BEAUMONT
TEXAS

REGULAR MEETING OF THE CITY COUNCIL
COUNCIL CHAMBERS JUNE 14, 2016 1:30 P.M.

CONSENT AGENDA

* Approval of minutes – June 7, 2016

* Confirmation of committee appointments

Marty Craig-Planning Commission Representative would be reappointed to the Historic Landmark Commission. The current term would expire April 7, 2018. (Mayor Becky Ames)

A) Approve a resolution approving the purchase of three stretcher loading systems from Stryker EMS Equipment of Portage, Michigan

B) Approve a payment to Motorola for an annual maintenance agreement to support the 800 MHz radio system

C) Authorize the City Manager to execute Change Order No. 1, accept maintenance, and authorize final payment to SR Tilley Builders, Inc., for the Concrete Rehabilitation of Various Locations Project

D) Authorize the City Manager to execute Change Order No. 4 for the Washington Boulevard Pavement and Drainage Improvement Project Phase I (Amarillo to Martin Luther King Parkway)

RESOLUTION NO.

BE IT RESOLVED BY THE CITY COUNCIL OF THE

CITY OF BEAUMONT:

THAT the following reappointment be made:

Reappointment	Commission	Beginning of Term	Expiration of Term
Marty Craig-Planning Commission Representative	Historic Landmark Commission	06/14/2016	04/07/2018

PASSED BY THE CITY COUNCIL of the City of Beaumont this the 14th day of June, 2016.

_____

- Mayor Becky Ames -

A

BEAUMONT
TEXAS

TO: City Council

FROM: Kyle Hayes, City Manager

PREPARED BY: Laura Clark, Chief Financial Officer

MEETING DATE: June 14, 2016

REQUESTED ACTION: Council consider a resolution approving the purchase of three (3) stretcher loading systems from Stryker EMS Equipment, of Portage, Michigan in the amount of $79,587.84

BACKGROUND
Beaumont Emergency Medical Services (EMS) currently uses Stryker Power-Pro Stretchers in all front-line ambulances. The Stryker Power-Load system is designed to automatically load the Stryker stretcher into the ambulance. The systems will be mounted in three (3) ambulances. The systems will minimize and/or eliminate the amount of physical strain put on the employees resulting in few injuries.

Pricing was obtained from Stryker EMS Equipment as a sole source provider. The City has been awarded a grant through the Texas Department of State Health Services, approved by Resolution No. 15-129, dated July 14, 2015, that will provide partial funding in the amount of $34,500. The remaining balance of $45,087.84 is to be provided by the City.

FUNDING SOURCE
The Texas Department of State Health Services, General Fund and Capital Reserve Fund.

RECOMMENDATION
Approval of the resolution.

RESOLUTION NO.

BE IT RESOLVED BY THE CITY COUNCIL

OF THE CITY OF BEAUMONT:

THAT the City Council hereby approves the purchase of three (3) Stryker Power-Load systems, Stryker service upgrade, and compatibility upgrade kits for use by Beaumont Emergency Medical Services (EMS) from Stryker EMS Equipment, of Portage, Michigan, in the amount of $79,587.84.

PASSED BY THE CITY COUNCIL of the City of Beaumont this the 14th day of June, 2016.

_____

- Mayor Becky Ames -

B

BEAUMONT
TEXAS

TO:	City Council
FROM:	Kyle Hayes, City Manager
PREPARED BY:	Bart Bartkowiak, Chief Technology Officer
MEETING DATE:	June 14, 2016
REQUESTED ACTION:	Council consider a resolution approving a payment to Motorola for an annual maintenance agreement in the amount of $675,200.04 to support the 800 MHz radio system.

BACKGROUND
The 800 MHz radio system is used by EMS, Fire, Police and numerous other departments throughout the City for daily communications. The agreement is exempt from competitive bidding since it is available from only one (1) source having exclusive rights to maintain the radio infrastructure. The maintenance agreement provides for constant monitoring of the radio system and 911 dispatch centers as well as dispatching of repair personnel with replacement parts when required.

