

INTEROFFICE MEMO

DATE: OCTOBER 17, 2018
TO: JESUS CHAPA, ASSISTANT CITY MANAGER
DOUG BLACK, SR. ASSISTANT CITY ATTORNEY  10/17/18
FROM: CHRIS HARDER, WATER DIRECTOR C.H.
SUBJECT: TRINITY RIVER STREAMBANK EROSION AFFECTING TWO 90"
SANITARY SEWER LINES – EMERGENCY RESPONSE

Two 90" diameter sanitary sewer lines (West Fork sewer lines) were installed in the 1960's and 1970's that initially connected the old Riverside Plant with the Village Creek Plant. They are generally aligned parallel to and offset from the Trinity River. These two pipelines currently convey the majority of the wastewater generated in Fort Worth to the Village Creek Plant, with flow capacity of upwards of 200 million gallons per day.

In the spring of 2016, Trinity River streambank erosion was discovered that threatened to expose and potentially undermine the West Fork sewer lines. An emergency contract was authorized in June of 2016 (CS No. 47913, see also, June 7, 2016 Emergency Memo) for the installation of two sheet pile cutoff walls; a temporary solution designed to help protect the pipelines while a permanent solution was designed and permitted by the U.S. Army Corps of Engineers. The emergency work was completed in July 2016.

The City engaged James Deotte Engineering, Inc. (M&C C-27950) to develop, design and permit a permanent solution to the erosion problem. The approved design is to install a reinforced concrete wall supported by drilled shaft piers that would act as the foundation for a rock gabion basket reinforced channel slope. The drilled piers would be extended into bedrock to provide permanent stability. The rock gabion basket would be extended from the concrete foundation up the channel bank side slope to prevent erosion.

The Corps of Engineers permit for this permanent solution was obtained in the summer of 2017. Bids for the construction of the permanent solution were obtained in late July of that year and on September 26, 2017 (M&C C-28407) council authorized execution of a construction contract with Humphrey and Morton in the amount of \$1,867,535 to construct the permanent solution.

Construction of the drilled piers was delayed almost a year, however, in part due to final easement acquisition and the discovery of artifacts in the work zone that required mitigation. Once the drilled pier construction began in late summer of 2018, it was discovered that the rock layer encountered at several locations was deeper than what was logged in the geotechnical bores taken as part of the design. Unfortunately, the engineering design needed to be revised to provide additional depth to the drilled piers to strengthen the foundation and additional vertical tie-back

reinforcing of the proposed protective wall. That redesign has just recently been completed and provided to the contractor for a cost assessment.

On September 22, 2018, Fort Worth was hit by a severe storm which eroded significant portions of the Trinity River and resulted in the failure of one of the sheet pile cutoff walls. The second cutoff wall is now unstable and needs to be reinforced immediately (see attached pictures). On October 13, 2018, another storm increased the Trinity River water surface elevation at least 13' in the impacted area, resulting in additional erosion of the streambank. Rain has occurred every day from October 13th up to the date of this memo and significant rain is forecast for the next several weeks.

With the construction of the permanent solution gabion wall project expected to take six months, preparation and placement of materials and equipment necessary to perform bypass pumping should the transmission pipes be compromised is necessary to protect public health.

Under this emergency memorandum the Water Department intends to do the following:

1. Reinforce and repair the existing sheet pile cutoff walls and prevent further failure (installation of driven piles with tieback rods to support). It is anticipated work will be performed by Shin and Gregory and Circle C Construction, the construction team that performed the original emergency work, at an estimated cost of \$200,000.
2. Expose the West Fork sewer lines at points upstream and downstream of the compromised area in order to allow expedited bypass pumping. It is anticipated this work will be performed by Circle C Construction at an estimated cost of \$50,000.
3. Install approximately 3,000 linear feet of 24" HDPE piping, to be in place should emergency bypass pumping be required. Work is anticipated to be performed by Circle C Construction. Estimated cost of \$250,000.
4. Purchase two 90" sewer plugs and position them at the site for the duration of the project. These plugs will be needed in the event of damage to the existing pipes that requires bypass pumping. It is anticipated that these plugs will be purchased from Sunbelt Rentals at a cost of approximately \$60,000.
5. Rent bypass pumps and pump manifold. Costs vary based on duration of rental. Should the rental last several months, total cost would be approximately \$300,000. It is anticipated that Sunbelt Rentals will be utilized for pump and manifold rentals.
6. Execute an emergency contract with Humphrey and Morton to immediately proceed with installation of vertical tiebacks and extra depth piers as required by the revised rock ledge information described above. Estimated cost for this additional work is \$650,000

