



## Travis County Commissioners Court Agenda Request

**Meeting Date:** May 28, 2013

**Prepared By:** Chiddi N'Jie, P.E. Phone #: 854-7585

**Division Director/Manager:** Steve Sun

**Department Head:** Steven M. Manilla, P.E., County Executive-TNR

**Sponsoring Court Member:** Commissioner Daugherty, Precinct Three  
Commissioner Gomez, Precinct Four

**AGENDA LANGUAGE:** Consider and take appropriate action on a request to approve the First Amendment to an Interlocal Cooperation Agreement with the City of Austin for the construction of improvements to Frate Barker Road between Manchaca Road and Brodie Lane, in Precincts Three and Four.

### **BACKGROUND/SUMMARY OF REQUEST:**

Brodie Lane is a two-lane roadway between Slaughter Lane (to the North Frate Barker Road) and FM 1626 (to the South of Frate Barker Road). It carries a large amount of commuter traffic between southern Travis County and northern Hays County to and from places of employment in Austin. The roadway is not designated as an arterial roadway and there are no plans to widen it to relieve congestion. Completing the proposed improvements to Frate-Barker Road, a designated arterial, is one of several initiatives the Court approved in 2006 to help reduce cut-through traffic on Brodie Lane. Completion of the improvements will help facilitate the movement of traffic between Brodie Lane and Manchaca Road and desirably encourage more motorists to use Manchaca Road instead of Brodie Lane.

The project includes roadway improvements for approximately 1.3 miles of Frate-Barker Road essentially along the existing roadway alignment from Manchaca Road to Brodie Lane. For the most part, the design of the proposed improvements will involve converting the existing two-lane rural roadway to a four-lane minor arterial with a continuous center left turn lane. The typical section will consist of four travel lanes with bike lanes, curb and gutter, and sidewalks.

The Frate Barker Road improvements project is a grant funded project (20% County and 80% FHWA through CAMPO) that was approved by the Capital Area Metropolitan Planning Organization (CAMPO) in June 2006. An interlocal agreement with the City of Austin (City) was executed in 2013 to grant the county the permission to construct the project within the City's corporate limits. This amendment to that interlocal is to further that cooperation by allowing the City to engage the services of the county's engineers, under management of the county, to integrate the construction plans for the relocation of affected waterlines and wastewater lines into

the county’s roadway construction documents and bid the projects together. The City will pay for all the waterline and wastewater line design services and construction costs. The current total estimated amount for the plans integration is \$7,869, and the estimated construction amount is \$1,850,500. The amount allocated for the consultant services, construction, and for contingency is \$2,045,420. This amendment was prepared and cleared by the legal staff of both the City and the county, and have been approved by the City Council.

**STAFF RECOMMENDATIONS:**

Staff recommends approval of the Amendment to the interlocal agreement.

**ISSUES AND OPPORTUNITIES:**

With the utility relocation plans integrated into the roadway plans, the entire work will be under the responsibility of one contractor making it less likely to develop miscommunication problems. In addition, the City may realize some savings due to the benefits of economy of scale, and the project can be done in less time. This project also represents desired collaboration between the county and the City.

**FISCAL IMPACT AND SOURCE OF FUNDING:**

The City will be paying for all costs related to the relocation of their service lines. This construction cost is currently estimated at about \$1,850,500. The amount of money authorized under the amendment is \$2,045,420, which includes an additional \$180,050 for contingency.

