ORIGINAL SWIFT 2018

City of Houston, Texas Combined Utility System

Northeast Plant Water Transmission Lines

SCHEDULE "A"

City of Houston, Texas Combined Utility System Amortization of New Debt



BOND DEBT SERVICE

City of Houston, Texas (2018) TWDB Financings for NE Plant Expansion and Transmission Lines *** DRAFT - FOR DISCUSSION PURPOSES ONLY *** 2018 (Nov.) Run - Based on May 4 2018 TWDB Estimated Rates plus 50 basis points

Run Date/Time: April 2, 2018 11 a.m.

Annua Debt Service	Debt Service	Interest	Principal	Period Ending
Debt Service	Debt Service	interest	Fillicipal	citating
2,421,249.97	2,421,249.97	2,421,249.97		05/15/2019
	5,759,776.50	2,434,776.50	3,325,000	11/15/2019
8,166,290.50	2,406,514.00	2,406,514.00		05/15/2020
	5,791,514.00	2,406,514.00	3,385,000	11/15/2020
8,167,224.50	2,375,710.50	2,375,710.50		05/15/2021
	5,820,710.50	2,375,710.50	3,445,000	11/15/2021
8,163,004.50	2,342,294.00	2,342,294.00		05/15/2022
	5,857,294.00	2,342,294.00	3,515,000	11/15/2022
8,163,735.00	2,306,441.00	2,306,441.00		05/15/2023
	5,896,441.00	2,306,441.00	3,590,000	11/15/2023
8,164,110.00	2,267,669.00	2,267,669.00		05/15/2024
	5,937,669.00	2,267,669.00	3,670,000	11/15/2024
8,163,683.50	2,226,014.50	2,226,014.50		05/15/2025
	5,986,014.50	2,226,014.50	3,760,000	11/15/2025
8,167,473.00	2,181,458.50	2,181,458.50		05/15/2026
	6,031,458.50	2,181,458.50	3,850,000	11/15/2026
8,164,984.50	2,133,526.00	2,133,526.00		05/15/2027
	6,083,526.00	2,133,526.00	3,950,000	11/15/2027
8,166,097.00	2,082,571.00	2,082,571.00		05/15/2028
	6,137,571.00	2,082,571.00	4,055,000	11/15/2028
8,166,007.75	2,028,436.75	2,028,436.75	, ,	05/15/2029
•	6,193,436.75	2,028,436.75	4,165,000	11/15/2029
8,162,938.75	1,969,502.00	1,969,502.00	• •	05/15/2030
.,,	6,259,502.00	1,969,502.00	4,290,000	11/15/2030
8,165,297.50	1,905,795.50	1,905,795.50	, ,	05/15/2031
, ,	6,325,795.50	1,905,795.50	4,420,000	11/15/2031
8,163,523.00	1,837,727.50	1,837,727.50	, ,	05/15/2032
, ,	6,397,727.50	1,837,727.50	4,560,000	11/15/2032
8,163,179.00	1,765,451.50	1,765,451.50	,,	05/15/2033
-,,	6,475,451.50	1,765,451.50	4,710,000	11/15/2033
8,164,130.00	1,688,678.50	1,688,678.50	77	05/15/2034
-,,	6,558,678.50	1,688,678.50	4,870,000	11/15/2034
8,166,271.50	1,607,593.00	1,607,593.00	,,,	05/15/2035
-,,-, 2.0	6,642,593.00	1,607,593.00	5,035,000	11/15/2035
8,164,842.75	1,522,249.75	1,522,249.75	0,000-,000	05/15/2036
0,201,012772	6,732,249.75	1,522,249.75	5,210,000	11/15/2036
8,164,887.50	1,432,637.75	1,432,637.75	5,210,000	05/15/2037
0,104,007.30	6,827,637.75	1,432,637.75	5,395,000	11/15/2037
8,166,132.75	1,338,495.00	1,338,495.00	0,000,000	05/15/2038
0,100,132.7	6,923,495.00	1,338,495.00	5,585,000	11/15/2038
8,163,414.79	1,239,919.75	1,239,919.75	3,363,000	05/15/2039
0,103,414.73	7,024,919.75	1,239,919.75	5,785,000	11/15/2039
8,162,445.00	1,137,525.25	1,137,525.25	3,703,000	05/15/2040
0,102,443.00	7,132,525.25	1,137,525.25	5,995,000	11/15/2040
8,163,939.00	1,031,413.75	1,031,413.75	3,333,000	05/15/2041
6,103,333.00	7,241,413.75	1,031,413.75	6,210,000	11/15/2041
8,162,910.50	921,496.75	921,496.75	0,210,000	05/15/2041
0,102,310.30	•	•	6.425.000	11/15/2042
9 162 772 20	7,356,496.75 807 275 50	921,496.75 807 275 50	6,435,000	05/15/2042
8,163,772.29	807,275.50 7,477,275.50	807,275.50 807,275.50	6,670,000	11/15/2043
8,166,158.50		688,883.00	0,070,000	05/15/2043 05/15/2044
0,100,138.50	688,883.00	•	6.015.000	
0 165 104 35	7,603,883.00	688,883.00 561,301.25	6,915,000	11/15/2044 05/15/2045
8,165,184.25	561,301.25	•	7 175 000	
0 165 222 7	7,736,301.25	561,301,25	7,175,000	11/15/2045
	428,922.50	428,922.50		05/15/2046
8,165,223.75	7,873,922.50	428,922.50	7,445,000	11/15/2046



BOND DEBT SERVICE

City of Houston, Texas (2018)
TWDB Financings for NE Plant Expansion and Transmission Lines
*** DRAFT - FOR DISCUSSION PURPOSES ONLY ***

2018 (Nov.) Run - Based on May 4 2018 TWDB Estimated Rates plus 50 basis points Run Date/Time: April 2, 2018 11 a.m.

Period Ending	Principal	Interest	Debt Service	Annual Debt Service
05/15/2047		291,190.00	291,190.00	8,165,112.50
11/15/2047	7,725,000	291,190.00	8,016,190.00	
05/15/2048		148,277.50	148,277.50	8,164,467.50
11/15/2048	8,015,000	148,277.50	8,163,277.50	8,163,277.50
	153,155,000	94,205,968.47	247,360,968.47	247,360,968.47



BOND DEBT SERVICE

City of Houston, Texas (2018)

TWDB Financings for NE Plant Expansion and Transmission Lines

*** DRAFT - FOR DISCUSSION PURPOSES ONLY ***

2018 (Nov.) Run - Based on May 4 2018 TWDB Estimated Rates plus 50 basis points

Run Date/Time: April 2, 2018 11 a.m.

Period			
Ending	Principal	Interest	Debt Service
06/30/2019		2,421,249.97	2,421,249.97
06/30/2020	3,325,000	4,841,290.50	8,166,290.50
06/30/2021	3,385,000	4,782,224.50	8,167,224.50
06/30/2022	3,445,000	4,718,004.50	8,163,004.50
06/30/2023	3,515,000	4,648,735.00	8,163,735.00
06/30/2024	3,590,000	4,574,110.00	8,164,110.00
06/30/2025	3,670,000	4,493,683.50	8,163,683.50
06/30/2026	3,760,000	4,407,473.00	8,167,473.00
06/30/2027	3,850,000	4,314,984.50	8,164,984.50
06/30/2028	3,950,000	4,216,097.00	8,166,097.00
06/30/2029	4,055,000	4,111,007.75	8,166,007.75
06/30/2030	4,165,000	3,997,938.75	8,162,938.75
06/30/2031	4,290,000	3,875,297.50	8,165,297.50
06/30/2032	4,420,000	3,743,523.00	8,163,523.00
06/30/2033	4,560,000	3,603,179.00	8,163,179.00
06/30/2034	4,710,000	3,454,130.00	8,164,130.00
06/30/2035	4,870,000	3,296,271.50	8,166,271.50
06/30/2036	5,035,000	3,129,842.75	8,164,842.75
06/30/2037	5,210,000	2,954,887.50	8,164,887.50
06/30/2038	5,395,000	2,771,132.75	8,166,132.75
06/30/2039	5,585,000	2,578,414.75	8,163,414.75
06/30/2040	5,785,000	2,377,445.00	8,162,445.00
06/30/2041	5,995,000	2,168,939.00	8,163,939.00
06/30/2042	6,210,000	1,952,910.50	8,162,910.50
06/30/2043	6,435,000	1,728,772.25	8,163,772.25
06/30/2044	6,670,000	1,496,158.50	8,166,158.50
06/30/2045	6,915,000	1,250,184.25	8,165,184.25
06/30/2046	7,175,000	990,223.75	8,165,223.75
06/30/2047	7,445,000	720,112.50	8,165,112.50
06/30/2048	7,725,000	439,467.50	8,164,467.50
06/30/2049	8,015,000	148,277.50	8,163,277.50
	153,155,000	94,205,968.47	247,360,968.47



BOND DEBT SERVICE BREAKDOWN

City of Houston, Texas (2018)

TWDB Financings for NE Plant Expansion and Transmission Lines

*** DRAFT - FOR DISCUSSION PURPOSES ONLY ***

2018 (Nov.) Run - Based on May 4 2018 TWDB Estimated Rates plus 50 basis points

Run Date/Time: April 2, 2018 11 a.m.

	Proposed 2018 TWDB -	Proposed 2018	
Period	Distribution	TWDB - Treatment	
Ending	Lines	Expansion	Total
06/30/2019	251,533.04	2,169,716.93	2,421,249.97
06/30/2020	847,944.00	7,318,346.50	8,166,290.50
06/30/2021	846,826.50	7,320,398.00	8,167,224.50
06/30/2022	845,198.00	7,317,806.50	8,163,004.50
06/30/2023	848,031.50	7,315,703.50	8,163,735.00
06/30/2024	845,312.50	7,318,797.50	8,164,110.00
06/30/2025	847,003.50	7,316,680.00	8,163,683.50
06/30/2026	848,069.00	7,319,404.00	8,167,473.00
06/30/2027	843,529.75	7,321,454.75	8,164,984.50
06/30/2028	848,323.00	7,317,774.00	8,166,097.00
06/30/2029	847,427.00	7,318,580.75	8,166,007.75
06/30/2030	845,735.50	7,317,203.25	8,162,938.75
06/30/2031	852,968.50	7,312,329.00	8,165,297.50
06/30/2032	849,202.00	7,314,321.00	8,163,523.00
06/30/2033	849,589.25	7,313,589.75	8,163,179.00
06/30/2034	849,073.50	7,315,056.50	8,164,130.00
06/30/2035	847,678.25	7,318,593.25	8,166,271.50
06/30/2036	850,371.25	7,314,471.50	8,164,842.75
06/30/2037	852,098.50	7,312,789.00	8,164,887.50
06/30/2038	847,952.50	7,318,180.25	8,166,132.75
06/30/2039	847,943.50	7,315,471.25	8,163,414.75
06/30/2040	847,086.50	7,315,358.50	8,162,445.00
06/30/2041	850,404.00	7,313,535.00	8,163,939.00
06/30/2042	847,925.00	7,314,985.50	8,162,910.50
06/30/2043	849,616.00	7,314,156.25	8,163,772.25
06/30/2044	845,476.00	7,320,682.50	8,166,158.50
06/30/2045	849,944.50	7,315,239.75	8,165,184.25
06/30/2046	847,915.25	7,317,308.50	8,165,223.75
06/30/2047	844,925.00	7,320,187.50	8,165,112.50
06/30/2048	850,787.50	7,313,680.00	8,164,467.50
06/30/2049	850,447.50	7,312,830.00	8,163,277.50
	25,696,337.79	221,664,630.68	247,360,968.47

SCHEDULE "B"

City of Houston, Texas Combined Utility System City of Houston Council Resolution

City of Houston Resolution No. 2018-22

A RESOLUTION AUTHORIZING SUBMISSION OF A LOAN APPLICATION TO THE TEXAS WATER DEVELOPMENT BOARD'S STATE WATER IMPLEMENTATION FUND PROGRAM

WHEREAS, the City of Houston, Texas, deems it appropriate to apply to the Texas Water Development Board for financial assistance by requesting a loan commitment from the State Water Implementation Fund Program in connection with the expansion of the Northeast water plant expansion and related transmission lines; and

WHEREAS, in accordance with the rules and regulations of the Texas Water Development Board, which govern the procedures of making such application, the governing body of the City is required to adopt a resolution to accompany such application; NOW, THEREFORE,

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF HOUSTON, TEXAS:

Section 1. That the Texas Water Development Board is hereby requested to grant financial assistance to the City of Houston by loan commitments from the State Water Implementation Fund Program the first loan to be for a portion of the cost of the expanding of the Northeast water plant and the second loan to be for water transmission lines associated with such expansion with the maximum amount of the two loans combined to be \$153,155,000 all as further described in the applications for such assistance, in substantially the form attached hereto as Exhibit "A" and incorporated herein for all purposes (the "Applications").

Section 2. That the Mayor, City Controller, City Attorney, Director of Houston Public Works and/or their authorized representatives are hereby authorized to make any changes, revisions, deletions, or insertions of information (including attachments to the Applications) as may be necessary to complete the Applications or make any revisions thereto required by the Texas Water Development Board.

Z:\GENERAL\JRC\Debt\TWDB Loan applications\2018.04.18\Res.docx

Section 3. That the Mayor of the City of Houston is hereby authorized to execute and submit the Applications to the Texas Water Development Board; and the Mayor, City Controller, City Attorney, Director of Public Works and Engineering, financial advisor, and consulting engineers named in such Applications, or other authorized representatives of the City are authorized to appear before the Texas Water Development Board in support of the Applications.

Section 4. That the Mayor, City Controller, City Attorney or Director of Public Works and Engineering are further specifically authorized to make the required assurances and representations to the Texas Water Development Board in accordance with the rules, regulations, and policies of the Texas Water Development Board.

Section 5. That a certified copy of this Resolution shall be attached to the Applications herein authorized to be prepared and submitted to the Texas Water Development Board.

Section 6. That this Resolution shall take effect immediately upon its passage and approval by the Mayor; however, in the event that the Mayor fails to sign this Resolution within five days after its passage and adoption, it shall take effect in accordance with Article VI, Section 6, Houston City Charter.

PASSED and ADOPTED this 18 day of 1981, 20

APPROVED this 18th day of April

Mayor of the City of Houston

Z:\GENERAL\JRC\Debt\TWDB Loan applications\2018.04.18\Res.docx

Pursuant to Article VI, S	ection 6, Houston Ci	ty Charter, the	e effective	date of	the
foregoing Resolution is		, 2018.			

Prepared by:

4/18/2018 JRC/nj

Requested by:

Carol Ellinger Haddock, P.E.

Acting Director Houston Public Works

LD No. 0631800092001

CAPTION PUBLISHED IN DAILY COURT REVIEW DATE:

	ł	1
AYE	NO	
		MAYOR TURNER
••••	• • • •	COUNCIL MEMBERS
		STARDIG
		DAVIS
		COHEN
<u>~</u>		BOYKINS
<u> </u>		MARTIN
V		LE
<u> </u>		TRAVIS
		CISNEROS
		GALLEGOS
		LASTER
1/		KNOX
سسا		ROBINSON
		KUBOSH
		EDWARDS
<u> </u>		CHRISTIE
CAPTION	ADOPTED	
		MAY 017 Rev. 12/15

City Secretary

City of Houston, B19

I, ANNA RUSSELL, City Secretary of the City of Houston, Texas, do hereby certify that

the within and foregoing is a true and correct copy of Resolution 2018-22, passed and adopted

by the City Council of said City on the 18th day of April, 2018, as the same appears in the

records in my office.

WITNESS my hand and the Seal of said City this 19th day of April, 2018.

Anna Russell

City Secretary of the City of Houston

SCHEDULE "C"

City of Houston, Texas
Combined Utility System
Sources and Uses of Funds for SWIFT Loan under Section 363



SOURCES AND USES OF FUNDS

City of Houston, Texas (2018)

TWDB Financings for NE Plant Expansion and Transmission Lines

*** DRAFT - FOR DISCUSSION PURPOSES ONLY ***

2018 (Nov.) Run - Based on May 4 2018 TWDB Estimated Rates plus 50 basis points

Run Date/Time: April 2, 2018 11 a.m.

Dated Date 11/16/2018
Delivery Date 11/16/2018

Bond Proceeds:	
Par Amount	153,155,000.00
	153,155,000.00
Uses:	
Project Fund Deposits:	
Project Fund - Distribution Expansion	15,461,654.27
Project Fund - Treatment Expansion	133,424,209.23
	148,885,863.50
Other Fund Deposits:	
Debt Service Reserve Fund	4,083,736.50
Delivery Date Expenses:	
Cost of Issuance	185,400.00
	153,155,000.00



SOURCES AND USES OF FUND5

City of Houston, Texas (2018) TWDB Financings for NE Plant Expansion and Transmission Lines *** DRAFT - FOR DISCUSSION PURPOSES ONLY *** 2018 (Nov.) Run - Based on May 4 2018 TWDB Estimated Rates plus 50 basis points Run Date/Time: April 2, 2018 11 a.m.

Dated Date

11/16/2018

Delivery Date 11/16/2018

5ources:	Proposed 2018 TWDB - Distribution Lines	Proposed 2018 TWDB - Treatment Expansion	Total
Bond Proceeds:			
Par Amount	15,905,000.00	137,250,000.00	153,155,000.00
	15,905,000.00	137,250,000.00	1 53,155,000.00
	Proposed 2018 TWDB - Distribution	Proposed 2018 TWDB - Treatment	
Uses:	Lines	Expansion	Total
Project Fund Deposits:			
Project Fund - Distribution Expansion	15,461,654.27		15,461,654.27
Project Fund - Treatment Expansion		133,424,209.23	133,424,209.23
	15,461,654.27	133,424,209.23	148,885,863.50
Other Fund Deposits:			
Debt Service Reserve Fund	424,092.12	3,659,644.38	4,083,736.50
Delivery Date Expenses:			
Cost of Issuance	19,253.61	166,146.39	185,400.00
	15,905,000.00	137,250,000.00	153,155,000.00

City of Houston, Texas Combined Utility System Application Forms and Supporting Documents



APPLICATION FOR FINANCIAL ASSISTANCE

FOR WATER AND WASTEWATER INFRASTRUCTURE PROJECTS

This application is comprehensive, covering all loan and grant assistance applications for water and wastewater infrastructure financing through the various Texas Water Development Board (TWDB) programs. The format of the application is intended to expedite the review process for both the applicant and TWDB staff. This application can be used by political subdivisions, including water supply corporations.

Please submit one double-sided original and one indexed, electronic copy, via electronic storage media such as CD or flash drive using MS Word, Excel and/or Adobe Acrobat.

Please submit your application to:

Texas Water Development Board
Water Supply and Infrastructure-Regional Water Planning and Development
P O Box 13231
1700 N. Congress Avenue, 5th Floor
Austin, Texas 78711-3231
(78701 for courier deliveries)

A complete application consists of all of the applicable information and forms requested in this document. When preparing this application please review the Application and all Guidance and Forms, listed at the end.

For more information, please contact your Regional Project Implementation Team at:

http://www.twdb.texas.gov/financial/programs/swift/regional project teams.asp

Thank you.

TWDB Use Only
Name of Applicant:
Date application received:
Date administratively complete:

Contents

Part A: General Information	3
Part B: Legal Information	7
Part C: Financial Information	
Part D: Project Information	
Part E: State Water Implementation Fund for Texas (SWIFT) Applicants Only:	23
Part F: Economically Distressed Programs (EDAP) Applicants Only:	
Part G: CWSRF/DWSRF Applicants Only	
Part H: Documentation of "Green" Projects and Project Components	
Part I: Summary of attachments to application	
Part J: Guidance and Forms	

Part A: General Information

١.	The I	egal autl	nority under which the applicant was created and operates.
	a)		TYPE A GENERAL-LAW MUNICIPALITY (Texas Local Gov't Code Sec. 5.001)
	b)		TYPE B GENERAL-LAW MUNICIPALITY (Texas Local Gov't Code Sec. 5.002)
	c)		TYPE C GENERAL-LAW MUNICIPALITY (Texas Local Gov't Code Sec. 5.003)
	d)	\boxtimes	HOME-RULE MUNICIPALITY (Texas Local Gov't Code Sec. 5.004)
	e)		SPECIAL-LAW MUNICIPALITY (<u>Texas Local Gov't Code Sec. 5.005</u>)
	f)		NONPROFIT ORGANIZATION (Business Organization Code Chapter 22)
	g)		NONPROFIT WATER SUPPLY OR SEWER SERVICE CORP. (Texas Water Code Chapter 67)
	h)		ALL DISTRICTS (Texas Water Code <u>Chapter 49)</u>
	i)		OTHER (attach)

2. Applicant Name and Contact Information:

Name:	City of Houston		
County:	Harris, Fort Bend, & Montgomery County		
Physical	611 Walker, 24th Floor, Houston, Texas 77002		
Address:			
Mailing	611 Walker, 24th Floor, Houston, Texas 77002		
Address:			
Phone:	(832) 395-2658		
Fax:	(832) 395-2681		
Website:	http://www.houstontx.gov/		

3. Brief description of the project <u>City of Houston Northeast Plant Water Transmission Lines</u>.

4. Applicant's Officers and Members:

<u>Name</u>	Office Held
Sylvester Turner	Mayor
Chris Brown	City Controller
Brenda Stardig	Council Member - District A
Jerry Davis	Council Member - District B
Ellen R. Cohen	Council Member - District C
Dwight A. Boykins	Council Member - District D
Dave Martin	Council Member - District E
Steve Le	Council Member - District F
Greg Travis	Council Member - District G
Karla Cisneros	Council Member - District H
Robert Gallegos	Council Member - District I
Mike Laster	Council Member - District J
Larry V. Green	Council Member - District K
Mike Knox	Council Member - At-Large Position 1
David W. Robinson	Council Member - At-Large Position 2
Michael Kubosh	Council Member - At-Large Position 3
Amanda Edwards	Council Member - At-Large Position 4
Jack Christie	Council Member - At-Large Position 5

Supervising Engineer 611 Walker, 15th Floor, Houston, TX 77002 (832) 395-2337 Venus.Price@houstontx.gov onsultants (Attach copies of all draft and/or executed contracts for consult as used by the Applicant in applying for financial assistance or constructing ect.): Engineer	
(832) 395-2337 Venus.Price@houstontx.gov onsultants (Attach copies of all draft and/or executed contracts for consults used by the Applicant in applying for financial assistance or constructing ect.):	
Venus.Price@houstontx.gov onsultants (Attach copies of all draft and/or executed contracts for consult used by the Applicant in applying for financial assistance or constructing ect.):	
onsultants (Attach copies of all draft and/or executed contracts for consulting used by the Applicant in applying for financial assistance or constructing ect.):	
onsultants (Attach copies of all draft and/or executed contracts for consulting used by the Applicant in applying for financial assistance or constructing ect.):	
e used by the Applicant in applying for financial assistance or constructing ect.):	
	N/A
City of Houston	
Houston Public Works	
Venus Price	
611 Walker, 15th Floor, Houston, TX 77002	
(832) 395-2337	
Venus.Price@houstontx.gov	
nsel	N/A
Norton Rose Fulbright US LLP	
Neil Thomas and Dimitri Millas	
1301 McKinney, Suite 5100, Houston, TX 77010-3095	
(713) 651-5246	
neil.thomas@nortonrosefulbright.com and dimitri.millas@nortonrosefulb	<u>oright.co</u>
	N/A
·	
(000) 000 0045	
(832) 239-9015 Trey.Cash@hilltopsecurities.com	
	Houston Public Works Venus Price 611 Walker, 15th Floor, Houston, TX 77002 (832) 395-2337 Venus.Price@houstontx.gov nsel Norton Rose Fulbright US LLP Neil Thomas and Dimitri Millas 1301 McKinney, Suite 5100, Houston, TX 77010-3095 (713) 651-3613 (713) 651-5246 neil.thomas@nortonrosefulbright.com and dimitri.millas@nortonrosefulbright.com First Southwest Company A Division of Hilltop Securities. Trey Cash 700 Milam Street, Suite 500, Houston, Texas 77002 (713) 654-8651

e)	Legal Co	unsel (if oth	er than Bond	l Counsel)		N/A
Γ	Firm	City of Houston				
	Name:		he City Attori	ney		
	Contact:	1				
L	Address:	900 Bagb	y, 4th Floor,	Houston, TX 77002		
	Phone:	(832) 393	-6440			
Γ	Fax:	(832) 393	-6259			
	Email:	Gary.Woo	d@houstont			
f)	Any other	r consultant	representing	the Applicant befor	e the Board	N/A □
L	Name:					
L	Contact:					
	Address:					
	Phone:					
	Fax:					
	Email:					
a) b) c) d) e) f) g) h) O th	ther Fundir e project, inceived fron	PROGRAD Drinking Notes Wastate Par Rural Wastate Wastate Wastate Wastate Wastate Wastate Wastate Wastate Polymon Sources: ncluding Apmany other	Mater State Fater State Reater Developer ticipation ter Assistance Implementally Distress ease explain Provide a light plicant's location funding ager available. Assistance Assistance Assistance funding ager available.	which programs? Conversely Revolving Fund (DW volving Fund (CWS) ment Fund (DFund) See Fund (RWAF) Station Fund for Texal ed Areas Program (Section in the section of the section funding is contribution, if any for this project of the section is and the section of the section is and the section of the section is and the section is an area of the section is a section in the section in the section is a section in the section is a section in the section in the section is a section in the section in the section is a section in the section in the section in the section is a section in the section in the section is a section in the section in the section in the section is a section in the section in th	AMOUNT REQUE (SRF) \$ _ S _ S _ as (SWIFT) \$ 1 EDAP) \$ _ ang source(s) being used or commitments appeared of this part of this par	utilized to complete oplied for and/or project. Provide
	Funding Source		e of Funds an/Grant)	Amount (\$)	Date Applied for Funding	Funding Secured Date
	Local			\$3,978,000		
	Contributi	on				
	Total					

7.

8.

9.

10.

Funding from All Sources		\$3,978,000		
Comments:				
Applicant is re	questing funding for	r which phase(s)? Ch	eck all that apply.	
\boxtimes	questing funding for Planning Acquisition	r which phase(s)? Ch	eck all that apply.	
Applicant is re	Planning	r which phase(s)? Ch	eck all that apply.	
	Planning Acquisition Design Construction questing funding to	r which phase(s)? Ch refinance existing de th a copy of the docur	ot?	ht to be refinanced

Part B: Legal Information

13. Cite the legal authority under which the Applicant can issue the proposed debt including the authority to make a proposed pledge of revenues. For a proposed revenue issue secured by a subordinate lien on combined utility system revenues. No debt is now outstanding under the Previous Bond Ordinance, though the Master Agreement dated December 7, 2000, between the City and the TWDB for the Allen's Creek Project, pursuant to which payments are scheduled through 2036, is outstanding. The proposed bonds will also be subordinate to existing debt under the City's current Master Ordinance, and will be payable from Net Revenues under the Ordinance on deposit in the City's General Purpose Fund. The pledge securing the bonds will be on a parity with parity Obligations (including the payments under the Project Contract to secure the Coastal Water Authority's Master Agreements with the TWDB).

21.	Is the applica ⊠	nt propo Yes	If yes, attach copies of the most recent resolution/ordinance(s) authorizing any outstanding parity debt. This is essential to insure outstanding bond covenants are consistent with covenants that might be required for TWDB financing. Attached resolution/ordinance(s)
		No	
22.	Does the app	licant po Yes No N/A	ossess a Certificate of Convenience and Necessity (CCN)? If yes, attach a copy of the CCN and service area map showing the areas the applicant is allowed to provide water or wastewater services. Attached CCN and service area map If no, indicate the status of the CCN.
23.		al Qualit	en the subject of any enforcement action by the Texas Commission on ty (TCEQ), the Environmental Protection Agency (EPA), or any other entity years? If yes, attach a brief description of every enforcement action within the past three years and action(s) to address requirements. Attached
24.	Are any facilit municipality o ⊠		e constructed or the area to be served within the service are of a public utility? If yes, has the applicant obtained an affidavit stating that the utility does not object to the construction and operation of the services and facilities in its service area? If yes, attach a copy of the affidavit. Attached affidavit Agreements Attached If no, provide an explanation as to why not.
		No	
25.	The WCP car	nnot be cant ad	Lested is more than \$500,000 a Water Conservation Plan (WCP) is required. more than <u>FIVE</u> years old and must have been adopted by the applicant. opted a Board-approved WCP? (Check one and attach requested Enter date of Applicant's WCP adoption: <u>September 10, 2014</u> If no, attach a copy of a draft Water Conservation Plan and Drought Contingency Plan prepared in accordance with the TWDB WCP Checklist (http://www.twdb.state.tx.us/financial/instructions/doc/TWDB-1968.pdf) Attached Draft WCP and Drought Contingency Plan Attached Utility Profile TWDB-1965
		N/A	http://www.twdb.state.tx.us/financial/instructions/doc/TWDB-1965.pdf (Request is \$500,000 or less per Water Code §§ 15.106(c), 17.125(c), 17.277(c), and 17.857(c))

Note: If the applicant will utilize the project financed by the TWDB to furnish services to another entity that in turn will furnish services to the ultimate consumer, the requirements for the WCP may be met through contractual agreements between the applicant and the other entity providing for establishment of a water conservation plan. The provision requiring a WCP shall be included in the contract at the earliest of: the original execution, renewal or substantial amendment of that contract, or by other appropriate measures.

26.	Does the app	ilicant pro	ovide retail wa	ter services?
		1	•	e applicant already submitted to the TWDB the annual water groundwater and surface water for the last <u>THREE</u> years? If no, please download survey forms and attach a copy of the completed water use surveys to the application.
				http://www.twdb.texas.gov/waterplanning/waterusesurvey/index.asp Attached Water Use Survey
		No		
27.	Is the applica	Yes	•	that provides potable water? a applicant already submitted the most recently required water he TWDB? If no, and if applying for a water supply project, please complete the online TWDB Water Audit worksheet found at http://www.twdb.texas.gov/conservation/resources/waterloss-resources.asp and attach a copy to the application. Attached TWDB Water Audit worksheet
28.	Does the Ap	plicant pr	ovide wastew	ater services?
	Ħ	Nο		

Part C: Financial Information

Regional or wholesale providers, complete questions 29-31. Retail providers, complete questions 32-34.

29. List top TEN customers of the system by annual usage in gallons and percentage of total usage, including whether any are in bankruptcy.

Customer Name	Annual Usage (gal)	Percent of Usage	Bankruptcy (Y/N)

Comments: N/A

30. List the top TEN customers of the system by gross revenues and percent of total revenues, including whether any are in bankruptcy

Customer Name	Annual Revenue(\$)	Percent of Revenue	Bankruptcy (Y/N)
	·		

31. Provide a summary of the wholesale contracts with customers

Contract Type	Minimum annual amount	Usage fee per 1,000 gallons	Annual Operations and Maintenance	Annual Capital Costs	Annual Debt Service	Other

32. List top <u>TEN</u> customers of the water and/or wastewater system by annual revenue with corresponding usage and percentage of total use, including whether any are in bankruptcy.

a. WATER

G. WYTTEN			
Customer Name	Annual Usage (gal)	Percent of Total Water Revenue	Bankruptcy (Y/N)
			:
			,
	İ	i l	
	İ	1	
		1	
L			

Comments: See attachment

b. WASTEWATER

Customer Name	Annual Usage	Percent of Total	Bankruptcy
	(gal)	Wastewater Revenue	(Y/N)

- 1		
-		

1		
1		
1		
]		
<u> </u>		
	i' l	
<u> </u>		
]		

Comments: See attachment

33. Current Average Residential Usage and Rate Information

	Date of Last Rate Increase	Avg. Monthly Usage	Avg. Monthly Bill	Avg. Monthly Increase Per	Projected Monthly Increase Necessary
Service		(gallons)	(\$)	Customer(\$)	(\$)
Water	04/01/17	5.31	30.49	1.04	0.88
Wastewater	04/01/17	5.17	34.97	1.19	1.01

34. Provide the number of customers for each of the past five years.

Year	Number of
	Customers
20	
20	
20	
20	
20	

Comments: See attachment

All applicants complete questions 35-51 of the financial section, as applicable.

35.	Disclose all issues that may affect the project or the applicant's ability to issue and/or repay debt
	(such as anticipated lawsuits, judgments, bankruptcies, major customer closings, etc.).
	<u>None</u>

36.	Has the applicant ever defaulted on any debt? Yes If yes, disclose all circumstances surrounding prior default(s).
	No No
37.	Does the applicant have taxing authority?
	□ No

38. Provide the last five-years of data showing total taxable assessed valuation including net ad valorem taxes levied, corresponding tax rate (detailing debt service and general purposes), and tax collection rate.

Fiscal	NI-4 T	T	0	Interest &	Tax	Percentage	Percentage
Year	Net Taxable	Tax	General	Sinking	Levy	Current	Total
Ending	Assessed Value (\$)	Rate	Fund	Fund	\$	Collections	Collections
20							
20							
20							
20							
20							

Comments: See attachment

39.	Attach the last five-years of tax assessed values delineated by Classification (Residential,
	Commercial and Industrial). If applicant does not have taxing authority, provide the
	assessed values of the county.

⊠ 20′	17 attached
⊠ 20′	16 attached
	15 attached
⊠ 20′	14 attached
<u>⊠</u> 20′	13 attached

- 40. Attach the direct and overlapping tax rate table:
 - Attached tax rate table
- 41. Provide the current top <u>TEN</u> taxpayers showing percentage of ownership to total assessed valuation. State if any are in bankruptcy and explain anticipated prospective impacts in the Comments blank, below. If any of these have changed in the past three years, please provide information on the changes to the top ten.

Taxpayer Name	Assessed Value	Percent of Total	Bankruptcy (Y/N)

Comments: See attachment

42. Provide the maximum tax rate permitted by law per \$100 of property value. \$0.58642

43.	Do		ant collect sales tax? rovide the sales tax collec	ction history for the past five years.
		Fiscal Year Ending	Total Collections	
		20	Total Concollone	
	2	20		
	1	20		
		20		
	1	20		
Comr	□ nents	No s: <u>See attach</u> ı	<u>nent</u>	
44.	Ind	licate the tax Tax-Exe Taxable	status of the proposed loa mpt	an?
45.		Shedule requipment of the System reversity of the System reversity of the System of th	ested, including multi-pl nues are anticipated to be e following information for rojected gross revenues perating and maintenance utstanding and proposed	e used to repay the proposed debt. Attach a proforma each year the debt is outstanding:
	b.	the following o the	information for each year utstanding and proposed he tax rate necessary to re	epay the proposed debt. Attach a pro forma indicating rethe debt is outstanding: debt service requirements epay current and proposed debt paid from taxes rate and tax base used to prepare the schedule
	C.	pro forma in pr	dicating the following infor ojected gross revenues, o railable for debt service itstanding and proposed d e tax rate necessary to pa	taxes to be used to repay the proposed debt. Attach a rmation for each year the debt is outstanding: operating and maintenance expenditures, net revenues debt service requirements ay the current and proposed debt rate and tax base used to prepare the schedule
	d.	information texpenditures	or each year the debt is o	repay the proposed debt. Attach a pro forma with outstanding, which includes projected revenues, annua ements, and revenues available for debt service.

40.	prior ye	ears and	d an un incial st	audited year-to-date sta	atement. Unaudited year-to-date statement mus ceeding the latest six months. ent.	
47.	the pre	ceding	fiscal ye I audit v Attach Attach	ear prepared by a certif was more than 6 month: led Annual Audit led Management Lette	cial statements, including the management letter fied public accountant or firm of accountants and as ago, then, provide interim financial information er im financial information	l, if
48.	Does t	Yes, G Yes, R	eneral (evenue	obligation debt	bt? (Check all that apply)	
49.	Obliga require	tion or F ements.	Revenu	e) and present a consol iny authorized but uniss n Debt:	identify the debt holder. Segregate by type (Gen blidated schedule for each, showing total annual sued debt. The schedule should also identify the debt	iera
	b.	Reven	ue: Yes ⊠ No	Attached schedule. The holder.	The schedule should also identify the debt	
	C.	Author ⊠	ized by Yes ⊠ No	Unissued Debt: Attached schedule. I holder.	The schedule should also identify the debt	

50.	List the ten la	argest employe		ant's service ar			
		N	ame		Numb	er of Emplo	yees
				·			
						······································	
51.	·	example, any al current bond ra	•		oase, employers	etc.) <u>See at</u>	achment
		Standard & Poor's	Date Received	Moody's	Date Received	Fitch	Date Received
	G.O.	AA	3/21/2016	Aa3	11/29/2017	AA	11/21/201
	Revenue	AA	12/15/2016	Aa2	4/7/2017	AA	2/1/2016
52.	ls the projec from another ⊠ Yes.	entity? If yes, the ap or other docu	plicant must at mentation esta ements provide	tach, at a minim	or receive water num, the propos rvice relationship closing.	ed agreemer	nt, contract,
Regio	onal Water Autl		rris County Reg	gional Water Au	of the contracts uthority, Central		

Part D: Project Information

53. Description of Project Need (for example, is the project needed to address a current compliance issue, avoid potential compliance issues, extend service, expand capacity, etc.):

The need for surface water treatment facility and transmission pipeline infrastructure improvements follows the passage of rules and regulations issued by the Harris-Galveston Subsidence District to decrease groundwater usage and consequently increase surface water usage in the district.

Groundwater subsidence in the greater Houston area coupled with increasing water demands requires that the City of Houston and the following regional partners expand the existing Northeast Water Purification Plant (NEWPP).

- North Harris County Regional Water Authority
- West Harris County Regional Water Authority
- Central Harris County Regional Water Authority
- North Fort Bend Water Authority

The plant expansion and new transmission pipeline will provide the Project participants with an additional surface water supply to help achieve the regulatory requirements of the Harris-Galveston Subsidence District and the Fort Bend Subsidence District that restrict groundwater usage.

54. Description of Project, including a bulleted list of project elements/components, and alternatives considered (including existing facilities):

The water line starts at the City of Houston's Northeast Water Purification Plant and runs west past I-45. It then turns south to the City's Acres Homes Pump Station. Several interconnects and take points are planned for the City and Harris County agencies. The entire proposed water line is a total of approximately 121,100 LF and consists of the following segments:

- 1,650 LF of 120-inch water line
- 76,150 LF of 108-inch water line
- 3,400 LF of 54-inch water line
- 37,600 LF of 66-inch water line
- 1,800 LF of 24-inch WL

Three corridors were initially considered for the water line. The final alignment was selected based primarily on cost, availability of right-of-way and undeveloped land for easements, limitation of impact to the community, number of critical crossings, condition of roadways, and constructability.

Several hydraulic scenarios were also considered. Different operating pressures, water line diameters, and number of water lines were analyzed before selecting the final line size, configuration, and operating pressure. Operating pressures up to 150-psi, water line sizes up to 156-inches diameter, and single / dual pipeline configurations were analyzed based on material cost, pumping cost, right-of-way cost, and operational considerations. The final configuration chosen as listed above consists of a single pipeline operated at no greater than 100 psi.

	A	A complete preliminary engineering feasibility data must include: a. A description and purpose of the project, including existing facilities. • Note: CWSRF and DWSRF must address issues scored in Intended Use F submittal Attached b. If project is for Construction only, then attach the appropriate Engineering Feasibility Report: a) Water (TWDB-0555 at http://www.twdb.texas.gov/financial/instructions/doc/TWDB-0555.pdf) Attached							
	b) <u>Wastewater</u> (TWDB-0556 at http://www.twdb.texas.gov/financial/instructions/doc/TWDB-0556.pdf) Attached								
		 DWSRF applicants must complete a Projected Draw Schedule (TWDB-1202 at http://www.twdb.texas.gov/financial/instructions/doc/TWDB-1202.xls) 							
55.	W	Water Made Available (For projects requesting a construction component):							
	a.	New supply 358,447 (acre-feet/year) \$449M (\$) capital cost							
		 The increase in the total annual volume of water supply that will be made available to the recipient(s) by the proposed project. Water Plan project examples: new groundwater wells, reservoir development, pipelines to sources. 							
	b.	New Conservation savings N/A (acre-feet/year) N/A (\$) capital cost							
		 Annual volume of anticipated water savings resulting from implementation of the proposed conservation project including water loss) and other conservation activities, 							
		 Water Plan project examples: municipal conservation, advanced Water Conservation, on- farm conservation, brush control, irrigation conservation. 							
	C.	New Reuse supply <u>N/A</u> (acre-feet/year) <u>N/A</u> (\$) capital cost							
		 Increase in the annual volume of (direct or indirect) reuse water supply that will be made available to the recipient(s) by the proposed project. Water Plan project examples: direct reuse, non-potable reuse, recycled water programs. 							
	d.	Maintenance of Current Supply N/A (acre-feet/year) N/A (\$) capital cost							
		 Volume of recipients' current supplies that will be maintained by implementing the proposed project Water Plan project examples: None. Not a water plan project. (Examples of these type 							
		projects: treatment rehabilitation, system storage facilities, system upgrades).							

56. Project Location:

City of Houston and Harris County

Attach a map of the service area and drawings as necessary to locate and describe the project. The map should show the project footprint and major project components.

57. Attach the Census tract numbers in which the applicant's service area is within. The Census tracts within your area may be found at:

http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

Please follow these steps:

- Select Advanced Search.
- Select the Geographies button located below Topics (left side of page).
- On the top of the window select the Name tab.
- In the text box, type "All Census Tracts within___" (Fill in the blank with the name of a County Subdivision or a Place.) Select "Go".
- If your town is a <u>County Subdivision</u>, select the geography labeled "All Census Tracts (or parts) within City, County, State" from the Geography Results. If your town is a place select the geography labeled "All Census Tracts (or parts) full-orpartially within City, State" from the Geography Results.
- Close the Geographies Search window.
- Use the Topics on the left side of the page to further refine your search or to select a table(s) from your search results.

- 58. Project Schedule:
 - a) Requested loan closing date.

November 2018

b) Estimated date to submit environmental planning documents.

May 2011 (ESA Phase I Submitted)

c) Estimated date to submit engineering planning documents. Phased Submission beginning September 2015

d) Estimated date for completion of design.

September 2025

e) Estimated Construction start date for first contract. May 2018

f) Estimated Construction end date for last contract.

March 2028

59. **Attach** a copy of current and future populations and projected water use or wastewater flows. Include entities to be served.

60.	Attach the most current itemized project cost estimate (include all costs and funding sources). Utilize the budget format provided (TWDB-1201 at http://www.twdb.texas.gov/financial/instructions/ . If applying for pre-construction costs only (i.e., P, A, D) then itemize only the relevant portions in the attached budget template Attached							
61.	Attach	Wastewater	ate Project Informatior r: Attached a complet http://www.twdb.texas	ed Wastewater Proje		n		
			iched a completed Wa http://www.twdb.texas					
62.	If the project is for Construction only, wastewater projects that involve the construction of a new plant or the expansion of an existing plant and/or associated facilities, attach evidence that an application for a new Texas Pollution Discharge Elimination System Permit or amendment to an existing permit related to the proposed project has been filed with the Texas Commission on Environmental Quality (TCEQ). Final permit authorization must be obtained from the TCEQ before funds can be released for construction activities. Attached No. Provide explanation: N/A							
63. If this project will result in: (a) an increase by the applicant in the use of groundwater, (b) new water well, or (c) an increase by the applicant in use of surface water, then the appli must demonstrate that it has acquired – by contract, ownership or lease – the necessary rights, groundwater permits, and/or surface water rights sufficient for the project before full be released for construction.								
	 a) Does the applicant currently own all the property rights, groundwater permits and surface water rights needed for this project? ☑ Yes If yes, please attach the completed, appropriate form. 1. WRD 208A (http://www.twdb.texas.gov/financial/instructions/index.asp) (Surface Water) ☑ Attached 2. WRD 208B (http://www.twdb.texas.gov/financial/instructions/index.asp) (Groundwater) ☐ Attached 							
		No N/A						
	b) If all property rights, groundwater permits, and surface water rights, needed for this project have not yet been acquired, identify the rights and/or permits that will need to be acquired and provide the anticipated date by which the applicant expects to have acquired such rights and/or permits.							
		Type of Permit Water Right	Entity from which the permit or right must be acquired	Acquired by lease or full ownership	Expected acquisition date	Permit / Water Right ID No.		
	<u> </u>							

Pleas	e label each attach	ment with the number	of the pertinent applica	tion section (i.e	. "Part D5")				
	c) List any major permits not identified elsewhere that are necessary for completion of project. Also, list any more necessary minor permits that may involve particular difficulty due to the nature of the proposed project.								
	Pe	ermit	Issuing Entity		Permit Acquired (Y/N)				
	No. If the second of Land or Easement	Attached f no, fill out the table less acquired, provide the he land or easements, acquisition. Entity from which the permit or right	pov/financial/instruction below and describe the anticipated date by wand indicate if funding Acquired by lease	e land or easem hich the applica from TWDB is Expected acquisition	to be used for the To Be Funded by				
	Permit SEE	must be acquired	or full ownership	date	TWDB (Yes/No)				
	ATTACHED								
65.	Impact (FONSI) issued for this p ☐ Yes ☐ Attach a ☐ No	Record of Decision (Foroject? copy of the finding.	termination of No Effect ROD), or any other env	rironmental dete	ermination been				
66.			Categorical Exclusion (rehabilitation or the fun						

TWDB-0148 Version: 6-2-15

Please label each attachment with the number of the pertinent application section (i.e. "Part D5")

67.	Are there potentially adverse environmental or social impacts that may require mitigate	ation or
	extensive regulatory agency or public coordination (e.g. known impacts to properties	eligible for
	listing on the National Register of Historic Places; potentially significant public contro	versy; need
	for an individual permit from the U.S. Army Corps of Engineers)?	
	⊠ Yes	
	If yes, attach additional information	
	No	

S-000900-0126-4 requires a stormwater retention basin to mitigate the placement of fill and the addition of impervious area in the flood zone. The transmission line projects from NEWPP to IH 45 are in the process of getting the USACE permits NWP12. The transmission line projects from IH 45 going south to Acres Homes may require an individual USACE permit. There is an overlapping landscaping easement within an existing City waterline easement in which some extensive improvements have been made without approval from the City, as was required in the easement documents. This may qualify as a social impact or public coordination.

Part E: State Water Implementation Fund for Texas (SWIFT) Applicants Only:

68.		the type of SWIFT funding (If more to ount of funding for each): Deferred Low Interest Loan Board Participation	han one funding option is being requested indicate \$ \$15,905,000 \$	
69.	dates f	ulti-year funding request or phased co for each loan requested. ached Cone-Time commitment	mmitments, provide a schedule reflecting the closing	
70.	Notice to SWIFT Applicants: Texas Water Code Sec. 15.435(h) requires all recipients of financial assistance from the SWIFT to acknowledge any applicable legal obligations in federal law, related to contracting with disadvantaged business enterprises, and state law, related to contracting with historically underutilized businesses. Checking the boxes below serves as this acknowledgement.			
	As an applicant for financial assistance from SWIFT, I acknowledge that this project must comply with any applicable legal obligations in federal law related to contracting with disadvantaged business enterprises.			
	Texas	with applicable legal obligations in s	nce from SWIFT, I acknowledge that this project mustate law (Texas Government Code Chapter 2161 and ochapter B) related to contracting with historically	
71.	a. Prop ⊠	e drafts of the following documents: bosed Bond Ordinance Attached vate Placement Memorandum Attached		

Part F: Economically Distressed Programs (EDAP) Applicants Only:

In accordance with TWDB Rules (31 TAC Chapter 363), an application for EDAP will **not** be considered until the County has adopted and is enforcing the Model Subdivision Rules (MSRs) Texas Water Code § 16.343. If the proposed project is within a municipality or its extraterritorial jurisdiction (ETJ), or if the applicant is a municipality, the municipality must also have adopted and be enforcing MSRs.

72.	Describe procedures for collecting monthly customer bills (include procedures for collection of delinquent accounts)
73.	Is financing being requested for a <u>wastewater</u> project? Yes If yes, does the applicant have the required resolution/ordinance establishing a mandatory hookup policy? Yes. If yes, attach a copy of the resolution/ordinance. Attached No. If no, explain
	☐ No
74.	Required documentation for the project area for Preliminary EDAP Eligibility (31 TAC Chapter
	Attached documentation of inadequacy of water and/or wastewater services. Attached documentation regarding the financial resources of the residential users in the EDAP area. Census data or documentation regarding median household income should be provided. Attached documentation demonstrating existence of a residence in the project area prior to June 1, 2005. This could include tax records of residence, dated aerial maps, or, other documentation demonstrating existence of a residence.
75.	Has the Department of State Health Services issued a determination stating a public health nuisance exists in the project area? Yes If yes, attach a copy of the determination. Attached
	No If no determination exists, attach documentation demonstrating a public health nuisance exists in the project area. (<i>Photographs may be submitted, but they must be labeled with location and date when taken. If the soil types are mentioned in the project area as an issue, include soil profile maps) This documentation will be used by TWDB staff to request a determination from the Department of State Health Services Attached</i>
76.	Is this project providing new service? Yes If yes, attach plats of the affected subdivisions. Attached No
77.	Attach an EDAP Facility Engineering Plan/Scope of Services report that complies with the requirements of WRD-023A. http://www.twdb.texas.gov/financial/instructions/index.asp Attached

Part G: CWSRF/DWSRF Applicants Only

Only applicants applying for funding from the CWSRF and DWSRF Programs must complete this section.

Pursuant to Federal Funding Accountability and Transparency Act (FFATA) the applicant is required to obtain a DUNS number that will represent a universal identifier for all federal funding assistance. DUNS numbers can be obtained from Dun and Bradstreet at http://fedgov.dnb.com/webform/

78.	Applicant's Data Universal Number System (DUNS) Number: DUNS			
regis which		ansparency Act (FFATA) the applicant is required to) and maintain current registration at all times during consideration by the Board. Register at:		
79.	The applicant has registered and will mainta a federal subaward is active or under consid Yes No	ain current SAM registration at all times during which deration by the Board.		
80.	 1. Did applicant receive over 80% of their revenue from Federal Awards last year? Yes No 2. Did applicant receive over \$25 million in Federal Awards last year? Yes No 3. Public does not have access to executive compensation information via SEC or IRS reports? Yes No 			
	compensation of the five most highly compens	n 3 above, applicant is required to disclose the name ated officers.		
	Officer's Name	Officer's Compensation (\$)		
	Complete form WRD 213 (http://www.twdb.texa Regarding Lobbying Attached Yes No	as.gov/financial/instructions/index.asp) - Certification		

Please label each attachment with the number of the pertinent application section (i.e. "Part D5") If applying for CWSRF Equivalency or DWSRF, attach the Certification Regarding Debarment, 83. Suspension and Other Responsibility. SRF-404 (http://www.twdb.texas.gov/financial/instructions/doc/SRF-404.pdf) Yes Attached No N/A If applying for CWSRF Equivalency or DWSRF, attach the Assurances – Construction Programs. 84. EPA-424D (http://www.twdb.texas.gov/financial/doc/EPA-424D.pdf) Yes Attached No N/A The applicant must comply with the Davis-Bacon Act regarding prevailing wage rates. The 85. applicant acknowledges that they are aware of, and will abide by, the Davis-Bacon Act requirements. Yes No Further information on the Davis-Bacon requirement is available through the TWDB Guidance document. DB-0156 (http://www.twdb.texas.gov/financial/instructions/index.asp) All project costs funded by the TWDB through CWSRF Equivalency or DWSRF must comply with the federal Disadvantaged Business Enterprise (DBE) program rules and requirements. The federal DBE program requires a good faith effort to contract with DBE's for all procurements including: professional and non-professional consulting services, equipment, supplies and construction to be funded by federal equivalency dollars. Guidance and forms are found at: TWDB-0210 (http://www.twdb.texas.gov/financial/instructions/doc/TWDB-0210.pdf) At a minimum, you must complete and attach the Applicant Affirmative Steps Certification and 86. Goals. This form is required to obtain a financial assistance commitment. TWDB-0215 (http://www.twdb.texas.gov/financial/instructions/doc/TWDB-0215.pdf) Attached Yes

If you have already solicited contractors, complete and attach the Affirmative Steps Solicitation			
Report. This form is required prior to loan closing and release of any funds; therefore, if this			
guestion is not applicable at this time, select N/A.			
TWDB-216 (http://www.twdb.texas.gov/financial/instructions/doc/TWDB-0216.pdf)			
Attached Yes			
□ No			
□ N/A			

No

87.

88.	Summary. This form must be submitted for review prior to loan closing and release of funds. This form is required prior to loan closing and release of any funds; therefore, if this question is not applicable at this time, select N/A. TWDB-0373 (http://www.twdb.texas.gov/financial/doc/TWDB-0373.pdf) Attached Yes No
89.	All Contractors that have been awarded will need to complete and attach the Prime Contractor Affirmative Steps Certification and Goals This form is required prior to loan closing and release of any funds; therefore, if this question is not applicable at this time, select N/A. TWDB-217 (http://www.twdb.texas.gov/financial/instructions/doc/TWDB-0217.pdf) Attached Yes No N/A
90.	All CWSRF applicants must be a Designated Management Agency (DMA) for wastewater collection and treatment. Please complete and attach DMA resolutions. WRD-210 (http://www.twdb.texas.gov/financial/doc/WRD-210.pdf) is an example of this type of resolution. Attached N/A

Part H: Documentation of "Green" Projects and Project Components CWSRF and DWSRF Applicants Only

All SRF applicants must complete this section if green benefits are all or part of the project (<u>more than an incidental benefit</u>). Project is defined as the entire project or a stand-alone component of the project. This section is required so that the TWDB may determine whether the project qualifies as "green" pursuant to Environmental Protection Agency (EPA) Guidance.

A project (or project component) is "green" if the primary purpose qualifies under EPA Guidance as one of the following:

a. Green Infrastructure,

Attached

- b. Water Efficiency-related,
- c. Energy Efficiency-related, or
- d. Environmentally Innovative.

You must use the Green Project Reserve guidance to complete this section. Current guidance may be found at: Green Project Reserve: Guidance for determining project eligibility TWDB-0161 (http://www.twdb.texas.gov/financial/instructions/doc/TWDB-0161.pdf) 91. Does your project or a component of your project qualify as Green, per EPA guidance? Yes No If Yes, Please complete the remainder of Section G. 92. Type of Green Project ☐ Water ☐ Environmentally ☐ Energy Green Innovative Efficiency Efficiency Infrastructure 93. The correct worksheets must be completed. **Green Project Reserve: CWSRF Green Project Worksheets** TWDB-0162 (http://www.twdb.texas.gov/financial/instructions/doc/TWDB-0162.pdf) Attached Yes No N/A

TWDB-0163 (http://www.twdb.texas.gov/financial/instructions/doc/TWDB-0163.pdf)

Green Project Reserve: DWSRF Green Project Worksheets

Yes No N/A

TWDB will make the final determination whether your project (or project component) meets federal criteria as "green". You may be required to submit a **business case**, **utilizing the Green guidance**

Part I: Summary of attachments to application

Following is a list of the documents that may be necessary in order to process this application. While not all of the listed information below may be required for all projects, an applicant should review the application carefully because incomplete applications will not be processed until all of this information has been provided. In addition, please make sure your entity system name appears on every attachment. Label each attachment with the number of the pertinent application section (i.e. "Part B5").

Check list for your convenience

<i>Part A</i> ⊠No. 6a&e ⊠No. 6b ⊠No. 6b ⊠No. 6c ⊠No. 6c ⊠No. 6c ⊠No. 6d ∏No. 12	General Information Engineer and Legal Counsel Statement Bond Counsel Contract Statement Bond Counsel Engagement Letter Co-Bond Counsel Opinion Conflict of interest disclosure letter Draft or executed consulting contracts (financial advisor) Draft or executed consulting contracts (auditor) Existing security document for refinancing
Part B ⊠No. 17 ⊠No. 18 ⊠No. 19 ⊡No. 20	Legal Resolution (TWDB-0201A) Application Affidavit (TWDB-0201) Certificate of Secretary (TWDB-201B) Water Supply Corporations Articles of Incorporation Certificate of incorporation from the Texas Secretary of State
⊠No. 21 ⊠No. 22 □No. 23 ⊠No. 24 □No. 25 □No. 26 □No. 27	□ By-laws and any amendments □ Certificate of status from the Texas Secretary of State □ Certificate of account status from Texas Comptroller Resolution/ordinance authorizing the issuance of parity debt Certificate of Convenience & Necessity (Service Area Map) Enforcement Actions Affidavit of No Objection (Agreements) Two copies of the Water Conservation Plan (TWDB-1968 and TWDB-1965) Water use surveys http://www.twdb.texas.gov/waterplanning/waterusesurvey/index.asp Water Loss Audit
Part C No. 32a No. 32b No. 34 No. 38 No. 39 No. 40 No. 41 No. 43 No. 45 No. 46 No. 47 No. 49 No. 50 No. 50	Financial Top ten customers of the water system. Top ten customers of the wastewater system. The number of water and wastewater customers for the past five years. Last five years of ad valorem tax levies and collections Assessed Values by Classifications Direct and Overlapping Tax Table Current top ten taxpayers Last five years of sales tax collection Proforma for each year of debt outstanding Five year comparative system operating statement. Annual audit and management letter Outstanding debt schedule Current ten largest employers Service provider contracts

<i>Part D</i> □No. 54a □No. 54b	Project Information Preliminary Engineering Feasibility Data (PEFD) Engineering Feasibility Report Water (TWDB-0555) Wastewater (TWDB-0556)
□No. 54c ☑No. 56 ☑No. 57 ☑No. 59 ☑No. 60 ☑No. 61	Project Draw Schedule (TWDB-1202) Project Map Census Tract(s) Current and future populations and projected water use or wastewater flows Project Cost Estimate Budget (TWDB-1201) Wastewater Project Information Form (WRD-253a) Water Project Information Form (WRD-253d)
□No. 62 ⊠No. 63a	Texas Pollution Discharge Elimination System Permit If applicant has property rights and permits a. WRD-208A (Surface Water) b. WRD-208B (Groundwater)
□No. 63c □No. 64 ☑No. 64 ☑No. 65	Additional Permits Site certificate, evidencing land ownership for the project. (ED-101) Table describe the land or easements that will need to be acquired Categorical Exclusion (CE), Finding of No Significant Impact (FONSI), Record of Decision or any other supporting document Social or environmental issues (See application form)
<i>Part E</i> ☐ No. 69 ☑ No. 71a ☑ No. 71b	State Water Implementation Fund for Texas Multi-year/phased commitment schedule Draft Bond Ordinance Private Placement Memorandum
<i>Part F</i> □No. 73 □No. 74	Economically Distressed Areas Program Resolution/ordinance establishing a mandatory hookup policy EDAP applicants Inadequacy documentation Financial resources documentation Existence of residences prior to 06/01/2005
□No. 75 □No. 76 □No. 77	Public health nuisance Plats EDAP Planning Phase – Facility Engineering Plan/Scope of Services (WRD-023A)
<i>Part G</i> □No. 82 □No. 83	CWSRF/DWSRF Applicants Only Lobbying Activities (WRD-213) Certification Regarding Debarment, Suspension and Other Responsibility Requirements. (SRF-404)
☐No. 84 ☐No. 86 ☐No. 87 ☐No .88 ☐No .89 ☐No .90	Assurances – Construction Programs (EPA-424D) Disadvantaged Business Requirements Guidance (TWDB-0210) Affirmative Steps Certification and Goals (TWDB-0215) Affirmative Steps Solicitation Report (TWDB-216) Loan/ Grant Participation Summary (TWDB-0373) Prime Contractor Affirmative Steps Certification and Goals (TWDB-217) Designated Management Agency (WRD-210)
<i>Part H</i> ☐No. 93	Green Projects Guidance (TWDB-0161) CWSRF Green Project Worksheets (TWDB-0162) DWSRF Green Project Worksheets (TWDB-0163)

Part J: Guidance and Forms

Part A General Information

CWSRF - 31 TAC 375 DWSRF - 31 TAC 371

EDAP and SWIFT - 31 TAC 363

For more information visit, http://www.twdb.texas.gov/about/rules/index.asp.

Part D Project Information

State Programs - 31 TAC 363

Drinking Water State Revolving Fund - 31 TAC 371

Clean Water State Revolving Fund / Equivalency - 31 TAC 375
Clean Water State Revolving Fund / Non-Equivalency - 31 TAC 375

Guidelines for Environmental Assessment, Clean Water Non-Equivalency (ED-001A)

Clean Water EID Instructions (SRF-099)

Guidelines for Environmental Assessment, State Participation, DFund, RWAF and WIF,

(ED-001B)

Guidelines for Environmental Assessment, EDAP (ED-001C)

Drinking Water EID Instructions (DW-001)

Part H Green Projects and Project Components

Green Project Reserve: Guidance for determining project eligibility

(TWDB-0161)

Engineer and Legal Counsel Statement

The Engineer and Legal Counsel for Part A6a&e are City of Houston employees. There is no contract for consultant services.

Bond Counsel Contract Statement

City of Houston - Combined Utility System does not have a Bond Counsel Contract. City Legal assigns a law firm for each bond issue upon the closing date.

NORTON ROSE FULBRIGHT

April ___, 2018

Mr. Ronald C. Lewis City of Houston City Hall Annex 900 Bagby Houston, TX 77002 Norton Rose Fulbright US LLP 1301 McKinney, Suite 5100 Houston, Texas 77010-3095 United States

Tel +1 713 651 5151 Fax +1 713 651 5246 nortonrosefulbright.com

Re: City of Houston, Texas Combined Utility System Subordinate Lien Revenue Bonds, Series 2018B and Series 2018E (together, the "Bonds")

Dear Mr. Lewis:

We are pleased to submit to you a proposed Engagement Letter for Norton Rose Fulbright US LLP ("Bond Counsel") to serve as Bond Counsel with respect to the captioned Bonds. When approved by you (the "City Attorney"), this letter will become effective and will evidence an agreement between the City and Bond Counsel, as further described herein, subject to all applicable provisions of the Charter and Code of Ordinances of the City.

BOND COUNSEL SERVICES

As Bond Counsel, we will assist the City's officials, staff and the City's Financial Advisor, in connection with the issuance, sale, and delivery of the Bonds (Bond Counsel Services). Basic Services hereunder include the following:

- (1) Preparation of one or more ordinances authorizing issuance of the Bonds and all other instruments which comprise the transcript of legal proceedings pertaining to the authorization, issuance, and sale of the Bonds, as well as legal research, document preparation, and consultation with respect to related municipal finance legal issues;
- (2) Consultation with the Texas Water Development Board concerning terms and delivery;
- (3) Attendance at meetings called by the Mayor, City Controller, City Council, and various members of City staff, to the extent required or requested by the City Attorney, to discuss sale of the Bonds or other municipal finance related legal issues:
- (4) Preparation and submission of transcripts of legal proceedings pertaining to the issuance of the Bonds to the Attorney General of Texas to obtain an approving opinion;
- (5) Supervision of preparation of the initial Bonds and the delivery thereof to the purchasers:
- (6) At the closing of the sale of the Bonds, delivery of an approving opinion, based

51078940.4

- on facts and law existing as of its date, as to the due authorization of the issuance, execution, and delivery of the Bonds, the validity of the Bonds, and the tax exempt status of the interest thereon;
- (7) Prior to and in connection with the closing of the Bonds, giving advice to the City to enable appropriate officials to comply with the arbitrage requirements of the Internal Revenue Code of 1986 as they affect the Bonds, including yield restrictions and arbitrage rebate requirements;
- (8) After the closing of the sale of the Bonds and upon specific request of the City Attorney, providing assistance to the City concerning questions and issues that may arise prior to the maturity of the Bonds.

In addition to the foregoing Basic Services, as Bond Counsel, we are prepared to undertake Additional Services, as directed by the City Attorney.

BOND COUNSEL FEES

Subject to the Section, Limitation of City's Duties, (a) Bond Counsel will be paid a fee calculated on an hourly rate basis pursuant to the schedule of rates attached hereto; (b) the aggregate maximum fees paid to Bond Counsel for the services set forth above shall not exceed \$350,000, consisting of \$175,000 for each series of Bonds; (c) payment of our fees shall be made after issuance and delivery of each series of Bonds, within 30 days after receipt by the City of an approved invoice therefor; and (d) such fee shall be paid from the proceeds of the respective sale of the Bonds. Each invoice will include an itemization of the hours worked by each attorney and legal assistant, the rate for each individual and description of the work performed by the individual.

Subject to the sale of the Bonds, Bond Counsel will be reimbursed for their reasonable and actual out-of-pocket expenses, such as the cost of reproduction of documents, long distance telephone, telegraph, telex and similar expenses, deliveries, filing fees, and all items paid for by Bond Counsel on behalf of the City, incurred in connection with the performance of all services hereunder. All of such expenses will be reasonable and subject to approval of the City Attorney, provided, however, that aggregate maximum reimbursable expenses shall not exceed \$10,000, consisting of \$5,000 for each series of Bonds.

We agree that conflicts affecting the City will be resolved in the City's favor, whenever possible. In the event a conflict cannot, in our judgment, be resolved in the City's favor, we will immediately advise the City Attorney. Any such failure to resolve a conflict in the City's favor will constitute grounds for termination of this Agreement by the City Attorney with ten days' notice.

INVOICES

Each invoice must include an itemization of the hours worked by each attorney and legal assistant, the rate for each individual and a description of the work performed by the individual.

Bond Counsel shall provide sufficient detail in its invoices to enable the City Attorney to determine the extent of work done and the expenses incurred, if any, including providing any supporting documentation that the City Attorney may reasonably request. Bond Counsel shall retain all records of work done and expenses incurred, if any, for a period of four years after

51078940.4

such work is completed and provide reasonable access to the City of such books and records as will enable City to perform an audit of the foregoing items.

LIMITATION OF CITY'S DUTIES

THE CITY SHALL NOT HAVE ANY OBLIGATION TO PAY AND SHALL NOT PAY FOR SERVICES RENDERED OR EXPENSES INCURRED UNTIL THE BONDS ARE SOLD AND THE PROCEEDS FROM THE SALE OF THE BONDS ARE RECEIVED BY THE CITY. The City's duty to pay Bond Counsel is contingent on City Council approving an ordinance authorizing issuance of each series of Bonds and approving Bond Counsel payment from the proceeds of the sale of Bonds. Nothing herein shall be construed as creating personal liability on the part of any officer of the City.

TERM AND TERMINATION

This Engagement Letter is effective on the date signed by the City Attorney and remains in effect until all services hereunder have been provided. This Engagement Letter may be terminated by the City by giving 30 days' written notice to Bond Counsel.

MINORITY AND WOMEN BUSINESS ENTERPRISES

At the request of the City Attorney, Bond Counsel will enter into an arrangement with a qualified Minority and Women Business Enterprise certified by the City and designated by the City Attorney to serve as Bond Counsel with Co- Counsel. Bond Counsel will allocate between itself and such firm the performance of Bond Counsel Services under this agreement. Bond Counsel will include such firm's portion of the fee in its invoice to the City for fees for the performance of Bond Counsel Services. It is agreed that the goal for the portion of Bond Counsel Services to be performed by Co-Counsel will be 24% of the Bond Counsel Services. In providing services to the City, Co-Counsel and Bond Counsel will act independently. Each of Bond Counsel and Co-Counsel will separately represent the City, and will not be a partnership. Co-Counsel will not act as an employee or contractor of the Bond Counsel, will not act under the direction of Bond Counsel, and will be separately responsible to the City for its services as Co-Counsel. Bond Counsel will not be responsible for Co-Counsel's performance or services.

Bond Counsel shall submit to the City Attorney at the beginning of each calendar year a schedule showing the ethnic and gender make-up of partners and associates of our respective firms.

RELEASE

BOND COUNSEL AGREES TO AND SHALL RELEASE THE CITY, ITS AGENTS, EMPLOYEES, OFFICERS, AND LEGAL REPRESENTATIVES (COLLECTIVELY IN THIS SECTION THE "CITY") FROM ALL LIABILITY FOR INJURY, DEATH, DAMAGE OR LOSS TO PERSONS OR PROPERTY SUSTAINED IN CONNECTION WITH OR INCIDENTAL TO PERFORMANCE UNDER THIS AGREEMENT, EVEN IF THE INJURY, DEATH, DAMAGE OR LOSS IS CAUSED BY THE CITY'S SOLE OR CONCURRENT NEGLIGENCE AND/OR THE CITY'S STRICT PRODUCTS LIABILITY OR STRICT STATUTORY LIABILITY.

INSURANCE

Bond Counsel shall maintain in effect certain insurance coverage and shall furnish evidence of 51078940.4

Page 4

insurance satisfactory to the City Attorney, in duplicate form, before beginning its performance under this Engagement. All liability policies must be issued by a company with a Certificate of Authority from the State Department of Insurance to conduct insurance business in Texas or a rating of at least B+ and a financial size of Class VI or better according to the current year's Best's Key Rating Guide, Property-Casualty United States or that is otherwise satisfactory to the City Attorney. Bond Counsel shall maintain the following insurance coverage in the following amounts:

Professional Liability

\$1,000,000 per occurrence; \$3,000,000 aggregate

Defense costs are excluded from the face amount of the policy. Aggregate limits are per 12-month policy period unless otherwise indicated.

Bond Counsel shall give 30 days' written notice to the City before the policy may be canceled, materially changed, or nonrenewed. Within the 30-day period, Bond Counsel shall provide other suitable policies in lieu of those about to be canceled, materially changed, or nonrenewed so as to maintain in effect the required coverage. If the Bond Counsel does not comply with this requirement, the City Attorney, at his or her sole discretion, may immediately suspend the Bond Counsel from any further performance under this Engagement Letter and begin procedures to terminate for default.

The City recognizes that Bond Counsel's insurance coverage does not extend to Co-Counsel.

COMPLIANCE WITH EQUAL OPPORTUNITY ORDINANCE

Bond Counsel shall comply with the City's Equal Employment Opportunity Ordinance as set out in Section 15-17 of the Code of Ordinances.

PAY OR PLAY

The requirements and terms of the City of Houston Pay or Play program, as set out in Executive Order 1-7, as revised from time to time, are incorporated into this Engagement Letter for all purposes. Bond Counsel has reviewed Executive Order No. 1-7 Revised and, to the extent applicable to this Engagement Letter, shall comply with its terms and conditions as they are set out at the time of City Council approval of this Engagement Letter.

Drug Policy

The requirements and terms of the City of Houston Drug Detection and Deterrence procedures ("Drug Policy") for Bond Counsel ("Contractor"), as set out in Executive Order 1-31, are incorporated into this Engagement Letter for all purposes. Bond Counsel has reviewed Executive Order 1-31 and, to the extent applicable to this Engagement Letter, shall comply with its terms and conditions as they are set out at the time of City Council approval of this Engagement Letter. A Contractor who does not utilize Safety Impact Positions, as defined in the Drug Policy, in the performance of this Agreement shall be deemed to have satisfied the requirements of the Drug Policy if it (i) completes and executes a Contractor's Certification of No Safety Impact Positions in Performance of a City Contract and (ii) delivers a copy of its existing Drug Policy to the City Attorney.

ZERO TOLERANCE POLICY FOR HUMAN TRAFFICKING AND RELATED ACTIVITIES

The requirements and terms of the City of Houston's Zero Tolerance Policy for Human Trafficking and Related Activities, as set forth in Executive Order 1-56, as revised from time to time, are incorporated into this Agreement for all purposes. Bond Counsel has reviewed Executive Order 1-56, as revised, and shall comply with its terms and conditions as they are set out at the time of the Countersignature Date. Bond Counsel shall notify the City's Chief Procurement Officer, City Attorney, and Director of any information regarding possible violation of the Bond Counsel or its subcontractors providing services or goods under this Agreement.

BOYCOTT OF ISRAEL

Bond Counsel certifies that Bond Counsel is not currently engaged in, and agrees for the duration of this Agreement not to engage in, the boycott of Israel as defined by Section 808.001 of the Texas Government Code.

BOND COUNSEL DEBT

IF BOND COUNSEL, AT ANY TIME DURING THE TERM OF THIS ENGAGEMENT LETTER, INCURS A DEBT, AS THE WORD IS DEFINED IN SECTION 15-122 OF THE HOUSTON CITY CODE OF ORDINANCES, IT SHALL IMMEDIATELY NOTIFY THE CITY CONTROLLER IN WRITING. IF THE CITY CONTROLLER BECOMES AWARE THAT BOND COUNSEL HAS INCURRED A DEBT, CITY CONTROLLER SHALL IMMEDIATELY NOTIFY BOND COUNSEL IN WRITING. IF BOND COUNSEL DOES NOT PAY THE DEBT WITHIN 30 DAYS OF EITHER SUCH NOTIFICATION, THE CITY CONTROLLER MAY DEDUCT FUNDS IN AN AMOUNT EQUAL TO THE DEBT FROM ANY PAYMENTS OWED TO BOND COUNSEL UNDER THIS ENGAGEMENT LETTER, AND BOND COUNSEL WAIVES ANY RECOURSE THEREFOR.

BOND COUNSEL SHALL FILE A NEW AFFIDAVIT OF OWNERSHIP, USING THE FORM DESIGNATED BY CITY, BETWEEN FEBRUARY 1 AND MARCH 1 OF EVERY YEAR DURING THE TERM OF THIS ENGAGEMENT LETTER.

Page :	6
--------	---

If this proposed Agreement for the services of Bond Counsel is satisfactory, please evidence your acceptance and approval by signing in the space provided below.

	Very truly yours,
	NORTON ROSE FULBRIGHT US LLP
	By Neil Thomas
ACCEPTED AND APPROVED:	
Ronald C. Lewis	

NORTON ROSE FULBRIGHT US LLP

Schedule of Standard Hourly Rates for Attorneys and Paralegals

Norton Rose Fulbright US LLP maintains a schedule of standard hourly rates for its attorneys and paralegals, which is subject to periodic revision. The schedule in effect as of January 1, 2018, is as follows:

The following information has been prepared based upon hourly rates schedule approved for 2018 for Houston-based personnel that might work on this matter:

Neil Thomas, partner, and Dimitri Millas, senior associate, will be your primary contacts. In order to provide you with the expertise of our firm, and to provide services on a cost effective basis, these attorneys will delegate parts of your work to other paralegals and support staff.

		2018 Rate	Proposed Rate
Neil Thomas	Partner	\$870	\$783
Patrick O'Daniel	Partner	\$850	\$765
Peter Smith	Partner	\$720	\$648
Dimitri Millas	Senior Associate	\$605	\$545
Jane Maher	Paralegal	\$135	\$122

We will not substitute or add additional personnel without the written consent of the City Attorney at rates similar to the above hourly rates approved by the City Attorney.

TERMS OF ENGAGEMENT

Introduction

These are the Terms of Engagement adopted by Norton Rose Fulbright US LLP ("Firm") and the addressee of the preceding Engagement Letter ("Client") and referred to in our Engagement Letter as the basis for our representation. Because they are an integral part of our agreement to provide representation, we ask that you review this document carefully and retain it for your files. If you have any questions after reading it, please promptly inform your principal contact at the Firm. In the event of conflict between the Engagement Letter and this Terms of Engagement, the Engagement Letter shall control.

Our Relationship with Others and Conflicts of Interest

Conflict of Interest is a concern for Firm and its clients. We attempt to identify actual and potential conflicts at the outset of each engagement. Unfortunately, conflicts sometimes arise or become apparent after work begins on an engagement. When that happens, we will do our best to address and resolve the situation in the manner that best serves the interests of all of our affected clients.

If a Conflict of Interest unrelated to this engagement develops between you and another client of Firm, you consent to the Firm's adverse representation in the unrelated matter.

Firm accepts this engagement on the understanding that our representation of you will not preclude us from accepting another engagement from a new or existing client provided that (1) such engagement is not substantially related to the subject matter of services we provide to you and (2) such other engagement would not impair the confidentiality of related client information.

After completion of the representation, changes may occur in the applicable laws or regulations that could affect your future rights and liabilities in regard to the matter. Firm has no continuing obligation to give advice with respect to any future legal developments that may relate to the project.

Firm recognizes that it shall be disqualified from representing any other client with interests materially and directly adverse to yours (i) in any matter which is substantially related to the Firm's representation of you and (ii) with respect to any matter where there is a reasonable probability that confidential information you furnished to the Firm could be used to your disadvantage. The City has waived the potential conflict of interest arising from the concurrent representation of Coastal Water Authority by letters dated August 2, 2017. You understand and agree that with those exceptions, the Firm is free to represent other clients, including clients whose interests may conflict with yours in litigations, business transactions or other matters. Also, as you know, the Firm represents or has represented clients with interests that may conflict with yours, such as clients with litigation involving condemnation. You agree that the Firm's representing you in this matter will not prevent or disqualify the Firm from representing clients adverse to you in unrelated condemnation matters and in other unrelated matters, and that you consent in advance to the Firm's undertaking such adverse representations.

Choice of Law

Because Firm performs legal services in a number of jurisdictions, for consistency and predictability, the Client and Firm agrees that the Texas Disciplinary Rules of Professional Conduct (found at www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or www.texasbar.com or <a href="https://ww

Use of Work Products

- (1) Firm agrees that all documents drafted pursuant to this Agreement are the property of the City. The City owns and may use all documents, all notes, plans, computations, databases, tabulations, exhibits, photographs, reports, underlying data and other work products (collectively, the "Documents") that Firm prepares or obtains under this Agreement.
- (2) Firm warrants that to the extent any documents provided to the City by it are copyrighted, Firm owns the copyright to the Documents or otherwise has rights to provide the documents.
- (3) Firm shall deliver the original Documents to the City Attorney on request. Upon request, within five working days after this Agreement terminates, Firm shall deliver to the City Attorney the original Documents, and all other files and materials Firm produces or gathers during its performance under this Agreement.
- (4) Firm shall have the right to retain copies of documents and other work products drafted or created pursuant to this Agreement and use them for training purposes or as forms or reference materials in connection with representing other clients, without attribution to the City.
- (5) Firm adopted a program of document retention and management of electronically stored information, including regular deletion of outdated, corrupt or useless files. Such program may change from time-to-time. It is important for Client to alert Firm in advance of special treatment, sensitive information, retention requirements and other unique conditions pertaining to Client files. Client agrees that it will notify Firm in a timely, written and specific manner, concerning any requirement for special or unusual handling or attention of its Client files. This includes any statutory or regulatory requirements relating to confidentiality and retention of Client files.
- (6) By execution of the Engagement Letter, Client consents to Firm's use of the name and a generic description of the transaction in Firm marketing materials. Confidential Client information shall not be included in such materials.

Disclaimer

We cannot guarantee the outcome of any matter. Any expression of our professional judgment regarding your matter or the potential outcome is, of course, limited by our knowledge of the facts and based on the law at the time of expression. It is also subject to any unknown or uncertain factors or conditions beyond our control.

Either at the commencement or during the course of the representation, we may express opinions or beliefs about the matter or various courses of action and the results that might be anticipated. Any expressions on our part concerning the outcome of the representation, or any other legal matters, are based on our professional judgment and are not guarantees.

By signing the Engagement Letter or otherwise indicating your acceptance of the Engagement Letter, you acknowledge that Firm has made no promises or guarantees to you about the outcome of the representation, and nothing in these Terms of Engagement shall be construed as such a promise or guarantee.

Your Cooperation

To enable us to provide effective representation, you agree to: (1) disclose to us fully, accurately and on a timely basis, all facts and documents that are or might be material or that we may request; (2) keep us apprised on a timely basis of all developments relating to the representation that are or might be material; (3) attend meetings, conferences, and other proceedings when it is reasonable to do so; (4) provide updated information for conflicts purposes, if necessary; and (5) cooperate fully with us in all matters relating to the engagement.

Modification of Our Agreement

The Terms of Engagement reflect our agreement on the terms of all engagements, and are not subject to any oral agreements, modifications, or understandings. Any change in these Terms of Engagement must be made in writing signed by both Firm and the City Attorney and approved, where required by City Council.

In Conclusion

If you have questions or concerns, at any time, relating to the terms and conditions of this engagement, the services or advice provided by Firm, or the fees and expenses reflected in the invoices, please bring them to the attention of your principal contact at our Firm, or Firm's General Counsel or Managing Partner.

NORTON ROSE FULBRIGHT US LLP

BURNEY & FOREMAN

1301 McKinney, Suite 5100 Houston, Texas 77010 5445 Almeda, Suite 400 Houston, Texas 77004

Re: City of Houston, Texas, Combined Utility System Subordinate Lien Revenue Bonds, Series 2018E (the "Bonds")

WE HAVE ACTED as Co-Bond Counsel for the City of Houston, Texas, a Texas homerule city (the "City") in connection with issuance of its Combined Utility System Subordinate Lien Revenue Bonds, Series 2018E, in the respective original principal amount of \$______, under a master ordinance and supplemental ordinance authorizing their issuance (the "Ordinance").

WE HAVE ACTED as Co-Bond Counsel for the sole purpose of rendering an opinion with respect to the legality and validity of the Bonds under the Constitution and laws of the State of Texas and with respect to the status of the interest on the Bonds under Federal income tax law. In such capacity we have examined relevant provisions of the Constitution and laws of the state of Texas and federal income tax law; a transcript of certain certified proceedings of the City Council of the City pertaining to the issuance of the Bonds; certain certifications and representations concerning the use and investment of proceeds of the Bonds, the use of other funds of the City, and other material facts within the knowledge and control of the City, upon which we rely; and certain other customary documents and instruments authorizing and relating to the issuance of the Bonds, including an executed Bond. We have not been requested to examine, and have not investigated or verified, any original proceedings, records, data, or other material, but have relied upon the transcript of certified proceedings. We have not assumed any responsibility with respect to the financial condition or capabilities of the City or the disclosure thereof in connection with the sale of the Bonds.

