakesh.chaubey@dallascityhall.com)

***Project related questions shall be submitted in writing no later than 4:00PM on Monday, June 7, 2021.***

**S-2 PRE-BID CONFERENCE**

There will be an online Pre-Bid Conference held at 10:00 AM on Friday, June 4, 2021.

To receive a calendar invite to the meeting, please email [DWUCapitalServices@dallascityhall.com](mailto: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 40 Calendar days after City Council award of this project. Liquidated Damages shall be \$ 500 Per Calendar Day.

**Milestone 2:** 10,000 linear feet of water/wastewater mains installed, backfilled, tested and temporary paving (if applicable) in place within 200 consecutive working days. Liquidated damages shall be \$200 Per Calendar Day.

**Milestone 3:** 20,000 linear feet of water/wastewater mains installed, backfilled, tested and temporary paving (if applicable) in place within 400 Consecutive Working Days. Liquidated damages shall be \$500 per calendar day.

**Milestone 4:** All water/wastewater work and site restoration completed within approximately more than 550 Consecutive Working Days. Liquidated damages shall be \$500 per calendar day.

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

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

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

S-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) **7040, 7041 and 7050** may be used interchangeably for various applications during construction at the discretion of the Engineer. There shall be no renegotiation of bid prices for any of these items due to quantity underruns or overruns.

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

Temporary water mains of new or acceptable used 2" galvanized iron water pipe or other pipe material acceptable to the Engineer shall be installed as specified by the plans or as required by the Construction Engineer.

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

Cold mix asphalt shall be used to mound over the 2" temporary water main at all driveways and at locations where the temporary mains cross vehicular traffic areas. The cold mix asphalt shall be removed after the removal of the temporary water mains.

The temporary 2" water mains will be chlorinated after installation. Services shall not be transferred to the temporary mains until the water in the temporary mains has been checked and approved by the Engineer. There will be no additional compensation for delays in obtaining approval to transfer services.

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

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

**S-16 TRAFFIC RESTRICTIONS**

The following traffic restrictions shall be enforced during construction.

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

**S-17 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-18 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-19 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-20 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-21 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-22 **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-23 **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-24 **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-25 **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-26 **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-27 **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-28 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-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.

**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 owner's 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 TEXAS WATER DEVELOPMENT BOARD LOAN**

TWDB requires that bidders be aware of the following:

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

## **S-37 MWBE COMPLIANCE MANAGEMENT SYSTEM REPORTING**

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



**S-38 WORK RESTRICTIONS FOR HOUSTON STREET**

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-39 **STAY HOME STAY SAFE – RULES FOR THE CONSTRUCTION INDUSTRY**

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

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

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

See attached Memo.



## **Stay Home Stay Safe**

### **Rules for the Construction Industry**

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

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

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

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

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



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

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

S-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:

As requested in a resolution by the Dallas City Council on June 13, 1990, establishing a "BID Plan" to promote the City's job opportunity program, the purpose of which is to encourage and facilitate the hiring of unemployed local residents for City construction contracts, our firm and all subcontractors hired the following unemployed persons during the month of \_\_\_\_\_, 20\_\_\_\_\_.

**TOTAL UNEMPLOYED HIRED**

<b>Employment Classification</b>
Construction Mgrs.
Foreman
Skilled
Helpers
Laborers
Managers
Administrators
Professionals
Technicians
Office & Clerical
<b>Grand Total</b>

<b>FEMALE</b>			
<b>Hispanic</b>	<b>Black</b>	<b>Other</b>	<b>White</b>

<b>MALE</b>			
<b>Hispanic</b>	<b>Black</b>	<b>Other</b>	<b>White</b>

**TOTAL UNEMPLOYED CITY OF DALLAS RESIDENTS HIRED**

<b>Employment Classification</b>
Construction Mgrs.
Foreman
Skilled
Helpers
Laborers
Managers
Administrators
Professionals
Technicians
Office & Clerical
<b>Grand Total</b>