**ATTACHMENTS/EXHIBITS:**

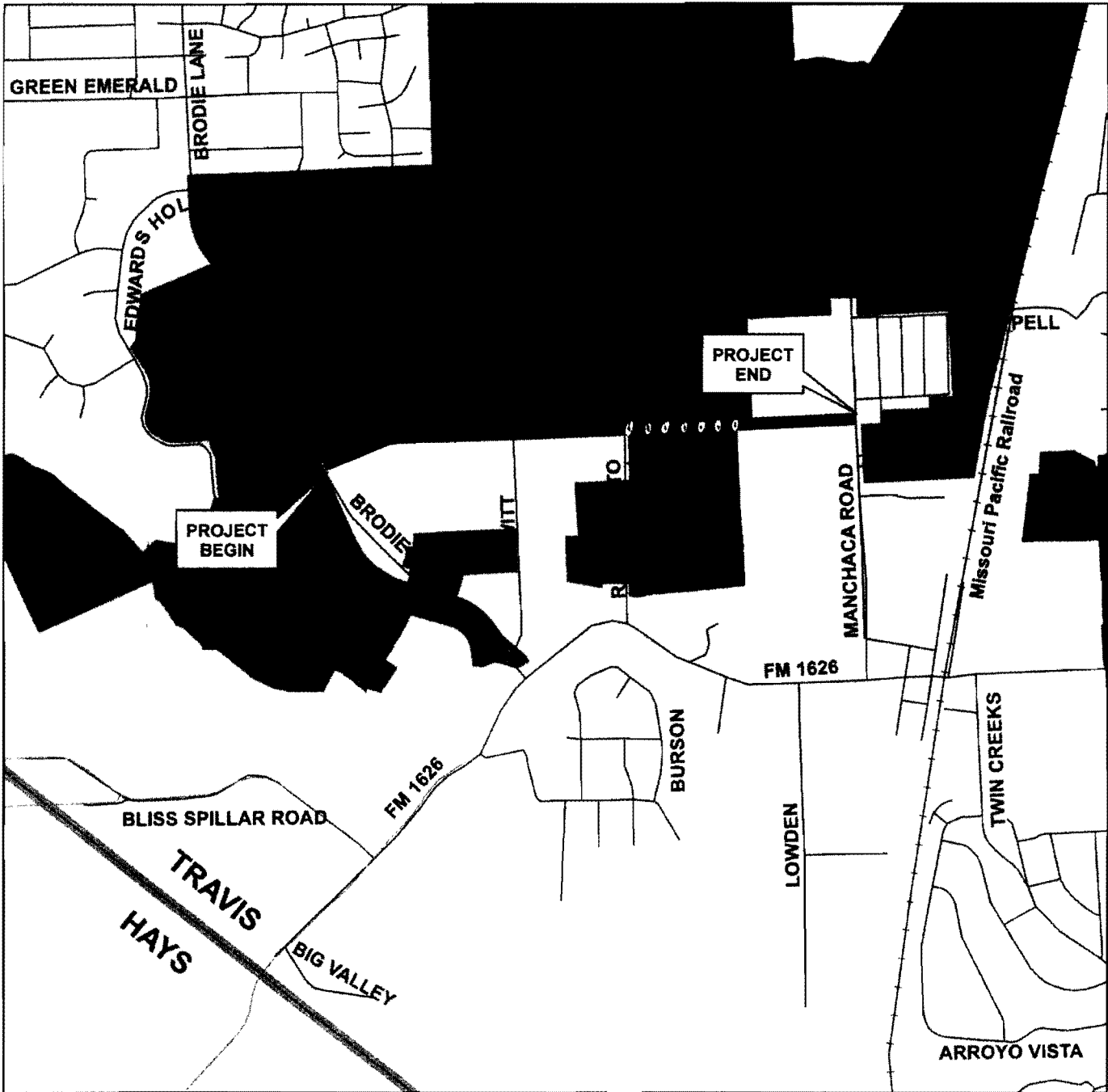
1. Location Map
2. Amendment to Frate Barker Road Interlocal Cooperation Agreement

**REQUIRED AUTHORIZATIONS:**

Cynthia McDonald	Financial Manager	TNR	854-4239
Steve Manilla	County Executive	TNR	854-9429
Tom Nuckols	Asst. County Attorney	County Attorney	

**CC:**

Chris Gilmore	Asst. County Attorney	Tawana Gardner	TNR
Cyd Grimes	Purchasing Agent	Steve Sun	TNR
Hannah York	Auditor's Office	Chiddi N'Jie	TNR
Donna Williams-Jones	TNR		