BASED ON SUCH EXAMINATION, it is our opinion that the transcript of certified proceedings evidences complete legal authority for the issuance of the Bonds in full compliance with the Constitution and laws of the State of Texas presently in effect; the Bonds are valid and legally binding obligations of the City in accordance with the terms and conditions thereof, except to the extent that the enforcement of the rights and remedies of the owners thereof may be limited by laws relating to bankruptcy, insolvency, reorganization, or moratorium or other similar laws affecting the rights of creditors, or the exercise of judicial discretion in accordance with general principles of equity; the Bonds have been authorized in accordance with law; and the Bonds, the outstanding combined utility system subordinate lien revenue bonds, and any additional combined utility system subordinate lien revenue bonds hereafter issued on a parity therewith are payable from and are secured by a lien on the "Pledged Revenues" received and collected by the City and deposited to the City's General Purpose Fund after certain required payments with respect to water and sewer system bonds issued and to be issued by the City and payment of all maintenance and operation expenses of the "System" from the operation and ownership of the "System" as defined and provided in the Ordinance.

IT IS FURTHER OUR OPINION, based upon the foregoing, that pursuant to section 103 of the Internal Revenue Code of 1986, as amended to the date hereof (the "Code"), and existing regulations, published rulings, and court decisions thereunder, and assuming continuing compliance with the provisions of the Ordinance, the Bonds are not private activity bonds and interest on the Bonds (1) will be excludable from the gross income, as defined in section 61 of the Code, of the owners thereof for federal income tax purposes, and (2) will not be included in computing the alternative minimum taxable income for federal income tax purposes of the owners thereof who are individuals or, except as described below, corporations.

WE CALL TO YOUR ATTENTION THAT, with respect to our opinion in clause (2) of the previous paragraph, interest on the Bonds owned by a corporation will be included in such corporation's adjusted current earnings for purposes of calculating the alternative minimum taxable income of such corporation, other than an S corporation, a qualified mutual fund, a real estate mortgage investment conduit (REMIC), a real estate investment trust (REIT), or a financial assets securitization investment trust (FASIT). A corporation's alternative minimum taxable income is the basis on which the alternative minimum tax imposed by section 55 of the Code is computed.

WE EXPRESS NO OTHER OPINION with respect to any other federal, state, or local tax consequences under present law or any proposed legislation resulting from the receipt or accrual of interest on, or the acquisition or disposition of, the Bonds. Ownership of tax-exempt obligations such as the Bonds may result in collateral federal tax consequences to, among others, financial institutions, life insurance companies, property and casualty insurance companies, certain S corporations with subchapter C earnings and profits, certain foreign corporations doing business in the United States, owners of an interest in a FASIT, individual recipients of Social Security or Railroad Retirement benefits, individuals otherwise qualifying for the earned income tax credit, and taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry, or who have paid or incurred certain expenses allocable to, tax-exempt obligations.

OUR OPINIONS ARE BASED ON EXISTING LAW, which is subject to change. Such opinions are further based on our knowledge of facts as of the date hereof. We assume no duty to update or supplement our opinions to reflect any changes in any law that may thereafter come to our attention or to reflect any changes in any law that may thereafter occur or become effective. Moreover, our opinions are not a guarantee of result and are not binding on the Internal Revenue Service; rather, such opinions represent our legal judgment based upon our review of existing law that we deem relevant to such opinions and in reliance upon the representations and covenants referenced above.



Warren P. Cash III
Managing Director

April 2, 2018

Texas Water Development Board 1700 N. Congress Avenue Austin, Texas 78701

Re: City of Houston, Texas, Combined Utility System

I am responding to a request that we provide this letter to the Texas Water Development Board (the "Board") addressing the concern that a potential conflict of interest may exist regarding the representation of both the City of Houston Combined Utility System, (the "Houston CUS") and the Board by our firm as financial advisor. The Houston CUS is in the process of requesting additional financial assistance in the amount of approximately \$153 million, representing the aggregate amount of one or more loan applications under the Board's SWIFT Program (the "Program").

In our capacity as financial advisor to the Houston CUS, our firm is assisting the Houston CUS in its loan application process to the Board for the Houston CUS's potential issuance of bonds to be purchased by the Board through the Program. If the Houston CUS's applications are chosen by the Board, the Board will directly provide the terms of the loans to the Houston CUS. Our firm has no involvement in the ranking of loan applications by the Board or the determination of interest rates or any other terms by the Board. Moreover, in our representation of the Board in its offering debt obligations we only review numbers and terms of loan applications in the aggregate and do not review individual loan applications. This enables our firm to retain its independence in fulfilling the duties of its role as financial advisor in a transaction as described above.

Our representation of the Board as financial advisor in the issuance of its debt obligations is not substantially related to the Board's subsequent process in approving applications and funding loans from borrowers. As a result, there is no reasonable possibility that the representation of the Board and the Houston CUS will adversely limit the representation of the other. If you wish, I will be happy to discuss this in greater detail at your convenience.

Sincerely yours,

Warren P. Cash III Managing Director

July Cush

THE STATE OF TEXAS
COUNTY OF HARRIS

AGREEMENT FOR FINANCIAL ADVISORY SERVICES

I. PARTIES

A. Address

THIS AGREEMENT FOR FINANCIAL ADVISORY SERVICES ("Agreement") is made between the CITY OF HOUSTON, TEXAS ("City"), a home rule city of the State of Texas, and HILLTOP SECURITIES INC. ("Contractor" or "Financial Advisor"), a Delaware corporation doing business in Texas.

The initial addresses of the parties, which one party may change by giving written notice to the other party, are as follows:

City

Director of Finance or Designee City of Houston P.O. Box 1562 Houston, Texas 77251 Contractor

Hilltop Securities Inc.
700 Milam-Suite 500
Houston, Texas 77002
Attention: Warren P. Cash III
Managing Director

The Parties agree as follows:

B. <u>Table of Contents</u> This Agreement consists of the following sections:

TABLE OF CONTENTS

Page No.

I. PARTIES	
A. Address	
B. Table of Contents	***************************************
C. Signatures	
II DEFINITIONS	
II. DEFINITIONS	***************************************
III. DUTIES OF CONTRACTOR	
A. Scope of Services	
B. Coordinate Performance	
C. Payment of Subcontractors	
D. RELEASE	6
E. INDEMNIFICATION	
F. INDEMNIFICATION PROCEDURES	8
G. Insurance	9
H. Warranties	
I. Confidentiality - Protection of City's Interest	12
J. Use of Work Products	
K. Licenses and Permits	
L. Compliance with Laws	
M. Compliance with Equal Opportunity Ordinance	13
N. Drug Abuse Detection and Deterrence	13
O. Conflicts of Interest	14
P. MWBE Compliance	15
Q. Pay or Play	15
R. Additions and Deletions of Services	15
IV. DUTIES OF CITY	
A. Payment Terms	
B. Expenses and Reimbursement	
C. Method of Payment	17
D. Taxes	18
E. Limit of Appropriation	18
F. Access to Data	19
V. TERM AND TERMINATION	20
A. Term	
B. Renewals	٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠
C.Time extensions	
D. Termination for Convenience by City	20
G:\CONTRACT\LPN\2038S_Hilltop Securities_Financial Advisory 2016_Final.doc	6/30/2016

E. Termination for Cause	21
F. Termination for Cause by Contractor	
G. Suspension of Contractor's services related to a System	
VI. MISCELLANEOUS	23
A. Independent Contractor	
B. Severability	
C. Entire Agreement	23
D. Written Amendment	
E. Applicable Laws	
F. Notices	
G, Captions	
H. Non-Waiver	
I. Inspections and Audits	
J. Enforcement	
K. Ambiguities	
L. Survival	
M. Publicity	
N. Parties In Interest	
O. Successors and Assigns	
P. Business Structure and Assignments	
Q. Remedies Cumulative	
P. Controlog Dakt	
R. Contractor Debt	27

EXHIBITS

- A. Scope of Services
- B. Drug Policy Compliance Agreement
- C. Certification of No Safety Impact Positions
- D. Drug Policy Compliance Declaration
- E. Fce Structure Financial Advisory Services

C. Signatures

The Parties have executed this Agreement in multiple copies, each of which is an original.

WITNESS/SEAL:	(Contractor) HILLTOP SECURITIES INC.
By: JMA A. PERMAN	By: Waller P. Cut II Name: WARPEN P. CASH II
Name: TINA A. PERRIMAN	
Title: <u>Dipactor</u>	Title: MANAGNE DIRECTOR
	Federal Tax I.D. No. 75-1382137
ATTEST/SEAL:	CITY OF HOUSTON, TEXAS Signed by:
City Secretary	Mayor
APPROVED:	COUNTERSIGNED BY:
Director, Finance Department Chief Procurement Officer	City Controller
APPROVED AS TO FORM: Am. Mouyer Sr. Assistant City Attorney	DATE COUNTERSIGNED:
Sr. Assistant City Attorney L.D. File No. 0341600051001	

II. DEFINITIONS

As used in this Agreement, the following terms have the meanings set out below:

"Agreement" means this contract between the Parties, including all exhibits and any written amendments authorized by City Council and Contractor.

"City" is defined in the preamble of this Agreement and includes its successors and assigns.

"Closing" shall mean the date and time at which the City receives the benefit or proceeds of the sale or negotiation of bonds, notes or other evidence of its indebtedness.

"Contractor" is defined in the preamble of this Agreement and includes its successors and assigns.

"Countersignature Date" means the date shown as the date countersigned on the signature page of this Agreement.

"CPO" means the Chief Procurement Officer for the City of Houston, as set forth in Chapter 15 of the Houston Code of Ordinances.

"Director" means the Director of the Department of Finance, or the person he or she designates.

"Documents" mean notes, manuals, notebooks, computations, databases, tabulations, exhibits, software, reports, underlying data, charts, analyses, maps, letters, financial models, forms, photographs, and other work products (and any modifications or improvements to them) that Contractor prepares or provides under this Agreement.

"Elected City Officials" means the Mayor, City Council Members and the City Controller,

"Parties" mean all the entities set out in the Preamble who are bound by this Agreement.

"Public Financing" shall mean the sale, or offering of bonds, notes, leases or other evidence of indebtedness of the City.

"Special Financing" shall mean the restructuring or conversion of bonds, notes, leases or other evidence of indebtedness of the City; including but not limited to the conversion of indebtedness of the City between fixed and variable rate structures, tender negotiations, and structuring of alternative financial instruments. Special Financing shall not include any non-financial services.

III. DUTIES OF CONTRACTOR

A. <u>Scope of Services</u>

In consideration of the payments specified in this Agreement, Contractor shall provide all labor, material, and supervision necessary to perform the services described in Exhibit "A."

B. Coordinate Performance

Contractor shall coordinate its performance with the Director and other persons that the Director designates. Contractor shall promptly inform the Director and other person(s) of all significant events relating to the performance of this Agreement.

C. Payment of Subcontractors

In accordance with the Texas Prompt Payment Act, Contractor shall make timely payments to all persons and entities supplying labor, materials, or equipment for the performance of this Agreement. CONTRACTOR SHALL DEFEND AND INDEMNIFY THE CITY FROM ANY CLAIMS OR LIABILITY ARISING OUT OF CONTRACTOR'S FAILURE TO MAKE THESE PAYMENTS.

D. RELEASE

CONTRACTOR AGREES TO AND SHALL RELEASE THE CITY, ITS

AGENTS, EMPLOYEES, OFFICERS, AND LEGAL REPRESENTATIVES

G:CONTRACT\LPN\20385_Hilltop Securities_Financial Advisory 2016_Final.doc

L.D. FILE NO. 0341600051001

6/30/2016

(COLLECTIVELY THE "CITY") FROM ALL LIABILITY FOR INJURY, DEATH, DAMAGE, OR LOSS TO PERSONS OR PROPERTY SUSTAINED IN CONNECTION WITH OR INCIDENTAL TO PERFORMANCE UNDER THIS AGREEMENT, EVEN IF THE INJURY, DEATH, DAMAGE, OR LOSS IS CAUSED BY THE CITY'S SOLE OR CONCURRENT NEGLIGENCE AND/OR THE CITY'S STRICT PRODUCTS LIABILITY OR STRICT STATUTORY LIABILITY.

E. <u>INDEMNIFICATION</u>

CONTRACTOR AGREES TO AND SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY, ITS AGENTS, EMPLOYEES, OFFICERS, AND LEGAL REPRESENTATIVES (COLLECTIVELY THE "CITY") HARMLESS FOR ALL CLAIMS, CAUSES OF ACTION, LIABILITIES, FINES, AND EXPENSES (INCLUDING, WITHOUT LIMITATION, ATTORNEYS' FEES, COURT COSTS, AND ALL OTHER DEFENSE COSTS AND INTEREST) FOR INJURY, DEATH, DAMAGE, OR LOSS TO PERSONS OR PROPERTY SUSTAINED IN CONNECTION WITH OR INCIDENTAL TO PERFORMANCE UNDER THIS AGREEMENT INCLUDING, WITHOUT LIMITATION, THOSE CAUSED BY:

- (1) CONTRACTOR'S AND/OR ITS AGENTS', EMPLOYEES', OFFICERS'
 DIRECTORS', CONTRACTORS', OR SUBCONTRACTORS'

 (COLLECTIVELY IN NUMBERED PARAGRAPHS 1-3,

 "CONTRACTOR") ACTUAL OR ALLEGED NEGLIGENCE OR
 INTENTIONAL ACTS OR OMISSIONS;
- (2) THE CITY'S AND CONTRACTOR'S ACTUAL OR ALLEGED

 CONCURRENT NEGLIGENCE, WHETHER CONTRACTOR IS

 IMMUNE FROM LIABILITY OR NOT; AND

73) THE CITY'S AND CONTRACTOR'S ACTUAL OR ALLEGED STRICT
PRODUCTS LIABILITY OR STRICT STATUTORY LIABILITY,
WHETHER CONTRACTOR IS IMMUNE FROM LIABILITY OR NOT.

CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY HARMLESS DURING THE TERM OF THIS AGREEMENT AND FOR FOUR YEARS AFTER THE AGREEMENT TERMINATES. CONTRACTOR'S INDEMNIFICATION IS LIMITED TO \$1,000,000 PER OCCURRENCE. CONTRACTOR SHALL NOT INDEMNIFY THE CITY FOR THE CITY'S SOLE NEGLIGENCE.

F. <u>INDEMNIFICATION PROCEDURES</u>

- (1) <u>Notice of Claims</u>. If the City or Contractor receives notice of any claim or circumstances which could give rise to an indemnified loss, the receiving party shall give written notice to the other party within 30 days. The notice must include the following:
 - (a) a description of the indemnification event in reasonable detail,
 - (b) the basis on which indemnification may be due, and
 - (c) the anticipated amount of the indemnified loss.

This notice does not estop or prevent the City from later asserting a different basis for indemnification or a different amount of indemnified loss than that indicated in the initial notice. If the City does not provide this notice within the 30 day period, it does not waive any right to indemnification except to the extent that Contractor is prejudiced, suffers loss, or incurs expense because of the delay.

(2) <u>Defense of Claims</u>

(a) Assumption of Defense. Contractor may assume the defense of the claim at its own expense with counsel chosen by it that is reasonably satisfactory to the City. Contractor shall then control the defense and any negotiations to settle the claim. Within 10 days after GACONTRACTALPNI20385_Hilliop Securities_Financial Advisory 2016_Final.doc 6/30/2016 L.O. FILE NO. 0341600051001

receiving written notice of the indemnification request, Contractor must advise the City as to whether or not it will defend the claim. If Contractor does not assume the defense, the City shall assume and control the defense, and all defense expenses constitute an indemnification loss.

(b) <u>Continued Participation</u>. If Contractor elects to defend the claim, the City may retain separate counsel to participate in (but not control) the defense and to participate in (but not control) any settlement negotiations. Contractor may settle the claim without the consent or agreement of the City, unless it (i) would result in injunctive relief or other equitable remedies or otherwise require the City to comply with restrictions or limitations that adversely affect the City, (ii) would require the City to pay amounts that Contractor does not fund in full, (iii) would not result in the City's full and complete release from all liability to the plaintiffs or claimants who are parties to or otherwise bound by the settlement.

G. <u>Insurance</u>

(a) Risks and Limits of Liability. Contractor shall maintain the following insurance coverages in the following amounts:

<u>COVERAGE</u>	LIMIT OF LIABILITY	
Workers' Compensation	Statutory for Workers' Compensation	
Employer's Liability	 Bodily Injury by Accident \$100,000 (each accident) Bodily Injury by Disease \$100,000 (policy limit) Bodily Injury by Disease \$100,000 (each employee) 	
Commercial General Liability: Bodily and Personal Injury; Products and Completed Operations Coverage	Bodily Injury and Property Damage, Combined Limits of \$1,000,000 each Occurrence, and \$1,000,000 aggregate	
Automobile Liability	 \$1,000,000 combined single limit for (1) Any Auto or (2) All Owned, Hired, and Non-Owned Autos 	

Professional Liability	•	\$1,000,000 per occurrence; \$1,000,000 aggregate
Excess Liability applicable each to CGL and Auto	•	\$1,000,000
Aggregate Limits are per 12-month policy period unless otherwise indicated.		

(b) Insurance Coverage. At all times during the term of this Agreement and any extensions or renewals, Contractor shall provide and maintain insurance coverage that meets the Agreement requirements. Prior to beginning performance under the Agreement, at any time upon the Director's request, or each time coverage is renewed or updated, Contractor shall furnish to the Director current certificates of insurance, endorsements, all policies, or other policy documents evidencing adequate coverage, as necessary. Contractor shall be responsible for and pay (a) all premiums and (b) any claims or losses to the extent of any deductible amounts. Contractor waives any claim it may have for premiums or deductibles against the City, its officers, agents, or employees.

Contractor shall require all subcontractors to carry insurance naming the City as an additional insured and meeting all of the above requirements except amount. The amount must be commensurate with the amount of the subcontract, but in no case less than \$500,000 per occurrence. Contractor shall provide copies of insurance certificates to the Director.

(c) Form of insurance. The form of the insurance shall be approved by the Director and the City Attorney; such approval (or lack thereof) shall never (a) excuse non-compliance with the terms of this Section, or (b) waive or estop the City from asserting its rights to terminate this Agreement. The policy issuer shall (1) have a Certificate of Authority to transact insurance business in Texas, or (2) be an eligible non-admitted insurer in the State of Texas and have a Best's rating of at least B+, and a Best's

Financial Size Category of Class VI or better, according to the most current <u>Best's Key</u>
Rating Guide.

(d) Required Coverage. The City shall be an Additional Insured under this Agreement, and all policies, except Professional Liability and Worker's Compensation, shall explicitly name the City as an Additional Insured. The City shall enjoy the same coverage as the Named Insured without regard to other Contract provisions. Contractor waives any claim or right of subrogation to recover against the City, its officers, agents, or employees, and each of Contractor's insurance policies except professional liability must contain coverage or endorsement waiving such claim. Each policy, except Workers' Compensation and Professional Liability, must also contain an endorsement that the policy is primary to any other insurance available to the Additional Insured with respect to claims arising under this Contract.

Therefore, all certificates of insurance submitted by Contractor shall be accompanied by endorsements for 1) Additional Insured coverage in favor of the City for Commercial General Liability and Automobile Liability policies, and 2) Waivers of Subrogation in favor of the City for Commercial General Liability, Automobile Liability and Workers' Compensation/Employers' Liability policies. The Director will consider all other forms on a case-by-case basis.

(e) Notice. CONTRACTOR SHALL GIVE 30 DAYS' ADVANCE WRITTEN NOTICE TO THE DIRECTOR IF ANY OF ITS INSURANCE POLICIES ARE CANCELED OR NON-RENEWED. Within the 30-day period, Contractor shall provide other suitable policies in order to maintain the required coverage. If Contractor does not comply with this requirement, the Director, at his or her

sole discretion, may immediately suspend Contractor from any further performance under this Agreement and begin procedures to terminate for default.

(f) Other Insurance

Contractor will, upon request, furnish to the City an affidavit that Contractor is in full compliance with Social Security and Unemployment Compensation Insurance, to the extent such provisions are applicable to Contractor's operations hereunder.

H. Warranties

Contractor's performance shall conform to the professional standards prevailing in Harris County, Texas with respect to the scope, quality, due diligence, and care of the services and products Contractor provides under this Agreement.

I. Confidentiality - Protection of City's Interest

Contractor, its agents, employees, contractors, and subcontractors shall hold all City information, data, and documents (collectively, "the Information") that they receive, or to which they have access, in strictest confidence. Contractor, its agents, employees, contractors, and subcontractors shall not disclose, disseminate, or use the Information unless the Director authorizes it in writing. Contractor shall obtain written agreements from its agents, employees, contractors, and subcontractors which bind them to the terms in this Section. It is understood that normal communications with rating agencies and bond insurance companies of financial data of the City are permitted. The Contractor shall comply with regulatory records requests and, except as prohibited by law, provide notice of a response to a request.

J. Use of Work Products

- (1) The City may use all Documents that Contractor prepares or obtains under this Agreement.
- (2) Contractor warrants that it owns the copyright to the Documents.

(3) The Contractor shall keep copies of all pertinent documents as required by regulatory bodies.

K. Licenses and Permits

Contractor shall obtain, maintain, and pay for all licenses, permits, and certificates including all professional licenses required by any statute, ordinance, rule, or regulation. Contractor shall immediately notify the Director of any suspension, revocation, or other detrimental action against his or her license.

L. Compliance with Laws

Contractor shall comply with all applicable state and federal laws and regulations and the City Charter and Code of Ordinances.

M. Compliance with Equal Opportunity Ordinance

Contractor shall comply with City's Equal Employment Opportunity Ordinance as set out in Section 15-17 of the Houston Code of Ordinances.

N. Drug Abuse Detection and Deterrence

- (1) It is the policy of the City to achieve a drug-free workforce and workplace. The manufacture, distribution, dispensation, possession, sale, or use of illegal drugs or alcohol by contractors while on City Premises is prohibited. Contractor shall comply with all the requirements and procedures set forth in the Mayor's Drug Abuse Detection and Deterrence Procedures for Contractors, Executive Order No. 1-31 ("Executive Order"), which is incorporated into this Agreement and is on file in the City Secretary's Office.
- (2) Before the City signs this Agreement, Contractor shall file with the Contract Compliance Officer for Drug Testing ("CCODT"):
 - (a) a copy of its drug-free workplace policy,

- (b) the Drug Policy Compliance Agreement substantially in the form set forth in Exhibit "B," together with a written designation of all safety impact positions and,
- (c) if applicable (e.g. no safety impact positions), the Certification of No Safety Impact Positions, substantially in the form set forth in Exhibit "C."

If Contractor files a written designation of safety impact positions with its Drug Policy Compliance Agreement, it also shall file every 6 months during the performance of this Agreement or on completion of this Agreement if performance is less than 6 months, a Drug Policy Compliance Declaration in a form substantially similar to Exhibit "D." Contractor shall submit the Drug Policy Compliance Declaration to the CCODT within 30 days of the expiration of each 6-month period of performance and within 30 days of completion of this Agreement. The first 6-month period begins to run on the date the City issues its Notice to Proceed or if no Notice to Proceed is issued, on the first day Contractor begins work under this Agreement.

- (3) Contractor also shall file updated designations of safety impact positions with the CCODT if additional safety impact positions are added to Contractor's employee work force.
 - (4)Contractor shall require that its subcontractors comply with the Executive Order, and Contractor shall secure and maintain the required documents for City inspection.

O. Conflicts of Interest

The Contractor shall not offer its services or provide services to any other parties (directly or indirectly) if the same would cause any conflict of interest for the Contractor; provided, however, the City acknowledges that the Contractor presently represents and provides fiscal advice to counties, cities, independent school districts, Municipal Utility Districts, transportation entities, the Harris County-Houston Sports Authority, the Houston Convention Center Hotel Corporation and other political subdivisions, which representations shall not be GACONTRACT/LPN/20385_Hilliop Securities_Financial Advisory 2016_Final.doc 6/30/2016

deemed conflicts of interest per se, but may be deemed conflicts of interest as to specific representations.

The Contractor shall not be permitted to participate directly or indirectly, in the purchase, negotiated sale, or private placement of the City's bonds. However, the Contractor shall be permitted to act as an underwriter for competitively bid City Bond issues where the Contractor does not serve as the Financial Advisor,

P. MWBE Compliance

Contractor shall comply with the City's Minority and Women Business Enterprise ("MWBE") programs as set out in Chapter 15, Article V of the City of Houston Code of Ordinances. Contractor shall make good faith efforts to award subcontracts or supply agreements in at least twenty-four percent (24%) of the amounts paid to Contractor for those services it provides under this Agreement to MWBEs. Contractor acknowledges that it has reviewed the requirements for good faith efforts on file with the City's Office of Business Opportunity ("OBO") and will comply with them.

Contractor shall require written subcontracts with all MWBE subcontractors and shall submit all disputes with MWBEs to mediation if directed to do so by the OBO Director.

Q. Pay or Play

The requirements and terms of the City of Houston Pay or Play program, as set out in Executive Order 1-7-Revised, as amended from time to time, are incorporated into this Agreement for all purposes. Contractor has reviewed Executive Order No. 1-7-Revised and shall comply with its terms and conditions.

R. Additions and Deletions of Services

The Director may add additional Deliverables and services by giving written notification to Contractor. For purposes of this Section, the "Effective Date" means the date on which GACONTRACTALPNI20385_Hillsop Securities_Financial Advisory 2016_Final.doc 6/30/2016 L.D. FILE NO. 0341600051001

Contractor receives written notification of the addition(s). As of the Effective Date, each item added is subject to this Agreement, as if it had originally been a part, but the charge for each item starts to accrue only on the Effective Date.

Exclusion of Services

If a Deliverable or service that is subject to this Agreement is deleted, lost, destroyed, or otherwise disposed of, the Director may exclude it from the operation of this Agreement by notifying Contractor in writing. The notice takes effect immediately on its receipt by Contractor. More than one notice may be given. When a notice is received, Contractor shall delete the charge for the excluded Deliverable from the sum(s) otherwise due under this Agreement.

IV. DUTIES OF CITY

A. Payment Terms

For the services described in Exhibit "A", the City shall pay Contractor on the basis of an annual retainer, paid quarterly in arrears, for the Systems as described in the attached Exhibit "E" Fee Structure, plus reimbursable expenses as set forth below, if any. Payment may be made from funds allocated to this Agreement or cost of issuance funds.

B. Expenses and Reimbursement

Reimbursable expenses include the following for each System:

- (1) the ordinary and reasonable cost, including any sales tax Contractor and/or subcontractor is legally required to pay, for copying, printing, postage, running computer analyses, messages, delivery services, long distance telephone conference calls, and any additional expenses approved by the Director that were incurred under this Agreement; and
- (2) any ordinary and reasonable costs associated with the issuance of the City's securities and which are paid by Contractor (including, by way of example and

City of Houston, A6c

without limiting to the foregoing, such items as CUSIP fees and fees charged for

electronic distribution of offering documents); and

(3) the ordinary and reasonable costs of travel to points outside of Houston by

Contractor's representatives or subcontractors if the travel is reasonably necessary

to accomplish a task and authorized by the Director.

C. Method of Payment

The City shall pay on the basis of quarterly invoices submitted by Contractor and

approved by the Director, itemizing the cost of services performed by System and/or Public

Financing. Any reimbursable expenses, if any, shall be invoiced separately quarterly by

Contractor, itemized by System and/or Public Financing. In an effort to stay aligned with the

City's standard operating procedures for payment of invoices which are on a calendar quarter

basis, the first invoice will be for services rendered during the months of August and September,

2016, and the subsequent invoices will be submitted quarterly starting with the month of

October, 2016 throughout the term of this Agreement. The City shall pay Contractor within 30

days of the receipt and approval of the invoices.

Early Payment Discount

The City of Houston's standard payment term is to pay 30 days after receipt of invoice or

receipt of goods or services, whichever is later, according to the requirements of the Texas

Prompt Payment Act (Tx. Gov't Code, Ch. 2251). However, the City will pay in less than 30

days in return for an early payment discount from Contractor as follows:

Payment Time - 10 Days: 2% Discount

Payment Time - 20 Days: 1% Discount

If the City fails to make a payment according to the early payment schedule above, but

does make the payment within the time specified by the Prompt Payment Act, the City shall not

receive the discount, but shall pay no other penalty. When the payment date falls on a Saturday, Sunday, or official holiday when City offices are closed and City business is not expected to be conducted, payment may be made on the following business day.

Disputed Payments

If the City disputes any cost of an item in an invoice Contractor submits for any reason, including lack of supporting documentation, the Director shall temporarily delete the disputed item and pay the remainder of the invoice. The Director shall promptly notify Contractor of the dispute and request remedial action. After the dispute is settled, Contractor shall include the disputed amount on a subsequently regularly scheduled invoice or on a special invoice for the disputed item only.

D. Taxes

The City is exempt from payment of Federal Excise and Transportation Tax and Texas Limited Sales and Use Tax. Contractor's invoices to the City must not contain assessments of any of these taxes. The Director will furnish the City's exemption certificate and federal tax identification number to Contractor if requested.

E. <u>Limit of Appropriation</u>

- (1) The City's duty to pay money to Contractor under this Agreement is limited in its entirety by the provisions of this Section.
- (2) In order to comply with Article II, Sections 19 and 19a of the City's Charter and Article XI, Section 5 of the Texas Constitution, the City has appropriated and allocated the sum of \$939,025.00 to pay money due under this Agreement (the "Original Allocation"). The executive and legislative officers of the City, in their discretion, may allocate supplemental funds for this Agreement, but they are not obligated to do so. Therefore, the parties have agreed to the following procedures and remedies:

G:\CONTRACT\LPN\20385_Hilltop Securities_Financial Advisory 2016_Final.doc L.D., FILE NO, 0341600051001 (3) The City makes a Supplemental Allocation by issuing to Contractor a Service Release Order, or similar form approved by the City Controller, containing the language set out below. When necessary, the Supplemental Allocation shall be approved by motion or ordinance of City Council.

NOTICE OF SUPPLEMENTAL ALLOCATION OF FUNDS

By the signature below, the City Controller certifies that, upon the request of the responsible director, the supplemental sum set out below has been allocated for the purposes of the Agreement out of funds appropriated for this purpose by the City Council of the City of Houston. This supplemental allocation has been charged to such appropriation.

\$ ____

(4) The Original Allocation plus all supplemental allocations are the Allocated Funds. The City shall never be obligated to pay any money under this Agreement in excess of the Allocated Funds. Contractor must assure itself that sufficient allocations have been made to pay for services it provides. If Allocated Funds are exhausted, Contractor's only remedy is suspension or termination of its performance under this Agreement, and it has no other remedy in law or in equity against the City and no right to damages of any kind.

F. Access to Data

The City shall, to the extent permitted by law, allow Contractor to access and make copies of documents in the possession or control of the City or available to it that are reasonably necessary for Contractor to perform under this Agreement.

The City does not, however, represent that all existing conditions are fully documented, nor is the City obligated to develop new documentation for Contractor's use.

V. TERM AND TERMINATION

A. Term

This Agreement is effective on July 30, 2016 and remains in effect for three (3) years thereafter, unless sooner terminated under this Agreement ("Initial Term"). It is specifically agreed that the Contractor shall not be obligated to perform any services under or pursuant to this Agreement and the City shall not be obligated to make any payments for services performed after the expiration of the Initial Term, unless: (a) the Contractor has been requested by letter from the Director (identifying the type of issue, the approximate principal amount and the estimated delivery date) which shall have been received more than thirty days prior to the end of the Initial Term of this Agreement, to begin Public Financing related services for a specific financing issue or issues in which case the Contractor shall complete such Public Financing related services on the specific financing issue or issues so begun; or (b) there is a previously-scheduled meeting or event, in which case the Contractor shall provide marketing services in connection with such meeting or event; or (c) the City exercises its option to renew this Agreement.

B. Renewals

If the Director, at his or her sole discretion, makes a written request for renewal to Contractor (with a copy of the request sent to the CPO) at least 30 days before expiration of the then-current term and if sufficient funds are allocated, then, upon expiration of the Initial Term, this Agreement may be renewed for up to two successive one-year terms upon the same terms and conditions.

C. Time Extensions

If Contractor requests an extension of time to complete its performance at the end of the Initial Term or at the end of any of the renewal terms, then the Director may, in his or her sole G:\CONTRACT\LPN\2038S_Hilliop Securities_Financial Advisory 2016_Final.doc 6/30/2016
L.D. FILE NO. 0341600051001

discretion, extend the time so long as the extension does not exceed 90 days. The extension must be in writing but does not require amendment of this Agreement. Contractor is not entitled to damages for delay(s) regardless of the cause of the delay(s).

D. <u>Termination for Convenience by City</u>

The City may terminate this Agreement at any time by giving 30 days written notice to Contractor, with a copy of the notice to the CPO. The City's right to terminate this Agreement for convenience is cumulative of all rights and remedies which exist now or in the future.

On receiving the notice, Contractor shall, unless the notice directs otherwise, immediately discontinue all services under this Agreement and cancel all existing orders and subcontracts that are chargeable to this Agreement. As soon as practicable after receiving the termination notice, Contractor shall submit an invoice showing in detail the services performed under this Agreement up to the termination date. The City shall then pay the fees to Contractor for services actually performed, but not already paid for, in the same manner as prescribed in Section IV unless the fees exceed the allocated funds remaining under this Agreement.

TERMINATION OF THIS AGREEMENT AND RECEIPT OF PAYMENT FOR SERVICES RENDERED ARE CONTRACTOR'S ONLY REMEDIES FOR THE CITY'S TERMINATION FOR CONVENIENCE, WHICH DOES NOT CONSTITUTE A DEFAULT OR BREACH OF THIS AGREEMENT. CONTRACTOR WAIVES ANY CLAIM (OTHER THAN ITS CLAIM FOR PAYMENT AS SPECIFIED IN THIS SECTION), IT MAY HAVE NOW OR IN THE FUTURE FOR FINANCIAL LOSSES OR OTHER DAMAGES RESULTING FROM THE CITY'S TERMINATION FOR CONVENIENCE.

E. <u>Termination for Cause</u>

If Contractor defaults under this Agreement, the Director may either terminate this Agreement or allow Contractor to cure the default as provided below. The City's right to G:CONTRACT\LPN\20385_Hilltop Securities_Financial Advisory 2016_Final.doc L.D. FILE NO. 0341600051001

terminate this Agreement for Contractor's default is cumulative of all rights and remedies which exist now or in the future. Default by Contractor occurs if:

- (1) Contractor fails to perform any of its duties under this Agreement;
- (2) Contractor becomes insolvent;
- (3) all or a substantial part of Contractor's assets are assigned for the benefit of its creditors; or
- (4) a receiver or trustee is appointed for Contractor.

If a default occurs, the Director may, but is not obligated to, deliver a written notice to Contractor describing the default and the termination date. The Director, at his or her sole option, may extend the termination date to a later date. If the Director allows Contractor to cure the default and Contractor does so to the Director's satisfaction before the termination date, then the termination is ineffective. If Contractor does not cure the default before the termination date, then the Director may terminate this Agreement on the termination date, at no further obligation of the City.

To effect final termination, the Director must notify Contractor in writing, with a copy of the notice to the CPO. After receiving the notice, Contractor shall, unless the notice directs otherwise, immediately discontinue all services under this Agreement, and promptly cancel all orders or subcontracts chargeable to this Agreement.

F. <u>Termination for Cause by Contractor</u>

Contractor may terminate its performance under this Agreement only if the City defaults and fails to cure the default after receiving written notice of it. Default by the City occurs if the City fails to perform one or more of its material duties under this Agreement. If a default occurs and Contractor wishes to terminate the Agreement, then Contractor must deliver a written notice to the Director describing the default and the proposed termination date. The date must be at GNCONTRACT/LPN/20385_Hilltop Securities_Financial Advisory 2016_Final.doc

6/30/2016

L.D. FILE NO. 0341600051001

least 30 days after the Director receives notice. Contractor, at its sole option, may extend the proposed termination date to a later date. If the City cures the default before the proposed termination date, then the proposed termination is ineffective. If the City does not cure the default before the proposed termination date, then Contractor may terminate its performance under this Agreement on the termination date.

G. Suspension of Contractor's services related to a System.

In the event the City no longer needs a particular service from Contractor with regard to a particular System for any reason for any length of time, the City will notify Contractor in writing and Contractor shall immediately discontinue such service related to that System upon receiving the notice, and cancel all existing orders and subcontracts that are chargeable to that System for the requested length of time. Contractor shall submit charges to the City in the next quarterly invoice showing in detail the services performed for that System up to the suspension date.

VI. MISCELLANEOUS

A. Independent Contractor

Contractor shall perform its obligations under this Agreement as an independent contractor and not as an employee of the City.

B. <u>Severability</u>

If any part of this Agreement is for any reason found to be unenforceable, all other parts remain enforceable unless the result materially prejudices either party.

C. Entire Agreement

This Agreement merges the prior negotiations and understandings of the Parties and embodies the entire agreement of the Parties. No other agreements, assurances, conditions, covenants (express or implied), or other terms of any kind, exist between the Parties regarding this Agreement.

D. Written Amendment

Unless otherwise specified elsewhere in this Agreement, this Agreement may be amended only by written instrument executed on behalf of the City (by authority of an ordinance adopted by the City Council) and Contractor. The Director is only authorized to perform the functions specifically delegated to him or her in this Agreement.

E. Applicable Laws

This Agreement is subject to the laws of the State of Texas, the City Charter and Ordinances, the laws of the federal government of the United States, and all rules and regulations of any regulatory body or officer having jurisdiction.

Venue for any litigation relating to this Agreement is Harris County, Texas.

F. Notices

All notices to either party to the Agreement must be in writing and must be delivered by hand, facsimile, United States registered or certified mail, return receipt requested, United States Express Mail, Federal Express, UPS or any other national overnight express delivery service. The notice must be addressed to the party to whom the notice is given at its address set out in Section I of this Agreement or other address the receiving party has designated previously by proper notice to the sending party. Postage or delivery charges must be paid by the party giving the notice.

G. Captions

Captions contained in this Agreement are for reference only, and, therefore, have no effect in construing this Agreement. The captions are not restrictive of the subject matter of any section in this Agreement.

H. Non-Waiver

If either party fails to require the other to perform a term of this Agreement, that failure does not prevent the party from later enforcing that term and all other terms. If either party waives the other's breach of a term, that waiver does not waive a later breach of this Agreement.

An approval by the Director, or by any other employee or agent of the City, of any part of Contractor's performance does not waive compliance with this Agreement or establish a standard of performance other than that required by this Agreement and by law. The Director is not authorized to vary the terms of this Agreement.

I. <u>Inspections and Audits</u>

City representatives may have the right to perform, or have performed, (1) audits of Contractor's books and records, and (2) inspections of all places where work is undertaken in connection with this Agreement. Contractor shall keep its books and records available for this purpose for at least three years after this Agreement terminates. This provision does not affect the applicable statute of limitations.

J. Enforcement

The City Attorney or his or her designee may enforce all legal rights and obligations under this Agreement without further authorization. Contractor shall provide to the City Attorney all documents and records that the City Attorney requests to assist in determining Contractor's compliance with this Agreement, with the exception of those documents made confidential by federal or State law or regulation.

K. Ambiguities

If any term of this Agreement is ambiguous, it shall not be construed for or against any party on the basis that the party did or did not write it.

L. Survival

Contractor shall remain obligated to the City under all clauses of this Agreement that expressly or by their nature extend beyond the expiration or termination of this Agreement, including but not limited to, the indemnity provisions.

M. Publicity

Contractor shall make no announcement or release of information concerning this Agreement unless the release has been submitted to and approved, in writing, by the Director.

N. Parties In Interest

This Agreement does not bestow any rights upon any third party, but binds and benefits the City and Contractor only.

O. Successors and Assigns

This Agreement binds and benefits the Parties and their legal successors and permitted assigns; however, this provision does not alter the restrictions on assignment and disposal of assets set out in the following paragraph. This Agreement does not create any personal liability on the part of any officer or agent of the City.

P. Business Structure and Assignments

Contractor shall not assign this Agreement at law or otherwise or dispose of all or substantially all of its assets without the Director's prior written consent. Nothing in this clause, however, prevents the assignment of accounts receivable or the creation of a security interest as described in §9.406 of the Texas Business & Commerce Code. In the case of such an assignment, Contractor shall immediately furnish the City with proof of the assignment and the name, telephone number, and address of the Assignee and a clear identification of the fees to be paid to the Assignee.

Contractor shall not delegate any portion of its performance under this Agreement without the Director's prior written consent.

Q. Remedies Cumulative

Unless otherwise specified elsewhere in this Agreement, the rights and remedies contained in this Agreement are not exclusive, but are cumulative of all rights and remedies which exist now or in the future. Neither party may terminate its duties under this Agreement except in accordance with its provisions.

R. Contractor Debt

IF CONTRACTOR, AT ANY TIME DURING THE TERM OF THIS AGREEMENT, INCURS A DEBT, AS THE WORD IS DEFINED IN SECTION 15-122 OF THE HOUSTON CITY CODE OF ORDINANCES, IT SHALL IMMEDIATELY NOTIFY THE CITY CONTROLLER IN WRITING. IF THE CITY CONTROLLER BECOMES AWARE THAT CONTRACTOR HAS INCURRED A DEBT, HE SHALL IMMEDIATELY NOTIFY CONTRACTOR IN WRITING. IF CONTRACTOR DOES NOT PAY THE DEBT WITHIN 30 DAYS OF EITHER SUCH NOTIFICATION, THE CITY CONTROLLER MAY DEDUCT FUNDS IN AN AMOUNT EQUAL TO THE DEBT FOR ANY PAYMENTS OWED TO CONTRACTOR UNDER THIS AGREEMENT, AND CONTRACTOR WAIVES ANY RECOURSE THEREFOR.

CONTRACTOR SHALL FILE A NEW AFFIDAVIT OF OWNERSHIP, USING THE FORM DESIGNATED BY CITY, BETWEEN FEBRUARY 1 AND MARCH 1 OF EVERY YEAR DURING THE TERM OF THIS AGREEMENT.

EXHIBIT "A"

SCOPE OF SERVICES

A. Services in General

- 1) The Financial Advisor shall provide reasonable and necessary financial advisory services to the City during the term of this Agreement, in connection with the General Obligation, Houston Airport System, Combined Utility System and the Convention and Entertainment Facility debt and related Special Financings of the City. The financial advisory services to the City shall exclude coverage for general advisory services related to swaps and other derivative products, but not excluding consideration of swaps and other derivative products directly relating to other obligations set forth in this Agreement. Services related to advising the City on the risks, fair valuation and execution specifics of derivatives are outside of the scope of this Agreement.
- 2) General services include, but are not limited to, financial advisory services related to new-money bonds sold on a competitive and negotiated basis, pre-pricing and post-pricing analysis of competitive and negotiated sales, refunding analysis and other debt restructurings, managing the process for securing and negotiating new credit facilities, re-investment analysis, development of debt management policies and procedures, monitoring of secondary-market activities, training, assistance in the procurement of debt management-related services, and analysis of debt management-related fees.
- 3) In connection with these services, it is specifically understood and agreed that the Financial Advisor's obligations to perform under this Agreement and all of the City's obligations to pay money under this Agreement are limited by, and shall be subject to the provisions of this Agreement.
- 4) The Financial Advisor shall coordinate its performance of the services hereunder with the Director and such other persons as the Director may specify under the provisions of the procedures for the sale of city bonds, notes and other financing instruments, finally adopted by Motion No. 87-1853.
- 5) The Financial Advisor may, upon request, provide periodic verbal reports to conditions, transactions, situations or circumstances encountered by the Financial Advisor relating to the services to be performed under this Agreement and shall attend meetings determined to be necessary by the Director upon reasonable notice thereof.
- 6) It is understood and agreed that the City will pay all costs of issuance related to the offering, sale, closing and delivery of the City's obligations.

7) The Financial Advisor shall use at least one MWBE Co-Financial Advisor on all Bond Transactions that involves refunding bonds or new money bonds sold on a competitive and negotiated basis, up to the MWBE goal specified in section III.P of this Agreement.

B. Financial Services

1) Work Plan

- a) Within sixty (60) days after the Countersignature Date of this Agreement, the Financial Advisor shall develop and submit to the Director for review and approval a preliminary 12 month work plan for the delivery and timing of the services hereinafter described. Within thirty (30) days after receipt by the Financial Advisor of the Director's comments concerning the preliminary 12-month work plan, the Financial Advisor shall submit to the Director for review and approval the work plan which incorporates the Director's comments after consultation with the Financial Advisor. The Financial Advisor shall update and submit to the Director for review and approval a 12-month work plan at the beginning of each calendar quarter.
- b) The parties recognize and agree that the work plan may be subject to revision during the term of this Agreement, but there shall be no substantial revision of or variation from the terms of the work plan without the knowledge and written approval of the Director and the Financial Advisor.

C. PUBLIC FINANCING RELATED SERVICES

- 1) The Financial Advisor shall assist in coordinating the City's Finance Working Group and perform the following services, when appropriate, in connection with negotiated sales, competitive sales, and private placements of bonds and/or notes:
 - a) Assist financing activities and work with the City's financial officers in planning and developing individual financing programs, including, assistance in the preparation, content, design, printing and distribution, of official statements, notice of sales, offering memorandum and such other materials as are customarily necessary to prepare for the issuance of obligations, such as cash flow projections, and structuring analysis.
 - b) Develop and present specific recommendations as to the details of the issuance, including, but not limited to, structuring, principal amounts, dates, interest rates, maturity schedules, call features, escrow structuring, revenues, flow of funds, debt-service coverage requirements, debt service reserve requirements, municipal bond insurance, surety policies, related swaps or other derivative products (but not including analysis of risks, fair valuation

services, or advice on execution of swaps, unless covered by a separate or supplemental agreement for those services between the City and the Contractor), credit and liquidity facilities, remarketing agreements, security provisions and protective and other covenants to be included for the benefit of the City.

- c) For each transaction listed in this section, develop, update, and distribute a detailed schedule for the Finance Working Group's issuance schedule of meetings, activities and deliverables.
- d) Provide coordination and advice, as appropriate, to the City, selected underwriters, bond counsel, special disclosure counsel, and other consultants in connection with the issuance up to and including the day of delivery.
- e) Assist in the procurement of municipal bond insurance and/or surety policies, as needed.
- f) Monitor secondary market activities.
- 2) Provide rating agency presentation support and coordination including:
 - a) The preparation of discussion points,
 - b) The preparation and delivery of comprehensive documents to the rating agencies prior to the presentation,
 - c) The preparation of a well-organized, structured presentation,
 - d) Planned follow-up conversations,
 - e) Distribute all rating agency letters to Finance Working Group participants.
 - f) Coordinate conversations with rating agencies and responses to rating agency questions.
- 3) Specific to negotiated sales:
 - a) Provide general advice to the City regarding pricing structures, timing, and marketing efforts prepared by and recommended by underwriters.
 - b) Assist in evaluating the appropriateness of the underwriter's gross spread.
 - c) In coordination with the underwriters, design and implement a marketing program for the financing to alert investors; to generate interest in purchasing the bonds and/or notes; and to induce the most favorable response to the

City's offering. All services under this section shall be coordinated with the Director and shall be subject to review by the City's public finance attorneys.

- d) Provide pre-pricing and post-pricing analysis.
- 4) Specific to competitive sales:
 - a) Design and implement a marketing program for the financing to alert investors; to generate interest in purchasing the bonds and/or notes; and to induce the most favorable response to the City's offering. All services under this section shall be coordinated with the Director and shall be subject to review by the City's public finance attorneys.
 - b) Provide pre-pricing and post-pricing analysis.
- 5) Specific to private placements:
 - a) Assist in the preparation of and distribution of Requests for Indication of Interest or Request for Proposals, as appropriate, and present specific recommendations in the evaluation and negotiation process of the placement, consistent with the Municipal Securities Rulemaking Board (MSRB) rules.
 - b) Assist in evaluating the appropriateness of the potential investor's structure and pricing proposal.
- 6) The Financial Advisor shall assist in coordinating the City's Finance Working Group and perform the following services in connection with securing and negotiating new credit facilities and managing the credit renewal process:
 - Assist in the preparation of Requests for Indication of Interest or Request for Proposals, as appropriate.
 - b) Assist financing activities and work with the City's financial officers in planning and developing individual financing programs, including, assistance in the preparation and negotiation of terms and conditions and such other materials as are customarily necessary.
 - c) Develop and present specific recommendations as to the details of the credit facilities, including, but not limited to, structuring, principal amounts, facility term, pricing, termination features, term-out provisions, closing requirements, security provisions and protective and other covenants to be included for the benefit of the City.

- d) Provide assistance, as appropriate, to the City, selected financial institutions, legal counsel, special disclosure counsel, and other consultants in connection with the credit facilities up to and including the countersignature date.
- 7) Provide input and support in strategic financial planning for Houston Airport System (HAS):
 - a) Input to and support for HAS financial models and strategic financial planning
 - b) Analysis and support in the development of and updates to the HAS capital plan, including the development of cash flow and appropriation commitment projections and alternatives.
 - c) Assistance in reviewing funding alternatives for the HAS capital plan and for each capital project, including strategies related to the use of HAS reserves, financing alternatives, Airport Improvement Program (AIP) and other grant funds, passenger facility charges, customer facility charges and tenant financings.
 - d) Advice and assistance with strategies for the use of passenger facility charges, including supporting materials for passenger facility charge applications.
 - e) Strategic advice on HAS rates and charges policies and practices
 - f) Provide financial analyses, as needed, with the development of strategies and negotiations with HAS tenants for major airport facilities.
 - g) Assist HAS develop and periodically review key financial metrics in support of HAS credit objectives.
 - h) Analyses, reports, presentations and advice for ongoing rating agency strategies, including annual surveillance and other periodic updates in support of HAS credit objectives.
 - i) Regular updates on airport financing practices, industry updates and key trends and factors in aviation finance that may impact HAS.

D. OTHER SERVICES

The Financial Advisor shall also provide the following services, inclusive in the retainer fees under Exhibit E:

- 1) Complete, annually and upon request, review of the City's capital requirements and resources available and an analysis of the City's financial capacity including:
 - a. Identifying the availability of resources brought to this Agreement.

- b. Consulting with City staff, auditors, engineers, attorneys, and other related professionals.
- c. Reviewing the City's debt capacity.
- d. Analyzing the City's revenue sources to determine their effect on the City's credit rating.
- e. Reviewing the City's current policy and practice of payment of, and reserving for, debt service.
- f. Analyzing the City's strengths and weaknesses in credit and debt design.
- g. Monitor the market for the viability of credit enhancement.
- 2) Assist the City's debt management process including:
 - a) Preparing debt model update/refresh for each of the City's credits for which a model is maintained, after the adoption of the System's budget and/or capital improvement plan and after the release of the System's Comprehensive Annual Financial Report (CAFR); following each new debt issuance; and as requested by the City. Provide debt models, in fully functional Excel format, to the City, subsequent to every update, for each of the City's credits for which a model is maintained
 - b) Preparing, quarterly and upon request, a schedule of upcoming financial transactions.
 - c) Preparing, semi-annually and upon request, a list of all projects currently being undertaken.
 - d) Establishing, biweekly and upon request, regular status calls between the City's Finance Working Group.
 - e) Preparing, annually and upon request, training alternatives to be selected by the City; in accordance with such requirement under the City's disclosure policies.
 - f) Establishing, annually and upon request, a performance review session; where feedback will be given by the City.
 - g) Preparing a summary of the City's debt each April 1st and subsequent to significant changes to the City's debt including but not limited to summaries of future debt service, facility expiration dates, and historical trends.
 - h) Assisting the City in establishing general policies concerning early debt retirement or refunding.

- i) Providing refunding, other debt restructuring, debt management-related fees and re-investment analyses.
- j) Assisting the City in preparing guidelines for new issue designs.
- k) Making recommendations regarding general debt planning, (i.e. separation of the timing of issuance from cash flow needs, optimization of the City's debt service structure and an assessment of alternative security structures).
- Assisting in the creation of selection criteria for rating agencies and credit providers when requested by the Director.
- m) Assisting the City in analyzing changes in federal and state legislation or regulations affecting long-range debt financing.
- n) Assisting in the procurement of debt management-related services.
- Examine and advise the City in the development of creative financing alternatives, through an annual strategic thinking session with each of the City credits.
- 4) Work with City personnel to develop in-house financial advisory capability including:
 - a) Analytical tools and evaluations.
 - b) Rating agency, analyst and investor relations.
 - c) Enhanced knowledge through workshops related to Public Financing issues.
- 5) Assist the City in financial analysis regarding proposed annexation of utility districts, proposed propositions and/or ballot initiatives, economic development authority debt issuance, and debt issuance of other entities directly impacting the City.
- 6) Maintain contact with financial institutions who might serve as credit enhancers or providers specifically on behalf of the City, as appropriate, for existing or proposed debt financings.
- 7) Maintain an ongoing market development program to alert underwriters and investors to pending sales; to generate interest in purchasing the City's bonds; and to generate the most favorable response to the City's offerings. All services under this section shall be coordinated with the Director and shall be subject to review by the City's public finance attorneys if the Director determines it to be necessary or desirable.
- 8) Maintain a list of major debt holders, including their address and key individuals.

E. SPECIAL SERVICES

- 1) The Financial Advisor shall also provide assistance, examination and analysis of miscellaneous Special Financings as determined to be necessary by the Director upon reasonable notice thereof.
- 2) For each Special Financing, prior to commencing work, the Director and the Financial Advisor shall sign a Memorandum of Understanding describing the Special Financing, detailing the scope of work, and specifying the cost of services, provided funds are allocated to pay for these services.

F. Local Presence Clause

With respect to the Financial Advisory Services, Contractor shall have had a local authorized business facility located within the City of Houston or surrounding area. The location shall remain operational throughout the term of the Agreement and shall support the demands of the City's requirements as set forth in this Agreement.

EXHIBIT "B"

DRUG POLICY COMPLIANCE AGREEMENT

I, Warren P. C	Cash III, Managing Directon (Print/Type)	or	as an owner or officer of
(Name	e) (Print/Type)	(Title)	
Hilltop Securi	ities Inc.		(Contractor)
		(Name o	of Company)
may enter into aware of and b safety impact p	with the City of Houston; a by the time the contract is a	and that by making awarded will be bo lloyee positions, ar	er or performance of any and all contracts it this Agreement, I affirm that the Contractor is und by and agree to designate appropriate nd to comply with the following requirements
1.	procedures for the Contr Mayor's Amended Policy	actor that meet the on Drug Detection	e Workplace Policy and related drug testing e criteria and requirements established by the n and Deterrence (Mayor's Drug Policy) and e Procedures for Contractors (Executive Order
2.			nsistent with Health and Human Services testing laboratory to perform the drug tests.
3.	Monitor and keep record City of Houston, provide		en and the results; and upon request from the ch testing and results.
4.	Submit semi-annual Dru	g Policy Complian	ce Declarations.
	alf of the Contractor that fundation at the condition of		the Mayor's Drug Policy and Executive Order of Houston.
documentation considered a	in compliance with the	Mayor's Drug Pol	h or failure to timely submit declarations and/o licy and/or Executive Order No. 1-31 will be nay result in non-award or termination of the
June 30, 201	6		Hilltop Securities Inc.
Date			Contractor Name
			By Warren P. ash II

Signature Warren P. Cash III

Managing Director

Title

EXHIBIT "C"

CONTRACTOR'S CERTIFICATION OF NO SAFETY IMPACT POSITIONS IN PERFORMANCE OF A CITY CONTRACT

I, Warren P. Cash III	Managing Director	
(Name)	(1	Citle)
as an owner or officer of Hillto	p Securities Inc.	(Contractor)
	(Name of Compar	ny)
	actor with respect to its bid, and heres, as defined in §5.18 of Executive	reby certify that Contractor has no Order No. 1-31, that will be involved
in performing Financial Advisor	ry Services	· · · · · · · · · · · · · · · · · · ·
	(Project) Is that it shall immedietely notify the positions are established to provide	e City of Houston Director of Human eservices in performing this City
June 30, 2016	Warren P. Cash	III
(Date)	(Typed or Printed	
	Waren P. (Cush as
	(Signature)	
	Managing Direct	tor
	(Title)	

EXHIBIT "D"

DRUG POLICY COMPLIANCE DECLARATION

1,	(Name)	(Print/Type)	τ)	Title)	owner or onicer or	
				(Name of Company)	(Contractor)	
have p	ersonal l	nowledge and fi	ull authority to mak	e the following declara	lions:	
This re	porting p	eriod covers the	preceding 6 month	ns from	to, 20	
Initials		A written Drug Free Workplace Policy has been implemented and employees notified. The policy meets the criteria established by the Mayor's Amended Policy on Drug Detection and Deterrence (Mayor's Policy).				
Initials		Written drug testing procedures have been implemented in conformity with the Mayor's Drug Detection and Deterrence Procedures for Contractors, Executive Order No. 1-31. Employees have been notified of such procedures.				
Initials		Collection/testir Services (HHS)	_	cted in compliance with	n federal Health and Hum	ıan
Initials	-	performing on the		contract. The number	d for employee positions of employees in safety in	
Initials		From	to	the follo	wing test has occurred	
miliais		(Start dat	e) (⊨ Random	nd date) Reasonable <u>Suspicion</u>	Post <u>Accident</u>	<u>Total</u>
	Numb Teste	oer Employees ed				
	Numb Positi	oer Employees ive				
	Perce Positi	ent Employees ive				
Initials	_			was immediately remo and Executive Order N	oved from the City worksi lo. 1-31.	te
Initials	<u> </u>			o submit this declaration dered a breach of cor	on timely in accordance w stract.	'ith
				ons made herein and a are true and correct.	Il information contained in	า this
	(Date)			(Typed	or Printed Name)	
				(Signate	ıre)	
				(Title)		

G:\CONTRACT\LPN\20385_Hilltop Securities_Financial Advisory 2016_Final.doc L.D., FILE NO. 0341600051001

EXHIBIT "E"

FEE STRUCTURE

Based on the scope of services outlined herein and the City's desire to compensate Financial Advisor on the basis of an annual retainer, the City shall pay the following fee structure for each type of enterprise or general fund financial advisory service, as described below:

FY2017 (July 30, 2016 - June 30, 2017)

<u>SYSTEMS</u>	Annual Retainer	Reimbursable Expenses (Not to exceed)	Special Projects (Not to exceed)
General Obligation/General Fund (GO/GF)	\$251,625.00	\$ 4,125.00	\$100,000.00
Houston Airport System (HAS)	\$251,625.00	\$ 4,125.00	
Combined Utility System (CUS)	\$251,625.00	\$ 4,125.00	
Convention & Entertainment Facility (CEF)	\$_70,125.00	\$ 1,650.00	
Total:	\$825,000.00	\$14,025.00	\$100,000.00

FY2018 through FY2019 (July 1, 2017 - June 30, 2019)

<u>SYSTEMS</u>	Annual Retainer	Reimbursable Expenses
		(Not to exceed)
General Obligation/General Fund	\$274,500.00	\$ 4,500.00
Houston Airport System	\$274,500.00	\$ 4,500.00
Combined Utility System	\$274,500.00	\$ 4,500.00
Convention & Entertainment Facility Dept.	<u>\$ 76,500,00</u>	<u>\$ 1,800.00</u>
Total:	\$900,000.00	\$15,300.00

Renewal Years

FY2021 (7/1/20 - 6/30/21)

<u>SYSTEMS</u>	Annual Retainer	Reimb. Expenses (Not to exceed)	Annual Retainer	Reimb. Expenses (Not to exceed)
GO/GF	\$279,990.00	\$4,590.00	\$285,589.80	\$4,681.80
HAS	\$279,990.00	\$4,590.00	\$285,589.80	\$4,681.80
CUS	\$279,990.00	\$4,590.00	\$285,589.80	\$4,681.80
CEF	<u>\$ 78,030.00</u>	\$1,836.00	\$ 79,590.60	\$1,872.72
Total	\$918.000.00	\$15,606.00	\$936,360.00	\$15,918.12

Financial Adviser shall bill the above retainer fees and the reimbursable expenses, if any, on separate invoices on a quarterly basis which shall be paid quarterly in arrears by the City. In an effort to stay aligned with the City's standard operating procedures for payment of invoices which are on a calendar quarter basis, the first invoice will be for services rendered during the months of August and September, 2016, and the subsequent invoices will be submitted quarterly starting with the month of October, 2016 throughout the term of this Agreement.

FY2020 (7/1/19 - 6/30/20)

In addition to the above, the following fee structure is adopted at no cost to the City for the services described below:

Maintenance and Surveillance Services. Online FairValue Advisor Services shall be
provided at no cost to the City for the City's four swaps in existence at the time this
Agreement becomes effective. Financial Adviser shall waive the one-time setup fee
of \$1,500 per swap and the annual subscription fee of \$2,500 per swap for the four
existing swaps during the term of this Agreement.



CITY OF HOUSTON

Sylvester Turner

Finance Department

Mayor

Kelly Dowe Chief Business Officer/Director of Finance P.O. Box 1562 Houston, Texas 77251-1562

T. 832-393-9051 F. 832-393-9116 www.houstonix.gov

September 26, 2017

McConnell & Jones LLP and Banks, Finley, White Company (M&J/BFW) 4828 Loop Central Drive, Suite 1000 Houston, Texas 77081 Attention: Ira Wayne McConnell Managing Partner

Re: Request for Contract Renewal under City of Houston contract #4600012376

Mr. McConnell,

Pursuant to Section V.B. Renewals of the Agreement for Professional Auditing Services entered between the City of Houston and McConnell & Jones LLP (M&J) and Banks, Finley, White & Co (BFW), a joint venture Partnership under assumed name of M&J/BFW Team (Contract No. 4600012376) effective January 15, 2014, the City of Houston hereby requests that this contract be renewed for an additional one-year term, upon the same terms and conditions, from January 15, 2018 through January 14, 2019.

If there are any questions, please feel free to contact Arif Rasheed at 832-393-9013.

Sincerely,

Kelly Dowe

Finance Director

Acknowledged by: McConnell & Jones LLP (M&J) and Banks, Finley, White & Co (BFW), Under Assumed Name of M&J/BFW Team (Please return a signed copy of this letter to Arif Rasheed at the above address):

Name: Kallnune Mc Conwell

Title: PUCKNES

Cc: Arif Rasheed, Deputy Director, FRO - Finance Department

Jerry Adams, Chief Procurement Officer, SPD - Finance Department

Lan Nguyen, Sr. ACA I - Logal Department

Council Members: Brenda Stardig Jerry Davis Eilen R. Cohen Dwight A. Boykins Dave Martin Steve Le Greg Travis Karia Cisneros Robert Gallegos Mike Laster Larry V. Green Mike Knox David W. Robinson Michael Kubosh Amanda Edwards Jack Christle Controller: Chris Brown

Controller's Office

To the Honorable Mayor and City Council of the City of Houston, Texas:

expen	I hereby certify, with respect to the money required for the contract, agreement, obligation of diture contemplated by the ordinance set out below that:
(V)	Funds have been encumbered out of funds previously appropriated for such purpose.
()	Funds have been certified and designated to be appropriated by separate ordinance to be approved prior to the approval of the ordinance set out below.
()	Funds will be available out of current or general revenue prior to the maturity of any such obligation.
()	No pecuniary obligation is to be incurred as a result of approving the ordinance set out below
()	The money required for the expenditure or expenditures specified below is in the treasury, in the fund or funds specified below, and is not appropriated for any other purposes.
()	A certificate with respect to the money required for the expenditure or expenditures specified below is attached hereto and incorporated herein by this reference.
()	Other - Grant Funds Available 12-17, 2013 Other - Grant Funds Available City Controller of the City of Houston, Texas
Date:	12-17, 2013 Chb. M-City Controller of the City of Houston, Texas
FUNI	REF: 1000-6400-520105 AMOUNT: 600,000 00 ENCUMB. NO.: OA 46-12376
	OA 46-12376 City of Houston, Texas Ordinance No. 2014-8

AN ORDINANCE APPROVING AND AUTHORIZING A CONTRACT BETWEEN THE CITY AND McCONNELL & JONES LLP / BANKS, FINLEY, WHITE & CO., A JOINT VENTURE PARTNERSHIP KNOWN AS M&J/BFW TEAM FOR PROFESSIONAL AUDITING SERVICES; PROVIDING A MAXIMUM CONTRACT AMOUNT; CONTAINING PROVISIONS RELATING TO THE SUBJECT; AND DECLARING AN EMERGENCY.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF HOUSTON, TEXAS:

Section 1. The City Council hereby approves and authorizes the contract, agreement or other undertaking described in the title of this Ordinance, in substantially the form as shown in the document which is attached hereto and incorporated herein by this reference. The Mayor is hereby authorized to execute such document and all related documents on behalf of the City of

Houston. The City Secretary is hereby authorized to attest to all such signatures and to affix the seal of the City to all such documents.

- Section 2. The Mayor is hereby authorized to take all actions necessary to effectuate the City's intent and objectives in approving such agreement, agreements or other undertaking described in the title of this ordinance, in the event of changed circumstances.
- Section 3. The City Attorney is hereby authorized to take all action necessary to enforce all legal obligations under said contract without further authorization from Council.
- Section 4. The total allocation for the contract, agreement or other undertaking approved and authorized hereby shall never exceed \$7,000,000.00, unless and until this sum is increased by ordinance of City Council.
- Section 5. There exists a public emergency requiring that this Ordinance be passed finally on the date of its introduction as requested in writing by the Mayor; therefore, this Ordinance shall be passed finally on such date and shall take effect immediately upon its passage and approval by the Mayor; however, in the event that the Mayor fails to sign this Ordinance within five days after its passage and adoption, it shall take effect in accordance with Article VI, Section 6. Houston City Charter

PASSE	O AND ADOPTED th	is 8th day of January, 20/4	<i>l</i> .
	APPROVED this	0 //	·
		Mayor of the City of Houston	ı, Texas
Pursuant to a foregoing Ordinance		Iouston City Charter, the effective date City Soundary	of the
(LPN:ln 10/30/1313	Dept. X an 1. Na Senior Assistan Dowe, Director, Finar	t City Attorney	

CAPTION PUBLISHED IN DAILY COURT REVIEW

DATE:

(L.D. File No. 03413000139-001)

G:\CONTRACT\LPN\Ordinances\McConnell JV Team Auditing Serv.doc

AYE	NO	
is desired.		MAYOR PARKER
••••	••••	COUNCIL MEMBERS
Barrer .		STARDIG
V _		DAVIS
W		COHEN
/		BOYKINS
W.		Martin
		NGUYEN
banker		PENNINGTON
		GONZALEZ
y /		GALLEGOS
W		LASTER
Basedo		GREEN
Barrio Constitution of the		COSTELLO
Rest.		ROBINSON
W		KUBOSH
Market .		BRADFORD
Barret		CHRISTIE
CAPTION	ADOPTED	
		MAY 017 Rev. 01/14

THE STATE OF TEXAS & SCOUNTY OF HARRIS

AGREEMENT FOR PROFESSIONAL AUDITING SERVICES

I. PARTIES

A. Address

THIS AGREEMENT FOR PROFESSIONAL AUDITING SERVICES ("Agreement") is made between the CITY OF HOUSTON, TEXAS ("City"), a home rule city of the State of Texas, and MCCONNELL & JONES LLP (M&J) & BANKS, FINLEY, WHITE & CO. (BFW), a Joint Venture Partnership doing business in Texas under the assumed name of M&J/BFW Team ("Auditor").

The initial addresses of the parties, which one party may change by giving written notice to the other party, are as follows:

City

Director of Finance or Designee City of Houston P.O. Box 1562 Houston, Texas 77251-1562 **Auditor**

M&J/BFW Team c/o McConnell & Jones LLP & Banks, Finley, White & Co. 3040 Post Oak Blvd. – Suite 1600 Houston, Texas 77056 Attention: Wayne McConnell Managing Partner

The Parties agree as follows:

B. Table of Contents

This Agreement consists of the following sections:

TABLE OF CONTENTS

		Page No.
	I.	PARTIES1
	II.	DEFINITIONS4
	III.	DUTIES OF AUDITOR5
	IV.	DUTIES OF CITY16
	v.	TERM AND TERMINATION21
	VI.	MISCELLANEOUS24
	EXH	BITS
		A. Scope of Services
		B. Fee Schedule
		C. Equal Employment Opportunity
		D. Drug Policy Compliance Agreement
		E. Auditor's Certification of No Safety Impact Positions
		F. Drug Policy Compliance Declaration
		G. Form of Engagement Letter for Basic Services
		H. Project Team Staffing
	C.	Parts Incorporated
	The al	ove-described sections and exhibits are incorporated into this Agreement.
	D.	Controlling Parts
	If a co	nflict among the Sections and Exhibits arises, the Sections control over the
Exhib	its.	

E. Signatures

The Parties have executed this Agreement in multiple copies, each of which is an original.

WITNESS:	Auditor: MCCONNELL & JONES LLP (M&J) & BANKS, FINLEY, WHITE & CO. (BFW)
Name:	Under Assumed Name of M& BFW Team
Title:	By: Stall aunally Consill
	Name: Ta Wayner Conney Title: Namo Vi Grande TAX ID NO. 44-2499 329
ATTEST/SEAL:	CITY OF HOUSTON, TEXAS Signed by:
City Secretary	Mayor
APPROVED:	COUNTERSIGNED BY:
ach in	
Director, Finance Department	City Controller
APPROVED:	
Calvin D. Wells, Deputy Director City Purchasing Agent	
APPROVED AS TO FORM:	DATE COUNTERSIGNED:
Lan P. Uguyan	
Sr. Assistant City Attorney	
L.D. File No. 0341300139001	

II. DEFINITIONS

As used in this Agreement, the following terms have the meanings set out below:

"Allocated Funds" is defined in Section IV(D).

"Auditor" is defined in the preamble of this Agreement, which definition includes its successors and assigns.

"Audit Committee" means the Finance Director and the City Controller or an audit committee as established by the Houston City Council.

"Basic Services" is defined in Exhibit "A"

"City" is defined in the preamble of this Agreement and includes its successors and assigns.

"City Controller" shall mean the City Controller of the City of Houston.

"City Purchasing Agent" shall mean the City Purchasing Agent of the City of Houston.

"Countersignature Date" means the date shown as the date countersigned on the signature page of this Agreement.

"Director" means the Director of Finance, or the person he or she designates.

"Document" means reports, charts, analyses, maps, letters, tabulations, exhibits, computer databases and diskettes, software, notes and other work products obtained by Auditor from the City or prepared by the Auditor as a task under this Agreement. "Document" does not include, however, the Auditor's working papers, proprietary methodologies, software or databases.

"Fiscal Year" means the City's Fiscal Year which runs from July 1 through June 30.

"Generally Accepted Accounting Principles" means accounting principles generally accepted in the United States of America.

"Generally Accepted Auditing Standards" means auditing standards generally accepted in the United States of America.

"Mayor" means the Mayor of the City or his designated representative.

"Notice to Proceed" means the communication from the Director in an Engagement Letter to Auditor instructing Auditor to begin performance.

"Parties" mean all the entities set out in the Preamble who are bound by this Agreement.

"Special Services" is defined in Exhibit "A".

III. DUTIES OF AUDITOR

A. Scope of Services

Auditor's performance under this Agreement is divided into 2 categories of services: 1) Basic Services and 2) Special Services, as described in the attached Exhibit "A". The Scope of Services also includes the matters set out in this section. In consideration of the payment specified in this Agreement, Auditor shall provide all labor, materials, and supervision necessary to perform the Basic Services and, if requested and agreed to by Auditor, the Special Services in each case, as set forth in a separate engagement letter in the form similar to the attached Exhibit "G" (each, an "Engagement Letter"), entered into by the City and the Auditor with respect to such services, in accordance with generally accepted auditing standards, for the fiscal years ending 2014, 2015, 2016 and for each additional year thereafter that the Auditor is engaged by the City. Engagement Letters providing for Auditor to perform Basic Services shall be substantially in the form set forth in the attached Exhibit "G".

The Director will be responsible for requesting the specific services to be provided by the Auditor and that Auditor shall assume responsibility for performing such services and preparing the resulting report(s).

B. Coordinate Performance

Auditor shall coordinate the performance of its services with the Director. Auditor understands and agrees that the Director will be monitoring the day-to-day activities of Auditor through daily contact, meetings and formal progress reports. Auditor shall promptly report to the Director any conditions, transactions, situations or circumstances it encounters in the performance of its services, that would impede or impair the proper conduct of the services hereunder or which would seem to warrant a special investigation or report in more detail than which is necessary to perform the services under this Agreement.

C. Notice to Proceed

Auditor shall begin performance of its services under this Agreement on the date specified in a Notice to Proceed from the Director as stated in an Engagement Letter.

D. Reports

Auditor shall prepare and submit reports and provide progress updates as requested by the Director.

E. Schedule of Performance - General

1. Time of Performance

Auditor shall commence services under this Agreement on the date specified by the Director. Such services shall be diligently performed thereafter, and shall be completed within the following specified times, as specified below under section D.2, unless an extension of time is agreed to by the Director, as specified below.

2. Due Dates

Except as specifically set forth in an Engagement Letter, due dates for subtasks and Deliverables are given in the table below. Dates are the same for each Fiscal Year that the Auditor provides Basic Services and assumes that the City's personnel provide the underlying reporting documents based on an

agreed upon timetable that allows ample time for the auditors to complete their work.

- a. Task 1 Audit of Comprehensive Annual Financial Report (CAFR) for preceding Fiscal Year:
 - i. CAFR (Including Schedules of Federal and State Financial Assistance)
 - Draft Report: October 27
 - Issue Final Report: On or before November 15 of each year
 - ii. Houston Airport System CAFR
 - Draft Report: October 27
 - Issue Final Report: On or before November 15 of each year
 - iii. Auditor Proposed Adjusting Journal Entries
 - Submit to City Controller and Finance Director for review and approval prior to Draft CAFR
 - iv. Management Recommendation Letters
 - Draft Final Letter: On or before November 30
 - Issue Final Letter: On or before November 30 of each year
- b. Task 2 and Task 3 (Single Audit):
 - i. Evaluate the Overall Presentation of the Schedules of Federal/State Financial Assistance.
 - Completion: Same as CAFR dates
 - ii. Accountant's Reports OMB Circular A-133
 - Draft Reports: Prepare and hold exit conference with Departments by November 15 of each year
 - Draft Reports: Prepare and hold exit conference with Director of Finance and City Controller by November 15 of each year.
 - iii. If requested by the City, **Follow-up** 90 days after issuance of the Single Audit
 - Issue Letter: February 28 of each year
- c. Task 4 Agreed-upon Procedures for the Texas Commission of Environmental Quality (TCEQ)

• Draft Report: Within 60 days of the City providing the requisite information

3. Time Extensions

Upon request of the Auditor, the Director shall grant time extensions, as provided under Section V.C of this Agreement:

- a. to the extent of any delays caused by the City or other agencies with whom the work must be coordinated and over whom the Auditor has no control (but only to the extent that the exercise of due diligence and care on the part of the Auditor within the scope of its work under this Agreement could not have avoided such delays), and
- b. to the extent of any delays caused by Force Majeure as that term is defined herein.

The extension must be in writing but does not require amendment to this Agreement. Auditor is not entitled to damages for delay(s) regardless of the cause of the delay(s).

F. Subcontractors

Auditor shall be responsible for negotiating subcontracts with its subcontractors. Such agreements shall require the subcontracting parties to substantially comply with all the terms expressed herein. Also, Auditor shall notify the Director any time it utilizes a subcontractor, provide the Director with the subcontractor's professional qualifications and responsibilities, and must obtain the Director's approval prior to entering into an agreement with the subcontractor.

G. Payment of Subcontractors

Auditor's Duty to Pay

Auditor shall make timely payments to all of its subcontractors supplying labor, materials or equipment for the performance of this Agreement, in accordance with the provisions of Chapter 2251 of the Texas Government Code. AUDITOR SHALL DEFEND, INDEMNIFY AND HOLD

HARMLESS THE CITY FROM ANY CLAIMS OR LIABLITY ARISING OUT OF AUDITOR'S FAILURE TO MAKE THESE PAYMENTS.

H. <u>RELEASE</u>

AUDITOR AGREES TO AND SHALL RELEASE THE CITY, ITS AGENTS, EMPLOYEES, OFFICERS, AND LEGAL REPRESENTATIVES (COLLECTIVELY THE "CITY") FROM ALL LIABILITY FOR INJURY, DEATH, DAMAGE, OR LOSS TO PERSONS OR PROPERTY SUSTAINED IN CONNECTION WITH OR INCIDENTAL TO PERFORMANCE BY THE AUDITOR UNDER THIS AGREEMENT, EVEN IF THE INJURY, DEATH, DAMAGE, OR LOSS IS CAUSED BY THE CITY'S CONCURRENT NEGLIGENCE AND/OR THE CITY'S STRICT PRODUCTS LIABILITY OR STRICT STATUTORY LIABILITY.

I. INDEMNIFICATION

AUDITOR AGREES TO AND SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY, ITS AGENTS, EMPLOYEES, OFFICERS, AND LEGAL REPRESENTATIVES (COLLECTIVELY THE "CITY") HARMLESS FOR ALL CLAIMS, CAUSES OF ACTION, LIABILITIES, FINES, AND EXPENSES (INCLUDING, WITHOUT LIMITATION, ATTORNEYS' FEES, COURT COSTS, AND ALL OTHER DEFENSE COSTS AND INTEREST) FOR INJURY, DEATH, DAMAGE, OR LOSS TO PERSONS OR PROPERTY SUSTAINED IN CONNECTION WITH OR INCIDENTAL TO PERFORMANCE UNDER THIS AGREEMENT INCLUDING, WITHOUT LIMITATION, THOSE CAUSED BY:

(1) AUDITOR'S AND/OR ITS AGENTS', EMPLOYEES', OFFICERS',
DIRECTORS', CONTRACTORS', OR SUBCONTRACTORS'
(COLLECTIVELY IN NUMBERED PARAGRAPHS 1-3, "AUDITOR")

ACTUAL OR ALLEGED NEGLIGENCE OR INTENTIONAL ACTS OR OMISSIONS;

- (2) THE CITY'S AND AUDITOR'S ACTUAL OR ALLEGED CONCURRENT
 NEGLIGENCE, WHETHER AUDITOR IS IMMUNE FROM LIABILITY OR
 NOT; AND
- (3) THE CITY'S AND AUDITOR'S ACTUAL OR ALLEGED STRICT PRODUCTS LIABILITY OR STRICT STATUTORY LIABILITY, WHETHER AUDITOR IS IMMUNE FROM LIABILITY OR NOT.

AUDITOR SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY HARMLESS DURING THE TERM OF THIS AGREEMENT AND FOR FOUR YEARS AFTER THE AGREEMENT TERMINATES. AUDITOR'S INDEMNIFICATION IS LIMITED TO \$1,000,000 PER OCCURRENCE. AUDITOR SHALL NOT INDEMNIFY THE CITY FOR THE CITY'S SOLE NEGLIGENCE.

J. Insurance

Auditor shall maintain in effect certain insurance coverage and shall furnish certificates of insurance, in duplicate form, before beginning its performance under this Agreement. All policies except Professional Liability and Workers' Compensation must include the City as an additional insured. The issuer of any policy (1) shall have a Certificate of Authority to transact insurance business in Texas or (2) shall be an eligible non-admitted insurer in the State of Texas and have a Best's rating of at least B+ and a Best's Financial Size Category of Class VI or better, according to the most current edition Best's Key Rating Guide. Auditor shall maintain the following insurance coverages in the following amounts:

(Coverage)

(Limit of Liability)

Workers' Compensation

Statutory for Workers' Compensation

Employer's Liability

Bodily Injury by accident \$500,000 (each accident) Bodily Injury by Disease \$500,000 (policy limit) Bodily Injury by Disease \$500,000 (each employee)

Commercial General Liability: Including Broad Form Coverage, Contractual Liability, Bodily and Personal Injury, and Completed **Operations**

Bodily Injury and Property Damage, Combined Limits of \$500,000 each Occurrence and \$1,000,000 aggregate

Automobile Liability Insurance (for vehicles Auditor uses in performing under this Agreement, including Owned, Non-Owned and Hired Auto Coverage)

\$1,000,000 combined single limit per occurrence

Professional Liability Coverage

\$1,000,000 combined single limit

Defense costs are excluded from the face amount of the policy. Aggregate Limits are per 12-month policy period, unless otherwise indicated.

All insurance policies (except for Professional Liability) must require by endorsement that the insurance carrier waives any rights of subrogation against the City, and that Auditor shall give 30 days advance written notice to the City before any of its policies are canceled. In addition, Auditor shall give the City 30 days advance written notice of any cancellation, material changes or nonrenewal of any of its policies that would result in Auditor not maintaining insurance coverages in the amounts set forth in sub-sections (1)-(5) of this Section III.(I) during the term of this Agreement. Within the 30 day period, Auditor shall secure other suitable policies in lieu of those about to be canceled, materially changed, or nonrenewed so as to maintain in effect the required coverage. For the avoidance of doubt, notwithstanding the cancellation, material changes or nonrenewal of any insurance policy that Auditor may have in effect as of the date hereof, Auditor shall maintain 10/30/2013 G:\CONTRACT\LPN\20248_McConnell & Jones_Auditing Services_Final.doc

insurance coverages in the amounts set forth in sub-sections (1)-(5) of this Section III.(I) during the term of this Agreement. If Auditor does not comply with this requirement, the Director, at his or her sole discretion, after the expiration of the 30 day period set forth in the preceding sentence, may

- immediately suspend Auditor from any further performance under this (1) Agreement and begin procedures to terminate for default, or
- (2)purchase the required insurance with City funds and deduct the cost of the premiums from amounts due to Auditor under this Agreement.