Waiting to prepare a change order to the contract under which the permanent solution is being constructed for the additional piers and tie-back structures is not prudent given the saturated conditions and forecast for more heavy rain. The City is exempt from competitive bidding when an emergency threatens the preservation of the city's property or the public health of the citizens. Concurrently awarding emergency contracts to repair the failing cutoff walls and establish procedures for bypass pumping, should there be a failure of the pipeline, furthers the interest of protecting the public health and safety of the City as well as being necessary to protect the city's

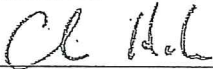
property. Chapter 2, Article I, Section 2-9 at (9) of the City's Code of Ordinances and Section 252.022 of the Local Government Code exempts from normal bidding requirements expenditures that are necessary to preserve or protect the city's property and the public health or safety of the municipality's residents.

This memo is submitted to request authorization for emergency procurement of services outlined above, at a total cost of approximately \$1,510,000. While this cost is extremely high, the consequences of one or both of the 90" pipes failing and allowing raw wastewater to flow into the Trinity River are dire and this must be prevented.

A confirming M&C will be circulated to ratify the above activities after the work has been performed.


APPROVED FOR EMERGENCY PROCUREMENT:

Recommended:



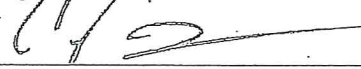
Chris Harder, Director, Water Dept.

Approved As To Form and Legality:



Douglas W Black, Sr. Assistant City Attorney

Approved:

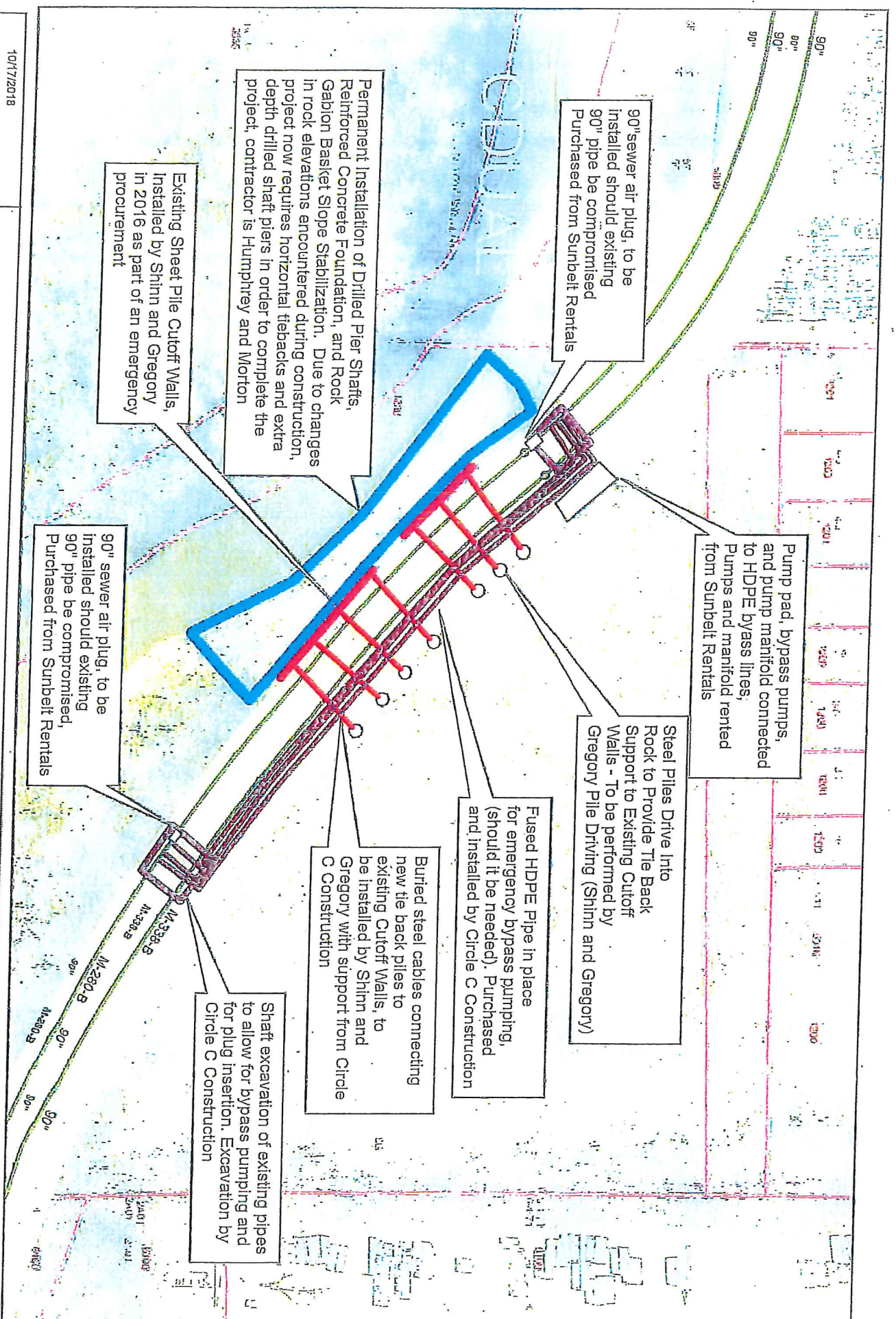


Cynthia Garcia, Purchasing Manager

Approved:



Jesus J. Chapa, Assistant City Manager



Permanent Installation of Drilled Pier Shafts, Reinforced Concrete Foundation, and Rock Gabion Basket Slope Stabilization. Due to changes in rock elevations encountered during construction, project now requires horizontal tiebacks and extra depth drilled shaft piers in order to complete the project, contractor is Humphrey and Morton

Existing Sheet Pile Cutoff Walls, Installed by Shinn and Gregory In 2016 as part of an emergency procurement

90" sewer air plug, to be installed should existing 90" pipe be compromised Purchased from Sunbelt Rentals

Pump pad, bypass pumps, and pump manifold connected to HDPE bypass lines, Pumps and manifold rented from Sunbelt Rentals

Steel Piles Drive Into Rock to Provide Tie Back Support to Existing Cutoff Walls - To be performed by Gregory Pile Driving (Shinn and Gregory)

Fused HDPE Pipe in place for emergency bypass pumping, (should it be needed), Purchased and installed by Circle C Construction

Buried steel cables connecting new tie back piles to existing Cutoff Walls, to be installed by Shinn and Gregory with support from Circle C Construction

Shaft excavation of existing pipes to allow for bypass pumping and for plug insertion. Excavation by Circle C Construction

90" sewer air plug, to be installed should existing 90" pipe be compromised, Purchased from Sunbelt Rentals

**Trinity River Slope Stabilization
 Contingency and Response Plan
 Emergency Procurements**





MEMORANDUM

Date: January 2, 2019

From: Chris Harder, P.E., Water Director

Via: Doug Black, Sr. Assistant City Attorney
Cynthia Garcia, Purchasing Manager

To: Jesus Chapa, Assistant City Manager

RE: SUPPLEMENT TO 10-17-2018 MEMORANDUM AND CITY SECRETARY CONTRACT NO. 51472 RE TRINITY RIVER STREAMBANK EROSION AFFECTING TWO 90" SANITARY SEWER LINES EMERGENCY REPAIRS


This memorandum is to supplement the October 17, 2018 emergency memorandum- resulting in City Secretary Contract No. 51472 with Circle C Construction Company ("Circle C ") for emergency services to reinforce and repair the existing sheet pile cutoff walls to prevent further failure of the Trinity River slope bank to allow a specialty contractor (Humphrey and Morton) to construct permanent river bank stabilization and to install piping for emergency bypass pumping. The initial estimated overall amount of the emergency work was \$1,510,000 and of that, the amount of reinforcing the sheet piling was \$200,000.