<b>FEMALE</b>			
<b>Hispanic</b>	<b>Black</b>	<b>Other</b>	<b>White</b>

<b>MALE</b>			
<b>Hispanic</b>	<b>Black</b>	<b>Other</b>	<b>White</b>

\_\_\_\_\_  
DATE

\_\_\_\_\_  
CONTRACTOR

\_\_\_\_\_  
CONTRACT NO. 20-473 / 20-474

**PRE-BID INQUIRIES AND PRE-BID INSPECTION INQUIRIES  
FOR  
CONTRACT NO. 20-473/474**

**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:**

Company Name: \_\_\_\_\_  
 Project Name: Schedule A: Water and Wastewater Main Installations at 27 Locations  
Schedule B: Water and Wastewater Improvements in Mesquite Heights Unserved Areas  
 Contract No.: \_\_\_\_\_  
 Question(s) By: \_\_\_\_\_  
 Date Submitted: \_\_\_\_\_

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

#### **A 4. BID ITEMS**

### **SCHEDULE A: WATER AND WASTEWATER MAIN INSTALLATIONS AT 27 LOCATIONS**

#### **ITEM NO. 1500J 8" DUCTILE IRON WATER PIPE**

This item consists of furnishing and placing approximately **80** 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 **20** 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.

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



**ITEM NO. 1800H****6" PVC WATER PIPE**

This item consists of furnishing and placing approximately **800** Linear Feet of **6"** Polyvinyl Chloride Water Pipe (C-900) in accordance **with Item 506. Open Cut – Water Conduit Installation, Item 506.5.COD: Hydrostatic Test, Item 506.6.COD: Connections To Existing Water Conduits, Item 506.6.1.COD: Water Main Tie-In During Off Hours, Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger, Item 506.7.3.2.COD: Flushing Method, Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water, Item 506.7.1.COD: Preliminary Flushing, Item 506.7.2.COD: Chlorination, Item 506.7.3.COD: Flushing, Item 506.7.4.COD: Disposal of Flushing Water, Item 506.7.5.4.COD: Sampling, Item 506.7.6.COD: Indemnification, Item 506.8.1.COD: Cut and Plugs, Item 501.14. Polyvinyl Chloride (PVC) Water Pipe, Item 501.14.5.COD: Fittings, and Item 501.14.6.COD: NSF 61 Compliance** of these specifications and addenda thereto.

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

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

**ITEM NO. 1800J****8" PVC WATER PIPE**

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

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

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

**ITEM NO. 1800L****12" PVC WATER PIPE**

This item consists of furnishing and placing approximately **3,650** Linear Feet of **12"** Polyvinyl Chloride Water Pipe (C-900) in accordance with **Item 506. Open Cut – Water Conduit Installation, Item 506.5.COD: Hydrostatic Test, Item 506.6.COD: Connections To Existing Water Conduits, Item 506.6.1.COD: Water Main Tie-In During Off Hours, Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger, Item 506.7.3.2.COD: Flushing Method, Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water, Item 506.7.1.COD: Preliminary Flushing, Item 506.7.2.COD: Chlorination, Item 506.7.3.COD: Flushing, Item 506.7.4.COD: Disposal of Flushing Water, Item 506.7.5.4.COD: Sampling, Item 506.7.6.COD: Indemnification, Item 506.8.1.COD: Cut and Plugs, Item 501.14. Polyvinyl Chloride (PVC) Water Pipe, Item 501.14.5.COD: Fittings, and Item 501.14.6.COD: NSF 61 Compliance** of these specifications and addenda thereto.

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

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

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

This item consists of furnishing and placing approximately **10,570** Linear Feet of **8"** Polyvinyl Chloride Pressure Rated Wastewater Pipe conforming to ASTM D2241 (DR 26) Minimum Pressure Rating of 160 PSI and ASTM D3139 joints, and in accordance with **Item 507. Open Cut – Wastewater Conduit Installation, Item 507.5.1.1.COD: Infiltration Test, and Item 501.15. Polyvinyl Chloride (PVC) Pressure-Rated Pipe (SDR Series)** of these specifications and addenda thereto.

This item to include barricading and all embedment materials.

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

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

This item consists of furnishing and placing approximately **1,350** Linear Feet of **12"** Polyvinyl Chloride Pressure Rated Wastewater Pipe conforming to ASTM D2241 (DR 26) Minimum Pressure Rating of 160 PSI and ASTM D3139 joints, and in accordance with **Item 507. Open Cut – Wastewater Conduit Installation, Item 507.5.1.1.COD: Infiltration Test, and Item 501.15. Polyvinyl Chloride (PVC) Pressure-Rated Pipe (SDR Series)** of these specifications and addenda thereto.