K. Warranties

Auditor's performance shall conform to the generally accepted auditing standards, applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States; and Office of Management and Budget ("OMB") Circular A-133, Audits of States, Local Governments and Non-profit Organizations. Auditor's performance shall also conform to the professional standards prevailing in Harris County, Texas with respect to the scope, quality, due diligence, and care of the services and products Auditor provides under this Agreement. Auditor shall perform all work using trained and skilled persons having experience performing the work required under this Agreement.

L. Confidentiality - Protection Of City's Interest

(1) Auditor, its employees, contractors, and subcontractors shall hold all City information, data, and documents (collectively, "the Information") that they receive, or to which they have access, in strictest confidence in perpetuity. Except in the performance of services hereunder or in accordance with the terms of this Agreement, Auditor, its employees, contractors, and subcontractors shall not disclose, disseminate, or use the Information unless the Director authorizes it in writing. This obligation of confidentiality shall not apply to information that (i) is or becomes G:\CONTRACT\LPN\20248_McConnell & Jones_Auditing Services_Final.doc 10/30/2013

publicly available by other than a breach hereof (including, without limitation, any information filed with any governmental agency and available to the public); (ii) is required to be disclosed by order of a court of competent jurisdiction, administrative agency or governmental body, or by subpoena, summons or other legal process, or by law, rule or regulation, or by applicable regulatory or professional standards, provided that prior to such disclosure by the Auditor (to the extent permitted by applicable law, rule or regulation), that City is given reasonable advance notice of such order and an opportunity to object to such disclosure; or (iii) is disclosed by the Auditor in connection with any judicial or other proceeding involving the City and Auditor (or any partners, principals, directors, or employees of Auditor) (whether or not such proceeding involved any third party) relating to Auditor's services for the City of this Agreement.

Auditor shall obtain written agreements from its agents, employees, contractors, and subcontractors which bind them to the terms in this Section.

M. Use Of Work Products

(1)The City may use all notes, plans, computations, databases, tabulations, exhibits. photographs, reports, underlying data and other work products (collectively, the "Documents") that Auditor prepares or obtains under this Agreement. However, the City understands that the audit documentation under this Agreement is the property of the Auditor and constitutes confidential information, subject to the Texas Public Information Act. However, pursuant to authority given by law or regulation, the Auditor may be requested to make certain audit documentation available to regulators or its designee, a federal agency providing direct or indirect funding, or the U.S. Government Accountability Office for purposes of a quality review of the audit, to resolve audit findings, or to carry out oversight responsibilities. Auditor will notify the Director of any such request. If requested, access to such audit documentation will be provided under the supervision of

the Auditor's personnel. Furthermore, upon request, Auditor may provide copies of selected audit documentation to the aforementioned parties. These parties may intend, or decide, to distribute the copies or information contained therein to others, including other governmental agencies.

The audit documentation for this engagement will be retained for a minimum of five years after the report release date or for any additional period requested by a regulator. If Auditor is aware that a federal awarding agency or auditee is contesting an audit finding, Auditor will contact the party(ies) contesting the audit finding for guidance prior to destroying the audit documentation.

In addition, upon the City's request, the Auditor shall provide the City Controller with detailed supporting schedules, flow charts or other analysis reasonably necessary to understand the reported findings and recommendations. Generally, this information is attached as exhibits to the final report, however the use of work products or Documents does not apply to the Auditor's working papers, which are considered the proprietary information of the Auditor.

- (2) Auditor warrants that it owns the copyright to the Documents.
- (3) Auditor shall deliver the original Documents to the Director on request. Within five working days after this Agreement terminates, Auditor shall deliver to the Director the original Documents, and all other files and materials Auditor gathers during its performance under this Agreement.

N. <u>Licenses And Permits</u>

Auditor shall obtain, maintain, and pay for all licenses, permits, and certificates including all professional licenses required by any statute, ordinance, rule, or regulation for the performance under this Agreement. Auditor shall immediately notify the Director of any suspension, revocation, or other detrimental action against his or her license.

O. Compliance With Laws

Auditor shall comply with all applicable state and federal laws and governmental regulations and the City Charter and Code of Ordinances in its performance under this Agreement.

P. <u>Compliance With Equal Opportunity Ordinance</u>

In the performance under this Agreement, Auditor shall comply with City's Equal Employment Opportunity Ordinance as set out in Exhibit "C".

Q. MWBE Compliance

In the performance under this Agreement, Auditor shall comply with the City's Minority and Women Business Enterprise ("MWBE") programs as set out in Chapter 15, Article V of the City of Houston Code of Ordinances. Auditor shall make good faith efforts to award subcontracts or supply agreements in at least 54% of the value of this Agreement to MWBEs. Auditor acknowledges that it has reviewed the requirements for good faith efforts on file with the City's Office of Business Opportunity ("OBO") and will comply with them.

R. Drug Abuse Detection And Deterrence

- (1) It is the policy of the City to achieve a drug-free workforce and workplace. The manufacture, distribution, dispensation, possession, sale, or use of illegal drugs or alcohol by contractors while on City Premises is prohibited. Auditor shall comply with all the requirements and procedures set forth in the Mayor's Drug Abuse Detection and Deterrence Procedures for Contractors, Executive Order No. 1-31 ("Executive Order"), which is incorporated into this Agreement and is on file in the City Secretary's Office.
- (2) Before the City signs this Agreement, Auditor shall file with the Contract Compliance Officer for Drug Testing ("CCODT"):
 - (a) a copy of its drug-free workplace policy,

(b) the Drug Policy Compliance Agreement substantially in the form set forth in Exhibit "D," together with a written designation of all safety impact positions and,

(c) if applicable (e.g. no safety impact positions), the Certification of No Safety

Impact Positions, substantially in the form set forth in Exhibit "E."

If Auditor files a written designation of safety impact positions with its Drug Policy Compliance Agreement, it also shall file every 6 months during the performance of this Agreement or on completion of this Agreement if performance is less than 6 months, a Drug Policy Compliance Declaration in a form substantially similar to Exhibit "F." If applicable, Auditor shall submit the Drug Policy Compliance Declaration to the CCODT within 30 days of the expiration of each 6-month period of performance and within 30 days of completion of this Agreement. The first 6-month period begins to run on the date the City issues its Notice to Proceed or if no Notice to Proceed is issued, on the first day Auditor begins work under this Agreement.

- (3) Auditor also shall file updated designations of safety impact positions with the CCODT if additional safety impact positions are added to Auditor's employee work force.
- (4) Auditor shall require that its subcontractors comply with the Executive Order, and Auditor shall secure and maintain the required documents for City inspection.

S. Conflicts Of Interest

The Auditor's personnel performing services hereunder shall not represent any other client in any matter that would constitute a conflict of interest under the conflict of interest rules of the American Institute of Certified Public Accountants.

T. Pay or Play

The requirements and terms of the City of Houston Pay or Play program as set out in Executive Order 1-7, as revised from time to time, are incorporated into this Agreement for all purposes. Auditor has reviewed Executive Order No. 1-7-Revised and shall comply with its terms and conditions.

U. Staffing and Personnel of Auditor

Auditor shall commit the named individuals shown in Exhibit "H"—Project Team to oversee or perform the services under this Agreement, namely the Client Service Partner, the Engagement Partner and the Technical Partners, as detailed in the Organization Chart of Audit Team illustrated therein. In the event any of the above named individuals are no longer in the employ of Auditor, Auditor must replace them with someone at the same job classification with similar experience, job qualifications and skills, with the approval of the Director. Auditor shall replace any of its personnel or subcontractors whose work product is deemed unsatisfactory by the Director.

IV. DUTIES OF CITY

A. Payment Terms

The City shall pay Auditor for its services at the hourly rate for each category of services performed by each applicable classification personnel as set forth in the Fee Schedule attached hereto as Exhibit "B". The hourly rates for various job classifications for the Basic Services and for Special Services listed in Exhibit "B" shall remain in effect through the Initial Term of this Agreement. For each renewal year thereafter, if any, Auditor shall be entitled to increase its hourly rates by a percentage not to exceed the increase to the United States Department of Labor Consumer Price Index – All Urban Consumers for the Houston-Galveston-Brazoria, Texas database for the first

month of the renewal year as compared to the same month of the preceding contract year, with a maximum percentage not to exceed 4% thereof.

Auditor further acknowledges that the fees set forth in Exhibit "B" represent the maximum compensation to be received by Auditor for performing the Services for each Fiscal Year, unless the Director agrees, in writing, to expand the scope of the Services and simultaneously provide additional funding for the expanded scope. All fees and expenses may only be paid from Allocated Funds, as provided in Section D. below.

B. Method Of Payment

1) Basic Services Fee.

City shall pay Auditor monthly for Basic Services rendered by Auditor pursuant to this Agreement, on the basis of valid invoices submitted by the Auditor and approved by the Director, showing the tasks performed, the hours worked in the preceding month and the corresponding hourly rate. To be effective, each invoice must include: (1) a summary progress report of hours worked by level of professional for the period covered by the invoice ("the Billing Period") expressed as a percentage of the total estimated Basic Services, with the applicable hourly rate and (2) the amount Auditor requests for payment. Payment to Auditor shall be made by the City within 30 days from receipt and approval of such an invoice by the Director.

2) Special Services Fee

(a) If the City requests any Special Services, the Auditor shall provide the Director with a written estimate of the fees it will charge to provide such services. Upon written approval of the Director and allocation of City funds therefor, Auditor shall proceed with the Special Services. Auditor shall bill

the City at the job classification rates for Special Services in accordance with the Fee Schedule in Exhibit B.

(b) Auditor shall request payment for Special Services by submitting an invoice to the City in the month following the performance of corresponding services. Invoices shall include an itemization justifying the fees charged for each task. The Special Services Fees shall be paid by the City on or about 30 days after receipt of a valid invoice submitted by the Auditor and approved by the Director and City Controller. The City agrees that it shall not unreasonably delay or withhold payment or approval for any invoice.

3) Disputed payments

If the City disputes any items in an invoice Auditor submits for any reason, including lack of supporting documentation, the Director shall temporarily delete the disputed item and pay the remaining amount of the invoice. The Director shall promptly notify the Auditor of the dispute and request clarification and/or remedial action. After the dispute is settled, the Auditor shall include the disputed amount on a subsequent regularly scheduled invoice or on a special invoice for the disputed item only.

C. Taxes

The City is exempt from payment of Federal Excise and Transportation Tax and Texas Limited Sales and Use Tax. Auditor's invoices to the City must not contain assessments of any of these taxes. The Director shall furnish the City's exemption certification and federal tax identification number to Auditor if requested.

D. **Limit Of Appropriation**

(1)The City's duty to pay money to Auditor under this Agreement is limited in its

entirety by the provisions of this Section.

(2)In order to comply with Article II, Sections 19 and 19a of the City's Charter

and Article XI, Section 5 of the Texas Constitution, the City has appropriated and allocated

the sum of \$600,000 to pay money due under this Agreement (the "Original Allocation").

The executive and legislative officers of the City, in their discretion, may allocate

supplemental funds for this Agreement, but they are not obligated to do so. Therefore, the

parties have agreed to the following procedures and remedies:

(3)The City makes a Supplemental Allocation by issuing to Auditor a Service

Release Order, or similar form approved by the City Controller, containing the language set

out below. When necessary, the Supplemental Allocation shall be approved by motion or

ordinance of City Council.

NOTICE OF SUPPLEMENTAL ALLOCATION OF FUNDS

By the signature below, the City Controller certifies that, upon the request of the

responsible director, the supplemental sum set out below has been allocated for the purposes

of the Agreement out of funds appropriated for this purpose by the City Council of the City

of Houston. This supplemental allocation has been charged to such appropriation.

The Original Allocation plus all supplemental allocations are the Allocated (4)

Funds. The City shall never be obligated to pay any money under this Agreement in excess

of the Allocated Funds. Auditor must assure itself that sufficient allocations have been made

to pay for services it provides. If Allocated Funds are exhausted, Auditor's only remedy is suspension or termination of its performance under this Agreement, and it has no other remedy in law or in equity against the City and no right to damages of any kind.

Ε. Suspension Of Performance

The Director may suspend Auditor's performance under this Agreement, with or without cause, by notifying Auditor in writing. For a period of fifteen days from suspension of the Auditor's performance under this Agreement and upon mutual agreement by the parties, Auditor shall resume work when directed to do so by the Director, at no additional cost to the City that is directly attributable to (i) the Director's suspension of the Auditor's performance under this Agreement or (ii) the period of suspension set forth above. The City shall not grant any compensation or extension of time under this Section if the suspension results from material non-compliance of Auditor or its subcontractors with any material requirement of this Agreement.

F. City Assistance

The City Department personnel shall be available to render all reasonable assistance and shall, to the extent permitted by law, provide all necessary books and records, supporting schedules, account reconciliations, and account analyses in the City's possession that are necessary for Auditor to perform services under this Agreement. The Director reserves the right to assign a member of the Department's staff to assist the Auditor in the performance of Services under this Agreement, as mutually agreed upon.

In addition, the City Controller's Central Financial Reporting and Accounting staff shall be available to render all possible assistance and shall respond promptly to verbal or written requests for information, provide all necessary books and records, detailed trial balances, supporting schedules, account reconciliations, and account analyses and shall provide the necessary coordination with the Information Services Division of Finance to obtain computer support and selective access to computer files. The City Controller's Internal Audit Division shall assist the Auditor to the degree negotiated by both parties. Workpapers and reports on completed internal control evaluations shall be made available to the Auditor upon a written request to the City Controller.

G. Reproduction Services And Workspace

The City shall provide reasonable on-site reproduction services and clerical support. Costs of special or extensive reproduction shall be the responsibility of the Auditor.

The City shall provide reasonable working space to the Auditor in locations maintained by the Finance Department or Controller's Office or other City facilities.

V. TERM AND TERMINATION

A. Contract Term

This Agreement is effective on the Countersignature Date and remains in effect for three (3) years therefrom ("Initial Term"), unless sooner terminated under this Agreement.

B. Renewals

Upon expiration of the Initial Term, this Agreement may be renewed for two successive oneyear terms each upon the same terms and conditions, if Director, at his or her sole discretion, makes a written request for renewal to Auditor at least thirty (30) days before expiration of the then-current term and if sufficient funds are allocated to pay for such renewal term.

C. Time Extension

If Auditor requests an extension of time to complete its performance, then the Director, may, in his or her sole discretion, extend the term so long as the extension does not exceed 180 days. The extension must be in writing but does not require amendment of this Agreement. Auditor is not entitled to damages for delay(s) regardless of the cause of the delay(s).

D. <u>Termination for Convenience by City</u>

The Director may terminate this Agreement at any time by giving 30 days written notice to Auditor. The City's right to terminate this Agreement for convenience is cumulative of all rights and remedies, which exist now or in the future.

On receiving the notice, Auditor shall, unless the notice directs otherwise, immediately discontinue all services under this Agreement and cancel all existing orders and subcontracts that are chargeable to this Agreement. As soon as practicable after receiving the termination notice, Auditor shall submit an invoice showing in detail the services performed under this Agreement up to the termination date. The City shall then pay the fees to Auditor for services actually performed, but not already paid for, in the same manner as prescribed in Section IV.B., unless the fees exceed the allocated funds remaining under this Agreement.

TERMINATION OF THIS AGREEMENT AND RECEIPT OF PAYMENT FOR SERVICES RENDERED ARE AUDITOR'S ONLY REMEDIES FOR THE CITY'S TERMINATION FOR CONVENIENCE, WHICH DOES NOT CONSTITUTE A DEFAULT OR BREACH OF THIS AGREEMENT. AUDITOR WAIVES ANY CLAIM (OTHER THAN ITS CLAIM FOR PAYMENT AS SPECIFIED IN THIS SECTION) IT MAY HAVE NOW OR IN THE FUTURE FOR FINANCIAL LOSSES OR OTHER DAMAGES RESULTING FROM THE CITY'S TERMINATION FOR CONVENIENCE.

E. Termination for Cause by City

If Auditor defaults under this Agreement, the Director may terminate this Agreement after providing Auditor written notice and an opportunity to cure the default as provided below. The City's right to terminate this Agreement for Auditor's default is cumulative of all rights and remedies, which exist now or in the future. Default by Auditor occurs if:

- (1) Auditor fails to perform any of its material duties under this Agreement;
- (2) Auditor becomes insolvent;
- (3) all or a substantial part of Auditor's assets are assigned for the benefit of its creditors; or
- (4) a receiver or trustee is appointed for Auditor.

If a default occurs, the Director shall deliver a written notice to Auditor describing the default and the termination date. The Director, at his sole option, may, but is not obligated to, allow Auditor a time to cure the default, or extend the termination date to a later date by a written notice to Auditor. If the Director allows the Auditor to cure the default and Auditor does so to the Director's satisfaction before the termination date, then the termination is ineffective. If Auditor does not cure the default before the termination date, then the Director may terminate this Agreement on the termination date, at no further obligation of the City.

To effect final termination, the Director must notify Auditor in writing. After receiving the notice, Auditor shall, unless the notice directs otherwise, immediately discontinue all services under this Agreement, and promptly cancel all orders or subcontracts chargeable to this Agreement.

F. Termination for Cause by Auditor

Auditor may terminate its performance under this Agreement only if the City defaults and fails to cure the default after receiving written notice of it. Default by the City occurs if the City fails to perform one or more of its material duties under this Agreement. If a default occurs and Auditor wishes to terminate the Agreement, then Auditor must deliver a written notice to the Director describing the default and the proposed termination date. The date must be at least 30 days after the Director receives the notice. Auditor, at its sole option, may extend the proposed termination date to a later date. If the City cures the default before the proposed termination date,

then the proposed termination is ineffective. If the City does not cure the default before the proposed termination date, then Auditor may terminate its performance under this Agreement on the termination date.

G. <u>Effects</u> of Termination

Upon termination, Auditor shall immediately turn over all work in progress and final Deliverables to the Director.

VI. MISCELLANEOUS

A. <u>Independent Contractor</u>

Auditor is an independent contractor and shall perform the services provided for in this Agreement in that capacity. The City has no control or supervisory powers over the manner or method of Auditor's performance under this Agreement. All personnel Auditor uses or provides are its personnel, employees or subcontractors and not the City's employees, agents, or subcontractors for any purpose whatsoever. Auditor is solely responsible for the compensation of its personnel, including but not limited to: the withholding of income, social security, and other payroll taxes and all worker's compensation benefits coverage.

B. Force Majeure

- 1. Neither party is liable for delays or other failures to perform its obligations under this Agreement to the extent the delay or failure is caused by Force Majeure. Force Majeure means fires, floods, explosions, and other acts of God, war, terrorist acts, riots, court orders, and the acts of superior governmental or military authority.
 - 2. This relief is not applicable unless the affected party does the following:
 - (a) uses due diligence to remove the Force Majeure as quickly as possible;

- (b) provides the other party with prompt written notice of the cause and its anticipated effect (unless the Force Majeure prevents such party from providing such notice); and
- (c) provides the other party with written notice describing the actual delay or non-performance incurred within 7 days after the Force Majeure ceases.
- 3. If the Force Majeure continues for more than ten days, the Director may terminate this Agreement by giving 7 days written notice to Auditor. This termination is not a default or breach of this Agreement. AUDITOR WAIVES ANY CLAIM IT MAY HAVE FOR FINANCIAL LOSSES OR OTHER DAMAGES RESULTING DIRECTLY FROM TERMINATION IN ACCORDANCE WITH THIS SECTION VI (B), EXCEPT FOR AMOUNTS DUE UNDER THE AGREEMENT AT THE TIME OF THE TERMINATION.
- 4. Auditor is not relieved from performing its obligations under this Agreement due to a strike or work slowdown of its employees. Auditor shall employ only competent and qualified personnel during a strike.

C. Severability

If any part of this Agreement is for any reason found to be unenforceable, all other parts remain enforceable unless the result materially prejudices either party.

D. Entire Agreement

This Agreement merges the prior negotiations and understandings of the Parties and embodies the entire agreement of the Parties. No other agreements, assurances, conditions, covenants (express or implied), or other terms of any kind, exist between the Parties regarding this Agreement.

E. Written Amendment

Unless otherwise specified elsewhere in this Agreement, this Agreement may be amended

only by written instrument executed on behalf of the City (by authority of an ordinance adopted by

the City Council) and Auditor. The Director is only authorized to perform the functions specifically

delegated to him or her in this Agreement.

F. Applicable Laws

This Agreement is subject to the laws of the State of Texas, the City Charter and Ordinances,

the laws of the federal government of the United States, and all rules and regulations of any

regulatory body or officer having jurisdiction.

Venue for any litigation relating to this Agreement is Harris County, Texas.

G. Notices

All notices to either party to the Agreement must be in writing and must be delivered by

hand, facsimile, United States registered or certified mail, return receipt requested, United States

Express Mail, Federal Express, Airborne Express, UPS or any other national overnight express

delivery service. The notice must be addressed to the party to whom the notice is given at its address

set out in Section I of this Agreement or other address the receiving party has designated previously

by proper notice to the sending party. Postage or delivery charges must be paid by the party giving

the notice.

H. Captions

Captions contained in this Agreement are for reference only, and, therefore, have no effect in

construing this Agreement. The captions are not restrictive of the subject matter of any section in

this Agreement.

G;\CONTRACT\LPN\20248_McConnell & Jones_Auditing Services_Final.doc L.D. FILE NO. 0341300139001 10/30/2013

I. Non-Waiver

If either party fails to require the other to perform a term of this Agreement, that failure does not prevent the party from later enforcing that term and all other terms. If either party waives the other's breach of a term, that waiver does not waive a later breach of this Agreement.

An approval by the Director, or by any other employee or agent of the City, of any part of Auditor's performance does not waive compliance with this Agreement or establish a standard of performance other than that required by this Agreement and by law. The Director is not authorized to vary the terms of this Agreement.

J. <u>Inspections and Audits</u>

City representatives may perform, or have performed, (1) audits of Auditor's books and records relating to Auditor's performance under this Agreement, and (2) inspections of all places where work is undertaken in connection with this Agreement. Auditor shall keep its books and records available for this purpose for at least 5 years after this Agreement terminates. This provision does not affect the applicable statute of limitations.

K. Enforcement

The City Attorney or his or her designee may enforce all legal rights and obligations of the City under this Agreement without further authorization from the City Council. Auditor shall provide the City Attorney all documents and records that the City Attorney requests to assist in determining Auditor's compliance with this Agreement, with the exception of those documents made confidential by federal or State law or regulation.

L. Ambignities

If any term of this Agreement is ambiguous, it shall not be construed for or against any party on the basis that the party did or did not write it.

M. Survival

Auditor shall remain obligated to the City under all clauses of this Agreement that expressly or by their nature extend beyond the expiration or termination of this Agreement, including but not limited to, the indemnity provisions.

N. Publicity

Auditor shall make no announcement or release of information concerning this Agreement unless the release has been submitted to and approved, in writing, by the Director.

O. Parties In Interest

This Agreement does not bestow any rights upon any third party, but binds and benefits the City and Auditor only.

P. Successors and Assigns

This Agreement binds and benefits the Parties and their legal successors and permitted assigns; however, this provision does not alter the restrictions on assignment and disposal of assets set out in the following paragraph. This Agreement does not create any personal liability on the part of any officer or agent of the City.

Q. Business Structure and Assignments

Auditor shall not assign this Agreement at law or otherwise or dispose of all or substantially all of its assets without the Director's prior written consent. Nothing in this clause, however, prevents the assignment of accounts receivable or the creation of a security interest as described in §9.406 of the Texas Business & Commerce Code. In the case of such an assignment, Auditor shall immediately furnish the City with proof of the assignment and the name, telephone number, and address of the Assignee and a clear identification of the fees to be paid to the Assignee.

Auditor shall not delegate any portion of its performance under this Agreement without the Director's prior written consent.

R. Remedies Cumulative

Unless otherwise specified elsewhere in this Agreement, the rights and remedies contained in this Agreement are not exclusive, but are cumulative of all rights and remedies which exist now or in the future. Neither party may terminate its duties under this Agreement except in accordance with its provisions.

S. <u>AUDITOR DEBT</u>

IF AUDITOR, AT ANY TIME DURING THE TERM OF THIS AGREEMENT, INCURS A DEBT, AS THE WORD IS DEFINED IN SECTION 15-122 OF THE HOUSTON CITY CODE OF ORDINANCES, IT SHALL IMMEDIATELY NOTIFY THE CITY CONTROLLER IN WRITING UPON THE AUDITOR'S ENGAGEMENT LEADER BECOMES AWARE OF SUCH DEBT. IF THE CITY CONTROLLER BECOMES AWARE THAT AUDITOR HAS INCURRED A DEBT, HE/SHE SHALL IMMEDIATELY NOTIFY AUDITOR IN WRITING. IF AUDITOR DOES NOT PAY THE DEBT WITHIN 30 DAYS OF EITHER SUCH NOTIFICATION, THE CITY CONTROLLER MAY DEDUCT FUNDS IN AN AMOUNT EQUAL TO THE DEBT FROM ANY PAYMENTS OWED TO AUDITOR UNDER THIS AGREEMENT, AND AUDITOR WAIVES ANY RECOURSE THEREFOR.

AUDITOR SHALL FILE A NEW AFFIDAVIT OF OWNERSHIP USING THE FORM DESIGNATED BY CITY, BETWEEN FEBRUARY 1AND MARCH 1 OF EVERY YEAR DURING THE TERM OF THIS AGREEMENT.

EXHIBIT "A"

SCOPE OF SERVICES

I. <u>BASIC SERVICES</u> The Basic Services to be performed under any Engagement Letter shall be set forth in such Engagement Letter. Such Basic Services may include, but are not necessarily limited to:

Task 1: Audit of Comprehensive Annual Financial Report (CAFR) commencing with fiscal year beginning July 1, 2013.

- 1.1 Auditor shall conduct annual financial audits of the COH's basic financial statements for the fiscal years ending June 30, 2014, 2015 and 2016. These audits shall be performed in accordance with generally accepted auditing standards; standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and Office of Management and Budget ("OMB") Circular A-133, Audits of States, Local Governments and Non-profit Organizations, as amended.
- 1.2 The Auditor shall plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements, whether caused by error or fraud, and shall perform tests of the COH's compliance with certain provisions of laws, regulations, contract, and grants. However, because of the characteristics of fraud, particularly those involving concealment and falsified documentation (including forgery), a properly planned and performed audit may not detect a material misstatement. Therefore, an audit conducted in accordance with generally accepted auditing standards is designed to obtain reasonable, rather than absolute, assurance that the financial statements are free of material misstatements. An audit is not designed to detect error or fraud that is immaterial to the financial statements or to detect immaterial instances of noncompliance.
- 1.3 In conjunction with its annual financial audit, the Auditor shall perform a compliance audit of management controls on investments, adherence to the City's established investment policies and the quarterly reports prepared by the investment manager. The results of the review shall be reported to the Audit Committee.
- 1.4 As part of the audit, the Auditor shall consider the COH internal control process and assess control risk, as required by generally accepted auditing standards and standards applicable to financial audits contained in *Government Auditing Standards*, for the purpose of establishing a basis for determining the

nature, timing, and extent of auditing procedures necessary for expressing an opinion on the financial statements, and not as a means for providing assurance on the COH's internal control process or to identify reportable conditions.

- 1.5 The auditing procedures shall include tests of documentary evidence supporting the transactions recorded in the accounts, and may include tests of the physical existence of inventories, and direct confirmation of receivables and certain other assets and liabilities by correspondence with selected individuals, creditors, and financial institutions. The Auditor shall make audit inquiries and request written responses from the COH's attorneys as part of the engagement.
- 1.6 As part of the audit of compliance with the requirements of major federal programs, the Auditor shall obtain an understanding of the COH internal control process related to administering major federal programs and the Auditor shall assess risk as required by OMB Circular A-133 for the purpose of establishing the nature, timing, and extent of auditing procedures necessary for expressing an opinion concerning compliance with laws and regulations related to major federal award programs.
- 1.7 As required by OMB Circular A-133, the compliance audit shall also include tests of transactions related to federal award programs for compliance with applicable laws and regulations. However, because of the concept of reasonable assurance and because the Auditor shall not perform a detailed examination of all transactions, there is a risk that material errors, fraud, or illegal acts may exist and not be detected by the Auditor. The Auditor shall advise the City however, of any related matters that come to the Auditor's attention, and shall include such matters in the reports required for an audit in accordance with OMB Circular A-133. The Auditor's responsibility as Auditor is limited to the periods for which the Auditor has been engaged as auditor or for which the Auditor has performed substantive auditing procedures.
- 1.8 The report on the Auditor's understanding of the City's internal control process and the assessment of control risk made as part of the City financial statement audit shall include: (1) the scope of our work in obtaining an understanding of the City's internal control and in assessing the control risk; and (2) the deficiencies in internal control, including the identification of significant deficiencies and material weaknesses identified as a result of the Auditor's work in understanding and assessing the control risk.
- 1.9 The Auditor shall complete and sign one copy of the Auditor's information section of the Data Collection form. COH management must prepare all other

sections of the form and sign the form prior to its submission to the Federal Audit Clearinghouse.

- 1.10 The Auditor's ability to express an opinion and render those reports and the wording of the Auditors opinion and reports, will be dependent on the facts and circumstances at the date of such reports. If, for any reason, the Auditor is unable to complete the audit or is unable to form or has not formed an opinion, the Auditor may decline to express an opinion or decline to issue a report as a result of this engagement. If the Auditor is unable to complete the audit or if the auditor's reports require modification, the Auditor shall discuss the reasons with the Director.
- 1.11 The Auditor understands that the Auditor's reports on the City's internal control (as part of the financial statement audit and in compliance with laws and regulations) are intended for the information of the management and others within the City and applicable federal and statute granting organizations.
- 1.12 The Auditor shall advise the City Controller as the City Controller prepares and compiles the Comprehensive Annual Financial Report (CAFR) in accordance with Governmental Accounting and Financial Reporting Standards which is published and issued by the Governmental Accounting Standards Board (GASB) and all eligibility requirements of the Government Finance Officers Association (GFOA) Certificate of Achievement for Excellence in Financial Reporting Program.
- 1.13 The Auditor shall determine and issue reports including opinions on:
 - 1.13.1 The entity-wide financial statements of the governmental activities, the business-type activities, the aggregate discretely presented component units, each major fund, and the aggregate remaining fund information of the City, which collectively comprise the City's basic financial statements as of the year end, and the respective changes in financial position and cash flows, where applicable, for the year then ended.
 - 1.13.2 The financial statements of the Houston Airport System at year end, and the changes in financial position and cash flows thereof for the year then ended.
 - 1.13.3 Whether the COH meets the financial assurance requirements of the Texas Commission on Environmental Quality (TCEQ).

1.13.4 Auditor shall prepare a management recommendation letter. The letter may communicate opportunities for the City to improve the economy and efficiencies of the City financial management practices that come to the Auditors attention during the audit process. The letter shall contain the responses from the responsible City Department Directors. Prior to issuance, the Auditor shall review the proposed draft letter with the Director of Finance and the City Controller. Subsequent to issuance, the Auditor shall review the final letter with the Mayor and City Council, if requested to do so. At the request of the City and, within 90 days after the issuance of the management recommendation letter, the Auditor shall evaluate the quality of the implementation of all agreed-to recommendations and submit a report on the status and condition of implementation to the Director of Finance and the City Controller.

Task 2: Single Audit Report including the Schedule of Expenditures of Federal Awards (SEFA)

- 2.1 In conjunction with the CAFR financial audit, the Auditor shall perform an audit of federal awards under the Single Audit Act, 1996, as amended, Office of Management and Budget (OMB) Circular A-133, and any amendments or supplements thereto. Successor publications will also apply in addition to the auditor requirements of OMB Circular A-133; the Auditor shall perform the following tasks:
- 2.2 The Auditor shall assist the City, up to a maximum of 20 hours, in its efforts to obtain acceptance of the Plan for Corrective Action by the Federal Cognizant Agency.
- 2.3 At the request of the Director, the Auditor shall conduct follow-up on corrective actions taken by the City ninety (90) days after issuance of the final audit report, evaluate the City's progress in correcting the problems, and separately report the findings to the Director of Finance and to the City Controller.
- 2.4 At the request of the Director, the Auditor shall follow-up on single-audit findings and recommendations to ascertain that resolution has been achieved. The Auditor shall, by the end of each month, submit a report to the Director and City Controller on the quality and timeliness of individual resolution decisions.

Task 3: State of Texas Single Audit Circular (Uniform Grant Management Standard)

3.1 In conjunction with the CAFR audit, the Auditor shall also perform auditing procedures on the City state programs in accordance with the provisions

of the State of Texas Single Audit Circular (Uniform Grant Management Standard)

- <u>3.2</u> Prior to the City publication of the State Single Audit Report, the Auditor shall review and evaluate the proposed Plan for Corrective Action.
- 3.3 The Auditor shall assist the City, up to a maximum of 20 hours, in its efforts to obtain acceptance of the Plan for Corrective Action by the State Cognizant Agency.
- 3.4 At the request of the Director, the Auditor shall conduct follow-up on corrective actions taken by the City ninety (90) days after issuance of the final audit report, evaluate the City's progress in correcting the problems and report separate findings to the Director of Finance and the City Controller.
- 3.5 At the request of the Director, the Auditor shall be responsible for follow-up on State single audit findings and recommendations to ascertain that resolution has been achieved. The Auditor shall, by the end of each month, submit a report to the Director and City Controller on the quality and timeliness of individual resolution decisions.
- **Task 4:** Reports to be issued: Following the completion of the audit of each fiscal year's financial statements, the Auditor shall issue:
 - 4.1 A report on the fair presentation of the financial statements in conformity with accounting principles generally accepted in the United States of America.
 - 4.2 A report on internal control over financial reporting and on compliance and other matters based on an audit of the financial statements performed in accordance with Government Auditing Standards.
 - 4.3 A report on compliance with requirements that could have a direct and material effect on each major program and on internal control over compliance in accordance with OMB Circular A-133.

Task 5: Special Services

Special Services shall be requested in a written notice signed by the Mayor or designee only if City Council has allocated sufficient funds to pay for these Services.

<u>5.1</u> Determine whether the COH is in substantial compliance with the significant financial and accounting requirements of ordinances pertaining to the revenue bonds associated with the various enterprise funds. The documents requiring opinions are:

- 5.1.1 Convention & Entertainment Facilities Department -Schedule of Pledged Revenues and Debt Service Requirements;
- 5.1.2 Airport Schedule of Overhead and Direct Charges; Schedule of Gross Revenues, Net Revenues, and Debt Service Requirements;
- 5.1.3 Water and Sewer Schedule of Gross Revenues, Net Revenues and Debt Service Requirements;
- <u>5.2</u> <u>Selected Audits/Reviews/Corrective Action Plans.</u> The Auditor may be requested to conduct various financial audits, and/or corrective action plans and reviews of City activities and funds.
- <u>5.3</u> Other Audits. The Auditor shall furnish all services and materials necessary for the performance of financial and compliance audits of any fund, department, or division operations of the City not included in the Scope of Services for Basic Services.
- <u>5.4</u> <u>Travel.</u> The Auditor shall journey to places outside Harris County, Texas in connection with any Special Services, if needed.
- <u>5.5</u> Expert Witness. The Auditor may be requested to assist the City as an expert witness in litigation with third parties or administrative proceedings.
- <u>5.6</u> <u>Special Investigations or Studies.</u> The Auditor shall conduct special investigations or studies within the Auditor's expertise, but not specified as a Basic Service.
- 5.7 Bond and Note Offerings. The Auditor shall furnish all services and materials necessary to render consents, to date reviews or other requested services for use in connection with the sale of bonds, notes, etc.; prepare and submit written reports with respect to such funds; advise and assist the COH in connection with such work and in connection with the preparation of various official statements relating thereto. In a typical year, the City will have four to six offerings, including, but not limited to:
 - 5.7.1 A tax and revenue anticipation note for General Fund cash flow;
 - 5.7.2 A public improvement bond issue;
 - 5.7.3 Two utility system issues; and

- 5.7.4 An airport system and/or convention and entertainment system issue.
- <u>5.8</u> <u>Conferences.</u> The Auditor shall attend periodic conferences with City officials and regulatory officials.
- <u>5.9</u> <u>Quality Control Review (QCR).</u> The Auditor shall review and evaluate the work of other CPA firms engaged by the City. Such QCR will be provided for within the other CPA firm's contract with the City and may be performed in conjunction with members of the City Auditor's or federal cognizant audit agency staffs.
- <u>5.10</u> Governmental Accounting Standards Board. The Auditor shall furnish services and materials necessary or proper for the performance of reviewing the City's planning, preparation and implementation of GASB pronouncements.
- <u>5.11</u> <u>Training for Finance Department and Other City Staff</u>. Each year of the contract, the Auditor shall provide training as outlined below:
 - 5.11.1 Accounting and Auditing Updates Provide a one-day seminar (equivalent to 8 CPE credits, including 2 credits of ethics) discussing accounting principles generally accepted in the United States of America, issues related to the City, recently issued, recently adopted and/or proposed GASB pronouncements of significance to the City, and ethics. This seminar will be provided to the Finance Department personnel and other City personnel designated by the Finance Director.
- 5.12 Any other services requested.

EXHIBT "B"

BASIC SERVICES

YEAR 1

Position	Rate	Estimated No. of Hours	Total
Partner	\$ 300	800	\$ 240,000
Manager	\$ 225	1,200	\$ 270,000
Senior	\$ 150	5,000	\$ 750,000
Staff	\$ 125	3,000	\$ 375,000

Total \$ 1,635,000 Discount \$ (435,000) Base Year (FY2014) Fee \$ 1,200,000

YEAR 2

Position	Rate	Estimated No. of Hours	Total
Partner	\$ 309	800	\$ 247,200
Manager	\$ 232	1,200	\$ 278,400
Senior	\$ 155	5,000	\$ 775,000
Staff	\$ 129	3,000	\$ 387,000

Total \$ 1,687,600 Discount \$ (451,600) Base Year (FY2015) Fee \$ 1,236,000

YEAR 3

Position	Rate	Estimated No. of Hours	Total
Partner	\$ 318	800	\$ 254,400
Manager	\$ 239	1,200	\$ 286,800
Senior	\$ 159	5,000	\$ 795,000
Staff	\$ 133	3,000	\$ 399,000
		Total	\$ 1,735,200

Total \$ 1,735,200

Discount \$ (461,200)

Base Year (FY2016) Fee \$ 1,274,000

^{*}Fees for Option Renewal Years with a 4% increase: FY2017 (\$1,325,000) and FY2018 (\$1,378,000)

SPECIAL SERVICES

HOURLY RATES

DURING AGREEMENT INITIAL TERM

POSITION	RATE	
PARTNER	\$300/hour	
SENIOR MANAGER/MANAGER	\$225/hour	
SENIOR AUDITOR	\$150/hour	
STAFF AUDITOR	\$125/hour	

^{*}Rates for Special Services for Option Renewal Years (FY2017 and FY2018) may have a 4% increase, as mutually agreed to between the Parties.

EXHIBIT "C"

EQUAL EMPLOYMENT OPPORTUNITY

- 1. The contractor, subcontractor, vendor, supplier, or lessee will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, or age. The contractor, subcontractor, vendor, supplier, or lessee will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, religion, color, sex, national origin, or age. Such action will include, but not be limited to, the following: employment; upgrading; demotion or transfer; recruitment advertising; layoff or termination; rates of pay or other forms of compensation and selection for training, including apprenticeship. The contractor, subcontractor, vendor, supplier or lessee agrees to post in conspicuous places available to employees, and applicants for employment, notices to be provided by the City setting forth the provisions of this Equal Employment Opportunity Clause.
- 2. The contractor, subcontractor, vendor, supplier, or lessee states that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex, national origin or age.
- 3. The contractor, subcontractor, vendor, supplier, or lessee will send to each labor union or representatives of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer advising the said labor union or worker's representative of the contractor's and subcontractor's commitments under Section 202 of Executive Order No. 11246, as amended and superseded, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 4. The contractor, subcontractor, vendor, supplier, or lessee will comply with all provisions of Executive Order No. 11246, as amended and superseded, and the rules, regulations, and relevant orders of the Secretary of Labor or other Federal Agency responsible for enforcement of the equal employment opportunity and affirmative action provisions applicable and will likewise furnish all information and reports required by the Mayor and/or Contractor Compliance Officer(s) for purposes of investigation to ascertain and effect compliance with this program.
- 5. The contractor, subcontractor, vendor, supplier, or lessee will furnish all information and reports required by Executive Order No. 11246, as amended and superseded, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to all books, records, and accounts by the appropriate City and Federal Officials for purposes of investigations to ascertain compliance with such rules, regulations, and orders. Compliance reports filed at such times as directed shall contain information as to the employment practice policies, program, and work force statistics of the contractor, subcontractor, vendor, supplier, or lessee.
- 6. In the event of the contractor's, subcontractor's, vendor's, supplier's, or lessee's non-compliance with the non-discrimination clause of this contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part, and the contractor, subcontractor, vendor, supplier, or lessee may be declared ineligible for further City contracts in accordance with procedures provided in Executive Order No. 11246, as amended and superseded, and such other sanctions may be imposed and remedies invoked as provided in the said Executive Order, or by rule, regulation, or order of the Secretary of Labor, or as may otherwise be provided by law.

- 7. The contractor shall include the provisions of paragraphs 1-8 of this Equal Employment Opportunity Clause in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, as amended and superseded, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontractor or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for noncompliance; provided, however, that in the event the contractor becomes involved in, or is threatened with litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.
- 8. The contractor shall file and shall cause his or her subcontractors, if any, to file compliance reports with the City in the form and to the extent as may be prescribed by the Mayor. Compliance reports filed at such times as directed shall contain information as to the practices, policies, programs, and employment policies and employment statistics of the contractor and each subcontractor.

EXHIBIT "D"

DRUG POLICY COMPLIANCE AGREEMENT

I,				as an owner or officer of
(Name	e) (Prin	nt/Type)	(Title)	(Contractor)
(Name of Con	pany)		,	(Contractor)
enter into with and agree to de	the City signate a	of Houston; and ppropriate safet	l that by making this A	er or performance of any and all contracts it may Agreement, I affirm that Contractor be bound by company employee positions and to comply with proceed:
Aı	ocedures mended F	for the Contract Policy on Drug I	tor that meet the crite. Detection and Deterre	ree Workplace Policy and related drug testing ria and requirements established by the Mayor's nee (Mayor's Drug Policy) and the Mayor's Drug ectors (Executive Order No. 1-31).]
	4.			ples consistent with Health and Human Services ied drug testing laboratory to perform the drug
	5.			sts given and the results; and upon request from mation of such testing and results.
	6.	Submit semi-a	nnual Drug Policy Co	ompliance Declarations.
			t full compliance with contract with the City	the Mayor's Drug Policy and Executive Order of Houston.
documentation	in comp each of th	oliance with the	e Mayor's Drug Pol	h or failure to timely submit declarations and/or icy and/or Executive Order No. 1-31 will be alt in non-award or termination of the contract by
Date				Contractor Name
				Signature
				m.i

EXHIBIT "E"

CONTRACTOR'S CERTIFICATION OF NO SAFETY IMPACT POSITIONS IN PERFORMANCE OF A CITY CONTRACT

I,	
(Name)	(Title)
as an owner or officer of	(Contractor)
	(Name of Company)
	tor with respect to its bid, and hereby certify that Contractor has no employed in §5.18 of Executive Order No. 1-31, that will be involved
in performing	·································
	(Project)
	that it shall immediately notify the City of Houston Director of Human sitions are established to provide services in performing this City Contract
(Date)	(Typed or Printed Name)
	(Signature)
	(Title)

EXHIBIT "F"

DRUG POLICY COMPLIANCE DECLARATION

Ι,			as an owner	or officer of	
(Nan	ne) (Print/Type)	(Title)		(G	
				(Contractor)	
		(Name of Company)			
have persona	l knowledge and full autho	ority to make the follow	ing declarations:		
This reporting	g period covers the precedi	ing 6 months from $__$	to	, 20	
	A written Drug Free W	orkplace Policy has be	en implemented a	ınd employees n	otified.
Initials	The policy meets the cri		: Mayor's Amende	ed Policy on Dr	ug Detection
	and Deterrence (Mayor	r's Policy).			•
	Written drug testing pro	ocedures have been imp	plemented in conf	formity with the	: Mayor's
Initials	Drug Detection and D			Executive Orde	r No. 1-31.
	Employees have been r	notified of such procedu	ures.		
	0 13 11 16 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1		-linnan with fodor	ol Ugolth and E	luman
T 1	Collection/testing has b		pitance with redei	ai ficaini and i.	tuman
Initials	Services (HHS) guideli	ines.			
	Appropriate safety imp	act positions have been	n designated for e	mplovee positio	ns
 Initials	performing on the City	y of Houston contract	The number of	employees in sa	afety impact
IIII 11912	positions during this re	norting period is	1110 11411.001 01		1
	positions during this re-	porting portion to			
	From	to	the following	test has occurre	d
Initials	(Start date)	(End date)			
	,		Reasonable	Post	
		Random	<u>Suspiction</u>	<u>Accident</u>	<u>Total</u>
Number Emp	oloyees Tested				
	loyees Positive				-
Percent Empl	loyees Positive				
•					
	Any employee who test				rksite
Initials	consistent with the May	yor's Policy and execut	tive Order No.13	31.	
				1 1 -1-	
	I affirm that falsification				nce
Initials	with established guidel	ines will be considered	a breach of conti	ract.	
 Date	and the second s	(Typ	ed or Printed Na	me)	•
		(Sign	nature)		
		(Titl	a)		
		1 1 171	C.I		

EXHIBIT "G"

Form of Engagement Letter for Basic Services

Date Mayor City of Houston, Texas P.O. Box 1562 Houston, TX 77251

Director of Finance City of Houston, Texas 611 Walker, 10th Floor Houston, Texas 77002

Dear Mayor,

McConnell & Jones LLP (M&J) & Banks, Finley, White and Company (BFW), a Joint Venture Partnership doing business in Texas under the assumed name of J&J/BFW Team ("M&J/BFW Team" or "Auditor" or "we" or "us") are pleased to confirm our understanding of the services we are to provide the City of Houston, Texas (the "City") for the year ended June 30, ______. M&J/BFW Team will be responsible for the services that we perform for the City hereunder.

The services to be performed by M&J/BFW Team pursuant to this engagement are subject to the terms and conditions of the Agreement for Professional Auditing Services (Contract No._____), dated effective _______ between the City and M&J/BFW Team ("the Agreement') and the terms and conditions set forth herein and in the accompanying appendices hereto. The terms and conditions hereof shall be effective as of the date of the commencement of services described herein.

We will audit the financial statements of the governmental activities, the business-type activities, the aggregate discretely presented component units, each major fund, and the aggregate remaining fund information, including the related notes to the financial statements, which collectively comprise the basic financial statements, of the City as of and for the year ended June 30, _______. Accounting standards generally accepted in the United States of America provide for certain required supplementary information (RSI), such as management's discussion and analysis (MD&A), to supplement the City's basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. As part of our engagement, we will apply certain limited procedures to the City's RSI in accordance with auditing standards generally accepted in the United States of America. These limited procedures will consist of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements.

We will not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance. The following RSI is required by generally accepted accounting principles and will be subjected to certain limited procedures, but will not be audited:

- 1) Management's Discussion and Analysis
- 2) General Operating Fund Budget to Actual
- 3) Pension System Supplementary Information
- 4) Other Post Employment Retirement Benefits Supplementary Information

We have also been engaged to report on supplementary information other than RSI that accompanies the City's financial statements. We will subject the following supplementary information to the auditing procedures applied in our audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America and will provide an opinion on it in relation to the financial statements as a whole:

- 1) Schedule of Expenditures of Federal Awards (Federal and State of Texas)
- 2) Combining and Individual Fund financial statements in preparation of Comprehensive Annual Financial Report (CAFR)

The following other information accompanying the financial statements will not be subjected to the auditing procedures applied in our audit of the financial statements, and our auditor's report will not provide an opinion or any assurance on that other information.

- 1) Introductory Section of CAFR
- 2) Statistical Section of CAFR

Audit Objectives

The objective of our audit is the expression of opinions as to whether your basic financial statements are fairly presented, in all material respects, in conformity with U.S. generally accepted accounting principles and to report on the fairness of the supplementary information referred to in the second paragraph when considered in relation to the financial statements as a whole. The objective also includes reporting on:

- Internal control related to the financial statements and compliance with the provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a material effect on the financial statements in accordance with Government Auditing Standards.
- Internal control related to major programs and an opinion (or disclaimer of opinion) on compliance with laws, regulations, and the provisions of contracts or grant agreements that could have a direct and material effect on each major program in accordance with the Single

Audit Act Amendments of 1996 and OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations.

The reports on internal control and compliance will each include a paragraph that states that the purpose of the report is solely to describe (1) the scope of testing of internal control over financial reporting and compliance and the result of that testing and not to provide an opinion on the effectiveness of internal control over financial reporting or on compliance, (2) the scope of testing internal control over compliance for major programs and major program compliance and the result of that testing and to provide an opinion on compliance but not to provide an opinion on the effectiveness of internal control over compliance, and (3) that the report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering internal control over financial reporting and compliance and OMB Circular A-133 in considering internal control over compliance and major program compliance. The paragraph will also state that the report is not suitable for any other purpose.

Our audit will be conducted in accordance with auditing standards generally accepted in the United States of America; the standards for financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; the Single Audit Act Amendments of 1996; the State of Texas Single Audit Act (Uniform Grant Management Standards); and the provisions of OMB Circular A-133, and will include tests of accounting records, a determination of major program(s) in accordance with OMB Circular A-133, and other procedures we consider necessary to enable us to express such opinions and to render the required reports. We cannot provide assurance that unmodified opinions will be expressed. Circumstances may arise in which it is necessary for us to modify our opinions or add emphasis-of-matter or other-matter paragraphs. If our opinions on the financial statements or the Single Audit compliance opinions are other than unmodified, we will discuss the reasons with you in advance. If, for any reason, we are unable to complete the audit or are unable to form or have not formed opinions, we may decline to express opinions or to issue a report as a result of this engagement.

Management Responsibilities

Management is responsible for the basic financial statements, schedule of expenditures of federal and state awards, and all accompanying information as well as all representations contained therein. Management is also responsible for identifying government award programs and understanding and complying with the compliance requirements, and for preparation of the schedule of expenditures of federal and state awards in accordance with the requirements of OMB Circular A-133 and the State of Texas Uniform Grant Management Standards. As part of the audit, we will assist with preparation of your financial statements, schedule of expenditures of federal and state awards, and related notes. You will be required to acknowledge in the written representation letter our assistance with preparation of the financial statements and schedule of expenditures of federal and state awards and that you have reviewed and approved the financial statements, schedule of expenditures of federal and state awards, and related notes prior to their issuance and have accepted responsibility for them. You agree to assume all management responsibilities for any nonaudit services we provide; oversee the services by designating an individual, preferably from senior management, who possesses suitable skill, knowledge, or experience; evaluate the adequacy and results of the services; and accept responsibility for them.

Management is responsible for establishing and maintaining effective internal controls, including internal controls over compliance, and for evaluating and monitoring ongoing activities, to help ensure that appropriate goals and objectives are met and that there is reasonable assurance that government programs are administered in compliance with compliance requirements. You are also responsible for the selection and application of accounting principles; for the preparation and fair presentation of the financial statements in conformity with U.S. generally accepted accounting principles and for compliance with applicable laws and regulations and the provisions of contracts and grant agreements.

Management is also responsible for making all financial records and related information available to us and for ensuring that management is reliable and financial information is reliable and properly recorded. You are also responsible for providing us with (1) access to all information of which you are aware that is relevant to the preparation and fair presentation of the financial statements, (2) additional information that we may request for the purpose of the audit, and (3) unrestricted access to persons within the government, (4) access to information of components and/or component auditors relative to facilitating group audit requirements under GAAS.

Management responsibilities also include identifying significant vendor relationships in which the vendor has responsibility for program compliance and for the accuracy and completeness of that information. Your responsibilities include adjusting the financial statements to correct material misstatements and confirming to us in the written representation letter that the effects of any uncorrected misstatements aggregated by us during the current engagement and pertaining to the latest period presented are immaterial, both individually and in the aggregate, to the financial statements taken as a whole.

Management is responsible for the design and implementation of programs and controls to prevent and detect fraud, and for informing us about all known or suspected fraud affecting the government involving (1) management, (2) employees who have significant roles in internal control, and (3) others where the fraud could have a material effect on the financial statements. Your responsibilities include informing us of your knowledge of any allegations of fraud or suspected fraud affecting the government received in communications from employees, former employees, grantors, regulators, or others. In addition, you are responsible for identifying and ensuring that the entity complies with applicable laws, regulations, contracts, agreements, and grants.

Additionally, as required by OMB Circular A-133, it is management's responsibility to follow up and take corrective action on reported audit findings and to prepare a summary schedule of prior audit findings and a corrective action plan. The summary schedule of prior audit findings should be available for our review during the preliminary phase of the audit.

Management is responsible for preparation of the schedule of expenditures of federal awards in conformity with OMB Circular A-133. You agree to include our report on the schedule of expenditures of federal awards in any document that contains and indicates that we have reported on the schedule of expenditures of federal awards. You also agree to [include the audited financial statements with any presentation of the schedule of expenditures of federal and state awards that includes our report thereon OR make the audited financial statements readily available to intended

users of the schedule of expenditures of federal awards no later than the date the schedule of expenditures of federal awards is issued with our report thereon]. Your responsibilities include acknowledging to us in the written representation letter that (1) you are responsible for presentation of the schedule of expenditures of federal awards in accordance with OMB Circular A-133; (2) that you believe the schedule of expenditures of federal awards, including its form and content, is fairly presented in accordance with OMB Circular A-133; (3) that the methods of measurement or presentation have not changed from those used in the prior period (or, if they have changed, the reasons for such changes); and (4) you have disclosed to us any significant assumptions or interpretations underlying the measurement or presentation of the schedule of expenditures of federal awards.

Management is also responsible for the preparation of the other supplementary information, which we have been engaged to report on, in conformity with U.S. generally accepted accounting principles. You agree to include our report on the supplementary information in any document that contains and indicates that we have reported on the supplementary information. You also agree to include the audited financial statements with any presentation of the supplementary information that includes our report thereon. Your responsibilities include acknowledging to us in the written representation letter that (1) you are responsible for presentation of the supplementary information in accordance with GAAP; (2) that you believe the supplementary information, including its form and content, is fairly presented in accordance with GAAP; (3) that the methods of measurement or presentation have not changed from those used in the prior period (or, if they have changed, the reasons for such changes); and (4) you have disclosed to us any significant assumptions or interpretations underlying the measurement or presentation of the supplementary information.

Management is responsible for establishing and maintaining a process for tracking the status of audit findings and recommendations. Management is also responsible for identifying for us previous financial audits, attestation engagements, performance audits, or other studies related to the objectives discussed in the Audit Objectives section of this letter. This responsibility includes relaying to us corrective actions taken to address significant findings and recommendations resulting from those audits, attestation engagements, performance audits, or studies.

You are also responsible for providing management's views on our current findings, conclusions, and recommendations, as well as your planned corrective actions, for the report, and for the timing and format for providing that information.

With regard to using the auditor's report, you understand that you must obtain our prior written consent to reproduce or use our report in bond offering official statements or other documents.

Audit Procedures—General

An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements; therefore, our audit will involve judgment about the number of transactions to be examined and the areas to be tested. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We will plan and perform the audit to obtain reasonable rather than absolute assurance about whether the financial

statements are free of material misstatement, whether from (1) errors, (2) fraudulent financial reporting, (3) misappropriation of assets, or (4) violations of laws or governmental regulations that are attributable to the entity or to acts by management or employees acting on behalf of the entity. Because the determination of abuse is subjective, *Government Auditing Standards* do not expect auditors to provide reasonable assurance of detecting abuse.

Because of the inherent limitations of an audit, combined with the inherent limitations of internal control, and because we will not perform a detailed examination of all transactions, there is a risk that material misstatements or noncompliance may exist and not be detected by us, even though the audit is properly planned and performed in accordance with U.S. generally accepted auditing standards and *Government Auditing Standards*. In addition, an audit is not designed to detect immaterial misstatements or violations of laws or governmental regulations that do not have a direct and material effect on the financial statements or major programs. However, we will inform the appropriate level of management of any material errors, any fraudulent financial reporting, or misappropriation of assets that come to our attention. We will also inform the appropriate level of management of any violations of laws or governmental regulations that come to our attention, unless clearly inconsequential, and of any material abuse that comes to our attention. We will include such matters in the reports required for a Single Audit. Our responsibility as auditors are limited to the period covered by our audit and does not extend to any later periods for which we are not engaged as auditors.

Our procedures will include tests of documentary evidence supporting the transactions recorded in the accounts, and may include tests of the physical existence of inventories, and direct confirmation of receivables and certain other assets and liabilities by correspondence with selected individuals, funding sources, creditors, and financial institutions.

In connection with the audit of the City, we will serve as the *group auditor* in connection with *components* of the City, both terms as defined by generally accepted auditing standards. During the planning phase of the City's audit, we will make a decision whether to make reference to component auditor's work in our auditor's report on the City's financial statements or perform additional audit procedures on the respective components in order to opine on the group financial statements. Under the capacity as group auditor and with the assistance of City management, we will request the following from component auditors:

- A copy of the financial statements of the respective components for the most recent audit period in relation to the City's fiscal year end.
- To advise us of other related parties not included on the list of City related parties as
 provided them and any related party transactions as they become known to the component
 auditors and of transactions with related parties that differ from any we may describe to
 them.
- To update their subsequent events procedures from the date of their report on the financial statements of respective components to the expected date of our report on the City's financial statements, and advise us of any subsequent events they identify that may require adjustment to, or disclosure in, the City's financial statements

We will request written representations from your attorneys as part of the engagement, and they may bill you for responding to this inquiry. At the conclusion of our audit, we will require certain written representations from you about the financial statements and related matters.

Audit Procedures-Internal Control

Our audit will include obtaining an understanding of the entity and its environment, including internal control, sufficient to assess the risks of material misstatement of the financial statements and to design the nature, timing, and extent of further audit procedures. Tests of controls may be performed to test the effectiveness of certain controls that we consider relevant to preventing and detecting errors and fraud that are material to the financial statements and to preventing and detecting misstatements resulting from illegal acts and other noncompliance matters that have a direct and material effect on the financial statements. Our tests, if performed, will be less in scope than would be necessary to render an opinion on internal control and, accordingly, no opinion will be expressed in our report on internal control issued pursuant to *Government Auditing Standards*.

As required by OMB Circular A-133, we will perform tests of controls over compliance to evaluate the effectiveness of the design and operation of controls that we consider relevant to preventing or detecting material noncompliance with compliance requirements applicable to each major federal award program. However, our tests will be less in scope than would be necessary to render an opinion on those controls and, accordingly, no opinion will be expressed in our report on internal control issued pursuant to OMB Circular A-133.

An audit is not designed to provide assurance on internal control or to identify significant deficiencies or material weaknesses. However, during the audit, we will communicate to management and those charged with governance internal control related matters that are required to be communicated under AICPA professional standards, *Government Auditing Standards*, and OMB Circular A-133.

Audit Procedures—Compliance

As part of obtaining reasonable assurance about whether the financial statements are free of material misstatement, we will perform tests of the City's compliance with provisions of applicable laws, regulations, contracts, and agreements, including grant agreements. However, the objective of those procedures will not be to provide an opinion on overall compliance and we will not express such an opinion in our report on compliance issued pursuant to *Government Auditing Standards*.

OMB Circular A-133 requires that we also plan and perform the audit to obtain reasonable assurance about whether the auditee has complied with applicable laws and regulations and the provisions of contracts and grant agreements applicable to major programs. Our procedures will consist of tests of transactions and other applicable procedures described in the *OMB Circular A-133 Compliance Supplement* for the types of compliance requirements that could have a direct and material effect on each of the City's major programs. The purpose of these procedures will be to express an opinion on

the City's compliance with requirements applicable to each of its major programs in our report on compliance issued pursuant to OMB Circular A-133.

Engagement Administration, Fees, and Other

We may from time to time, and depending on the circumstances, use third-party service providers in serving your account. We may share confidential information about you with these service providers, but remain committed to maintaining the confidentiality and security of your information. Accordingly, we maintain internal policies, procedures, and safeguards to protect the confidentiality of your personal information. In addition, we will secure confidentiality agreements with all service providers to maintain the confidentiality of your information and we will take reasonable precautions to determine that they have appropriate procedures in place to prevent the unauthorized release of your confidential information to others. In the event that we are unable to secure an appropriate confidentiality agreement, you will be asked to provide your consent prior to the sharing of your confidential information with the third-party service provider. Furthermore, we will remain responsible for the work provided by any such third-party service providers.

We understand that your employees will prepare all cash, accounts receivable, or other confirmations and schedules we request and will locate any documents selected by us for testing.

At the conclusion of the engagement, we will complete the appropriate sections of the Data Collection Form that summarizes our audit findings. It is management's responsibility to submit the reporting package (including financial statements, schedule of expenditures of federal awards, summary schedule of prior audit findings, auditors' reports, and corrective action plan) along with the Data Collection Form to the federal audit clearinghouse. We will coordinate with you the electronic submission and certification. If applicable, we will provide copies of our report for you to include with the reporting package you will submit to pass-through entities. The Data Collection Form and the reporting package must be submitted within the earlier of 30 days after receipt of the auditors' reports or nine months after the end of the audit period, unless a longer period is agreed to in advance by the cognizant or oversight agency for audits.

The audit documentation for this engagement is the property of the M&J/BFW Team and constitutes confidential information. However, pursuant to authority given by law or regulation, we may be requested to make certain audit documentation available to the Cognizant or Oversight Agency or its designee, a federal agency providing direct or indirect funding, or the U.S. Government Accountability Office for purposes of a quality review of the audit, to resolve audit findings, or to carry out oversight responsibilities. We will notify you of any such request. If requested, access to such audit documentation will be provided under the supervision of the M&J/BFW Team personnel. Furthermore, upon request, we may provide copies of selected audit documentation to the aforementioned parties. These parties may intend, or decide, to distribute the copies or information contained therein to others, including other governmental agencies.

The audit documentation for this engagement will be retained for a minimum of five years after the report release date or for any additional period requested by the federal cognizant agency for the City. If we are aware that a federal awarding agency, pass-through entity, or auditee is contesting an audit

finding, we will contact the party(ies) contesting the audit finding for guidance prior to destroying the audit documentation.
We expect to begin our audit upon signing of this engagement letter and to issue our reports no later than December 1, Gregory Ellison is the engagement partner and is responsible for supervising the engagement and signing the reports or authorizing another individual to sign them.
Our fee for these services will be \$consistent with the fee set forth in Exhibit B of the Agreement with the City. Our invoices for these fees will be rendered each month in accordance with Section IV.B of the Agreement. The above fee is based on anticipated cooperation from City personnel and the assumption that unexpected circumstances will not be encountered during the audit.
We appreciate the opportunity to be of service to the City of Houston, Texas and believe this letter accurately summarizes the significant terms of our engagement under generally accepted auditing standards in addition to other provisions set forth in the Agreement.
If you agree with the terms of our engagement as described in this letter, please sign the enclosed copy and return it to us.
You have requested that we provide you with a copy of our most recent external peer review reports and any subsequent reports received during the contract period. Accordingly, our peer review report accompanies this letter.
Very truly yours,
McConnell & Jones LLP (M&J) & Banks, Finley, White and Company (BFW) Under Assumed Name of M&J/BFW Team
Wayne McConnell, CPA Partner
RESPONSE:
This letter correctly sets forth the understanding of the City of Houston, Texas.
Acknowledged and approved on behalf of The Mayor of the City of Houston, Texas:
Signature: Title: Finance Director Date:

10/30/2013

EXHIBIT "H"

PROJECT TEAM

(See attached)

Organization Chart of Audit Team





Wayne McConnell, CPA Client Service Partner

Gregory Ellison, CPA Engagement Partner

Technical Partners

Jim White, CPA Govt'l Funds/ Financial Reporting

Jeff White, CPA Utility Systems

L. Michael Forsythe, CPA, CFE Airport Systems

Enterprise Funds	Governmental Funds	Other Funds/ Component Units	Single Audit
المعارضة والمعارضين والمناصرة والمعارضة والمعارضة والمعارضة والمعارضة والمعارضة والمعارضة والمعارضة والمعارضة	ا الما داور الما أو ما أن المار و المار ال	- Annony punking-punking niki niki ni ngua n <mark>ga</mark> mbiga galahan buni binnip bunis at menteru	المستوا والمقارب المهاد المعاود المعاورة المهاد المعاورة المعاورة المعادرة
Wandalyn Wright, CPA	Shintasha Brock, CPA	Godwin Okoye, CPA	Imran Khimani, CPA

City of Houston Resolution No. 2018-22

A RESOLUTION AUTHORIZING SUBMISSION OF A LOAN APPLICATION TO THE TEXAS WATER DEVELOPMENT BOARD'S STATE WATER IMPLEMENTATION FUND PROGRAM

WHEREAS, the City of Houston, Texas, deems it appropriate to apply to the Texas Water Development Board for financial assistance by requesting a loan commitment from the State Water Implementation Fund Program in connection with the expansion of the Northeast water plant expansion and related transmission lines; and

WHEREAS, in accordance with the rules and regulations of the Texas Water Development Board, which govern the procedures of making such application, the governing body of the City is required to adopt a resolution to accompany such application; NOW, THEREFORE,

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF HOUSTON, TEXAS:

Section 1. That the Texas Water Development Board is hereby requested to grant financial assistance to the City of Houston by loan commitments from the State Water Implementation Fund Program the first loan to be for a portion of the cost of the expanding of the Northeast water plant and the second loan to be for water transmission lines associated with such expansion with the maximum amount of the two loans combined to be \$153,155,000 all as further described in the applications for such assistance, in substantially the form attached hereto as Exhibit "A" and incorporated herein for all purposes (the "Applications").

Section 2. That the Mayor, City Controller, City Attorney, Director of Houston Public Works and/or their authorized representatives are hereby authorized to make any changes, revisions, deletions, or insertions of information (including attachments to the Applications) as may be necessary to complete the Applications or make any revisions thereto required by the Texas Water Development Board.

Z:\GENERAL\JRC\Debt\TWDB Loan applications\2018.04.18\Res.docx

Section 3. That the Mayor of the City of Houston is hereby authorized to execute and submit the Applications to the Texas Water Development Board; and the Mayor, City Controller, City Attorney, Director of Public Works and Engineering, financial advisor, and consulting engineers named in such Applications, or other authorized representatives of the City are authorized to appear before the Texas Water Development Board in support of the Applications.

Section 4. That the Mayor, City Controller, City Attorney or Director of Public Works and Engineering are further specifically authorized to make the required assurances and representations to the Texas Water Development Board in accordance with the rules, regulations, and policies of the Texas Water Development Board.

Section 5. That a certified copy of this Resolution shall be attached to the Applications herein authorized to be prepared and submitted to the Texas Water Development Board.

Section 6. That this Resolution shall take effect immediately upon its passage and approval by the Mayor; however, in the event that the Mayor fails to sign this Resolution within five days after its passage and adoption, it shall take effect in accordance with Article VI, Section 6, Houston City Charter.

PASSED and ADOPTED this 18 day of 1981, 2018

APPROVED this 18th day of April

Mayor of the City of Houston

Z:\GENERAL\JRC\Debt\TWDB Loan applications\2018.04.18\Res.docx

Pursuant to Article VI, S	ection 6, Houston Ci	ty Charter, the	e effective	date of	the
foregoing Resolution is		, 2018.			

Prepared by:

4/18/2018 JRC/nj

Requested by:

Carol Ellinger Haddock, P.E.

Acting Director Houston Public Works

LD No. 0631800092001

CAPTION PUBLISHED IN DAILY COURT REVIEW DATE:

	ł	1
AYE	NO	
		MAYOR TURNER
••••	• • • •	COUNCIL MEMBERS
		STARDIG
		DAVIS
		COHEN
<u>~</u>		BOYKINS
<u> </u>		MARTIN
V		LE
<u> </u>		TRAVIS
		CISNEROS
		GALLEGOS
		LASTER
1/		KNOX
سسا		ROBINSON
		KUBOSH
		EDWARDS
<u> </u>		CHRISTIE
CAPTION	ADOPTED	
		MAY 017 Rev. 12/15

City Secretary

APPLICATION AFFIDAVIT

THE STATE OF TEXAS §

COUNTY OF HARRIS §

CITY OF HOUSTON, TEXAS §

BEFORE ME, the undersigned, a Notary Public in and for the State of Texas, on this day personally appeared Carol Ellinger Haddock, P.E., Director of Houston Public Works, as the Authorized Representative of the City of Houston, Texas, who being by me duly sworn, upon oath says that:

- 1. the decision by the City to request financial assistance from the Texas Water Development Board ("Board") was made in a public meeting held in accordance with the Open Meetings Act (Government Code, §551.001, et. seq.) and after providing all such notice as required by such Act as is applicable to the City;
- 2. the information submitted in the application is true and correct according to my best knowledge and belief;
- 3. the City has no pending, or outstanding judgments, orders, fines, penalties, taxes, assessment or other enforcement or compliance issue of any kind or nature by the Environmental Protection Agency, Texas Commission on Environmental Quality, Texas Comptroller, Texas Secretary of State, or any other federal, state or local government, with the exception under an agreed order with the TCEQ since 2005, which requires the City to make certain repairs and replacements to the City's sanitary sewer facilities over a 10 year period. The repairs and replacements are included in the CUS Capital Improvement Program;
- 4. the City warrants compliance with the representations made in the application in the event that the Board provides the financial assistance; and
- 5. the City will comply with all applicable federal laws, rules, and regulations as well as the laws of this state and the rules and regulations of the Board.

Carol Ellinger Haddock, P.E.
Director of Houston Public Works



Notary Public, State of Texas

Ruth C. Bregregro

City of Houston, B19

I, ANNA RUSSELL, City Secretary of the City of Houston, Texas, do hereby certify that

the within and foregoing is a true and correct copy of Resolution 2018-22, passed and adopted

by the City Council of said City on the 18th day of April, 2018, as the same appears in the

records in my office.

WITNESS my hand and the Seal of said City this 19th day of April, 2018.

Anna Russell

City Secretary of the City of Houston

MAYOR'S OFFICE

HOUSTON, TEXAS

March 21, 2018

To the Honorable City Council of the City of Houston, Texas

In accordance with the provisions of Article VII, Section 7 of the Charter of the City of Houston, Texas, I submit and introduce to you the Ordinance set out as attached with the request that it be passed finally on the date of its introduction. There exists a pubic emergency requiring such action, and I accordingly request that you pass the same if it meets with your approval.

Mayor, City of Houston, Texas

City of Houston Ordinance No. 2018- 198

city of houston ordinance no. 2018-198

AN ORDINANCE SUPPLEMENTING THE CITY OF HOUSTON, TEXAS MASTER ORDINANCE NO. 2004-299; PROVIDING FOR THE ISSUANCE OF THE CITY OF HOUSTON, TEXAS, COMBINED UTILITY SYSTEM FIRST LIEN REVENUE BONDS, SERIES 2018A, PROVIDING FOR THE AMOUNTS, INTEREST RATES, PRICES, AND TERMS THEREOF AND OTHER MATTERS RELATING THERETO; PROVIDING FOR THE PAYMENT THEREOF; MAKING OTHER PROVISIONS REGARDING SUCH BONDS AND MATTERS INCIDENT THERETO; AUTHORIZING A CO-BOND COUNSEL AGREEMENT; AUTHORIZING EXECUTION AND DELIVERY OF A PAYING AGENT/REGISTRAR AGREEMENT; AND DECLARING AN EMERGENCY

	2 .st		~^ ·	ŧ.	
PASSED AND APPROVED THIS	۷.۱	day of	LIGE C	h ,	2018

Approved as to Form:

Senior Assistant City Attorney

(Requested by Carol Haddock, P. E.)

Interim Director of Department of

Public Works and Engineering)

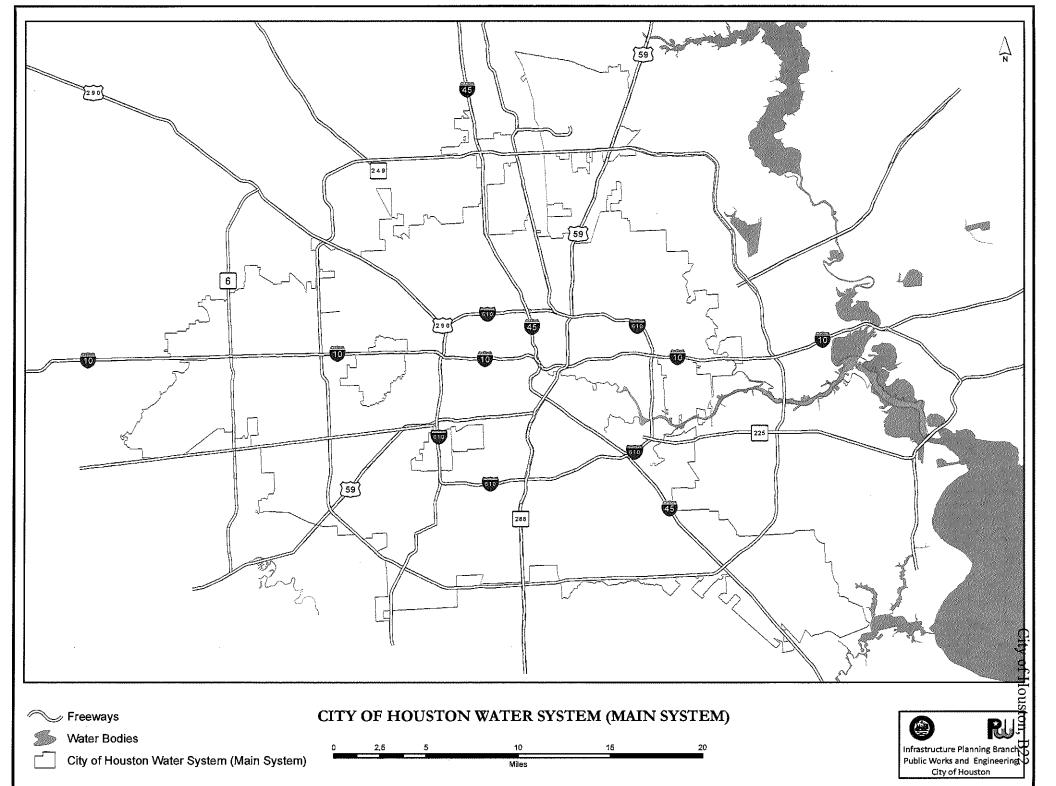
(L.D. File No. 0341800020001)

CAPTION PUBLISHED IN DAILY COURT REVIEW MAR 2 7 2018 DATE:

AYE	NO	•
		MAYOR TURNER
****		COUNCIL MEMBERS
س		STARDIG
سسا		DAVIS
سسسا		COHEN
سسا		BOYKINS
		MARTIN
L		LE
سسا		TRAVIS
سنسا		CISNEROS
سا		GALLEGOS
سسا		LASTER
		KNOX
-		ROBINSON
ا		KUBOSH
اسسا		EDWARDS
سسا		CHRISTIE
CAPTION	ADOPTED	
		MAY 017 Rev. 12/1:

Execution Page

51075748.4



Q76504 3015-1073

THIRD SUPPLEMENT TO WATER SUPPLY CONTRACT BETWEEN THE CITY OF HOUSTON, TEXAS AND THE NORTH FORT BEND WATER AUTHORITY FOR THE NORTHEAST TRANSMISSION LINE—SEGMENT 1

THIS THIRD SUPPLEMENT TO WATER SUPPLY CONTRACT FOR THE NORTHEAST TRANSMISSION LINE—SEGMENT 1 (this "Third Supplement") is made by and between the CITY OF HOUSTON, TEXAS ("Houston") and the NORTH FORT BEND WATER AUTHORITY (the "Authority") for the purpose of providing for the construction of a large-diameter water transmission line as described in this Third Supplement. This Third Supplement is effective on the date of countersignature hereof by the Houston Controller ("Effective Date"). For and in consideration of the premises and mutual covenants and agreements contained herein, the parties hereto do mutually agree as follows:

TABLE OF CONTENTS

ARTICLE I	RECITALS	3
ARTICLE I	I. DEFINITIONS	5
ARTICLE I	II. DESIGN AND CONSTRUCTION OF SEGMENT 1	9
3.1	Design and Construction by Houston	9
3.2	Construction of Segment 1	9
3.3	Allocation of Segment 1 Capacity and Project Costs	. 10
3.4	Design Responsibility and Engineering Costs	. 11
3.5	Construction Contract	
3.6	Change Order to Construction Contracts	. 14
3.7	Site Visits and Reports	. 14
3.8	Ownership and Segment 1 Capacity	. 14
3.9	Books, Records and Data	
3.10	Time of Completion	. 15
ARTICLE I	V. PAYMENT OF PROJECT COSTS	. 15
4.1	Funds Held in Trust; Limitations on Use	15
4.2	General Invoice & Payment Requirements	
4.3	Previously Appropriated Project Costs	
4.4	Engineering Payments	
4.5	Construction Payments	
4.6	Payment of Pay Estimates for Construction Costs	
4.7	AUP Reports	
ARTICLE V	. COMPONENT PARTS OF SEGMENT 1 INCLUDED IN DEFINED	
	TERMS OF WATER SUPPLY CONTRACT	. 19
5.1	Transmission Facilities	. 19
5.2	Point(s) of Delivery	
5.3	Point(s) of Measurement	. 19

IN WITNESS WHEREOF, the parties hereto have executed this Third Supplement in multiple copies, each of which shall be deemed to be an original, effective on the date of countersignature indicated below.

ATTEST/SEAL:	NORTH FORT BEND WATER AUTHORITY:
By: Melony Gay Name: Melony Gay Title: Secretary, Bound of Quechors	Name: Robert Patton Title: Vice President, Board of Directors
ATTEST/SEAL:	CITY OF HOUSTON, TEXAS
willsell	Signed by: Continued Washington
City Secretary	Mayor
APPROVED:	COUNTERSIGNED BY:
Dale A. Redick Director, Department of Public Works and	City Controller Level Polk
Engineering	
APPROVED AS TO FORM:	DATE COUNTERSIGNED:
1 0 1.000	11-10-15

C76505

THIRD SUPPLEMENT TO WATER SUPPLY CONTRACT BETWEEN THE CITY OF HOUSTON, TEXAS AND

THE CENTRAL HARRIS COUNTY REGIONAL WATER AUTHORITY FOR THE NORTHEAST TRANSMISSION LINE—SEGMENT 1

THIS THIRD SUPPLEMENT TO WATER SUPPLY CONTRACT FOR THE NORTHEAST TRANSMISSION LINE—SEGMENT 1 (this "Third Supplement") is made by and between the CITY OF HOUSTON, TEXAS ("Houston") and the CENTRAL HARRIS COUNTY REGIONAL WATER AUTHORITY (the "Authority") for the purpose of providing for the construction of an additional large-diameter water transmission line as described in this Third Supplement. This Third Supplement is effective on the date of countersignature hereof by the Houston Controller ("Effective Date"). For and in consideration of the premises and mutual covenants and agreements contained herein, the parties hereto do mutually agree as follows:

TABLE OF CONTENTS

ARTICLE I	. RECITALS	3
ARTICLE I	I. DEFINITIONS	5
ARTICLE I	II. DESIGN AND CONSTRUCTION OF SEGMENT 1	9
3.1	Design and Construction by Houston	9
3.2	Construction of Segment 1	10
3.3	Allocation of Segment 1 Capacity and Project Costs	10
3.4	Design Responsibility and Engineering Costs	11
3.5	Construction Contract	
3.6	Change Orders to Construction Contracts	14
3.7	Site Visits and Reports	14
3.8	Ownership and Segment 1 Capacity	15
3.9	Books, Records and Data	15
3.10	Time of Completion	15
ARTICLE I	V. PAYMENT OF PROJECT COSTS	15
4.1	Funds Held in Trust; Limitations on Use	15
4.2	General Invoice & Payment Requirements	
4.3	Previously Appropriated Project Costs	
4.4	Engineering Payments	17
4.5	Construction Payments	17
4.6	Payment of Pay Estimates for Construction Costs	17
4.7	AUP Reports	18
	•	

IN WITNESS WHEREOF, the parties hereto have executed this Third Supplement in multiple copies, each of which shall be deemed to be an original, effective on the date of countersignature indicated below.