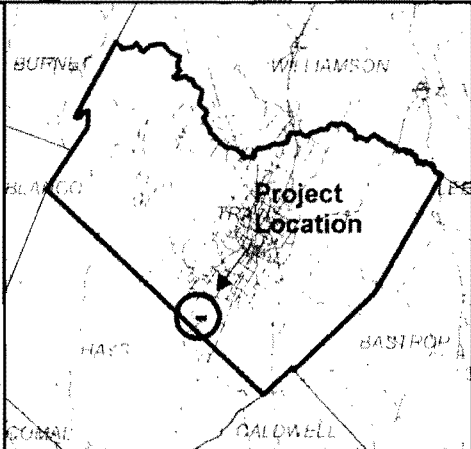


- Railroad
- Project Limits in COA
- City Limits
- County Line



0 1,000 2,000 3,000 4,000 Feet

JANUARY 24, 2008



TRAVIS COUNTY Texas Department of Transportation

**PROJECT LOCATION MAP**

**Frate Barker Road:  
From Brodie Lane to Manchaca Road**

Travis County, Texas

DISCLAIMER: This map was generated by HNTB Corporation using GIS (Geographic Information Systems) software. No claims are made to the accuracy or completeness of the information shown herein nor to its suitability for a particular use. The scale and location of all mapped data are approximate.

AMENDMENT TO FRATE BARKER ROAD  
INTERLOCAL COOPERATION AGREEMENT  
CITY OF AUSTIN AND TRAVIS COUNTY

This Amendment to Interlocal Agreement (this "Amendment") is made and entered into by and between the City of Austin, Texas (the "City") and Travis County, Texas (the "County"), hereinafter collectively referred to as the "Parties," upon the premises and for the consideration stated herein.

WHEREAS, the Parties entered into that a certain Frate Barker Road Interlocal Cooperation Agreement on December 11, 2012 (the "Interlocal"); and

WHEREAS, under the Interlocal, the County intends to construct certain roadway and drainage improvements to a portion of Frate Barker Road between Brodie Lane and Manchaca Road (the "Project"); and

WHEREAS, a portion of the Project is located within the City's corporate limits; and

WHEREAS, in addition to the improvements described in the Interlocal, the City presently desires to provide for construction of approximately 3750 linear feet (LF) of 16" water line and 2000 LF of 12" water line and the installation of two pressure reducing valves within the Project limits and right-of-way (the "Waterline Improvements"); and

WHEREAS, the Parties desire to cooperate in the development of the Waterline Improvements; and

WHEREAS, the Parties intend to conform this this Amendment in all respects with the Interlocal Cooperation Act, Texas Government Code Section 791.001, et seq.;

NOW, THEREFORE, the Parties agree as follows:

1. Project Management.
  - (a) The County will manage the construction of the Waterline Improvements as part of the Project. The Project and the City's Waterline Improvements are more particularly described in **Exhibits A and B**. The County Executive of the Travis County Transportation and Natural Resources Department (the "County Executive") will act on behalf of the County with respect to the Waterline Improvements, coordinate with the City, receive and transmit information and instructions, and will have complete authority to interpret and define the County's policies and decisions with respect to the Waterline Improvements. The County Executive will designate a Project Manager and may designate other representatives to transmit instructions and act on behalf of the County with respect to the Waterline Improvements.