It has been determined that additional sheet piling and grading improvements are needed in order to secure an exposed river bank wall surface that could collapse on work crews during construction of the permanent repairs. It is anticipated that the additional work may cost up to \$700,000.00.


A change order will be processed to the existing contract with Circle C and actual costs will be reconciled at the end of the project.

APPROVED FOR EMERGENCY PROCUREMENT:


Recommended:


Chris Harder, Water Department

Approved as to from and Legality:


Douglas W. Black, Sr. Assistant City Attorney

Approve:


Cynthia Garcia, Purchasing Manager

Approve:


Jesus J. Chapa, Assistant City Manager



FORT WORTH

**City of Fort Worth
Change Order Request**

CITY SECRETARY
CONTRACT NO. 51472-001

Project Name: Emergency Response - Trinity River Streambank Erosion Affecting two 90-inch Sanitary Sewer Lines City Sec No.: 51472

Project No.(s): Emergency Reinforcement and Repair of existing sheet pile wall DOE No. N/A City Proj. No.: N/A

Project Description: Emergency Reinforcement and Repair of existing sheet pile cutoff walls and piping installation for emergency bypass pumping

Contractor: William J. Schultz, Inc. dba Circle C Construction Co. Change Order # 1 Date: 1/8/2019

City Project Mgr. John Kasavich City Inspector: David Johnson

Phone Number: 817-392-8480 Phone Number: 817-392-8455

Dept.	Sewer Unit 1	Sewer Unit 2	Sewer Unit 3	Totals	Contract Time (Calendar days)
Original Contract Amount	\$500,000.00			\$500,000.00	
Extras to Date					
Credits to Date					
Pending Change Orders (in M&C Process)					
Contract Cost to Date	\$500,000.00			\$500,000.00	
Amount of Proposed Change Order	\$700,000.00			\$700,000.00	
Revised Contract Amount	\$1,200,000.00			\$1,200,000.00	
Original Funds Available for Change Orders					
Remaining Funds Available for this CO					
Additional Funding (if necessary)	\$700,000.00			\$700,000.00	

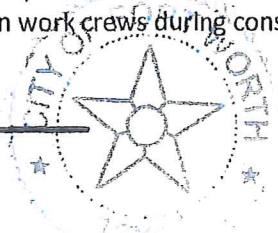
CHANGE ORDERS to DATE (INCLUDING THIS ONE) AS % OF ORIGINAL CONTRACT	140.00%
MAX ALLOWABLE CONTRACT AMOUNT (ORIGINAL CONTRACT COST + 25%)	\$625,000.00

JUSTIFICATION (REASONS) FOR CHANGE ORDER

This Change Order authorized by the attached memorandum of January 2, 2019 which supplement the October 17, 2018 emergency memorandum- resulting in City Secretary Contract No. 51472 with Circle C Construction Company for emergency services to reinforce and repair the existing sheet pile cutoff walls to prevent further failure of the Trinity River slope bank to allow a specialty contractor (Humphrey and Morton authorized under the original October 17, 2018 emergency memorandum) to construct permanent river bank stabilization and to install piping for emergency bypass pumping.

The change order will provide additional sheet piling and grading improvements that are needed in order to secure an exposed river bank wall surface that could collapse on work crews during construction of the permanent repairs.

Attested by:
Mary J. Kayser
Mary J. Kayser, City Secretary



OFFICIAL RECORD
CITY SECRETARY
FT. WORTH, TX

It is understood and agreed that the acceptance of this Change Order by the contractor constitutes an accord and satisfaction and represents payment in full (both time and money) for all costs arising out of, or incidental to, the above Change Order.