The 800 MHz radio system is shared with Jefferson County, Hardin County, Orange County, the cities of Groves, Nederland, Port Arthur and Port Neches, the Port of Beaumont, BISD, Water District No.10 and Lamar University's Police Department. The annual cost of the maintenance contract is allocated among all agencies by the number of radios each agency has on the system.

Funding is available through the Department of Homeland Security Supplemental 2014 Port Security Grant Program (PSGP) for 75% of this years maintenance in the amount of $506,400.03. The 25% match will be shared among all participating entities. The City of Beaumont's portion of the match for the Motorola Maintenance will be $50,342.28.

FUNDING SOURCE
2014 PSGP grant funds and Capital Reserve Fund.

RECOMMENDATION
Approval of resolution.

MOTOROLA

MOTOROLA SOLUTIONS, INC.
1301 E. Algonquin Road
Schaumburg, IL 60196

Visit our website at :www.motorolasolutions.com

INVOICE

TOTAL INVOICE AMOUNT:	$675,200.04
MOTOROLA INVOICE NUMBER:	50105942
INVOICE DATE:	05/25/2016
PAYMENT DUE:	06/24/2016
CUSTOMER ACCOUNT NUMBER:	1013010533 0002
PURCHASE ORDER DATE:	
YOUR PURCHASE ORDER NUMBER:	

BILL TO BEAUMONT, CITY OF

PO BOX 3827
BEAUMONT, TX 77704

For questions concerning this Invoice please contact Motorola at:

Motorola Solutions, Inc. Federal Tax Id: 36-1115800

00001-00001-00001
Payment Terms: NET 30 INVOICE
Sales Order Number: S00001017979

Invoice Detail

Item	Model Number	Qty	Description	Unit Price	Amount
			BILLING FOR YOUR SERVICE AGREEMENT		
			SERVICE PERIOD 01-MAY-16 TO 30-APR-17		
			MOTOROLA CONTRACT # S00001017979		
			SVC01SVC1101C ASTRO INFRASTRUCTURE REPAIR W/ADV REPL		
2		6	ENH: REMOTE SITE	465.04	2,790.24
3		12	ENH:DISPATCH SITE	697.56	8,370.72
4		6	ASTRO 25 STATIONS	921.84	5,531.04
5		12	ASTRO25 OPERATOR POSITIONS	512.40	6,148.80
6		12	ASTRO25 M2 CORE	1,052.02	12,624.24
7		12	ENH: SMARTZONE SITE	2,635.20	31,622.40
8		12	ENH: SMARTZONE STATION	9,247.56	110,970.72
9		12	ENH: SMARTZONE OPER POSITION	4,556.25	54,675.00
10		12	ENH: CONVENTIONAL SITE	140.62	1,687.44

(Continued on Next Page)

Detach here and return bottom portion with your payment

Payment Coupon

INVOICE NUMBER	CUSTOMER ACCOUNT NUMBER	PAYMENT DUE
50105942	1013010533 0002	06/24/2016

Invoice Total	Amount Paid
$675,200.04	

Please put your Invoice Number and your Customer Account Number on your check for prompt processing

BEAUMONT, CITY OF

PO BOX 3827
BEAUMONT, TX 77704

Send Payment To:

MOTOROLA

MOTOROLA SOLUTIONS, INC.
P.O. Box 404059
Atlanta, GA 30384-4059

0500010005090402 1013010533 0002 0000 052516 0067520004 05

MOTOROLA

MOTOROLA SOLUTIONS, INC.
1301 E. Algonquin Road
Schaumburg, IL 60196

Visit our website at :www.motorolasolutions.com

INVOICE

TOTAL INVOICE AMOUNT:	$675,200.04
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PURCHASE ORDER DATE:	
YOUR PURCHASE ORDER NUMBER:	

BILL TO BEAUMONT, CITY OF

PO BOX 3827
BEAUMONT, TX 77704

For questions concerning this Invoice please contact Motorola at:

Motorola Solutions, Inc. Federal Tax Id: 36-1115800

00002-00001-00001
Payment Terms: NET 30 INVOICE
Sales Order Number: S00001017979

Invoice Detail Continued

Item	Model Number	Qty	Description	Unit Price	Amount
11		12	ENH: CONVENTIONAL STATION	585.60	7,027.20
			SVC01SVC1102C ASTRO DISPATCH SERVICE		
13		12	ASTRO25 M2 CORE	452.67	5,432.04
14		12	ENH: SMARTZONE SITE	282.16	3,385.92
15		12	ENH: DISPATCH CENTER LOCATION	621.11	7,453.32
16		12	ENH: CONVENTIONAL SITE	70.54	846.48
17		6	ENH: REMOTE SITE	24.16	144.96
18		12	ENH: DISPATCH SITE	67.92	815.04
			SVC01SVC1103C ASTRO NETWORK MONITORING		
20		12	ASTRO SITE	157.86	1,894.32
21		12	DISPATCH SITE	236.79	2,841.48
22		12	ASTRO 25 M2 CORE	455.35	5,464.20
23		12	ENH: SMARTZONE SYSTEM	1,423.54	17,082.48
24		12	ENH: SMARTZONE SITE	349.84	4,198.08
			SVC01SVC1104C ASTRO TECHNICAL SUPPORT		
26		12	ENH: SMARTZONE SITE	191.68	2,300.16
27		12	ENH: CONVENTIONAL SITE	28.40	340.80
28		12	ENH: REMOTE SITE	45.28	543.36
29		12	ENH: DISPATCH SITE	135.81	1,629.72
30		12	ASTRO25 M2 CORE	1,056.25	12,675.00
31		12	ENH: DISPATCH SITE	0.07	0.84
			SVC01SVC1405C NETWORK PREVENTATIVE MAINTENANCE A		
33		12	ASTRO25 MASTER SITE	197.16	2,365.92
34		6	ASTRO25 STATION	147.72	886.32
35		12	ASTRO25 OPERATOR POSITION	73.86	886.32
36		12	ENH: REMOTE SITE	65.70	788.40
37		12	ENH: DISPATCH SITE	98.55	1,182.60
38		12	ENH: GROUND ACCESSIBLE STATION	1,230.99	14,771.88
39		12	ENH: GROUND ACCESSIBLE OPERATION	299.43	3,593.16
40		12	SITE PM ACCESS A	188.53	2,262.36
			SVC01SVC1213C ONSITE INFRASTRUCTURE RESPONSE		
			PREMIER		

MOTOROLA

MOTOROLA SOLUTIONS, INC.
1301 E. Algonquin Road
Schaumburg, IL 60196

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INVOICE

TOTAL INVOICE AMOUNT:	$675,200.04
MOTOROLA INVOICE NUMBER:	50105942
INVOICE DATE:	05/25/2016
PAYMENT DUE:	06/24/2016
CUSTOMER ACCOUNT NUMBER:	1013010533 0002
PURCHASE ORDER DATE:	
YOUR PURCHASE ORDER NUMBER:	

BILL TO BEAUMONT, CITY OF

PO BOX 3827
BEAUMONT, TX 77704

For questions concerning this Invoice please contact Motorola at:

00003-00001-00001
Payment Terms: NET 30 INVOICE
Sales Order Number: S00001017979

Motorola Solutions, Inc. Federal Tax Id: 36-1115800

Invoice Detail Continued

Item	Model Number	Qty	Description	Unit Price	Amount
42		6	ASTRO25 STATION	19.68	118.08
43		12	ENH: ONSITE INFRASTRUCTURE RESPONSE SITE	3,105.40	37,264.80
44		12	STATIONS	15,512.25	186,147.00
45		12	OPERATION POSITIONS	3,353.94	40,247.28
46		12	ASTRO25 M2 CORE	2,249.18	26,990.16
47		12	ASTRO25 M1 OPERATOR POSITION	31.02	372.24
48		6	ENH: REMOTE SITE	1,199.56	7,197.36
49		12	ENH: DISPATCH SITE	1,295.40	15,544.80
50		12	DISPATCH CENTER LOCATION	2,173.78	26,085.36