- (b) The City will manage the development and, to the extent set forth herein, the design and construction of the Waterline Improvements as set forth herein and more particularly described in **Exhibit B**. The Austin Water Utility Director of the City (the "City's Water Utility Director") will act on behalf of the City with respect to the Waterline Improvements, coordinate with the County, receive and transmit information and instructions, and will have complete authority to interpret and define the City's policies and decisions with respect to the Waterline Improvements. The City's Water Utility Director may designate a City Waterline Improvements Project Manager ("City's Waterline Improvements Project Manager") and may designate other representatives to transmit instructions and act on behalf of the City with respect to the Waterline Improvements.
- (c) The City's Water Utility Director will act as a single point of contact for the City with respect to the Waterline Improvements and will coordinate with the City's Public Works Director with respect to the portion of the Project located within the City.
- (d) If a disagreement between City and County arises on the Waterline Improvements regarding engineering design, design and construction standards, plans and specifications, inspection and testing, deficiencies and remedial action, change orders, or any other requirement or provision of this Amendment, and the disagreement is not resolved by the City's Waterline Improvements Project Manager and the County Project Manager, it shall be referred as soon as possible to the City's Water Utility Director and the County's Public Works Director for resolution. If the Directors do not resolve the issue, it shall be referred as soon as possible to the Assistant City Manager responsible for Public Works and the County Executive of the Travis County Transportation and Natural Resources Department for resolution.

2. Project Development.

- (a) With the exception of the engineering, construction inspection, and construction testing of the Waterline Improvements, the County will be responsible for the construction of the Waterline Improvements.
- (b) The City will be responsible for the development of the engineering design, plans and specifications and construction inspection, and testing for the Waterline Improvements. The plans and specifications for the Waterline Improvements shall be in accordance with the design and construction standards of the City, and the City shall provide the engineering design, plans and specifications for the Waterline Improvements to the County no later than May 30, 2013.

- (c) The City will be responsible for any required modifications to the engineering design, plans, and specifications for the Waterline Improvements during the development and construction of the Waterline Improvements.
- (d) The City will ensure that its design engineer provides professional liability, automobile liability, and general liability insurance in accordance with the standard requirements of the City for such projects, during the term of the design and construction of the Waterline Improvements and will have the County named as an additional insured with respect to general liability and automobile liability coverage or in the alternative, the City may design the Waterline Improvements with its in-house professional engineering.
- (e) The City and, to the extent set forth herein, the County will be responsible for the review and approval of the engineering design, plans and specifications and for construction inspection and testing for the Waterline Improvements. In addition, the City and, to the extent set forth herein, the County will be responsible for the review and approval of any modifications to the engineering design, plans, and specifications for the Waterline Improvements, during the development and construction of the Waterline Improvements.
- (f) The City will permit the Waterline Improvements as required by City and County rules and regulations and be responsible for any associated fees required for the Waterline Improvements. To the extent feasible, the City shall coordinate the City's review of any permit application and issuance of the Waterline Improvements permit concurrently with the City's review and approval of engineering design and plans and specifications for the Project.
- (g) The County will transfer legal title to the constructed Waterline Improvements to the City when the Waterline Improvements are completed and accepted for operation and maintenance by the City.
- (h) The County shall require the contractor to immediately take any appropriate remedial action to correct any deficiencies in the Waterline Improvements identified by the City.
- (i) The Parties will participate in joint review meetings with representatives from all affected City and County Departments in order to avoid and resolve conflicts in review comments. The City will provide a designated review team to expedite the review process.

3. Project Integration; Design, Bidding, & Award of Construction Contract.

- (a) Upon approval and execution of this Amendment by both the County and the City, the County shall modify its contract with its engineering

consulting firm for the Project to include the integration of the Waterline Improvements engineering design and construction documents ("PS&E") into the Project at the City's cost. The fee for the professional services required to integrate the Waterline Improvements PS&E documents into the Project is \$9,870.00, including a 25% contingency. The engineering fee proposal and scope of services is set forth in **Exhibit C**, attached hereto. The County shall submit any proposed revisions to the Waterline Improvements PS&E documents to the City for its review and approval.

- (b) Bid items for the City's Waterline Improvements will be included in the bid documents for the Project, as an additive, alternate set of bid items, and each contractor submitting a bid on the Project will be required to include within the bid those costs, itemized by line item number, attributable to the City's Waterline Improvements. The County will solicit bids for the construction of the County's Project and Waterline Improvements based on the combined plans and specifications, in accordance with applicable state and local bidding laws, practices, and procedures, and in accordance with the County's HUB policy. The County will notify the City of the lowest responsible bid and the amount of the bid component for the Waterline Improvements and, upon written agreement of the City to be provided within 7 days of receipt of notice, the County will enter into a firm unit-price contract with the successful bidder, which includes the Waterline Improvements.