ATTEST/SEAL:	CENTRAL HARRIS COUNTY REGIONAL WATER AUTHORITY
By: Caster Name: Judge Caston Title: Secretary	By Manual L. Cox Name: Margaret L. Cox Title: President
ATTEST/SEAL:	CITY OF HOUSTON, TEXAS Signed by:
City Secretary	Mayor Armonida Washington
APPROVED:	COUNTERSIGNED BY:
Director, Department of Public Works and Engineering	City Controller Jener Poll
APPROVED AS TO FORM:	DATE COUNTERSIGNED:
Assistant City Attorney L.D. File No. D6363 D035 2001	11-10-15

C176507 2015-1076

THIRD SUPPLEMENT TO WATER SUPPLY CONTRACT BETWEEN THE CITY OF HOUSTON, TEXAS AND THE NORTH HARRIS COUNTY REGIONAL WATER AUTHORITY

FOR THE NORTHEAST TRANSMISSION LINE—SEGMENT 1

THIS THIRD SUPPLEMENT TO WATER SUPPLY CONTRACT FOR THE NORTHEAST TRANSMISSION LINE—SEGMENT 1 (this "Third Supplement") is made by and between the CITY OF HOUSTON, TEXAS ("Houston") and the NORTH HARRIS COUNTY REGIONAL WATER AUTHORITY (the "Authority") for the purpose of providing for the construction of an additional large-diameter water transmission line as described in this Third Supplement. This Third Supplement is effective on the date of countersignature hereof by the Houston Controller ("Effective Date"). For and in consideration of the premises and mutual covenants and agreements contained herein, the parties hereto do mutually agree as follows:

TABLE OF CONTENTS

ARTICLE I	RECITALS	3
ARTICLE I	I. DEFINITIONS	5
ARTICLE I	II. DESIGN AND CONSTRUCTION OF SEGMENT 1	9
3.1	Design and Construction by Houston	9
3.2	Construction of Segment 1	10
3.3	Allocation of Segment 1 Capacity and Project Costs	10
3.4	Design Responsibility and Engineering Costs	11
3.5	Construction Contract	12
3.6	Change Orders to Construction Contracts	
3.7	Site Visits and Reports	15
3.8	Ownership and Segment 1 Capacity	15
3.9	Books, Records and Data	15
3.10	Time of Completion	16
ARTICLE I	V. PAYMENT OF PROJECT COSTS	16
4.1	Funds Held in Trust; Limitations on Use	16
4.2	General Invoice & Payment Requirements	16
4.3	Previously Appropriated Project Costs	17
4.4	Engineering Payments	17
4.5	Construction Payments	17
4.6	Payment of Pay Estimates for Construction Costs	
4.7	AUP Reports	
	A	

1

IN WITNESS WHEREOF, the parties hereto have executed this Third Supplement in multiple copies, each of which shall be deemed to be an original, effective on the date of countersignature indicated below.

> NORTH HARRIS COUNTY REGIONAL WATER AUTHORITY

> > Alan J. Rendl, President

ATTEST:

DATE APPROVED:

10-26-2015

APPROVED:

ijmmie Schindewolf, General Manager

(AUTHORITY SEAL)

Segment I Agreement

	(LA Missie D. Yourse	
	Annise D. Parker Amanula Usash Mayor	
ATTEST/SEAL:	DATE COUNTERSIGNED:	
Anna Russell City Secretary	("Effective Date")	
APPROVED: Oale A. Rudick Director, Department		
ASSISTANT CRY Attorney L.D. File Mo 063130035 300		

Ronald C. Green Jerus City Controller

C36509 3015-1018

THIRD SUPPLEMENT TO WATER SUPPLY CONTRACT BETWEE THE CITY OF HOUSTON, TEXAS AND THE WEST HARRIS COUNTY REGIONAL WATER AUTHORITY FOR THE NORTHEAST TRANSMISSION LINE—SEGMENT 1

THIS THIRD SUPPLEMENT TO WATER SUPPLY CONTRACT FOR THE NORTHEAST TRANSMISSION LINE—SEGMENT 1 (this "Third Supplement") is made by and between the CITY OF HOUSTON, TEXAS ("Houston") and the WEST HARRIS COUNTY REGIONAL WATER AUTHORITY (the "Authority") for the purpose of providing for the construction of a large-diameter water transmission line as described in this Third Supplement. This Third Supplement is effective on the date of countersignature hereof by the Houston Controller ("Effective Date"). For and in consideration of the premises and mutual covenants and agreements contained herein, the parties hereto do mutually agree as follows:

TABLE OF CONTENTS

ARTICLE I	. RECITALS	
	I. DEFINITIONS	
ARTICLE I	II. DESIGN AND CONSTRUCTION OF SEGMENT 1	9
3.1	Design and Construction by Houston	9
3.2	Construction of Segment I	
3.3	Allocation of Segment 1 Capacity and Project Costs	10
3.4	Design Responsibility and Engineering Costs	11
3.5	Construction Contract	11
3.6	Change Orders to Construction Contracts	14
3.7	Site Visits and Reports	14
3.8	Ownership and Segment 1 Capacity	14
3.9	Books, Records and Data	
3.10	Time of Completion	15
ARTICLE I	V. PAYMENT OF PROJECT COSTS	15
4.1	Funds Held in Trust; Limitations on Use	15
4.2	General Invoice & Payment Requirements	15
4.3	Previously Appropriated Project Costs	16
4.4	Engineering Payments	
4.5	Construction Payments	17
4.6	Payment of Pay Estimates for Construction Costs	17
4.7	AUP Reports	17
7.7	1 POT TAPOLEMINION	

IN WITNESS WHEREOF, the parties hereto have executed this Third Supplement in multiple copies, each of which shall be deemed to be an original, effective on the date of countersignature indicated below.

ATTEST/SEAL:	WEST HARRIS COUNTY REGIONAL WATER AUTHORITY:
By: Name: Douglas C. Postle Title: Secretary	By: Jue auber Name: Bruce Parker Title: President
ATTEST/SEAL:	CITY OF HOUSTON, TEXAS
$A \in A$	Signed by:
mutusell Un	Nige D. Jankar
City Secretary	Mayor
APPROVED:	COUNTERSIGNED BY:
Director, Department of Public Works and Engineering	Braild Charles City Controller Lead Public
APPROVED AS TO FORM:	DATE COUNTERSIGNED:
10000	11-10-15

FOURTH SUPPLEMENT TO WATER SUPPLY CONTRACT 2015-1015 BETWEEN THE CITY OF HOUSTON, TEXAS AND THE CENTRAL HARRIS COUNTY REGIONAL WATER AUTHORITY

FOR THE NORTHEAST TRANSMISSION LINE—SEGMENT 2

THIS FOURTH SUPPLEMENT TO WATER SUPPLY CONTRACT BETWEEN THE CITY OF HOUSTON, TEXAS AND THE CENTRAL HARRIS COUNTY REGIONAL WATER AUTHORITY FOR THE NORTHEAST TRANSMISSION LINE—SEGMENT 2 (this "Fourth Supplement") is made by and between the CITY OF HOUSTON, TEXAS ("Houston") and the CENTRAL HARRIS COUNTY REGIONAL WATER AUTHORITY (the "Authority") for the purpose of providing for the construction of an additional large-diameter water transmission line from Houston's Northeast Water Purification Plant to the Authority's transmission and distribution system. This Fourth Supplement is effective on the date of countersignature hereof by the Houston Controller ("Effective Date"). For and in consideration of the premises and mutual covenants and agreements contained herein, the parties hereto to mutually agree as follows:

TABLE OF CONTENTS

ARTICLE	I. RECITALS	
ARTICLE	II. DEFINITIONS	5
ARTICLE	III. DESIGN AND CONSTRUCTION OF SEGMENT 2	10
3.1	Engineering & Construction by Houston	
3.2	Construction of Segment 2	11
3.3	Allocation of Segment 2 Capacity and Project Costs	12
3.4	Real Estate Acquisition	12
3.5	Design Responsibility and Engineering Costs	12
3.6	Construction Contracts	13
3.7	Change Orders to Construction Contracts	
3.8	Site Visits and Reports	17
3.9	Ownership and Segment 2 Capacity	
3.10		17
3.11	Time of Completion	17
ARTICLE	IV. PAYMENT OF PROJECT COSTS	17
4.1	Funds Held in Trust; Limitations on Use	
4.2	General Invoice & Payment Requirements	
4.3	Previously Appropriated Project Costs	19
4.4	Real Estate Payments	19
4.5	Engineering Sub-Segment Payments	21
4.6	Construction Sub-Segment Payments	21
4.7	Payment of Pay Estimates for Construction Costs	21
4.8	Transfer of Funds on Sub-Segment Completion	22
4.9	Contingencies	23

IN WITNESS WHEREOF, the parties hereto have executed this Fourth Supplement in multiple copies, each of which shall be deemed to be an original, effective on the date of countersignature indicated below.

indicated below.	•
ATTEST/SEAL:	CENTRAL HARRIS COUNTY REGIONAL WATER AUTHORITY
By:	Name: Margaret L. Cox Title: President
ATTEST/SEAL: Wakussll City Secretary	Signed by: Amarcla Washington Mayor
APPROVED: Director, Department of Public Works and Engineering	COUNTERSIGNED BY:
APPROVED AS TO FORM:	DATE COUNTERSIGNED:
10000	11-10-15

C76508 2015-1077

FOURTH SUPPLEMENT TO WATER SUPPLY CONTRACT BETWEEN THE CITY OF HOUSTON, TEXAS AND THE NORTH HARRIS COUNTY REGIONAL WATER AUTHORITY

FOR THE NORTHEAST TRANSMISSION LINE—SEGMENT 2

THIS FOURTH SUPPLEMENT TO WATER SUPPLY CONTRACT BETWEEN THE CITY OF HOUSTON, TEXAS AND THE NORTH HARRIS COUNTY REGIONAL WATER AUTHORITY FOR THE NORTHEAST TRANSMISSION LINE—SEGMENT 2 (this "Fourth Supplement") is made by and between the CITY OF HOUSTON, TEXAS ("Houston") and the NORTH HARRIS COUNTY REGIONAL WATER AUTHORITY (the "Authority") for the purpose of providing for the construction of an additional large-diameter water transmission line from Houston's Northeast Water Purification Plant to the Authority's transmission and distribution system. This Fourth Supplement is effective on the date of countersignature hereof by the Houston Controller ("Effective Date"). For and in consideration of the premises and mutual covenants and agreements contained herein, the parties hereto to mutually agree as follows:

TABLE OF CONTENTS

ARTICLE I	RECITALS	3
ARTICLE I	I. DEFINITIONS	5
ARTICLE I	II. DESIGN AND CONSTRUCTION OF SEGMENT 2	10
3.1	Engineering & Construction by Houston	
3.2	Construction of Segment 2	11
3.3	Allocation of Segment 2 Capacity and Project Costs	
3.4	Real Estate Acquisition	12
3,5	Design Responsibility and Engineering Costs	
3.6	Construction Contracts	13
3.7	Change Orders to Construction Contracts	
3.8	Site Visits and Reports	
3.9	Ownership and Segment 2 Capacity	17
3.10	Books, Records and Data	
3.11	Time of Completion	
ARTICLE I	V. PAYMENT OF PROJECT COSTS	18
4.1	Funds Held in Trust; Limitations on Use	
4.2	General Invoice & Payment Requirements	
4.3	Previously Appropriated Project Costs	
4.4	Real Estate Payments	
4.5	Engineering Sub-Segment Payments	
4.6	Construction Sub-Segment Payments	
	• • • • • • • • • • • • • • • • • • • •	

IN WITNESS WHEREOF, the parties hereto have executed this Fourth Supplement in multiple copies, each of which shall be deemed to be an original, effective on the date of countersignature indicated below.

NORTH HARRIS COUNTY REGIONAL WATER AUTHORITY

Alan I Rend President

ATTEST:

DATE APPROVED:

By: Lenox A. Sigler. Secretary

10-26-2015

APPROVED:

Dur

mmie Schindewolf, P.E.

General Manager

APPROVE AS TO FORM:

вà:

Robin S. Bobbin

General Counsel



Segment 2 Agreement

a	Annise D. Parker Amande Washryton
	Mayor
	DATE COUNTERSIGNED:
	("Effective Date")
*	

OUNTERSIGNED BY:

Ronald C. Green Jewyl.
City Controller

ATTEST/SEAL:

Anna Russell City Secretary

APPROVED:

Director, ____ Department

CITY OF HOUSTON
COMBINED SYSTEM STATISTICS
Water Supply
June 30, 2017 (unaudited)

Largest Treated Water Customers

The following schedule presents information concerning the ten largest treated water customers of the System for the twelve month period ended June 30, 2017. The total charges to such customers during such period represent approximately 5.1% of the System Gross Revenues and 10.2% of total water sales revenues for such period.

		Gross	
	Customers	Charges	Consumption (1000 gal)
1.	North Harris Co. Regional Water Authority	\$ 13,777,478	9,796,511
2.	North Channel Water Auth	7,884,706	2,677,533
3.	West Harris Co. Regional Water Aut.	6,895,6 3 5	8,463,205
4.	City of Pasadena	5,509,722	6,681,346
5.	North Fort Bend County WA	S,285,774	6,549,409
6.	Gulf Coast Water Authority (Galveston)*	4,301,949	5 ,221,19 3
7.	City of Pearland	3,824,253	1,152,760
8.	Anheuser Busch	3,362,427	1,140,290
9.	Clear Lake City	3,003,495	3,582,370
10.	Memorial Villages Water Authority	 2,192,323	717,366
		\$ 56,037,761	45,981,983

Largest Untreated Water Customers

The following schedule presents information concerning the ten largest untreated water customers of the System for a twelve month period ended June 30, 2017. The total of the contract payments by these ten customers during such period represents approximately 3.3% of the System Gross Revenue and 6.6% of total water sales revenues for such period.

		Gross	
	Customers	Charges	Consumption (1000 gal)
1	Equistar Chemicals LP CH11	\$ 8,710,509	13,121,258
2	Air Liquide America Corp.	4,361,993	6,570,670
3	Shell Oil	4,323,541	6,516, 8 39
4	Battleground Water Company	4,109,414	6, 190,449
5	Baytown Area	3,467,009	5,224,003
6	Chevron Phillips Chemical Co.	2,920,154	4,396,234
7	Houston Refining, LP (Lyondell -Citgo) CH11	2,6 2 8,006	4,107,400
8	*Hoescht Celanese	1,986,457	2,999,214
9	Occidental Chemical	1,855,257	2,795,718
10	E.I. Dupont De Nemours	1,540,831	2,323,289
		\$ 35,903,172	54,245,074

CITY OF HOUSTON
COMBINED UTILITY SYSTEM STATISTICS
LARGEST SEWER CUSTOMERS
June 30, 2017 (unaudited)

The following schedule presents information concerning the ten largest customers of the Sewer Facilities for the twelve month period ended June 30, 2017. The total charges to such customers represent approximately 2.54% of the System Gross Revenue and 5.85% of Sewer Facilities gross charges during such period.

	Gross	
Customers	Charges	Consumption (1000 gal)
1. ANHEUSER BUSCH	\$ 5,349 ,0 17	624,387
2. CITY OF HOUSTON	5,269,710	858,276
3. HARRIS COUNTY	4,710,349	790,095
4. HI5D	3,983,45 7	659,093
5. UNIV. OF HOUSTON	3,153,636	528,708
6. OAK FARMS DAIRIES	2,823,126	83,495
7. ATLANTIC COFFEE INDU	2,136,503	167,124
8. COCA COLA	1,744,861	57,228
9. MD ANDERSON	994,424	165, 970
10. METHODIST HOSPITAL	547,358	92,425
	\$ 30,712,442	4,026,801

CITY OF HOUSTON, TEXAS COMBINED UTILITY SYSTEM

Number of Water and Wasterwater Customers

Fiscal Year	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
Water	453,750	457,536	460,743	464,094	475,473
Waster Water	436,424	439,495	442,161	444,841	452,883

City of Houston, Texas AD VALOREM TAX LEVIES AND COLLECTIONS (amounts expressed in thousands) (unaudited)

	Taxi	Rafe ^(a)		Net Current Year	Current Collections Prior to End of	Prior Years ^t Delinquent	Total	Total Collections
Fiscal	General	Debt		Tax Levy (b) (d)	Fiscal Year (c) (d) (e)	Collections(e)	Collection (c) (d) (e)	Percentage
<u>Year</u>	<u>Purposes</u>	Service	Total	(in thousands)	(in thousands)	(in thousands)	(in thousands)	of Net Levy (d)
2009	0.45460	0.18415	0.63875	961,059	926,956	32,395	959,351	99.8
2010	0.45728	0.18147	0,63875	960,083	932,952	23,672	956,624	99.6
2011	0.46336	0,17539	0.63875	912,808	891,910	27,684	919,594	100.7
2012	0.48071	0.15804	0.63875	927,886	907,472	24,177	931,649	100,4
2013	0.46221	0.17654	0,63875	970,157	949,784	30,555	980,339	101.0
2014	0.47709	0.16166	0.63875	1,071,503	1,053,287	25,100	1,078,387	100.6
2015	0.47464	0,15644	0,63108	1,183,204	1,156,298	23,578	1,179,876	99.7
2016	0.44219	0.15893	0.60112	1,228,563	1,206,449	9,000	1,215,449	98.9
2017	0,45446	0.13196	0.58642	1,299,973	1,276,573	16,500	1,293,073	99.5
2018	0.42023	0.16398	0.58421	1,345,625	1,321,404	9,510	1,330,914	98.9

(a) The Texas Constitution limits the maximum ad valorem tax rate to \$2.50 per \$100 of assessed valuation for home-rule cities such as the City; however, for a discussion of the more restrictive City Charter Limitations, see "PROPERTY TAXES - City Charter Tax and Revenue Limitations."

(b) The figures represent net adjusted levies, including the late certification and correction rolls from the Appraisal District, through June 30 of each Fiscal Year, except for Fiscal Year 2018, which is as of August 11, 2017.

(c)

These amounts do not include revenues from various types of Industrial District Contracts entered into by the City with industrial property owners outside of the City's corporate limits totaled \$0.00 million in Fiscal Year 2017. Such Industrial District Contracts have a term of fifteen years (currently scheduled to terminate in Tax Year 2027) and allow property owners to make payments to the City in lieu of paying ad valorem taxes.

Includes all ad valorem tax receipts received by the City, including tax increment revenues that are deposited into special funds designated for various tax increment reinvestment zones. By virtue of contracts among the City, the Zones and the local government corporations that manage the zones, the tax increments are transferred to the respective local government corporation and are available to fund authorized projects in the Zone and to be pledged to obligations issued by the local government corporation on behalf of the Zone. Bonds and other obligations issued by the local government are not debt of the City. In Fiscal Year 2018, the City has budgeted approximately \$139 million of tax increments to be transferred to special funds for such zones, as required by State law, of which approximately \$42 million will be transferred back to the City of affordable housing projects, an administrative fee and a fee for municipal service costs attributable to development in such Zones. Much of the tax increments transferred to the zones are used to promote economic developments through the acquisition and construction of public improvements to spur development in certain areas of the City. Additionally, the zones provide affordable housing and funds for certain City capital improvement projects.

(e) The City's Fiscal Year 2018 Budget includes a proposed tax rate of \$0.58421 (per \$100 assessed valuation) for Tax Year 2017 (Fiscal Year 2018). The City Charter provides that, in preparing the City's budget, provision shall first be made for the payment of debt service on the City's ontstanding bond indebtedness, with the remaining revenues to be apportioned among the City's respective departments.

City of Houston, Texas AD VALOREM TAX OBLIGATION PERCENTAGES (amounts expressed in thousands) (unaudited)

Tax <u>Year</u>	Fiscal <u>Year</u>	Tax-Supported Debt at December 31 (in thousands) (0)	Tax Roli ^(a) <u>(in</u> thousands)	Tax-Supported Debt as a Percentage of Tax Roll	Tax-Supported Per <u>Capita Debt</u> ^(b)	Debt Service Requirement Payable from Taxes ^{(e)(d)} (in thousands)	Tax Levy for Debt Service (in thousands) (e)
2006	2007	2,833,037	120,595,451	2,35%	1,306	262,523	209,000
2007	2008	3,016,248	135,764,121	2.22%	1,365	279,277	229,600
2008	2009	3,174,023	149,627,515	2.12%	1,418	254,513	251,700
2009	2010	3,324,065	150,270,904	2.21%	1,472	308,113	254,600
2010	2011	3,440,075	142,964,244	2,41%	1,639	342,966	232,545
2011	2012	3,471,590	145,042,978	2.39%	1,617	297,923	229,700
2012	2013	3,469,360	152,801,703	2,27%	1,613	300,124	241,100
2013	2014	3,392,510	167,460,662	2.03%	1,545	304,267	243,813
2014	2015	3,329,635	187,196,033	1.78%	1,487	338,424	264,500
2015	2016	3,225,240	204,300,968	1.58%	1,405	339,851	295,954
2016	2017	3,079,240	220,692,709	1,40%	1,337	339,639	258,415

- (a) With the exception of Tax Year 2016, the tax roll represents the total appraised value of property, after subtracting all exemptions, and reflects all adjustments made by the Appraisal Districts as of June 30 of each Fiscal Year. The Tax Year 2016 amount represents the Appraisal Districts' estimate of certified taxable valuations based on tax rolls available as of July 7, 2017. As of July 11, 2017, the total assessed value for Tax Year 2016 (including exempt property values) was approximately \$287.8billion, which is the appraised value used to determine the statutory limitation of approximately \$28.9 billion relating to total bond indebtedness.
- (b) Per capita figures are based on population estimates according to the U.S. Census Bureau.
- (c) These amounts have not been reduced by the combined coding fund balances in the General Debt Service Fund.
- (d) These amounts include principal and interest payments for Tax Obligations, except it only includes interest for Commercial Paper Notes at an assumed rate appropriate for each Fiscal Year.
- (e) Sources of funds for the general obligation debt service requirement include the tax levy and transfers from Enterprise and Special Revenue Funds.
- (f) Information as reported in the City's Monthly Operations and Financial Report dated as of December 31 of each Fiscal Year.

CITY OF HOUSTON ASSESSED VALUE AND ESTIMATED VALUE OF TAXABLE PROPERTY Last Ten Fiscal Years (amounts expressed in thousands) (unaudited)

Fiscal Year	Residential Property	Commercial Property	Industrial Property	Personal Property	Less: Tax Exempt Property	Total Taxable Assessed Value	Total Direct Tax Rate
2008	\$ 84,322,788	\$ 75,245,892	\$ 11,740,472	\$ 2,515,631	\$ 38,060,662	\$ 135,764,121	6.4375
2009	\$ 90,065,098	\$ 88,374,034	\$ 12,148,055	\$ 2,380,333	\$ 44,198,187	\$ 148,769,333	6.3875
2010	\$ 91,451,713	\$ 89,110,300	\$ 12,911,034	\$ 2,344,315	\$ 46,805,799	\$ 149,011,563	6.3875
2011	\$ 89,957,336	\$ 84,250,876	\$ 11,500,552	\$ 2,276,946	\$ 46,201,271	\$ 141,784,439	6.3875
2012	\$ 90,484,912	\$ 86,617,837	\$ 11,826,503	\$ 2,159,964	\$ 47,104,376	\$ 143,984,840	6.3875
2013	\$ 91,402,063	\$ 93,629,148	\$ 14,232,884	\$ 2,143,660	\$ 50,417,778	\$ 150,989,977	6.3875
2014	\$ 96,665,925	\$ 103,323,330	\$ 17,601,808	\$ 2,341,556	\$ 52,006,243	\$ 167,926,376	6.3875
2015	\$ 109,039,079	\$ 112,587,772	\$ 18,590,654	\$ 2,258,016	\$ 54,652,493	\$ 187,823,028	6.3108
2016	\$ 124,551,897	\$ 120,734,308	\$ 19,609,242	\$ 2,283,537	\$ 64,551,171	\$ 202,627,813	6.0112
2017	\$ 136,658,632	\$ 129,297,857	\$ 18,461,085	\$ 2,463,330	\$ 67,001,550	\$ 219,879,354	5.8642

The tax rates are based on a 100% assessment ratio. Tax rates are stated per \$1,000 assessed value.

CITY OF HOUSTON DIRECT AND OVERLAPPING PROPERTY TAX RATES

Last Ten Fiscal Years (unaudited)

Purpose	2017	2016	2015	2014	2013
City	4.64460	4.40104	4.74626	4 77005	4.6001
General Purposes	4,54458	4.42194	4.74635	4.77085	4.6221
Debt Service	1.31962	1.58926	1.56445	1.61665	<u>1.7654</u> 6.3875
City of Houston (1)	5,86420	6,01120	6.31080	6.38750	0.3873
County Fort Bend County	4.7400	4,8600	4,9476	4.9976	4,9976
Harris County (2)	4,4485	4,4656	4,4467	4.4300	4,2830
Montgomery County	4,6670	. 4.7670	4,7670	4.8380	4.8380
School District	4,0070	. 4.1010	1,7070	1,0500	1,0500
Aldine I.S.D.	13,2338	12,8590	13.0590	13.0580	13,2839
Alief I.S.D.	13,0500	12,8000	12,8000	12,9000	13,2000
Clear Creek I.S.D.	14,0000	14,0000	14.0000	14,0000	13,6000
Conroe I,S,D. (5)	12,8000	12,8000	12.8000	12,9000	12,9500
Crosby I.S.D.	16,7000	16.7000	16,7000	16,7000	14,4000
Cypress-Fairbanks I.S.D.	14,4000	14.4000	14,4000	14,5000	14,5000
Deer Park I,S,D.	15,5670	15,5670	15,5670	15,5670	15.2670
Fort Bend I, S, D.	13,4000	13.4000	13,4000	13,4000	13,4000
Galena Park I.S.D.	15,6330	15.1340	15,1340	15,1340	15.1340
Goose Creek I,S.D. (5)	14,3190	14.3189	14.3189	13,3213	13,3213
Houston I.S.D.	12,0670	11.9670	11,9670	11.5670	11,5670
Huffman I.S.D.	14,0000	14.0000	14,0000	14.2000	14.4500
Humble I.S.D.	15,2000	15,2000	15,2000	15,2000	15,2000
Katy I.S.D.	15.1660	15.2660	15,2660	15,2660	15.2660
Klein I.S.D.	14,3000	13,9000	13,9000	14,3000	14,4000
New Caney I.S.D.	16,7000	16,7000	16,7000	15,4000	15,4000
North Forest I.S.D. (3)					
Pasadena I.S.D.	13,5000	13.5000	13,5000	13.5000	13,5000
Sheldon I.S.D.	14.1000	14,1000	14.1000	14,3000	14.3000
Spring I.S.D.	14.6996	14.7000	15,1000	15.7000	15,7000
Spring Branch I.S.D.	13,9450	13.9450	13.9450	13.9450	13.9450
Municipal Utility District					
Harris County MUD # 355	0.0900	1.2000	1,2000	2.0000	2,3500
Harris County MUD # 359	1,9000	2.6000	2.7000	3,0000	3,0500
Harris County MUD # 366	1.8000	2,0000	2,0000	2,5000	2,5000
Harris County MUD # 372	11.1000	1,6500	1.7500	1.9000	1.9000
Harris County MUD # 381	6,3000	7.4000	7,4000	= 0000	7 0000
Harris County MUD # 390	7,0000	7.0000	7,0000	7.0000	7.0000
Harris County MUD # 393	7.5000	9,1000	9,1000		
Harris County MUD # 404	8.6125	8.6125	8,6125		
Harris County MUD # 410	5,9000	6.9000	6,9000		
Harris County MUD # 411	7.5000	9,0000	9.0000		
Harris County MUD # 415	8.0000	7.0000	2 (202	7,6125	7,6125
Harris County MUD # 450	8.1358	7.9888	7.6892	7.0125	7.0123
Harris County MUD # 451	9.1358	8,8000	8,8000 7,4000		
Harris County MUD # 460	7.4000 9.1300	7.4000	7.4000		
Harris County MUD # 499					
Harris County MUD # 529	7,5000 5,0000				
Harris County MUD # 537 Northwood MUD #1	12,5000	12.5000	12,5000	12,5000	12,5000
	12,3000	12.3000	12,3000	12,5000	12.3000
Other Jurisdictions Clear Lake City Water Authority	2,7000	2.7000	2,8000	2,8000	2,8000
Fort Bend Parkway Road (4)	2,7000	2.7000	2,0000	2,0000	0,5443
Harris County Dept, of Education	0,005195	0,0600	0.0600	0,0636	0,0658
Houston Community College	0,003193	0,0000	0.2984	0,2012	0,1750
Lee College District (5)	2,1320	2,1570	2,2070	2,6070	2,4100
Lone Star College System .	1.0780	1,0790	1.0810	1.1600	1,2100
Port of Houston Authority	0.1334	0.1342	0.1531	0.1716	0.1952
San Jacinto College District	18,2379	17,5783	18,5600	1,8560	1,8560

⁽¹⁾ The tax rates are based on a 100% assessment ratio. Tax rates are stated per \$1,000 assessed value.

⁽²⁾ Harris County includes the Harris County Flood Control District and the Harris County Toll Road. The Toll Road rate is zero.

⁽³⁾ North Forest I.S.D. was closed and merged with Houston I.S.D.

⁽⁴⁾ Debt has been paid off.

⁽⁵⁾ Overlapping percent is less than 0.01%.

CITY OF HOUSTON, TEXAS PRINCIPAL PROPERTY TAXPAYERS

June 30, 2017

Current Year and Nine Years Ago (amounts expressed in thousands) (unaudited)

			2017		2008					
Taxpayer		Taxahle Assessed Value		Percentage of Total Taxable Assessed Value		Taxable Assessed Value	Rank	Percentage of Total Taxable Assessed Value		
Centerpoint Energy, Inc.	\$	2,068,050	1	1.02%	\$	1,522,138	1	1.12%		
Chevron Chemical Company		1,136,484	2	0.56%						
Crescent (Real Estate) HC Investors LP		873,922	3	0.43%		1,378,918	2	1.02%		
One, Two, Three Allen Center		857,457	4	0.42%						
Cousins Greenway & POC		715,139	5	0.35%						
HG Galleria 1 11 111 LP		679,041	6	0.34%						
TPG Citywest & San Felipe		663,239	7	0.33%						
Shell Services Company		548,998	8	0.27%						
1000 Louisiana LP		516,383	9	0.25%						
Busycon Properties LLC		512,788	10	0.25%						
Hines Interests Limited Partnership						1,248,647	3 .	0.92%		
Houston Refining						980,824	4	0.72%		
Cullen Holdings						740,183	5	0.55%		
Teachers Insurance						629,949	6	0.46%		
AT & T Corp						629,090	7	0.46%		
Exxon Mobil Corp						580,399	8	0.43%		
TPG BH ICC LP						576,224	9	0.42%		
Anheuser Busch Inc.			 -			447,348	- 10	0.33%		
Total	<u>\$</u>	8,571,501	= =	4.24%	\$	8,733,720	=	6.43%		

CITY OF HOUSTON, TEXAS TAX REVENUE BY SOURCE - GOVERNMENTAL FUNDS Last Ten Fiscal Years (accrual basis of accounting) (amounts expressed in thousands) (uuaudited)

Fiscal Year]	Property Tax	Sales Tax	F	ranchise Tax	 dustrial sessments	В	Mixed Beverage Tax	Bingo Tax	 Total Tax Collections
2008	\$	829,837	\$ 495,173	\$	190,518	\$ 17,787	\$	10,479	\$ 256	\$ 1,544,050
2009	\$	890,308	\$ 507,103	\$	190,800	\$ 19,133	\$	10,587	\$ 226	\$ 1,618,157
2010	\$	895,779	\$ 468,965	\$	191,292	\$ 15,817	\$	10,382	\$ 195	\$ 1,582,430
2011	\$	853,277	\$ 492,824	\$	190,911	\$ 14,458	\$	10,283	\$ 167	\$ 1,561,920
2012	\$	866,143	\$ 546,543	\$	193,153	\$ 37	\$	9,525	\$ 193	\$ 1,615,594
2013	\$	906,761	\$ 600,256	\$	195,664	\$ 29,845	\$	9,887	\$ 196	\$ 1,742,609
2014	\$	973,902	\$ 629,441	\$	190,368	\$ 16,534	\$	13,869	\$ 187	\$ 1,824,301
2015	\$	1,074,070	\$ 667,061	\$	190,245	\$ 16,736	\$	15,784	\$ 209	\$ 1,964,105
2016	\$	1,099,411	\$ 640,476	\$	191,584	\$ 19,238	\$	16,064	\$ 207	\$ 1,966,980
2017	\$	1,152,420	\$ 631,993	\$	191,025	\$ 19,291	\$	16,662	\$ 234	\$ 2,011,625



TABLE OF CONTENTS

City of Houston, Texas (2018) TWDB Financings for NE Plant Expansion and Transmission Lines *** DRAFT - FOR DISCUSSION PURPOSES ONLY *** 2018 (Nov.) Run - Based on May 4 2018 TWDB Estimated Rates plus 50 basis points Run Date/Time: April 2, 2018 11 a.m.

Report TWDB Financings for NE Plant Expansion and Transmission Lines												
Bond Pricing			. 2									
Bond Summary Statistics			, 3									
Bond Debt Service			. 4									
Sources and Uses of Funds			. 7									
Bond Debt Service Breakdown			. 8									



SOURCES AND USES OF FUNDS

City of Houston, Texas (2018)

TWDB Financings for NE Plant Expansion and Transmission Lines

*** DRAFT - FOR DISCUSSION PURPOSES ONLY ***

2018 (Nov.) Run - Based on May 4 2018 TWDB Estimated Rates plus 50 basis points

Run Date/Time: April 2, 2018 11 a.m.

Dated Date 11/16/2018 Delivery Date 11/16/2018

Sources: **Bond Proceeds:** 153,155,000.00 Par Amount 153,155,000.00 Uses: **Project Fund Deposits:** 15,461,654.27 Project Fund - Distribution Expansion 133,424,209.23 Project Fund - Treatment Expansion 148,885,863.50 Other Fund Deposits: Debt Service Reserve Fund 4,083,736.50 **Delivery Date Expenses:** 185,400.00 Cost of Issuance 153,155,000.00



BOND PRICING

City of Houston, Texas (2018)
TWDB Financings for NE Plant Expansion and Transmission Lines
*** DRAFT - FOR DISCUSSION PURPOSES ONLY ***

2018 (Nov.) Run - Based on May 4 2018 TWDB Estimated Rates plus 50 basis points Run Date/Time: April 2, 2018 11 a.m.

Bond Component	Maturity Date	Amount	Rate	Yield	Price
soria component	Date	Allouit	Nate	, icid	
Serial Bond (2018):	44 /45 /2010	2 225 000	4 7000/	1 700%	100.000
	11/15/2019	3,325,000	1.700%	1.700%	100.000
	11/15/2020	3,385,000	1,820%	1.820%	100.000
	11/15/2021	3,445,000	1.940%	1.940%	
	11/15/2022	3,515,000	2.040%	2.040%	100,000
	11/15/2023	3,590,000	2,160%	2.160%	100.000
	11/15/2024	3,670,000	2.270%	2.270%	100.000
	11/15/2025	3,760,000	2.370%	2,370%	100.000
	11/15/2026	3,850,000	2.490%	2.490%	100.000
	11/15/2027	3,950,000	2.580%	2.580%	100,000
	11/15/2028	4,055,000	2.670%	2.670%	100.000
	11/15/2029	4,165,000	2,830%	2.830%	100.000
	11/15/2030	4,290,000	2.970%	2.970%	100,000
	11/15/2031	4,420,000	3.080%	3.080%	100.000
	11/15/2032	4,560,000	3.170%	3.170%	100,000 100,000
	11/15/2033	4,710,000	3.260%	3.260%	
	11/15/2034	4,870,000	3.330%	3.330%	100.000
	11/15/2035	5,035,000	3.390%	3,390%	100.000
	11/15/2036	5,210,000	3.440%	3.440%	100.000
	11/15/2037	5,395,000	3.490%	3.490%	100.000
	11/15/2038	5,585,000	3.530%	3.530%	100.000
	11/15/2039	5,785,000	3.540%	3,540%	100.000
	11/15/2040	5,995,000	3.540%	3.540%	
	11/15/2041	6,210,000	3.540%	3,540%	100.000 100.000
	11/15/2042	6,435,000	3.550%	3,550%	
	11/15/2043	6,670,000	3.550%	3.550%	100.000
	11/15/2044	6,915,000	3.690%	3.690%	100.000 100.000
	11/15/2045	7,175,000	3.690%	3,690%	100.000
	11/15/2046	7,445,000	3,700%	3.700%	
	11/15/2047 11/15/2048	7,725,000 8,015,000	3.700% 3.700%	3.700% 3.700%	100.000 100.000
		153,155,000			
Dated	Date	1:	1/16/2018		
Deliver			1/16/2018		
First Co	•		5/15/2019		
Par Am		153,1	55,000.00		
Origina	l Issue Discount				
Produc		153,1	55,000.00	100.000000%	
Under	writer's Discount				
Purcha	se Price	153,1	55,000.00	100,000000%	
Accrue	d Interest				
	oceeds		55,000.00		



BOND SUMMARY STATISTICS

City of Houston, Texas (2018)

TWD8 Financings for NE Plant Expansion and Transmission Lines
*** DRAFT - FOR DISCUSSION PURPOSES ONLY ***

2018 (Nov.) Run - Based on May 4 2018 TWDB Estimated Rates plus 50 basis points Run Date/Time: April 2, 2018 11 a.m.

11/16/2018 11/16/2018 05/15/2019 11/15/2048 3.009519% 3.411795% 3.448438% 3.421331% 3.448438%
05/15/2019 11/15/2048 3.009519% 3.411795% 3.448438% 3.421331%
11/15/2048 3.009519% 3.411795% 3.448438% 3.421331%
3.009519% 3.411795% 3.448438% 3.421331%
3,411795% 3,448438% 3,421331%
3.448438% 3.421331%
3.421331%
3.448438%
17.837
17.477
153,155,000.00
153,155,000.00
94,205,968.47
94,205,968.47
247,360,968.47
8,167,473.00
8,246,129.15

Bond Component	Par Value	Price	Average Coupon	Average Life	Average Maturity Date	Duration	PV of 1 bp change
Serial Bond (2018)	153,155,000.00	100,000	3.448%	17.837	09/17/2036	12,922	190,002.55
	153,155,000.00			17.837			190,002.55
			TIC		All-In TIC	Arbitrage Yield	
	Par Value + Accrued Interest + Premium (Discount)	153,185,00	00.00	153,155,00	00.00	449,280,000.00	
	- Underwriter's Discount - Cost of Issuance Expense - Other Amounts			-185,40	00.00		
	Target Value		00.00	152,969,60	00,00	449,280,000.00	
	Target Date Yield	Mu 3.4117	ltiple 795%	Mu 3.421	ltiple 331%	Multiple 3.009519%	

Note: Expenses and rates are estimted for 2018 and later issues.

Bid Price

100.000000



BOND DEBT SERVICE

City of Houston, Texas (2018)

TWDB Financings for NE Plant Expansion and Transmission Lines

*** DRAFT - FOR DISCUSSION PURPOSES ONLY ***

Ov. \ Run - Rased on May 4 2018 TWDB Estimated Rates plus 50 basis

2018 (Nov.) Run - Based on May 4 2018 TWDB Estimated Rates plus 50 basis points Run Date/Time: April 2, 2018 11 a.m.

Dariad				Annual
Period Ending	Principal	Interest	Debt Service	Debt Service
	Timelpai		Bedrocking	
05/15/2019		2,421,249.97	2,421,249.97	2,421,249.97
11/15/2019	3,325,000	2,434,776.50	5,759,776.50	
05/15/2020		2,406,514.00	2,406,514.00	8,166,290.50
11/15/2020	3,385,000	2,406,514.00	5,791,514.00	, ,
05/15/2021	-,,	2,375,710.50	2,375,710.50	8,167,224.50
11/15/2021	3,445,000	2,375,710.50	5,820,710.50	-, ,
05/15/2022	3,443,000	2,342,294.00	2,342,294.00	8,163,004.50
11/15/2022	3,515,000	2,342,294.00	5,857,294.00	0,205,004.50
05/15/2023	3,313,000	2,306,441.00	2,306,441.00	8,163,735.00
	2 500 000	2,306,441.00	5,896,441.00	6,103,733.00
11/15/2023	3,590,000	• •	· ·	0.164.110.00
05/15/2024		2,267,669.00	2,267,669.00	8,164,110.00
11/15/2024	3,670,000	2,267,669.00	5,937,669.00	
05/15/2025		2,226,014.50	2,226,014.50	8,163,683.50
11/15/2025	3,760,000	2,226,014.50	5,986,014.50	
05/15/2026		2,181,458.50	2,181,458.50	8,167,473.00
11/15/2026	3,850,000	2, 181, 458.50	6,031,458.50	
05/15/2027		2,133,526.00	2,133,526.00	8,164,984.50
11/15/2027	3,950,000	2,133,526.00	6,083,526.00	
05/15/2028		2,082,571.00	2,082,571.00	8,166,097.00
11/15/2028	4,055,000	2,082,571.00	6,137,571.00	
05/15/2029		2,028,436.75	2,028,436.75	8,166,007.75
11/15/2029	4,165,000	2,028,436.75	6,193,436.75	
05/15/2030	. ,	1,969,502.00	1,969,502.00	8,162,938.75
11/15/2030	4,290,000	1,969,502.00	6,259,502.00	• •
05/15/2031	,,	1,905,795.50	1,905,795.50	8,165,297.50
11/15/2031	4,420,000	1,905,795.50	6,325,795.50	,
05/15/2032	1,120,000	1,837,727.50	1,837,727.50	8,163,523.00
11/15/2032	4,560,000	1,837,727.50	6,397,727.50	-,,
05/15/2033	1,500,000	1,765,451.50	1,765,451.50	8,163,179.00
11/15/2033	4,710,000	1,765,451.50	6,475,451.50	.,,
05/15/2034	7,710,000	1,688,678.50	1,688,678.50	8,164,130.00
11/15/2034	4,870,000	1,688,678.50	6,558,678.50	0,10 1,250.00
05/15/2035	7,670,000	1,607,593.00	1,607,593.00	8,166,271.50
	E 03E 000		6,642,593.00	0,100,271.50
11/15/2035	5,035,000	1,607,593.00	1,522,249.75	8,164,842.75
05/15/2036	5 240 000	1,522,249.75		0,104,042.73
11/15/2036	5,210,000	1,522,249.75	6,732,249.75	0 164 997 50
05/15/2037	5 005 000	1,432,637.75	1,432,637.75	8,164,887.50
11/15/2037	5,395,000	1,432,637.75	6,827,637.75	0.466.400.75
05/15/2038		1,338,495.00	1,338,495.00	8,166,132.75
11/15/2038	5,585,000	1,338,495.00	6,923,495.00	0.450.44.75
05/15/2039		1,239,919.75	1,239,919.75	8,163,414.75
11/15/2039	5,785,000	1,239,919.75	7,024,919.75	
05/15/2040		1,137,525.25	1, 1 37,525.25	8,162,445.00
11/15/2040	5,995,000	1,137,525.25	7,132,525.25	
05/15/2041		1,031,413.75	1,031,413.75	8,163,939.00
11/15/2041	6,210,000	1,031,413.75	7,241,413.75	
05/15/2042		921,496.75	921,496.75	8,162,910.50
11/15/2042	6,435,000	921,496.75	7,356,496.75	
05/15/2043		807,275.50	807,275.50	8,163,772.25
11/15/2043	6,670,000	807,275.50	7,477,275.50	•
05/15/2044		688,883.00	688,883.00	8,166,158.50
11/15/2044	6,915,000	688,883.00	7,603,883.00	
05/15/2045		561,301.25	561,301.25	8,165,184.25
11/15/2045	7,175,000	561,301.25	7,736,301.25	•
05/15/2046		428,922.50	428,922.50	8,165,223.75
11/15/2046	7,445,000	428,922.50	7,873,922.50	
		-	•	



BOND DEBT SERVICE

City of Houston, Texas (2018)

TWDB Financings for NE Plant Expansion and Transmission Lines

*** DRAFT - FOR DISCUSSION PURPOSES ONLY ***

2018 (Nov.) Run - Based on May 4 2018 TWDB Estimated Rates plus 50 basis points

Run Date/Time: April 2, 2018 11 a.m.

Period Ending	Principal	Interest	Debt Service	Annual Debt Service
05/15/2047		291,190.00	291,190.00	8,165,112.50
11/15/2047	7,725,000	291,190.00	8,016,190.00	
05/15/2048		148,277.50	148,277.50	8,164,467.50
11/15/2048	8,015,000	148,277.50	8,163,277.50	8,163,277.50
	153,155,000	94,205,968.47	247,360,968.47	247,360,968.47



BOND DEBT SERVICE

City of Houston, Texas (2018)

TWDB Financings for NE Plant Expansion and Transmission Lines

*** DRAFT - FOR DISCUSSION PURPOSES ONLY ***

2018 (Nov.) Run - Based on May 4 2018 TWDB Estimated Rates plus 50 basis points Run Date/Time: April 2, 2018 11 a.m.

Period			
Ending	Principal	Interest	Debt Service
06/30/2019		2,421,249.97	2,421,249.97
06/30/2020	3,325,000	4,841,290.50	8,166,290.50
06/30/2021	3,385,000	4,782,224.50	8,167,224.50
06/30/2022	3,445,000	4,718,004.50	8,163,004.50
06/30/2023	3,515,000	4,648,735.00	8,163,735.00
06/30/2024	3,590,000	4,574,110.00	8,164,110.00
06/30/2025	3,670,000	4,493,683.50	8,163,683.50
06/30/2026	3,760,000	4,407,473.00	8,167,473.00
06/30/2027	3,850,000	4,314,984.50	8,164,984.50
06/30/2028	3,950,000	4,216,097.00	8,166,097.00
06/30/2029	4,055,000	4,111,007.75	8,166,007.75
06/30/2030	4,165,000	3,997,938.75	8,162,938.75
06/30/2031	4,290,000	3,875,297.50	8,165,297.50
06/30/2032	4,420,000	3,743,523.00	8,163,523.00
06/30/2033	4,560,000	3,603 ,1 79.00	8,163,179.00
06/30/2034	4,710,000	3,454,130.00	8,164,130.00
06/30/2035	4,870,000	3,296,271.50	8,166,271.50
06/30/2036	5,035,000	3,129,842.75	8,164,842.75
06/30/2037	5,210,000	2,954,887.50	8,164,887.50
06/30/2038	5,395,000	2,771,132.75	8,166,132.75
06/30/2039	5,585,000	2,578,414.75	8,163,414.75
06/30/2040	5,785,000	2,377,445.00	8,162,445.00
06/30/2041	5,995,000	2,168,939.00	8,163,939.00
06/30/2042	6,210,000	1,952,910.50	8,162,910.50
06/30/2043	6,435,000	1,728,772.25	8,163,772.25
06/30/2044	6,670,000	1,496,158.50	8,166,158.50
06/30/2045	6,915,000	1,250,184.25	8,165,184.25
06/30/2046	7,175,000	990,223.75	8,165,223.75
06/30/2047	7,445,000	720,112.50	8,165,112.50
06/30/2048	7,725,000	439,467.50	8,164,467.50
06/30/2049	8,015,000	148,277.50	8,163,277.50
	153,155,000	94,205,968.47	247,360,968.47



SOURCES AND USES OF FUNDS

City of Houston, Texas (2018)

TWDB Financings for NE Plant Expansion and Transmission Lines

*** DRAFT - FOR DISCUSSION PURPOSES ONLY ***

2018 (Nov.) Run - Based on May 4 2018 TWDB Estimated Rates plus 50 basis points

Run Date/Time: April 2, 2018 11 a.m.

Dated Date Delivery Date 11/16/2018 11/16/2018

5ources:	Proposed 2018 TWDB - Distribution Lines	Proposed 2018 TWDB - Treatment Expansion	Total
Bond Proceeds: Par Amount	15,905,000.00	137,250,000.00	153,155,000.00
rai Amount	15,905,000.00	137,250,000.00	153,155,000.00
Uses:	Proposed 201B TWDB - Distribution Lines	Proposed 2018 TWDB - Treatment Expansion	Total
Project Fund Deposits: Project Fund - Distribution Expansion Project Fund - Treatment Expansion	15,461,654.27	133,424,209.23 133,424,209.23	15,461,654.27 133,424,209.23 148,885,863.50
Other Fund Deposits: Debt Service Reserve Fund	424,092.12	3,659,644.38	4,083,736.50
Delivery Date Expenses: Cost of Issuance	19,253.61	166,146.39	185,400.00
	15,905,000.00	137,250,000.00	153,155,000.00



BOND DEBT SERVICE BREAKDOWN

City of Houston, Texas (2018)

TWDB Financings for NE Plant Expansion and Transmission Lines

*** DRAFT - FOR DISCUSSION PURPOSES ONLY ***

2018 (Nov.) Run - Based on May 4 2018 TWDB Estimated Rates plus 50 basis points

Run Date/Time: April 2, 2018 11 a.m.

Proposed 2018 TWDB -Proposed 2018 Distribution Period TWDB - Treatment Total **Ending** Expansion Lines 06/30/2019 251,533.04 2,169,716.93 2,421,249.97 06/30/2020 847,944.00 7,318,346.50 8,166,290.50 06/30/2021 846,826.50 7,320,398.00 8,167,224.50 06/30/2022 845,198.00 7,317,806.50 8,163,004.50 06/30/2023 848,031.50 7,315,703.50 8,163,735.00 845,312.50 7,318,797.50 8,164,110.00 06/30/2024 8,163,683.50 06/30/2025 847,003.50 7,316,680.00 06/30/2026 848,069.00 7,319,404.00 8,167,473.00 06/30/2027 843,529.75 7,321,454.75 8,164,984.50 06/30/2028 848,323.00 7,317,774.00 8,166,097.00 06/30/2029 847,427.00 7,318,580.75 8,166,007.75 06/30/2030 7,317,203.25 8,162,938.75 845,735.50 06/30/2031 852,968.50 7,312,329.00 8,165,297.50 06/30/2032 849,202.00 7,314,321.00 8,163,523.00 06/30/2033 849,589.25 7,313,589.75 8,163,179.00 06/30/2034 849,073.50 7,315,056.50 8,164,130.00 7,318,593.25 8,166,271.50 06/30/2035 847,678.25 8,164,842.75 06/30/2036 850,371.25 7,314,471.50 852,098.50 7,312,789.00 8,164,887,50 06/30/2037 8,166,132.75 847,952.50 7,318,180.25 06/30/2038 7,315,471.25 8,163,414.75 06/30/2039 847,943.50 8,162,445.00 06/30/2040 847,086.50 7,315,358.50 06/30/2041 850,404.00 7,313,535.00 8,163,939.00 847,925.00 7,314,985.50 8,162,910.50 06/30/2042 06/30/2043 849.616.00 7,314,156.25 8,163,772.25 06/30/2044 845,476.00 7,320,682.50 8,166,158,50 7,315,239.75 8,165,184.25 06/30/2045 849,944.50 7,317,308.50 8,165,223.75 06/30/2046 847,915.25 8,165,112.50 06/30/2047 844,925.00 7,320,187.50 06/30/2048 850,787.50 7,313,680.00 8,164,467.50 06/30/2049 850,447.50 7,312,830.00 8,163,277.50 247,360,968.47 25,696,337.79 221,664,630.68

City of Houston (CUS) Draft - Baseline as of December 2017

Summary of Model Results

			Fisçal Year		Fiscal Year		Fiscal Year		Fiscal Year		Fiscal Year
			2018		2019		2020		2021		2022
Projected Revenues			(Projected)								
Total Projected Net Service Charge Revenues		S	1,072,875,280	\$	1,110,425,915	\$	1,188,933,027	\$	1,230,545,683	S	1,273,614,782
Other Revenues			44,404,616		44,404,616		44,404,616		44,404,616		44,404,616
Transter from General Purpose Fund			15,000,000		44,000,000		44,000,000		44,000,000		44,000,000
Deferred Revenues		_					54,200,000	_		_	-
Total Projected Revenues			1,132,279,896		1,198,830,531		1,331,537,643		1,318,950,299		1,362,019,398
Total Service Revenue Increase			3.40%		3.50%		7.07%		3.50%		3_50%
Estimated Operating Expenditures			469,094,629		507,249,578		517,177,584		528,754,397		539,058,647
Net Revenue Available for Debt Service			663,185_268		691,580,953		814,360,059		790,195,903		822,960,751
Debt Service Requirements (Including Fees)			467,977,063		492,186,085		508,804,680		528,641,827		545,591,059
Other Non-Operating Expenditures		_	57,762,768	_	54,135,964	_	54,775,466	_	55,427,929		56,478,058
TOTAL Non Operating Expenditures			525,739,831		546,322,048		563,580,145		584,069,756		602,069,117
Revenues Less Expenditures			137,445,437		145,258,905		250,779,914		206,126,147		220,891,634
Annual Debt Service Coverage (Cashflow)			1.41 x		1.40 x		1.60 x		1.49 x		1.50 x
Additional Bonds Test											
(1) Additional Bonds Test 1 (Prior Year Net Revs at least =	Max Annual										
Prior FY Revenue / Max Annual at Fixed Rate	5.50%		1.30 x		1.30 x		1,31 x		1.49 x		1,40 x
Prior FY Revenue / Max Annual at Fixed Rate	6.00%		1.30 x		1.30 x		1,31 x		1,49 x		1,40 x
Prior FY Revenue / Max Annual at Fixed Rate	6.50%		1.30 x		1.30 x		1.31 x		1.49 x		1.40 x
(2) Additional Bonds Test 2 (Prior Year Net Revs Plus GP F	und at least =	:									
Total FY Revenue / Max Annual at Fixed Rate	5,50%		2.49 x		2.43 x		2.30 x		2,50 x		2,28 x
Total FY Revenue / Max Annual at Fixed Rate	6.00%		2.49 x		2.43 x		2.30 x		2.50 x		2.28 x
Total FY Revenue / Max Annual at Fixed Rate	6,50%		2.49 x		2.43 x		2.30 x		2,50 x		2.28 x
Projected Total W&S CIP Appropriations Contributed Capital from Others		\$	370,000,000	\$	370,000,000	\$	370,000,000	\$	410,000,000	\$	410,000,000
Projected W&S CIP - CUS Funding Only		S	370,000,000	5	370,000,000	s	370,000,000	5	410,000,000	\$	410,000,000
Projected Water and Sewer Spending		s	360,000,000	\$	360,000,000	s	370,000,000	s	370,000,000	\$	410,000,000
Funding Sources											
TWDB Available Proceeds		\$	60,000,000	\$	40,000,000	s	40,000,000	s	40,000,000	\$	40,000,000
General Purpose Fund (Pay as You go)			70,000,000		75,000,000		100,000,000		130,000,000		130,000,000
Construction Funds on Hand (Bond Proceeds)											
Projected Funding from Commercial Paper			230,000,000		245,000,000		230,000,000		200,000,000		240,000,000
Total Fund Available	•	\$	360,000,000	S	360,000,000	\$	370,000,000	\$	370,000,000	\$	410,000,000
Projected Market Bond Issues			270,715,000		257,940,000		244,705,000		214_285,000		250,440,000
Projected TWDB Bond Issues			64,680,000		40,000,000		40,000,000		40,000,000		40,000,000
-											

Note: All Additional Bonds Test calculations include "Other Revenues" (ie: new water contracts, water authority/capital contributions).

Excluding these revenues in the calculation of Net Revenue Available for Debt Service produces significantly different results.

⁽¹⁾ Additional Bonds Test requires the prior fiscal year's net revenue be at least equal to 1.00x projected maximum annual debt service (excludes general purpose fund balance).

⁽²⁾ Additional bonds test requirement that prior fiscal year's net revenue and general purpose fund balance be equal to at least 1.20 times maximum annual debt service.

City of Houston (CUS) Draft - Baseline

as of December 2017

Projected Cash Flow

		Fiscal Year 2018 (Projected)		Fiscal Year 2019 (Projected)		Fiscal Year 2020 (Projected)		Fiscal Year 2021 (Projected)		Fiscal Year 2022 (Projected)
Projected Revenues					_	()	_	()	_	(414)
(1) Service Charge Revenues (2) Deferred Revenues	\$	1,072,875,280	\$	1,110,425,915	\$	1,188,933,027 54,200,000	5	1,230,545,683	s	1,273,614,782
(3) Transfer From General Purpose Fund		15,000,000		44,000,000		44,000,000		44,000,000		44,000,000
(4) Other Revenues		16,901,616		16,901,616		16,901,616		16,901,616		16,901,616
(5) Interest Income Earned		7,503,000		7,503,000		7,503,000		7,503,000		7,503,000
(6) Impact Fees		20,000,000		20,000,000		20,000,000		20,000,000		20,000,000
TOTAL Projected Revenues		1,132,279,896		1,198,830,531	_	1,331,537,643		1,318,950,299	_	1,362,019,398
Estimated Operating Expenditures										
(7) O&M Expenditures ***	\$	457,946,260	5	496,105,185	\$	506,027,289	5	516,147,835	\$	526,470,791
(8) Bonds payable from gross revenues		6,398,831		6,384,706		6,380,806		6,397,931		6,376,006
(9) Pension Bond Debt Service	_	4,749,538	_	4,759,687	_	4,769,489		6,208,631		6,211,850
TOTAL Estimated Operating Expenditures		469,094,629		507,249,578		517,177,584		528,754,397		539,058,647
NET REVENUES Available for Debt Service .	5	663,185,268	\$	691,580,953	\$	814_360,059	5	790,195,903	<u>s</u>	822,960,751
Non Operating Expenditures										
(10) Capital Transfer (Equipment Acquisition)	\$	42,575,820	\$	43,427,336	s	44,295,883	s	45,181,801	5	46,085,437
Existing & Projected Bonds Debt Service		459,559,118		463,083,572		160,369,673		462,014,208		461,986,115
Future Bond Debt Service		5,205,506		25,890,075		45,222,569		63,415,181		80,392,506
(11) Bond Debt Service Requirements		464,764,625		488,973,647		505,592,242		525,429,389		542,378,621
Variable Rate Bond Fees		3,212,438		3,212,438		3,212,438		3,212,438		3,212,438
(12) Commercial Paper Debt Service		1,613,769		1,389,415		1,332,123		1,174,571		1,336,924
Commercial Paper Fees		5_250,000		5_250,000		5,250,000		5,250,000		5,250,000
Discretionary Debt Service	_	8,323,179	_	4,069_213		3,897,460		3,821,557	_	3,805,697
TOTAL Non Operating Expenditures	\$	525,739,831	\$	546,322,048	\$	563,580,145	\$	584,069,756	5	602,069,117
Revenues Less Expenditures	\$	137,445,437	\$	145,258,905	\$	250,779,914	\$	206,126,147	5	220,891,634
Beginning Operating Reserve Balance	\$	76,018,613	\$	78,182,438	\$	84,541,596	\$	86,196,264	s	88,125,733
Operating Reserve Requirement (2 Months O&M)		78,182,438	-	84.541.596	-	86,196,264	-	88,125,733	•	89,843,108
Operating Reserve Funding Requirement		2.163,825		6,359,158		1,654,668		1,929,469		1,717,375
Ending Balance	••••	78,182,438		84,541,596		86,196,264		88,125,733		89,843,108
Transfers to General Purpose Fund		\$135,281,612		\$138,899,747		\$249,125,246		\$204,196,678		\$219,174,259
Transfers net of GP Transfer to Revenue		120,281,612		94,899,747		205,125,246		160,196,678		175,174.259
CWA - Luce Bayou (General Purpose Outflow net of Wir Auth pmis)		566,107		1,461,003		3,641,906		4,182,890		4,785,987
TWDB Loans - 2015		1,274,443		1,275,842		1,275,886		1,274,652		1,277,157
TWDB Loans - 2016		3,018,152		3,012,480		3,010,668		3,007,186		3,007,330
TWDB Loans - 2017 and forward		-		2,352,020		6,796,850		7,443,240		7,448,200
Transfers net of GP Outflows for Luce/NE Plant/Dist. Lines		115,422,910		86,798,402		190,399,936		144,288,710		158,655,585
Total Service Revenue Increase		3.40%		3.50%		7.07%		3.50%		3.50%
** O & M Increase Factor		2,00%		2.00%		2.00%		2.00%		2.00%

⁽¹⁾ Base Revenue Projectious (prior to increases in rate) provided by the Public Works & Engineering Department of the City of Houston. Includes estimated revenue from water sales to WHCRWA. CHCRWA. NEBWA. and NHCRWA contracts to provide water.

2) Estimated payments from WHCRWA. CHCRWA. NFBWA and NHCRWA. Exposed to be large lamp sum capital contributions for capital expenditures the System has or will fund.

3) Transfers made from the General Purpose Fund to the Revenue Fund* of the System. These transfers flow to "Net Revenues Available for Debt Service" and the debt coverage ratios.

4) Includes other operating revenue and sale of property.

5) Estimates provided by the Public Works & Engineering Department of the City of Houston.

6) Fors received by the system from new development. Projections provided by Public Works.

7) O & Minerased by a factor consistent with the rate study projections.

8) Bonds payable from Gross System revenues, include CWA debt service.

City of Houston (CUS) Draft - Baseline as of December 2017

Bond Issue Schedule

	Fiscal Year 2018 (Projected)	Fiscal Year 2019 (Projected)	Fiscal Year 2020 (Projected)	Fiscal Year 2021 (Projected)	Fiscal Year 2022 (Projected)
Sources of Funds TWDB Bonds CUS Lien Bonds (Open Market) TOTAL Sources of Funds	64,680,00 270,715,00 \$ 335,395,00	257,940,000	244,705,000	40,000,000 214,285,000 \$ 254,285,000	40,000,000 250,440,000 \$ 290,440,000
Uses of Funds Commercial Paper Redemption Deposit to Construction Fund (TWDB) Deposit to Construction Fund (Open Market) Reserve Fund Deposits or Surety Policy Issuance Expenses TOTAL Uses of Funds	255,830,0 61,635,0 - 14,050,0 3,880,0 \$ 335,395,0	38,120,000 38,120,000 12,765,000 3,305,000	38,120,000 12,165,000 3,170,000	202,500,000 38,120,000 - 10,795,000 2,870,000 \$ 254,285,000	236,665,000 38,120,000 - 12,425,000 3,230,000 \$ 290,440,000
TWDB Funds Carryover Balance New Funds Total Spending - Carryover Balance Spending - Current Yr Funds Spending Remaining Balance (Carryover to next FY)	105,543,5 61,635,0 167,178,5 60,000,0 60,000,0	38,120,000 75 145,298,575 00 40,000,000 00 40,000,000	38,120,000 143,418,575 40,000,000 - 40,000,000	103,418,575 38,120,000 141,538,575 40,000,000 40,000,000 101,538,575	101,538,575 38,120,000 139,658,575 40,000,000 - 40,000,000 99,658,575

City of Houston, Combined Utility System Projected Coverage of Debt (including TWD8 Loans) June 17, 2016

All amounts are projected and estimated; actual results can and will vary.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	{12}	(13)	(14)	(15)
			=(1}-(2)				=(3}-(4)-(5)-(6)		L		To Be Issued		=(9)+(10)+(11)+(12)	=(4)+(6)+(8)+(13)	=(3)/(14)
						N									
				Existing and	Operating	Net Contract Pmts to Coastal								All Projected Debt	All Debt
		Operating	Net Revenue Less	Projected Debt	Reserve	Wtr Auth (Luce	Net Remaining	Wallisville and	SWIRFT (through					(including fees and	Projected
	Projected Revenue	Expenses	Oper. Expenses	Service and Fees	Funding	Bayou)	Available	Allens Creek	2017)	2018 (May)	2018 (Nov.)	2019	Total SWIRFT Loans	SWIFT loans)	Coverage
6/30/2018	1,132,279,896	469,094,629	663,185,268	483,164,011	2,163,825	565,107	177,291,324	1,233,880	5,248,183	2020 (1415)	2020 (1101.)	4023	5,248,183	490,212,181	1.35
6/30/2019	1,198,830,531	507,249,578	591,580,953	502,894,712	6,359,158	1,461,003	180,866,080	1,233,880	8,327,845	2,691,599	2,421,250		13,440,694	519,030,289	1.33
5/30/2020	1,331,537,643	517,177,584	814,360,059	519,284,262	1,654,668	3,641,906	289,779,223	1,233,880	8,320,634	5,442,725	8,166,291	376,420	22,306,069	546,466,117	1.49
6/30/2021	1,318,950,299	528,754,397	790,195,903	538,887,955	1,929,469	4,182,890	245,195,589	1,233,880	8,318,862	5,444,104	8,167,225	1,026,680	22,956,870	567,261,595	1.39
5/30/2022	1,362,019,398	539,058,647	822,960,751	555,983,680	1,717,375	4,785,987	260,473,709	1,233,880	8,317,477	5,446,763	8,163,005	1,029,030	22,956,274	584,959,821	1.41
6/30/2023	1,362,595,916	549,569,221	813,026,695	575,701,419	1,751,762	5,553,718	230,019,795	1,843,880	8,315,541	5,445,853	8,163,735	1,025,830	22,950,958	606,049,976	1.34
6/30/2024	1,408,732,611	560,308,167	848,424,444	593,640,500	1,789,824	6,390,183	246,603,938	1,843,645	8,312,387	5,446,239	8,164,110	1,027,080	22,949,816	624,824,144	1.36
6/30/2025	1,456,484,091	571,257,829	885,226,262	612,181,811	1,824,944	7,549,766	263,669,741	1,841,391	8,313,182	5,442,649	8,163,684	1,027,670	22,947,184	544,520,153	1.37
6/30/2026	1,505,906,873	586,876,935	919,029,938	628,065,390	2,603,184	9,973,141	278,388,223	1,846,774	8,313,015	5,445,174	8,157,473	1,027,600	22,953,262	662,838,567	1.39
6/30/2027	1,557,059,452	590,877,362	966,182,090	646,205,721	666,738	10,542,305	308,767,326	1,839,536	8,311,695	5,443,464	8,164,985	1,026,870	22,947,014	681,534,575	1,42
6/30/2028	1,610,002,371	602,504,197	1,007,498,173	665,493,070	1,937,806	10,765,907	329,301,390	1,845,258	8,307,828	5,442,502	8,166,097	1,025,480	22,941,907	701,046,142	1.44
6/30/2029	1,664,798,292	514,885,818	1,049,912,474	686,469,529	2,063,603	12,328,548	349,050,794	1,843,068	8,309,997	5,442,516	8,166,008	1,028,320	22,946,840	723,587,984	1.45
6/30/2030	1,721,512,071	626,983,699	1,094,528,372	715,045,062	2,016,314	13,034,706	364,432,290	1,843,255	8,305,563	5,442,175	8,162,939	1,025,390	22,936,067	752,859,091	1.45
6/30/2031	1,780,210,832	639,323,651	1,140,887,180	726,844,197	2,056,659	14,312,890	397,673,434	1,845,530	8,303,633	5,445,347	8,165,298	1,026,690	22,940,968	765,943,585	1.49
6/30/2032	1,840,964,049	651,903,909	1,189,060,141	749,293,901	2,096,710	14,094,901	423,574,630	1,844,600	8,306,043	5,442,505	8,163,523	1,027,110	22,939,181	788,172,583	1.51
6/30/2033	1,903,843,630	658,654,190	1,245,189,440	771,157,941	1,125,047	14,715,268	458,191,184	1,839,959	8,299,843	5,444,154	8,163,179	1,026,650	22,933,825	810,646,992	1,54
6/30/2034	1,968,923,995	671,102,394	1,297,821,601	793,690,388	2,074,701	14,826,610	487,229,902	1,847,086	8,301,547	5,445,261	8,164,130	1,025,310	22,936,248	833,300,332	1_56
6/30/2035	2,036,282,173	685,100,367	1,351,181,806	639,930,974	2,332,996	14,939,594	693,978,243	1,840,099	8,300,449	5,445,881	8,166,272	1,027,980	22,940,582	679,651,249	1.99
5/30/2036	2,105,997,888	694,667,029	1,411,330,859	660,587,869	1,594,444	15,581,455	733,567,092	1,844,587	8,302,564	5,446,261	8,164,843	1,029,550	22,943,218	700,957,129	2.01
6/30/2037	2,178,153,652	708,560,369	1,469,593,283	655,323,489	2,315,557	17,514,506	784,439,731	1,844,668	8,297,847	5,446,498	8,164,888	1,030,020	22,939,252	707,621,916	2.08
6/30/2038	2,252,834,869	722,731,577	1,530,103,292	613,435,216	2,361,868	18,439,924	895,866,284	415,342	8,294,347	5,446,515	8,166,133	1,02 9 ,390	22,936,385	655,226,868	2_34
6/30/2039	2,330,129,928	737,186,208	1,592,943,719	632,731,076	2,409,105	18,584,903	939,218,636	415,342	8,293,028	5,446,254	8,163,415	1,027,660	22,930,356	674,661,677	2,36
6/30/2040	2,410,130,313	751,929,932	1,658,200,381	595,878,206	2,457,287	18,722,937	1,041,141,951	415,342	8,293,815	5,446,285	8,162,445	1,029,720	22,932,265	637,948,749	2.60
6/30/2041	2,492,930,713	756,968,531	1,725,962,182	619,417,148	2,506,433	18,853,686	1,085,174,915	415,342	8,292,020	5,442,313	8,163,939	1,025,570	22,923,842	661,620,018	2.61
6/30/2042	2,578,629,126	782,307,902	1,796,321,225	607,387,072	2,556,562	18,997,607	1,167,379,984	415,342	8,289,075	5,444,389	8,162,911	1,025,210	22,921,584	649,721,605	2.76
6/30/2043	2,667,326,984	797,954,060	1,869,372,925	614,467,233	2,607,693	19,123,270	1,233,174,728	415,342	8,285,419	5,447,056	8,163,772	1,028,420	22,924,666	656,930,512	2.85
6/30/2044	2,759,129,267	813,913,141	1,945,216,126	601,697,506	2,659,847	19,241,447	1,321,617,326	415,342	8,279,602	5,445,231	8,166,159	1,025,200	22,916,191	644,270,485	3.02
6/30/2045	2,854,144,630	830,191,404	2,023,953,226	588,508,324	2,713,044	19,358,262	1,413,373,596	415,342	8,265,790	5,445,574	8,165,184	1,025,550	22,902,099	531,184,027	3.21
5/30/2046	2,952,485,530	846,795,232	2,105,690,299	571,690,806	2,767,305	19,479,656	1,511,752,532	415,342	8,255,432	5,442,749	8,165,224	1,029,250	22,892,655	614,478,459	3.43
6/30/2047	3,054,268,362	863,731,136	2,190,537,226	554,646,549	2,822,651	19,591,159	1,613,476,858	415,342	6,964,362	5,444,560	8,165,113	1,026,300	21,600,335	596,253,384	3.67
6/30/2048	3,159,613,593	881,005,759	2,278,607,834	552,243,113	2,879,104	17,044,381	1,706,441,237	415,342	3,978,800	5,445,760	8,164,468	1,026,700	18,615,728	588,318,564	3.87
6/30/2049	3,268,645,908	898,625,874	2,370,020,033	515,257,713	2,936,686	17,058,076	1,834,767,559	415,342	-	-	8,163,278	1,025,340	9,188,618	541,919,748	4.37
6/30/2050	3,381,494,353	916,598,392	2,454,895,961	495,792,138	2,995,420	17,069,906	1,949,038,498	415,342	-	-	-	1,027,110	1,027,110	514,304,495	4.79
6/30/2051	3,498,292,494	934,930,359	2,563,362,134	477,203,775	3,055,328	12,823,640	2,070,279,391	415,342	•	•	•	-	-	490,442,758	5.23
6/30/2052_	3,619,178,569	953,628,967	2,665,549,603	460,694,575	3,116,435	4,550,197	2,197,188,396	415,342	-	-			-	465,660,114	5.72
	75,724,320,303	24,472,408,444	51,251,911,860	21,230,896,328	82,919,548	455,710,442	29,482,385,542	40,052,871	248,625,823	160,588,351	247,360,968	31,191,100	687,766,242	22,414,425,884	

8ase Revenue Projections provided by the Public Works & Engineering Department of the City of Houston, growing at 3.4% in FY18, 3.50% in FY19, 7.07% in FY20 and 3.5% thereafter.

Base Revenue Projections for FY17-FY22 include amounts pulled from the General Purpose Fund to cover increased operational expenses (\$15MM in FY15-16, and \$42MM in FY18-20).

O&M estimated by Public Works, increased annually by a factor consistent with the rate study projections (2%).

O&M includes debt service payable from gross revenues and pension bond debt service.

Existing and Projected Debt Service includes additional bond financig related to expected ongoing capital construction and capital maintenance.

Existing and Projected Debt Service includes discretionary debt service paid from the General Purpose Fund; that discretionary debt service is expected to continue until FY 2025.

Operating Reserve Funding is based on maintaining a 2-month reserve, as provided in existing bond indentures.

Net Contract Payments to Coastal Water Authority (Luce Bayou) includes offset for payments to be received from regional water authorities. Includes CWA's applied for SWIFT loans.



P.O. Box 13231, 1700 N. Congress Ave. Austin, TX 78711-3231, www.twdb.texas.gov Phone (512) 463-7847, Fax (512) 475-2053

April 5, 2018

Mr. Samir Solanki Acting Deputy Director City of Houston 611 Walker, 24th Floor Houston, TX 77002

Re: City of Houston

SWIFT PIF #12574 - Houston - SS Phase I, #12573 - Houston - NEWPP Expansion State Water Implementation Fund for Texas - Invitation to Apply

Dear Mr. Solanki:

Thank you for submitting an abridged application for financial assistance through the State Water Implementation Fund for Texas (SWIFT) program on behalf of the City of Houston. The abridged applications received for the current funding cycle have been prioritized according to the criteria outlined in 31 TAC § 363.1304, and the Texas Water Development Board (Board) approved the prioritization on April 5, 2018.

We are pleased to extend the City of Houston an invitation to submit a complete application for financial assistance through the SWIFT program. All applicants have 30 days to submit their applications. The deadline for receipt of the complete application is 5:00pm, Central Standard Time, on Friday, May 4, 2018. The invited amount and type of SWIFT funding eligible to be included in the application is summarized below. This prioritization approval does not constitute a funding commitment, but indicates that the SWIFT program is estimated to have sufficient capacity for the project, contingent on the financial and technical review of the complete application.

Amount and Type of Funding Approved:

- Houston SS Phase I
 - o 2018: \$15,910,000 Low-Interest Loan
- Houston NEWPP Expansion
 - o 2018: \$137,255,000 Low-Interest Loan

Applications may be submitted through our online loan application system or as traditional hard copies. To download application documents or access the online system, please visit our <u>Financial Assistance Application web page</u>.

Our Mission

Board Members

To provide leadership, information, education, and support for planning, financial assistance, and outreach for the conservation and responsible development of water for Texas

Peter Lake, Chairman | Kathleen Jackson, Board Member | Brooke T. Paup, Board Member

Jeff Walker, Executive Administrator

SWIFT Application Invitation Letter April 5, 2018 Page 2

In accordance with Texas Water Code § 16.0121, water systems are required to provide regular water loss audits to the TWDB, which are used to calculate a Water Loss Threshold for each system. Then next annual water loss audits are due to the TWDB on May 1, 2018, and these will be used as part of the SWIFT application evaluation. Please visit our <u>Water Loss Audit Resources</u> web page for more information.

Current records indicate that Houston's water loss exceeds its threshold. Please include in your application, information regarding measures that Houston is already or will be taking to mitigate the water loss issues. When applying for TWDB financial assistance, systems whose loss exceeds their threshold must apply for funds to address the water loss issue in addition to their proposed project or request a waiver.

Please direct any questions or concerns regarding the application, commitment process, and closing processes to Nancy Richards, Manager, Regional Project Implementation Team 4. Please contact Nancy to discuss your project in greater detail and to schedule a preapplication meeting if you have not already done so. Nancy's team will work with you throughout the life of your project and may be reached at Nancy.Richards@twdb.texas.gov or (512) 463-0250.

We look forward to working with the City of Houston on the next steps toward implementing this important project. Thank you again for your interest in the SWIFT program.

Jessica Xuba

Sincerely

Deputy Executive Administrator Texas Water Development Board

Cc: Nancy Richards, Manager, Regional Project Implementation Team 4

CITY OF HOUSTON, TEXAS COMBINED UTILITY SYSTEM FUND REVENUES AND EXPENSES Last Ten Fiscal Years

(amounts expressed in thousands) (unaudited)

Total Annual Revenues Last Ten Fiscal Years	 2008	2009	2010		2011			2012
Operating Revenues								
Water sales	\$ 328,435	\$ 351,608	\$	356,046	\$	455,333	\$	480,676
Waste water system user charges	305,748	323,301		320,722		410,941		421,370
Penalties and Other services and charges	 14,084	 12,329		14,370		12,901		15,192
Total Operating Revenues	648,267	 687,238		691,138		879,175		917,238
Nonoperating Revenues								
Interest	35,436	33,436		15,160		10,090		5,696
Other income	 84,228	 51,262		65,077		20,453		45,448
Total Nonoperating Revenues	 119,664	 84,698		80,237		30,543		51,144
Total Revenues	\$ 767,931	\$ 771,936	\$	771,375	\$	909,718	\$	968,382
Total Annual Expenses Last Ten Fiscal Years	 2008	 2009		2010		2011	B	2012
Operating Expenses								
Maintenance and operating	\$ 346,652	\$ 371,770	\$	372,365	\$	363,260	\$	410,781
Depreciation and Amortization	 220,202	 204,919		203,695		214,956		211,170
Total Operating Expenses	 566,854	 576,689		576,060		578,216		621,951
Nonoperating Expenses								
Interest on long-term debt	267,505	260,396		273,609		-		290,882
Other expenses	 19,515	 5,432		-		12,273		670
Total Nonoperating Expenses	 287,020	 265,828		273,609	•	12,273		291,552
	\$ 853,874	\$ 842,517	\$	849,669	\$	590,489	\$	913,503

	2013		2014	2015	 2016		2017
C	Corrected		Restated				
\$	485,485 426,888	\$	499,912 441,300	\$ 486,517 434,305	\$ 529,879 5 462,786	\$	547,054 475,392
	17,455	***************************************	12,195	6,602	 9,917		3,349
	929,828		953,407	 927,424	 1,002,582	1	1,025,795
	(507) 41,521		10,688 69,370	7,685 37,910	 12,652 55,306		3,954 58,414
	41,014		80,058	 45,595	 67,958		62,368
\$	970,842	\$	1,033,465	\$ 973,019	 1,070,540	\$	1,088,163
	2013		2014	2015	2016	:	2017
\$	395,439 217,622	\$	635,081 223,381	\$ 426,855 231,048	\$ 451,342 S 236,841	\$	354,396 246,218
	613,061		858,462	 657,903	 688,183		600,614
	285,378 286		291,122 5,397	 265,013 (954)	 252,116 1,877		248,920
	285,664		296,519	 264,059	 253,993		248,920
\$	898,725	\$	1,154,981	\$ 921,962	\$ 942,176	\$	849,534

Combined Utility System Fund For the period ended December 31, 2017 (amounts expressed in thousands)

				FY2018		
	FY2017	Adopted	Current		Controller's	Finance
	Actual	Budget	Budget	YTD	Projection	Projection
Operating Revenues						
Water Sales	\$ 547,054 \$	572,233 \$	572,233 \$	287,052 \$	572,233 \$	572,233
Sewer Sales	475,392	489,489	489,489	245,768	489,489	489,489
Penalties	12,458	13,200	13,200	5,044	13,200	13,200
Other	9,578	9,948	9,948	5,328	9,948	9,948
Total Operating Revenues	1,044,482	1,084,870	1,084,870	543,192	1,084,870	1,084,870
Operating Expenses						
Personnel	101,680	190,961	190,961	91,887	185,498	185,498
Supplies	40,105	45,295	45,795	19,448	45,295	45,295
Electricity and Gas	41,361	47,694	47,694	18,782	47,694	47,694
Contracts & Other Payments	154,953	180,215	180,835	61,698	177,915	177,915
Non-Capital Equipment	1,460	2,702	2,816	519	2,702	2,702
Total Operating Expenses	339,559	466,867	468,101	192,534	459,104	459,104
Operating Income (Loss)	704,923	618,003	616,769	350,658	625,766	625,766
Non-Operating Revenues (Expenses)						
Interest income	8,657	7,748	7,748	5,475	7,748	7,748
Sale of Property, Mains and Scrap	4,835	710	710	14,503	710	710
Other	23,355	10,685	10,685	6,138	15,574	15,574
Impact Fees	19,566	20,000	20,000	8,663	20,000	20,000
CWA & TRA Contracts (P & I)	(7,204)	(6,399)	(6,399)	(4,961)	(6,399)	(6,399)
Total Non-Operating Rev (Exp)	49,209	32,744	32,744	30,018	37,633	37,633
Income (Loss) Before Operating Transfers	754,132	650,747_	649,513	380,676	663,399	663,399
Operating Transfers						
Debt Service Transfer	452,300	504,646	504,646	319,176	502,646	502,646
CWA & TRA Contracts (P & I) Luce Bayou	12,749	690	690	185	690	690
Transfer to PIB - Water & Sewer	9,149	11,862	11,862	908	11,862	11,862
Transfer to Capital Project Fund	70,000	70,000	70,000	70,000	70,000	70,000
Pension Liability Interest	4,722	4,750	4,750	593	4,750	4,750
Equipment Acquisition	9,505	47,736	48,502	3,940	47,736	47,736
Transfer to Stormwater	52,246	55,784	55,784	21,394	55,784	55,784
Total Operating Transfers	610,671	695,468	694,234	416,196	693,468	693,468
Net Current Activity			// TO	(05 500) 2	(00.000\ #	(30,069)
Operating Fund Only	\$ <u>143,461</u> \$	(44,721) \$	<u>(44,721)</u> \$	(35,520) \$	(30,069) \$	(30,069)

About the Fund:

The Combined Utility System Fund, which includes Fund 8300, Fund 8301, and Fund 8305, is an enterprise fund which accounts for operation of the City's water and wastewater facilities. The fund provides for the operation of the City's treated and untreated water, as well as, receives and process wastewater generated in a service area that includes the City, certain municipalities and unincorporated communities in the Houston metropolitan area. Some of the City's largest customers are other cities and water authorities which supply water to their own customers.