THIS INVOICE REPLACES AND SUPERCEDES INVOICE NUMBER 50105931

THANK YOU FOR CHOOSING MOTOROLA SOLUTIONS

PLEASE PAY THIS AMOUNT (PAYMENT DUE: 06/24/2016) 675,200.04

RESOLUTION NO.14-215

BE IT RESOLVED BY THE CITY COUNCIL OF THE

CITY OF BEAUMONT:

THAT the City Manager be and he is hereby authorized to receive funding in the amount of $513,750 through the Department of Homeland Security Supplemental 2014 Port Security Grant Program (PSGP).

BE IT FURTHER RESOLVED THAT the City Manager be and he is hereby authorized to execute all documents necessary to accept grant funding through the Department of Homeland Security Supplemental 2014 Port Security Grant Program (PSGP) in the amount of $513,750.

PASSED BY THE CITY COUNCIL of the City of Beaumont this the 30th day of September, 2014.

THE CITY OF BEAUMONT, JEFFERSON COUNTY, TEXAS
BEAUMONT, TEXAS

- Mayor Becky Ames -

RESOLUTION NO.

BE IT RESOLVED BY THE CITY COUNCIL OF THE

CITY OF BEAUMONT:

THAT the City Manager be and he is hereby authorized to approve a payment in the amount of $675,200.04 to Motorola for an annual maintenance agreement for support of the 800 MHz radio system.

PASSED BY THE CITY COUNCIL of the City of Beaumont this the 14th day of June, 2016.

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- Mayor Becky Ames -

C

BEAUMONT
TEXAS

TO:	City Council
FROM:	Kyle Hayes, City Manager
PREPARED BY:	Dr. Joseph Majdalani, P.E., Public Works Director JM
MEETING DATE:	June 14, 2016
REQUESTED ACTION:	Council consider a resolution authorizing the City Manager to execute Change Order No. 1, accept maintenance, and authorize final payment to SR Tilley Builders, Inc., for the Concrete Rehabilitation of Various Locations Project.

BACKGROUND
On June 30, 2015, by Resolution No. 15-118, City Council awarded SR Tilley Builders, Inc., of Vidor, Texas the contract for the Concrete Rehabilitation of Various Locations Project in the amount of $3,450,445.

Change Order No. 1 in the amount of $30,557.48 is required to adjust the original contract amount due to the change of concrete mix, reinforcement designs, and American Disability Act (ADA) accessibility sidewalks and ramps. With the approval of Change Order No. 1, the final contract amount will be $3,481,002.48.

The project has been inspected by the Engineering Division and found to be complete in accordance with the provisions and terms set forth in the contract. Acceptance of maintenance, approval of Change Order No. 1, and final payment in the amount of $533,154.15 is recommended.

FUNDING SOURCE
Capital Program – Street Rehabilitation Program.

RECOMMENDATION
Approval of resolution.

RESOLUTION NO. 15-118

BE IT RESOLVED BY THE CITY COUNCIL OF THE

CITY OF BEAUMONT:

THAT the City Council hereby approves the award of a contract to SR Tilley Builders, Inc., of Vidor, Texas, in the amount of $3,450,445 for the Concrete Rehabilitation of Various Locations Project to include saw cutting, removing existing cracked and broken concrete pavements, repair and compact existing base course, and placement of new reinforced concrete pavement on various concrete pavement locations throughout the City of Beaumont.

PASSED BY THE CITY COUNCIL of the City of Beaumont this the 30th day of June, 2015.