4. Management Duties of the County. In addition to its duties under the Interlocal, the County hereby covenants and agrees to provide to the City:

- (a) written notice of the schedule for integration of the Waterline Improvements PS&E documents into the Project and the advertisement for bids, award of contract, and construction of the Waterline Improvements;
- (b) upon completion of bidding, the County will furnish the City a copy of the Waterline Improvements' integrated plans and specifications for the City's records;
- (c) written copy of all contracts affecting the Waterline Improvements;
- (d) a monthly itemized statement of all disbursements made and debts incurred during the preceding month relating to the Waterline Improvements, including copies of invoices, statements, vouchers, or any other evidence of payment of debt;
- (e) executed change orders, jointly approved by the City and the County, related to the Waterline Improvements;
- (f) a copy of any change order request related to the Waterline Improvements component of the Project within two (2) working days of its receipt by the

County, by delivery to the City's Project Manager for review and approval; and

- (g) sufficient notice, documentation and opportunity for the City to review and jointly approve the construction contractor's applications for progress and final payments;
- (h) upon satisfactory completion of construction and any applicable warranty or construction performance period, the County will recommend that the City accept the Waterline Improvements and furnish the City a copy of the record as-built drawings of the Waterline Improvements for the City's records.

5. Management Duties of the City. In addition to its duties under the Interlocal, the City hereby covenants and agrees to:

- (a) submit to County for review and approval the Waterline Improvements PS&E documents on or before April 30, 2013, which date may be reasonably extended by the Parties;
- (b) review and address the County's initial review comments within five (5) working days, and work in good faith to resolve any outstanding issues;
- (c) expeditiously review any applicable permit applications and work in good faith to resolve any outstanding issues;
- (d) review any change order proposal for the Waterline Improvements and return the change order request to the County within five (5) working days of its receipt by the City's Project Manager, with a written recommendation for its disposition; respond to requests for information within three (3) working days and requests for approval of shop drawings within ten (10) working days.
- (e) perform independent inspection and testing on the Waterline Improvements in coordination with the County's inspectors and as agreed to by the County and City's Project Managers, and in a timely manner; and in connection therewith, the City will designate inspectors to make any such inspections, including any joint final inspection of the completed Waterline Improvements; the City's inspectors shall communicate any issues to the County's inspectors, and County inspectors will in turn communicate those issues to the construction contractor;
- (f) coordinate with the County Project Manager, as reasonable and necessary;
- (g) immediately report any deficiencies observed in the construction of the Waterline Improvements in writing to the County's Project Manager;



- (h) review and jointly approve the construction contractor's application for progress and final payments ;
  - (i) attend meetings at the request of the County's Project Manager; and
  - (j) upon satisfactory substantial completion of the Waterline Improvements, the City will conditionally accept the Waterline Improvements and will finally accept the Waterline Improvements upon completion of any applicable warranty or construction performance period.
6. Bond and Guarantee. All construction contracts affecting the Waterline Improvements shall include a payment and performance bond acceptable to and in favor of and benefiting the County and the City, for the full amount of the contract and a warranty by the contractor executed in favor of and benefiting the County and the City, for a period of one year from the date of acceptance of the County's Project and Waterline Improvements by the Parties. The Parties shall be named as co-obligees on the payment and performance bonds.
7. Liability. To the extent allowed by Texas law, the County and the City agree that each entity is responsible for its own proportionate share of any liability for its negligent acts or omissions arising out of or connected to this Amendment. In addition, the construction contractor shall be required to provide workers compensation insurance and general liability insurance acceptable to the County and the City. The City shall be included as an additional insured on the above-referenced insurance policy and a waiver of subrogation will be provided on the auto liability, general liability, and workers compensation coverage.
8. Financial Obligations.
- (a) The City agrees to pay all costs for the Waterline Improvements, including the cost of surveying, design, integration of the Waterline Improvements PS&E documents into the Project, construction, inspection, testing, and the cost of any change orders made necessary by field changes to address unanticipated conditions under the terms and conditions in this Amendment. The City shall pay project integration and construction costs through an escrow account with Travis County at an amount equal to the cost of the design plus the construction bid amount, unless otherwise agreed to by the City and the County in writing. This amount is currently estimated at \$9,870 for the integration of the PS&E and \$1,850,500 for construction with a \$185,050.00 contingency for an estimated total not to exceed amount of Two Million Forty Five Thousand Four Hundred Twenty and No/100 Dollars (\$2,045,420.00). The City's cost estimate for integration and construction costs of the Waterline Improvements is set forth in **Exhibit D**, attached hereto.
  - (b) The City shall place the City's funds into an approved County construction escrow account for the Waterline Improvements within 21