This item to include barricading and all embedment materials.

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

**ITEM NO. 3430L****12" HDPE WASTEWATER PIPE**

This item consists of furnishing and placing approximately **350** Linear Feet of **12"** Polyethylene Wastewater Pipe in accordance with **Item 507. Open Cut – Wastewater Conduit Installation, Item 507.5.1.1.COD: Infiltration Test, and Item 501.22. Polyethylene (PE) Large Diameter Wastewater Pipe with Modified Wall Profiles and Performance Standards** of these specifications and addenda thereto.

This item to include barricading, all embedment materials, and fittings.

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

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

This item consists of the Rehabilitation of approximately **347** Linear Feet of **8"** Wastewater Main in accordance with the **DWU Standard Technical Specifications Manual, Latest Edition**. This item to include all labor, materials, equipment, barricading, and incidentals required to complete the rehabilitation of the wastewater main in accordance with these specifications and addenda thereto.

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

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

This item consists of approximately **4** point repair(s) of **8"** Wastewater Main as necessary to facilitate rehabilitation.

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

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

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

This item consists of approximately **5** point repair(s) of **10"** Wastewater Main as necessary to facilitate rehabilitation.

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

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

**ITEM NO. 3550****REMOVAL OF INTERNAL OBSTRUCTIONS FOR WASTEWATER MAINS**

This item consists of the Removal of **1** Each Internal Obstruction in an Existing Wastewater Main without excavation.

This item to include all labor, materials, equipment and incidentals required to complete the removal of obstructions; including, but not limited to: trench safety and support, barricading, by-pass pumping, identifying and locating obstructions, providing and operating specialized cutting and removal equipment and disposal of debris. This item includes only those obstructions and blockages that are not removed in accordance with the DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition for Wastewater Main Cleaning. This shall be a **contingent item** and shall only be used if directed by the Project Manager, in writing. The provisions of **Item 104.2.1. Increased Or Decreased Quantities of Work** of the specifications related to over and under runs **do not** apply to this item.

Measurement and payment will be per each obstruction removed. Two or more obstructions shall be considered as one item for payment purposes if they are separated by less than 3' and can be removed with the same equipment setup.

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

This item consists of Pipe Bursting approximately **1,983** 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 **1,720** 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. 3570KxK****PIPE BURSTING OF EXISTING 10" WASTEWATER MAIN  
WITH 10" WASTEWATER MAIN**

This item consists of Pipe Bursting approximately **1,103** 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 **3** Tons of Iron Fittings in accordance with **Item 501.7.4.COD: Fittings and Item 502.5.2.COD: All Other Fittings** of these specifications and addenda thereto.

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

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

**ITEM NO. 5050****WATER SERVICE**

This item consists of furnishing and placing approximately **465** 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. 5091****INSTALL FIRE HYDRANT**

This item consists of furnishing and placing approximately **41** 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 **29** 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 **29** 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. 5100H****6" GATE VALVE**

This item consists of furnishing and placing approximately **44** Each **6"** Gate Valve in accordance with **Item 502.6.6.COD: Line Valve Installation and Item 502.6.1.COD: Double Disk, Metal Seated Gate Valves For Ordinary Waterworks Service Or Item 502.6.2.COD: Resilient-Seated Gate Valves For Ordinary Waterworks Service** of these specifications and addenda thereto, and the applicable Standard Drawings.

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

**ITEM NO. 5100J****8" GATE VALVE**

This item consists of furnishing and placing approximately **141** 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 **24** 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. 5110LxJ****12" x 8" TAPPING SLEEVE**

This item consists of furnishing and placing approximately **2** Each **12" x 8"** Tapping Sleeve in accordance with **Item 502.6.1.17. Tapping Valves and Item 502.10.2.3. Tapping Sleeves** of these specifications and addenda thereto.

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

**ITEM NO. 5110VxL                      24" x 12" TAPPING SLEEVE**

This item consists of furnishing and placing approximately 2 Each 24" x 12" Tapping Sleeve in accordance with **Item 502.6.1.17. Tapping Valves and Item 502.10.2.3. Tapping Sleeves** of these specifications and addenda thereto.

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

**ITEM NO. 5110AAxL                      36" x 12" TAPPING SLEEVE**

This item consists of furnishing and placing approximately 2 Each 36" x 12" Tapping Sleeve in accordance with **Item 502.6.1.17. Tapping Valves and Item 502.10.2.3. Tapping Sleeves** of these specifications and addenda thereto.