CITY OF HOUSTON, TEXAS COMBINED UTILITY SYSTEM STATISTICS

Debt Service Schedule (unaudited)

The following schedule sets forth the principal and interest requirements on all outstanding bonds payable from revenues of the System for each of the City's fiscal years ending June 30 as shown below, based on footnoted assumptions. The following schedule also does not include Discretionary Debt Service Payments or interest on Commercial Paper notes issued as Third Lien Obligations under the Master Ordinance.

Payable From System Net Revenues Total Payable Total Payable Fiscal Year **Previous** From From Ordinance First System Net **Total Debt** Ending System Gross Service (1) (2) June 30 **Bonds** Lien Bonds(2) Revenues Revenues(1) \$ \$ 470,042,619 \$ 470,042,619 \$ 476,441,450 2018 6,398,831 \$ 471,492,782 471,492,782 477,877,488 2019 6,384,706 477,274,582 2020 6,380,806 23,520,000 447,373,775 470,893,775 479,976,350 6,397,931 451,173,419 473,578,419 2021 22,405,000 479,926,332 6,376,006 15,480,000 458,070,326 473,550,326 2022 456,819,932 480,520,513 2023 6,355,581 17,345,000 474,164,932 6,350,206 19,005,000 455,111,736 474,116,736 480,466,942 2024 479,815,541 455,486,585 473,476,585 2025 6,338,956 17,990,000 472,867,727 483,649,934 18,155,000 454,712,727 10,782,206 2026 30,815,000 2027 3,378,081 441,312,270 472,127,270 475,505,351 30,810,000 439,740,621 470,550,621 473,929,077 2028 3,378,456 473,892,071 2029 3,404,306 44,095,000 426,392,765 470,487,765 480,055,395 3,400,828 476,654,566 476,654,566 2030 466,581,553 469,977,866 3,396,313 466,581,553 2031 464,738,042 468,124,142 2032 3,386,100 464,738,042 2033 3,381,000 462,264,207 462,264,207 465,645,207 481,894,641 478,518,441 478,518,441 2034 3,376,200 286,126,849 282,745,549 282,745,549 3,381,300 2035 280,084,771 2036 280,084,771 280,084,771 239,313,607 239,313,607 239,313,607 2037 2038 182,085,422 182,085,422 182,085,422 2039 176,372,794 176,372,794 176,372,794 114,467,650 114,467,650 114,467,650 2040 113,747,717 113,747,717 113,747,717 2041 2042 78,945,679 78,945,679 78,945,679 78,944,296 78,944,296 78,944,296 2043 65,895,668 65,895,668 65,895,668 2044 52,407,049 52,407,049 52,407,049 2045 35,306,544 35,306,544 35,306,544 2046 2047 17,952,674 17,952,674 17,952,674 17,973,800 2048 17,973,800 17,996,774 9,512,729,586 \$ 9,752,372,560 \$ 9,844,597,402 92,247,816 \$ 239,620,000 \$ Total

¹⁾ Includes CWA Bonds.

^{(2) \$249,075,000} of the Series 2012C variable rate bond debt service is calculated at the rate of 5.061% through March 2013 and thereafter at the fixed rate payor swap rate of 3.761%. This was refunded and replaced with Series 2016C in August 2016. Series 2004B debt service is adjusted to take into account expected payments under the Series 2004B Qualified Hedge Agreements.

D. Schedule for Debt Service Requirements to Maturity:

The following debt service schedules have been adjusted to include refundings that occurred subsequent to June 30, 2017.

1. General Long-Term Tax Obligation Debt (adjusted for Capital Appreciation and Deferred Interest Bonds reclassification of principal & interest) (in thousands):

	Public Imp Bor		Pension C Bo	Obligation nds
Year Ending June 30	Principal	Interest	Principal	Interest
2018	\$206,480	\$105,143	\$7,050	\$30,633
2019	212,510	95,742	7,540	30,190
2020	218,265	86,187	8,065	29,716
2021	185,890	75,641	17,070	29,208
2022	176,005	66,525	18,170	28,135
2023-2027	663,980	216,436	109,825	121,999
2028-2032	348,200	71,164	205,807	79,634
2033-2037	94,190	18,104	123,081	26,742
2038-2042	26,660	4,060	20,250	3,522
2043-2047	3,005	150	-	-
Total	\$ 2,135,185	\$ 739,152	\$ 516,858	\$ 379,779

	General C			Tax and Revenue Certificates of Obligation					
Year Ending June 30	 rincipal	Ir	ıterest	Pr	incipal	.In	terest		
2018	\$ 159,900	\$	1,702	\$	1,080	\$	730		
2019	70,000		481		1,135		675		
2020	10,000		112		1,195		619		
2021	-		_		1,255		559		
2022	-		-		1,315		496		
2023-2027	-		-		9,770		611		
2028-2032	-		-		_		-		
2033-2037	_		-		_		-		
2038-2042	_		-		-		-		
2043-2047	_		_		-		-		
Total	\$ 239,900	\$	2,295	\$	15,750	\$	3,690		

		Total	Futu	re Requiren	nents	
Year Ending					To	tal Future
June 30]	Principal		Interest	Reg	uirements
2018	\$	374,510	\$	138,208	-\$	512,718
2019		291,185		127,088		418,273
2020		237,525		116,634		354,159
2021		204,215		105,408		309,623
2022		195,490		95,156		290,646
2023-2027		783,575		339,046		1,122,621
2028-2032		554,007		150,798		704,805
2033-2037		217,271		44,846		262,117
2038-2042		46,910		7,582		54,492
2043-2047		3,005		150		3,155
Total	\$	2,907,693	\$	1,124,916	\$	4,032,609

2. HUD Section 108 Loans (in thousands):

		HUD Section 108 Loans (in thousands)								
Year Ending	Pr	incipal	Int	terest	Total Future					
2018	\$	672	\$	198	\$	870				
2019		672		160		832				
2020		672		121		793				
2021		480		89		569				
2022		480		62		542				
2023-2027		860		24		884				
2028-2032		-		-		_ ′				
Total	\$	3,836	\$	654	\$	4,490				

3. Enterprise Funds (adjusted for capital appreciation and deferred reclassification of principal and interest) (in thousands):

Year Ending	Airport System Senior Lien ding Revenue Bonds				Airport System Senior Lien Commercial Paper					Airport System Subordinate Lien Revenue Bonds			
June 30	Pr	incipal]	Interest	Pri	incipal	Ţn.	terest		Principal]	nterest	
2018	\$	10,225	\$	22,613	\$	-	\$	1,502	-\$	67,630.00	\$	68,271	
2019		10,735		22,089		-		1,502		67,785		65,133	
2020		11,275		21,538		-		1,504		77,050		61,870	
2021		11,835		20,961		-		1,502		69,350		58,396	
2022		12,430		20,354		87,000		850		88,575		54,818	
2023-2027		72,120		91,553		_		_		469,835		212,030	
2028-2032		92,385		70,628		-		-		603,380		98,864	
2033-2037		120,350		41,811		-		-		136,160		3,131	
2038-2042		89,290		7,541		-		-		-		-	
Total	\$	430,645	\$	319,088	\$	87,000	\$	6,860	\$	1,579,765	\$	622,513	

		tem Inferior ontract		Airport System Pension Obligations				Airport System Special Facility Bonds- Rental Car Facility				
June 30	Pri	incipal	Interest		Principal		Interest		Principal		Interest	
2018	\$	6,240	\$	171	\$	-	\$	107	\$	5,490		5,275
2019		-		-				106		5,715		5,170
2020		-		-		-		107		5,960		5,038
2021		_		-		-		107		6,240		4,878
2022		_		-		-		106		7,505		4,691
2023-2027		-		-		-		532		48,425		14,752
2028-2032		_		_		1,267		436		12,255		843
2033-2037		-		-		739		79		-		-
2038-2042		_		-		_		-		-		-
Total	\$	6,240	\$	171	\$	2,006	\$	1,580	\$	91,590	\$	40,647

Year Ending		ystem Note st Airlines	Year Ending		rport System To ture Requireme	
June 30	Principal	Interest	June 30	Principal	Interest	Total
2018	\$ 5,018	\$ 2,528.00	2018	\$ 94,603	\$ 100,467	\$ 195,070
2019	5,018	2,418	2019	89,253	96,418	185,671
2020	5,018	2,308	2020	99,303	92,365	191,668
2021	5,018	2,198	2021	92,443	88,042	180,485
2022	5,018	2,088	2022	200,528	82,907	283,435
2023-2027	25,092	8,792	2023-2027	615,472	327,659	943,131
2028-2032	25,092	6,045	2028-2032	734,379	176,816	911,195
2033-2037	25,092	3,297	2033-2037	282,341	48,318	330,659
2038-2042	15,055	659	2038-2042	104,345	8,200	112,545
Total	\$ 115,421	\$ 30,333	Total	\$ 2,312,667	\$ 1,021,192	\$ 3,333,859

Convention and Entertainment	Convention and Entertainment
Facilities Revenue Bonds	Pension Obligations

Year Ending June 30	P.	rincipal]	Interest	Pri	incipal	In	terest
2018	\$	21,815	\$	24,797	\$	75	\$	226
2019		22,384		24,292		80		221
2020		23,712		23,987		90		216
2021		24,083		23,331		185		211
2022		21,807		27,113		195		199
2023-2027		115,469		140,798		1,185		794
2028-2032		126,829		146,699		1,744		360
2033-2037		68,215		63,556		70		7
2038-2042		24,390		5,124		-		-
2043-2047		12,486		763		-		.
Total	\$	461,190	\$	480,460	\$	3,624	\$	2,234

Convention and Entertainment Total Future Requirements

Year Ending		***************************************					
June 30	Prir	reipal	Interest				
2018	\$	21,890	\$	24,032			
2019		22,464		23,598			
2020		23,802		24,203			
2021		24,268		23,542			
2022		22,002		27,312			
2023-2027		116,654		141,592			
2028-2032		128,573		147,059			
2033-2037		68,285		63,570			
2038-2042		24,390		5,124			
2043-2047		12,486		763			
Total	\$ 4	164,814	\$	480,795			

		tility System e Bonds	Combined Utility System Swap Agreement	Combined Utility System Commercial Paper				
Year Ending June 30 Principal		Interest	Net Swap Payment	Principal	Interest			
2018	\$ 200,505	\$ 237,179	\$ 32,359	\$ 20,000	\$ -			
2019	213,810	227,399	32,314	-	-			
2020	196,255	220,117	31,002	-	-			
2021	207,690	212,664	30,820	-	-			
2022	222,875	204,375	30,820	-	-			
2023-2027	1,237,970	871,423	154,090	-	-			
2028-2032	1,555,765	592,509	125,938	-	-			
2033-2037	1,417,800	308,550	16,731	-	-			
2038-2042	565,280	100,529	-		-			
2043-2047	230,695	20,026	<u>.</u>	-	-			
2048-2052	14,940	299	-	-				
Total	\$ 6,063,585	\$ 2,995,070	\$ 454,074	\$ 20,000	\$ -			

	W	ater and S/ Revenu		C		d Utility System on Obligations			
Year Ending June 30	Pı	incipal	Interest	Pr	incipal	L	ıterest		
2018	\$	**	\$ -	-\$	1,190	\$	3,559		
2019		~	-		1,275		3,485		
2020		7,390	16,130		1,365		3,404		
2021		6,656	15,749		2,890		3,319		
2022		4,347	11,133		3,075		3,137		
2023-2027		24,295	79,014		18,590		12,524		
2028-2032		14,651	60,255		27,486		5,717		
2033-2037		-	-		1,246		134		
Total	\$	57,339	\$ 182,281	\$	57,117	\$	35,279		

	Combined Utility System Total Future Requirements									
Year Ending			Net		Total Future					
June 30	I	Principal	ncipal Interest		Swa	Swap Payment		quirements		
2018	\$	221,695	\$	240,738	\$	32,359	\$	494,792		
2019		215,085		230,884		32,314		478,283		
2020		205,010		239,651		31,002		475,663		
2021		217,236		231,732		30,820		479,787		
2022		230,297		218,645		30,820		479,762		
2023-2027		1,280,855		962,961		154,090		2,397,906		
2028-2032		1,597,902		658,481		125,938		2,382,322		
2033-2037		1,419,046		308,684		16,731		1,744,462		
2038-2042		565,280		100,529		-		665,809		
2043-2047		230,695		20,026		-		250,721		
Total	\$	6,198,041	\$	3,212,630	\$	454,074	∙\$	9,864,746		

4. Long-Term Contracts-Water and Sewer System (in thousands):

	Mainter	ter Authority iance and ion Lien		Army Engineers	Texas Water Development Boar	d Swir	Sw ^a it Loan			
Year Ending June 30	Principal	Interest	Principal	Principal Interest Principal Interest 1		st Principal	Interest			
2018	\$ 3,455	\$ 2,944	\$ 133	\$ 283	\$ - \$ 1,49	7 \$ 2,305	\$ 1,988			
2019	3,590	2,795	137	278	1,49	7 2,315	1,973			
2020	3,755	2,626	141	274	- 1,49	7 2,330	1,957			
2021	3,960	2,438	146	. 269	- 1,49	7 2,345	1,937			
2022	4,125	2,251	151	265	- 1,49	7 2,370	1,914			
2023-2027	25,515	7,690	829	1,248	3,420 3,71	9 12,285	9,135			
2028-2032	13,800	3,166	971	1,106	4,545 2,59	9 13,360	8,049			
2033-2037	9,555	583	1,138	939	6,035 1,10	4 15,035	6,344			
2038-2042	-		1,334	743		17,260	4,137			
2043-2047	-	₩	1,563	514		18,690	1,394			
2048-2052	-	-	1,831	245		-	-			
2053-2057		-	402	. 13		**	• -			
Total	\$ 67,755	\$ 24,493	\$ 8,776	\$ 6,177	\$14,000 \$14,90	7 \$ 88,295	\$ 38,828			

CWA Lu			Bayou	you CWA Luce Bayou ROW			CWA Luce Bayou SWIRFT					Other Contracts Total Future Requirements			
Year Ending June 30	Principa	I	Interest	rest Principal		Interest		Principal		Interest		Principal		iterest	
2018	\$ -		467	\$ -		-	\$ -		-\$	-	\$	2,438	\$	4,235	
2019	-		857	266		436		-		1,149		2,718		6,190	
2020	-		1,663	552		852		-		1,763		3,023		8,006	
2021	2,91	5	1,805	580		825		-		2,338		5,986		8,671	
2022	2,97	5	1,935	608		796		-		3,220		6,104		9,627	
2023-2027	16,02	0	11,605	3,526		3,496		-		34,306		36,080		63,509	
2028-2032	11,20	5	11,735	4,494		2,527		-		69,040		34,575		95,056	
2033-2037	5,88	0	5,853	5,727		1,294		13,165		71,575		46,980		87,109	
2038-2042	8,99	0	3,913	2,008		99		56,600		36,609		86,192		45,501	
2043-2047	11,29	5	1,438			-		70,545		23,129		102,093		26,475	
2048-2052	2,58	9	´ <u>-</u>	-		-		62,715		6,634		67,135		6,879	
2053-2057	· -		-	-		-		_		-		402		13	
Total	\$ 61,86	9 \$	41,271	\$17,761	\$1	0,325	\$ 2	03,025	\$ 2	249,763	\$	393,726	\$	361,271	

E. Debt Issuances and Refundings

Combined Utility System Revenue and Refunding Bonds

On August 1, 2016, the City refunded \$249,000,000 of Combined Utility System First Lien Revenue Refunding Bonds, Series 2012C, with Combined Utility System First Lien Revenue Bonds Series 2016C, via Direct Purchase at 70% of 1-Month Libor plus 60 basis points through August 1, 2019.

On November 1, 2016, the City issued \$63,020,000 of Texas Water Development Board bonds, Series 2016D with coupons ranging from 0.63% - 3.04%. Proceeds will be used to pay for projects and cost of issuance.

On February 15, 2017, the City issued \$65,750,000 of Texas Water Development Board bonds, Series 2017A with coupons ranging from 0.12% - 1.68%. Proceeds will be used to pay for projects and cost of issuance.

On May 4, 2017, the City issued \$288,080,000 of Combined Utility System First Lien Revenue Refunding Bonds, Series 2017B with coupons ranging from 4.00% - 5.00%. The proceeds were placed in Escrow for the purpose of generating resources for future debt service payments of the refunded portion of the 2011D Bonds and to refund \$250,000,000 of Combined Utility System Commercial Paper Notes. The true interest cost of the 2017B Bonds was 3.423%. The bonds mature in varying amounts from 2017 to 2047. Net present savings related to the refunded bonds totaled \$5,928,871 or 8.40% of the refunded bonds and reduced debt service by \$7.178,027.

Prior Year Defeased Debt

In 2017 the City defeased \$70,570,000 of the 2011D Combined Utility System First Lien Revenue Refunding Bonds by placing new bond proceeds in an escrow to provide for future debt payments on the defeased bonds. Accordingly, the escrowed assets and the liability for the defeased bonds are not included in the government's financial statements. At June 30, 2017, \$70,750,000 of defeased bonds are still outstanding.

In 2015 the City defeased \$67,905,000 of the 2005, 2007A and 2007B Combined Utility System First Lien Revenue Refunding Bonds by placing new bond proceeds in an escrow to provide for future debt payments on the defeased bonds. Accordingly, the escrowed assets and the liability for the defeased bonds are not included in the government's financial statements. At June 30, 2017, \$52,905,000 of defeased bonds are still outstanding.

F. Bond Compliance Requirements

The revenue bond ordinances require that during the period in which the bonds are outstanding the City must create and maintain certain accounts or funds to receive the proceeds from the sale of the revenue bonds and to account for the revenues (as defined), which are pledged for payment of the bonds. The assets can be used only in accordance with the terms of the bond ordinance and for the specific purpose(s) designated therein.

The City is generally required to make a monthly transfer to debt service funds equal to one-sixth of the next interest payment and one-twelfth of the next principal payment. Certain bond ordinances have additional requirements for the establishment of rates and the accumulation of principal and interest repayment amounts from surplus operating funds. Generally, the bonds may be redeemed prior to their maturities in accordance with the bond ordinances and at various premiums equal to or less than 2%. During fiscal year 2017 the City has complied with the requirements of all revenue bond ordinances and related bond restrictions.

City of Houston, Texas Total Outstanding Debt Voter-Authorized Obligations (amounts expressed in thousands)

	December 31, 2017	December 31, 2016
Payable from Ad Valorem Taxes		
Public Improvement Bonds (a)	2,358,330	2,320,605
Commercial Paper Notes (b)	20,000	154,900
Pension Obligations	1,584,750	587,375
Certificates of Obligations	15,750	16,360
Subtotal	3,978,830	3,079,240
Payable from Sources Other Than Ad Valorem Taxes	***************************************	
Combined Utility System		
Combined Utility System Revenue Bonds	5,882,895	5,804,650
Combined Utility System Commercial Paper Notes (c)	70,000	120,000
Water and Sewer System Revenue Bonds (d)	165,427	156,703
Contract Revenue Obligations - CWA	64,300	67,755
Combined Utility System Subordinate Lien	169,160	88,295
Airport System		
Airport System Sr. Lien Bonds (e)	420,420	430,645
Airport System Subordinate Lien	1,524,335	1,590,590
Airport System Sr. Lien Commercial Paper Notes (0)	95,000	87,000
Airport System Inferior Lien Contracts (g)	0	6,240
Airport Special Facilities Revenue Bonds (h)	803,380	808,685
Hotel Occupancy Tax and Civic Parking		
Facilities Revenue Bonds (i)	592,035	609,538
Hotel Occupancy Tax And Parking Revenue Commercial Paper (j)	50,210	. 0
Subtotal	9,837,162	9,770,101
Total Debt Payable by the City	\$13,815,992	\$12,849,341

- (a) In Nov 2001 voters authorized \$776 million in tax bonds. In Nov 2006 voters authorized \$625 million in tax bonds. In Nov 2012 voters authorized 1 \$410 million in tax bonds and Nov 2017 an additional \$495 million.
- (b) The City has authorized maximum issuance of General Obligation Commercial Paper Programs Series E-1; \$100 million, E-2; \$100 million, G-1; \$75 million, G-2; \$125 million, H-2; \$100 million, J: \$125 million, K1; \$200 million and K2; \$100 million.
- (c) The City has authorized \$700 million in Combined Utility System Commercial Paper Notes.
- (d) Includes \$108.1 million accreted value of capital appreciation bonds at this date and \$99.4 million last year.
- (e) The Houston Airport System issued Senior Lien Revenue bonds on August 20, 2009.
- (f) City Council has authorized Airport Senior Lien Commercial Paper Notes Series A and B with \$150 million of appropriation capacity. In May 2016 the Airport Inferior Lien appropriation facilities was also increased from \$225 million to \$450 million.
- (g) Under a sublease agreement, the Houston Airport System has agreed to make sublease payments that include the debt service payments on the Series 1997A Special Facilities Bonds that financed the Automated People Mover ("APM") at George Bush Airport. These sublease payments constitute Inferior Lien Obligations under the Airport bond ordinances.
- (h) All Special Facility Revenue Bonds are secured solely from Special Facility Lease Revenues. Does not include Series 1997A Special Facilities.

 Bonds which was paid off on July 5,2017. It shows a balance of \$6.2 million outstanding for month ending September 2016 See footnote (g).
- (i) Includes \$152,3 million accreted value of capital appreciation bonds at this date and \$148,3 million last year.
- (j) The City authorized \$75 million of Subordinate Lien Hotel Occupancy Tax and Parking Revenue Commercial Paper in Oct 2013.

CITY OF HOUSTON, TEXAS PRINCIPAL AND INTEREST PAYABLE FROM AD VALOREM TAXES (EXCLUDING COMMERCIAL PAPER NOTES) (unaudited)

The following schedule presents the City's debt service requirements for Fiscal Years 2018 through 2043 for the outstanding Tax Bonds, Pension Obligations, and Tax Certificates. Debt service on commercial paper notes is not reflected in the schedule below.

2019 308,252,055 37,729,883 2,514,837 348,496,776 2020 304,451,858 37,780,617 2,518,087 344,750,563 2021 261,531,368 46,278,329 2,518,337 310,328,034 2022 242,530,240 46,304,626 2,515,587 291,350,452 2023 239,590,657 46,316,733 2,514,837 288,422,227 2024 176,763,742 46,341,190 885,033 223,989,965 2025 167,493,385 46,362,652 213,856,034 2026 146,013,098 46,391,400 192,404,499 2027 150,554,975 46,411,773 196,966,748 2028 143,887,338 46,438,740 190,326,078 2029 110,721,834 53,987,364 164,709,199 2030 72,636,246 54,026,387 126,662,632 2031 50,565,355 65,477,864 116,043,219 2032 41,553,293 65,510,991 107,064,283 2033 32,872,834 29,605,810 62,478,644	Fiscal Year		Pension	Tax	Total Debt
2018 311,623,165 37,683,328 2,513,837 351,820,331 2019 308,252,055 37,729,883 2,514,837 348,496,776 2020 304,451,858 37,780,617 2,518,087 344,750,565 2021 261,531,368 46,278,329 2,518,337 310,328,034 2022 242,530,240 46,304,626 2,515,587 291,350,454 2023 239,590,657 46,316,733 2,514,837 288,422,227 2024 176,763,742 46,341,190 885,033 223,989,965 2025 167,493,385 46,362,652 213,856,034 2026 146,013,098 46,391,400 192,404,497 2027 150,554,975 46,411,773 196,966,744 2028 143,887,338 46,438,740 190,326,074 2029 110,721,834 53,987,364 164,709,199 2030 72,636,246 54,026,387 126,662,632 2031 50,565,355 65,477,864 116,043,215 2032 41,553,293 65,510,991	Ended June 30	Tax Bonds ^{(a)(d)}	Obligations ^(b)	Certificates(c)	Service ^(e)
2020 304,451,858 37,780,617 2,518,087 344,750,562 2021 261,531,368 46,278,329 2,518,337 310,328,034 2022 242,530,240 46,304,626 2,515,587 291,350,454 2023 239,590,657 46,316,733 2,514,837 288,422,227 2024 176,763,742 46,341,190 885,033 223,989,965 2025 167,493,385 46,362,652 213,856,03 2026 146,013,098 46,391,400 192,404,497 2027 150,554,975 46,411,773 196,966,748 2028 143,887,338 46,438,740 190,326,078 2029 110,721,834 53,987,364 164,709,195 2030 72,636,246 54,926,387 126,622,632 2031 50,565,355 65,477,864 116,043,219 2032 41,553,293 65,510,991 107,064,283 2033 32,872,834 29,605,810 62,478,644 2034 30,146,280 6,49,801 36,596,081	2018			2,513,837	351,820,331
2021 261,531,368 46,278,329 2,518,337 310,328,034 2022 242,530,240 46,304,626 2,515,587 291,350,454 2023 239,590,657 46,316,733 2,514,837 288,422,227 2024 176,763,742 46,341,190 885,033 223,989,965 2025 167,493,385 46,362,652 213,856,034 2026 146,013,098 46,391,400 192,404,497 2027 150,554,975 46,411,773 196,966,748 2028 143,887,338 46,438,740 190,326,078 2029 110,721,834 53,987,364 164,709,195 2030 72,636,246 54,026,387 126,662,632 2031 50,565,355 65,477,864 116,043,219 2032 41,553,293 65,510,991 107,064,283 2033 32,872,834 29,605,810 62,478,644 2034 30,146,280 6,49,801 36,596,081 2035 18,487,930 49,741,158 68,229,081 2036 17,108,032 39,478,572 56,586,604 2038 10,078	2019	308,252,055	37,729,883	2,514,837	348,496,776
2022 242,530,240 46,304,626 2,515,587 291,350,452 2023 239,590,657 46,316,733 2,514,837 288,422,227 2024 176,763,742 46,341,190 885,033 223,989,963 2025 167,493,385 46,362,652 213,856,036 2026 146,013,098 46,391,400 192,404,497 2027 150,554,975 46,411,773 196,966,748 2028 143,887,338 46,438,740 190,326,078 2029 110,721,834 53,987,364 164,709,199 2030 72,636,246 54,026,387 126,662,633 2031 50,565,355 65,477,864 116,043,219 2032 41,553,293 65,510,991 107,064,283 2033 32,872,834 29,605,810 62,478,644 2034 30,146,280 6,449,801 36,596,081 2035 18,487,930 49,741,158 68,229,086 2036 17,108,032 39,478,572 56,586,604 2038 10,078,147 880,470 10,958,617 2039 7,076,574 880,470 <td>2020</td> <td>304,451,858</td> <td>37,780,617</td> <td>2,518,087</td> <td>344,750,563</td>	2020	304,451,858	37,780,617	2,518,087	344,750,563
2023 239,590,657 46,316,733 2,514,837 288,422,227 2024 176,763,742 46,341,190 885,033 223,989,965 2025 167,493,385 46,362,652 213,856,036 2026 146,013,098 46,391,400 192,404,497 2027 150,554,975 46,411,773 196,966,748 2028 143,887,338 46,438,740 190,326,078 2029 110,721,834 53,987,364 164,709,199 2030 72,636,246 54,026,387 126,662,632 2031 50,565,355 65,477,864 116,043,219 2032 41,553,293 65,510,991 107,064,283 2033 32,872,834 29,605,810 62,478,644 2034 30,146,280 6,449,801 36,596,644 2035 18,487,930 49,741,158 68,229,08 2036 17,108,032 39,478,572 56,586,604 2037 13,678,543 24,547,367 38,225,916 2038 10,078,147 880,470 7,957,044 2040 4,521,200 880,470 7,957,044	2021	261,531,368	46,278,329	2,518,337	310,328,034
2024 176,763,742 46,341,190 885,033 223,989,965 2025 167,493,385 46,362,652 213,856,036 2026 146,013,098 46,391,400 192,404,497 2027 150,554,975 46,411,773 196,966,748 2028 143,887,338 46,438,740 190,326,078 2029 110,721,834 53,987,364 164,709,199 2030 72,636,246 54,026,387 126,662,632 2031 50,565,355 65,477,864 116,043,219 2032 41,553,293 65,510,991 107,064,282 2033 32,872,834 29,605,810 62,478,644 2034 30,146,280 6,449,801 36,596,081 2035 18,487,930 49,741,158 68,229,088 2036 17,108,032 39,478,572 56,586,604 2037 13,678,543 24,547,367 38,225,916 2038 10,078,147 880,470 10,958,617 2039 7,076,574 880,470 7,957,044 2040 4,521,200 880,470 5,401,676 20	2022	242,530,240	46,304,626	2,515,587	291,350,454
2025 167,493,385 46,362,652 213,856,036 2026 146,013,098 46,391,400 192,404,497 2027 150,554,975 46,411,773 196,966,748 2028 143,887,338 46,438,740 190,326,078 2029 110,721,834 53,987,364 164,709,199 2030 72,636,246 54,026,387 126,662,633 2031 50,565,355 65,477,864 116,043,219 2032 41,553,293 65,510,991 107,064,283 2033 32,872,834 29,605,810 62,478,644 2034 30,146,280 6,449,801 36,596,081 2035 18,487,930 49,741,158 68,229,088 2036 17,108,032 39,478,572 56,586,604 2037 13,678,543 24,547,367 38,225,916 2038 10,078,147 880,470 10,958,617 2039 7,076,574 880,470 7,957,044 2040 4,521,200 880,470 5,401,676 2041 4,522,800 21,130,470 25,653,276 2042 4,520,90	2023	239,590,657	46,316,733	2,514,837	288,422,227
2026 146,013,098 46,391,400 192,404,497 2027 150,554,975 46,411,773 196,966,748 2028 143,887,338 46,438,740 190,326,078 2029 110,721,834 53,987,364 164,709,199 2030 72,636,246 54,026,387 126,662,633 2031 50,565,355 65,477,864 116,043,219 2032 41,553,293 65,510,991 107,064,283 2033 32,872,834 29,605,810 62,478,644 2034 30,146,280 6,449,801 36,596,081 2035 18,487,930 49,741,158 68,229,086 2036 17,108,032 39,478,572 56,586,604 2037 13,678,543 24,547,367 38,225,916 2038 10,078,147 880,470 10,958,617 2039 7,076,574 880,470 7,957,044 2040 4,521,200 880,470 5,401,676 2041 4,522,800 21,130,470 25,653,276 2042 4,520,900 4,520,900 2043 3,155,250 3,155,250 <td>2024</td> <td>176,763,742</td> <td>46,341,190</td> <td>885,033</td> <td>223,989,965</td>	2024	176,763,742	46,341,190	885,033	223,989,965
2027 150,554,975 46,411,773 196,966,748 2028 143,887,338 46,438,740 190,326,078 2029 110,721,834 53,987,364 164,709,199 2030 72,636,246 54,026,387 126,662,633 2031 50,565,355 65,477,864 116,043,219 2032 41,553,293 65,510,991 107,064,283 2033 32,872,834 29,605,810 62,478,644 2034 30,146,280 6,449,801 36,596,081 2035 18,487,930 49,741,158 68,229,086 2036 17,108,032 39,478,572 56,586,604 2037 13,678,543 24,547,367 38,225,916 2038 10,078,147 880,470 10,958,617 2039 7,076,574 880,470 7,957,044 2040 4,521,200 880,470 5,401,676 2041 4,522,800 21,130,470 25,653,276 2042 4,520,900 4,520,900 2043 3,155,250 3,155,250	2025	167,493,385	46,362,652		213,856,036
2028 143,887,338 46,438,740 190,326,078 2029 110,721,834 53,987,364 164,709,199 2030 72,636,246 54,026,387 126,662,633 2031 50,565,355 65,477,864 116,043,219 2032 41,553,293 65,510,991 107,064,283 2033 32,872,834 29,605,810 62,478,644 2034 30,146,280 6,449,801 36,596,081 2035 18,487,930 49,741,158 68,229,086 2036 17,108,032 39,478,572 56,586,604 2037 13,678,543 24,547,367 38,225,910 2038 10,078,147 880,470 10,958,617 2039 7,076,574 880,470 7,957,044 2040 4,521,200 880,470 5,401,670 2041 4,522,800 21,130,470 25,653,270 2042 4,520,900 4,520,900 2043 3,155,250 3,155,250	2026	146,013,098	46,391,400		192,404,497
2029 110,721,834 53,987,364 164,709,199 2030 72,636,246 54,026,387 126,662,633 2031 50,565,355 65,477,864 116,043,219 2032 41,553,293 65,510,991 107,064,283 2033 32,872,834 29,605,810 62,478,644 2034 30,146,280 6,449,801 36,596,081 2035 18,487,930 49,741,158 68,229,086 2036 17,108,032 39,478,572 56,586,604 2037 13,678,543 24,547,367 38,225,916 2038 10,078,147 880,470 10,958,617 2039 7,076,574 880,470 5,401,676 2040 4,521,200 880,470 5,401,676 2041 4,522,800 21,130,470 25,653,276 2042 4,520,900 4,520,900 4,520,900 2043 3,155,250 3,155,250	2027	. 150,554,975	46,411,773		196,966,748
2030 72,636,246 54,026,387 126,662,633 2031 50,565,355 65,477,864 116,043,219 2032 41,553,293 65,510,991 107,064,283 2033 32,872,834 29,605,810 62,478,644 2034 30,146,280 6,449,801 36,596,081 2035 18,487,930 49,741,158 68,229,088 2036 17,108,032 39,478,572 56,586,604 2037 13,678,543 24,547,367 38,225,910 2038 10,078,147 880,470 10,958,617 2039 7,076,574 880,470 7,957,044 2040 4,521,200 880,470 5,401,670 2041 4,522,800 21,130,470 25,653,270 2042 4,520,900 4,520,900 2043 3,155,250 3,155,250	2028	143,887,338	46,438,740		190,326,078
2031 50,565,355 65,477,864 116,043,219 2032 41,553,293 65,510,991 107,064,283 2033 32,872,834 29,605,810 62,478,644 2034 30,146,280 6,449,801 36,596,083 2035 18,487,930 49,741,158 68,229,088 2036 17,108,032 39,478,572 56,586,604 2037 13,678,543 24,547,367 38,225,910 2038 10,078,147 880,470 10,958,617 2039 7,076,574 880,470 7,957,044 2040 4,521,200 880,470 5,401,670 2041 4,522,800 21,130,470 25,653,270 2042 4,520,900 4,520,900 3,155,250	2029	110,721,834	53,987,364		164,709,199
2032 41,553,293 65,510,991 107,064,282 2033 32,872,834 29,605,810 62,478,644 2034 30,146,280 6,449,801 36,596,081 2035 18,487,930 49,741,158 68,229,088 2036 17,108,032 39,478,572 56,586,604 2037 13,678,543 24,547,367 38,225,916 2038 10,078,147 880,470 10,958,617 2039 7,076,574 880,470 7,957,044 2040 4,521,200 880,470 5,401,670 2041 4,522,800 21,130,470 25,653,270 2042 4,520,900 4,520,900 2043 3,155,250 3,155,250	2030	72,636,246	54,026,387		126,662,633
2033 32,872,834 29,605,810 62,478,644 2034 30,146,280 6,449,801 36,596,081 2035 18,487,930 49,741,158 68,229,086 2036 17,108,032 39,478,572 56,586,604 2037 13,678,543 24,547,367 38,225,916 2038 10,078,147 880,470 10,958,617 2039 7,076,574 880,470 7,957,044 2040 4,521,200 880,470 5,401,670 2041 4,522,800 21,130,470 25,653,270 2042 4,520,900 4,520,900 2043 3,155,250 3,155,250	2031	50,565,355	65,477,864		116,043,219
2034 30,146,280 6,449,801 36,596,081 2035 18,487,930 49,741,158 68,229,086 2036 17,108,032 39,478,572 56,586,604 2037 13,678,543 24,547,367 38,225,910 2038 10,078,147 880,470 10,958,617 2039 7,076,574 880,470 7,957,044 2040 4,521,200 880,470 5,401,670 2041 4,522,800 21,130,470 25,653,270 2042 4,520,900 4,520,900 2043 3,155,250 3,155,250	2032	41,553,293	65,510,991		107,064,283
2035 18,487,930 49,741,158 68,229,088 2036 17,108,032 39,478,572 56,586,604 2037 13,678,543 24,547,367 38,225,916 2038 10,078,147 880,470 10,958,617 2039 7,076,574 880,470 7,957,044 2040 4,521,200 880,470 5,401,670 2041 4,522,800 21,130,470 25,653,270 2042 4,520,900 4,520,900 2043 3,155,250 3,155,250	2033	32,872,834	29,605,810		62,478,644
2036 17,108,032 39,478,572 56,586,604 2037 13,678,543 24,547,367 38,225,910 2038 10,078,147 880,470 10,958,617 2039 7,076,574 880,470 7,957,044 2040 4,521,200 880,470 5,401,670 2041 4,522,800 21,130,470 25,653,270 2042 4,520,900 4,520,900 2043 3,155,250 3,155,250	2034	30,146,280	6,449,801		36,596,081
2037 13,678,543 24,547,367 38,225,910 2038 10,078,147 880,470 10,958,617 2039 7,076,574 880,470 7,957,044 2040 4,521,200 880,470 5,401,670 2041 4,522,800 21,130,470 25,653,270 2042 4,520,900 4,520,900 2043 3,155,250 3,155,250	2035	18,487,930	49,741,158		68,229,088
2038 10,078,147 880,470 10,958,617 2039 7,076,574 880,470 7,957,04 2040 4,521,200 880,470 5,401,670 2041 4,522,800 21,130,470 25,653,270 2042 4,520,900 4,520,900 2043 3,155,250 3,155,250	2036	17,108,032	39,478,572		56,586,604
2039 7,076,574 880,470 7,957,044 2040 4,521,200 880,470 5,401,670 2041 4,522,800 21,130,470 25,653,270 2042 4,520,900 4,520,900 2043 3,155,250 3,155,250	2037	13,678,543	24,547,367		38,225,910
2040 4,521,200 880,470 5,401,670 2041 4,522,800 21,130,470 25,653,270 2042 4,520,900 4,520,900 2043 3,155,250 3,155,250	2038	10,078,147	880,470		10,958,617
2041 4,522,800 21,130,470 25,653,270 2042 4,520,900 4,520,900 2043 3,155,250 3,155,250	2039	7,076,574	880,470		7,95 7, 044
2042 4,520,900 4,520,900 2043 3,155,250 3,155,250	2040	4,521,200	880,470		5,401,670
2043 3,155,250 3,155,250	2041	4,522,800	21,130,470		25,653,270
	2042	4,520,900			4,520,900
Total \$ 2,874,337,099 \$ 896,636,467 \$ 15,980,557 \$ 3,786,954,123	2043				3,155,250
ΤΟΙΔΙ Ψ 2,07,1,557, Φ 0,0,050,101 Φ 15,500,551 Φ 5,100,551,12	Total	\$ 2,874,337,099	\$ 896,636,467	\$ 15,980,557	\$ 3,786,954,123

Each Fiscal Year the City budgets for Commercial Paper Notes debt service and related reserve funds based on a calculation that assumes a certain amount of Commercial Paper Notes is expected to be issued during that Fiscal Year at an assumed rate of interest.

- (a) Total debt service does not include payments related to various leases for office space and equipment, which are not considered debt under Texas law. The terms and conditions of such leases and agreements vary.
- (b) A portion of the debt service for the Pension Obligations is paid by the City's Combined Utility System and Airport System.
- (c) Adjusted to reflect the sinking fund payments for the Tax and Revenue Certificates of Obligation (QECB Direct Pay to Issuer), Series 2013Q (the "Series 2013Q Certificates"). Excludes the federal subsidy payment expected to be received by the City in connection with the Series 2013Q Certificates.
- (d) Excludes estimated federal Build America Bond subsidy payment of 35% of interest paid in connection with the City's Public Improvement Refunding Bonds, Taxable Series 2009B and 2010B (Direct Subsidy-Build America Bonds).
- (e) Totals may reflect a variance due to rounding.

City of Houston, Texas CUS - TWDB Loan 34 CWSRF (Feb 2018) *** PRELIMINARY - FOR DISCUSSION PURPOSES ONLY *** Interest Rate Estimated at 3.5%

Bond Value		n Lic i		1-4	C		
	Balance	Debt Service	Debt Service	Interest	Coupon	Principal	Ending
64,680,000	64,680,000						02/15/2018
64,680,000	64,680,000	565,950.00	565,950.00	S65,950.00			05/15/2018
63,440,000	63,440,000	555,555.55	2,371,900.00	1,131,900.00	3.500%	1,240,000	11/15/2018
63,440,000	63,440,000	3,482,100.00	1,110,200.00	1,110,200.00		- ,,	05/15/2019
62,155,000	62,155,000	o, .o.,	2,395,200.00	1,110,200.00	3.500%	1,285,000	11/15/2019
62,155,000	62,155,000	3,482,912.50	1,087,712.50	1,087,712.50	0.500.0	2,200,000	05/15/2020
60,825,000	60,825,000	0,102,0220	2,417,712.50	1,087,712.50	3.500%	1,330,000	11/15/2020
60,825,000	60,825,000	3,482,150.00	1,064,437.50	1,064,437.50	2134475	2,000,000	05/15/2021
59,445,000	59,445,000	5,102,200,00	2,444,437.50	1,064,437.50	3.500%	1,380,000	11/15/2021
59,445,000	59,445,000	3,484,725.00	1,040,287.50	1,040,287.50	0.200,5	_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	05/15/2022
58,020,000	58,020,000	5,101,720.00	2,465,287.50	1,040,287.50	3.500%	1,425,000	11/15/2022
58,020,000	58,020,000	3,480,637.50	1,015,350.00	1,015,350.00	0,000,0	_,,	05/15/2023
56,545,000	56,545,000	3,430,037.30	2,490,350.00	1,015,350.00	3.500%	1,475,000	11/15/2023
56,545,000	56,545,000	3,479,887.50	989,537.50	989,537.50	3,20070	2,.,2,000	05/15/2024
55,015,000	55,015,000	3,473,007.50	2,519,537.50	989,537.50	3.500%	1,530,000	11/15/2024
55,015,000	55,015,000	3,482,300.00	962,762.50	962,762.50	0,500,5	2,500,000	05/15/2025
53,430,000	53,430,000	5,102,000.00	2,547,762.50	962,762.50	3.500%	1,585,000	11/15/2025
53,430,000	53,430,000	3,482,787.50	935,025.00	935,025.00	3,30070	2/203/000	05/15/2026
51,790,000	51,790,000	5,402,707.50	2,575,025.00	935,025.00	3,500%	1,640,000	11/15/2026
51,790,000	51,790,000	3,481,350.00	906,325.00	906,325.00	5,560,6	2,040,000	05/15/2027
50,090,000	50,090,000	3,401,550.00	2,606,325.00	906,325.00	3.500%	1,700,000	11/15/2027
50,090,000	50,090,000	3,482,900.00	876,575.00	876,575.00	3.30070	2,700,000	05/15/2028
48,330,000	48,330,000	3,402,300.00	2,636,575.00	876,575.00	3.500%	1,760,000	11/15/2028
48,330,000	48,330,000	3,482,350.00	845,775.00	845,775.00	3.30070	1,700,000	05/15/2029
46,505,000	46,505,000	3,402,330.00	2,670,775.00	845,775.00	3.500%	1,825,000	11/15/2029
46,805,000	46,505,000	3,484,612.50	813,837.50	813,837.50	3.300,0	2,023,000	05/15/2030
44,615,000	44,615,000	3,404,012.30	2,703,837.50	813,837.50	3.500%	1,890,000	11/15/2030
44,615,000	44,615,000	3,484,600.00	780,762.50	780,762.50	3.20070	2,050,000	05/15/2031
42,660,000	42,660,000	3,464,600.00	2,735,762.50	780,762.50	3.500%	1,955,000	11/15/2031
42,660,000	42,660,000	3,482,312.50	746,550.00	746,550.00	3.30070	1,000,000	05/15/2032
40,635,000	40,635,000	3,402,312.30	2,771,550.00	746,550.00	3,500%	2,025,000	11/15/2032
40,635,000	40,635,000	3,482,662.50	711,112.50	711,112.50	3,30071	1,013,000	05/15/2033
38,540,000	38,540,000	3,402,002.30	2,806,112.50	711,112,50	3.500%	2,095,000	11/15/2033
38,540,000	38,540,000	. 3,480,562,50	674,450.00	674,450.00	3.30070	2,033,000	05/15/2034
36,370,000	36,370,000	. 3,400,302,30	2,844,450.00	674,450.00	3,500%	2,170,000	11/15/2034
36,370,000	36,370,000	3,480,925.00	636,475.00	636,475.00	3,30070	2,170,000	05/15/2035
34,120,000	34,120,000	3,480,323.00	2,886,475.00	636,475.00	3.500%	2,250,000	11/15/2035
34,120,000	34,120,000	3,483,575.00	597,100.00	597,100.00	3.30070	1,130,000	05/15/2036
31,790,000	31,790,000	3,403,373.00	2,927,100.00	597,100.00	3.500%	2,330,000	11/15/2036
31,790,000	31,790,000	3,483,425.00	556,325.00	556,325.00	3.500%	2,000,000	05/15/2037
29,380,000	29,380,000	3,403,423.00	2,966,325.00	556,325.00	3.500%	2,410,000	11/15/2037
29,380,000	29,380,000	3,480,475.00	514,150.00	514,150.00	3.30078	2,410,000	05/15/2038
26,885,000	26,885,000	3,400,473.00	3,009,150.00	514,150.00	3.500%	2,495,000	11/15/2038
26,885,000	26,885,000	3,479,637.50	470,487.50	470,487.50	3.30070	2,433,000	05/15/2039
24,300,000	24,300,000	3,475,037.30	3,055,487.50	470,487.50	3.500%	2,585,000	11/15/2039
24,300,000	24,300,000	3,480,737.50	425,250.00	425,250.00	3,30070	2,303,000	05/15/2040
21,620,000	21,620,000	3,400,737.30	3,105,250.00	425,250.00	3.500%	2,680,000	11/15/2040
21,620,000	21,620,000	3,483,600.00	378,350,00	378,350.00	3.300%	2,000,000	05/15/2041
18,845,000		3,463,000,000	3,153,350.00	378,350,00	3.500%	2,775,000	11/15/2041
18,845,000	18,845,000 18,845,000	3,483,137.50	329,787.50	329,787.50	5.50076	2,773,000	05/15/2042
	15,970,000	3,463,137.30	3,204,787.50	329,787.50	3,500%	2,875,000	11/15/2042
15,970,000 15,970,000	15,970,000	3,484,262.50	279,475.00	279,475.00	3,30070	2,073,000	05/15/2043
12,995,000	12,995,000	3,707,602.30	3,254,475.00	279,475.00	3.500%	2,975,000	11/15/2043
12,995,000	12,995,000	3,481,887.50	227,412.50	227,412.50	5.3000	2,515,000	05/15/2044
9,915,000	9,915,000	OC' 100'TOH'C	3,307,412.50	227,412.50	3,500%	3,080,000	11/15/2044
9,915,000	9,915,000	3,480,925.00	173,512.50	173,512.50	3,300,0	3,000,000	05/15/2045
6,725,000	6,725,000	3,400,323.00	3,363,512.50	173,512.50	3.500%	3,190,000	11/15/2045
	6,725,000	3,481,200.00	117,687.50	117,687.50	3,30070	3,130,000	05/15/2046
6,725,000	3,420,000	3,401,200,00	3,422,687.50	117,687.50	3.500%	3,305,000	11/15/2046
3,420,000 3,420,000	3,420,000	3,482,537.50	59,850.00	59,850.00	3,30070	بالالارد بالدرد	05/15/2047
3,420,000	3,420,000	3,482,557.50 3,479,850.00	3,479,850.00	59,850.00	3.500%	3,420,000	11/15/2047
 ,		105,030,975.00	105,030,975.00	40,350,975.00		64,680,000	

City of Houston, Texas Treatment Expansion *** PRELIMINARY - FOR DISCUSSION PURPOSES ONLY ***

Dated Date Delivery Date 11/15/2016 11/15/2016

Period Ending	Principal	Coupon	Interest	Debt Service	Annual Debt Service	Bond Balance	Total Bond Value
11/15/2016						17,195,000	17,195,000
05/15/2017			292,315.00	292,315.00	292,315.00	17,195,000	17,195,000
11/15/2017	335,000	3.400%	292,315.00	627,315.00	232,020,00	41,195,000	41,195,000
05/15/2018	,	31.5575	761,152.50	761,152,50	1,388,467.50	41,195,000	41,195,000
11/15/2018	780,000	** %	761,152.50	1,541,152.50	_,, , ,	182,520,000	182,520,000
05/15/2019	,		3,873,115.00	3,873,115.00	5,414,267.50	182,520,000	182,520,000
11/15/2019	3,145,000	** %	3,873,115.00	7,018,115.00	-,,	179,375,000	179,375,000
05/15/2020			3,806,862.50	3,806,862.50	10,824,977.50	179,375,000	179,375,000
11/15/2020	3,275,000	** %	3,806,862,50	7,081,862.50	, ,	176,100,000	176,100,000
05/15/2021			3,737,837.50	3,737,837.50	10,819,700.00	176,100,000	176,100,000
11/15/2021	3,420,000	** %	3,737,837.50	7,157,837.50		172,680,000	172,680,000
05/15/2022			3,665,747.50	3,665,747.50	10,823,585.00	172,680,000	172,680,000
11/15/2022	3,565,000	** %	3,665,747.50	7,230,747.50		169,115,000	169,115,000
05/15/2023			3,590,567.50	3,590,567.50	10,821,315.00	169,115,000	169,115,000
11/15/2023	3,720,000	** %	3,590,567.50	7,310,567.50		165,395,000	165,395,000
05/15/2024			3,512,102.50	3,512,102.50	10,822,670.00	165,395,000	165,395,000
11/15/2024	3,880,000	** %	3,512,102.50	7,392,102.50		161,515,000	161,515,000
05/15/2025			3,430,242.50	3,430,242.50	10,822,345.00	161,515,000	161,515,000
11/15/2025	4,045,000	** %	3,430,242.50	7,475,242.50		157,470,000	157,470,000
05/15/2026			3,344,877.50	3,344,877.50	10,820,120.00	157,470,000	157,470,000
11/15/2026	4,220,000	** %	3,344,877.50	7,564,877.50		153,250,000	153,250,000
05/15/2027			3,255,800.00	3,255,800.00	10,820,677.50	153,250,000	153,250,000
11/15/2027	4,405,000	** %	3,255,800.00	7,660,800.00		148,845,000	148,845,000
05/15/2028			3,162,790.00	3,162,790.00	10,823,590.00	148,845,000	148,845,000
11/15/2028	4,590,000	** %	3,162,790.00	7,752,790.00		144,255,000	144,255,000
05/15/2029			3,065,847.50	3,065,847.50	10,818,637.50	144,255,000	144,255,000
11/15/2029	4,790,000	** %	3,065,847,50	7,855,847.50		139,465,000	139,465,000
05/15/2030			2,964,667.50	2,964,667.50	10,820,515.00	139,465,000	139,465,000
11/15/2030	4,995,000	** %	2,964,667.50	7,959,667.50		134,470,000	134,470,000
05/15/2031		** **	2,859,115.00	2,859,115.00	10,818,782.50	134,470,000	134,470,000
11/15/2031	5,215,000	** %	2,859,115.00	8,074,115.00		129,255,000	129,255,000
05/15/2032			2,748,897.50	2,748,897.50	10,823,012.50	129,255,000	129,255,000
11/15/2032	5,440,000	** %	2,748,897.50	8,188,897,50	40.000 000 00	123,815,000	123,815,000
05/15/2033	F 67F 000	** %	2,633,892.50	2,633,892.50	10,822,790.00	123,815,000	123,815,000
11/15/2033	5,675,000	** %	2,633,892.50	8,308,892.50	40 022 205 00	118,140,000	118,140,000
05/15/2034 11/15/2034	5,920,000	** %	2,513,892.50	2,513,892.50	10,822,785.00	118,140,000	118,140,000
05/15/2035	3,520,000	70	2,513,892.50 2,388,677.50	8,433,892.50 2,388,677.50	10 912 570 00	112,220,000	112,220,000
11/15/2035	6,175,000	** %	2,388,577.50	8,563,677.50	10,822,570.00	112,220,000	112,220,000
05/15/2036	0,175,000	/8	2,258,040.00		10 031 717 50	106,045,000	106,045,000
11/15/2036	6,440,000	** %	2,258,040.00	2,258,040.00 8,698,040.00	10,821,717.50	106,045,000	106,045,000
05/15/2037	0,440,000	76	2,121,760.00	2,121,760.00	10,819,800.00	99,605,000 99,605,000	99,605,000 99,605,000
11/15/2037	6,720,000	** %	2,121,760.00	8,841,760.00	10,013,000.00	92,885,000	92,885,000
05/15/2038	0,720,000	75	1,979,507.50	1,979,507.50	10,821,267.50	92,885,000	92,885,000
11/15/2038	7,010,000	** %	1,979,507.50	8,989,507.50	10,021,207.30	85,875,000	85,875,000
05/15/2039	,,010,000	,,,	1,831,087.50	1,831,087.50	10,820,595.00	85,875,000	85,875,000
11/15/2039	7,315,000	** %	1,831,087.50	9,146,087.50	10,020,333.00	78,560,000	78,560,000
05/15/2040	,,0=0,000	,-	1,676,182.50	1,676,182,50	10,822,270.00	78,560,000	78,560,000
11/15/2040	7,630,000	** %	1,676,182.50	9,306,182.50	10,012,11,0.00	70,930,000	70,930,000
05/15/2041	,,,		1,514,560.00	1,514,560.00	10,820,742.50	70,930,000	70,930,000
11/15/2041	7,965,000	** %	1,514,560.00	9,479,560.00	20,020,7 12,00	62,965,000	62,965,000
05/15/2042	.,,	,-	1,345,805.00	1,345,805.00	10,825,365.00	62,965,000	62,965,000
11/15/2042	8,305,000	** %	1,345,805.00	9,650,805.00	,,_,	54,660,000	54,660,000
05/15/2043			1,169,795.00	1,169,795.00	10,820,600.00	54,660,000	54,660,000
11/15/2043	8,665,000	** %	1,169,795.00	9,834,795.00	, ,	45,995,000	45,995,000
05/15/2044	• •		986,102.50	986,102.50	10,820,897.50	45,995,000	45,995,000
11/15/2044	9,040,000	** %	986,102.50	10,026,102.50		36,955,000	36,958,000
05/15/2045			794,422.50	794,422.50	10,820,525.00	36,955,000	36,955,000
11/15/2045	9,435,000	** %	794,422.50	10,229,422.50	, ,	27,520,000	27,520,000
05/15/2046	•		594,327.50	594,327.50	10,823,750.00	27,520,000	27,520,000
11/15/2046	9,840,000	** %	594,327.50	10,434,327,50		17,680,000	17,680,000
			*				

City of Houston, Texas Treatment Expansion *** PRELIMINARY - FOR DISCUSSION PURPOSES ONLY ***

Period Ending	Principal	Coupon	Interest	Debt Service	Annual Debt Service	Bond Balance	Total Bond Value
05/15/2047			385,585.00	385,585.00	10,819,912.50	17,680,000	17,680,000
11/15/2047	9,335,000	** %	385,585.00	9,720,585.00		8,345,000	8,345,000
05/15/2048			183,590,00	183,590,00	9,904,175.00	8,345,000	8,345,000
11/15/2048	8,345,000	4.400%	183,590.00	8,528,590.00	8,528,590.00		
	183,635,000		144,898,330.00	328,533,330.00	328,533,330.00		

City of Houston, Texas Distribution Line Extension *** PRELIMINARY - FOR DISCUSSION PURPOSES ONLY ***

Dated Date Delivery Date 11/15/2015 11/15/2015

Te	Bond	Annual						Period
Bond Va	Balance	Debt 5ervice	Debt Service	Interest	oupon	cipal	Princip	Ending
25,915,0	25,915,000							11/15/2015
25,915,0	25,915,000	322,586.50	322,586.50	322,586.50				05/15/2016
39,480,0	39,480,000	022,000.00	962,586.50	322,586.50	240%	.000	640,00	11/15/2016
39,480,6	39,480,000	1,525,890.00	563,303.50	563,303.50	2 1075	,000	010,00	05/15/2017
59,460,6	59,460,000	2/020/030/00	1,478,303.50	563,303.50	** %	.ດດດ	915,00	11/15/2017
59,460,0	59,460,000	2,443,744.50	965,441.00	965,441.00	,,	,000	313,00	05/15/2018
77,200,0	77,200,000	2,443,744.50	2,270,441.00	965,441.00	** %	000	1,305,00	11/15/2018
77,200,0	77,200,000	3,640,811.75	1,370,370.75	1,370,370.75	70	,000	1,505,00	05/15/2019
90,875,0	90,875,000	3,040,011.73	3,015,370.75	1,370,370.75	** %	nnn	1,645,00	11/15/2019
90,875,0	90,875,000	4,700,221.50	1,684,850.75	1,684,850.75	70	,000	1,045,00	05/15/2020
106,045,0	106,045,000	7,700,221.50	3,624,850.75	1,684,850.75	** %	nnn	1,940,00	11/15/2020
105,045,0	106,045,000	5,656,491.75	2,031,641.00	2,031,641.00	,,,	,000	2,5 10,00	05/15/2021
103,755,0	103,755,000	3,030,431,73	4,321,641.00	2,031,641.00	** %	nnn	2,290,00	11/15/2021
103,755,0	103,755,000	6,315,593.50	1,993,952.50	1,993,952.50	70	,000	2,230,00	05/15/2022
101,390,0	101,390,000	0,010,000.00	4,358,952,50	1,993,952.50	** %	oon	2,365,00	11/15/2022
101,390,0	101,390,000	6,313,163.75	1,954,211.25	1,954,211.25	70	,000	2,505,00	05/15/2023
98,950,0	98,950,000	0,323,203.73	4,394,211.25	1,954,211.25	** %	OOO.	2,440,00	11/15/2023
98,950,0	98,950,000	6,306,587.75	1,912,376.50	1,912,376.50	70	,000	2,440,00	05/15/2024
96,415,0	96,415,000	0,300,367.73	4,447,376.50	1,912,376.50	** %	σοσ	2,535,00	11/15/2024
96,415,0	96,415,000	6,315,495.50	1,868,119.00	1,868,119.00	/0	,000	2,333,00	05/15/2025
93,790,0	93,790,000	OCICEPICIE	4,493,119.00	1,868,119.00	** %	000	2,625,00	11/15/2025
93,790,0	93,790,000	6 314 600 nn	1,821,570.00	1,821,570.00	· /a	,000	2,023,00	05/15/2026
91,075,0	91,075,000	6,314,689.00	4,536,570.00	1,821,570.00	** %	ODO.	2,715,00	11/15/2026
91,075,0	91,075,000	6 300 517 00		1,772,947.00	70	,000	2,713,00	05/15/2027
88,260,0	88,260,000	6,309,517.00	1,772,947.00 4,587,947.00	1,772,947.00	** %	000	2,815,00	1 1/ 15/2027
88,260,0	88,260,000	6 200 075 25	1,721,928.25	1,721,928.25	70	,000	2,615,00	05/15/2028
85,335,0	85,335,000	6,309,875.25	4,646,928.25	1,721,928.25	** %	000	2,925,00	11/15/2028
85,335,0	85,335,000	C 21E 224 7E	1,668,296.50	1,668,296.50	, ya	,000	2,925,00	05/15/2029
82,300,0	82,300,000	6,315,224.75	4,703,296.50	1,668,296.50	** %	ann.	3,035,00	11/15/2029
82,300,0	82,300,000	6,315,361.25	1,612,064.75	1,612,064.75	/0	,000	3,033,00	05/15/2030
79,155,0	79,155,000	0,513,301.23	4,757,064.75	1,612,064.75	** %	000	3,145,00	11/15/2030
79,155,0	79,155,000	6 210 477 75	1,553,407.50	1,553,407.50	76	,000	3,143,00	05/15/2031
75,885,0	75,885,000	6,310,472.25	4,823,407.50	1,553,407.50	k* %	000	3,270,00	11/15/2031
75,885,0	75,885,000	6,315,456.00	1,492,048,50	1,492,048.50	70	,000	3,270,00	05/15/2032
72,495,0	72,495,000	ODIDEPLETE	4,B82,048.50	1,492,048.50	** %	000	3,390,00	11/15/2032
72,495,0	72,495,000 72,495,000	6 310 144 FA	1,428,096.00	1,428,096.00	70	,000	3,390,00	05/15/2033
68,970,0	68,970,000	6,310,144.50	4,953,096.00	1,428,096.00	** %	nan	3,525,00	11/15/2033
68,970,0	68,970,000	6,314,367.00	1,361,271.00	1,361,271.00	70	,000	3,323,00	05/15/2034
65,310,0	65,310,000	00,100,100	5,021,271.00	1,361,271.00	** %	000	3,660,00	11/15/2034
65,310,0	65,310,000	6,312,907.00	1,291,636.00	1,291,636.00	70	,000	3,000,00	05/15/2035
61,510,0	61,510,000	0,312,507.00	5,091,636.00	1,291,636.00	** %	000	3,800,00	11/15/2035
61,510,0	61,510,000	6,310,730.50	1,219,094.50	1,219,094.50	70	,000	3,000,00	05/15/2036
57,555,0	57,555,000	0,310,730.30	5,174,094.50	1,219,094.50	** %	ann	3,955,00	11/15/2036
57,555,0	57,555,000	6,317,401.50	1,143,307.00	1,143,307.00	70	OUC	المردد درد	05/15/2037
53,450,0	53,450,000	0,317,401,30		1,143,307.00	** %	000	4,105,00	11/15/2037
		C 213 710 7E	5,248,307.00 1,064,431.75		. 70	,000	4,105,00	•
53,450,0	53,450,000	6,312,738.75		1,064,431.75	** %		4.365.00	05/15/2038 11/15/2038
49,185,0	49,185,000	C 314 COC FO	5,329,431.75	1,064,431.75	70	UUU	4,265,00	05/15/2039
49,185,0	49,185,000	6,311,696.50	982,264.75 5,422,264,75	982,264.75	* 0/	nnn	4.440.00	
44,745,0	44,745,000	C 110 272 00		982,264.75	** %	UUU	4,440,00	11/15/2039 05/15/2040
44,745,0	44,745,000	6,318,777.00	896,512.25	896,512.25	k# 0/	000	4 605 00	
40,140,0	40,140,000	C 200 00F F0	5,501,512.25	896,512,25	* %	000	4,605,00	11/15/2040
40,140,0	40,140,000	6,308,905.50	807,393.25	807,393.25	* %	000	4 705 00	05/15/2041
35,355,0	35,355,000	c 207 000 2F	5,592,393.25	807,393.25	. 70	000	4,785,00	11/15/2041
35,355,0	35,355,000	6,307,009.25	714,616.00	714,616.00	* %	000	4 000 00	05/15/2042
30,375,0	30,375,000	C 212 FF4 F0	5,694,616.00	714,616.00	. 70	000	4,980,00	11/15/2042
30,375,0	30,375,000	6,312,554.50	617,938.50	617,938.50	* 0/	nnn	E 100.00	15/15/2043
25,195,0	25,195,000	C 24E 170 F0	5,797,938,50	617,938.50	* %	UUU	5,180,00	11/15/2043
25,195,0	25,195,000	6,315,179.50	517,241.00	517,241.00	* 01	000	r 200 00	05/15/2044
19,815,0 19,815,0	19,815,000	E 200 767 06	5,897,241.00	517,241.00	* %	UUU	5,380,00	11/15/2044
198150	19,815,000	6,309,767.00	412,526.00	412,526.00	* 0*	000	F F0F C0	05/15/2045
	14,220,000	6 340 655 55	6,007,526.00	412,526.00	* %	UUU .	5,595,00	11/15/2045
14,220,0		6,310,953.50	303,427.50	303,427.50)5/15/2046
14,220,0 14,220,0	14,220,000			DDA 4 4-				a tac foc
14,220,0 14,220,0 9,700,0	9,700,000		4,823,427.50	303,427.50	* %	000	4,520,00	11/15/2046
14,220,0 14,220,0		5,033,927.50	4,823,427.50 210,500.00 4,145,500.00	303,427.50 210,500.00 210,500.00	* %		4,520,00 3,935,00	11/15/2046 05/15/2047 11/15/2047

City of Houston, Texas Distribution Line Extension *** PRELIMINARY - FOR DISCUSSION PURPOSES ONLY ***

Period Ending	Principal	Coupon	Interest	Debt Service	Annual Debt Service	Bond Balance	Total Bond Value
05/15/2048			126,830.00	126,830.00	4,272,330.00	5,765,000	5,765,000
11/15/2048	2,900,000	4.400%	126,830.00	3,026,830.00		2,865,000	2,865,000
05/15/2049			63,030.00	63,030.00	3,089,860.00	2,865,000	2,865,000
11/15/2049	1,860,000	4.400%	63,030.00	1,923,030.00		1,005,000	1,005,000
05/15/2050			22,110,00	22,110.00	1,945,140.00	1,005,000	1,005,000
11/15/2050	1,005,000	4.400%	22,110 .00	1,027,110.00	1,027,110.00		, .
	112,490,000		78,982,681.50	191,472,681.50	191,472,681.50		

CITY OF HOUSTON, TEXAS PRINCIPAL EMPLOYERS June 30, 2017 Current Year and Nine Years Ago

(unaudited)

		2017			2008	
Employer	Employees	Rank	Percentage of Total City Employment	Employees	Rank	Percentage of Total City Employment
Walmart	37,000	1	3.18%			
Memorial Hermann Health System	24,108	2	2.07%	19,000	1	1.90%
HEB	23,732	3	2.04%			
The University of Texas MD Anderson Cancer Center	21,086	4	1.81%	15,000	3	1.50%
Mcdonald's Corporation	20,918	5	1.80%			
Houston Methodist	20,000	6	1.72%	. 9,991	7	1.00%
Kroger Company	16,000	7	1.38%	12,000	6	1.20%
United Airlines	14,941	8	1.28%			
Schlumberger Limited	12,069	9	1.04%			
Shell Oil Compamy	11,507	10	0.99%	13,000	4	1.30%
Continental Airlines, Incorporated				16,000	2	1.60%
ARAMARK Corporation				8,500	10	0.85%
Baylor College of Medicine				9,143	8	0.91%
Hewlett-Packard Corporation				9,000	9	0.90%
University of Texas Medical Branch at Galveston				12,318	5	1,23%
Total:	201,361		17.31%	123,952		12.39%

Source: Greater Houston Partnership, Here is Houston Facts (9-26-17)

Employers excludes school districts and city, county, state and federal governments.

Employee numbers are for the ten-county region, not the city only.

Employee may live outside the City.

Total Houston Residents employed regardless of where they work:

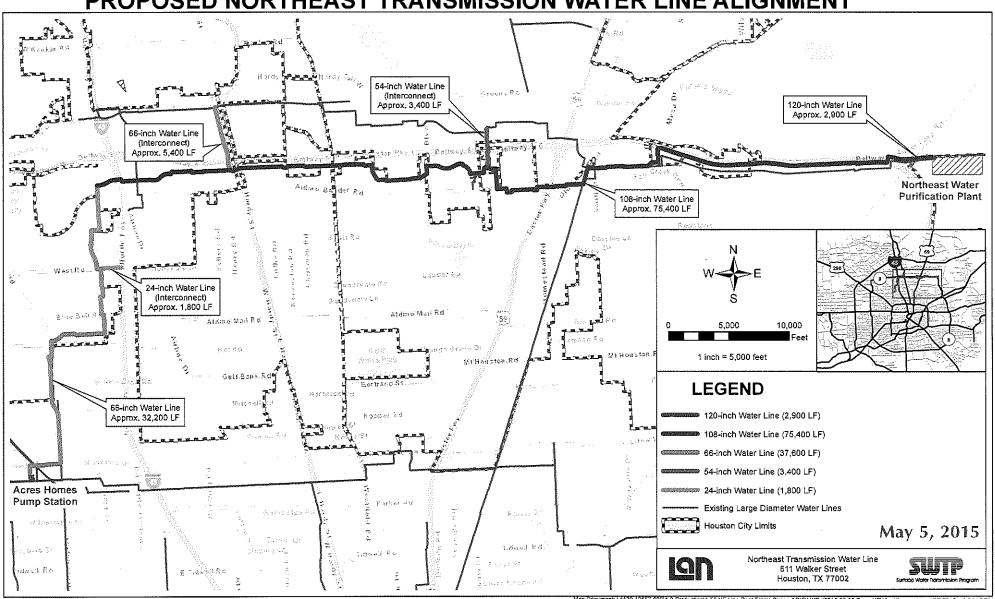
Source:

June 2017 Local Area Unemployment Statistics, Bureau of Labor Statistics

June 2008 Texas Workplace Commission

2017 1,163,299 2008 999,582

CITY OF HOUSTON PROPOSED NORTHEAST TRANSMISSION WATER LINE ALIGNMENT



Census Tract Numbers for NETL Water Line Alignment									
2224.01									
2226									
2227									
2231									
2232									
2401									
2405.02									
2520									
5332									
5334									
5335									
5336									
5337.01									
5338.01									

SWIFT Application for NETL

<u>Item 59</u>

Current and future populations and projected water use (City of Houston Service Area Only)

Population	2010	2020	2030	2040	-
NETL Service Area	116,960	124,418	135,875	146,281	-

Note 1 H-GAC Projection Database (2010-2040)

Note 2 Base year is 2010

Treated Water Service Area by Customer Category	2010	2015	2020	2025	2030	2035	2040
NETL Service Area	24	26	28	72	75	77	78
Retail	18	18	19	25	25	26	27
Wholesale	6	6	6	19	19	19	19
GRP	0	0	0	24	24	25	25
Cost-Share	1	2	3	5	7	7	7

TWDB-1201 Revised 11/22/2010

PROJECT BUDGET - Entity N	Original TWDB	Additional TWDB	Total TWDB	TWDB Funds	T 44 951 HOGS 42 H 1955 H 191		Other Funds	terrando en terrando da la compansión de la compansión de la compansión de la compansión de la compansión de l
	, .			(Water		Other Funds	(Water	
	Funds 2015	Funds 2018	Funds		Total TWDB	(Houston; 20% of	Authorities; 20%	
11	(Houston; 80% of		(Houston; 80%				of 57.33%)	Total Cost (100%
Uses	42.67%)	42.67%)	of 42.67%)	of 57.33%)	Cost (80%)	42.67%)	01 57.3376]	Total Cost (100%
Construction								
Construction	\$110,635,050	\$15,461,654	\$126,096,704	\$174,998,929		\$31,524,176		
Subtotal Construction	\$110,635,050	\$15,461,654	\$126,096,704	\$174,998,929	\$301,095,633	\$31,524,176	\$43,749,732	\$376,369,54
Basic Engineering Fees								
Planning +	\$6,328,999	\$0	\$6,328,999	\$8,503,434	\$14,832,433	\$1,582,250	\$2,125,858	\$18,540,54
Design	\$16,197,302	\$0	\$16,197,302		\$39,555,424	\$4,049,326		
Construction Engineering	\$1,693,949		\$1,693,949		\$4,064,086	\$423,487	\$592,534	\$5,080,10
Basic Engineering Other	41,000,070		\$1,000,0	¥=15.511.51	300030000000000000000000000000000000000			
**	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$
Subtotal Basic Engineering								
Fees	\$24,220,250	\$0	\$24,220,250	\$34,231,692	\$58,451,942	\$6,055,062	\$8,557,923	\$73,064,92
Special Services								
Application	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$(
Environmental	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$(
Water Conservation Plan	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$(
I/I Studies/Sewer	\$0 \$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0	(100 min 100 m
Surveying	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$(
Geotechnical	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$(
Testing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$(
Permits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$(
Inspection	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$(
O&M Manual	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$(
Project Management (by	φυ	φ0	φυ	Ψ	-10. (1-3. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10	φυ	Ψ0	
engineer)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$(
Pilot Testing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$(
Water Distribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$(
Special Services Other	Ψυ	Ψυ	φυ	Ψ0_	Kilipidan spanjaga	Ψ	Ψ0	de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la
**	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$(
					parametricana		*-	aptate interpretation
Subtotal Special Services	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$(
Other								
Administration	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$(
Land/Easements	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$(
Water Rights Purchase (If								
Applicable)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1
Capacity Buy-In (If								
Applicable)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1
Project Legal Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1
Other **	\$0	\$0	\$0	\$0	\$0	\$0	\$0	############## \$ (
Subtotal Other Services	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1
	***		, , , , , , , , , , , , , , , , , , ,	•	100000000000000000000000000000000000000			TANGES IN CONTRACTOR
Fiscal Services							60	\$(
Financial Advisor	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$(
Bond Counsel	\$0	\$0	\$0	\$0	\$0	\$0		\$443,340
Issuance Cost	\$0	\$443,346	\$0	\$0	\$443,346	\$0	\$0	\$443,340
Bond Insurance/Surety	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$
Fiscal/Legal	\$0	\$0	\$0	\$0	\$0	\$0	<u> </u>	\$(
Capitalized Interest	\$0	\$0	\$0	\$0	\$0	\$0		
Bond Reserve Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$(
Loan Origination Fee	\$0	\$0	\$0		\$0	\$0	\$0	
City Admin/PATC/Legal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
Subtotal Fiscal Services	\$0	\$443,346	\$0	\$0	\$443,346	\$0	\$0	\$443,34
Contingency	40	¥,	, , , , , , , , , , , , , , , , , , ,	1				
Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$
Subtotal Contingency	\$0	\$0	\$0	\$0	\$0	\$0		
ountotal containgency	, , , , , , , , , , , , , , , , , , , 	90	φυ	1 40	1	1		450 11 150 1 150 1 150 1

Other ** description must be entered

+ For Planning applications under the EDAP Program, please break down Planning costs as follows:

Category A

Category B

Category C

Category D

Total Planning Costs

0
0
0
0
0
0
0

WRD-253d 10/17

Texas Water Development Board Water Project Information										
A. Project Name	B. Project No.			C. County						
Northeast Transmiss	ion Line					Harris				
D. Program(s)	,,	E. Date				F. Regional Planning Group (A-P)				
SWIFT		4/3/2018				H				
	phase project,	new or expa	new or expansion; plant, well, storage, pump station, distribution system, etc)							
Construction of approximately 121,100 LF of 24" - 120" water transmission lines.										
Attach map of service area affected by Project or other documentation. H. Is an Inter Basin Transfer potentially involved? I. Is project located in a Groundwater District (If yes, identify District by name)?										
Yes ■ No 5		Y	∕es 🔳	Harris-G	alveston -	Sub	sidence Distri	ct	No 🗆	
J. Service Area Projected			opulation I			Projected Population				
Population for at least a 20 year period:	Year:	201 0	***************************************	2020	2025		2030	2035	2040	
(if different from Planning Area,	Population:	474,195	51	14,055	535,840)	557,717	556,696	598,356	
discuss in separate attachment)	Population.									
Project Design Year:				<u> </u>	Design I	Popul	ation'	F00	250	
(Year for which project will be sized)		Design Population: (Population served by project on the design year) 598,356								
K. Is the proposed project included in a current Regional Water Plan? Yes ■ No □ Don't Know □ (If Yes, please specify on what page in the Regional Water Plan - Regional Water Plan Page Number: 259										
L. What type of water source is associated directly with the proposed project? Surface Water ■ Groundwater □ Reuse □										
M. Will the project increase the volu	me of water so	ipply? Ye	s 🗉	No □						
N. What volume of water is the project anticipated to deliver/ treat per year? 358,500 Acre-Feet/Year										
O. Current Water Supply Informatio						<u></u>				
		Certificate No.			l	Source County			Annual Volume and Unit	
San Jacinto River Basin (Lake Houston	& Lake Conroe)					larris		l	288,767acre-ft/yr	
Groundwater Supply Aquifer Well Field to N/A			location	N/A		•	Annual Volume and Unit N/A			
Reuse Water Certificate No. N/A N/A			No.	Annual Amount Used and Unit N/A			*********			
P. Proposed Water Supply Associated Directly with the Proposed Project										
Surface Water Supply Source / Provider Names		Certificate No.				Source County			Annual Volume and Unit	
		· · · · · · · · · · · · · · · · · · ·				Polk		1 -	1,023,800 acre-ft/yr Annual Volume and Unit	
roundwater Supply Aquifer Well Field loc V/A V/A		ocation			Source County V/A			N/A		
Reuse Water Certificate No		No.			Amount Used and Unit					
N/A N/A										
Q. Consulting Engineer Name			Telephone No.		E-mail address					
R. Applicant Contact Name, Title Telephone No. E-mail address										
Venus Price, P.E., Section Lead						Venus.Price@houstontx.gov				

All boxes on this form must be filled out for the application to be administratively complete. Items may be marked as N/A if appropriate.

STA	TE OF TEXAS	§		
COUNTY OF <u>HARRIS</u>		§		
		§		
			·	
	SU	JRFACE WATE	AFFIDAVIT	
	_	•	ersonally appeared a person <u>Carol</u> administered an oath to him/her, u	
1.	I am over 18 years of age, of s this affidavit are within my pe	-	able of making this affidavit. The fand are true and correct.	acts stated in
2.		exas Water Develor	ouston, an entity that has filed an a ment Board for a project that propo	
3.		vironmental Quality	eation and/or Water Rights Permit(s or a predecessor agency authorizing for the Project?	•
		Yes 🔀	No 🗌	
	Please attach a copy of	of the Certificate(s) of	f Adjudication and Water Rights P	ermit(s).
	Item attached:	Yes 🔀	No 🗌	
4.	Does the applicant have the coright to appropriate and use the	-	e the surface water from an entity the total the transfer of the project?	hat enjoys the
		Yes 🗌	No 🔀	
	* *	•	ed water supply contract, lease or or tion to use the surface water neede	_
	Item attached:	Yes 🗌	No 🔀	

Please identify the Certificate of Adjudication(s) and Water Rights Permit(s) possessed by the wholesale water provider pursuant to which the contract, lease or other legal instrument has been or will be executed.

	Certificate of Adjudications:				
	Item attached:	Yes 🗌	No 🖂		
	Water Rights Permit(s): 5807, 5808	4261, 4261A, 42	261B, 4277, 4277A, 4	1963, 4963A, 4965, 4965A,	
	Item attached:	Yes 🔀	No 🗌		
Signed the da	y of April	- gi	,20	18	
	<i>f</i>		Name: (An	of Haddock	
			Title:	rector	
Sworn to and	subscribed before me by	Carol Ha	nddock on	April 9th,	
		Rett	t C. Bozane	ga	
		Notary I	Public in and for the S	tate of Texas	
	[SEAL]	RUTH C. BOCAN MY COMMISSION EI MARCH 9, 201	PIRES:		

My Commission expires: March 9, 2019

CERTIFICATE OF ADJUDICATION

CERTIFICATE OF ADJUDICATION: 08-4261

OWNER: City of Houston

Water Division Dept. of Public Works P. O. Box 1562

Houston, Texas 77002

COUNTIES: Harris, Polk, Liberty,

Chambers, Trinity and San

Jacinto

PRIORITY DATE: December 30, 1913,

and September 23,

1959

WATERCOURSE: Old River, tributary of

the Trinity River and the Trinity River BASIN: Trinity River

WHEREAS, by final decree of the 344th Judicial District Court of Chambers County, in Cause No. 344-10865, In Re; The Adjudication of Water Rights in the Lower Trinity River Segment of the Trinity River Basin and the western portion of the Neches-Trinity Coastal Basin dated October 30, 1985 a right was recognized under Certified Filing 71ABCD, Permit 1970C, Permit 1974A and Permit 2621 to appropriate waters of the State of Texas as set forth below;

NOW, THEREFORE, this certificate of adjudication to appropriate waters of the State of Texas in the Trinity River Basin is issued to the City of Houston, subject to the following terms and conditions:

1. IMPOUNDMENT

- A. Owner, in conjunction with the Trinity River Authority of Texas under Certificate of Adjudication 08-4248, is authorized to maintain an existing dam and reservoir (Lake Livingston) on the Trinity River and impound therein not to exceed 1,750,000 acre-feet of water. The east end of the dam is located in the Thomas Bradley Survey, Abstract 98, Polk County, Texas.
- B. Owner, in conjunction with the Trinity River Authority of Texas under Certificate of Adjudication 08-4248, is authorized to complete construction of a dam and reservoir (Lake Wallisville) on the Trinity River and impound therein not to exceed 51,600 acre-feet of water. Station 0 + 00 on the centerline of dam bears S 32°29'54"W, 13,906.24 feet from the northwest corner of the S. Burney Grant, Abstract 7, Chambers County, Texas.
- C. Owner is authorized to maintain an existing 4700 acre-foot capacity off-channel reservoir (Lynchburg Reservoir). The levee creating said reservoir is located in the Nathanial Lynch Grant, Abstract 44, Harris County.
- D. Owner is authorized to temporarily store water diverted from the Trinity River, in Lake Houston located on the San Jacinto River in the San Jacinto River Basin.