calendar days of notification to the City by the County, as described below.

- (i) The proposed project integration fees for the Waterline Improvements shall be placed into escrow within 21 calendar days following the execution of this Amendment.
  - (ii) The funds for the construction of the Waterline Improvements shall be placed into escrow within 21 calendar days following notification by the County of the successful bidder and the bid amount.
- (c) The County shall obtain the written approval of the City for all change orders affecting the construction of the Waterline Improvements prior to the County issuing the approved change order to the contractor, such approval not to be unreasonably withheld or delayed. The City's Waterline Improvements Project Manager shall meet with the County's Project Manager to review the contractor's progress reports and invoices for the Waterline Improvements before approval by the County.
- (d) For construction change orders, which are the responsibility of the City, as described above, and which cause the actual costs of construction of the Waterline Improvements to exceed the cumulative not to exceed amount the City has paid to the County, the City shall make additional funds available to the County within 90 days of receipt of invoice by the County, such invoice to be accompanied by the change order request from the construction contractor, which has been recommended for approval by the County and the City's Inspector and Project Manager.
- (e) The City agrees to pay liquidated damages, delay damages, de-mobilization costs, re-mobilization costs, and any other associated costs incurred by the County under its construction contract for the Project by reason of the non-payment of any change order for the construction of the Waterline Improvements which is the responsibility of the City and which has not been paid within 90 days of the date of submittal by the County.
- (f) The County shall promptly notify the City of any such claim for damages by the construction contractor and the County and the City shall negotiate with the construction contractor for the resolution of the claim. In the event that a decision is made to litigate such a claim, the City shall be solely responsible for any or all costs recited above, and the costs of litigation, including, but not limited to, attorney's fees, court costs, depositions, experts, the amount of any damages contained in a judgment or settlement, interest, and the costs of appeal.

- (g) The Parties agree to and shall provide their respective shares for the development of the Project on a timely basis in order to meet the Project schedule.
- (h) The County Treasurer shall act as Escrow Agent for the management of the City's funds and shall deposit the funds in an interest bearing escrow account. The County shall invest the funds in accordance with the Public Funds Investment Act, Tex. Gov't Code Chapter 2256, and other applicable laws, or bond covenants. The interest and any unused portion of the public funds provided by the City under this Amendment shall be returned to the City within 30 calendar days after the final acceptance of the Waterline Improvements. The County shall provide the City, at least quarterly, with an accounting of the deposits to and disbursements from the City's escrow account. The County will make its records available, at reasonable times, to the City's auditors, or its independent financial advisors or other professionals who provide arbitrage rebate calculations to the City.
- (i) The County Treasurer shall timely pay submitted invoices for the Waterline Improvements, which has been approved as required by this Agreement. The invoices for the Project will be paid based on work completed in accordance with the approved plans and specifications.