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

**ITEM NO. 5510J                      HIGHWAY CROSSING FOR 8" WATER MAIN (BOTOC)**

This item consists of approximately 177 Linear Feet of Highway Crossing for the proposed 8" Water By Other Than Open Cut in accordance with **Item 509.2. State Highway Crossings, Item 503.3. Methods of Jacking, Boring Or Tunneling, Item 503.3.2.COD: Materials, Item 503.3.3.COD: Construction Methods, and Item 503.3.3.1.COD: General** of these specifications and addenda thereto, and the applicable Standard Drawings.

This item to include the manhole, if shown on the plans. The 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. 5600****CUT AND PLUG EXISTING WATER MAIN**

This item consists of approximately **82** 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 **24** Each Cut and Plug Water Main for Test.

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

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

**ITEM NO. 5650****REMOVAL OF LEAD PIPE JOINTS**

This item consists of cutting and removal of **7** 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 each.

**ITEM NO. 5755B****1" AUTOMATED FLUSH POINT**

This item consists of furnishing and placing approximately 1 Each 1" 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. 5990J****8" WASTEWATER MAIN (BOTOC)**

This item consists of approximately 85 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. 5990L****12" WASTEWATER MAIN (BOTOC)**

This item consists of approximately 85 Linear Feet of 12" 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 12" 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. 5995J****8" WASTEWATER MAIN BY HORIZONTAL DIRECTIONAL DRILLING**

This item consists of approximately 738 Linear Feet of 8" Wastewater Main to be installed by Horizontal Directional Drilling in accordance with the **DWU Standard Technical Specifications for Water & Wastewater Construction, Latest Edition**, and as shown on the Plans.

The pipe and any associated special appurtenances are included in this item.

Measurement and payment will be per linear foot of pipe installed.

**ITEM NO. 6060****WASTEWATER LATERAL**

This item consists of furnishing and placing approximately **336** 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. 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

Measurement and payment will be in accordance with **Item 502.2.3. Measurement and Payment of Cleanouts** of these specifications.

**ITEM NO. 6100****WASTEWATER ACCESS DEVICE**

This item consists of furnishing and placing approximately **14** 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 **2** Each **48"** Diameter Drop Connection Manhole in accordance with **Item 502.1. Manholes, Item 502.1.2.COD: Wastewater Manhole Adjustments, Item 502.1.4.8.COD: Wastewater Manhole Frame Seals, Item 502.1.4.9.COD: Interior Coatings For Manholes, and Item 502.1.7.COD: Manhole Backfill** of these specifications and addenda thereto, and the applicable Standard Drawings.

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

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

**ITEM NO. 6120AG****60" DIAMETER PRESSURE TYPE MANHOLE**

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately **1** Each **60"** Diameter Pressure Type Manhole in accordance with **Item 502.1. Manholes, Item 502.1.2.COD: Wastewater Manhole Adjustments, Item 502.1.4.8.COD: Wastewater Manhole Frame Seals, Item 502.1.4.9.COD: Interior Coatings For Manholes, and Item 502.1.7.COD: Manhole Backfill** of these specifications and addenda thereto, and the applicable Standard Drawings.

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

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

**ITEM NO. 6130AE****48" DIAMETER WASTEWATER MANHOLE**

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately **58** 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 **1** 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. 6140****ABANDON EXISTING MANHOLE**

This item consists of abandoning approximately **3** 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 **64** Each Vacuum Test for Wastewater Manhole in accordance with **Item 502.1.5.2 Vacuum Testing Manholes and Item 507.5. Tests and Inspections** of these specifications.

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

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



**ITEM NO. 6150AE****48" DIAMETER MANHOLE REHABILITATION**

This item consists of rehabilitating approximately **2** 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. 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 **337** 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 **26,786** 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 **36,979** 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 **360** 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 **1,402** 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 **5,131** 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. 7050****SAND BACKFILL**

This item consists of furnishing and placing approximately **187** Cubic Yards of Sand Backfill at locations approved by the Project Manager, in accordance with **Item 504.6.5. Sand Backfill and Item 504.2.2.6. Sand** of these specifications and addenda thereto.