THE CITY OF BEAUMONT, JEFFERSON COUNTY, TEXAS

BEAUMONT, TEXAS

- Mayor Becky Ames -

710 Pleasant St Vidor, TX 77662 Office: 409.422.4917 Fax: 409.422.4926

srtilleybuilders@gmail.com

CONTRACTOR'S WARRANTY

The contractor signatory below **SR Tilley Builders, Inc.** ("Contractor") hereby guarantees **City of Beaumont** ("Owner") that the construction performed on various street locations to be free from defects in material and workmanship for a period of one year from the date of commencement of use, substantial completion or date of notice of completion, whichever is the first to occur:

This Standard Limited Warranty applies and is limited as follows:

1. To the property only as long as it remains in the possession of the original owner named above.

2. To the construction work that has not been subject to accident, misuse or abuse.

3. To the construction work that has not been modified, altered, defaced, or had repairs made or attempted by others.

4. That contractor be immediately notified in writing within ten (10) days of first knowledge of defect by owner or his agent.

5. That contractor shall be given first opportunity to make any repairs, replacements or corrections to the defective construction at no cost to owner within a reasonable period of time.

6. Under no circumstances shall contractor be liable by virtue of this warranty or otherwise for damage to any person or property whatsoever for any special, indirect, secondary or consequential damages of any nature however arising out of the use or inability to use because of the construction defect.

Contractor Signature: Matt Tilley **Date:** 4/29/2016

Substantial Completion Date: 4/29/2016

CITY OF BEAUMONT

DATE: 18 MAY 2016
PROJECT: CONCRETE REHABILITATION OF VARIOUS LOCATIONS PROJECT
OWNER: CITY OF BEAUMONT
CONTRACTOR: SR TILLEY BUILDERS, INC.
CHANGE ORDER NO.: 01 (FINAL)

THE FOLLOWING CHANGES IN THE PLANS AND/OR SPECIFICATIONS ARE HEREBY MADE:

Add/Delete Construction Items and/or quantities to the Contract:

Item No.	Item Code	Description	Unit	Original Quantity	New Quantity	Unit Price	Amount
		DELETION					
361	3200	FULL DEPTH REPAIR (6") CPJR (CL P)	SY	11,503.90	-	$145.00	($1,668,065.50)
361	3202	FULL DEPTH REPAIR (10") CPJR (HES)	SY	8,850.70	248.70	$185.00	($1,591,370.00)
361	3204	FULL DEPTH REPAIR (12") CPJR (HES)	SY	500		$200.00	($100,000.00)
502	2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MON	9	8.50	$5,000.00	($2,500.00)
		ADDITION					
361	3200A	FULL DEPTH REPAIR (6") CPJR (CL P)(24" CC TIE BARS)(18"X18" BW MAT)	SY	-	4658.84	$144.00	$670,872.96
361	3200B	FULL DEPTH REPAIR (6") CPJR (HES)(24" CC TIE BARS)(18"X18" BW MAT)	SY	-	6497.53	$146.00	$948,639.38
361	3202A	FULL DEPTH REPAIR (10") CPJR (CL P)(24" CC TIE BARS)(18"X18" BW MAT)	SY	-	2412.04	$181.50	$437,785.26
361	3202B	FULL DEPTH REPAIR (10") CPJR (HES)(24" CC TIE BARS)(18'X18' BW MAT)	SY	-	6919.09	$184.00	$1,273,112.56
361	3204B	FULL DEPTH REPAIR (12") CPJR (HES)(24" CC TIE BARS)(18"X18" BW MAT)	SY	-	160.75	$196.90	$31,651.68
360	****	BUS STOP PAD IMPROVEMENTS	LS		1.00	$30,431.15	$30,431.15
			CHANGE ORDER TOTAL AMOUNT ADDED				$30,557.48

ORIGINAL CONTRACT AMOUNT:	$3,450,445.00
NET FROM PREVIOUS CHANGE ORDERS :	$0.00
TOTAL AMOUNT OF THIS CHANGE ORDER:	$30,557.48
PERCENT OF THIS CHANGE ORDER:	0.89%
TOTAL PERCENT CHANGE ORDER TO DATE:	0.89%
NEW CONTRACT AMOUNT:	$3,481,002.48

NO CALENDAR DAYS HAVE BEEN ADDED IN THE CONTRACT BY THIS CHANGE ORDER

ACCEPTED BY:

SEAN TILLEY, SR TILLEY BUILDERS, INC.