9. City Inspection and Testing.

The City shall be responsible for the inspection of the Waterline Improvements and all testing of the construction of the Waterline Improvements and for the final acceptance of the Waterline Improvements. The City shall designate inspectors to make interim and final inspections of the Waterline Improvements. The City's inspectors shall coordinate with the City and County Project Mangers, the County's inspectors, as reasonable and necessary, in making inspection(s). Any deficiencies in the construction of the Waterline Improvements identified by the City shall be immediately reported in writing to the County's Project Manager and the contractor with an additional written notice to the County Executive to be deposited in the U.S. Mail within two days of the identification of any such deficiencies. The County Executive shall require the contractor to immediately take any appropriate remedial action to correct any deficiencies identified by the City.

10. Miscellaneous.

- (a) Force Majeure. In the event that the performance by the County or the City of any of its obligations or undertakings hereunder shall be interrupted or delayed by any occurrence not occasioned by its own conduct, whether such occurrence be an act of God, or the common enemy, or the result of war, riot, civil commotion, sovereign conduct, or the act or conduct of any person or persons not a party or privy hereto, then it shall be excused from such performance for such period of time as it reasonably necessary after such occurrence to remedy the effects hereto.

- (b) Notice. Any notice given hereunder by either party to the other shall be in writing and may be effected by personal delivery in writing or by registered or certified mail, return receipt requested when mailed to the proper party, at the following addresses:

CITY: Greg Meszaros  
City of Austin  
Austin Water Utility  
625 E. 10<sup>th</sup> Street  
Austin, Texas 78701

WITH COPY TO: Gordon Bowman  
Assistant City Attorney  
City of Austin Law Department  
301 W. 2nd Street  
Austin, Texas 78701

COUNTY: Steve Manilla (or successor)  
County Executive, TNR  
P. O. Box 1748  
Austin, Texas 78767

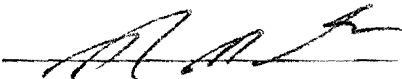
WITH A COPY TO: David Escamilla (or successor)  
Travis County Attorney  
P. O. Box 1748  
Austin, Texas 78767  
Attn: File No. 163.44

AND WITH A COPY TO: Cyd Grimes, C.P.M. (or successor)  
Travis County Purchasing Agent  
P.O. Box 1748  
Austin, Texas 78767

- (c) Number and Gender Defined. As used in this Amendment, whenever the context so indicates, the masculine, feminine, or neuter gender and the singular or plural number shall each be deemed to include the others.
- (d) Entire Agreement. This Amendment may not be modified, discharged, or changed in any respect whatsoever except by a further agreement in writing duly executed by authorized representatives of the parties hereto. No official, representative, agent, or employee of Travis County, Texas has any authority to modify this Amendment, except pursuant to such express authority as may be granted by the Commissioners Court of Travis County, Texas. Except as otherwise set forth in this Amendment, the Interlocal will remain in full force and effect in accordance with its original terms and be binding on the Parties and their respective heirs, executors, administrators, successors and assigns.

- (e) Effective Date. This Amendment takes effect upon the last date of due execution of the Agreement by the County and the City.
- (f) Other Instruments. The parties hereto covenant and agree that they will execute other and further instruments and documents as may become necessary or convenient to effectuate and carry out the purposes of this Amendment.
- (g) Invalid Provision. Any clause, sentence, provision, paragraph, or article of this Amendment held by a court of competent jurisdiction to be invalid, illegal, or ineffective shall not impair, invalidate, or nullify the remainder of this Amendment, but the effect thereof shall be confined to the clause, sentence, provision, paragraph, or article so held to be invalid, illegal, or ineffective.
- (h) Current Funds. The party or parties paying for the performance of governmental functions or services shall make payments therefore from current revenues available to the paying party.

CITY OF AUSTIN, TEXAS

By: 

Name: Robert Goode

Title: Assistant City Manager

Authorized Representative

Date: 5/1/13

Approved as to Form:

  
Assistant City Attorney

TRAVIS COUNTY, TEXAS

By: \_\_\_\_\_  
Samuel T. Biscoe, County Judge

Date: \_\_\_\_\_

**EXHIBIT A**

**PROJECT**

**The Frate Barker Road Waterline Improvements Scope:**

The Frate Barker Road improvement project is located in the Southeast sector of Travis County in Precinct 4. The project limits are from Brodie Lane to Manchaca Road.