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

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

**ITEM NO. 7071****CLASS "B" CONCRETE**

This item consists of furnishing and placing approximately **263** 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 **1,303** 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 **376** 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 **2,328** 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 **3,810** Cubic Yards of Crushed Rock (Flexible Base) for Temporary Paving Base material in accordance with **Item 402.4.COD: Replacing Paved Surfaces and Item 301.5. Flexible Subbase Or Base (Crushed Stone/Concrete)** of these specifications and addenda thereto.

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

**ITEM NO. 7570****REINFORCED CONCRETE PAVING**

This item consists of furnishing and placing approximately **2,334** Cubic Yards of Reinforced Concrete Paving in accordance with **Item 402.4.4. Replacing Reinforced Concrete Pavement, Item 303. Portland Cement Concrete Pavement and Item 303.2.1.3.2.COD: Gradation** of these specifications and addenda thereto. **See 107.27.COD: Environmental Compliance.**

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

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

**ITEM NO. 7580****REINFORCED CONCRETE SIDEWALK**

This item consists of furnishing and placing approximately **156** 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 **279** 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 **9** 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. 7600****REINFORCED CONCRETE BASE**

This item consists of furnishing and placing approximately **1,452** Cubic Yards of Reinforced Concrete Base in accordance with **Item 402.4.COD: Replacing Paved Surfaces, Item 402.4.11.COD: Replacing Asphaltic Concrete Pavement with A Concrete Base, Item 303. Portland Cement Concrete Pavement and Item 303.2.1.3.2.COD: Gradation** of these specifications and addenda thereto. **See 107.27.COD: Environmental Compliance.**

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

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

**ITEM NO. 7655****HOT MIX ASPHALT CONCRETE PAVEMENT**

This item consists of furnishing and placing approximately **1,660** Tons of Hot Mix Asphalt Concrete Pavement in accordance with **Item 402.4.COD: Replacing Paved Surfaces, Item 402.4.11.COD: Replacing Asphaltic Concrete Pavement with A Concrete Base, and Item 302.9. Hot-Mix Asphalt Pavement** of these specifications and addenda thereto. A prime coat shall be applied to a completed granular base course as described in **Item 302.7. Prime Coat and Item 302.9. Hot-Mix Asphalt Pavement**, at a rate of 0.25 gallons per square yard. A tack coat shall be applied to a surface of concrete, brick, or asphalt at a rate of 0.10 gallons per square yard. Prime coat and tack coat shall be not be measured for payment, but will be subsidiary to this bid item.

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

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

**ITEM NO. 7712****STORM WATER POLLUTION PREVENTION PLAN**

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

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

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

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

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

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

**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 **36,748** 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 **36,042** 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 **53** Each locations to a specific infrastructure(s) to determine type, size, location, elevation, and/or condition as determined by the Engineer. The disturbed area will be replaced with compacted backfill in accordance with **Item 504. Open Cut – Backfill and Item 504.6.1. Excavated Material** of these specifications and addenda thereto.

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

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

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

Measurement and payment will be per each complete in place.

**END SCHEDULE A: WATER AND WASTEWATER MAIN INSTALLATIONS AT 27 LOCATIONS**

#### **A 4. BID ITEMS**

##### **SCHEDULE B: WATER AND WASTEWATER IMPROVEMENTS IN MESQUITE HEIGHTS UNSERVED AREA**

###### **ITEM NO. 1800H                      6" PVC WATER PIPE**

This item consists of furnishing and placing approximately **70** Linear Feet of **6" Polyvinyl Chloride Water Pipe (C-900)** in accordance with **Item 506. Open Cut – Water Conduit Installation, Item 506.5.COD: Hydrostatic Test, Item 506.6.COD: Connections To Existing Water Conduits, Item 506.6.1.COD: Water Main Tie-In During Off Hours, Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger, Item 506.7.3.2.COD: Flushing Method, Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water, Item 506.7.1.COD: Preliminary Flushing, Item 506.7.2.COD: Chlorination, Item 506.7.3.COD: Flushing, Item 506.7.4.COD: Disposal of Flushing Water, Item 506.7.5.4.COD: Sampling, Item 506.7.6.COD: Indemnification, Item 506.8.1.COD: Cut and Plugs, Item 501.14. Polyvinyl Chloride (PVC) Water Pipe, Item 501.14.5.COD: Fittings, and Item 501.14.6.COD: NSF 61 Compliance** of these specifications and addenda thereto.