PREPARED BY:

RAFAEL G. MIRANDA
PROJECT MANAGER

APPROVED BY:

ZHENG TAN, P.E.
CITY ENGINEER

Joseph Majdalani

DR. JOSEPH MAJDALANI, P.E.
PUBLIC WORKS DIRECTOR

ATTESTED BY:

TINA BROUSSARD, CITY CLERK

KYLE HAYES, CITY MANAGER

CITY OF BEAUMONT

PAY ESTIMATE

PROJECT :	CONCRETE REHABILITATION OF VARIOUS LOCATION	NEW CONTRACT AMOUNT :	$3,481,002.49	PERCENT OF TIME USED :	84.44%
CONTRACTOR :	SR TILLEY BUILDERS, INC.	CONTRACT DATE :	June 30, 2015	PERCENT OF WORK COMPLETED :	100.00%
MONTHLY ESTIMATE # :	08 (FINAL)	CONTRACT CALENDAR DAYS :	270		
PERIOD ENDING :	MARCH 1 - 31 TO APRIL 1-30, 2016	CALENDAR DAYS USED :	228		
CHANGE ORDERS :	No. 01 (FINAL)				

ITEM NO.	DESC CODE	DESCRIPTION	UNIT MEASURE	EST. QTY.	PREVIOUS ESTIMATE	TO DATE ESTIMATE	TOTAL ESTIMATE TO DATE	UNIT PRICE	TOTAL AMOUNT
361	3200	FULL DEPTH CONCRETE REPAIR (6") CPJR (CLASS P)	SY	11,503.90	0.00	0.00	0.00	$145.00	$0.00
361	3202	FULL DEPTH CONCRETE REPAIR (10") CPJR (HES)	SY	8,850.7	0.00	248.70	248.70	$185.00	$46,009.49
361	3204	FULL DEPTH CONCRETE REPAIR (12") CPJR (HES)	SY	500	0.00	0.00	0.00	$200.00	$0.00
502	2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MON	9.00	0.00	8.50	8.50	$5,000.00	$42,500.00
361	3200A	FULL DEPTH CONCRETE REPAIR (6") CPJR (CLASS P)(24" TIE BAR)(18" X 18" BW MAT)	SY	4,658.84	0.00	4,658.84	4,658.84	$144.00	$670,872.96
361	3200B	FULL DEPTH CONCRETE REPAIR (6") CPJR (HES)(24" TIE BAR)(18" X 18" BW MAT)	SY	6,497.53	0.00	6,497.53	6,497.53	$146.00	$948,639.38
361	3202A	FULL DEPTH CONCRETE REPAIR (10") CPJR (CLASS P)(24" TIE BAR)(18" X 18" BW MAT)	SY	2,412.04	0.00	2,412.04	2,412.04	$181.50	$437,785.26
361	3202B	FULL DEPTH CONCRETE REPAIR (10") CPJR (HES)(24" TIE BAR)(18" X 18" BW MAT)	SY	6,919.09	0.00	6,919.09	6,919.09	$184.00	$1,273,112.56
361	3204B	FULL DEPTH CONCRETE REPAIR (12") CPJR (HES)(24" TIE BAR)(18" X 18" BW MAT)	SY	160.75	0.00	160.75	160.75	$196.90	$31,651.68
360	****	BUS STOP PAD IMPROVEMENTS	LS	1.00	0.00	1.00	1.00	$30,431.15	$30,431.15

PREPARED BY:

RAFAEL MIRANDA, PROJECT MANAGER

APPROVED BY:

ZHENG TAN, P.E., CITY ENGINEER

DR. JOSEPH MAJDALANI, P.E., PUBLIC WORKS DIRECTOR

GRAND TOTAL AMOUNT OF WORK DONE :	$3,481,002.48
LESS 5% RETAINAGE :	$0.00
SUB TOTAL :	$3,481,002.48
LESS PREVIOUS PAY ESTIMATE :	$2,947,848.33
AMOUNT DUE THIS ESTIMATE :	$533,154.15

I certify that all work including materials covered by this invoice have been completed or delivered in accordance with Contract documents.