2. USE

- A. Owner is suthorized to divert and use not to exceed 444,000 acre-feet of water per annum from the Trinity River (Lake Livingston) and 10,000 acre-feet of water from the Trinity River (Lake Wallisville-when completed) for municipal purposes.
- B. Owner is also authorized to divert and use not to exceed 458,800 acre-feet of water per annum from the Trinity River (Lake Livingston), 28,000 acre-feet of water per annum from the Trinity River (Lake Wallisville-when completed) and 31,600 acre-feet of water per annum directly from the Trinity River for industrial purposes.
- C. Owner_is authorized to divert and use 13,400 acre-feet of water per annum from the Trinity River and Old River to irrigate a maximum of 9350 acres of land within Chambers and Liberty Counties.

- D. Owner is authorized to divert and use water authorized under this certificate and stored in Lake Houston and Lynchburg Reservoir for municipal and industrial purposes only.
- E. Owner is authorized to use the water impounded in the aforesaid on-channel reservoirs for recreation purposes.

3. DIVERSION

- A. Location and rate:
 - (1) At a point on the Trinity River in the John A. Williams Grant, Abstract 119, Liberty County, Texas, at a maximum rate of not to exceed 1700 cfs (765,000 gpm).
 - (2) At a point on the Trinity River in the Theodore Dorsett Grant, Abstract 27, Liberty County, Texas, at a maximum rate of not to exceed 775 cfs (348,750 gpm).
 - (3) At a point on the Old River in the Henry Griffith Grant, Abstract 12, Chambers County, Texas, at a maximum rate of 288 cfs (129,600 gpm).
 - (4) At a point on the Trinity River in the B.B.B.& C. RR Co. Survey, Abstract 58, Chambers County, Texas, at a unspecified rate.
- B. Maximum combined rate: 3400 cfs (1,530,000 gpm) upon completion of Lake Wallisville Dam.

4. PRIORITY

- A. The time priority of owner's right is December 30, 1913 to divert and use 31,600 acre-feet of water per annum for industrial purposes; 13,400 acre-feet of water per annum for irrigation purposes at a diversion rate of 288 cfs (129,600 gpm) at diversion point No. 3.
- B. The time priority of owner's right is September 23, 1959 to divert and use 444,000 acre-feet of water per annum for municipal purposes and 458,800 acre-feet of water per annum for industrial purposes at a diversion rate of 1700 cfs (765,000 gpm) at diversion point No. 1 and 775 cfs (348,750 gpm) at diversion point No. 2.
- C. Upon completion of Lake Wallisville Dam and Reservoir the time priority of owner's right is September 23, 1959 to divert the remaining 10,000 acre-feet of water per annum for municipal purposes; the remaining 28,000 acre-feet of water for industrial purpose and the maximum combined diversion rate of 3400 cfs (1,530,000 gpm).

5. SPECIAL CONDITIONS

- A. Owners shall maintain a sluiceway in the aforesaid Lake Livingston Dam at a bottom elevation of not more than seventy (70) feet above mean sea level, having an opening of not less than ninety-aix (96) inches in diameter and equipped with a regulating gate for the purpose of allowing the free passage through the dam at all times of those waters to which lower users are lawfully entitled. Whenever the Commission finds that the owners are storing any waters to which downstream appropriators or lawful diverters are entitled, the owners shall release same to said appropriators or lawful diverters on the order of the Texas Water Commission.
- B. Owners are authorized and required to operate the Lake Livingston dam and reservoir described in this certificate of adjudication in conjunction with the Lake Wallieville dam and reservoir which are required to be constructed on the Trinity River in Chambers County, Texas. The total water available

from both projects shall be divided between the owners so that the City shall receive seventy per cent (70%) and the Authority shall receive thirty per cent (30%) thereof and that the specific quantitities for each shall, if necessary, be adjusted so as to divide the total available water between the owners in such proportions.

- Owner shall install and maintain a metering instrument at each diversion point which will automatically record the total amount of water diverted. Owner shall make determinations of water surface elevations in Lake Livingston Reservoir by means of recording gauges set to U. S. Coast and Geodetic Survey datum, each of which shall be protected by a well house designed for such purposes and the Commission shall be furnished complete records of such determinations. Owners shall relocate, or cause to be relocated, all existing stream flow stations which may be inundated or impaired by the reservoir and establish, or cause to be established, such other recording stream flow stations as the Commission may deem necessary to record inflows into the reservoir. Owner shall maintain daily records of waters released through the reservoir authorized herein for downstream use. All atream flow stations shall be set to the same datum described above and the Commission shall be furnished complete records of the data herein required to be kept. The metering instruments, the gauges for well houses, and the stream flow stations and the installation, design and operation thereof shall be subject to approval of the Commission.
- D. Owner is authorized to use the bed and banks of the Trinity River, below the aforesaid dams (Lake Livingston and Lake Wallisville), to convey and deliver water to be appropriated hereunder to downstream diversion points.
- E. Owner is authorized to use all of the water diverted from the Trinity River Basin in the San Jacinto River Basin, the Trinity-San Jacinto, the San Jacinto-Brazos, and the western portion of the Neches-Trinity Coastal Basins, excluding Bolivar Peninsula.
- F. Owner is authorized to convey the water diverted from the Trinity River at Diversion Point No. I authorized herein by pipeline, canal and the bed and banks of Luce Bayou, for temporary storage in Lake Houston located on the San Jacinto River in the San Jacinto River Basin.
- G. Owner's use of the bed and banks of Luce Bayou as authorized herein shall not interfere with any rights held under Certificate of Adjudication 10-3979 in the San Jacinto River Basin issued by the Commission. Any plans and specifications in connection with such use shall make all necessary and specific provisions for the protection of the on-channel reservoir, the off-channel reservoir and the pumping facilities authorized by such certificate of adjudication and all other rights in connection therewith.
- II. Owner's right is subordinate to any claim on waters of the Trinity River Basin imported into and/or originating in and above Lake Lewisville Reservoir, Grapevine Reservoir, Lake Worth Reservoir, and Lake Ray Hubbard Reservoir, and shall not constitute any limitation upon the granting of permits by the Commission for the impoundment and use of waters above the said four named reservoirs.
- I. This certificate is further subordinate to any claim on waters imported and/or originating in the Trinity River Basin above Lake Livingston reservoir authorized herein, that could be impounded by: 1) existing reservoirs; 2) by reservoirs for which permits have been granted or certificates of adjudication issued and the construction of such reservoirs is

incomplete; 3) by reservoirs for which applications are now pending bafore the Commission; or 4) by the following proposed reservoirs as shown in the Master Plan Report of the Trinity River Authority of Texas dated April 18, 1958, but only to the extent necessary to insure a dependable yield from each such proposed reservoir as shown opposite the respective names, to-wit:

Reservoir Name	Dependable Yield (MGD)*
Big Fossil	0.5
Tehuacana	61.0
Tennessee Colony	362.0
Upper Keechi	13.6
Lover Keechi	20.5
Big Elkhart	11.0.
Little Elkhart	6.2
Hurricane Bayou	15.6
Bed1as	95.5
Nelson	14.6
Harmon	7.4
Ga11	16.6
Mustang	13.2
Caney	13.5
Long King	18.5

*Million Gallons per Day

It is the intent herein that this certificate of adjudication shall not constitute a prior claim against upstream flows necessary to produce dependable yields in the aggregate amount from future reservoirs hereinabove listed. Except for the Tennessee Colony Reservoir, nothing herein shall prohibit the construction of future reservoirs at different locations, of different dimensions, or the combination of reservoirs as aubatitutes for the above-listed future reservoirs; provided, however, that such modifications in dimensions, locations or the combination of reservoirs shall not diminish the dependable yield of the reservoir authorized herein in excess of the diminution which would be occasioned by the construction of such reservoirs with the respective dependable yields as hereinabove listed. Tennessae Colony Reservoir may be modified as to location and dimension provided that any such modification shall likewise not further diminish the dependable yield of the reservoir authorized herein.

This certificate of adjudication is specifically subordinate to the present and future use and reuse and consumptive use of any return flows from waters impounded in each of the existing and above described proposed reservoirs and the return flows from water imported into the river basin, for municipal and industrial purposes within the Trinity River Basin above Lake Livingston notwithstanding the re-entry of auch return flows into a public stream they may nevertheless be used again, diverted and routed through such treatment facilities as may be considered necessary for their purification, under authority of permits heretofore or hereafter issued by the Texas Watar Commission for such purposes in the upstream This certificate is also subordinats to the watershed. present and future use and reuse for navigation purposes of the return flows from the metropolitan areas of Dallas and Fort Worth in their natural flowing state and by impoundment in pools created by locks and appurtenances within the river and navigation channels; and further, such return flows shall be allowed to pass through the reservoir authorized herein to the extent necessary to provide navigation below said reservoir and the rights hereby acquired shall be subordinate to such uses.

- K. Owner may divert water from Diversion Point No. 1 not to exceed 902,800 acre-feet of water per annum. Owner may divert from Diversion Point No. 2 up to 450,000 acre-feet of water per annum, provided that the total amount diverted at both diversion points must not exceed a total of 902,800 acre-feet of water per annum.
- L. Owner may not exercise the right to divert and use that portion of the water authorized herein which is to be diverted from Lake Wallisville for any purposes until construction of the aforesaid reservoir is complete and owner applies for and is granted a diversion point or points and a rate of diversion from said reservoir.
- M. Construction of the Walliaville dam, reservoir and related facilities authorized or required by this certificate of adjudication shall be in accordance with plans approved by the Texas Water Commission and shall be started and completed within the time limits established by the Commission.
- N. Owner shall maintain a suitable outlet in the aforesaid dams authorized herein to allow the free passage of water that owner is not entitled to divert or impound.
- O. Owner shall make no diversions of water from the diversion points, downstream of the Lake Wallisville dam, except to the extent that water for such diversions is relensed from the aforesaid reservoir.

The locations of pertinent features related to this certificate are ahown on Pages 16, 18, 20 and 21 of the Lower Trinity River Segment Certificates of Adjudication Maps, copies of which are located in the offices of the Texas Water Commission, Austin, Texas and the Harris, Polk, Liberty, Chambers, Trinity and San Jacinto County Clerks.

This certificate of adjudication is issued subject to all terms, conditions and provisions in the final decree of the 344th Judicial District Court of Chambers County, Texas, in Cause No. 344-10865, In Re: The Adjudication of Water Rights in the Lower Trinity River Segment of the Trinity River Basin and the western portion of the Neches-Trinity Coastal Basin dated October 30, 1985 and supersedes all rights of the owner asserted in that cause.

This certificate of adjudication is issued subject to senior and superior water rights in the Trinity River Basin.

This certificate of adjudication is issued subject to the Rules of the Texas Water Commission and its continuing right of supervision of State water resources consistent with the public policy of the State as set forth in the Texas Water Code.

TEXAS WATER COMMISSION

Paul Hopkins Chairman

DATE ISSUED:

JUN 0 1986

ATTEST:

Mary Ann Refner, Chief Clark

S

2260

TEXAS COMMISSION ON ENVIRONMENTAL



I hereby certify that this is a fine and pertest cupy of a Texas Commission on Environmental Quality document, which is filed in the permanent reports of the Commission. Given under my hand and the sets of office on

AMENDMENT TO CERTIFICATE OF ADJUDICATION

CERTIFICATE NO. 08-4261A

TYPE: 11.122

Owner:

City of Houston

Address:

611 Walker

Houston, Texas 77002

Filed:

September 23, 2009

Granted:

MAR 1 5 2010

Purpose:

Hydroelectric Power

County:

Polk and San Jacinto

Watercourse: The Trinity River

Watershed:

Trinity River Basin

WHEREAS, Certificate of Adjudication No. 08-4261 authorizes the City of Houston (City), in conjunction with the Trinity River Authority, Owner of Certificate of Adjudication No. 08-4248, to maintain an existing dam and reservoir (Lake Livingston) on the Trinity River. Trinity River Basin, and impound therein not to exceed 1,750,000 acre-feet of water; and

WHEREAS, multiple special conditions and time priorities apply; and

WHEREAS, an amendment to Certificate of Adjudication No. 08-4261, designated Certificate of Adjudication No. 08-4261B was granted on May 5, 2009, which corrected Certificate of Adjudication No. 08-4261 to include an additional fifth diversion point which was included in the final determination, but was inadvertently excluded from the Certificate of Adjudication; and

WHEREAS, the City seeks to amend Certificate of Adjudication No. 08-4261 to add non-consumptive hydroelectric power generation as an additional authorized use; and

WHEREAS, the City indicates hydroelectric power generation will only be conducted when water is released from Lake Livingston for another authorized purpose such as water released from Lake Livingston for downstream use, to meet priority calls, or to pass inflows when the conservation storage of Lake Livingston is full: and

WHEREAS, the Texas Commission on Environmental Quality finds that jurisdiction over the application is established; and

. .

WHEREAS, the Executive Director recommends special conditions be included; and

WHEREAS, no requests for a contested case hearing were received for this application;

WHEREAS, the Commission has complied with the requirements of the Texas Water Code and Rules of the Texas Commission on Environmental Quality in issuing this amendment;

NOW, THEREFORE, this amendment to Certificate of Adjudication No. 08-4261, designated Certificate of Adjudication No. 08-4261A, is issued to the City of Houston, subject to the following terms and conditions:

1. USE

In addition to the previous authorization, Owner is also authorized to use the water released from Lake Livingston for non-consumptive hydroelectric power generation purposes.

2. TIME LIMITATIONS

- A. Construction of the hydroelectric facility must be in accordance with the plans and specifications approved by the Executive Director. Construction of the hydroelectric facility without final approval of the plans and specifications is a violation of this authorization.
- B. Construction shall begin within two years and be completed within five years of the latter of issuance of this amendment, the issuance of the Federal Energy Regulatory Commission operating permit for the proposed hydroelectric facility, and the Texas Commission on Environmental Quality's certificate of the Federal Energy Regulatory Commission operating permit for the proposed hydroelectric facility, unless Owner applies for and is subsequently granted an extension of time before the expiration of these time limitations.
- C. Failure to commence construction of the hydroelectric facility within the period stated above shall subject all rights to this amendment to forfeiture, subject to notice and hearing. After beginning construction, failure to timely construct the hydroelectric facility stated above shall subject this amendment to cancellation in whole or in part, subject to notice and hearing.

This amendment is issued subject to all terms, conditions, and provisions contained in Certificate of Adjudication No. 08-4261, as amended, except as specifically amended herein.

This amendment is issued subject to all superior and senior water rights in the Trinity River Basin.

Owner agrees to be bound by the terms, conditions and provisions contained herein and such agreement is a condition precedent to the granting of this amendment.

All other matters requested in the application which are not specifically granted by this amendment are denied.

This amendment is issued subject to the Rules of the Texas Commission on Environmental Quality and to the right of continuing supervision of State water resources exercised by the Commission.

For the Commission

ISSUED: MAR 1 5 2010

FILED FOR RECORD

2010 MAR 25 PM 1: 03

State of texts (County of Polic)

J. SCHELANA WALKER hereby certify that this instrument was FILED in the file number sequence on the date and at the time stamped hereon by me and was duly RECORDED in the Official Public Records in Votume and Page of the named RECORDS OF

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



THE STATE OF TEXAS COUNTY OF TRAVIA

I hereby certify that this is a true and correct capy of a Texas Commission on Environmental Quality document, which is filed in the permanent records of the Commission. Given under my hand and the seal of office on

AMENDMENT TO A CERTIFICATE OF ADJUDICATION a Donna Castanucia, Chief Clerk

Texas Commission on Environmental Quality

CERTIFICATE NO. 08-4261B

TYPE § 11.122

Owner:

City of Houston

Address:

611 Walker

Houston, Texas

77002

Filed:

April 29, 2009

Granted:

MAY 0 5 2009

Purposes:

Municipal, Agricultural,

Counties:

Harris, Polk, Liberty,

Industrial, and Recreation

Chambers, Trinity,

and San Jacinto

Watercourse: Trinity River

Watershed:

Trinity River Basin

WHEREAS, Certificate of Adjudication No. 08-4261 authorizes the City of Houston to maintain multiple dams and reservoirs on the Trinity River, Trinity River Basin, and an off Certificate of Adjudication No. 08-4261 also channel reservoir for recreation purposes. authorizes the City of Houston divert and use water from three points on the Trinity River, and one point on the Old River for municipal, agricultural and industrial purposes at a maximum combined diversion rate of 3,400 cfs (1,530,000 gpm). Multiple Special Conditions apply; and

WHEREAS, the City of Houston has a concurrent pending application, designated as application No 08-4261A; and

WHEREAS, the Owner requests a correction to Certificate of Adjudication No. 08-4261 to include a fifth diversion point which was inadvertently omitted during the drafting of the Certificate, but was included in the Final Determination and the Final Judgement of the City's adjudication of it's water right; and

WHEREAS, pursuant to 30 Texas Administrative Code § 50.145, the Executive Director, on his own motion or at the request of a permittee, may make a nonsubstantive correction to a permit without formal amendment and public notice procedures to correct a clerical error and to describe more accurately the point of diversion; and

WHEREAS, the Texas Commission on Environmental Quality finds that jurisdiction over the application is established; and

WHEREAS, no requests for a contested case hearing were received for this application; and

WHEREAS, the Commission has complied with the requirements of the Texas Water Code and rules of the Texas Commission on Environmental Quality in issuing this amendment;

NOW, THEREFORE, this amendment to Certificate of Adjudication No. 08-4261 designated Certificate of Adjudication No. 08-4261B, is issued to the City of Houston, subject to the following conditions:

1. DIVERSION

3.10

- a) In addition to the previous authorization, Owner is now authorized to divert water from a point on the Trinity River which bears S 48° 19'W, 1109 feet from the northeast corner of the William Whitlock Survey, Abstract No 118, in Liberty County, Texas.
- b) In addition to the previous authorization, Owner is authorized to divert the water from the new diversion point at a maximum rate of 775.0 cfs (348,750gpm), and a combined maximum diversion rate of 3400.0 cfs (1,530,000 gpm) for all points authorized by the Certificate.

This amendment is issued subject to all terms, conditions and provisions contained in Certificate of Adjudication No. 08-4261, except as specifically amended herein.

This amendment is issued subject to all superior and senior water rights in the Trinity River Basin.

Owner agrees to be bound by the terms, conditions and provisions contained herein and such agreement is a condition precedent to the granting of this amendment.

All other matters requested in the application which are not specifically granted by this amendment are denied.

This amendment is issued subject to the Rules of the Texas Commission on Environmental Quality and to the right of continuing supervision of State water resources exercised by the Commission.

For the Commission

Date issued: MAY 0 5 2009

CERTIFICATE OF ADJUDICATION

CERTIFICATE OF ADJUDICATION: 08-4277 OWNER:

OWNER: Dayton Canal Company

P. O. Box 128

Dayton, Texas 77535

COUNTY: Liberty

PRIORITY DATES: July 2, 1913 and August 25, 1969

WATERCOURSE: Big Ditch and East Prong

BASIN: Trinity River

Old River, tributaries of the Trinity River and the

Trinity River

WHEREAS, by final decree of the 344th Judicial District Court of Chambers County, in Cause No. 344-10865, In Re: The Adjudication of Water Rights in the Lower Trinity River Segment of the Trinity River Basin and the Western Portion of the Neches-Trinity Coastal Basin dated October 30, 1985, a right was recognized under Certified Filing 553AB authorizing the Dayton Canal Company to appropriate waters of the State of Texas as set forth below;

NOW, THEREFORE, this certificate of adjudication to appropriate waters of the State of Texas in the Trinity River Basin is issued to the Dayton Canal Company, subject to the following terms and conditions:

1. DIPOUNDMENT

Owner is authorized to maintain an existing dam and reservoir on Big Ditch and impound therein not to exceed 65 acre-feet of water. The dam is located in the Louis Davis Grant, Abstract 18, Liberty County, Texas.

2. USE

- A. Owner is authorized to divert and use not to exceed 5,000 acre-feet of water per annum from the aforesaid reservoir on Big Ditch for the irrigation of 9238.04 acres of land within the service area of the Dayton Canal Company.
- B. Owner is further authorized to divert and use not to exceed 33,000 acre-feet of water per annum from the Trinity River, Big Ditch and the East Prong Old River for the irrigation of 9238.04 acres of land within the service area of the Dayton Canal Company.
- C. The 9238.04 acres of land is the maximum number of acres authorized to be irrigated from all sources of State water as set forth in Paragraphs A and B above.

3. DIVERSION

A. Location:

- Diversion Point No. 1: At a point on the Trinity River in the John A. Williams Grant, Abstract 119, Liberty County, Texas.
- (2) Diversion Point No. 2: At a point on the East Prong Old River in the William D. Smith Grant, Abstract 106, Liberty County, Texas.
- (3) Diversion Point No. 3: At a point on Big Ditch in the William Bloodgood Grant, Abstract 3, Liberty County, Texas.
- (4) Diversion Point No. 4: At a point on the perimeter of the aforessid reservoir.

B. Maximum rates are as shown;

- (1) Maximum rate from Diversion Point No. 1: 140.00 cfs (63,000 gpm).
- (2) Maximum rate from Diversion Point No. 2: 22.22 cfs (10,000 gpm)
- (3) Maximum rate from Diversion Point No. 3: 17.78 cfs (8,000 gpm)
- (4) Maximum rate from Diversion Point No. 4: 35.56 cfs (16,000 gpm)

4. PRIORITY

- A. The time priority of owner's right is July 2, 1913 for the diversion and use of 33,000 acre-feet of water per annum from the Trinity River, the East Prong Old River and Big Ditch and all of the diversion rate at Diversion Points No. 1, 2 and 3 for the irrigation of 9238.04 acres of land.
- B. The time priority of owner's right is August 25, 1969 for the impoundment of water in the reservoir on Big Ditch and the diversion and use of 5,000 acre-feet of water per annum therefrom and all of the diversion rate at Diversion Point No. 4 for irrigation purposes.

5. SPECIAL CONDITIONS

- A. Owner shall maintain a suitable outlet in the aforesaid dam authorized herein to allow the free passage of water that owner is not entitled to divert or impound.
- B. The authorized irrigated area under this certificate of adjudication shall be coterminous with the service area of the Dayton Canal Company. The company shall notify the Commission of all changes in its service area.

The locations of pertinent features related to this certificate are shown on Page 18 of the Lower Trinity River Segment Certificates of Adjudication Maps, copies of which are located in the offices of the Texas Water Commission, Austin, Texas and the Liberty County Clerk.

This certificate of adjudication is issued subject to all terms, conditions and provisions in the final decree of the 344th Judicial District Court of Chambers County, Texas, in Cause No. 344-10865, In Re: The Adjudication of Water Rights in the Lower Trinity River Segment of the Trinity River Basin and the Western Portion of the Neches-Trinity Coastal Basin dated October 30, 1985 and supersedes all rights of the owner asserted in that cause.

This certificate of adjudication is issued subject to senior and superior water rights in the Trinity River Basin.

City of Houston Desagn

This certificate of adjudication is issued subject to the Rules of the Texas Water Commission and its continuing right of supervision of State water resources consistent with the public policy of the State as set forth in the Texas Water Code.

TEXAS WATER COMMISSION

Paul Hopkins, Chairman

DATE ISSUED:

JUN 9 1986

ATTEST:

3

Texas Commission on Environmental Quality



THE STATE OF TEXAS COUNTY OF TRAVIB

I hereby certify that this is a true and correct copy of a Texas Commission on Environmental Quality document, which is filed in the permanent records of the Commission. Given under my nend and the seel of office on

AMENDMENT TO A CERTIFICATE OF ADJUDICATION

LaDonna Castanucia, Chief Clerk

CERTIFICATE NO.08-4277A

TYPE: 11.122 & 11.085

Owner:

American Rice Growers Cooperative

Address:

P.O. Box 129

Association-Dayton Division

Dayton, Texas 77535

Accepted for

Filing:

March 1, 2000

Granted:

NOV 13 2009

Purposes:

Municipal, Industrial,

Mining, and Agricultural

(Irrigation)

Counties;

Liberty, Chambers, Harris, Galveston, Brazoria, Fort Bend, San Jacinto, Walker, Grimes,

Waller, Montgomery, and

Watercourse:

Big Ditch and the East Prong

Old River, Tributaries of the

Trinity River and the Trinity River

Watersheds:

Trinity River Basin, San Jacinto River Basin, Trinity-San Jacinto Coastal Basin. and San Jacinto-Brazos Coastal

Basin

WHEREAS, Certificate of Adjudication No. 08-4277 is owned by the American Rice Growers Cooperative-Dayton Division (American Rice) and authorizes, with a time priority of August 25, 1969, the maintenance of a dam and reservoir with a capacity of 65 acre-feet on Big Ditch, tributary of the Trinity River in the Louis Davis Grant, Abstract No. 18, Liberty County and the diversion and use of not to exceed 5,000 acre-feet of water per year from the perimeter of the reservoir at a maximum rate of 35.56 cubic feet per second (cfs) for the irrigation of 9,238.04 acres of land within its service area; and

WHEREAS, the Certificate also authorizes, with a time priority of July 2, 1913, the diversion and use of not to exceed a total of 33,000 acre-feet of water per year from a point on the Trinity River; a point on the East Prong Old River, tributary of the Trinity River; and a point on Big Ditch for irrigation of the above-described land; and

WHEREAS, the point on the Trinity River is in the John A. Williams Grant, Abstract No.119, Liberty County and includes a maximum diversion rate of 140 cfs; and

WHEREAS, the point on the East Prong Old River is in the William D. Smith Grant, Abstract No. 106, Liberty County and includes a maximum diversion rate of 22.22 cfs; and

WHEREAS, the point on Big Ditch is in the William Bloodgood Grant, Abstract No. 3, Liberty County and includes a maximum diversion rate of 17.78 cfs; and

WHEREAS, the Certificate includes a special condition requiring the Owner to maintain a suitable outlet in the dam on Big Ditch to allow passage of water that the Owner is not entitled to divert or impound and a special condition requiring the Owner to notify the Texas Commission on Environmental Quality of any changes in their service area; and

WHEREAS, pursuant to an August 21, 1997 agreement between the Owner and the City of Houston, which includes Owner's agreement to sell the water rights authorized by Certificate of Adjudication No. 08-4277 to the City subject to certain conditions, the Owner and the City of Houston seek to amend the certificate to:

- (1) authorize additional places of use for all of the water authorized in the Certificate to anywhere within the following areas (interbasin transfer):
 - (a) Liberty, Harris, Galveston, Brazoria, Fort Bend and Chambers Counties;
 - (b) the Trinity-San Jacinto Coastal Basin;
 - (c) the San Jacinto River Basin; and
 - (d) the San Jacinto-Brazos Coastal Basin;
- authorize the use of all water included in the Certificate for municipal, industrial, mining and agricultural purposes;
- authorize the diversion of all water included in the Certificate at an additional diversion point on the Trinity River included in the City of Houston's Certificate of Adjudication No. 08-4261, as amended, which is immediately downstream of the point currently authorized on the river;
- (4) authorize the diversion of all of the water included in the Certificate at the requested additional diversion point at a maximum rate of 215.6 cfs with a condition that diversion under the certificate at all authorized points of diversion would not exceed a combined maximum rate of 215.6 cfs at any time;
- (5) confirm, expressly on the face of the amendment, that the amended Certificate retains for all purposes the July 2, 1913 priority date currently included for the authorization to divert and use 33,000 acre-feet of water per year from the Trinity River, Big Ditch and East Prong Old River and the August 25, 1969 priority date currently included for the authorization to divert and use 5,000 acre-feet of water per year from the reservoir on Big Ditch; and
- (6) reflect that upon Closing as provided in the aforesaid August 21, 1997 agreement between the applicants, the amended Certificate, will be owned by the City of Houston; and

WHEREAS, the place of use requested by the applicants includes land in Liberty, Chambers, San Jacinto, Walker, Grimes, Waller, Harris, Fort Bend, Montgomery, Galveston and Brazoria Counties and in the Trinity River Basin, the San Jacinto River Basin, the Trinity-San Jacinto Coastal Basin, the San Jacinto-Brazos Coastal Basin; and

WHEREAS, the Texas Commission on Environmental Quality finds that jurisdiction over the application is established; and

WHEREAS, upon Closing as provided in the aforesaid August 21, 1997 agreement between the applicants, this amended Certificate will be owned by the City of Houston, Texas; and

WHEREAS, this application is subject to the Texas Coastal Management Program (CMP) and must be consistent with the CMP goals and policies; and

WHEREAS, when the diversion of water is intended for an interbasin transfer, the Executive Director recommends that special conditions be included in order to maintain downstream environmental conditions during times of low flow;

WHEREAS, the Texas Commission on Environmental Quality finds that the issuance of this amendment is consistent with the goals and polices of the Texas Coastal Management Plan; and

WHEREAS, the Commission has complied with the requirements of the Texas Water Code and Rules of the Texas Commission on Environmental Quality in issuing this amendment; and

NOW, THEREFORE, this amendment to Certificate of Adjudication No. 08-4277, designated as Certificate of Adjudication No. 08-4277A, is issued to American Rice Growers Cooperative Association-Dayton Division, subject to the following terms and conditions:

USE

- A. In addition to the previous authorization in Certificate of Adjudication No. 08-4277, Use paragraph 2, A & B, Owner is now authorized to use the 38,000 acrefect of water per year for agricultural, municipal, industrial, and mining purposes.
- B. In addition to the previous place of use, Owner is now authorized an interbasin transfer for diversion and use of the 38,000 acre-feet of water per year within the City of Houston's service area Liberty, Chambers, San Jacinto, Walker, Grimes, Waller, Harris, Fort Bend, Montgomery, Galveston and Brazoria Counties within the Trinity River Basin, the San Jacinto River Basin, the Trinity-San Jacinto Coastal Basin, and the San Jacinto-Brazos Coastal Basin.

2. DIVERSION

In addition to the previously authorized diversion points, Owner is authorized:

- A. Diversion Point No. 5, at a point on the Trinity River in the John A. Williams Grant, Abstract 119, Liberty County, Texas which is also authorized in Certificate of Adjudication No. 08-4261, as amended. Said point also being Located at 29.962°N Latitude and 94.809°W Longitude.
- B. The maximum combined diversion rate is 215.6 cfs (96,761.28 gpm).

PRIORITY

The time priority of the Owner's Right under this Certificate of Adjudication No. 08-4277A is July 2, 1913 for the 33,000 acre-feet of water and August 25, 1969 for 5,000 acre-feet of water.

CONSERVATION

Owner shall maintain a water conservation plan that provides for the utilization of those practices, techniques and technologies that reduce or maintain the consumption of water, prevent or reduce the loss or waste of water, maintain or improve the efficiency in the use of water, increase the recycling and reuse of water, or prevent the pollution of water, so that a water supply is made available for future or alternative uses.

SPECIAL CONDITION

- A. Prior to diversion, from Diversion Point No. 5 authorized herein, of water for transport and use outside the Trinity River Basin, Owner shall install a reference marker, with an accuracy of +/- 5%, immediately downstream of that diversion point.
- B. For transport and use outside the Trinity River Basin, Owner shall only divert authorized water when the remaining streamflow of the Trinity River equals or exceeds 404 cfs at the referenced point downstream of Diversion Point No. 5. This special condition is subject to adjustment by the Commission if the Commission determines, through an expedited public review process, that such adjustment is appropriate to achieve compliance with applicable environmental flow standards adopted pursuant to Texas Water Code § 11.1471. Any adjustment shall be made in accordance with the provisions of Texas Water Code § 11.147(e-1).
- C. Unless written waiver of this restriction is obtained from the Executive Director, transport of water under this Certificate for use in areas outside the Trinity River Basin, other than areas within the Trinity -San Jacinto Coastal Basin, is restricted to a canal, pipeline or similar conveyance facility from a diversion point authorized under this Certificate to the intended water treatment facilities, including any intermediate storage, pumping, or other transportation devices, isolated from natural drainage.
- D. Owner shall submit the proper ownership documents to reflect the City of Houston as the Owner of this amendment to Certificate of Adjudication No. 08-4277 within 90 days of issuance of this amendment.

This amendment is issued subject to all superior and senior water rights in the Trinity River Basin.

Owner agrees to be bound by the terms, conditions and provisions contained herein and such agreement is a condition precedent to the granting of this amendment.

All other matters requested in the application which are not specifically granted by this amendment are denied.

This amendment is issued subject to the Rules of the Texas Commission on Environmental Quality and to the right of continuing supervision of State water resource exercised by the Commission.

For the Commission

Date Issued: NOV 13 2009

Bryan W. Shaw, Ph.D., Chairman
Buddy Garcia, Commissioner
Carlos Rubinstein, Commissioner
Mark R. Vickery, P.G., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution
November 19, 2009

Ed McCarthy
Jackson, Sjoberg, McCarthy & Wilson, L.L.P.
711 West 7th Street
Austin, Texas 78701-2785

RE: American Rice Growers Cooperative Association-Dayton Division and City of Houston

ADJ 4277

Application No. 08-4277A to amend Certificate of Adjudication No. 08-4277

TWC§§ 11.122 & 11.085, Requiring Published and Mailed Notice

Big Ditch, the East Prong Old River, and the Trinity River, Trinity River Basin, San Jacinto River Basin, Trinity- San Jacinto Coastal Basin, and San Jacinto-Brazos Coastal Basin

Liberty, Chambers, Harris, Galveston, Brazoria, Fort Bend, San Jacinto, Walker, Grimes, Waller, Montgomery Counties

Dear Mr. McCarthy:

Enclosed is a certified copy of the above referenced document.

The applicants, American Rice Growers Cooperative Association-Dayton Division and City of Houston, are instructed to ensure that the official record of this water right is filed with the County Clerk of the county in which the appropriation is to be made.

The applicant is responsible for making payment arrangements with the Liberty County Clerk's Office for filing its documents in the official records. An additional certified copy is enclosed for the purpose of filing with the appropriate County Clerk.

As proof of filing, please ensure that the enclosed card is completed by the Liberty County Clerk's Office and returned to the Water Rights Permitting & Availability Section (MC 160), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087.

This action is taken under the authority delegated by the Executive Director of the Texas Commission on Environmental Quality.

Should you have questions, please contact Mr. Esteban (Steve) Ramos of the Texas Commission on Environmental Quality's Water Rights Permitting & Availability Section at (512) 239-6538, or if by correspondence, include MC 160 in the letterhead address below.

Sincerely,

Todd Chenoweth, Director Water Supply Division

TC/er

Enclosures

P.O. Box 13087 Austin, Texas 78711-3087

512-239-1000

Internet address: www.tceq.state.tx.us

Bryan W. Shaw, Ph.D., Chairman
Buddy Garcia, Commissioner
Carlos Rubinstein, Commissioner
Mark R. Vickery, P.G., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 19, 2009

TO: Persons on the attached mailing list.

RE: American Rice Grower Cooperative Association-Dayton Division

Certificate of Adjudication No. 08-4277A

This letter is your notice that the Texas Commission on Environmental Quality (TCEQ) executive director (ED) has issued final approval of the above-named application. According to 30 Texas Administrative Code (TAC) Section 50.135 the approval became effective on November 13, 2009, the date the ED signed the permit or other approval unless otherwise specified in the permit or other approval.

You may file a motion to overturn with the chief clerk. A motion to overturn is a request for the commission to review the TCEQ ED's approval of the application. Any motion must explain why the commission should review the TCEQ executive director's action. According to 30 TAC Section 50.139 an action by the ED is not affected by a motion to overturn filed under this section unless expressly ordered by the commission.

A motion to overturn must be received by the chief clerk within 23 days after the date of this letter. An-original and 7 copies of a motion must be filed with the chief clerk in person, or by mail to the chief clerk's address on the attached mailing list. On the same day the motion is transmitted to the chief clerk, please provide copies to the applicant, the ED's attorney, and the Public Interest Counsel at the addresses listed on the attached mailing list. If a motion to overturn is not acted on by the commission within 45 days after the date of this letter, then the motion shall be deemed overruled.

You may also request judicial review of the ED's approval. According to Texas Water Code Section 5.351 a person affected by the ED's approval must file a petition appealing the ED's approval in Travis County district court within 30 days after the <u>effective date of the approval</u>. Even if you request judicial review, you still must exhaust your administrative remedies, which includes filing a motion to overturn in accordance with the previous paragraphs.

Individual members of the public may seek further information by calling the TCEQ Office of Public Assistance, toll free, at 1-800-687-4040.

LaDonna Castañuela

Chief Clerk

LDC/er

MAILING LIST

for

American Rice Grower Cooperative Association-Dayton Division Certificate of Adjudication No. 08-4277A

FOR THE APPLICANT:

Ed McCarthy
Jackson, Sjoberg, McCarthy & Wilson, L.L.P.
711 West 7th Street
Austin, Texas 78701-2785

American Rice Growers Cooperative Association P.O. Box 129 Dayton, Texas 77535-0003

Carl Pickett P.O. Box 10225 Liberty, Texas 77575

City of Houston P.O. Box 1562 Houston, Texas 77251-1562

PROTESTANTS/INTERESTED PERSONS:

See attached list.

FOR THE EXECUTIVE DIRECTOR via electronic mail:

Robin Smith, Staff Attorney
Texas Commission on Environmental Quality
Environmental Law Division MC 173
P.O. Box 13087
Austin, Texas 78711-3087

Steve Ramos, Technical Staff
Texas Commission on Environmental Quality
Water Supply Division MC 160
P.O. Box 13087
Austin, Texas 78711-3087

FOR OFFICE OF PUBLIC ASSISTANCE via electronic mail:

Bridget Bohac, Director Texas Commission on Environmental Quality Office of Public Assistance MC 108 P.O. Box 13087 Austin, Texas 78711-3087

FOR PUBLIC INTEREST COUNSEL via electronic mail:

Blas J. Coy, Jr., Attorney Texas Commission on Environmental Quality Public Interest Counsel MC 103 P.O. Box 13087 Austin, Texas 78711-3087

FOR THE CHIEF CLERK via electronic mail:

LaDonna Castafiuela Texas Commission on Environmental Quality Office of Chief Clerk MC 105 P.O. Box 13087 Austin, Texas 78711-3087 BELLATTI, LAWRENCE L ANDREWS KURTH 1LP STE 4200 600 TRAVIS ST HOUSTON TX 77002-3009

MUNZ, LRE
TX STATE SOIL & WATER CONSERVATION BD
PO BOX 658
TEMPLE TX 76503-0658

FROST , FORD J VICE PRESIDENT
FPL PARMING LTD
STE 1050
1331 LAMAR ST
HOUSTON TX 77010-3025

STOVER, JOHN D PO BOX 1728 LUFKIN TX 75902-1728 ISTRE, ROBERT GENERAL MANAGER GULF COAST WATER AUTHORITY 3630 FM 1765 TEXAS CITY TX 77591-3677

WERKENTHIN JR, FRED B
BOOTH AHRENS & WERKENTHIN PC
STE 1515
515 CONGRESS AVE
AUSTIN TX 78701-3504

CERTIFICATE OF ADJUDICATION

CERTIFICATE OF ADJUDICATION: 10-4963

OWNERS:

San Jacinto River Authority P. O. Box 329 Conroa, Texas 77305.

City of Houston Attn: Department of Public Works P. O. Box 1562 Houston, Texas 77007

Texas Water Development Board Water Availability Data & Studies P. O. Box 13231, Capitol Station Austin, Texas 78711

COUNTIES: Montgomery and Harris

PRIORITY DATES: January 12, 1959

and June 28, 1965

WATERCOURSE: West Fork San Jacinto

River, tributary of the

San Jacinto River

BASIN: San Jacinto River

WHEREAS, by final decree of the 155th Judicial District Court of Waller County, in Cause No. 10,023A, In Re: The Exceptions of the San Jacinto River Authority to the Adjudication of Water Rights in the San Jacinto River Basin dated December 1, 1986, a right was recognized under Permit 1962B authorizing the San Jacinto River Authority, the City of Houston and the Texas Water Development Board to appropriate waters of the State of Texas as set forth below:

NOW, THEREFORE, this certificate of adjudication to appropriate waters of the State of Texas in the San Jacinto River Basin is issued to the San Jacinto River Authority, the City of Houston and the Texas Water Development Board, subject to the following terms and conditions:

IMPOUNDMENT

Owners are authorized to maintain an existing dam and reservoir on the West Fork San Jacinto River (Lake Conroe) and impound therein not to exceed 430,260 acre-feet of water. The dam is located in the James Smith Grant; Abstract 37; the James Edwards Survey, Abstract 189; the James Edwards Survey, Abstract 190; the Robert Marsh Survey, Abstract 355 and the James W. Singleton Survey, Abstract 496, Montgomery County, Texas.

Certificate of Adjudication 10-4963

2. USE

A. Owners are authorized to divert or release and use not to exceed 100,000 acre-feet of water per annum from the aforesaid Lake Conros for purposes as follows:

Municipal Purposes - - - - - - 66,000 acre-feet

Industrial Purposes - - - - - - 28,500 acre-feet

Mining Purposes - - - - - - - 5,500 acre-feet

B. Owners are also authorized to use the impounded water for recreation purposes.

3. DIVERSION

- A. Location
 At the perimeter of the aforesaid reservoir.
- B. Maximum rate: 700.00 cfs (315,000 gpm).

4: PRIORITY

- A. The time priority of owners' right is January 12, 1959 for the impoundment of 380,430 acre-feet of water and the diversion and use of water for purposes authorized herein.
- B. The time priority of owners right is June 28, 1965 for the impoundment of the additional 49,830 acre-feet of water.

5. SPECIAL CONDITIONS

- A. Owners are authorized to use the bed and banks of the West Fork San Jacinto River for the purpose of conveying all or any part of the water authorized to be diverted hereunder from the place of impoundment (Lake Conroe) downstream to Lake Houston in Harris County.
- B. Owners shall maintain a suitable outlet in the aforesaid dam authorized herein to allow the free passage of water that the owners are not entitled to divert or impound.
- C. Owners shall install a metering instrument at each diversion point which will automatically record to within five percent of accuracy the total amount of water diverted. Owners shall make daily determinations of water surface elevations in the reservoir by means of a recording gage, set to mean sea level datum, which shall be protected by a well house designed for such purposes. Owners shall also install a recording

Certificate of Adjudication 10-4963

streamflow station, set to mean sea level datum, to measure the inflow from the West Fork San Jacinto River into the reservoir. The Commission shall be furnished complete records of all determinations required herein.

The locations of pertinent features related to this certificate are shown on Pages 5 and 15 of the San Jacinto River Basin Certificates of Adjudication Maps, copies of which are located in the offices of the Texas Water Commission, Austin, Texas.

This certificate of adjudication is issued subject to all terms, conditions and provisions in the final decree of the 155th Judicial District Court of Waller County, Texas, in Cause No. 10,023A, In Re: The Exceptions of the San Jacinto River Authority to the Adjudication of Water Rights in the San Jacinto River Basin dated December 1, 1986 and supersedes all rights of the owner asserted in that cause, provided, however, that no attempt has been made to adjudicate private contractural rights.

This certificate of adjudication is issued subject to senior and superior water rights in the San Jacinto River Basin.

This certificate of adjudication is issued subject to the Rules of the Texas Water Commission and its continuing right of supervision of State water resources consistent with the public policy of the State as set forth in the Texas Water Code.

TEXAS WATER COMMISSION

Paul Hopkins, Chairman

DATE ISSUED:

FEB 25 1987

ATTEST:

Mary And Hefner, Chief Clerk

Bryan W. Shaw, Ph.D., Chairman
Buddy Garcia, Commissioner
Carlos Rubinstein, Commissioner
Mark R. Vickery, P.G., Executive Director





Texas Commission on Environmental Quality

Protecting Texas by Reducing and Preventing Pollution

July 22, 2010

Martin Rochelle Lloyd, Gosselink, Rochelle & Townsend, P.C. 816 Congress Avenue, Suite 1900 Austin, Texas 78701

RE: San Jacinto River Authority and the City of Houston Certificate of Adjudication No. 10-4963A

This letter is your notice that the Texas Commission on Environmental Quality (TCEQ) executive director (ED) has issued final approval of the above-named application. According to 30 Texas Administrative Code (TAC) Section 50.135 the approval became effective on the date the ED signed the permit or other approval. A copy of the final approval is enclosed and cites the effective date.

You may file a **motion to overturn** with the chief clerk. A motion to overturn is a request for the commission to review the TCEQ executive director's approval of the application. Any motion must explain why the commission should review the TCEQ executive director's action. According to 30 TAC Section 50.139 an action by the ED is not affected by a motion to overturn filed under this section unless expressly ordered by the commission.

A motion to overturn must be received by the chief clerk within 23 days after the date of this letter. An original and 7 copies of a motion must be filed with the chief clerk in person or by mail. The Chief Clerk's mailing address is Office of the Chief Clerk (MC 105), TCEQ, P.O. Box 13087, Austin, Texas 78711-3087. On the same day the motion is transmitted to the chief clerk, please provide copies to Robert Martinez, Environmental Law Division Director (MC 173), and Blas Coy, Public Interest Counsel (MC 103), both at the same TCEQ address listed above. If a motion is not acted on by the commission within 45 days after the date of this letter, then the motion shall be deemed overruled.

You may also request **judicial review** of the ED's approval. According to Texas Water Code Section 5.351 a person affected by the ED's approval must file a petition appealing the ED's approval in Travis County district court within 30 days after the <u>effective date of the approval</u>. Even if you request judicial review, you still must exhaust your administrative remedies, which includes filing a motion to overturn in accordance with the previous paragraphs.

Individual members of the public may seek further information by calling the TCEQ Office of Public Assistance, toll free, at 1-800-687-4040.

Sincerely

aDonna Castañuela

Chief Clerk

LDC/er

cc: Blas Coy, TCEQ Public Interest Counsel (MC 103) via electronic mail

Bryan W. Shaw, Ph.D., Chairman
Buddy Garcia, Commissioner
Carlos Rubinstein, Commissioner
Mark R. Vickery, P.G., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution
July 22, 2010

Mr. Martin Rochelle Lloyd, Gosselink, Rochelle & Townsend, P.C. 816 Congress Avenue, Suite 1900 Austin, Texas 78701 **CERTIFIED MAIL**

RE:

San Jacinto River Authority and the City of Houston

ADJ 4963, CN600644595, CN600128995, RN103974663, RN103974457

Certificate of Adjudication No. 10-4963A

Texas Water Code §11.122

West Fork San Jacinto River, San Jacinto River Basin

Harris and Montgomery Counties

Dear Mr. Rochelle:

Enclosed is a certified copy of the above referenced document.

The applicants, San Jacinto River Authority and the City of Houston, are instructed to ensure that the official record of this water right is filed with the County Clerks of the counties in which the appropriation is to be made.

The applicants are responsible for making payment arrangements with the Harris and Montgomery County Clerk's Offices for filing their documents in the official records. Additional certified copies are enclosed for the purpose of filing with the appropriate County Clerks.

As proof of filing, please ensure that the enclosed cards are completed by the Harris and Montgomery County Clerk's Offices and returned to the Water Rights Permitting & Availability Section (MC 160), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087.

This action is taken under the authority delegated by the Executive Director of the Texas Commission on Environmental Quality.

Should you have questions, please contact Ms. Tracie Donnelly of the Texas Commission on Environmental Quality's Water Rights Permitting & Availability Section at (512) 239-0083, or if by correspondence, include MC 160 in the letterhead address below.

Sincerely,

Linda Brookins, Division Director

Water Supply Division

LB/td

Enclosures

TEXAS COMMISSION ON ENVIRONMENTAL QUA



I hereby certify that this is a true and correct copy of a Texas Commission on Environmental Quality document, which is filed in the permanent records of the Commission. Given under my hand and the seal of office on

AMENDMENT TO A

CERTIFICATE OF ADJUDICATIO (about Castanuela, Chief Clerk Castanuela, Chief Clerk Castanuela, Chief Clerk Castanuela, Chief Clerk Castanuela, Chief Clerk

CERTIFICATE NO. 10-4963A

TYPE § 11.122

Owners:

San Jacinto River Authority

Addresses:

P.O. Box 329

Conroe, Texas 77305

City of Houston

P.O. Box 1562

Houston, Texas 77007

Filed:

April 29, 2010

Granted:

'JUL 2 0 2010

Purpose:

Industrial, Agricultural,

Counties:

Harris, Montgomery

Municipal, Mining

Watercourse: West Fork San Jacinto,

Watershed:

San Jacinto River Basin

tributary of San Jacinto River

WHEREAS, Certificate of Adjudication No. 10-4963 (Certificate) authorizes the San Jacinto River Authority and the City of Houston (Owners) to maintain an existing dam and reservoir (Lake Conroe) on the West Fork San Jacinto River, San Jacinto River Basin and to impound therein not to exceed 430,260 acre-feet of water for recreational purposes in Montgomery County; and

WHEREAS, Owners are also authorized to divert or release and use not to exceed 100,000 acre-feet of water per year from the perimeter of Lake Conroe at a maximum diversion rate of 700 cfs (315,000 gpm) as follows: 66,000 acre-feet for municipal purposes, 28,500 acrefeet for industrial purposes, and 5,500 acre-feet for mining purposes; and

WHEREAS, Owners are also authorized to use the bed and banks of the West Fork San Jacinto River to convey all or any part of the 100,000 acre-feet of water downstream to Lake Houston in Harris County; and

WHEREAS, the priority dates for this right are January 12, 1959 for the impoundment of 380,430 acre-feet of water and the diversion and use of the 100,000 acre-feet of water, and June 28, 1965 for the impoundment of an additional 49,830 acre-feet of water, and

WHEREAS, the Certificate contains Special Conditions; and

WHEREAS, Owners seek an amendment to Certificate of Adiudication No. 10-4963 to add multi-use (municipal, industrial, mining, and agricultural) to the 100,000 acre-feet of water currently authorized for diversion; and

WHEREAS, the Texas Commission on Environmental Quality (Commission) finds that jurisdiction over the application is established; and

WHEREAS, no requests for a contested case hearing were received for this application; and

WHEREAS, the Commission has complied with the requirements of the Texas Water Code and Rules of the Texas Commission on Environmental Quality in issuing this amendment;

NOW, THEREFORE, this amendment to Certificate of Adjudication No. 10-4963, designated Certificate of Adjudication No. 10-4963A, is issued to the San Jacinto River Authority and the City of Houston, subject to the following terms and conditions:

1. USE

- A. In lieu of the previous authorization to divert or release and use not to exceed 100,000 acre-feet of water per year for municipal purposes (66,000 acre-feet), industrial purposes (28,500 acre-feet), and mining purposes (5,500 acre-feet), Owners are now authorized to divert or release and use not to exceed 100,000 acre-feet of water per year for municipal, industrial, mining, and agricultural purposes.
- B. Any water diverted or released for agricultural purposes pursuant to Use paragraph 1.A. shall be utilized within the Owners' service areas in the San Jacinto River Basin.
- C. Owners are also authorized to use the impounded water for recreation purposes.

CONSERVATION

Owners shall implement water conservation plans that provide for the utilization of those practices, techniques, and technologies that reduce or maintain the consumption of water, prevent or reduce the loss or waste of water, maintain or improve the efficiency in the use of water, increase the recycling and reuse of water, or prevent the pollution of water, so that a water supply is made available for future or alternative uses. Such plans shall include a requirement that in every wholesale water contract entered into, on or after the effective date of this amendment, including any contract extension or renewal, that each successive wholesale customer develop and implement conservation measures. If the customer intends to resell the water, then the contract for resale of the water must have water conservation requirements so that each successive wholesale customer in the resale of the water be required to implement water conservation measures.

This amendment is issued subject to all terms, conditions and provisions contained in Certificate No. 10-4963 except as specifically amended herein.

This amendment is issued subject to all superior and senior water rights in the San Jacinto River Basin.

Owners agree to be bound by the terms, conditions and provisions contained herein and such agreement is a condition precedent to the granting of this amendment.

All other matters requested in the application which are not specifically granted by this amendment are denied.

This amendment is issued subject to the Rules of the Texas Commission on Environmental Quality and to the right of continuing supervision of State water resources exercised by the Commission.

For the Commission

ISSUED: JUL 2 0 2010

CERTIFICATE OF ADJUDICATION

CERTIFICATE OF ADJUDICATION: 10-4965 OWNER: City of Houston

Attn: Department of Public

Works

P. O. Box 1562

Houston, Texas 77007

COUNTY: Harris

PRIORITY DATES: May 7, 1940 and

February 26, 1944

WATERCOURSE: San Jacinto River

BASIN: San Jacinto River

WHEREAS, by final decree of the 155th Judicial District Court of Waller County, in Cause No. 10,023A, In Re: The Exceptions of the San Jacinto River Authority to the Adjudication of Water Rights in the San Jacinto River Basin dated December 1, 1986, a right was recognized under Permit 1323 and Permit 1411 authorizing the City of Houston to appropriate waters of the State of Texas as set forth below;

NOW, THEREFORE, this certificate of adjudication to appropriate waters of the State of Texas in the San Jacinto River Basin is issued to the City of Houston, subject to the following terms and conditions:

1. IMPOUNDMENT

Owner is authorized to maintain an existing dam and reservoir on the San Jacinto River (Lake Houston) and impound therein not to exceed 160,000 acre-feet of water. The dam is located in the Victor Blanco Grant, Abstract 2 and the William Wilson Survey, Abstract 838, Harris County, Texas.

2. USE

- A. Owner is authorized to divert and use not to exceed 168,000 acre-feet of water per annum from the aforesaid reservoir for industrial, municipal and irrigation purposes.
- B. Owner is also authorized to use the impounded water for recreation purposes.

3. DIVERSION

- A. Location From the perimeter of the aforesaid reservoir.
- B. Maximum rate: None specified. Owner may continue diligent development of its diversion rate as needed for industrial, municipal, and irrigation purposes.

ak

4. PRIORITY

- A. The time priority of owner's right is May 7, 1940 for the impoundment of 152,000 acre-feet of water, for recreation use and the diversion and use of the first 112,000 acre-feet of water.
- B. The time priority of owner's right is February 26, 1944 for the impoundment of an additional 8,000 acre-feet of water and the diversion and use of the remaining 56,000 acre-feet of water.

5. SPECIAL CONDITIONS

- A. Owner shall maintain a suitable outlet in the aforesaid dam authorized herein to allow the free passage of water that owner is not entitled to divert or impound.
- B. Owner is authorized to store water diverted from the Trinity River Basin in the aforesaid Reservoir for subsequent diversion and use.

The locations of pertinent features related to this certificate are shown on Page 15 of the San Jacinto River Basin Certificates of Adjudication Maps, copies of which are located in the offices of the Texas Water Commission, Austin, Texas.

This certificate of adjudication is issued subject to all terms, conditions and provisions in the final decree of the 155th Judicial District Court of Waller County, Texas, in Gause No. 10,023A, In Re: The Exceptions of the San Jacinto River Authority to the Adjudication of Water Rights in the San Jacinto River Basin dated December 1, 1986 and supersedes all rights of the owner asserted in that cause.

This certificate of adjudication is issued subject to senior and superior water rights in the San Jacinto River Basin.

Certificate of Adjudication 10-4965

This certificate of adjudication is issued subject to the Rules of the Texas Water Commission and its continuing right of supervision of State Water resources consistent with the public policy of the State as set forth in the Texas Water Code.

TEXAS WATER COMMISSION

Paul Hopkins, Chairman

DATE ISSUED:

FEB 25 1987

ATTEST:

7

7010318372



Texas Natural Resource Conservation Commission



AMENDMENT TO CERTIFICATE OF ADJUDICATION

APPLICATION NO. 10-4965A

Watercourse: San Jacinto River

CERTIFICATE NO. 10-4965A

TYPE: §11.122

OWNER:

City of Houston

Address:

P.O. Box 1562

Houston, Texas 77251-1562

Filed:

January 9, 2002

Granted:

OCT 3 1 2002

Purpose:

Municipal, Industrial, Irrigation,

County:

Harris

Recreation

Basins:

San Jacinto River Basin

WHEREAS, Certificate of Adjudication No. 10-4965, issued to the City of Houston, authorizes the owner to maintain a dam and reservoir on the San Jacinto River (Lake Houston) in Harris County, and to impound therein not to exceed 160,000 acre-feet of water for recreational purposes; and

WHEREAS, Certificate of Adjudication No. 10-4965 also authorizes the owner to divert and use not to exceed 168,000 acre-feet of water per annum for industrial, municipal, and irrigation purposes from the perimeter of the aforesaid reservoir, and

WHEREAS, the time priority of the owner's right is May 7, 1940 for the impoundment of 152,000 acre-feet of water for recreation use and the diversion and use of the first 112,000 acrefeet of water; and

WHEREAS, the time priority of the owner's right is February 26, 1944 for the impoundment of an additional 8,000 acre-feet of water and the diversion and use of the remaining 56,000 acre-feet of water; and

WHEREAS, pursuant to Texas Water Code § 11.122, the City of Houston, applicant, seeks to amend Certificate of Adjudication No. 10-4965, to authorize the use of 500 acre-feet of the original authorized 168,000 acre-feet for the additional use of recreation purposes, in addition to the currently authorized uses of municipal, industrial, and irrigation; and

WHEREAS, the City of Houston proposes to deliver water through the historic Camenters Bayou channel to improve water supply to Sheldon Reservoir; and

FROM (Espey Consultants, Inc.

FAX NO. :15123265723

Jun. 25 2003 10:47FM P2

WHEREAS, no new appropriation of State water is being requested; and

WHEREAS, the Texas Commission on Environmental Quality finds that jurisdiction over the application is established; and

WHEREAS, pursuant to 30 Texas Administrative Code § 295.158 (c) the application to amend this Certificate does not require mailed and published notice; and

WHEREAS, no person protested the granting of this application; and

WHEREAS, the Commission has complied with the requirements of the Texas Water Code and Rules of the Texas Commission on Environmental Quality in issuing this amendment;

NOW, THEREFORE, this amendment to Certificate of Adjudication No. 10-4965, designated as Certificate of Adjudication No. 10-4965A, is issued to the City of Houston subject to the following conditions:

1. USE ·

In lieu of the previous authorization to divert and use not to exceed 168,000 screfeet of water per annum for industrial, municipal, and irrigation purposes, owner is now authorized to divert and use not to exceed 167,500 scre-feet of water per annum for municipal, industrial, and irrigation purposes, and not to exceed 500 acre-feet of water per annum for industrial, municipal, irrigation, and recreational purposes, from the perimeter of Lake Houston.

2. TIME PRIORITY

The time priority of the 500 acre-feet for industrial, municipal, irrigation, and recreational purposes is February 26, 1944.

3. CONSERVATION

Owners shall implement water conservation plans that provide for the utilization of those practices, techniques, and technologies that reduce or maintain the consumption of water, prevent or reduce the loss or waste of water, maintain or improve the efficiency in the use of water, increase the recycling and reuse of water, or prevent the pollution of water, so that a water supply is made available for future or alternative uses.

This amendment to Certificate of Adjudication 10-4965 is issued subject to all superior and senior water rights in the San Jacinto River Basin.

This amendment is issued subject to all terms, conditions and provisions of Certificate of Adjudication 10-4965, except as specifically amended herein.

PAGE

· fRom 'Espay Consultants, Inc.

FAX NO. :15123265723

Jun. 25 2003 10:47AM P3

Certificate owner agrees to be bound by the terms, conditions, and provisions contained herein and such agreement is a condition precedent to the granting of this amondment.

All other matters requested in the application which are not specifically granted by this amendment are denied.

This amendment is issued subject to the Rules of the Texas Commission on Environmental Quality and to the right of continuing supervision of State water resources exercised by the Commission.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

For the Commission

Date Issued: OCT 3 1 2002

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



WATER USE PERMIT

THE STATE OF TEXAS

I hereby certify that this is a true and correct copy of a Texas Commission on Environmental Quality document, which is filed in the permanent records of the Commission Given under my hand and the seel of office on

Colone (DEC 10 2008

Labonna Castanuela, Chief Clerk.

TYPE: §§11.121&11.085(v)

PERMIT NO. 5807

Permittees:

San Jacinto River Authority

Address:

P.O. Box 329

Conroe, Texas 77305

City of Houston

(Department of Public Works

and Engineering)

611 Walker, 21st Floor

Houston, Texas 77002

Filed:

June 19, 2003

Granted:

DEC 03 2008

Purpose:

Municipal and Industrial

Counties:

Harris, Fort Bend, Galveston,

Brazoria, Chambers, and

Montgomery

Watercourse:

San Jacinto River

Watershed:

San Jacinto River Basin, Trinity-San Jacinto Coastal Basin, Trinity River Basin, and

San Jacinto-Brazos Coastal

Basin

WHEREAS, Applicants seek to authorize the diversion and use of not to exceed 32,500 acre-feet of water per year out of the unappropriated firm yield of Lake Houston on the San Jacinto River, San Jacinto River Basin; the use of the requested water for municipal and industrial purposes; a maximum combined diversion rate of 465.69 cfs (209,000 gpm); the diversion of water from any point on the perimeter of Lake Houston including the diversion points already authorized for the San Jacinto River Authority (SJRA) and the City of Houston (City) by Certificates of Adjudication Nos. 10-4964 and 10-4965; the San Jacinto River Authority to use the water within the SJRA's service area within Montgomery and Harris Counties in the San Jacinto River Basin and in the portion of the SJRA's service area in Harris County that is within the Trinity-San Jacinto Coastal Basin under TWC §11.085(v)(3) and (4); and the City of Houston to use the water within the City's service area within Harris, Fort Bend, and Galveston Counties in the San Jacinto River Basin and in the City's service area within the portions of Brazoria and Chambers Counties that are in the Trinity-San Jacinto Coastal Basin, Trinity River Basin, and San Jacinto-Brazos Coastal Basin under TWC§11.085(v)(3) and (4); and

WHEREAS, the City owns Lake Houston which is authorized by Certificate of Adjudication No. 10-4965; and

WHEREAS, water which is diverted, but not consumed by SJRA and the City may be returned within the SJRA and the City's service area; and

WHEREAS, this application is subject to the Texas Coastal Management Program (CMP) and must be consistent with the CMP goals and policies; and

WHEREAS, the Texas Commission on Environmental Quality (TCEQ or Commission) finds that jurisdiction over the application is established; and

WHEREAS, the Executive Director has determined that the requested amount, 32,500 acre-feet, is not available on a firm basis, but found a reduced amount of 28,200 acre-feet on a firm basis; and

WHEREAS, the Executive Director recommends that special conditions be included in the permit; and

WHEREAS, the TCEQ finds that the issuance of the permit is consistent with the goals and policies of the Texas CMP; and

WHEREAS, one request for a contested case hearing was received and subsequently withdrawn; and

WHEREAS, the Commission has complied with the requirements of the Texas Water Code and Rules of the Texas Commission on Environmental Quality in issuing this permit;

NOW, THEREFORE, Water Use Permit No. 5807 is issued to San Jacinto River Authority and City of Houston, subject to the following terms and conditions:

1. USE

101

- A. Permittees are authorized to divert and use not to exceed 28,200 acre-feet of water per year of the unappropriated firm yield of Lake Houston on the San Jacinto River, San Jacinto River Basin for municipal and industrial purposes. Of this water, 14,100 acre-feet of water per year shall be available for diversion and use by SJRA and 14,100 acre-feet of water per year shall be available for diversion and use by the City.
- B. SJRA is authorized to use the water appropriated to it hereunder within the SJRA's service area within Montgomery and Harris Counties in the San Jacinto River Basin and in that portion of the SJRA's service area in Harris County that is within the Trinity-San Jacinto Coastal Basin pursuant to TWC §11.085(v)(3) and (4).
- C. The City is authorized to use the water appropriated to it hereunder within the City's service area within Harris, Fort Bend, and Galveston Counties in the San Jacinto River Basin and in portions of the City's service area in Brazoria and Chambers Counties that are within the Trinity-San Jacinto Coastal Basin, Trinity River Basin, and San Jacinto-Brazos Coastal Basin pursuant to TWC §11.085(v)(3) and (4).

2. DIVERSION

Permittees are authorized to divert the water authorized herein from any point on the perimeter of Lake Houston, including the diversion points authorized for the SJRA and the City by Certificates of Adjudication Nos. 10-4964 and 10-4965, at a maximum combined diversion rate of 465.69 cfs (209,000 gpm).

TIME PRIORITY

The time priority for this authorization is June 19, 2003.

4. CONSERVATION

Permittees shall implement water conservation plans that provide for the utilization of those practices, techniques, and technologies that reduce or maintain the consumption of water, prevent or reduce the loss or waste of water, maintain or improve the efficiency in the use of water, increase the recycling and reuse of water, or prevent the pollution of water, so that a water supply is made available for future or alternative uses. Such plans shall include a requirement that in every wholesale water contract entered into, on or after the effective date of this amendment, including any contract extension or renewal, that each successive wholesale customer develop and implement conservation measures. If the customer intends to resell the water, then the contract for resale of the water must have water conservation requirements so that each successive wholesale customer in the resale of the water be required to implement water conservation measures.

SPECIAL CONDITIONS

- A. Permittees are prohibited from exercising a priority call on water rights with priority dates between those of the Permittees' senior priority dates and the priority date of this permit for the purpose of refilling drawdowns of Lake Houston storage caused by diversion of the additional firm yield authorized by this permit.
- В. Permittees shall only divert and use water pursuant to Paragraphs 1. USE and 2. DIVERSION in accordance with the most recent approved Lake Houston Reservoir Accounting Plan. Permittees shall maintain the accounting plan in electronic format and make the data available to the Executive Director and the public upon request. Any modifications to the Lake Houston Reservoir Accounting Plan shall be approved by the Executive Director, Any modification of the plan that changes the permit terms must be in the form of an amendment to the permit. Should Permittees fail to maintain the accounting plan or notify the Executive Director of any modifications to the plan, Permittees shall immediately cease diversion pursuant to Paragraph 2, DIVERSION, and either apply to amend the permit, or voluntarily forfeit this permit. If Permittees fail to amend the accounting plan or forfeit this permit, the TCEQ may begin proceedings to cancel the permit. The Commission shall be notified immediately by Permittees upon modification of the accounting plan and provided with copies of the appropriate documents effecting such changes.

- C. Should the rating curve for Lake Houston be updated by USGS/TWDB to reflect revised information and data, the streamflow restrictions listed in Special Condition D. may be adjusted. Should the rating curve, or other elements of the accounting plan, such as the streamflow restrictions be adjusted, Permittees shall submit revisions to the most recent approved Lake Houston Reservoir Accounting Plan to the Executive Director for approval.
- D. In order to provide sufficient flow for instream uses of the San Jacinto River, diversion from Lake Houston shall be limited to times when there is no flow over the Lake Houston dam or when streamflow at USGS Gage 08072000 equals or exceeds the following values:

Recommended Monthly Flows (cfs)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
791	930	752	658	542	658	297	49	89	42	198	615

This special condition is subject to adjustment by the commission if the commission determines, through an expedited public review process, that such adjustment is appropriate to achieve compliance with applicable environmental flow standards adopted pursuant to Texas Water Code § 11.1471. Any adjustment shall be made in accordance with the provisions of Texas Water Code § 11.147(e-1).

This permit is issued subject to all superior and senior water rights in the San Jacinto River Basin.

Permittees agree to be bound by the terms, conditions and provisions contained herein and such agreement is a condition precedent to the granting of this permit.

All other matters requested in the application which are not specifically granted by this permit are denied.

This permit is issued subject to the Rules of the Texas Commission on Environmental Quality and to the right of continuing supervision of state water resources exercised by the Commission.

For the Commission

ISSUED: DEC 0 3 2008

Bryan W. Shaw, Ph.D., Chairman Buddy Garcia, Commissioner Carlos Rubinstein, Commissioner Mark R. Vickery, P.G., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution September 25, 2009

Martin C. Rochelle Lloyd Gosselink, Attorneys at Law 816 Congress Avenue Austin, Texas 78701

RE:

San Jacinto River Authority and City of Houston WRPERM 5808
CN 600644595, CN 600128995, RN 104067236, RN 104067277
Water Use Permit No. 5808
TWC §§11.121 & 11.085 (v), Requiring Mailed and Published Notice Lake Houston on the San Jacinto River, San Jacinto River Basin Harris, Montgomery, Fort Bend, Brazoria, and Galveston Counties

Dear Mr. Rochelle:

Enclosed is a certified copy of the above referenced document.

The applicants, San Jacinto River Authority and the City of Houston are instructed to ensure that the official record of this water right is filed with the County Clerk of the county in which the appropriation is to be made.

The applicant is responsible for making payment arrangements with the Harris County Clerk's Office for filing its documents in the official records. An additional certified copy is enclosed for the purpose of filing with the appropriate County Clerk.

As proof of filing, please ensure that the enclosed card is completed by the Harris County Clerk's Office and returned to the Water Rights Permitting & Availability Section (MC 160), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087.

This action is taken under the authority delegated by the Executive Director of the Texas Commission on Environmental Quality.

Should you have questions, please contact Mr. Esteban (Steve) Ramos of the Texas Commission on Environmental Quality's Water Rights Permitting & Availability Section at (512) 239-6538, or if by correspondence, include MC 160 in the letterhead address below.

Sincerely,

Todd Chenoweth, Director Water Supply Division

TC/er

Enclosures

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



WATER USE PERMIT

PERMIT NO. 5808

TYPE: §§11.121&11.085(v)

Permittees:

San Jacinto River Authority

Address:

P.O. Box 329

Conroe, Texas 77305

City of Houston

(Department of Public Works

and Engineering)

611 Walker, 21st floor

Houston, Texas 77002

Filed:

June 19, 2003

Granted:

SEP 22 Z009

Purpose:

Municipal and Industrial

Counties:

Harris, Fort Bend, Galveston,

Brazoria, Chambers, and

Montgomery

Watercourse:

San Jacinto River

Watershed:

San Jacinto River Basin,

Trinity-San Jacinto Coastal Basin, Trinity River Basin, and San Jacinto-Brazos Coastal

Basin

WHEREAS, Applicants seek to authorize the diversion and use of not to exceed 80,000 acre-feet of run of the river water per year from Lake Houston on the San Jacinto River, San Jacinto River Basin; the use of the requested water for municipal and industrial purposes; a maximum combined diversion rate of 465.69 cfs (209,000 gpm); the diversion of water from any point on the perimeter of Lake Houston including the diversion points already authorized for the San Jacinto River Authority (SJRA) and the City of Houston (City) by Certificate of Adjudication Nos. 10-4964 & 10-4965; the SJRA to use the water within the SJRA's service area within Montgomery and Harris Counties in the San Jacinto River Basin and in the part of the SJRA's service area in Harris County that is within the Trinity-San Jacinto Coastal Basin Pursuant TWC §11.085(v)(3) and (4); and the City to use the water within the City's service area within Harris, Fort Bend, and Galveston Counties in the San Jacinto River Basin and in the City's service area in the portions of Brazoria and Chambers Counties that are within the Trinity-San Jacinto Coastal Basin, Trinity River Basin, and San Jacinto-Brazos Coastal Basin Pursuant TWC§11.085(v)(3) and (4); and

WHEREAS, the City owns Lake Houston which is authorized by Certificate of Adjudication No. 10-4965; and

WHEREAS, water which is diverted, but not consumed by SJRA and the City may be returned within the SJRA and the City's service area; and

WHEREAS, this application is subject to the Texas Coastal Management Program (CMP) and must be consistent with the CMP goals and policies; and

WHEREAS, the Texas Commission on Environmental Quality (TCEQ or Commission) finds that jurisdiction over the application is established; and

WHEREAS, Applicant has provided and the Executive Director has approved the Lake Houston Reservoir Accounting Plan; and

WHEREAS, the Executive Director recommends that special conditions be included in the permit; and

WHEREAS, the TCEQ finds that the issuance of the permit is consistent with the goals and policies of the Texas CMP; and

WHEREAS, two hearing requests were received and were subsequently withdrawn; and

WHEREAS, the Commission has complied with the requirements of the Texas Water Code and Rules of the TCEQ in issuing this permit;

NOW, THEREFORE, this Water Use Permit No. 5808 is issued to SJRA and the City (Permittees), subject to the following terms and conditions:

1. USE

- A. Permittees are authorized to divert and use not to exceed 80,000 acre-feet of run of the river water per year from Lake Houston on the San Jacinto River, San Jacinto River Basin for municipal and industrial purposes. Of this water, 40,000 acre-feet of water per year shall be available for diversion and use by SJRA and 40,000 acre-feet of water per year shall be available for diversion and use by the City.
- B. SJRA is authorized to use the water appropriated to it herein within SJRA's service area within Montgomery and Harris Counties in the San Jacinto River Basin and in the part of the SJRA's service area in Harris County that is within the Trinity-San Jacinto Coastal Basin pursuant to TWC §11.085(v)(3) and (4).
- C. The City is authorized to use the water appropriated to it herein within the City's service area within Harris, Fort Bend, and Galveston Counties in the San Jacinto River Basin and in the City's service area in the portions of Brazoria and Chambers Counties that are within the Trinity-San Jacinto Coastal Basin, Trinity River Basin, and San Jacinto-Brazos Coastal Basin pursuant to TWC§11.085(v)(3) and (4).

DIVERSION

A. Permittees are authorized to divert the water authorized herein from any point on the perimeter of Lake Houston, including the diversion points already authorized for the SJRA and the City by Certificate of Adjudication Nos. 10-4964 & 10-4965.

B. Permittees are authorized to divert the water authorized herein from any point on the perimeter of Lake Houston at a maximum combined diversion rate of 465.69 cfs (209,000 gpm).

TIME PRIORITY

The time priority for this authorization is June 19, 2003.

4. CONSERVATION

Permittees shall implement water conservation plans that provide for the utilization of reasonable practices, techniques, and technologies, for each category of authorized use, that reduce on a per-unit basis the consumption of water, prevent or reduce the loss or waste of water, improve the efficiency in the use of water, increase the recycling and reuse of water, and prevent the pollution of water, so that a water supply is made available for future or alternative uses. The practices, techniques, and technologies used shall be designed to achieve a level of efficiency of use for each category of authorized use that is equal to or greater than the level provided for in Permittees' most recent water conservation plans on file with the Commission as of the date of the issuance of this permit. Such plans shall include a requirement in every wholesale water contract entered into, on or after the effective date of this amendment, including any contract extension or renewal, that each successive wholesale customer develop and implement conservation measures meeting the requirements of this provision. If the customer intends to resell the water, then the contract for resale of the water must have water conservation requirements so that each successive wholesale customer in the resale of the water is required to implement water conservation measures meeting the requirements of this provision.

5. SPECIAL CONDITIONS

- A. Permittees shall only divert and use water authorized by this permit in accordance with the most recently approved Lake Houston Reservoir Accounting Plan. Permittees shall maintain the plan in electronic format and make the data available to the Executive Director and the public upon request. Any modifications to the Lake Houston Reservoir Accounting Plan shall be approved by the Executive Director. Any modification to the accounting plan that changes the permit terms must be in the form of an amendment to the permit. Should Permittees fail to maintain the accounting plan or notify the Executive Director of any modifications to the plan, Permittees shall immediately cease diversion and use of water pursuant to Paragraph 1. USE and Paragraph 3. DIVERSION, and either apply to amend the permit, or voluntarily forfeit this permit. If Permittee fails to amend the accounting plan or forfeit this permit, the Commission may begin proceedings to cancel the permit. The Commission shall be notified immediately by the Permittees upon modification of the accounting plan and provided with copies of the appropriate documents effectuating such changes.
- B. Diversions are only authorized when there are inflows to Lake Houston that are not accounted for as releases from Lake Conroe or groundwater based return flows authorized by Permit 5809.

C. In order to provide sufficient flow for instream uses of the San Jacinto River, diversions from Lake Houston should be limited to times when streamflow at USGS Gage 08072000 equals or exceeds the following values:

Recommended Monthly Flows (cfs)

ĺ	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
-	791	930	752	658	542	658	:297	175	175	175	198	615

This special condition is subject to adjustment by the Commission if the Commission determines, through an expedited public review process, that such adjustment is appropriate to achieve compliance with applicable environmental flow standards adopted pursuant to Texas Water Code § 11.1471. Any adjustment shall be made in accordance with the provisions of Texas Water Code § 11.147(e-1).

D. Should the rating curve for Lake Houston be updated by USGS/TWDB to reflect revised information and data, the streamflow restrictions listed in Special Condition C may be adjusted. Should the rating curve, or other elements of the accounting plan, such as the streamflow restrictions listed in Special Condition C
be adjusted, Permittees shall submit revisions to the most recent approved Lake Houston Reservoir Accounting Plan to the Executive Director for approval.

This permit is issued subject to all superior and senior water rights in the San Jacinto River Basin.

Permittees agree to be bound by the terms, conditions, and provisions contained herein and such agreement is a condition precedent to the granting of this permit.

All other matters requested in the application which are not specifically granted by this permit are denied.

This permit is issued subject to the Rules of the Texas Commission on Environmental Quality and to the right of continuing supervision of State water resources exercised by the Commission.

For the Commission

ISSUED: **SEP 22 2009**

Description of Land or Easement Permit	Entity from which the permit or right must be acquired	Acquired by lease or full ownership	Expected acquisition date	To Be Funded by TWDB (Yes/No)	
Temporary Construction Easement 0.2782	Clearlake Healthcare Realty, LLC	Full Ownership	4/20/2018	Yes	
Water Line Easement	Harris County Flood Control District	Full Ownership	5/15/2018	Yes	
Water Line Easement 0.4045	Harris County Flood Control District	Full Ownership	6/1/2018	Yes	
Temporary Construction Easement 0.5242	Fall Creek Investors No. 2, L.P.	Full Ownership	7/15/2018	Yes	
Water Line Easement 0.3592	Lisburn Company	Full Ownership	7/15/2018	Yes	
Water Line Easement 1,1337	14950 Meadows, LP	Full Ownership	8/5/2018	Yes	
Water Line Easement 0.6411	Hydril Company, L.P.	Full Ownership	11/10/2018	Yes	
Water Line Easement 0.6411	Harris County Flood Control District	Full Ownership	11/10/2018	Yes	
Water Line Easement 0.0918	Hydril Company, L.P.	Full Ownership	11/10/2018	Yes	
Water Line Easement 0.2693	Allen Russell	Full Ownership	11/15/2018	Yes	
Water Line Easement 0.1244	GNB Corporation	Full Ownership	3/15/2019	Yes	
Water Line Easement 0.31	GNB Corporation	Full Ownership	3/15/2019	Yes	
Water Line Easement 0.091	Jack Abercia	Full Ownership	3/15/2019	Yes	
Water Line Easement 0.216	Sadegh Irannexhad	Full Ownership	3/15/2019	Yes	
Water Line Easement 1.0111	VSD, LLC	Full Ownership	4/1/2019	Yes	
Water Line Easement 1.1971	Soundstar Aldine, LLC	Full Ownership	4/23/2019	Yes	
Water Line Easement 0.3448	Aldine Independent School District	Full Ownership	4/23/2019	Yes	
Water Line Easement 1,1971	Soundstar Aldine, LLC	Full Ownership	4/23/2019	Yes	
Water Line Easement 0.4401	MCI Worldcom Network Services, Inc.	Full Ownership	4/23/2019	Yes	
Water Line Easement 0.2858	Pari, LLC	Full Ownership	4/23/2019	Yes	
Water Line Easement 0.2804	Thind Lodging, LLC	Full Ownership	4/23/2019	Yes	
Water Line Easement 0.4762	Liberty Property Limited Partnership	Full Ownership	4/23/2019	Yes	
Water Line Easement 0.4715	Agellan Commercial Reit U.S. LP	Full Ownership	4/23/2019	Yes	
Water Line Easement	Northgreen Intercontinental	Full Ownership	4/23/2019	Yes	
0.3141 Water Line Easement	Rankin Road Investments LLC	Full Ownership	4/23/2019	Yes	
0.2625 Water Line Easement	Rankin Road Investments LLC	Full Ownership	4/23/2019	Yes	
0.8816 Water Line Easement	N.K.A. Grand Associates	Full Ownership	4/25/2019	Yes	
0.0839 Water Line Easement	H. Gene Broiwn & Associates	Full Ownership	4/25/2019	Yes	
0.2324 Water Line Easement	Cynthia Leftwich	Full Ownership	4/25/2019	Yes	
0.2824 Water Line Easement	Centerpoint Energy	Full Ownership	4/25/2019	Yes	
Center Line 150' Water Line Easement 0.1761	The Jag/Alex Trust	Full Ownership	4/25/2019	Yes	

Description of Land or Easement Permit	Entity from which the permit or right must be acquired	Acquired by lease or full ownership	Expected acquisition date	To Be Funded by TWDB (Yes/No)	
Water Line Easement 0.0861	Samuel Narvaez Ibarra	Full Ownership	4/25/2019	Yes	
Water Line Easement 0.7578	El Dorado Capital, Inc.	Full Ownership	4/25/2019	Yes	
Water Line Easement 0.7691	I-40 Group	Full Ownership	4/25/2019	Yes	
Water Line Easement 0.5919	Northbelt-Hardy Joint Venutre	Full Ownership	4/25/2019	Yes	
Water Line Easement 0.5895	USF Propco I, LLC	Full Ownership	5/15/2019	Yes	
Water Line Easement 0.06	Deer Creek, LLC	Full Ownership	6/1/2019	Yes	
Water Line Easement 0.075	City of Houston & GBN Corporation	Full Ownership	6/1/2019	Yes	
Water Line Easement 0.12	Greenspoint Business Owners Association, Inc.	Full Ownership	6/1/2019	Yes	
Water Line Easement 0.153	Greenspoint A, LLC	Full Ownership	6/1/2019	Yes	
Temporary Construction Easement 0.0462	Harris County Flood Control District	Full Ownership	10/15/2019	Yes	
Temporary Construction Easement 0.0363	Harris County Flood Control District	Full Ownership	10/15/2019	Yes	
Temporary Construction Easement 0.3176	Milestone Hotels, LLC	Full Ownership	12/31/2019	Yes	
Temporary Construction Easement 0,1028	Regent Suites, LLC	Full Ownership	12/31/2019	Yes	
Temporary Construction Easement 0.2642	GVJ Investments, Ltd	Full Ownership	12/31/2019	Yes	
Temporary Construction Easement 0.1792	TMQ Hospitality Group, Inc	Full Ownership	12/31/2019	Yes	
Temporary Construction Easement 0.061	Greenspoint Airport, L.P.	Full Ownership	12/31/2019	Yes	
Water Line Easement 0.466	Aldine Bender Property, LLC	Full Ownership	12/31/2019	Yes	
Water Line Easement 0.176	Beltway 8 & Hardy, L.P.	Full Ownership	12/31/2019	Yes	
Water Line Easement 0.744	Beltway 8 & Hardy, L.P.	Full Ownership	12/31/2019	Yes	
Water Line Easement 0.117	Intown Suites Houston Intercontinental, LLC	Full Ownership	12/31/2019	Yes	
Water Line Easement 0.251	Joseph and Jolly Corporation	Full Ownership	12/31/2019	Yes	
Water Line Easement 0.259	YPI North Belt Portfolio, LLC	Full Ownership	12/31/2019	Yes	
Water Line Easement 0.139	Aldine Bender Property, LLC	Full Ownership	12/31/2019	Yes	
Water Line Easement 1.084	Aldine Bender Property, LLC	Full Ownership	12/31/2019	Yes	
Water Line Easement 0.195	GBDS Investments, LTD	Full Ownership	12/31/2019	Yes	
Water Line Easement 0.982	Rolling Frito-Lay Sales, LP	Full Ownership	12/31/2019	Yes	
Water Line Easement 0.137	Mitchell Resorts, Inc.	Full Ownership	12/31/2019	Yes	
Water Line Easement 0.125	Mitchell Resorts, Inc.	Full Ownership	12/31/2019	Yes	
Water Line Easement 0.317	Imperial Valley Municipal District	Full Ownership	12/31/2019	Yes	
Water Line Easement 1.309	Shomer VI, LTD	Full Ownership	12/31/2019	Yes	
Temporary Construction Easement 0.9861	Aldine Independent School District	Full Ownership	12/31/2019	Yes	

Description of Land or Easement Permit	Entity from which the permit or right must be acquired	Acquired by lease or full ownership	Expected acquisition date	To Be Funded by TWDB (Yes/No)
Temporary Construction Easement 0.8608	Imperial Valley Municipal District	Full Ownership	12/31/2019	Yes
Temporary Construction Easement 0.8878	Aldine Bender Property, LLC	Full Ownership	12/31/2019	Yes
Temporary Construction Easement 0.3679	YPI North Belt Portfolio, LLC	Full Ownership	12/31/2019	Yes
Temporary Construction Easement 0.2302	Joseph and Jolly Corporation	Full Ownership	12/31/2019	Yes
Temporary Construction Easement 0.1254	Harris County, Texas	Full Ownership	12/31/2019	Yes
Temporary Construction Easement 0.833	Sunoco Pipeline L.P.	Full Ownership	12/31/2019	Yes

Texas Water Development Board

P.O. Box 13231, 1700 N. Congress Ave. Austin, TX 78711-3231, www.twdb.texas.gov Phone (512) 463-7847, Fax (512) 475-2053

MEMORANDUM

TO;

File

FROM:

T. Clay Schultz, Ph.D., Director, Regional Water Project Development

DATE:

December 7, 2016

SUBJECT:

City of Houston, Harris County Environmental Determination

Second Source Phase I - Line No. S-00900-0140

State Water Implementation Fund for Texas: Project 51021 (LM15021, LM15022, LM15023, LM16021, LM16022, LM16023, LM16038, LM17022, LM17023, LM17038, LM18021, LM18022, LM18023, LM18038, LM19021.