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

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

###### **ITEM NO. 1800J                      8" PVC WATER PIPE**

This item consists of furnishing and placing approximately **4,740** Linear Feet of **8" Polyvinyl Chloride Water Pipe (C-900)** in accordance with **Item 506. Open Cut – Water Conduit Installation, Item 506.5.COD: Hydrostatic Test, Item 506.6.COD: Connections To Existing Water Conduits, Item 506.6.1.COD: Water Main Tie-In During Off Hours, Item 506.6.2.COD: Shutdown of Water Mains 20" Diameter and Larger, Item 506.7.3.2.COD: Flushing Method, Item 506.7.COD: Disposal of Heavily Chlorinated Water Main Flushing Water, Item 506.7.1.COD: Preliminary Flushing, Item 506.7.2.COD: Chlorination, Item 506.7.3.COD: Flushing, Item 506.7.4.COD: Disposal of Flushing Water, Item 506.7.5.4.COD: Sampling, Item 506.7.6.COD: Indemnification, Item 506.8.1.COD: Cut and Plugs, Item 501.14. Polyvinyl Chloride (PVC) Water Pipe, Item 501.14.5.COD: Fittings, and Item 501.14.6.COD: NSF 61 Compliance** of these specifications and addenda thereto.

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

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

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

This item consists of furnishing and placing approximately **3,190** Linear Feet of **8"** Polyvinyl Chloride Pressure Rated Wastewater Pipe conforming to ASTM D2241 (DR 26) Minimum Pressure Rating of 160 PSI and ASTM D3139 joints, and in accordance with **Item 507. Open Cut – Wastewater Conduit Installation, Item 507.5.1.1.COD: Infiltration Test, and Item 501.15. Polyvinyl Chloride (PVC) Pressure-Rated Pipe (SDR Series)** of these specifications and addenda thereto.

This item to include barricading and all embedment materials.

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

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

This item consists of furnishing and placing approximately **800** Linear Feet of **12"** Polyvinyl Chloride Pressure Rated Wastewater Pipe conforming to ASTM D2241 (DR 26) Minimum Pressure Rating of 160 PSI and ASTM D3139 joints, and in accordance with **Item 507. Open Cut – Wastewater Conduit Installation, Item 507.5.1.1.COD: Infiltration Test, and Item 501.15. Polyvinyl Chloride (PVC) Pressure-Rated Pipe (SDR Series)** of these specifications and addenda thereto.

This item to include barricading and all embedment materials.

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

**ITEM NO. 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. 5020****EXTRA IRON FITTINGS**

This item consists of furnishing and placing approximately **5** 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. 5610****CUT AND PLUG WATER MAIN FOR TEST**

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

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

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

**ITEM NO. 5050****WATER SERVICE**

This item consists of furnishing and placing approximately **1** 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. 5091****INSTALL FIRE HYDRANT**

This item consists of furnishing and placing approximately 8 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. 5100H****6" GATE VALVE**

This item consists of furnishing and placing approximately 8 Each 6" Gate Valve in accordance with **Item 502.6.6.COD: Line Valve Installation and Item 502.6.1.COD: Double Disk, Metal Seated Gate Valves For Ordinary Waterworks Service Or Item 502.6.2.COD: Resilient-Seated Gate Valves For Ordinary Waterworks Service** of these specifications and addenda thereto, and the applicable Standard Drawings.

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

**ITEM NO. 5100J****8" GATE VALVE**

This item consists of furnishing and placing approximately 15 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. 6060****WASTEWATER LATERAL**

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

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

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

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



**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 **5** Each **48"** Diameter Pressure Type Manhole in accordance with **Item 502.1. Manholes, Item 502.1.2.COD: Wastewater Manhole Adjustments, Item 502.1.4.8.COD: Wastewater Manhole Frame Seals, Item 502.1.4.9.COD: Interior Coatings For Manholes, and Item 502.1.7.COD: Manhole Backfill** of these specifications and addenda thereto, and the applicable Standard Drawings.