SEAN TILLEY, SR TILLEY BUILDERS, INC.

RESOLUTION NO.

WHEREAS, on June 30, 2015, the City Council of the City of Beaumont, Texas, adopted Resolution No. 15-118 approving the award of a contract to SR Tilley Builders, Inc., of Vidor, Texas, in the amount of $3,450,445.00 for the Concrete Rehabilitation of Various Locations Project; and,

WHEREAS, Change Order No. 1, in the amount of $30,557.48, is necessary to adjust the original contract amount due to the change of concrete mix, reinforcement designs and Americans With Disabilities Act accessibility sidewalks and ramps, thereby increasing the total contract amount to $3,481,002.48; and,

WHEREAS, the project has been inspected by the Engineering Division and found to be complete in accordance with the provisions and terms set forth in the contract;

NOW, THEREFORE, BE IT RESOLVED BY THE

CITY COUNCIL OF THE CITY OF BEAUMONT:

THAT the statements and findings set out in the preamble to this resolution are hereby, in all things, approved and adopted; and,

THAT the City Manager be and he is hereby authorized to execute Change Order No.1 for adjusting quantities as described above, thereby increasing the contract amount by $30,557.48 for a total contract amount of $3,481,002.48 for the Concrete Rehabilitation of Various Locations Project; and,

BE IT FURTHER RESOLVED THAT the Concrete Rehabilitation of Various Locations Project be and the same is hereby accepted; and,

BE IT ALSO RESOLVED THAT the City Manager is hereby authorized to make final payment in the amount of $533,154.15 to SR Tilley Builders, Inc., of Vidor, Texas.

PASSED BY THE CITY COUNCIL of the City of Beaumont this the 14th day of June, 2016.

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- Mayor Becky Ames -

D

BEAUMONT
TEXAS

TO:	City Council
FROM:	Kyle Hayes, City Manager
PREPARED BY:	Dr. Joseph Majdalani, P.E., Public Works Director JM
MEETING DATE:	June 14, 2016
REQUESTED ACTION:	Council consider a resolution authorizing the City Manager to execute Change Order No. 4 in the amount of $14,622.00 for the Washington Boulevard Pavement and Drainage Improvement Project Phase I (Amarillo to Martin Luther King Parkway).

BACKGROUND
On March 25, 2014, by Resolution No. 14-067, City Council awarded Brystar Contracting, Inc., of Beaumont, Texas the contract for the Washington Boulevard Pavement and Drainage Improvement Project Phase I (Amarillo to Martin Luther King Parkway) in the amount of $16,478,838.95. This project consists of reconstructing the existing dilapidated asphalt pavement, upgrading its storm sewer system and replacing water and sanitary sewer mains including its appurtenances.

Proposed Change Order No. 4, will consist of additional changes to construct a concrete structure to retain and preserve the existing Right-of-Way landscape improvements, adjust existing sanitary sewer manhole tops to match the proposed roadway pavement grade. The change order amount is $14,622.00 and will represent an increase of 0.09% to the original contract amount. The new contract amount upon approval of Change Order No. 4 would be $16,470,808.90.

FUNDING SOURCE
Beaumont Municipal Airport Oil and Gas Revenues.

RECOMMENDATION
Approval of resolution.

RESOLUTION NO.14-067

BE IT RESOLVED BY THE CITY COUNCIL OF THE

CITY OF BEAUMONT:

THAT the City Council hereby approves the award of a contract to Brystar Contracting, Inc., of Beaumont, Texas, in the amount of $16,478,838.95 for the Washington Boulevard Pavement and Drainage Improvement Project Phase I (Amarillo to Martin Luther King Parkway).