LM19022, LM19023, LM20021, LM20022, LM20023)

The attached memorandum contains the staff's views regarding the environmental soundness of the pipeline components of the Second Source Phase I Line No. S-00900-0140 in Harris County, Texas. This project will utilize planning, acquisition, design, and construction funds from loans LM15021, LM15022, LM15023, LM16021, LM16022, LM16023, LM16038, LM17022, LM17023, LM17038, LM18021, LM18022, LM18023, LM18038, LM19021, LM19022, LM19023, LM20021, LM20022, and LM20023 from the State Water Implementation Fund for Texas (SWIFT). The Texas Water Development Board (TWDB) committed these loans on July 23, 2015, in the original amount of \$378,172,356. Since the commitment, the City and NFBWA have transferred funds between TWDB funded projects, which changed the total commitment amount for this project to \$344,085,000.

This project is jointly funded by the City of Houston (City), the Central Harris Regional Water Authority (CHCRWA), and the North Harris County Regional Water Authority (NHCRWA). The City closed loan LM15022 on December 3, 2015 and loan LM16022 on November 15, 2016. CHCRWA closed loan LM15021 on December 11, 2015 and loan LM16021 on November 14, 2016. NHCRWA closed loan LM15023 on December 11, 2015 and loans LM16023 and LM16038 on November 15, 2016. The City, CHCRWA, and NHCRWA intend to close on their remaining loans for this project in the future.

This proposed project is part of a group of construction packages comprising the Northeast waterline. The Northeast waterline will provide water for co-participants and additional

Our Mission

Board Members

To provide leadership, information, education, and support for planning, financial assistance, and outreach for the conservation and responsible development of water for Texas

Bech Bruun, Chairman | Kathleen Jackson, Board Member | Peter Lake, Board Member

Jeff Walker, Executive Administrator

capacity for the City. Although the loan is intended to fund a number of project components, this Environmental Determination solely pertains to the installation of a 108-inch water line along City easements from East of Bellows Fall Lane to Smith Road. Specifically, this section of the Northeast waterline consists of approximately 10,600 linear feet of 108-inch diameter water line. The project includes one interconnect to an existing 84-inch water line.

Based on staff's environmental review, TWDB staff has determined that no significant adverse environmental impacts should result from the proposed project discussed in the attached Environmental Determination. As required by 31 Texas Administrative Code § 363.14, full consideration has been given to the views and comments of the requisite regulatory agencies. Based on this review, the following conditions have been developed in order to ensure that this TWDB funded project is environmentally sound and will not have any adverse impacts on the quality of the human environment:

- As per an agreement with the U.S. Army Corps of Engineers (Project No. SWG-2016-00556) to ensure compliance with Section 404 of the Clean Water Act, the City of Houston agrees to comply with all terms and conditions of Nationwide Permit 12 for utility line activities;
- Standard emergency condition for the discovery of cultural resources, and;
- Standard emergency condition for the discovery of threatened and endangered species.

With the addition of these conditions, the specified project elements above are environmentally sound and design funds may be released once all other requirements are satisfied.

Enclosure

Texas Water Development Board

P.O. Box 13231, 1700 N. Congress Ave. Austin, TX 78711-3231, www.twdb.texas.gov Phone (512) 463-7847, Fax (512) 475-2053

TO:

T. Clay Schultz, Ph.D., Director, Regional Water Project Development

THROUGH:

Nancy Richards, Manager, Team 4 – East (Regions H and I)

FROM:

Jean Devlin, Environmental Reviewer, Team 4 (Regions H and I)

DATE:

December 7, 2016

SUBJECT:

Environmental Summary

Second Source Phase I - Line No. S-00900-0140

State Water Implementation Fund for Texas: Project 51021 (LM15021, LM15022, LM15023, LM16021, LM16022, LM16023, LM16038, LM17022, LM17023, LM17038, LM18021, LM18022, LM18023, LM18038, LM19021,

LM19022, LM19023, LM20021, LM20022, LM20023)

Pursuant to the environmental assessment requirements of Section § 363.14 of the Texas Water Development Board (TWDB) rules, TWDB staff has conducted a review of the Second Source Phase I – Line No. S-00900-0140 in Harris County, Texas. This project will utilize planning, acquisition, design, and construction funds from loans LM15021, LM15022, LM15023, LM16021, LM16022, LM16023, LM16038, LM17022, LM17023, LM17038, LM18021, LM18022, LM18023, LM18038, LM19021, LM19022, LM19023, LM20021, LM20022, and LM20023 from the State Water Implementation Fund for Texas (SWIFT). The Texas Water Development Board (TWDB) committed these loans on July 23, 2015, in the original amount of \$378,172,356. Since the commitment, the City and NFBWA have transferred funds between TWDB funded projects, which changed the total commitment amount for this project to \$344,085,000.

This project is jointly funded by the City of Houston (City), the Central Harris Regional Water Authority (CHCRWA), and the North Harris County Regional Water Authority (NHCRWA). The City closed loan LM15022 on December 3, 2015 and loan LM16022 on November 15, 2016. CHCRWA closed loan LM15021 on December 11, 2015 and loan LM16021 on November 14, 2016. NHCRWA closed loan LM15023 on December 11, 2015 and loans LM16023 and LM16038 on November 15, 2016. The City, CHCRWA, and NHCRWA intend to close on their remaining loans for this project in the future.

Purpose and Need¹

The City created the Surface Water Transmission Program (SWTP) in response to a mandate issued by the Harris-Galveston Subsidence District (HGSD) to decrease groundwater usage and consequently increase surface water usage. The goals of the SWTP are to increase surface water usage, decommission and minimize the use of groundwater pump stations, increase water system pressures, and address other large diameter waterline issues.

Project Description

This section of the Northeast waterline begins east of Bellows Fall Lane and follows North Sam Houston Parkway East heading west. The proposed water line travels south running parallel to Atrium Fall Creek apartments. The 108-inch diameter water line continues along the Fall Creek residential neighborhood then to the City's existing Wastewater Treatment Plant (WWTP) where the interconnection occurs. The water line continues west to Smith Road where it connects to water line WBS No. S-000900-0126.

Various utilities will be adjusted for the construction of the 108-inch diameter water line. The site will be regraded to handle the impacts of construction. Restoration of landscaping anticipated to be damaged from construction will be incorporated into the design. A gravel road will be re-constructed.

One easement has been acquired for construction of water line WBS No. S-000900-0140. A dedicated water line easement will be obtained in the City's WWTP. The proposed water line is in existing water line easements for the majority of the project. The total estimated project cost for this segment is \$31,000,000.

Reviews by Regulatory Agencies and Resulting Conditions

Lockwood, Andrews, and Newnam, Inc., (LAN) on behalf of the City, coordinated with the following federal and state regulatory agencies: Texas Parks and Wildlife Department (TPWD), Wildlife Division, Wildlife Habitat Assessment Program; U.S. Army Corps of Engineers (USACE), Galveston District; U.S. Fish and Wildlife Service (USFWS), Clearlake; and Texas Historical Commission (THC). Each agency was given an opportunity to review the Environmental Data Form. No adverse comments were received. A summary of the correspondence is provided below.

¹ City of Houston (October 2016). Environmental Data Form: 108-inch Water Line along City Easements from East of Bellows Fall Lane to Smith Road – Line No. S-00900-0140 (Prepared by Lockwood, Andrews, and Newnam, Inc.). Received by TWDB October 14, 2016.

Texas Parks and Wildlife Department, Wildlife Division, Wildlife Habitat Assessment Program

The TPWD reviewed the proposed project and provided a response dated August 30, 2016. Based on the project description, the Wildlife Habitat Assessment Program does not anticipate significant adverse impacts to rare, threatened or endangered species or other wildlife resources.

U.S. Fish and Wildlife Service, Clear Lake Ecological Services Field Office

USFWS provided a response dated February 1, 2016, indicating that the proposed project will have no effect on federally listed threatened or endangered species.

The SWIFT loan is conditioned to read that if a threatened or endangered species is encountered during construction, the Contractor will immediately cease work in the area of the encounter and notify the Owner, who will immediately implement actions in accordance with the Endangered Species Act (ESA) and applicable State statutes. These actions shall include reporting the encounter to the TWDB, the USFWS, and the TPWD, obtaining any necessary approvals or permits to enable the work to continue, or implement other mitigation actions. The Contractor shall not resume construction in the area of encounter until all necessary permits have been obtained.

U.S Army Corps of Engineers, Galveston District

The USACE provided a response letter, dated July 26, 2016 (Project Number SWG-2016-00556) that acknowledged the receipt of a July 21, 2016 request for Department of the Army permit authorization to perform certain work associated with the 108-inch water line. The project involves activities subject to the requirements of Section 404 of the Clean Water Act. Therefore a permit is required. The City has submitted a permit application for a Nationwide Permit 12 for Utility Line activities.

Texas Historical Commission

The THC provided a response dated August 3, 2016, indicating that the proposed project will not have adverse effects on cultural resources and that no survey is required.

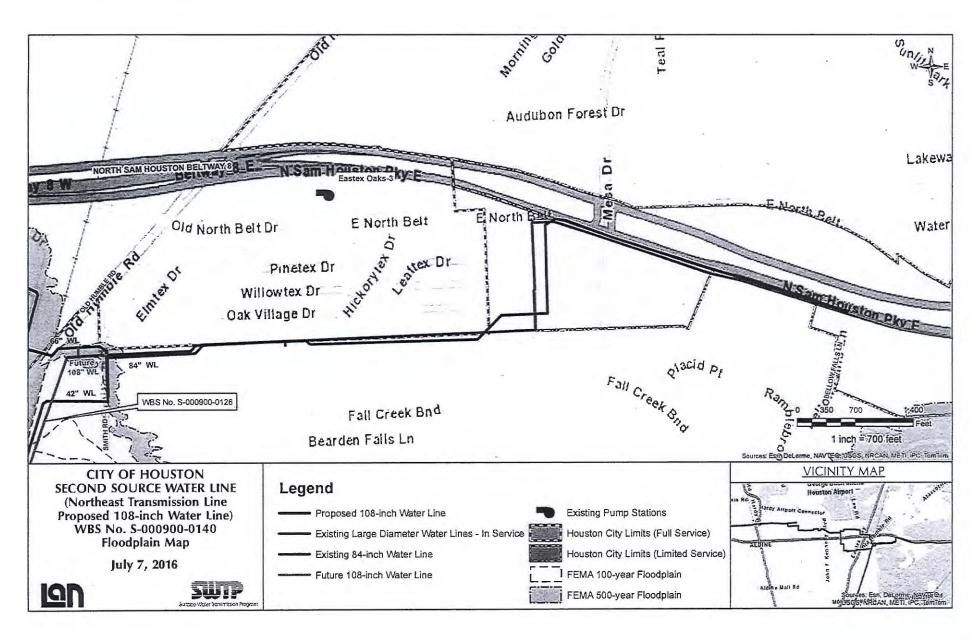
The SWIFT loan is conditioned to read that if archeological sites are discovered during construction, work will cease immediately in that area and the Contractor will notify the THC and the TWDB of the discovery. The THC and the TWDB will then proceed in accordance with the regulations of the Advisory Council on Historic Preservation (36 CFR Part 800) prior to taking any action which would affect the cultural resources.

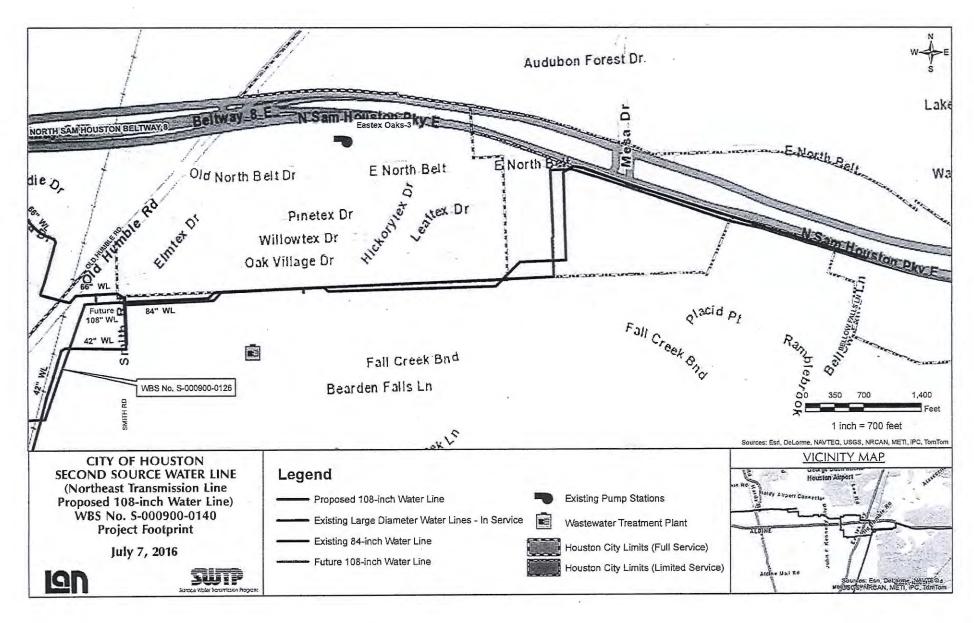
Conditions and Recommendation

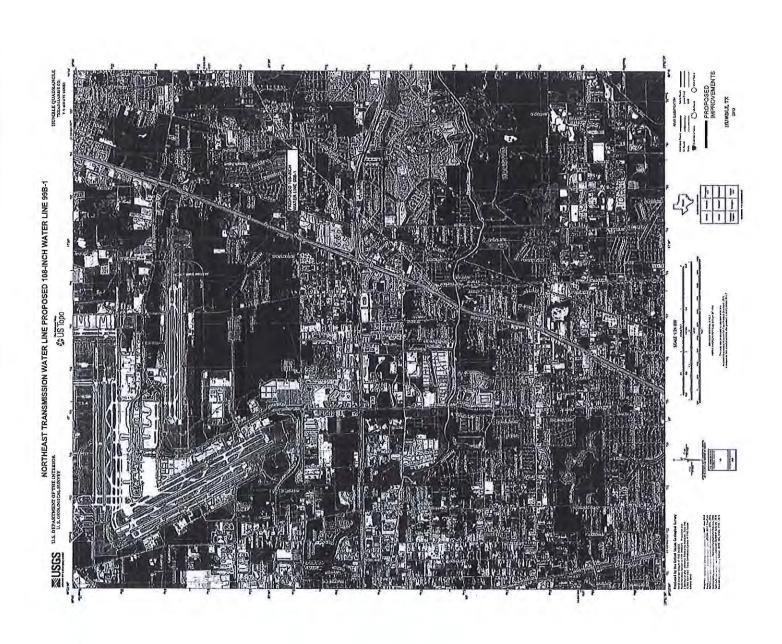
Full consideration has been given to the views and comments of the requisite regulatory agencies. Based on a detailed environmental review consistent with 31 TAC §363.14, the following conditions have been developed in order to ensure that this TWDB funded project is environmentally sound and will not have any adverse impacts on the quality of the human environment:

- As per an agreement with the U.S. Army Corps (Project No. SWG-2016-00556) to
 ensure compliance with Section 404 of the Clean Water Act, the City of Houston
 agrees to comply with all terms and conditions of Nationwide Permit 12 for
 utility line activities;
- Standard emergency condition for the discovery of cultural resources, and;
- Standard emergency condition for the discovery of threatened and endangered species.

With the addition of the conditions listed above, I recommend that the Executive Administrator find the specified project elements above to be environmentally sound and that design funds be released once other requirements are satisfied.









P.O. Box 13231, 1700 N. Congress Ave. Austin, TX 78711-3231, www.twdb.texas.gov Phone (512) 463-7847, Fax (512) 475-2053

MEMORANDUM

TO:

File

FROM:

T. Clay Schultz, Ph.D., Director, Regional Water Project Development

DATE:

February 20, 2018

SUBJECT:

City of Houston, Harris County, Texas

Environmental Determination

Second Source Phase I - Northeast Water Transmission Line

(Segments WBS No. S-0009000-0154, WBS No. S-0009000-0155, and

WBS No. S-0009000-174) **SWIFT Project No. 51021**

The attached memorandum contains the staff's views regarding the environmental soundness of the water line project proposed by the City of Houston (City), Harris County, Texas. This project will utilize a portion of planning, acquisition, design, and construction funds from the State Water Implementation Fund for Texas (SWIFT) Program. The Texas Water Development Board (TWDB) committed to loans on July 23, 2015 and July 21, 2016 for multi-year loans. Loan closings will be spaced over five years, as the funds are needed.

The Second Source Phase I - Northeast Water Transmission Line (NETL) project is being constructed in segments. This waterline will be constructed as part of a larger system that will connect other water providers with water from the Northeast Water Purification Plant (NEWPP). The environmental review is segmented to allow the various line segments to proceed without delay. The TWDB has issued two Environmental Determinations (EDs) for various segments of the NETL:

- ED issued February 25, 2016 for Segments WBS No. S-00900-0126, WBS No. S-00900-0127, and WBS No. S-00900-0156
- ED issued December 7, 2016 for Segment WBS No. S-00900-0140

This ED includes only the following segments of the NETL to be constructed along City easements (see attached maps):

- Segment WBS No. S-000900-0154. Approximately 7,800 linear feet (LF) of a 108-inch diameter water pipeline from the Union Pacific Railroad to west of John Ralston Road.
- Segment WBS No. S-000900-0155. Approximately 10,500 linear feet (LF) of a

Our Mission

Board Members

Kathleen Jackson, Board Member | Peter Lake, Board Member

To provide leadership, information, education, and support for planning, financial assistance, and outreach for the conservation and responsible development of water for Texas

Jeff Walker, Executive Administrator

Environmental Determination City of Houston (SWIFT No. 51021) Northeast Transmission Line Segments WBS No. S-000900-0154, -0155, and -0174) Page 2

- 108-inch diameter water pipeline from west of John Ralston Road to east of Bellow Falls Lane.
- Segment WBS No. S-000900-0174. Approximately 1,650 LF of a 120-inch diameter water pipeline from the NEWPP to east of the Union Pacific Railroad. The alignment is adjacent to Water Works Boulevard. In addition, this segment includes approximately 150 LF of a 96-inch diameter stub out.

Based on staff's environmental review, I have determined that no significant adverse environmental impacts should result from the proposed project discussed in the attached Environmental Summary. As required by 31 Texas Administrative Code § 363.14, full consideration has been given to the views and comments of the requisite regulatory agencies and affected persons. Based on this review, the following conditions have been developed to ensure that this TWDB-funded project is environmentally sound and will not have any adverse impacts on the quality of the human environment:

- To ensure compliance with Section 404 of the Clean Water Act, all work within potential waters of the U.S. including wetlands, will be performed to comply with the terms and conditions of Nationwide Permit 12 for Utility Line Activities as per agreement with the U.S. Army Corps of Engineers-Galveston District office (USACE Project No. SWG-2017-00817);
- To ensure compliance with the Migratory Bird Treaty Act, clearing activities will be avoided within the nesting season (March through August); however, if clearing must occur during this period, a nesting survey will be conducted by a qualified biologist prior to vegetation clearing during the breeding season. If active nests are observed, a 50-foot buffer of vegetation will remain undisturbed around the nests until the young have fledged or the nest is abandoned;
- To ensure compliance with the Bald and Golden Eagle Protection Act, the City will perform surveys for active bald eagle nests prior to construction. If any nests are found, the United States Fish and Wildlife National Bald Eagle Management Guidelines will be implemented;
- Standard emergency condition for the discovery of cultural resources; and
- Standard emergency condition for the discovery of threatened and endangered species.

With the addition of these conditions, the specified project elements above are environmentally sound and design and construction funds may be released once all other requirements are satisfied.

Enclosure

Texas Water Development Board

P.O. Box 13231, 1700 N. Congress Ave. Austin, TX 78711-3231, www.twdb.texas.gov Phone (512) 463-7847, Fax (512) 475-2053

TO:

T. Clay Schultz, Ph.D., Director, Regional Water Project Development

FROM:

Kathy Calnan, Environmental Reviewer

DATE:

February 20, 2018

SUBJECT:

Environmental Summary

City of Houston, Harris County, Texas

Second Source Phase I – Northeast Water Transmission Line (Segments WBS No. S-000900-0154, WBS No. S-000900-0155, and WBS No. S-000900-174)

Pursuant to the environmental assessment requirements of § 363.14 of the Texas Water Development Board (TWDB) rules, TWDB staff has conducted a review of the specified segments of the Northeast Water Transmission Line (NETL) project proposed by the City of Houston (City), Harris County, Texas. This project will utilize a planning, acquisition, design, and construction funds from multi-year loans through the State Water Implementation Fund for Texas (SWIFT) Program. The environmental assessment is based primarily on the Environmental Data Forms¹ submitted to the TWDB by the City and other available resources.

Purpose and Need

The City created the Surface Water Transmission Program in response to a mandate issued by the Harris-Galveston Subsidence District (HGSD) to decrease groundwater usage and consequently increase surface water usage. The Program's goals are to increase surface water usage, decommission and minimize the use of groundwater pump stations, increase water system pressures, and address other large diameter waterline issues. To meet these goals for the northwest region of the City, the Regionalization Plan incorporated the construction of a new Northeast Transmission Waterline (Northeast Waterline, Second Source Water Line (NETL)) to transmit water from the Northeast Water Purification Plant (NEWPP) to the Acres Homes Pump Station. The NETL will provide water for coparticipants and additional capacity for the City. The following entities will be provided take points for future metered connections:

Our Mission

Board Members

¹ City of Houston (August 2017). Environmental Data Form: 120-inch Water Line, with 96-inch sub out (WBS No. S-0009000-0174) and Environmental Data Form: Project Segments WBS No. S-0009000-0154 and S-0009000-0155) (Prepared by Lockwood, Andrews & Newnam, Inc.). Received by the TWDB on August 25, 2017 and September 27, 2017, respectively. Environmental Data Forms were complete with correspondence from the U.S. Army Corps of Engineers, received by the TWDB on January 30, 2018.

- North Harris County Regional Water Authority (NHCRWA)
- West Harris County Regional Water Authority (WHCRWA)
- North Fort Bend Water Authority (NFBWA)
- Central Harris County Regional Water Authority (CHCRWA)
- Municipal Utility Districts (MUDs) and Private Utility Districts (PUDs) within unincorporated areas of Harris County near the City limits

Project Description

The environmental review of the NETL is being segmented in order to allow various segments of the NETL to proceed without delay.

The TWDB has issued two Environmental Determinations (EDs) for specific segments of the NETL:

- ED issued February 25, 2016, for Segments WBS No. S-00900-0126, WBS No. S-00900-0127, and WBS No. S-00900-0156 of the Second Source Phase I Northeast Water Transmission Line
- ED issued December 7, 2016, for Segment WBS No. S-00900-0140 of the Second Source Phase I – Northeast Water Transmission Line

This environmental determination includes only Segments of the NETL to be constructed along City easements as shown on the attached maps and described below:

- Segment WBS No. S-000900-0154. Approximately 7,800 linear feet (LF) of a 108-inch diameter water pipeline from the Union Pacific Railroad to west of John Ralston Road.
- Segment WBS No. S-000900-0155. Approximately 10,500 linear feet (LF) of a 108inch diameter water pipeline from west of John Ralston Road to east of Bellow Falls Lane.
- Segment WBS No. S-000900-0174. Approximately 1,650 LF of a 120-inch diameter water pipeline from the Northeast Water Purification Plant (NEWPP) to east of the Union Pacific Railroad. The alignment is adjacent to Water Works Boulevard. This segment includes a 96-inch diameter stub out (approximately 150 LF).

The City provided one Environmental Determination Form (EDF, TWDB-0800 Form) for Segments WBS No. S-000900-154 and WBS No. S-000900-155, and a separate EDF for Segment WBS No. S-000900-174. These EDFs were not complete because they did not include the USACE response about the permitting needs under Section 404 / Clean Water Act Section 404 of the Clean Water Act (Section 404/CWA) and Section 10 of the Rivers and Harbors Act (Section 10/R&HA). The groupings of segments within EDFs did not exactly match the groupings submitted to the U.S. Army Corps of Engineers (USACE), Galveston District Regulatory Office for permit reviews. The USACE had advised the City to submit segments of the overall NETL project in separate stand-alone 'packages' for permitting review of potential jurisdictional waters of the U.S. These transmission packages would include wetland delineations and a Preliminary Jurisdictional Determination (PJD) which would assume that all water crossings, including ditches, wetlands, and all aquatic resources were jurisdictional Waters of the United States (WOTUS). According to the

reports in Transmission Package #2 sent to the USACE on December 11, 2017 for Segments WBS No. S-000900-140, -154, -155, and -174, all four of the line segments in Transmission Line Package #2 for the NETL would temporarily impact 0.0843 acre (ac) of jurisdictional WOTUS through excavation and fill activities, which are subject to regulation under Section 404 of the Clean Water Act (CWA). Impacts to approximately 0.0499 acres of jurisdictional WOTUS would be avoided by using tunnel boring at stream crossings, including Garners Bayou. No permanent impacts would occur to any jurisdictional WOTUS. Based on this survey, the City requested concurrence that the proposed project should be authorized under Nationwide Permit 12 for Utility Line Activities (NWP 12). In a response dated January 30, 2018, the USACE confirmed that the 45-day review verification period had been exceeded, and per regulations, the permit has been issued by default (USACE Project No. SWG-2017-00817) for Segments in Transmission Line Package #2. The City provided a copy of the Transmission Line Package #2 to the TWDB to verify that these project components qualify for a NWP 12. All project activities within potential WOTUS will be performed in compliance with NWP 12.

The Texas Historical Commission (THC) reviewed these project components in accordance with the Texas Antiquities Code. In a June, 5, 2017, response to the review request for Segment WBS No. S-0009000-174 (Track # 201707184), the THC concurred with the assessment by the City of Houston (as described in the City's May 16, 2017, letter to the THC) that there were no areas of historic significance at the project location. Likewise, the THC response (dated July 11, 2017, Track #201707989), noted that a survey was not required and that the project may proceed.

If archeological sites are discovered during construction, work will cease immediately in that area and the City will notify the THC and the TWDB of the discovery. The THC and the TWDB will then proceed in accordance with the regulations of the Advisory Council on Historic Preservation (36 CFR Part 800) prior to taking any action which would affect the cultural resources.

The Texas Parks and Wildlife Department (TPWD) Habitat Assessment Program, in an email dated June 1, 2017, stated that they do not anticipate significant adverse impacts to rare, threatened or endangered species, or other fish and wildlife resources for Segment WBS No. S-0009000-174. In a letter dated July 13, 2017, concerning Segments WBS No. S-0009000-154 and -155, the TPWD supported the implementation of several mitigative measures that the City had described in the EDF, including compliance with the Migratory Bird Treaty Act, Bald and Gold Eagle Protection Acts, Stormwater Pollution Prevention Plan, trenchless construction when crossing streams and channels, and tree and wetland protection methods. The TPWD also recommended other activities to promote soil stabilization, avoid the spread of invasive species and avoidance of impacts to wildlife species. The U.S. Fish and Wildlife Service (USFWS) provided a form letter (dated February 1, 2016) that directed the City to the USFWS Information Planning and Conservation (IPaC) system, an online resource for information on threatened and endangered species and other fish and wildlife resources.

If threatened or endangered species happen to be encountered during construction, work will cease immediately and the City will notify TWDB staff, TPWD, and if federally listed

species, the USFWS. Subsequent to notification, mitigation measures will be taken in accordance with the Endangered Species Act of 1973, as amended.

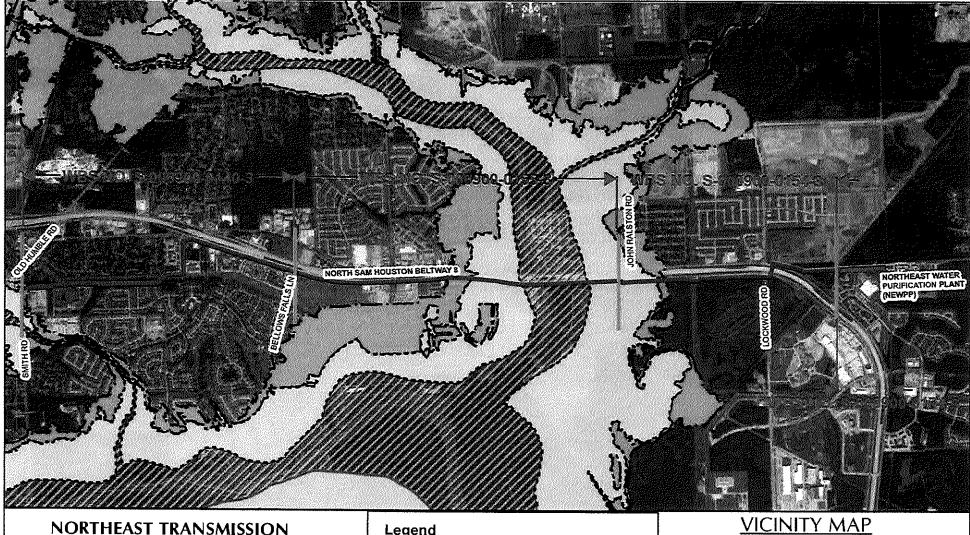
Segments WBS No. S-000900-174 is not located within the 500-year floodplain; however, Segments WBS No. S-000900-154 and -155 are within the 100-year floodplain of Garner's Bayou. In a letter dated August 15, 2017, the Harris County Flood Control District (HCFCD) stated that there was no objection to the project, as after the City had received approval of the Plans and Specification by the HCFCD Watershed Coordination Department and access and use by the HCFCD was not impaired. In addition, TWDB is requiring a floodplain permit or waiver from the local floodplain coordinator (FPA, National Flood Insurance Program (NFIP)) prior to clearing, excavation, or construction activities within the floodplain.

Conditions and Recommendation

Full consideration has been given to the views and comments of the requisite regulatory agencies and affected persons. Based on a detailed environmental review consistent with 31 TAC § 363.14, the following conditions have been developed in order to ensure that this TWDB-funded project is environmentally sound and will not have any adverse impacts on the quality of the human environment:

- To ensure compliance with Section 404 of the Clean Water Act, all work within
 potential waters of the U.S. including wetlands, will be performed to comply with
 the terms and conditions of Nationwide Permit 12 for Utility Line Activities as
 per agreement with the U.S. Army Corps of Engineers-Galveston District office
 (USACE Project No. SWG-2017-00817);
- To ensure compliance with the Migratory Bird Treaty Act, clearing activities will be avoided within the nesting season (March through August); however, if clearing must occur during this period, a nesting survey will be conducted by a qualified biologist prior to vegetation clearing during the breeding season. If active nests are observed, a 50-foot buffer of vegetation will remain undisturbed around the nests until the young have fledged or the nest is abandoned;
- To ensure compliance with the Bald and Golden Eagle Protection Act, the City will perform surveys for active bald eagle nests prior to construction. If any nests are found, the United States Fish and Wildlife National Bald Eagle Management Guidelines will be implemented;
- Standard emergency condition for the discovery of cultural resources; and
- Standard emergency condition for the discovery of threatened and endangered species.

With the addition of these conditions, TWDB staff recommends that the Executive Administrator find the specified project elements above to be environmentally sound and that planning, design, acquisition and construction funds be released once other requirements are satisfied.



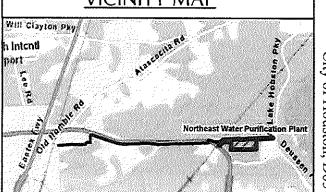
NORTHEAST TRANSMISSION WATER LINE Proposed 108-inch Water Line

Floodplain Map

December 2017

Surface Water Transmission Programs

Proposed 120-inch Water Line Proposed 108-inch Water Line Project Divider Harris County Flood Control District Channels 100-year floodplain with elevation 500-year floodplain FLOODWAY 0 3,000 6,000 Feet



Environmental Determination

MEMORANDUM

TO:

File

FROM:

Jessica Zuba, Director, Regional Water Planning and Development

DATE:

February 25, 2016

SUBJECT:

City of Houston, Harris County

Environmental Determination Second Source Phase I Project

State Water Implementation Fund for Texas: Project No. 51021 (LM15021, LM15022, LM15023, LM16022, LM16023, LM17022, LM17023, LM18021, LM18022, LM18023, LM19021, LM19022,

LM19023, LM20021, LM20022, LM20023)

The attached memorandum contains the staff's views regarding the environmental soundness of the pipeline components of the Second Source Phase I Project proposed by the City of Houston (City), Harris County, Texas. This project will utilize planning, acquisition, design, and construction funds from loans LM15021, LM15022, LM15023, LM16022, LM16023, LM17022, LM17023, LM18021, LM18021, LM18022, LM18023, LM19021, LM19022, LM19023, LM20021, LM20022, and LM20023 from the State Water Implementation Fund for Texas (SWIFT). The Texas Water Development Board (TWDB) committed these loans on July 23, 2015, in the amount of \$378,172,356. This project is jointly funded by the City, the Central Harris Regional Water Authority (CHCRWA), and the North Harris County Regional Water Authority (NHCRWA). The City closed on loan LM15022 on December 3, 2015. CHCRWA closed on loan LM15021 on December 11, 2015. NHCRWA closed on loan LM15023 on December 11, 2015. The City, CHCRWA, and NHCRWA intend to close on the remaining loans for this project in the future.

The proposed project is comprised of three construction packages: (1) 108-inch diameter water line along City easements from Smith Road to Lee Road; (2) 108-inch diameter water line from Lee Road to Vickery Drive; and (3) 54-inch diameter water line along Vickery Drive from Aeropark Drive to World Houston Parkway. These are three of nineteen projects comprising the Northeast waterline. The Northeast waterline will provide water for co-participants and additional capacity for the City. The following entities will be provided take points for future metered connections: NHCRWA, West Harris County Regional Water Authority (WHCRWA), North Fort Bend Water Authority (NFBWA), CHCRWA, Municipal Utility Districts (MUDs) and Private Utility Districts

(PUDs) within unincorporated areas of Harris County near the City limits.

Based on staff's environmental review, I have determined that no significant adverse environmental impacts should result from the proposed project discussed in the attached Environmental Summary. As required by 31 Texas Administrative Code §363.14, full consideration has been given to the views and comments of the requisite regulatory agencies and affected persons. Based on this review, the following conditions have been developed in order to ensure that this TWDB funded project is environmentally sound and will not have any adverse impacts on the quality of the human environment:

- For any construction within a 100-year floodplain, a floodplain permit or documentation from the local floodplain administrator that no permit is required must be obtained prior to construction or clearing activities. All plans will be submitted to the Harris County Flood Control District for review and approval prior to construction;
- Compliance with all terms and conditions of U.S. Army Corps of Engineers Nationwide Permit 12 for Utility Line Activities as per Project No. SWG-2016-00011;
- Standard emergency condition for the discovery of cultural resources; and,
- Standard emergency condition for the discovery of threatened and endangered species.

With the addition of these conditions, the specified project elements above are environmentally sound and acquisition, design, and construction funds may be released once all other requirements are satisfied.

Enclosure

TO: Jessica Zuba, Director, Regional Water Planning and Development

THROUGH: Nancy Richards, Manager, Team 4 – East (Regions H and I)

FROM: Jean Devlin, Environmental Reviewer, Team 4 (Regions H and I)

DATE: February 25, 2016

SUBJECT: Environmental Summary

City of Houston, Harris County Second Source Phase I Project

State Water Implementation Fund for Texas: Project No. 51021 (LM15021, LM15022, LM15023, LM16022, LM16023, LM17022, LM17023, LM18021, LM18022, LM18023, LM19021, LM19022,

LM19023, LM20021, LM20022, LM20023)

Pursuant to the environmental assessment requirements of the Texas Water Development Board (TWDB) rules 31 Texas Administrative Code (TAC) Section §363.14, I have conducted a review of the Second Source Water Line Project in Harris County, Texas. This project will utilize planning, acquisition, design, and construction funds from loans LM15021, LM15022, LM15023, LM16022, LM16023, LM17022, LM17023, LM18021, LM18022, LM18023, LM19021, LM19022, LM19023, LM20021, LM20022, LM20023 from the State Water Implementation Fund for Texas (SWIFT). The Texas Water Development Board (TWDB) committed these loans on July 23, 2015, in the amount of \$378,172,356. This project is jointly funded by the City of Houston (City), the Central Harris Regional Water Authority (CHCRWA), and the North Harris County Regional Water Authority (NHCRWA). The City closed on loan LM15022 on December 3, 2015. CHCRWA closed on loan LM15021 on December 11, 2015. NHCRWA closed on loan LM15023 on December 11, 2015. The City, CHCRWA, and NHCRWA intend to close on their remaining loans for this project in the future.

Purpose and Need¹

The City created the Surface Water Transmission Program (SWTP) in response to a mandate issued by the Harris-Galveston Subsidence District (HGSD) to decrease groundwater usage and consequently increase surface water usage. The SWTP goals are to increase surface water usage, decommission and minimize the use of groundwater pump stations, increase water system pressures, and address other large diameter water line issues. To meet these goals for the northwest region of the City, the City's Regionalization Plan incorporated the construction of a new Northeast Transmission Waterline (Northeast Waterline and Second Source Water Line) to transmit water from the proposed Northeast Water Purification Plant (NEWPP) to the Acres Home Pump Station (AHPS). The Northeast waterline will provide water for co-participants and additional capacity for the City. The following entities will be provided take points for future metered connections: NHCRWA, West Harris County Regional Water Authority

¹ City of Houston (February 2016). Environmental Data Form: Second Source Phase I Project (Prepared by Lockwood, Andrews, and Newnam, Inc.). Received by TWDB February 16, 2016.

(WHCRWA), North Fort Bend Water Authority (NFBWA), CHCRWA, Municipal Utility Districts (MUDs) and Private Utility Districts (PUDs) within unincorporated areas of Harris County near the City limits.

Project Description

The proposed project is comprised of three construction packages: (1) 108-inch diameter water line along City easements from Smith Road to Lee Road; (2) 108-inch diameter water line from Lee Road to Vickery Drive; and (3) 54-inch diameter water line along Vickery Drive from Aeropark Drive to World Houston Parkway. These are three of nineteen projects comprising the Northeast waterline.

This section of the Northeast Water Line consists of approximately 12,800 linear feet of 108-inch diameter water lines and 3,300 linear feet of 54-inch diameter water lines. The project includes two interconnects to an existing 66-inch diameter water line and one interconnect to an existing 42-inch diameter water line. It includes several tunnel segments with the major crossings being US Highway 59, North Sam Houston Parkway, and the Union Pacific Rail Road (UPRR). Much of the alignment runs through existing and proposed easements.

This section of project begins east of Smith Road. The 108-inch diameter water line runs west across Smith Road to a tract of land being purchased by the City for an interconnect site location. On this property, the 108-inch diameter water connects to an existing 66-inch diameter water line and a future 84-inch diameter water line. Access roads and a stormwater detention pond will be built on the site.

The 108-inch diameter water line then runs southwest adjacent to the Union Pacific Rail Road (UPRR), where the interconnection to an existing 42-inch diameter water line is made. The proposed water line crosses the UPRR near the future Aldine Bender Road extension area and continues west in easements adjacent to Aldine Bender Road until crossing Lee Road. The water line continues west through the easements until turning North at Crosswinds Boulevard. The water line then runs north along Crosswinds to Aeropark Drive, where it turns west again to Vickery Drive. At Vickery Drive, a 54-inch diameter water line runs north through easements and road right-of-way to World Houston Parkway. Here it connects to the same existing 66-inch diameter water line that is connected to at Smith Road, completing the bypass comprising the work around.

In addition to the large diameter water lines, small diameter water lines, stormwater lines, sanitary lines, and pavement are being replaced as needed to construct the large diameter water lines. Twenty eight easements are being acquired for construction of the water line in this section of the project.

At the east end of this project section near Smith Road, the 108-inch diameter water line will continue east to the City's NEWPP. On the west end near Vickery Drive, the 108-

inch diameter water line will continue west to I-45. At I-45, the water line will continue south to the City's Acres Homes Pump Station. These continuations will be included in separate environmental reviews. The total estimated project cost for this segment is \$55,000,000. The planning, acquisition, design, and construction phases of this project will be funded by the TWDB.

Reviews by Regulatory Agencies and Resulting Conditions

Lockwood, Andrews, and Newnam, Inc., on behalf of the City, coordinated with the following federal and state regulatory agencies: Texas Parks and Wildlife Department (TPWD), Wildlife Division, Wildlife Habitat Assessment Program; U.S. Army Corps of Engineers (USACE), Galveston District; U.S. Fish and Wildlife Service (USFWS), Clearlake; Texas Historical Commission (THC); and the Harris County Flood Control District. Each agency was given an opportunity to review the Environmental Data Form. No adverse comments were received. A summary of the correspondence is provided below.

<u>Texas Parks and Wildlife Department, Wildlife Division, Wildlife Habitat Assessment Program</u>

The TPWD reviewed the proposed project and provided a response dated December 21, 2015 (TPWD Project No. 35863). Based on the project description, the Wildlife Habitat Assessment Program does not anticipate significant adverse impacts to rare, threatened or endangered species or other wildlife resources.

The City contacted the USFWS on November 20, 2015 requesting the review of the proposed project. Lockwood, Andrews & Newnam, Inc., on behalf of the City, attempted to contact the USFWS again on January 26, 2016. The USFWS has not provided a response regarding the project; however, based on coordination with TPWD, the proposed project is not likely to have adverse effects on federally listed threatened or endangered species or habitat.

The SWIFT loan is conditioned to read that if a threatened or endangered species is encountered during construction, the Contractor will immediately cease work in the area of the encounter and notify the Owner, who will immediately implement actions in accordance with the Endangered Species Act (ESA) and applicable State statutes. These actions shall include reporting the encounter to the TWDB, the U.S. Fish and Wildlife Service, and the Texas Parks and Wildlife Department, obtaining any necessary approvals or permits to enable the work to continue, or implement other mitigation actions. The Contractor shall not resume construction in the area of encounter until all necessary permits have been obtained.

U.S. Army Corps of Engineers, Fort Worth District

The USACE provided a response letter, dated January 4, 2016 (Project Number SWG-2016-00011), stating that the project will involve activities subject to the requirements of Section 404 of the Clean Water Act and that the project appears to qualify for a Nationwide Permit 12 for Utility Line Activities. Provided that the permittee complies with all the terms and conditions therein, the project may proceed. Furthermore, activities that have commenced, or are under contract to commence, in reliance on a nationwide permit will remain authorized provided the activity is completed within 12 months of the date of the nationwide permit's expiration, modification, or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization in accordance with 33 CFR 330.4(e) and 33 CFR 330.5(c) or (d).

Texas Historical Commission

The THC provided a response dated December 22, 2015, indicating that the proposed project will not have adverse effects on cultural resources and that no survey is required.

The SWIFT loan is conditioned to read that if archeological sites are discovered during construction, work will cease immediately in that area and the Contractor will notify the THC and the TWDB of the discovery. The THC and the TWDB will then proceed in accordance with the regulations of the Advisory Council on Historic Preservation (36 CFR Part 800) prior to taking any action which would affect the cultural resources.

Harris County Flood Control District

Lockwood, Andrews & Newnam, Inc., on behalf of the City, contacted the Harris County Flood Control District (HCFCD) on December 11, 2015. The HCFCD requested that plans be submitted to the HCFCD for review and approval.

The SWIFT loan is conditioned to read that for any construction within a 100-year floodplain, a floodplain permit or documentation from the local floodplain administrator that no permit is required, must be obtained prior to construction or clearing activities. All plans will be submitted to the HCFCD for review and approval prior to construction.

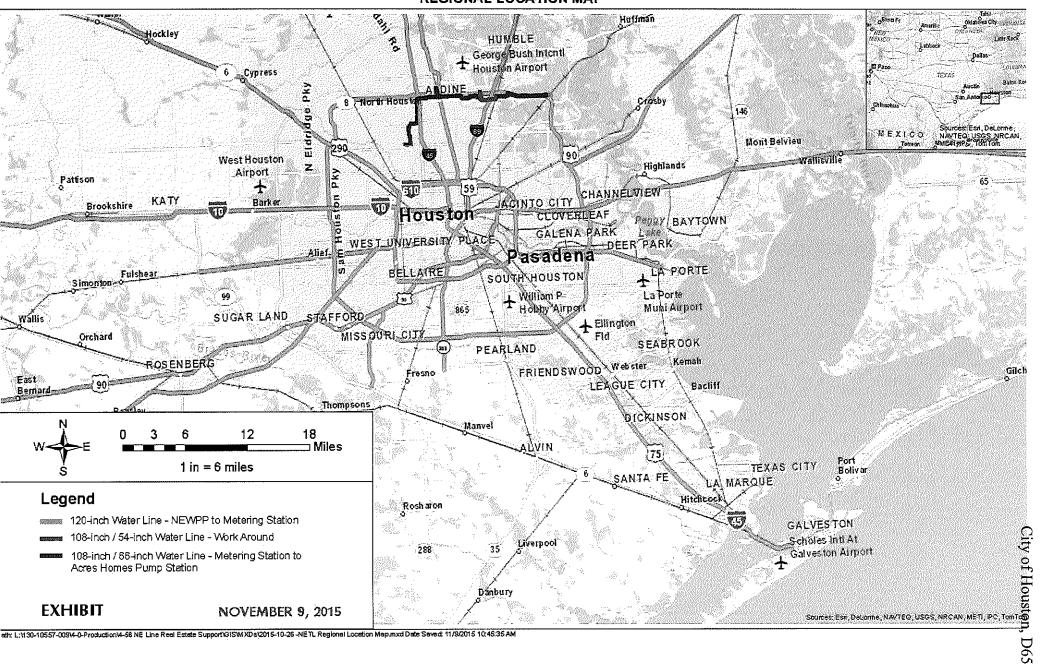
Conditions and Recommendation

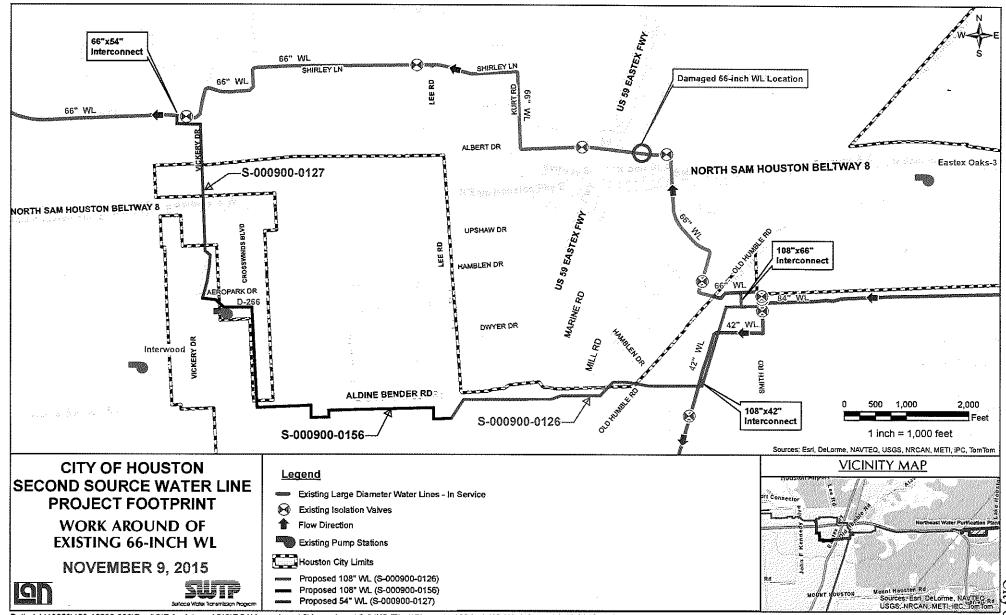
Full consideration has been given to the views and comments of the requisite regulatory agencies and affected persons. Based on a detailed environmental review consistent with 31 TAC §363.14, the following conditions have been developed in order to ensure that this TWDB funded project is environmentally sound and will not have any adverse impacts on the quality of the human environment:

- For any construction within a 100-year floodplain, a floodplain permit or documentation from the local floodplain administrator that no permit is required must be obtained prior to construction or clearing activities. All plans will be submitted to the Harris County Flood Control District for review and approval prior to construction;
- Compliance with all terms and conditions of U.S. Army Corps of Engineers Nationwide Permit 12 for Utility Line Activities as per Project No. SWG-2016-00011;
- Standard emergency condition for the discovery of cultural resources; and,
- Standard emergency condition for the discovery of threatened and endangered species.

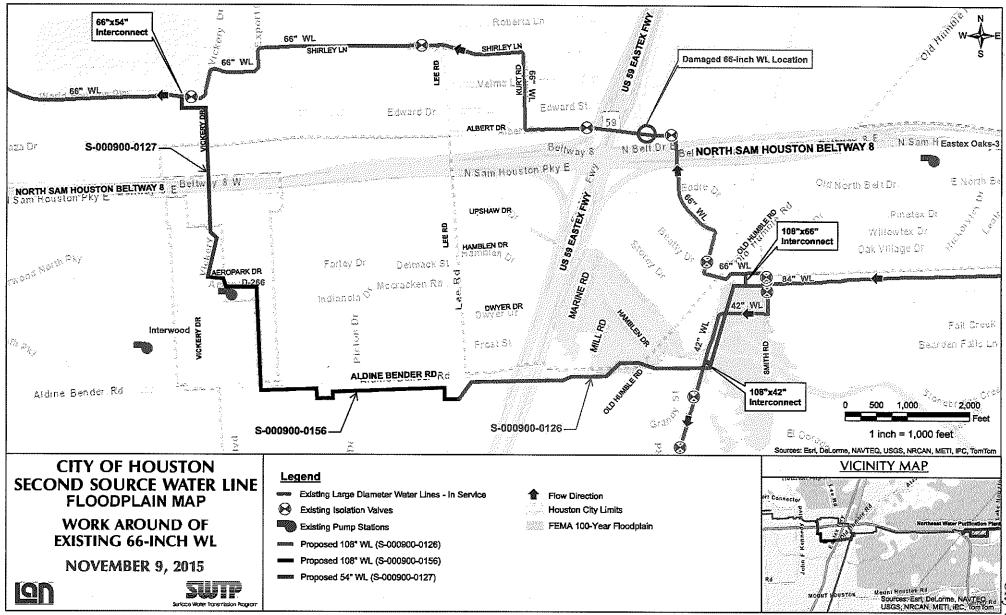
With the addition of these conditions, I recommend that the Executive Administrator find the specified project elements above to be environmentally sound and that acquisition, design, and construction funds be released once other requirements are satisfied.

CITY OF HOUSTON SECOND SOURCE WATER LINE (NORTHEAST TRANSMISSION WATER LINE) **REGIONAL LOCATION MAP**





Path: L:\110059\120-10290-000\Prod\CIP Assistance\GIS\RCA\Amendment 2\Amendment 2 (MXD Files)\Phase 1 - 108-inch WL Work Around 3-10-2015.mxd 3/10/2015 12:56:24 PM



ity of Houston, D65

CITY OF HOUSTON ORDINANCE NO. 2018-___

AN ORDINANCE SUPPLEMENTING THE CITY OF HOUSTON, TEXAS MASTER ORDINANCE NO. 2004-299; PROVIDING FOR THE ISSUANCE OF THE CITY OF HOUSTON, TEXAS, COMBINED UTILITY SYSTEM SUBORDINATE LIEN REVENUE BONDS, SERIES 2018E, PROVIDING FOR THE AMOUNTS, INTEREST RATES, PRICES, AND TERMS THEREOF AND OTHER MATTERS RELATING THERETO; PROVIDING FOR THE PAYMENT THEREOF; MAKING OTHER PROVISIONS REGARDING SUCH BONDS AND MATTERS INCIDENT THERETO; AUTHORIZING A CO-BOND COUNSEL AGREEMENT; AUTHORIZING EXECUTION AND DELIVERY OF A PAYING AGENT/REGISTRAR AGREEMENT; AND DECLARING AN EMERGENCY

TABLE OF CONTENTS

		rage
ARTICLE I	FINDINGS AND DETERMINATIONS	1
Section 1.	1. Findings and Determinations	1
ARTICLE II	DEFINITIONS AND INTERPRETATIONS	2
Section 2.	1. Definitions Generally	2
Section 2.2	2. Definitions	2
ARTICLE III	TERMS OF THE SERIES 2018E BONDS	4
Section 3.	1. Name, Amount, Purpose, Authorization	4
Section 3.2	2. Numbers, Date, and Denomination	4
Section 3.	3. Interest Payment Dates, Interest Rates, and Maturities	5
Section 3.	4. Redemption Prior to Maturity	6
Section 3.5	5. Manner of Payment, Characteristics, Execution, and Authentication	6
Section 3.	6. The Depository Trust Company of New York	7
Section 3.	7. Applicability of Terms of the Master Ordinance	8
ARTICLE IV	PLEDGE AND SOURCE OF PAYMENT FOR THE BONDS	8
Section 4.	1. Pledge and Source of Payment	8
Section 4.3	2. Rates and Charges	9
Section 4.3	3. Additional Special Funds	10
Section 4.	4. Flow of Funds	10
Section 4.:	5. Subordinate Lien Obligations Interest and Sinking Fund	11
Section 4.	6. Undesignated Amounts in the General Purpose Fund	13
Section 4.	7. Invest of Funds, Transfer of Investment Income, Security for Funds	
Section 4.5	8. Additional Bonds, Reservation of Rights	13
ARTICLE V	CONCERNING THE PAYING AGENT/REGISTRAR	13
Section 5.	1. Acceptance	13
Section 5.2	2. Fiduciary Account	13
Section 5.3	3. Bonds Presented	13
Section 5.4	4. Bonds Not Timely Presented	13
Section 5.	5. Paying Agent/Registrar May Own Bonds	14
Section 5.	6. Successor Paying Agents/Registrars	14
51080690.2	-i-	

TABLE OF CONTENTS

(continued)

		, ,	Page
ARTICLE VI		VISIONS CONCERNING SALE AND APPLICATION OF CEEDS OF THE BONDS	15
Section 6	5.1.	Sale of the Series 2018E Bonds	15
Section 6.2.		Approval, Registration, and Delivery	15
Section 6.3.		Application of Proceeds of the Series 2018E Bonds	15
Section (5.4.	Covenants to Maintain Tax Exempt Status	15
Section 6	5.5.	Paying Agent/Registrar Agreement	19
Section (5.6.	Co-Bond Counsel; Appointment and Acceptance	19
Section (5.7.	Related Matters	19
ARTICLE VII	CON	TINUING DISCLOSURE UNDERTAKING	20
Section 7	7.1.	Annual Reports	20
Section 7	7.2.	Material Event Notices	20
Section 7	7.3.	Limitations, Disclaimers, and Amendments	21
Section 7	7.4.	Definitions	22
ARTICLE VIII	PRO.	JECT FUND	23
Section 8	3.1.	Project Fund	23
Section 8	3.2.	Investment of Money in the Project Fund	23
ARTICLE IX	APPI	LICATION OF PROVISIONS OF MASTER ORDINANCE	24
Section 9	9.1.	Application of Provisions of Master Ordinance	24
ARTICLE X	MISC	CELLANEOUS	24
Section 1	10.1.	Further Proceedings	24
Section 1	10.2.	Compliance with Board Rules and Regulations	24
Section 1	10.3.	Severability	25
Section 1	10.4.	Open Meeting	26
Section 1	10.5.	Declaration of Emergency and of Public Security Authorization	26
Section 1	10.6.	Authority to Modify Attachments	26
Section 1	10.7.	Repealer	26
Section 1	10.8.	Remedies	26

TABLE OF CONTENTS

(continued)

Page

EXHIBIT A - Form of Series 2018E Bond

EXHIBIT B – Paying Agent/Registrar Agreement
EXHIBIT C – Combined Utility System Co-Bond Counsel Agreement
EXHIBIT D – Private Placement Memorandum

[Remainder of This Page Intentionally Left Blank]

CITY OF HOUSTON ORDINANCE NO. 2018-___

AN ORDINANCE SUPPLEMENTING THE CITY OF HOUSTON, TEXAS MASTER ORDINANCE NO. 2004-299; PROVIDING FOR THE ISSUANCE OF THE CITY OF HOUSTON, TEXAS, COMBINED UTILITY SYSTEM SUBORDINATE LIEN REVENUE BONDS, SERIES 2018E, PROVIDING FOR THE AMOUNTS, INTEREST RATES, PRICES, AND TERMS THEREOF AND OTHER MATTERS RELATING THERETO; PROVIDING FOR THE PAYMENT THEREOF; MAKING OTHER PROVISIONS REGARDING SUCH BONDS AND MATTERS INCIDENT THERETO; AUTHORIZING EXECUTION AND DELIVERY OF A PAYING AGENT/REGISTRAR AGREEMENT; AND DECLARING AN EMERGENCY

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF HOUSTON:

ARTICLE I

FINDINGS AND DETERMINATIONS

<u>Section 1.1.</u> <u>Findings and Determinations</u>. It is officially found and determined that:

- (a) The City of Houston, Texas (the "City") is an incorporated city operating under a home-rule charter adopted pursuant to Article XI, Section 5, of the Constitution of Texas having a population according to the latest federal decennial census of 50,000 or more and is an "issuer" pursuant to Chapters 1371 and 1502, Texas Government Code, as amended, and having outstanding long-term debt secured by the Net Revenues of the System which is rated by a nationally recognized rating agency for municipal securities in one of the four highest rating categories for long-term obligations.
- (b) The City has adopted a Master Ordinance providing for the issuance of bonds and other obligations to be secured by revenues from the City's combined utility system (the "Master Ordinance").
- (c) Under the Master Ordinance, the City has created the General Purpose Fund, and pursuant to the terms of the Master Ordinance the General Purpose Fund may be used for any lawful purpose of the System.
- (d) The City has entered into a Project Contract with the Coastal Water Authority ("CWA"), which, as now or hereafter supplemented (the "Project Contract"), requires the City to pay certain debt service of CWA under the WIF Bonds, the Master Agreements or other obligations (including additional CWA bonds) with the Texas Water Development Board (the "Board") from the Pledged Revenues.
- (e) The City desires to issue one or more series of Subordinate Lien Obligations secured on a parity with its obligations to CWA under the Project Contract.
- (f) On July 23, 2015, the Board approved an application of the City for financial assistance through a commitment in the aggregate amount of \$296,125,000 from the State Water

Implementation Revenue Fund, and such commitment was later amended by the Board on [*July 20, 2017*], to be evidenced by the Board's purchase of \$______ City of Houston Combined Utility System Subordinate Lien Revenue Bonds, Series 2018E (the "Series 2018E Bonds").

- (g) Pursuant to the commitment described in subsection (f) above (the "Commitment"), the City now desires to sell the Series 2018E Bonds to the Board.
- (h) The conditions precedent to the issuance of Subordinate Lien Obligations, other than approval of the Series 2018E Bonds by the Attorney General of Texas, have been met, and the City is authorized to issue the Series 2018E Bonds and make the pledges and covenants set forth herein.
- (i) The provisions of the City of Houston Charter, Article VI-A, Section 7, do not operate to limit total revenues of the City or the issuance of the Subordinate Lien Obligations secured hereby, as contemplated by this Ordinance.
- (j) The City is authorized by Chapter 1502, Texas Government Code, as amended, to issue the Series 2018E Bonds substantially in the form set forth in *Exhibit A* attached hereto to and payable from the City's combined utility system (the "System"), for the purpose of financing drinking water supply system improvements.
- (k) The City finds that the issuance of the Series 2018E Bonds is in its best interests. The City desires to finance improvements, additions, or extensions to the System.

ARTICLE II

DEFINITIONS AND INTERPRETATIONS

- Section 2.1. <u>Definitions Generally</u>. Any capitalized term used herein but not defined in Section 2.2 or elsewhere in this Supplemental Ordinance has the meaning assigned to such term in the Master Ordinance, except that if the definition of such term in the Master Ordinance applies specifically to the First or Second Lien Bonds, such definition is to be read as applying to the Subordinate Lien Obligations issued hereunder.
- <u>Section 2.2.</u> <u>Definitions</u>. In this Supplemental Ordinance, the following terms have the following meanings, unless the context clearly indicates otherwise:
 - "Board" means the Texas Water Development Board or any successor agency thereto.
 - "Bonds" means any or all of the obligations issued as Subordinate Lien Obligations.
- "Business Day" means, for purposes of this Supplemental Ordinance, a day other than (i) a Saturday or Sunday, (ii) a day on which the Paying Agent/Registrar, or if applicable, the Tender Agent, the Auction Agent, the Broker-Dealers, the Bond Insurer, or banks and trust companies in New York, New York are authorized or required to remain closed, or (iii) a day on which the New York Stock Exchange is closed.

"Commitment" means the Commitment described in Section 1.1(f) hereof.

"CWA" means the Coastal Water Authority, a Texas local government subdivision, or any successor thereto.

"DTC" means The Depository Trust Company of New York, New York, or any successor securities company.

"DTC Participant" means securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations on whose behalf DTC was created to hold securities and to facilitate the clearance and settlement of securities transactions among DTC Participants through electronic book-entry changes in the accounts of the DTC Participants, thereby eliminating the need for physical movement of definitive certificates.

"Master Agreements" means one or more Master Agreements now or hereafter entered into, amended, or supplemented between CWA and the Board pursuant to which CWA is financing design and construction of the Luce Bayou Project.

"Ordinance" means collectively, the Master Ordinance, this Supplemental Ordinance, and all amendments hereof and supplements hereto.

"Outstanding," when used with reference to the Subordinate Lien Bonds, means, as of a particular date, all such Subordinate Lien Bonds theretofore delivered except: (a) any such Subordinate Lien Bonds canceled by or on behalf of the City at or before said date; (b) any such Subordinate Lien Bonds defeased pursuant to the defeasance provisions of the Master Ordinance or a Supplemental Ordinance authorizing its issuance, or otherwise defeased as permitted by applicable law; and (c) any such Subordinate Lien Bond in lieu of or in substitution for which another Subordinate Lien Bond shall have been delivered pursuant to the ordinance authorizing the issuance of such Subordinate Lien Bond. When used with respect to the Project Contract, the obligations of the City under such Project Contract are "Outstanding" for the term of the Project Contract, as such Project Contract may hereafter be extended.

"Paying Agent/Registrar" means The Bank of New York Mellon Trust Company, National Association, and its successors in that capacity.

"Pledged Revenues" means any Net Revenues deposited to the General Purpose Fund.

"Series 2015E Bonds" means the City of Houston, Texas Combined Utility System Subordinate Lien Revenue Bonds, Series 2015E.

"Series 2016D Bonds" means the City of Houston, Texas Combined Utility System Subordinate Lien Revenue Bonds, Series 2016D.

"Series 2017C Bonds" means the City of Houston, Texas Combined Utility System Subordinate Lien Revenue Bonds, Series 2017C.

"Series 2018E Bonds" means the Bonds issued hereunder and so designated by Article III.

3

"Subordinate Lien Bonds" means the Series 2015E Bonds, the Series 2016D, the Series 2017C Bonds, the Series 2018E Bonds, and any additional bonds of the City issued on a parity therewith, but excluding the City's payment obligations to CWA under the Project Contract

"Subordinate Lien Bonds Reserve Fund" means the common reserve fund for the Subordinate Lien Obligations (excluding the City's obligations under the Project Contract) established by Section 4.3 of this Supplemental Ordinance.

"Subordinate Lien Bonds Reserve Fund Participants" means the Series 2015E Bonds, the Series 2016D, the Series 2017C Bonds, the Series 2018E Bonds, and any other Subordinate Lien Bonds hereafter issued by the City and designated as Subordinate Lien Bonds Reserve Fund Participants.

"Subordinate Lien Bonds Reserve Fund Requirement" means the reserve fund requirement for the Subordinate Lien Bonds Reserve Funds Participants, which is 50% of the maximum annual debt service requirements of the Subordinate Lien Bonds Reserve Fund Participants, which is initially 50% of the maximum annual debt service requirements for the Series 2015E Bonds, the Series 2016D, the Series 2017C Bonds, and the Series 2018E Bonds, which is \$

"Subordinate Lien Obligations" means the Series 2015E Bonds, the Series 2016D Bonds, the Series 2017C Bonds, the Series 2018E Bonds, any additional bonds of the City issued on a parity therewith, and the City's payment obligations to CWA under the Project Contract.

"Subordinate Lien Obligations Interest and Sinking Fund" means a special account of the General Purpose Funds to which amounts for the Subordinate Lien Obligations are deposited.

"WIF Bonds" means CWA's outstanding Contract Revenue Bonds (Luce Bayou Project), Series 2009, and Contract Revenue Bonds (Luce Bayou Project), Series 2010.

ARTICLE III TERMS OF THE SERIES 2018E BONDS

Section 3.1. Name, Amount, Purpose, Authorization. The Series 2018E Bonds, to
be known and designated as the "CITY OF HOUSTON, TEXAS, COMBINED UTILITY
SYSTEM SUBORDINATE LIEN REVENUE BONDS, SERIES 2018E," in the aggregate
principal amount of \$, will be issued in fully registered form, without coupons.
The Series 2018E Bonds are being issued for the purpose of (a) financing certain improvements
to the City's drinking water supply system; (b) paying the costs of issuance of the Series 2018E
Bonds; and (c) funding the Subordinate Lien Bonds Reserve Fund to satisfy the Subordinate Lien
Bonds Reserve Fund Requirement, all under and pursuant to the authority of Chapter 1502,
Texas Government Code, as amended, and all other applicable law.

Section 3.2. Numbers, Date, and Denomination. The Bonds are numbered separately from R-1 upward, are dated [*_______, 2018*], and are in the denominations of \$5,000 or any integral multiple thereof. The initial Bonds to be delivered to the Attorney General may be issued as one bond for each stated maturity in the applicable principal amount

4

and denomination and are to be numbered consecutively from T-1 and upward (hereinafter called the "Initial Bond(s)")

Section 3.3. Interest Payment Dates, Interest Rates, and Maturities. The Series 2018E Bonds will bear interest from duly provided for their Issue Date, or the most recent Interest Payment Date to which interest has been paid or, at the rates per annum set forth below, calculated on the basis of a 360-day year composed of twelve 30-day months and payable semiannually on May 15 and November 15 of each year, commencing [*May 15, 2019*], until maturity or prior redemption.

[Remainder of This Page Intentionally Left Blank]

51080690,2

5

The Series 2018E Bonds bear interest, mature and become payable on [*November 15*] in the years and in the principal amounts set forth below, subject to prior redemption, as set forth in the FORM OF SERIES 2018E BOND in *Exhibit A* hereof:

Maturity Date	Principal Amount	Interest Rate (%)
([*November 15*])		
2018	\$	
2019		
2020		
2021		
2022	L	
2023	**************************************	
2024		
2025		
2026		
2027		
2028		
2029		
2030		
2031		
2032		
2033		
2034		
2035		
2036		
2037		
2038		
2039	-	
2040		· ·
2041		
2042		
2043		,
2044		
2045		
2046		
2047		

Section 3.4. Redemption Prior to Maturity. The Series 2018E Bonds are subject to redemption in the manner provided in the FORM OF BOND set forth in *Exhibit A*.

Section 3.5. Manner of Payment, Characteristics, Execution, and Authentication. The Paying Agent/Registrar is the paying agent for the Series 2018E Bonds. The Series 2018E Bonds are payable, have the characteristics, are signed and executed, and are authenticated, all as provided and in the manner indicated in the FORMS OF SERIES 2018E BOND set forth in *Exhibit A* of this Supplemental Ordinance. The Series 2018E Bonds are not required to be

sealed except as required under Texas law, but may be sealed with the seal of the City in original or facsimile. The Initial Bonds shall be in the form set forth in *Exhibit A*.

Section 3.6. The Depository Trust Company of New York.

(a) Notwithstanding any provision of this Supplemental Ordinance to the contrary, unless the City otherwise directs, all Series 2018E Bonds issued hereunder will be registered in the name of Cede & Co., as nominee of DTC, as the Registered Owner of the Series 2018E Bonds, and held in the custody of DTC. Unless otherwise requested by DTC, a single certificate will be issued and delivered to DTC for each maturity of the Series 2018E Bonds. Beneficial owners of Series 2018E Bonds will not receive physical delivery of Series 2018E Bond certificates except as provided hereinafter as long as DTC continues to serve as securities depository for the Series 2018E Bonds as provided herein, all transfers of beneficial ownership interests in the Series 2018E Bonds will be made by book-entry only, and no investor or other party purchasing, selling, or otherwise transferring beneficial ownership interests in Series 2018E Bonds is to receive, hold, or deliver any Series 2018E Bond certificate; provided, that, if DTC fails or refuses to act as securities depository for the Series 2018E Bonds, the City takes the actions necessary to provide for the issuance of Series 2018E Bond certificates to the Registered Owners of such Series 2018E Bonds.

With respect to Series 2018E Bonds registered in the name of Cede & Co., as nominee of DTC, the City and the Paying Agent/Registrar have no responsibility or obligation to any DTC Participant or to any person on behalf of whom a DTC Participant holds an interest in the Series 2018E Bonds. Without limiting the immediately preceding sentence, the City and the Paying Agent/Registrar have no responsibility or obligation with respect to (i) the accuracy of the records of DTC, Cede & Co. or any DTC Participant with respect to any ownership interest in the Series 2018E Bonds, (ii) the delivery to any DTC Participant or any other person, other than a Registered Owner, as shown on the Register, of any notice with respect to the Series 2018E Bonds, including any notice of redemption, or (iii) the payment to any DTC Participant or any other person, other than a Registered Owner, as shown in the Register, of any amount with respect to the principal of, premium, if any, or interest on the Series 2018E Bonds.

(b) If (i) DTC determines not to continue to act as securities depository for the Series 2018E Bonds (which determination becomes effective no less than 90 days after written notice to such effect to the City and the Paying Agent/Registrar); (ii) the City or the Paying Agent/Registrar determines (which determination is conclusive as to DTC and the beneficial owners of the Series 2018E Bonds) that DTC is incapable of discharging its responsibilities described herein; or (iii) the City or the Paying Agent/Registrar determines (which determination is conclusive as to DTC and the beneficial owners of the Series 2018E Bonds) that it is in the best interests of the beneficial owners of the Series 2018E Bonds not to continue DTC's bookentry only system of transfer for the Series 2018E Bonds, then the City shall use its best efforts to appoint a successor securities depository, qualified to act as such under Section 17A of the Securities Exchange Act of 1934, as amended; provided, however, that neither the City nor the Paying Agent/Registrar appoints a successor securities depository for the Series 2018E Bonds to replace DTC without the approval of the Board so long as the Board is the beneficial owner of the Series 2018E Bonds. In the event of such an appointment, the City shall notify DTC of the appointment of such successor securities depository and transfer one or more separate Series

2018E Bonds to such successor securities depository or notify DTC Participants of the availability through DTC of Series 2018E Bonds and transfer one or more separate Series 2018E Bonds to DTC Participants having Series 2018E Bonds credited to their DTC accounts. In such event, the Series 2018E Bonds are no longer restricted to being registered in the Register in the name of Cede & Co., as nominee of DTC, but may be registered in the name of the successor securities depository, or its nominee, or in whatever name or names Registered Owners transferring or exchanging Series 2018E Bonds designate, in accordance with the provisions of this Supplemental Ordinance.

If the City fails to appoint a successor securities depository for the Series 2018E Bonds, the City shall cause to be authenticated and delivered replacement Series 2018E Bonds, in certificated form, to the beneficial owners of the Series 2018E Bonds.

- (c) Notwithstanding any other provision of this Supplemental Ordinance to the contrary, as long as any Series 2018E Bonds are registered in the name of Cede & Co., as nominee of DTC, (i) all payments with respect to the principal of, premium, if any, and interest on the Series 2018E Bonds and all notices with respect to such Series 2018E Bonds shall be made and given, respectively, in accordance with DTC's Operational Arrangements, as provided in the Blanket Letter of Representations between DTC and the City; (ii) the requirements of this Supplemental Ordinance of holding, delivering or transferring Series 2018E Bonds shall be deemed modified to require the appropriate person or entity to meet the requirements of DTC; and (iii) delivery of the Series 2018E Bonds will be in accordance with arrangements among the City, the Paying Agent/Registrar, and DTC.
- (d) If at any time DTC ceases to hold the Series 2018E Bonds in book-entry only form, all references herein to DTC have no further force or effect.
- (e) The City covenants and agrees to not discontinue the use of book-entry only system for the Series 2018E Bonds without the prior written approval of the Board.

Section 3.7. Applicability of Terms of the Master Ordinance.

Notwithstanding any provision of this Supplemental Ordinance to the contrary, unless the City otherwise directs, to the extent this Ordinance is silent as to any matter relating to the Series 2018E Bonds which is otherwise included in the Master Ordinance, the terms of the Master Ordinance for First Lien Bonds or Second Lien Bonds, including particularly the provisions of Sections 3.5, 3.6, 3.7, 3.8, and 3.9 of the Master Ordinance, are applicable to the Series 2018E Bonds as if written for the Series 2018E Bonds issued hereunder.

ARTICLE IV

PLEDGE AND SOURCE OF PAYMENT FOR THE BONDS

Section 4.1. Pledge and Source of Payment. In the Master Ordinance, the City covenants and agrees that Gross Revenues (as defined in the Previous Ordinance), as collected and received by the City, must be applied first to provide for the payment of all Required Payments and then Gross Revenues must be deposited and paid into the special funds established

by the Master Ordinance, to provide for the payment of all remaining Maintenance and Operation Expenses that are not paid as Required Payments, including deposit of surplus Net Revenues to the General Purpose Fund. Under this Ordinance, Pledged Revenues deposited (or previously deposited) are available to provide for the payment of all principal of, interest on and any redemption premiums on the Subordinate Lien Obligations (including the Series 2018E Bonds), any parity Obligations (including the payments under the Project Contract to secure CWA's Master Agreements), and to make any required payment of rebate or other payments to the United States Treasury under Article VI, and all expenses of paying same. The Subordinate Lien Obligations, including the Series 2018E Bonds and the payments under the Project Contract, constitute special obligations of the City payable solely from and equally and ratably secured by a lien on the Pledged Revenues as collected and received by the City from the operation and ownership of the System, which Pledged Revenues must, in the manner provided by this Ordinance, be set aside for and pledged to the payment of the Subordinate Lien Obligations in the General Purpose Fund, the Subordinate Lien Obligations Interest and Sinking Fund, and the Subordinate Lien Bonds Reserve Fund, and the Subordinate Lien Obligations are, in all respects, on a parity with and of equal dignity with one another and the parity bonds (except, as further provided for herein, the payments under the Project Contract and the payment of Subordinate Lien Bonds that are not designated Subordinate Lien Bonds Reserve Fund Participants are not secured by the Subordinate Lien Bonds Reserve Fund). Neither CWA nor the Owners of the Subordinate Lien Obligations ever have the right to demand payment of either the principal of, interest on or any redemption premium on the Subordinate Lien Obligations out of any funds raised or to be raised by taxation.

The pledge of Pledged Revenues hereunder is the same pledge that currently secures the obligations of the City under the outstanding Subordinate Lien Obligations, and no other parity obligations are currently outstanding. The City covenants that if it has existing obligations secured from the Pledged Revenues on a parity basis as the pledge to the Series 2018E Bonds, then the lien or liens on the Pledged Revenues securing the Series 2018E Bonds will be on a parity with the lien securing such obligations.

Section 4.2. Rates and Charges. For as long as the Subordinate Lien Obligations remain Outstanding, the City agrees to fix, charge, and collect rates and charges for the use and services of the System which are calculated to be fully sufficient to produce Net Revenues in each Fiscal Year at least equal to:

(a) the greater of

- (i) 120% of the combined Debt Service Requirements scheduled to occur in such Fiscal Year on all Previous Ordinance Bonds and First Lien Bonds then Outstanding; or
- (ii) 110% of the combined Debt Service Requirements scheduled to occur in such Fiscal Year on all Previous Ordinance Bonds, First Lien Bonds and Second Lien Bonds then Outstanding, and
- (b) at least equal to 100% of the combined debt service on the Subordinate Lien Obligations then Outstanding, taking into account unrestricted accumulated Net Revenues from prior years in the General Purpose Fund,

plus an amount equal to the sum of all deposits required to be made to the First Lien Bond Reserve Fund and to the Second Lien Bond Reserve Fund in such Fiscal Year, and to the Subordinate Lien Bonds Reserve Fund in such Fiscal Year; provided that in calculating the Net Revenues required by paragraphs (a) and (b) above all or any portion of such Net Revenues that exceed 100% of the combined Debt Service Requirements may be attributed to amounts on deposit in the General Purpose Fund that are available to pay Debt Service Requirements pursuant to Section 5.9(c) of the Master Ordinance, and provided further that in no event shall Net Revenues ever be less than the amount required to establish and maintain the First Lien Bond Interest and Sinking Fund and the First Lien Bond Reserve Fund as hereinafter provided, to establish and maintain the Second Lien Bond Interest and Sinking Fund and the Second Lien Bond Reserve Fund as hereinafter provided and, to the extent that funds for such purpose are not otherwise available, to pay all other Outstanding Obligations payable from the Net Revenues of the System, including all amounts owed as a repayment obligation by the City pursuant to a Reserve Fund Surety Policy or a Credit Agreement, as and when the same become due.