Contractor's Company Name	Contractor Name	Contractor Signature	Date
William J. Schultz, Inc. dba Circle C Construction Co.	Teri Skelly	<i>Teri Skelly</i>	1-9-19
Inspector	Date	Project Manager	Date
<i>[Signature]</i>	1-9-19	John R. Kasavich	1-8-19
Director (Water Dept)	Date	Construction Supervisor (Water Dept)	Date
C. Hall	T.S. 1/9/19	<i>[Signature]</i>	1-9-19
Assistant City Attorney	Date	Assistant City Manager	Date
<i>[Signature]</i>	D. Black. 1/11/19	<i>[Signature]</i>	1/11/19
Council Action (If Required)			
M&C Number	N/A	M&C Date Approved	N/A

M/WBE Breakdown for this Change Order

MWBE Sub	Type of Service	Amount for this CO
Total		\$0.00

Previous Change Orders

CO #	DATE	AMOUNT
Total		\$0.00

Contract Compliance Manager

By signing I acknowledge that I am the person responsible for the monitoring and administration of this contract, including ensuring all performance and reporting requirements.

John R. Kasavich

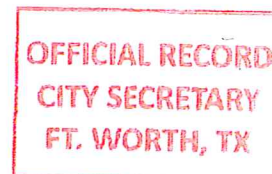
Signature

John R. Kasavich

Name of Employee

Engineering Manager

Title



RECEIVED
CITY OF FORT WORTH
CITY SECRETARY

SECTION 00 52 43
AGREEMENT FOR EMERGENCY REPAIR SERVICES

THIS AGREEMENT is made by and between The City of Fort Worth, a Texas home rule municipality acting by and through its duly authorized City Manager, ("City"), and WILLIAM J. SCHULTZ, INC., D/B/A CIRCLE "C" CONSTRUCTION COMPANY, a corporation authorized to do business in Texas, acting by and through its duly authorized representative ("Contractor"). City and Contractor, in consideration of the mutual covenants hereinafter set forth, agree as follows:

Article 1. WORK

Contractor shall reinforce and repair the existing sheet pile cutoff walls to prevent further failure of the slope bank and install 3,000 feet of 24- inch HOPE piping should emergency bypass pumping be required.

Article 2. PROJECT

The recent rains of September and October 2018, have further eroded the bank of a portion of the Trinity River compromising the integrity of the City's twin 90-inch sanitary sewer mains (M-280-B and M-338-B) which convey sewage to the Village Creek Treatment Plant. The lines must be protected.

In the spring of 2016 two temporary sheet pile cutoff walls were installed to protect the mains while a permanent solution was designed. The permanent solution was under construction until the recent rains destabilized the temporary solution causing further erosion of the stream bank.

Article 3. CONTRACT TIME

3.1 Time is of the essence.

Contractor recognizes that time is of the essence, and the Contractor will be required to remain on the jobsite until the work on repairing the cut off walls and procedures for bypass pumping is completed. The City expects the Contractor to have a sense of urgency to complete the Work in a timely manner.

Article 4. CONTRACT PRICE

City agrees to pay Contractor for performance of the Work based on Contractor's invoice an amount up to Five Hundred Thousand Dollars (\$500,000.00) This figure may be amended up or down as final invoices are received.

Article 5. CONTRACT DOCUMENTS

5.1 CONTENTS:

The Contract Documents which comprise the entire agreement between City and Contractor concerning the Work consist of the following:

1. This Agreement.
2. Exhibits to this Agreement:
 - a. Approved Invoice
 - b. Evidence of Current Insurance
 - c. Current Prevailing Wage Rate Table incorporated by reference.
3. General Conditions incorporated by reference