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

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

**ITEM NO. 6130AE****48" DIAMETER WASTEWATER MANHOLE**

This item consists of furnishing, placing, and protecting from corrosion by Epoxy Coating or other approved method approximately **6** 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. 6141****VACUUM TEST FOR WASTEWATER MANHOLE**

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

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

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

**ITEM NO. 6255****TREE REMOVAL**

This item consists of removing approximately **39** Each of existing trees. This item is a contingent item and trees will be removed only as directed by the DWU Project Manager or Construction staff. Item will be in accordance with **Item 202.1. Removal, Protection, and Replacement of Trees, Shrubbery, Plants, Sod, and Other Vegetation** and **Item 202.1.1.COD: Trees** of these specifications and addenda thereto.

This item shall include the material, labor, equipment, miscellaneous items, and all incidentals required to cut, remove and dispose of the trees. Note that removal of trees less than 5-inches in caliper will not be paid for directly but will be subsidiary to other items of the contract. 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 staff.

Measure and Payment shall be at the Contract Unit Price per each tree removed.

**ITEM NO. 6902****PLACEMENT OF BLOCK SODDING**

This item consists of furnishing and placing approximately **10** 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. 6905****PLACEMENT OF SEED**

This item consists of furnishing and placing approximately **1,100** Square Yards of Seed in accordance with **Item 202.6.1. General**, **Item 202.6.3. Planting Season and Application Rates**, **Item 202.6.4.1. General** and **Item 202.6.4.6. Watering, Maintaining, and Finishing Seeded Areas** of these specifications and addenda thereto.

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

**ITEM NO. 6920****TELEVISION INSPECTION**

This item consists of performing a Television Inspection on approximately **3,983** 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 **8,800** 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 **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. 7040****STABILIZED BACKFILL**

This item consists of furnishing and placing approximately **40** 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 **50** 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. 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. 7071****CLASS "B" CONCRETE**

This item consists of furnishing and placing approximately 7 Cubic Yards of Class "B" Concrete in accordance with **Item 504.3.2. Foundation, Item 502.4.1. Concrete Blocking, and Item 702.2. Mix Design and Mixing Concrete For Structures** of these specifications and addenda thereto, and the applicable Standard Drawings. **See 107.27.COD: Environmental Compliance.**

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

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

This item consists of furnishing and placing approximately 13 Square Yards of Rip Rap in accordance with **Item 803.3. Riprap, Item 803.3.3.2. Dry Riprap, Type A and Type B** of these specifications and addenda thereto, and the applicable Standard Drawings.

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

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

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

This item consists of furnishing, placing, and removing approximately 94 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 **20** 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. 7560****CRUSHED ROCK FOR TEMPORARY PAVING BASE**

This item consists of furnishing and placing approximately **160** Cubic Yards of Crushed Rock (Flexible Base) for Temporary Paving Base material in accordance with **Item 402.4.COD: Replacing Paved Surfaces and Item 301.5. Flexible Subbase Or Base (Crushed Stone/Concrete)** of these specifications and addenda thereto.

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

**ITEM NO. 7600****REINFORCED CONCRETE BASE**

This item consists of furnishing and placing approximately **1,203** 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 **792 Tons** of Hot Mix Asphalt Concrete Pavement in accordance with **Item 402.4.COD: Replacing Paved Surfaces, Item 402.4.11.COD: Replacing Asphaltic Concrete Pavement with A Concrete Base, and Item 302.9. Hot-Mix Asphalt Pavement** of these specifications and addenda thereto. A prime coat shall be applied to a completed granular base course as described in **Item 302.7. Prime Coat and Item 302.9. Hot-Mix Asphalt Pavement**, at a rate of 0.25 gallons per square yard. A tack coat shall be applied to a surface of concrete, brick, or asphalt at a rate of 0.10 gallons per square yard. Prime coat and tack coat shall be not be measured for payment, but will be subsidiary to this bid item.

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

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

**ITEM NO. 7712****STORM WATER POLLUTION PREVENTION PLAN**

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

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

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

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

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

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

**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 **8,770** 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 **4,310** 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 **5** Each locations to a specific infrastructure(s) to determine type, size, location, elevation, and/or condition as determined by the Engineer. The disturbed area will be replaced with compacted backfill in accordance with **Item 504. Open Cut – Backfill and Item 504.6.1. Excavated Material** of these specifications and addenda thereto.

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

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

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

Measurement and payment will be per each complete in place.

**END SCHEDULE B: WATER AND WASTEWATER IMPROVEMENTS IN MESQUITE HEIGHTS UNSERVED AREA**