Section 4.3. Additional Special Funds. In addition to the special Funds created under Section 5.3 of the Master Ordinance, the following special accounts are created as accounts of the General Purpose Fund:

- (a) Subordinate Lien Obligations Interest and Principal Sinking Fund; and
- (b) Subordinate Lien Bonds Reserve Fund.

The City must maintain all of such Funds as separate accounts of the General Purpose Fund on the books of the City. The Subordinate Lien Obligations Interest and Sinking Fund constitutes trust funds held in trust for the Owners of the Subordinate Lien Obligations (and parity Obligations, if any, under Qualified Hedge Agreements and Credit Agreements) and the proceeds of which (except for interest income, which shall be held outside of such Fund in the General Purpose Fund) shall be pledged to the payment of the Subordinate Lien Obligations and such parity Obligations. The Funds named above may be used solely as herein provided so long as any Subordinate Lien Obligations or such parity Obligations remain Outstanding. The City reserves the right to establish, maintain, and account for on the books of the City such additional funds and accounts as may be necessary or desirable in the efficient administration of the System and flow of funds governing all Outstanding Obligations, including any funds or accounts necessary for the issuance of Third or Fourth Lien Bonds under the Master Ordinance.

Section 4.4. Flow of Funds. After making any Required Payments in accordance with the terms of the Previous Ordinance and any other payments in accordance with Section 5.4 of the Master Ordinance, Net Revenues deposited to the General Purpose Funds shall be deposited as follows:

(a) <u>First</u>, to make all deposits into the Subordinate Lien Obligations Interest and Sinking Fund required by Section 4.5 hereof or any ordinance authorizing the issuance of Subordinate Lien Obligations;

- (b) <u>Second</u>, to make all deposits into the Subordinate Lien Bonds Reserve Fund required by Section 4.6 hereof or any ordinance authorizing the issuance of Subordinate Lien Bonds; and
- (g) <u>Third</u>, to deposit any remaining Net Revenues into the undesignated General Purpose Fund.

Section 4.5. Subordinate Lien Obligations Interest and Sinking Fund. On or before the last Business Day immediately preceding (i) an Interest Payment Date so long as any Subordinate Lien Obligations remain Outstanding, and (ii) any date when any payments are due and payable under a Qualified Hedge Agreement relating to Subordinate Lien Obligations, there shall be transferred into the Subordinate Lien Bond Interest and Sinking Fund from the Revenue Fund the following amounts:

- (a) Such amounts as will be sufficient to pay the amount of interest scheduled to become due on the Subordinate Lien Obligations on such Interest Payment Date; plus
- (b) Such amounts, if any, as will be sufficient to pay the amount of principal of the Subordinate Lien Obligations due on such Interest Payment Date, including the principal amounts of, and any redemption premiums on, any Subordinate Lien Obligations payable as a result of the operation or exercise of any mandatory or optional redemption provision contained in any Supplemental Ordinance authorizing the issuance of Subordinate Lien Obligations; plus
- (c) any amounts then due under the Project Contract; plus
- (d) Such amounts, if any, as shall be necessary to pay fees, charges, and other amounts payable to any and all of the Paying Agent/Registrar, and any auction agent, market agent, broker/dealer, remarketing agent, Credit Agreement provider, or Qualified Hedge Agreement provider which, by the terms of their agreements with the City, are payable from the Subordinate Lien Bond Interest and Sinking Fund.

To the extent of any shortfall, then on any payment date amounts will be applied pro rata between the immediately preceding subparagraph (c) and the sum of subparagraphs (a) and (b). Between subparagraphs (a) and (b), any pro rata amount received will be applied first to pay interest and then to principal. After the deposit of all amounts then owed under subparagraphs (a), (b), and (c) will any amount be applied to amounts owed under subparagraph (d).

Moneys credited to the Subordinate Lien Bond Interest and Sinking Fund shall be used solely for the purpose of paying interest on, principal (at maturity or prior redemption or to purchase Subordinate Lien Obligations issued as term bonds in the open market to be credited against mandatory redemption requirements) of and redemption premiums on the Subordinate Lien Obligations, plus all fees, charges, and other amounts payable to any and all of the Paying Agent/Registrar, and any auction agent, market agent, broker/dealer, remarketing agent, Credit Agreement provider, or Qualified Hedge Agreement provider which, by the terms of their agreements with the City, are payable from the Subordinate Lien Bond Interest and Sinking

Fund. On or before each date principal becomes due and/or Interest Payment Date on the Subordinate Lien Obligations, the City shall transfer from the Subordinate Lien Bond Interest and Sinking Fund to the Paying Agent/Registrar in immediately available funds an amount equal to the principal and interest payable on the Subordinate Lien Obligations on such date.

Subordinate Lien Bonds Reserve Fund. The Subordinate Lien Bonds Reserve Fund will be funded by an additional deposit on the date of closing of the Series 2018E Bonds and available for such purpose of satisfying Subordinate Lien Bonds Reserve Fund Requirement. If there is any deficiency in the amount of the Subordinate Lien Bonds Reserve Fund Requirement on deposit when any Subordinate Lien Bonds are issued, then or before the last Business Day of each month so long as any Subordinate Lien Bonds that are Reserve Fund Participants remain Outstanding, there shall be transferred into the Subordinate Lien Bonds Reserve Fund from the General Purpose Fund amounts equal to one sixtieth (1/60th) of the Subordinate Lien Bonds Reserve Fund Requirement for the Subordinate Lien Bonds unless or until there has been accumulated in the Subordinate Lien Bonds Reserve Fund money and investments in an aggregate amount at least equal to the Subordinate Lien Bonds Reserve Fund Requirement for the Subordinate Lien Bonds; provided that additional deposits into the Subordinate Lien Bonds Reserve Fund sufficient to provide for the increased Subordinate Lien Bonds Reserve Fund Requirement resulting from the issuance of any Additional Subordinate Lien Bonds that are Reserve Fund Participants shall be made by not later than 60 months from the date of issuance of such Additional Subordinate Lien Bonds. After such amount has accumulated in the Subordinate Lien Bonds Reserve Fund and so long thereafter as such Fund contains such amount, no further deposits shall be required to be made into the Subordinate Lien Bonds Reserve Fund, and any excess amounts in such Fund may be transferred to the Revenue Fund. But if and whenever the balance in the Subordinate Lien Bonds Reserve Fund is reduced below such amount, monthly deposits into such Fund shall be resumed and continued in amounts at least equal to one sixtieth (1/60th) of the Subordinate Lien Bonds Reserve Fund Requirements on the Subordinate Lien Bonds until the Subordinate Lien Bonds Reserve Fund has been restored to such amount. The Subordinate Lien Bonds Reserve Fund shall be used to pay the principal of and interest on the Subordinate Lien Bonds that are Reserve Fund Participants (and parity Obligations, if any, under Qualified Hedge Agreements and Credit Agreements) at any time when there is not sufficient money available in the Subordinate Lien Obligations Interest and Sinking Fund for such purpose and it may be used finally to pay and retire the last Subordinate Lien Bonds that are Reserve Fund Participants to mature or be redeemed.

The requirements of the immediately preceding paragraph of this Section notwithstanding, the City may provide, upon giving notice to the Board, a Reserve Fund Surety Policy issued in amounts equal to all or part of the Subordinate Lien Bonds Reserve Fund Requirements on the Subordinate Lien Bonds that are Reserve Fund Participants in lieu of depositing cash into the Subordinate Lien Bonds Reserve Fund. In the event a Reserve Fund Surety Policy issued to satisfy all or a part of the City's obligation with respect to the Subordinate Lien Bonds Reserve Fund causes the amount then on deposit in the Subordinate Lien Bonds Reserve Fund Requirements on all Subordinate Lien Bonds, the City may transfer such excess amount to any fund or funds established for the payment of or security for Subordinate Lien Bonds, or to the undesignated portion of the General Purpose Fund.

- Section 4.6. Undesignated Amounts in the General Purpose Fund. Amounts in the General Purpose Fund not held in the Subordinate Lien Obligations Interest and Sinking Fund or the Subordinate Lien Bonds Reserve Fund are held as undesignated amounts, and are to be applied as provided in Sections 5.9 and 5.10 of the Master Ordinance.
- Section 4.7. Invest of Funds, Transfer of Investment Income, Security for Funds. All amounts in the General Purpose Fund, whether undesignated or held in the Subordinate Lien Obligations Interest and Sinking Fund or the Subordinate Lien Bonds Reserve Fund, are to be invested, transferred, and secured as provided in Sections 5.9 and 5.10 of the Master Ordinance.
- Section 4.8. Additional Bonds, Reservation of Rights. No Additional First Lien Bonds or Additional Second Lien Bonds may be issued by the City unless Net Revenues for the last completed Fiscal Year or any consecutive 12-month period out of the 18-month period immediately preceding the month in which the Supplemental Ordinance adopting such Additional First Lien Bonds or Additional Second Lien Bonds was adopted shall have been not less than the greater of (1) 120% of the combined maximum annual debt service requirements on all First Lien Bonds and any Previous Ordinance Bonds, or (ii) 110% of the combined maximum annual debt service requirements on all First Lien Bonds, Second Lien Bonds, and any Previous Ordinance Bonds, considering existing bond ordinance language regarding calculation methodologies.

The City otherwise reserves the right to issue Bonds, Third Lien Bonds, or Fourth Lien Bonds at any time and from time to time under the provisions of the Master Ordinance.

ARTICLE V

CONCERNING THE PAYING AGENT/REGISTRAR

- Section 5.1. Acceptance. The Bank of New York Mellon Trust Company, National Association is appointed as the initial Paying Agent/Registrar for the Series 2018E Bonds. The initial Paying Agent/Registrar and any successor Paying Agent/Registrar, by undertaking the performance of the duties of the Paying Agent/Registrar hereunder, and in consideration of the payment of fees and/or deposits of money pursuant to this Supplemental Ordinance, are deemed to accept and agree to abide by the terms of this Supplemental Ordinance.
- Section 5.2. Fiduciary Account. All money transferred to the Paying Agent/Registrar under this Supplemental Ordinance (except sums representing Paying Agent/Registrar's fees) must be held in a fiduciary account for the benefit of the City, is the property of the City, and must be disbursed in accordance with this Supplemental Ordinance.
- Section 5.3. <u>Bonds Presented</u>. Subject to the provisions of Section 5.4, all matured Series 2018E Bonds presented to the Paying Agent/Registrar for payment will be paid without the necessity of further instructions from the City. The Paying Agent/Registrar will cancel such Series 2018E Bonds as provided herein.
- Section 5.4. Bonds Not Timely Presented. The Paying Agent/Registrar agrees to remit to the City, upon receipt of the certificate provided for herein, a sum equal to the aggregate

face amount of all Series 2018E Bonds which have not been presented for payment prior to the date specified in such certificate. Such certificate will:

- (a) Specify the Series 2018E Bonds or portions thereof to which it applies and the amount of each;
- (b) Specify the date on which the City believes itself to be no longer obligated to pay such Series 2018E Bonds or portions thereof by virtue of the expiration of the applicable statute of limitations under the laws of the State of Texas; and
 - (c) Be signed by the Mayor and attested by the City Secretary.

Funds held by the Paying Agent/Registrar that represent principal of and interest on the Series 2018E Bonds remaining unclaimed by any Registered Owner after the expiration of three years from the date such funds have become due and payable (a) will be reported and disposed of by the Paying Agent/Registrar in accordance with the provisions of Title 6 of the Texas Property Code, as amended, to the extent such provisions are applicable to such funds, or (b) to the extent such provisions do not apply to the funds, such funds must be paid by the Paying Agent/Registrar to the City upon receipt by the Paying Agent/Registrar of a written request therefor from the City.

The Paying Agent/Registrar has no liability to the Owners of Series 2018E Bonds by virtue of actions taken in compliance with this Section.

- <u>Section 5.5.</u> Paying Agent/Registrar May Own Bonds. The Paying Agent/Registrar in its individual or any other capacity, may become the owner or pledgee of Series 2018E Bonds with the same rights it would have if it were not the Paying Agent/Registrar.
- Section 5.6. Successor Paying Agents/Registrars. The City covenants that at all times while the Series 2018E Bonds are Outstanding it will provide a legally qualified bank, trust company, financial institution, or other agency to act as Paying Agent/Registrar for the Series 2018E Bonds. If the Paying Agent/Registrar or its successor for any reason no longer acts as Paying Agent/Registrar hereunder, the City covenants that it will appoint a bank in the same city as the Paying Agent/Registrar initially appointed to perform the duties of Paying Agent/Registrar hereunder. Any successor Paying Agent/Registrar must be either a national or state banking institution and a corporation organized and doing business under the laws of the United States of America or any state, which is authorized under such laws to exercise trust powers and is subject to supervision or examination by federal or state authority.

The City reserves the right to change the Paying Agent/Registrar for the Series 2018E Bonds on not less than 60 days written notice to the Paying Agent/Registrar, as long as any such notice is effective not less than 60 days prior to the next succeeding principal or interest payment date on the Series 2018E Bonds. Promptly upon the appointment of any successor Paying Agent/Registrar and the payment by the City of any fees due to be paid to the previous Paying Agent/Registrar, the previous Paying Agent/Registrar must deliver the Register or a copy thereof to the new Paying Agent/Registrar and the new Paying Agent/Registrar will notify each Registered Owner, by first-class mail, postage prepaid, of such change and of the address of the

new Paying Agent/Registrar. Each Paying Agent/Registrar hereunder, by acting in that capacity, is deemed to have agreed to the provisions of this Supplemental Ordinance.

ARTICLE VI

PROVISIONS CONCERNING SALE AND APPLICATION OF PROCEEDS OF THE BONDS

Section 6.1. Sale of the Series 2018E Bonds. The Commitment of the Board to purchase the Series 2018E Bonds is accepted and the sale of the Series 2018E Bonds to the Board, as the initial Purchaser of the Series 2018E Bonds, for a price equal to 100% of the principal amount of the Series 2018E Bonds, is authorized in accordance with the terms thereof. The City will pay any payments related to the Series 2018E Bonds to the Board by wire transfer at no charge. It is found and declared that the above price and terms of sale of the Series 2018E Bonds are the most advantageous reasonably obtainable by the City.

The Mayor and the City Approval, Registration, and Delivery. Section 6.2. Controller are authorized to have control and custody of the Series 2018E Bonds and all necessary records and proceedings pertaining thereto pending their delivery, and the Mayor, the City Controller, and the City Secretary and other officers and employees of the City are authorized, directed and instructed to make such certifications and to execute such instruments (including by facsimile signature) as may be necessary to accomplish the delivery of the Series 2018E Bonds and to assure the investigation, examination, and approval thereof by the Attorney General of Texas and the registration of the initial Series 2018E Bonds by the Comptroller of Public Accounts of the State of Texas. Upon registration of the Series 2018E Bonds, the Comptroller of Public Accounts of the State of Texas (or a deputy designated in writing to act for the Comptroller) is requested to sign manually the registration certificate prescribed herein to be attached or affixed to each Series 2018E Bond initially delivered and to impresser print the seal of the Comptroller of Public Accounts of the State of Texas thereon. Delivery of the Series 2018E Bonds is subject to the unqualified approving opinions as to the legality of the Series 2018E Bonds of the Attorney General of Texas and of Norton Rose Fulbright US LLP, Houston, Texas, and Burney & Foreman, Houston, Texas as Co-Bond Counsel.

Section 6.3. Application of Proceeds of the Series 2018E Bonds.

Proceeds from the sale of the Series 2018E Bonds, promptly upon receipt by the city, will be deposited into the Project Accounts described in Section 8.1 hereof.

Section 6.4. Covenants to Maintain Tax Exempt Status.

(a) <u>Definitions</u>. When used in this Section, the following terms have the following meanings:

"Code" means the Internal Revenue Code of 1986, as amended by all legislation, if any, enacted on or before the Issue Date.

"Computation Date" has the meaning stated in section 1.148-1(b) of the

51080690,2

Regulations.

"Gross Proceeds" has the meaning stated in section 1.148-1(b) of the Regulations.

"Investment" has the meaning stated in section 1.148-1(b) of the Regulations.

"Issue Date" is the date on which the Series 2018E Bonds are first delivered against payment therefor.

"Nonpurpose Investment" has the meaning stated in section 1.148-1(b) of the Regulations.

"Proceeds" has the meaning stated in section 1.148-1(b) of the Regulations.

"Rebate Amount" has the meaning stated in section 1.148-3 of the Regulations.

"Regulations" means the temporary or final Income Tax Regulations applicable to the Series 2018E Bonds issued pursuant to sections 141 through 150 of the Code. Any reference to a section of the Regulations shall also refer to any successor provision to such section hereafter promulgated by the Internal Revenue Service pursuant to sections 141 through 150 of the Code and applicable to the Series 2018E Bonds.

"Yield of"

- (1) any Investment shall be computed in accordance with section 1.148-5 of the Regulations, and
- (2) the Series 2018E Bonds shall be computed in accordance with section 1.148-4 of the Regulations.
- (b) Not to Cause Interest to Become Taxable. The City shall not use, permit the use of or omit to use Gross Proceeds or any other amounts (or any property the acquisition, construction or improvement of which is to be financed directly or indirectly with Gross Proceeds) in a manner which, if made or omitted, respectively, or take any other action which would cause the interest on any Series 2018E Bond to become includable in the gross income, as defined in section 61 of the Code, of the owner thereof for federal income tax purposes. Without limiting the generality of the foregoing, unless and until the City shall have received a written opinion of counsel nationally recognized in the field of municipal bond law to the effect that failure to comply with such covenant will not adversely affect the exemption from federal income tax of the interest on any Series 2018E Bond, the City shall comply with each of the specific covenants in this Section.
- (c) <u>No Private Use or Private Payments</u>. Except as permitted by section I41 of the Code and the regulations and rulings thereunder, the City shall, at all times prior to the last stated maturity of the Series 2018E Bonds,
 - (1) exclusively own, operate, and possess all property the acquisition, construction, or improvement of which is to be financed or refinanced directly or

indirectly with Gross Proceeds of the Series 2018E Bonds and not use or permit the use of such Gross Proceeds or any property acquired, constructed, or improved with such Gross Proceeds in any activity carried on by any person or entity other than a state or local government, unless such use is solely as a member of the general public, or in a manner that would otherwise cause the Series 2018E Bonds to be "Private Activity Bonds" within the meaning of section 141 of the Code or the regulations promulgated thereunder, or

- (2) not directly or indirectly impose or accept any charge or other payment for use of Gross Proceeds of the Series 2018E Bonds or any property the acquisition, construction or improvement of which is to be financed or refinanced directly or indirectly with such Gross Proceeds other than taxes of general application and interest earned on investments acquired with such Gross Proceeds pending application for their intended purposes.
- (d) No Private Loan. Except to the extent permitted by section 141 of the Code and the regulations and rulings thereunder, the City shall not use Gross Proceeds of the Series 2018E Bonds to make or finance loans to any person or entity other than a state or local government. For purposes of the foregoing covenant, Gross Proceeds are considered to be "loaned" to a person or entity if (1) property acquired, constructed or improved with Gross Proceeds is sold or leased to such person or entity in a transaction which creates a debt for federal income tax purposes, (2) capacity in or service from such property is committed to such person or entity under a take-or-pay, output, or similar contract or arrangement, or (3) indirect benefits, or burdens and benefits of ownership, of such Gross Proceeds or such property are otherwise transferred in a transaction which is the economic equivalent of a loan.
- Not to Invest at Higher Yield. Except to the extent permitted by section 148 of the Code and the regulations and rulings thereunder, the City shall not, at any time prior to the earlier of the final stated maturity or final payment of the Series 2018E Bonds, directly or indirectly invest Gross Proceeds of such Series 2018E Bonds in any Investment (or use such Gross Proceeds to replace money so invested), if as a result of such investment the Yield of all Investments allocated to such Gross Proceeds whether then held or previously disposed of, exceeds the Yield on the Series 2018E Bonds. No portion of the proceeds of the loan will be used, directly or indirectly, in a manner that would cause the Series 2018E Bonds to be "arbitrage bonds" within the meaning of a section 148(a) of the Code and Regulations, including to acquire or to replace funds which were used, directly or indirectly, to acquire Nonpurpose Investments (as defined in the Code and Regulations) which produce a yield materially higher than the yield on any Board bonds that are issued to provide financing for the loan (the "Source Series Bonds"), other than Nonpurpose Investments acquired with: (i) proceeds of the Source Series Bonds invested for a reasonable temporary period of up to three years after the issue date of the Source Series Bonds until such proceeds are needed for the facilities to be financed; (ii) amounts invested in a bona fide debt service fund, within the meaning of section 1.148-1(b) of the Regulations; and (iii) amounts deposited in any reasonably required reserve or replacement fund to the extent such amounts do not exceed the least of maximum annual debt service on the Series 2018E Bonds, 125% of average annual debt service on the Series 2018E Bonds, or 10% of the stated principal amount (or, in the case of a discount, the issue price) of the Series 2018E Bonds.

- (f) Not Federally Guaranteed. Except to the extent permitted by section 149(b) of the Code and the regulations and rulings thereunder, the City shall not take or omit to take any action which would cause the Series 2018E Bonds to be federally guaranteed within the meaning of section 149(b) of the Code and the regulations and rulings thereunder.
- (g) <u>Information Report</u>. The City shall timely file with the Secretary of the Treasury the information required by section 149(e) of the Code with respect to the Series 2018E Bonds on such forms and in such place as such Secretary of the Treasury may prescribe.
- (h) <u>Payment of Rebate Amount</u>. Except to the extent otherwise provided in section 148(f) of the Code and the regulations and rulings thereunder, the City shall:
 - (1) account for all Gross Proceeds (including all receipts, expenditures and investments thereof) on its books of account separately and apart from all other funds (and receipts, expenditures and investments thereof) and shall retain all records of such accounting for at least six years after the final Computation Date. The City may, however, to the extent permitted by law, commingle Gross Proceeds of the Series 2018E Bonds with other money of the City, provided that the City separately accounts for each receipt and expenditure of such Gross Proceeds and the obligations acquired therewith,
 - (2) calculate the Rebate Amount with respect to the Series 2018E Bonds, not less frequently than each Computation Date, in accordance with rules set forth in section 148(f) of the Code, section 1.148-3 of the Regulations, and the rulings thereunder. The City shall maintain a copy of such calculations for at least six years after the final Computation Date,
 - (3) as additional consideration for the purchase of the Series 2018E Bonds by the initial purchaser thereof and the loan of the money represented thereby, and in order to induce such purchase by measures designed to ensure the excludability of the interest thereon from the gross income of the owners thereof for federal income tax purposes, pay to the United States the amount described in paragraph (2) above at the times, in the installments, to the place, in the manner and accompanied by such forms or other information as is or may be required by section 148(f) of the Code and the regulations and rulings thereunder, and
 - (4) exercise reasonable diligence to assure that no errors are made in the calculations and payments required by paragraphs (2) and (3) and, if an error is made, to discover and promptly to correct such error within a reasonable amount of time thereafter (and in all events within one hundred eighty (180) days after discovery of the error), including payment to the United States of any additional Rebate Amount owed to it, interest thereon and any penalty required by the Regulations.
- (i) Not to Divert Arbitrage Profits. Except to the extent permitted by section 148 of the Code and the regulations and rulings thereunder, the City shall not, at any time prior to the earlier of the final stated maturity or final payment of the Series 2018E Bonds, enter into any transaction that reduces the amount required to be paid to the United States pursuant to Subsection (h) of this Section because such transaction results in a smaller profit or a larger loss

than would have resulted if the transaction had been at arm's length and had the Yield of the Series 2018E Bonds not been relevant to either party.

- (j) <u>Elections</u>. The City hereby directs and authorizes the City Controller, or his representative, or either or any combination of them, to make elections permitted or required pursuant to the provisions of the Code or the Regulations, as they deem necessary or appropriate in connection with the Series 2018E Bonds, in the Certificate as to Tax Exemption or similar or other appropriate certificate, form or document.
- (k) <u>The Board's Source Series Bonds</u>. The City shall not acquire any of the Source Series Bonds that are issued to provide financing for the Board's purchase of the Series 2018E Bonds.
- Section 6.5. Paying Agent/Registrar Agreement. The registration of and payment of the principal of, premium, if any, and interest on the Series 2018E Bonds when due will be effectuated pursuant to the terms of a Paying Agent/Registrar Agreement to be entered into by and between the City and the Paying Agent/Registrar, which will be substantially in the form attached hereto as *Exhibit B*, the terms and provisions of which are approved, and the Mayor and the City Controller are authorized to execute and deliver such Paying Agent/Registrar Agreement on behalf of the City in multiple counterparts and the City Secretary is authorized to attest thereto and may affix the City's seal.
- Section 6.6. Co-Bond Counsel; Appointment and Acceptance. The engagement of Norton Rose Fulbright US LLP, Houston, Texas, and Burney & Foreman, Houston, Texas, are hereby approved; all fees of such engagement shall be paid from proceeds of the Series 2018E Bonds. The City is hereby authorized to execute the engagement letter, attached hereto as *Exhibit C*, with Norton Rose Fulbright US LLP.
- Section 6.7. Related Matters. In order that the City may satisfy in a timely manner all of its obligations under the Ordinance, the Mayor, the City Secretary, and the City Controller of the City and all other appropriate officers and agents of the City are authorized and directed to take all other actions that are reasonably necessary to provide for issuance and delivery of the Series 2018E Bonds, including without limitation, executing by manual or facsimile signature and delivering on behalf of the City all certificates, consents, receipts, requests, notices, investment agreements, trust agreements, and other documents as may be reasonably necessary to satisfy the City's obligations under the Ordinance, and paying costs incurred in connection with the issuance of the Series 2018E Bonds, to direct the transfer and application of funds of the City consistent with this Supplemental Ordinance, and issue a Private Placement Memorandum in the form attached hereto as Exhibit D. If requested by the Attorney General of Texas or his representatives, the City Attorney or his designee may authorize such ministerial changes in the written text of this Supplemental Ordinance as are necessary to obtain the Attorney General's approval and as he determines are consistent with the intent and purposes of this Supplemental Ordinance, which determination is final, as evidenced by delivery of the final Supplemental Ordinance to the Attorney General.

ARTICLE VII

CONTINUING DISCLOSURE UNDERTAKING

Section 7.1. Annual Reports. The City agrees to provide annually to the MSRB, within six months after the end of each fiscal year ending in or after 2017, financial information and operating data with respect to the City of the general type included in the City's Audited Financial Statements and Supplementary Schedules for the City's Combined Utility System Fund. Any financial statements so to be provided will be (1) prepared in accordance with generally accepted accounting principles currently in effect for governmental units as prescribed by the Government Accounting Standards Board, which principles are subject to change from time to time to comply with state law or regulation and (2) audited, if the City commissions an audit of such statements and the audit is completed within the period during which they must be provided. If audited financial statements are not so provided, then the City will provide audited financial statements for the applicable fiscal year to the MSRB, when and if audited financial statements become available but if such audited financial statements are unavailable the City will provide such financial statements on an unaudited basis within the above-described six-month period.

If the City changes its fiscal year, it will notify the MSRB of the change (and of the date of the new fiscal year end) prior to the next date by which the City otherwise would be required to provide financial information and operating data pursuant to this Section.

The financial information and operating data to be provided pursuant to this Section may be set forth in full in one or more documents or may be included by specific reference to any document that is available from the MSRB or filed with the SEC, or may be provided in any other manner consistent with the Rule.

- Section 7.2. <u>Material Event Notices</u>. The City will notify the MSRB, in an electronic format as prescribed by the MSRB, in a timely manner not in excess of 10 business days after the occurrence of the events with respect to the Series 2018E Bonds, notice of any of the following events with respect to the Series 2018E Bonds:
 - A. Principal and interest payment delinquencies;
 - B. Non-payment related defaults, if material;
 - C. Unscheduled draws on debt service reserves reflecting financial difficulties;
 - D. Unscheduled draws on credit enhancements reflecting financial difficulties;
 - E. Substitution of credit or liquidity providers, or their failure to perform;
 - F. Adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the

51080690,2

Series 2018E Bonds or other material events affecting the tax status of the Series 2018E Bonds;

- G. Modifications to rights of holders of the Series 2018E Bonds, if material;
- H. Series 2018E Bond calls, if material, and tender offers;
- I. Defeasances;
- J. Release, substitution, or sale of property securing repayment of the Series 2018E Bonds, if material;
 - K. Rating changes;
 - L. Bankruptcy, insolvency, receivership or similar event of the City;
- M. The consummation of a merger, consolidation, or acquisition involving the City or the sale of all or substantially all of the assets of the City, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; and
- N. Appointment of a successor or additional trustee or the change of name of a trustee, if material.

The City will notify the MSRB in an electronic form prescribed by the MSRB, in a timely manner, of any failure by the City to provide financial information or operating data in accordance with Section 7.1 of this Supplemental Ordinance by the time required by such Section.

Section 7.3. <u>Limitations, Disclaimers, and Amendments</u>. The City will be obligated to observe and perform the covenants specified in this Article for so long as, but only for so long as, the City remains an "obligated person" with respect to the Series 2018E Bonds within the meaning of the Rule, except that the City in any event will give the notice required by Section 7.2 of any Series 2018E Bond calls and defeasance that cause the City to be no longer such an "obligated person."

The provisions of this Article are for the sole benefit of the Owners and beneficial owners of the Series 2018E Bonds, and nothing in this Article, express or implied, give any benefit or any legal or equitable right, remedy, or claim hereunder to any other person. The City undertakes to provide only the financial information, operating data, financial statements, and notices which it has expressly agreed to provide pursuant to this Article and does not undertake to provide any other information that may be relevant or material to a complete presentation of the City's financial results, condition, or prospects or undertake to update any information provided in accordance with this Article or otherwise, except as expressly provided herein. The City does not make any representation or warranty concerning such information or its usefulness to a decision to invest in or sell Series 2018E Bonds at any future date.

UNDER NO CIRCUMSTANCES SHALL THE CITY BE LIABLE TO THE OWNER OR BENEFICIAL OWNER OF ANY SERIES 2018E BOND OR ANY OTHER PERSON, IN CONTRACT OR TORT, FOR DAMAGES RESULTING IN WHOLE OR IN PART FROM ANY BREACH BY THE CITY, WHETHER NEGLIGENT OR WITHOUT FAULT ON ITS PART, OF ANY COVENANT SPECIFIED IN THIS ARTICLE, BUT EVERY RIGHT AND REMEDY OF ANY SUCH PERSON, IN CONTRACT OR TORT, FOR OR ON ACCOUNT OF ANY SUCH BREACH SHALL BE LIMITED TO AN ACTION FOR MANDAMUS OR SPECIFIC PERFORMANCE.

No default by the City in observing or performing its obligations under this Article will ever constitute a breach of or default under this Supplemental Ordinance for purposes of any other provision of this Supplemental Ordinance.

Nothing in this Article is intended or shall act to disclaim, waive, or otherwise limit the duties of the City under federal and state securities laws.

The provisions of this Article may be amended by the City from time to time to adapt to changed circumstances that arise from a change in legal requirements, a change in law, or a change in the identity, nature, status, or type of operations of the City, but only if (1) the provisions of this Article, as so amended, would have permitted an underwriter to purchase or sell Series 2018E Bonds in a primary offering of the Series 2018E Bonds in compliance with the Rule, taking into account any amendments or interpretations of the Rule to the date of such amendment, as well as such changed circumstances, and (2) either (a) the Owners of a majority in aggregate principal amount (or any greater amount required by any other provision of this Supplemental Ordinance that authorizes such an amendment) of the Outstanding Series 2018E-Bonds consent to such amendment or (b) a person or entity that is unaffiliated with the City (such as nationally recognized bond counsel) determines that such amendment will not materially impair the interests of the Owners and beneficial owners of the Series 2018E Bonds. If the City so amends the provisions of this Article, it shall include with any amended financial information or operating data next provided in accordance with Section 7.1 an explanation, in narrative form, of the reasons for the amendment and of the impact of any change in the type of financial information or operating data so provided. The City may also amend or repeal the provisions of this Article if the SEC amends or repeals the applicable provisions of the Rule or a court of final jurisdiction enters judgment that such provisions of the Rule are invalid, and the City also may amend the provisions of this Article in its discretion in any other manner or circumstance, but in either case only if and to the extent that the provisions of this sentence would not prevent an underwriter from lawfully purchasing or selling Series 2018E Bonds in a primary offering of the Series 2018E Bonds.

Section 7.4. <u>Definitions</u>.

As used in this Article, the following terms have the meanings ascribed to such terms below:

"MSRB" means the Municipal Securities Rulemaking Board. Until such time as the SEC or the MSRB shall determine otherwise, information to be filed with the MSRB pursuant to the Rule will be submitted through the Electronic Municipal Market Access system ("EMMA")

maintained by the MSRB and will be accessible at http://www.emma.msrb.org or other such access location as designated by the SEC or the MSRB.

"Rule" means SEC Rule 15c2-12, as amended from time to time.

"SEC" means the United States Securities and Exchange Commission.

ARTICLE VIII

PROJECT FUND.

Section 8.1. Project Fund. The creation of the special fund of the City, known as the Series 2018E Combined Utility System Bond Project Fund (the "Project Fund"), is confirmed as the construction fund for the Series 2018E Bonds. The Project Fund, which may include sub-accounts, will be maintained as a separate account on the books of the City and known as the "Series 2018E Project Account." The City will deposit the proceeds of the sale of the Series 2018E Bonds to the credit of the Project Fund and disburse the money held for the credit of the Project Fund for authorized System purposes and to pay the costs of issuing the Series 2018E Bonds. If required by the Board, the City may enter into one or more agreements, including an Agreement for Benefit of Texas Water Development Board Relating to the Establishment of a Segregated Account, between the City and the Board, with respect to the disposition of the proceeds of the Series 2018E Bonds, and the Mayor and the City Controller are authorized to execute and deliver such agreements.

The proceeds from the sale of the Series 2018E Bonds to the Board represent a loan by the Board to the City from the State Water Implementation Revenue Fund. Upon completion of a project for the Series 2018E Bonds ("Project"), the City will provide the Executive Administrator of the Board with a Final Accounting of the total costs of each such Project and "as built plans" for each Project. The City may use any loan proceeds from the Series 2018E Bonds that are determined to be surplus proceeds remaining after completion of the project for the following purposes as approved by the Executive Administrator: (1) to deposit into the Subordinate Lien Obligations Interest and Sinking Fund or other debt service account for the payment of interest or principal on the Series 2018E Bonds owned by the Board; or (2) eligible project costs as authorized by the Executive Administrator.

Section 8.2. Investment of Money in the Project Fund. Money on deposit in the Project Fund may, at the option of the City, be invested as permitted under the Texas Public Funds Investment Act, as amended; and collateralized as required under the Texas Public Funds Collateral Act, provided that all such deposits and investments must be made in such manner (which may include repurchase agreements for such investments with any national bank) that the money required to be expended from the Project Fund will be available at the proper time or times. All investments will be valued in terms of current market value no less frequently than the last business day of the City's Fiscal Year System, except that any direct obligations of the United States of America, State and Local Government Series, will be continuously valued at their par value or principal face amount. Any obligation in which money is so invested must be kept and held in an official depository of the City, except as hereinafter provided. For purposes of maximizing investment returns, money in the Project Fund may be invested, together with

money in the funds maintained pursuant to Article V of the Master Ordinance or with other money of the City, in common investments of the kind described above, or in a common pool of such investments which is kept and held at an official depository of the City, which is deemed not to be or constitute a commingling of such money or funds, provided that records clearly evidencing the investment or investment pool in which such money is invested and the share thereof purchased with such money or owned by the Project Fund is held by or on behalf of the Project Fund.

All interest and income derived from such deposits and investments must be deposited in the Project Account, applied to the purposes permitted by Section 6.3 or other qualified System purposes, and does not constitute Gross Revenues of the System, except that, to the extent required by law, such interest and income may be applied to make payments to the United States as shall be required to assure that interest on the Series 2018E Bonds is excludable from gross income for federal income tax purposes as described in Section 6.4(h) of this Supplemental Ordinance. Additionally, payments to the Board for any excess funds or disallowed costs may be made from such interest and income in the Project Fund.

ARTICLE IX

APPLICATION OF PROVISIONS OF MASTER ORDINANCE

Section 9.1. Application of Provisions of Master Ordinance. In addition to provisions specifically referenced herein as applicable to the Subordinate Lien Bonds or subordinate Lien Obligations, the provisions of Articles VI, VII, and VIII of the Master Ordinance apply to the Series 2018E Bonds to the extent that such provisions are not otherwise expressly provided for in this Ordinance.

ARTICLE X

MISCELLANEOUS

- Section 10.1. Further Proceedings. The Mayor of the City, the City Controller of the City and the City Secretary of the City and other appropriate officials of the City are authorized and directed to do any and all things necessary and/or convenient to carry out the terms of this Supplemental Ordinance.
- Section 10.2. Compliance with Board Rules and Regulations. The City covenants and agrees that while the Series 2018E Bonds are outstanding:
 - (1) to comply with all applicable requirements contained in 31 Texas Administrative Code, Chapter 363, including the following;
 - A. to provide insurance coverage in an amount sufficient to protect the Board's interest in the Project pursuant to 31 Texas Administrative Code 363.42(a)(2)(L);

- B. to adopt an approved water conservation program while the Series 2018E Bonds remain Outstanding pursuant to 31 Texas Administrative Code 363.42(a)(2)(F); and
- C. to report to the Board the amounts of Project funds, if any, that were used to compensate historically underutilized businesses that worked on the Project, in accordance with 31 Texas Administrative Code 363.1312;
- (2) to hold the proceeds of the Series 2018E Bonds at a designated state depository institution or other properly chartered and authorized institution in accordance with the Public Funds Investment Act, Government Code, Chapter 2256, and the Public Funds Collateral Act, Government Code, Chapter 2257;
- (3) to not use any proceeds of the Series 2018E Bonds when sampling, testing, removing or disposing of contaminated soils and/or media at the Project site, and to indemnify, hold harmless and protect the Board from any and all claims, causes of action or damages to the person or property of third parties arising from the sampling, analysis, transport, storage, treatment and disposition of any contaminated sewage sludge, contaminated sediments and/or contaminated media that may be generated by the City, its contractors, consultants, agents, officials and employees as a result of activities relating to the Project to the extent permitted by law;
- (4) to submit outlay reports with sufficient documentation on costs on a quarterly or monthly basis in accordance with the Board's outlay report guidelines;
- (5) all laborers and mechanics employed by contractors and subcontractors for the Project shall be paid wages at rates not less than those prevailing on projects of a similar character in the locality in accordance with the Davis-Bacon Act, and the U.S. Department of Labor's implementing regulations. The City, all contractors, and all subcontractors shall ensure that all Project contracts mandate compliance with Davis-Bacon. All contracts and subcontracts for the construction of the Project carried out in whole or in part with financial assistance made available as provided herein shall insert in full in any contract in excess of \$2,000 the contracts clauses as provided by the Board;
- (6) to provide the Board with all information required to be reported in accordance with the Federal Funding Accountability and Transparency Act of 2006, Pub. L. 109-282, as amended by Pub. L. 110-252. The City shall obtain a Data Universal Numbering System (DUNS) Number and shall register with System for Award Management (SAM), and maintain current registration at all times during which the Series 2018E are outstanding; and
- (7) to comply with the standard emergency discovery conditions for threatened and endangered species and cultural resources, as more fully specified in the final environmental finding of the Executive Administrator of the Board.
- Section 10.3. Severability. If any Section, paragraph, clause, or provision of this Supplemental Ordinance is for any reason held to be invalid or unenforceable, the invalidity or

unenforceability of such Section, paragraph, clause, or provision shall not affect any of the remaining provisions of this Supplemental Ordinance.

Section 10.4. Open Meeting. It is found, determined, and declared that a sufficient written notice of the date, hour, place, and subject of the meeting of the City Council at which this Supplemental Ordinance was adopted was posted at a place convenient and readily accessible at all times to the general public at the City Hall of the City for the time required by law preceding this meeting, as required by the Open Meetings Act, Chapter 551, Texas Government Code, as amended, and that this meeting has been open to the public as required by law at all times during which this Supplemental Ordinance and the subject matter thereof has been discussed, considered and formally acted upon. The City Council further ratifies, approves, and confirms such written notice and the contents and posting thereof.

Section 10.5. Declaration of Emergency and of Public Security Authorization. It is officially found and determined that a case of emergency and urgent public necessity exists which requires the holding of the meeting at which this Supplemental Ordinance is passed and further requires that this Supplemental Ordinance be passed finally and take effect immediately on the date of its introduction, such emergency and urgent public necessity being that the proceeds from the sale of the Series 2018E Bonds are required as soon as possible and without delay for the purposes set forth herein. It is further officially found and determined that this Supplemental Ordinance is a public security authorization, and therefore this Supplemental Ordinance is effective immediately upon approval by the City Council pursuant to Section 1201.028 of the Texas Government Code, as amended.

Section 10.6. Authority to Modify Attachments. When used herein with respect to agreements and other documents that are attached as exhibits hereto, the phrase "substantially in the form of" authorizes the execution of an agreement or document that is not materially inconsistent with the purpose, intent and general substantive parameters of the agreement or other document as attached. The determination by an officer or employee of the City acting under authority delegated thereto by this Supplemental Ordinance or the Master Ordinance to execute any such agreement or other document in substantially the form attached to this Supplemental Ordinance has the same force and effect as a determination made by the City Council.

Section 10.7. Repealer. All ordinances, or parts thereof inconsistent herewith are repealed to the extent of such inconsistency.

Section 10.8. Remedies. The Board may exercise all remedies available to it in law or equity, and any provision of the Ordinance that restricts or limits the Board's full exercise of these remedies shall be of no force and effect.

PASSED AND APPROVED THIS	day of	, 2018.
	Mayor	
Approved as to Form:		
Senior Assistant City Attorney		
(Requested by Carol Haddock, P. E.)		
Interim Director of Department of		
Public Works and Engineering)		
(I D Ella Ma		•

EXHIBITS:

Exhibit A	Form of Series 2018E Bond
Exhibit B	Paying Agent/Registrar Agreement
Exhibit C	Combined Utility System Co-Bond Counsel Letter Agreement
Exhibit D	Private Placement Memorandum

EXHIBIT A

FORM OF SERIES 2018E BOND

The Series 2018E Bonds shall be in substantially the following form, with such omissions, insertions and variations as may be permitted or required pursuant to the terms of this Supplemental Ordinance.

FORM OF SERIES 2018E BOND

UNITED STATES OF AMERICA STATE OF TEXAS

CITY OF HOUSTON, TEXAS, COMBINED UTILITY SYSTEM SUBORDINATE LIEN REVENUE BOND SERIES 2018E

NUMBER R-			DENG \$	OMINATION
REGISTERED			, I	REGISTERED
INTEREST RATE:%	BOND DATE:, 2018	<u>ISSUE DATE</u> : , 2018	MATURITY DATE:	CUSIP NO.:
Registered Owner:	Cede & Co.			
Principal Amount:				DOLLARS

The CITY OF HOUSTON, TEXAS, a municipal corporation duly incorporated under the laws of the State of Texas (herein the "City"), for value received, promises to pay, to the Registered Owner identified above or registered assigns, solely from certain pledged revenues and funds as hereinafter specified and from no other source, on the Maturity Date specified above, upon presentation and surrender of this at the principal corporate trust office of the "Paying Agent/Registrar," initially The Bank of New York Mellon Trust Company, National Association in any coin or currency of the United States of America which on the date of payment of such principal is legal tender for the payment of debts due the United States of America, the Principal Amount identified above (or so much as shall not have been paid upon prior redemption), and to pay, solely from such pledged revenues and funds, interest thereon at the Interest Rate shown above, calculated on the basis of a 360-day year composed of twelve 30-day months, from the later of the Issue Date identified above or the most recent interest payment date to which interest has been paid or duly provided for. Interest on this bond is payable on each May 15 and November 15 beginning [*May 15, 2019*], until the maturity or redemption date of this bond or until the City's obligation with respect to this bond has been satisfied. Interest on this bond shall be payable by check mailed by the Paying Agent/Registrar to the Registered Owner of record as of the 1st day of the month of the interest payment date as shown on the books of registration kept by the Paying Agent/Registrar.

THIS BOND IS ONE OF A DULY AUTHORIZED SERIES OF BONDS (herein the "Series 2018E Bonds") in the aggregate principal amount of \$_______ issued pursuant to a master ordinance and a supplemental ordinance adopted by the City Council of the City (herein the "Ordinance") to (a) finance certain improvements to the City's drinking water supply system, and (b) pay the costs of issuing the Series 2018E Bonds, all under and pursuant to the authority of Chapter 1502, Texas Government Code, as amended, and all other applicable law.

THIS BOND AND ALL OF THE SERIES 2018E BONDS are special obligations of the City that are equally and ratably payable from and secured by a lien on the "Pledged Revenues" collected and received by the City and deposited to the City's General Purpose Fund after certain required payments with respect to water and sewer system bonds issued and to be issued by the City and payment of all maintenance and operation expenses of the combined utility system from the operation and ownership of the City's combined utility system as defined and provided in the Ordinance, which Pledged Revenues are required to be set aside for and pledged to the payment of the City's outstanding Subordinate Lien Obligations, including the Series 2018E Bonds and all additional bonds issued on a parity therewith, in the interest and sinking fund and the reserve fund required to be maintained for the payment of all such bonds, all as more fully described and provided for in the Ordinance. This bond and the series of which it is a part, together with the interest thereon, are payable solely from such Pledged Revenues and do not constitute an indebtedness or general obligation of the City.

THE CITY MAY CALL THE SERIES 2018E BONDS FOR REDEMPTION PRIOR TO MATURITY on [*May 15, 2029*], or any date thereafter, in whole or in part in inverse order of maturity (but if less than all the Series 2018E Bonds of a single maturity are called for redemption, those bonds called shall be selected by lot or other customary random method by the Paying Agent/Registrar), at a redemption price of par plus accrued interest to the date fixed for redemption.

SERIES 2018E BONDS MAY BE REDEEMED IN PART only in integral multiples of \$5,000 of principal amount or maturity amount, as applicable. If a Series 2018E Bond subject to redemption is in a denomination larger than \$5,000, a portion of such Series 2018E Bond may be redeemed, but only in integral multiples of \$5,000. In selecting portions of Series 2018E Bonds for redemption, the Paying Agent/Registrar shall treat each Series 2018E Bond as representing that number of Series 2018E Bonds of \$5,000 denomination which is obtained by dividing the principal amount (or maturity amount) of such Series 2018E Bond by \$5,000. Upon surrender of any Series 2018E Bond for redemption in part, the Paying Agent/Registrar, in accordance with the provisions of the Ordinance, shall authenticate and deliver in exchange therefore a Series 2018E Bond or Series 2018E Bonds of like maturity and interest rate in an aggregate principal amount (or maturity amount) equal to the unredeemed portion of the Series 2018E Bond so surrendered.

NOTICE OF ANY SUCH OPTIONAL REDEMPTION identifying the Series 2018E Bonds to be redeemed shall be sent by first-class mail, postage prepaid, to the Registered Owners thereof at their addresses as shown on the books of registration kept by the Paying Agent/Registrar not less than 30 days before the date fixed for such redemption. By the date fixed for redemption, due provision shall be made with the Paying Agent/Registrar for the payment of the redemption price of the Series 2018E Bonds called for redemption. If such notice of redemption is given, and if due provision for such payment is made, all as provided above, the Series 2018E Bonds which are to be so redeemed thereby automatically shall be redeemed prior to their scheduled maturities, they shall not bear interest after the date fixed for redemption, and they shall not be regarded as being outstanding except for the purpose of being paid by the Paying Agent/Registrar with the funds so provided for such payment.

THE CITY HAS RESERVED THE RIGHT TO ISSUE ADDITIONAL COMBINED UTILITY SYSTEM REVENUE BONDS, subject to the restrictions contained in the Ordinance, which bonds may be secured by a lien prior and superior to, on a parity with, or subordinate and inferior to, the lien on the Pledged Revenues securing this bond and the series of which it is a part.

THIS BOND IS TRANSFERABLE only upon presentation and surrender at the principal corporate trust office of the Paying Agent/Registrar, duly endorsed for transfer or accompanied by an assignment duly executed by the registered owner or his authorized representative, subject to the terms and conditions of the Ordinance.

THIS BOND IS EXCHANGEABLE upon presentation and surrender at the principal corporate trust office of the Paying Agent/Registrar for Series 2018E Bonds in the principal amount (or maturity amount) of \$5,000 or any integral multiple thereof, subject to the terms and conditions of the Ordinance.

THE PAYING AGENT/REGISTRAR IS NOT REQUIRED TO ACCEPT for transfer or exchange any Series 2018E Bond called for redemption during the 15 days prior to mailing of any notice of redemption; provided, however, that such limitation shall not apply to the transfer or exchange by the registered owner of a Series 2018E Bond called for redemption in part.

THE REGISTERED OWNER HEREOF shall never have the right to demand payment out of any funds raised or to be raised by taxation.

REFERENCE IS MADE TO THE ORDINANCE, a copy of which is on file in the office of the Paying Agent/Registrar, and to all of the provisions of which the Registered Owner of this bond by the acceptance hereof assents, for definitions of terms; the description of and the nature and extent of the security for the Series 2018E Bonds; the priority for the application and use of the income and revenues of the System; the Pledged Revenues pledged to the payment of the principal of and interest on the Series 2018E Bonds; the nature and extent and manner of enforcement of the lien and pledge securing the payment of the Series 2018E Bonds; the terms and conditions for the issuance of additional revenue obligations, including additional Subordinate Lien Obligations; the terms and conditions for amending the Ordinance; the terms and conditions relating to the transfer or exchange of this bond; the rights, duties, and obligations of the City and the Paying Agent/Registrar; the terms and provisions upon which the liens, pledges, charges and covenants made therein may be discharged at or prior to the maturity of this bond, and deemed to be no longer Outstanding thereunder; and for the other terms and provisions thereof. Capitalized terms used herein, unless otherwise defined, have the same meanings assigned in the Ordinance.

IT IS DECLARED AND REPRESENTED that this bond has been duly and validly issued and delivered; that all acts, conditions, and things required or proper to be performed, exist, and be done precedent to or in the issuance and delivery of this bond have been performed, existed, and been done in accordance with law; that the Series 2018E Bonds do not exceed any statutory limitation; and that provision has been made for the payment of the principal of and interest on this bond and all of the Series 2018E Bonds by the aforesaid lien on and pledge of the Pledged Revenues.

THIS BOND shall not be valid or obligatory for any purpose or be entitled to any benefit under the Ordinance unless this bond either (i) is registered by the Comptroller of Public Accounts of the State of Texas or (ii) is authenticated by the Paying Agent/Registrar by due execution of the authentication certificate manually endorsed hereon. Such duly executed certificate of authentication shall be conclusive evidence that this bond was delivered by the Paying Agent/Registrar under the provisions of the Ordinance.

IN WITNESS WHEREOF, the	City has in the Ordinance	directed this bond	to be signed
by the Mayor and the City Controller	and countersigned by the	City Secretary by	their printed
facsimile signatures.			

Mayor	
City Controller	
City Secretary	

[FORM OF COMPTROLLER'S REGISTRATION CERTIFICATE]

The following form of Comptroller's Registration Certificate shall be attached or affixed to each of the Series 2018E Bonds initially delivered.

OFFICE OF THE COMPTROLLER OF PUBLIC ACCOUNTS	REGISTER NO.
General of the State of Texas to the effect that hereof have been examined by him as required conformity with the Constitution and laws of the special obligation of the City of Houston, Tex	cord in my office a certificate of the Attorney this bond and the proceedings for the issuance by law, that he finds that it has been issued in a State of Texas and that it is a valid and binding tas, payable from the revenues and other funds gs authorizing the same, and I do further certify to
WITNESS MY SIGNATURE AND SEA	AL OF OFFICE this
	Comptroller of Public Accounts of the State of Texas
[SEAL]	
[SEAL]	

[FORM OF AUTHENTICATION CERTIFICATE]

The following form of Authentication Certificate shall appear on each of the definitive Series 2018E Bonds.

AUTHENTICATION CERTIFICATE

[FORM OF ASSIGNMENT]

The following form of assignment shall appear on each of the Series 2018E Bonds.

ASSIGNMENT

For value received, the undersigned hereby sells, assigns, and transfers unto		
	L SECURITY OR NTIFYING NUMBER)	
(Print or type name, ad	ddress, and zip code of transferee)	
the within bond and hereby irrevocably con	stitutes and appoints	
attorney to transfer said bond on the boo substitution in the premises.	oks kept for registration thereof, with full power of	
DATED:	•	
Signature Guaranteed:		
	Registered Owner	
NOTICE: The signature must be guaranteed by a commercial bank or a member firm of a national securities exchange. Notarized or witnessed signatures are not acceptable.	NOTICE: The signature on this assignment must correspond with the name of the Registered Owner as it appears on the face of the within bond in every particular, without alteration or enlargement or any change whatever.	

A-9

EXHIBIT B

PAYING AGENT/REGISTRAR AGREEMENT

(see attachment)

EXHIBIT C

COMBINED UTILITY SYSTEM CO-BOND COUNSEL LETTER AGREEMENT

(see attachment)

EXHIBIT D

PRIVATE PLACEMENT MEMORANDUM

(see attachment)

PRIVATE PLACEMENT MEMORANDUM DATED	. 2018

NEW ISSUES BOOK-ENTRY-ONLY

On the date of initial delivery of the Bonds (defined below), Issuer Co-Bond Counsel will render their opinion substantially in the form attached in APPENDIX C - FORM OF OPINION OF CO-BOND COUNSEL.

CITY OF HOUSTON, TEXAS
Combined Utility System
Subordinate Lien Revenue Bonds,
Series 2018E (the "Bonds")

	, 2 018	Due: [*November 15*], as shown in Exhibit A	
Interest Date:		Interest on the Bonds will be payable from the Delivery Date or the most recentifierest Payment Date on May 15 and November 15 each year, commencing [*May 15, 2019*] (each an "Interest Payment Date") until the earliest of maturity or prioredemption. The Bonds of each series will bear interest at the rates per annum set forth in "APPENDIX A - MATURITY SCHEDULE."	
Record Date:		The close of business on the first day of the month immediately preceding the Interest Payment Date.	
Redemption:		The Bonds are subject to redemption prior to maturity as provided herein. See "THI BONDS - Redemption Provisions" herein.	
Authorized Denomination	s:	The Bonds are being issued as fully registered bonds in denominations of \$5,000, o any integral multiple thereof.	
Paying Agent/	Registrar:	The paying agent ("Paying Agent/Registrar") for the Bonds is The Bank of New York Mellon Trust Company, N. A.	
Book-Entry-O	nly System	Upon initial issuance, the ownership of the Bonds will be registered in the registration books of the Issuer kept by the Paying Agent/Registrar, in the name of Cede & Co., a nominee of The Depository Trust Company, New York, New York ("DTC") to whice principal, redemption premium, if any, and interest payments on the Bonds will be made. The purchasers of the Bonds will not receive physical delivery of bond certificates. Principal of, interest, and premium if any, on the Bonds will be payable at the designated office of the Paying Agent/Registrar in Houston, Texas as the same become due and payable.	
Issuer:		City of Houston, Texas.	
Official Action	1:	Ordinance, dated, 2018.	
Purpose:		See "APPENDIX B - OFFICIAL ACTION."	
Security for th	e Bonds:	See APPENDIX B - OFFICIAL ACTION."	
Ratings:		The Bonds are unrated.	
Delivery Date:		, 2018	

Prices or Yields, and Initial CUSIP Numbers

City of Houston, Texas

ELECTED OFFICIALS

Sylvester Turner, Mayor

Chris B. Brown, City Controller

CITY COUNCIL

Council Member, District A	Council Member, District I
APPOINTED	OFFICIALS
City Attorney	
CONSULTANTS	AND ADVISORS
Financial Advisors	Hilltop Securities Inc.
	TKG & Associates LLC
Co-Bond Counsel	
FINANCING WORKIN	G GROUP MEMBERS
Legal Department	
Department of Finance	
Office of the City Controller	
Department of Public Works and Engineering	Samir Solanki Cynthia Rushing

TABLE OF CONTENTS

Page
INTRODUCTION1
THE BONDS
General Description
TAX MATTERS3
Opinion
OTHER INFORMATION
Forward Looking Statements
THE CITY AND THE SYSTEM4
General
LITIGATION5
General Litigation, Labor and Employment, and Other Claims
CONTINUING DISCLOSURE OF INFORMATION
Compliance with Prior Undertakings
MISCELLANEOUS
ADDITIONAL INFORMATION
APPENDIX A MATURITY SCHEDULE APPENDIX B FORM OF OFFICIAL ACTION APPENDIX C FORM OF OPINION OF CO-BOND COUNSEL

APPENDIX C FORM OF OPINION OF CO-BOND COUNSEL

Private Placement Memorandum relating to

CITY OF HOUSTON, TEXAS
Combined Utility System
Subordinate Lien Revenue Bonds,
Series 2018E (the "Bonds")

INTRODUCTION

This Private Placement Memorandum, including the cover page and appendices, contains brief descriptions of the Issuer, provides certain information with respect to the issuance by the Issuer, and summaries of certain provisions of the "Bonds" pursuant to the Official Action. Except as otherwise set forth herein, capitalized terms used but not defined in this Private Placement Memorandum have the meanings assigned to them in the Official Action. See "APPENDIX B—"FORM OF OFFICIAL ACTION" attached hereto.

APPENDIX A contains the maturity schedule for the Bonds. APPENDIX B contains the Official Action and a description of the purpose for the proceeds of the Bonds. APPENDIX C contains a copy of the proposed opinion of Co-Bond Counsel with respect to the Bonds. The summaries of the documents contained in the forepart of this Private Placement Memorandum are not complete or definitive, and every statement made in this Private Placement Memorandum concerning any provision of any document is qualified by reference to such document in its entirety.

THE BONDS

General Description

The Bonds are being issued in the aggregate principal amount set forth in APPENDIX A of this Private Placement Memorandum and will mature and be subject to redemption prior to maturity as described therein. The Bonds are being issued as fully registered bonds in denominations of \$5,000, or any integral multiple thereof. The Bonds will be dated as of the stated date of issue and will mature on the dates referenced thereon, and will bear interest at the rates per annum set forth in "APPENDIX A - MATURITY SCHEDULE."

Interest on the Bonds is payable semiannually on each Interest Payment Date, and will be calculated on the basis of a 360-day year consisting of twelve 30-day months. Principal of and the redemption price with respect to the Bonds will be payable to the Owners upon presentation and surrender at the principal office of the Paying Agent/Registrar.

Purpose

See "APPENDIX B - FORM OF OFFICIAL ACTION."

Authority for Issuance

The Bonds are issued pursuant to Chapter 1502, Texas Government Code, as amended; and the Official Action adopted by the Issuer.

Security for the Bonds

See "APPENDIX B - FORM OF OFFICIAL ACTION."

Redemption Provisions

The Bonds are subject to optional redemption by the City prior to maturity on [*May 15, 2029*], or any date thereafter, in whole or in part (but if less than all the Bonds of a single maturity of a series are called for redemption, those Bonds called shall be selected by lot or other customary random method by the Paying

Agent/Registrar), at a redemption price equal to the principal amount thereof, plus accrued interest to the date fixed for redemption.

The Bonds may be redeemed in part only in integral multiples of \$5,000 of principal amount or maturity amount, as applicable. If a Bond subject to redemption is in a denomination larger than \$5,000, a portion of such Bond may be redeemed, but only in integral multiples of \$5,000. In selecting portions of the Bonds for redemption, the Paying Agent/Registrar shall treat each Bond as representing that number of Bonds of \$5,000 denomination, which is obtained by dividing the principal amount (or maturity amount) of such Bond by \$5,000. Upon surrender of any Bond for redemption in part, the Paying Agent/Registrar, in accordance with the provisions of the Ordinance, shall authenticate and deliver in exchange therefore a Bond or Bonds of like maturity and interest rate in an aggregate principal amount (or maturity amount) equal to the unredeemed portion of the Bond so surrendered.

Notice of Redemption; Selection of Bonds to Be Redeemed

See "APPENDIX B - FORM OF OFFICIAL ACTION."

Notice of any such optional redemption identifying the Bonds to be redeemed shall be sent by first-class mail, postage prepaid, to the Registered Owners thereof at their addresses as shown on the books of registration kept by the Paying Agent/Registrar not less than 30 days before the date fixed for such redemption. If such notice of redemption is given, and if due provision for such payment is made, all as provided above, the Bonds which are to be so redeemed thereby automatically shall be redeemed prior to their scheduled maturities, they shall not bear interest after the date fixed for redemption, and they shall not be regarded as being outstanding except for the purpose of being paid by the Paying Agent/Registrar with the funds so provided for such payment.

Book-Entry-Only System

The information in this caption concerning The Depository Trust Company, New York, New York ("DTC") and DTC's book entry system has been obtained from DTC and the Issuer makes no representation or warranty nor takes any responsibility for the accuracy or completeness of such information.

DTC will act as securities depository for the Bonds. The Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered certificate will be issued for each maturity of the Bonds and deposited with DTC. See APPENDIX B - "FORM OF OFFICIAL ACTION."

DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants (the "Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation, and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a Standard & Poor's rating of "AA." The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Settlement of Purchase of Bonds

The Texas Water Development Board (the "Board") and the Issuer intend for the delivery of the Bonds to be facilitated through the book-entry-only system of DTC. See "THE BONDS - Book-Entry-Only System." In connection with the delivery of the Bonds, a settlement agent may be used to effect the delivery of the Bonds. If such a settlement agent is used, such settlement agent (i) is being used solely to facilitate book-entry delivery of the Bonds, (ii) will be acting solely as a "Clearing DTC Participant" and not as an "underwriter" (each as defined in Section 2(a)(11) of the U.S. Securities Act of 1933, as amended, (iii) is not acting as a fiduciary or municipal advisor to the Board or the Issuer with regard to the Bonds and, accordingly, has no fiduciary duty to either the Board or the Issuer under Federal or state securities laws, and therefore is not required by federal or state law to act in the best interests of the Board or the Issuer, (iv) in providing information to either the Board or the Issuer, is not providing "advice" with the meaning of Section 15B of the Securities Exchange Act of 1934, as amended, and that the information provided has not been relied on by either the Board or the Issuer in the issuance of the Bonds and (v) has not provided any legal, accounting, regulatory or tax advice to the Issuer.

TAX MATTERS

Opinion

Co-Bond Counsel will deliver its opinion for the Bonds on the date of delivery of the Bonds substantially in the form as attached in "APPENDIX C - FORM OF OPINION OF CO-BOND COUNSEL."

OTHER INFORMATION

Forward Looking Statements

The statements contained in this Private Placement Memorandum, including the cover page, appendices, and any other information or documents provided by the Issuer, that are not purely historical, are forward-looking statements, including statements regarding the Issuer's expectations, hopes, intentions, or strategies regarding the future. Holders and beneficial owners of the Bonds have placed reliance on forward-looking statements. All forward looking statements included in this Private Placement Memorandum are based on information available to the Issuer on the date hereof. It is important to note that the Issuer's actual results could differ materially from those in such forward-looking statements.

Ratings

The Bonds are unrated.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

THE CITY AND THE SYSTEM

General

The Combined Utility System of the City of Houston, Texas (the "City") established under the Master Ordinance currently consists of the City's groundwater and surface water sources and conveyance, treatment and distribution facilities (the "Water Facilities") and wastewater collection and treatment facilities (the "Sewer Facilities"). The Water Facilities and Sewer Facilities are sometimes collectively referred to as the "Water and Sewer Facilities" or the "Combined Utility System." The Combined Utility System may include other utility systems provided for in Chapter 1502, Texas Government Code, as amended, which the City may, from time to time, elect to combine with the Combined Utility System so long as the revenues of such other utility systems are included in Gross Revenues under the Master Ordinance.

Governmental Structure

The City has a mayor-council form of government in which the Mayor and the sixteen-member City Council serve as the legislative body. Eleven council members are elected by district and five council members are elected at-large. The present term of office for all elected officials expires in January 2020. On November 3, 2015, voters approved an amendment to the City Charter (the "Term Limits Amendment") that changed the number of terms of elective office to no more than two terms in the same office and limits the length for all terms of elective office to four years, beginning in January 2016. The Term Limits Amendment also provided for a transition, whereby City elected officials elected to their first terms in office in the November 2013 election are able to serve two more four-year terms (for a potential total of 10 years in office), and those elected to their second terms in the November 2013 election will be able to serve a final term of four years (for a potential total of eight years in office).

On November 19, 2015, a lawsuit was filed in State district court against the City claiming that the ballot language for the Term Limits Amendment was misleading and seeking to have the amendment declared illegal and invalid. The City filed a Plea to the Jurisdiction with the district court asserting that the plaintiffs failed to properly serve the City and the other defendants. The trial court denied the City's plea. The City appealed and the Court of Appeals affirmed that denial, after a motion for rehearing, on May 2, 2017. The City intends to continue defending itself vigorously. In addition, on June 5, 2017, one of the plaintiffs initiated an original mandamus action in the Texas Supreme Court seeking to invalidate the Term Limits Amendment and requesting a new ballot measure in November 2017. The Supreme Court denied the mandamus relief requested. The case will likely proceed to trial or summary disposition in 2018, although a trial date has not yet been set. The City intends to continue defending itself vigorously.

The Mayor is the City's chief executive officer. The Mayor exercises administrative control over the City's government, presides over City Council meetings, establishes the City Council agenda, and appoints the heads of the various departments of the City, subject to confirmation by the City Council. The Mayor also is responsible for preparing and submitting the City's annual budget proposals to the City Council for adoption.

The City Controller is the City's chief financial officer. The Office of the City Controller superintends, supervises, manages and conducts the fiscal affairs of the City, maintains the books of accounts, prepares financial statements, conducts the sales of City obligations, certifies the availability of funds before the City incurs any financial obligation, and, along with the Mayor, countersigns all warrants, contracts or orders for payment of any money by the City.

City Charter Tax and Revenue Limitations

Proposition 1 and Proposition 2 (2004). In 2004, voters approved Proposition 1(Article III, Sec. 1 and Article IX, Sec. 20, City Charter) in order to limit increases in (i) the City's ad valorem tax revenues by requiring voter approval for increases in ad valorem taxes in future years above a limit equal to the lesser of the actual revenues in the preceding Fiscal Year, plus 4.5%, or a formula that is based upon the actual revenues received in Fiscal Year 2005 adjusted for the cumulative combined rates of inflation and the City's population growth; and (ii) water and sewer rates (i.e., the City's Combined Utility System) by limiting rate increases to the combined increases in the rates of inflation and population growth, excluding rate increases required by certain bond covenants and rates established by contract, unless approved by the voters. At the same election, the voters also approved Proposition 2

(City Charter Article VI-a, Sec. 7), which proposed to limit increases in the City's "combined revenues," which would include revenues of the General Fund, Special Funds and Enterprise Funds. Based on the specific language of Proposition 1 and Proposition 2, the number of votes for each proposition, and the language of the City Charter, the City declared that Proposition 2 was not effective.

Proposition 2 Litigation. Supporters of Proposition 2 filed a lawsuit to declare Proposition 2 effective. After protracted litigation, on August 26, 2011, the Texas Supreme Court vacated the judgment of the trial court (for lack of ripeness) without reference to the merits and dismissed the case for want of jurisdiction. In April of 2014, the suit was refiled. The City filed a plea to the jurisdiction, which was denied by the district court. The City has appealed the denial. On August 17, 2017 the appeals court ruled, affirming the trial court's denial of the plea. The City has filed a petition for review at the Texas Supreme Court. The Texas Supreme Court has not requested the filing of briefs and no hearing date has been set. The trial court proceedings are stayed pending the resolution of the appeal.

Propositions G and H. In response to Proposition 1 and Proposition 2, the City held an election on November 7, 2006, at which the voters approved Proposition G and Proposition H, which are currently effective. Proposition G amended the City Charter to exclude revenues of the City's enterprise systems (i.e., Combined Utility System, Houston Airport System and the Convention and Entertainment Facilities Department) from the types of revenues limited under the City Charter. Voter approval of Proposition G removed the enterprise systems from the revenue limitations of Proposition 2, although the limitation on water and sewer rate increases included in Proposition 1 remains in effect. Proposition H allows the City to collect and spend up to \$90 million of revenue, over and above any Proposition 2 limitations, for increased police, fire and emergency medical services and related matters. The amount collected and spent in each year becomes part of the base revenue calculations for the following year. Propositions G and H are incorporated into the City's Financial Policies, and the City has collected revenues and made expenditures for public safety purposes in compliance with Proposition H.

Drainage Utility Fee and Pay-As-You-Go Fund. In 2011, City Council passed an ordinance that imposed an assessment upon benefitted property that receives drainage services (the "Drainage Utility Fee") to help provide for the provision, maintenance and improvement of the City's drainage and street drainage systems. Certain properties are exempt from the Drainage Utility Fee, including State government agency facilities, public and private institutions of higher education, and existing churches. Exempted properties are estimated to be approximately 2.55% of the drainage service area.

The Drainage Utility Fee is deposited into a segregated drainage account in the "Dedicated Pay-As-You-Go Fund for Drainage and Streets" (the "Pay-As-You-Go Fund") which also includes ad valorem tax revenue, certain grants, and a developer impact fee. All funding in the Pay-As-You-Go Fund that is not derived from ad valorem taxes is excluded from the revenue limitations in the City Charter.

Pay-As-You-Go Fund Litigation. In December 2010, citizens filed an election contest in State district court seeking to have the voters' approval of the Pay-As-You-Go Fund charter amendment declared void. On May 24, 2011, the district court granted a motion for summary judgment in favor of the City, thereby disposing of all plaintiffs' claims. On appeal, the Fourteenth Court of Appeals affirmed the district court's summary judgment decision. The Texas Supreme Court reversed the appellate court and remanded to the district court for further proceedings. The district court granted the plaintiffs' motion for summary judgment, finding the election that approved the Pay-As-You-Go Fund void and ordering a new election. The district court's decision was upheld on appeal, and the City's request for review by the Texas Supreme Court was denied. The citizen-initiated proposed charter amendment will be put back on the ballot with revised ballot language.

Drainage Utility Fee Litigation. In 2012, the owners of three apartment complexes filed a lawsuit against the City and the Director of Public Works and Engineering in his official capacity challenging the validity of the Drainage Utility Fee and alleging ultra vires actions by the Director. The City filed a plea to the jurisdiction seeking dismissal of the suit. The City's plea was granted in part and denied in part. The apartment complexes' remaining ultra vires claims, declaratory judgment claims, and constitutional challenges to the ordinance remain pending in the district court. The apartment complexes appealed, the court of appeals affirmed the trial court's decision and the Supreme Court denied review.

Three railroad companies had intervened in the lawsuit to challenge the Drainage Utility Fee but, on the City's motion, the court struck the railroad companies' intervention. The railroad companies then filed their own lawsuit challenging the validity of various aspects of the assessment of the Drainage Utility Fee, alleging both ultra vires and constitutional claims, and asking for injunctive relief and attorneys' fees. The City filed a plea to the jurisdiction on all of the railroads' ultra vires claims, which was granted by the district court but denied on appeal by the Texas Supreme Court. The railroad companies' ultra vires claims, declaratory judgment claims, and constitutional challenges are currently pending in the district court.

An additional lawsuit has been filed against the City seeking a declaratory judgment that the Drainage Utility Fee is illegal and asking that the City reimburse residents who have paid the fee in prior years. The lawsuit seeks to certify such residents as a class. The trial court dismissed the case; the plaintiff has appealed that decision.

LITIGATION

General Litigation, Labor and Employment, and Other Claims

The City is a defendant in various lawsuits and is aware of pending claims arising in the ordinary course of its municipal and enterprise activities, certain of which seek substantial damages. That litigation includes lawsuits claiming damages that allege that the City caused personal injuries and wrongful deaths; class actions and other lawsuits and claims alleging discriminatory hiring and promotion practices and certain civil rights violations arising under the Federal Voting Rights Act; various claims from contractors for additional amounts under construction contracts; claims involving property tax assessments; suits over the validity of City ordinances and over their enforcement; suits alleging non-compliance with certain federal and state environmental statutes; and various other liability claims. The status of such litigation ranges from an early discovery stage to various levels of appeal of judgments both for and against the City. The amount of damages is limited in certain cases under the Texas Tort Claims Act and is subject to appeal. The City intends to defend itself vigorously against the suits; however, no prediction can be made, as of the date hereof, with respect to the liability of the City for such claims or the final outcome of such suits.

The City is also aware that various claims for inverse condemnation have been and may be asserted against the City in connection with the City's operations, the aggregate amounts of which are unknown. The City intends to defend itself vigorously against all such inverse condemnation claims; however, the City's liability with respect to these claims cannot be predicted.

Litigation Challenging the Election Authorizing the Pension Obligation Bonds. On December 15, 2017, Noteware v. Turner was filed in the 269th District Court in Harris County, Texas, challenging the validity of the election approving the pension obligation bonds held November 7, 2017. The suit alleges that because of language in the election proposition, the City misled the voters as to the effect of the election on the revenue limitations of the City Charter and is therefore void.

On December 21, 2017, the court denied Noteware's motion to temporarily restrain the City from issuing the bonds or distributing the bond proceeds to the pension funds. The plaintiff continues to pursue claims for relief. As of the date of this Official Statement, no trial date and no hearing date for interim relief have been set. The City has complied with all legal requirements pertaining to the election and is required to comply with the City Charter revenue limitations in respect to the pension obligation bonds. As such, the City believes that no case or controversy is presented which would adversely affect the pension obligation bonds. The City believes that the suit is without merit and frivolous. Upon issuance of the Attorney General's opinion in connection with the delivery of the pension obligation bonds on December 22, 2017, the pension obligation bonds were deemed valid and incontestable under Texas law.

The City currently is involved in lawsuits against the Houston Firefighters' Relief and Retirement Fund (the "Firefighter Fund") and against a former actuary for the Firefighter Fund. The City does not believe that the outcome of any of the lawsuits related to the Firefighter Fund would have a material effect on the Combined Utility System because the Combined Utility System does not contribute to the Firefighter Fund.

Litigation Regarding Actuarial Consultant. In City of Houston v. Towers Watson & Co., the City seeks damages from Towers Watson & Co. ("Towers") for providing negligent actuarial advice regarding the Firefighter

Fund. More specifically, the City alleges that Towers negligently represented the financial condition of the Firefighter Fund, the cost of increasing the benefits provided by the Firefighter Fund, the assets and liabilities of the Firefighter Fund, and the cost of future City contributions to the Firefighter Fund, and that these services were done incompetently and not in accordance with generally accepted actuarial principles and practices in connection with benefits increases.

Firefighter Litigation Regarding Pension Reform Legislation. In Houston Firefighters' Relief and Retirement Fund v. City of Houston, et. al., filed on May 30, 2017, the Firefighter Fund sued the City challenging the constitutionality of the pension reform legislation passed in the most recent legislative session (the "Pension Reform Legislation") and sought injunctive relief and declaratory judgment in respect to such legislation. Specifically, the Firefighter Fund alleged that the Pension Reform Legislation violates Article XVI, Section 67 of the Texas Constitution ("Section 67") because it allegedly violates the Firefighter Fund's Board of Trustee's "exclusive" authority to select an actuary, and adopt actuarial assumptions regarding the City contribution rates. On June 30, 2017, the district court judge sustained all defendants' Pleas to the Jurisdiction, ordered that the case be dismissed in its entirety, and, in the alternative, should the dismissal be found to have been granted in error, denied the Fund's request for a temporary injunction. The Firefighter Fund filed its appeal brief on October 9, 2017, and the City response was filed January 8, 2018.

Litigation Regarding HMEPS. The City is also currently involved in a lawsuit involving the Houston Municipal Employees' Pension System (the "Municipal System"). Before this current suit, on March 20, 2015, the Texas Supreme Court issued its opinion in Klumb v. Houston Municipal Employees Pension System ("Klumb"). At issue in the case was whether the board of the Municipal System violated Article 6243h, Vernon's Texas Civil Statutes, as amended ("HMEPS Statute") by resolving that employees of certain local government corporations and not-for-profit corporations are employees of the City for purposes of the Municipal System. The Texas Supreme Court found, among other things, that the HMEPS board's actions were within its "broad discretionary authority" under the HMEPS Statute, and thus held that the City "failed to plead actionable ultra vires and constitutional claims against the Municipal System and the Trustees." Following the issuance of the Texas Supreme Court's ruling in Klumb, the Municipal System asked the City to turn over certain identifying information and make pension contributions for employees of the local government corporations and not-for-profit corporations at issue in that case. On June 18, 2015, the Municipal System initiated a new lawsuit, seeking mandamus relief and asserting an ultra vires action against the City, the Mayor and several other City officers. The City filed a counterclaim and thirdparty claim alleging breach of the meet-and-confer agreement related to the Municipal System's definition of "employee". The Municipal System filed a motion for summary judgment and the City filed a plea to the jurisdiction. In October 2015, the trial court denied the City's plea to the jurisdiction, and the City filed an interlocutory appeal. The trial court did not rule on the summary judgment motion filed by the Municpal System. The denial of the City's plea was reversed in part and affirmed in part by the Court of Appeals. The City and the Municipal System each filed a petition for review in the Texas Supreme Court. The Supreme Court recently requested each side to file briefs on the merits which they have done. Response briefs were filed on December 12, 2017, and reply briefs are due on January 18, 2018. The City intends to continue to vigorously defend this litigation.

State Legislation

Although the City is a home-rule city under the Texas Constitution, it may not adopt ordinances or charter provisions inconsistent with Texas law. The Texas Legislature may enact legislation that (i) materially increases the costs and expenditures of the City or (ii) reduces the ability of the City to collect ad valorem taxes or System revenues described herein. Under the Texas and United States Constitutions, the Texas Legislature may not, however, enact legislation that impairs the City's ability to pay principal of and interest on its indebtedness.

In between regular sessions, the Governor could elect to call one or more special sessions before the next regular session for the purpose of considering specific topics. It is currently anticipated that the Governor may call a special session to consider budget related matters.

No-Litigation Certificate

On the date of delivery of the Bonds to the initial purchasers thereof, the Issuer will execute and deliver a certificate to the effect that, except as disclosed herein, no litigation of any nature has been filed or is pending, as of

that date, to restrain or enjoin the issuance or delivery of the Bonds or which would affect the provisions made for their payment or security or in any manner questioning the validity of the Bonds.

CONTINUING DISCLOSURE OF INFORMATION

In the Official Action, the Issuer has made an agreement to periodically disclose certain information for the benefit of the holders and beneficial owners of the Bonds. The Issuer is required to observe the agreement for so long as it remains obligated to advance funds to pay the Bonds. Under the agreement, the Issuer will be obligated to provide certain updated financial information and operating data, and timely notice of specified material events, to certain other information vendors. SEE APPENDIX B - "FORM OF OFFICIAL ACTION."

Compliance with Prior Undertakings

The City has made certain filings to describe its compliance with its continuing disclosure undertakings with respect to debt obligations issued by the City. Please see the filings made by the City on June 17, 2014, July 14, 2014, July 28, 2014, February 11, 2015, May 12, 2015, May 15, 2015, October 22, 2017, December 5, 2017 and January 25, 2018, which are available by accessing the following link to the City's page on EMMA (https://emma.msrb.org/IssuerHomePage/Issuer?id=122D8F57A31F0F0513F7133054BC213B&type=G) and locating each of these dated filings under the "Event-Based Disclosures" tab and, with regard to the May 15, 2015 notice, the "Financial Disclosures" tab. The contents of each of the aforementioned filings are incorporated by reference herein.

MISCELLANEOUS

Any statements made in this Private Placement Memorandum involving matters of opinion or of estimates, whether or not so expressly stated, are set forth as such and not as representations of fact, and no representation is made that any of the estimates will be realized. Neither this Private Placement Memorandum nor any statement that may have been made verbally or in writing is to be construed as a contract with the owners of the Bonds.

The information contained above is neither guaranteed as to accuracy or completeness nor to be construed as a representation by the Issuer. The information and expressions of opinion herein are subject to change without notice and neither the delivery of this Private Placement Memorandum nor any sale made hereunder is to create, under any circumstances, any implication that there has been no change in the affairs of the Issuer or the Issuer from the date hereof.

The Private Placement Memorandum is submitted in connection with the sale of the securities referred to herein and may not be reproduced or used, as a whole or in part, for any other purpose.

ADDITIONAL INFORMATION

The Private Placement Memorandum speaks only as of its date and the information contained herein is subject to change. Descriptions of the Bonds and the Official Action and any other agreements and documents contained herein constitute summaries of certain provisions thereof and do not purport to be complete. This Private Placement Memorandum was approved by the Issuer.

APPENDIX A

MATURITY SCHEDULE

SERIES 2018E BONDS

Maturity Date		Interest	
([*November 15*])	Principal Amount	<u>Rate (%)</u>	CUSIP Number
2018	\$		
2019			
2020			
2021			
2022			
2023			
2024			
2025			
2026			
2027			
2028	Ì		
2029	1		
2030			
2031			
2032			
2033			
2034			
2035			
2036			
2037			
2038			
2039			
2040			
2041			
2042			
2043			
2044			
2045			
2046			
2047			

APPENDIX B

FORM OF OFFICIAL ACTION

(see Tab ____)

APPENDIX C

FORM OF OPINION OF CO-BOND COUNSEL

(see Tab ____)

51080687.2 C-1