40 Article 6. INDEMNIFICATION

41 Contractor covenants and agrees to indemnify, hold harmless and defend, at its own expense, the city, its
42 officers, servants and employees, from and against any and all claims arising out of, or alleged to arise
43 out of, the work and services to be performed by the contractor, its officers, agents, employees,
44 subcontractors, licenses or invitees under this contract. This indemnification provision is specifically
45 intended to operate and be effective even if it is alleged or proven that all or some of the damages
46 being sought were caused, in whole or in part, by any act, omission or negligence of the city. This
47 indemnity provision is intended to include, without limitation, indemnity for costs, expenses and legal
48 fees incurred by the city in defending against such claims and causes of actions.
49

50 6.2 Contractor covenants and agrees to indemnify and hold harmless, at its own expense, the city, its
51 officers, servants and employees, from and against any and all loss, damage or destruction of property
52 of the city, arising out of, or alleged to arise out of, the work and services to be performed by the
53 contractor, its officers, agents, employees, subcontractors, licensees or invitees under this contract.
54 This indemnification provision is specifically intended to operate and be effective even if it is alleged
55 or proven that all or some of the damages being sought were caused, in whole or in part, by any act,
56 omission or negligence of the city.

57
58 Article 7. MISCELLANEOUS

59 7.1 Terms.

60 Terms used in this Agreement which are defined in Article 1 of the General Conditions will have the
61 meanings indicated in the General Conditions.

62 7.2 Assignment of Contract.

63 This Agreement, including all of the Contract Documents may not be assigned by the Contractor without
64 the advanced express written consent of the City.

65 7.3 Successors and Assigns.

66 City and Contractor each binds itself, its partners, successors, assigns and legal representatives to the other
67 party hereto, in respect to all covenants, agreements and obligations contained in the Contract Documents.

68 7.4 Severability.

69 Any provision or part of the Contract Documents held to be unconstitutional, void or unenforceable by a
70 court of competent jurisdiction shall be deemed stricken, and all remaining provisions shall continue to be
71 valid and binding upon CITY and CONTRACTOR.

72 7.5 Governing Law and Venue.

73 This Agreement, including all of the Contract Documents is performable in the State of Texas. Venue shall
74 be Tarrant County, Texas, or the United States District Court for the Northern District of Texas, Fort Worth
75 Division.

76 7.6 Other Provisions.

77 The Contractor agrees to pay at least minimum wage per hour for all labor as the same is classified,
3 promulgated and set out by the City.

79 7.7 Authority to Sign.

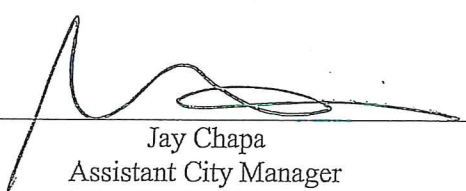
80 Contractor shall attach evidence of authority to sign Agreement, if other than duly authorized signatory of
81 the Contractor.

82
83 IN WITNESS WHEREOF, City and Contractor have signed this Agreement in multiple counterparts. At least
84 one counterpart of each has been delivered to City and Contractor.

85
86 This Agreement will be effective on the last date subscribed by a signatory (which is the Effective Date of the
87 Agreement).
88

City of Fort Worth

Contractor: WILLIAM J. SCHULTZ, INC.,
D/B/A CIRCLE "C" CONSTRUCTION
COMPANY

By: 
Jay Chapa
Assistant City Manager

By: 
(Signature)

Title: Vice - President
Teresa Skelly
(Printed Name)

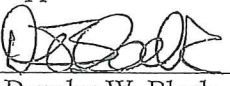
Date 10/26/18

Attest: 
City Secretary



Address: on file
(Seal)


City/State/Zip:
Date

Approved as to Form and Legality:

Douglas W. Black
Senior Assistant City Attorney
No M&C Reg'd - see memo

89 M&C N/A
90 Date N/A

91 HB 1295: NA

APPROVAL RECOMMENDED:


Chris Harder, P.E.
Director, Water Department
200 Texas St. Fort Worth, TX-76102

Contract Compliance Manager

By signing I acknowledge that I am the person responsible for the monitoring and administration of this contract, including ensuring all performance and reporting requirements.

Tony Shubela

Signature

Tony Shubela

Name of Employee

Senior Capital Project Officer

Title