## **EXHIBIT B**

### **CITY'S WATERLINE IMPROVEMENTS**

#### **Water Transmission Mains Scope:**

The construction of approximately 3750 linear feet of 16 inch water line and 2000 linear feet of 12 inch water line and the installation of two pressure reducing valves within the Project limits and right-of-way.

**EXHIBIT C**

**WATERLINE IMPROVEMENTS INTEGRATION COSTS**



Preliminary Cost Proposal  
 HNTB Corporation  
**FRATE-BARKER WATERLINE / WASTE WATER IMPROVEMENTS**  
 Travis County - Precinct Three

TASK DESCRIPTION	PROJECT MANAGEMENT			ENGINEERING			BUSINESS ADMINISTRATION			OTHER	Total Hours	Total Costs
	Project Principal	Sr. Project Manager	Deputy Project Manager	Sr. Engineer	Engineer IV	Engineer III	Business Manager	Project Administrator	Admin / Clerical	Expert Testimony		
	\$300	\$195	\$135	\$126	\$114	\$99	\$120	\$84	\$60	\$300		
<b>PROJECT MANAGEMENT</b>												
Project Management												
General Administration												
Develop agreements with City of Austin and/or Travis County		1						4			5	\$ 531
Data management and file transfers				2							2	\$ 232
Quality Control / Quality Assurance		1									1	\$ 195
<b>Subtotal Hours</b>	0	2	0	2	0	0	0	4	0	0	8	
<b>Subtotal Labor Cost</b>	\$ -	\$ 390	\$ -	\$ 252	\$ -	\$ -	\$ -	\$ 480	\$ 336	\$ -	\$ -	\$ 978
<b>DESIGN SERVICES</b>												
Coordination												
Initial meeting with City of Austin		2									2	\$ 390
Coordinate with City of Austin during lay out (assumes 1 meeting)		2									2	\$ 390
Review preliminary waterline and waste water design		2		4							6	\$ 894
Attend review meeting with City of Austin and Travis County		2									2	\$ 390
Review final waterline and waste water design		2		4							6	\$ 894
Attend review meeting with City of Austin and Travis County		2									2	\$ 390
Incorporate Plans and Specifications												
Incorporate final waterline and waste water plans into plan set												
Update index of sheets						2					2	\$ 198
Update sheet numbers						4					4	\$ 396
Add COA provided plan sheets and standard sheets (PDF) into final plans				1		4					5	\$ 522
Quality Control / Quality Assurance		2		2							4	\$ 642
Incorporate final waterline and waste water specifications into project manual												
Update Project Manual index to reflect COA provided information						2					2	\$ 198
Update Project Manual bid forms with COA provided information						4					4	\$ 396
Incorporate COA provided specifications and special provisions				1		2					3	\$ 324
Add bid items and quantities to Engineer's Opinion of Probable Construction Cost document (COA to provide unit costs)				2							2	\$ 252
Quality Control / Quality Assurance		2		2							4	\$ 642
<b>Subtotal Hours</b>	0	16	0	16	0	18	0	0	0	0	50	
<b>Subtotal Labor Cost</b>	\$ -	\$ 3,120	\$ -	\$ 2,016	\$ -	\$ 1,782	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,918
<b>PROJECT TOTALS</b>												
<b>Total Hours</b>	0	18	0	18	0	18	0	4	0	0	58	
<b>Total Labor Cost</b>	\$ -	\$ 3,610	\$ -	\$ 2,268	\$ -	\$ 1,782	\$ -	\$ 336	\$ -	\$ -	\$ -	\$ 7,896

**EXHIBIT D**

**CITY'S WATERLINE IMPROVEMENTS COST ESTIMATE**