PASSED BY THE CITY COUNCIL of the City of Beaumont this the 25th day of March, 2014.

THE CITY OF BEAUMONT, JEFFERSON COUNTY, TEXAS

- Mayor Becky Ames -

RESOLUTION NO. 15-255

WHEREAS, on March 25, 2014, the City Council of the City of Beaumont, Texas, passed Resolution No. 14-067 awarding a contract in the amount of $16,478,838.95 to Brystar Contracting, Inc., of Beaumont, Texas, for the Washington Boulevard Pavement and Drainage Improvement Project – Phase I (Amarillo to Martin Luther King Parkway); and,

WHEREAS, on March 17, 2015, the City Council of the City of Beaumont, Texas, passed Resolution No. 15-051 authorizing Change Order No. 1, in the amount of ($99,838.41), for minor design changes to better accommodate field conditions, thereby decreasing the contract amount to $16,379,000.54; and,

WHEREAS, Change Order No. 2, in the amount of $85,093.00, is required to replace the existing piping system and fittings that connect the elevated water storage tank on Harriot Street to the City water distribution system, thereby increasing the total contract amount to $16,464,093.54;

NOW, THEREFORE, BE IT RESOLVED BY THE

CITY COUNCIL OF THE CITY OF BEAUMONT:

THAT the statements and findings set out in the preamble to this resolution are hereby, in all things, approved and adopted; and,

THAT the City Manager be and he is hereby authorized to execute Change Order No. 2 for additional work described above, thereby increasing the contract amount by $85,093.00 for a total contract amount of $16,464,093.54 for the Washington Boulevard Pavement and Drainage Improvement Project – Phase I (Amarillo to Martin Luther King Parkway).

PASSED BY THE CITY COUNCIL of the City of Beaumont this the 17th day of November, 2015.

THE CITY OF BEAUMONT, JEFFERSON COUNTY, TEXAS

- Mayor Becky Ames -

RESOLUTION NO.15-051

WHEREAS, on March 25, 2014, the City Council of the City of Beaumont, Texas, passed Resolution No.14-067 awarding a contract in the amount of $16,478,838.95 to Brystar Contracting, Inc., of Beaumont, Texas, for the Washington Boulevard Pavement and Drainage Improvement Project - Phase 1 (Amarillo to Martin Luther King Parkway); and,

WHEREAS, Change Order No. 1, in the amount of ($99,838.41), is required for minor design changes to better accommodate field conditions, thereby decreasing the contract amount to $16,379,000.54;

NOW, THEREFORE, BE IT RESOLVED BY THE

CITY COUNCIL OF THE CITY OF BEAUMONT:

THAT the statements and findings set out in the preamble to this resolution are hereby, in all things, approved and adopted; and,

THAT the City Manager be and he is hereby authorized to execute Change Order No. 1 for minor design changes to better accommodate field conditions, in the amount of ($99,838.41), thereby decreasing the contract amount to $16,379,000.54 for the Washington Boulevard Pavement and Drainage Improvement Project - Phase I (Amarillo to Martin Luther King Parkway).

PASSED BY THE CITY COUNCIL of the City of Beaumont this the 17th day of March, 2015.

THE CITY OF BEAUMONT, JEFFERSON COUNTY, TEXAS

Becky Ames

- Mayor Becky Ames -

CITY OF BEAUMONT

DATE: 1 JUNE 2016
PROJECT: WASHINGTON BOULEVARD PAVEMENT AND DAINAGE IMPROVEMENT PROJECT PHASE I
OWNER: CITY OF BEAUMONT
CONTRACTOR: BRYSTAR CONTRACTING, INC.
CHANGE ORDER NO.: 04

THE FOLLOWING CHANGES IN THE PLANS AND/OR SPECIFICATIONS ARE HEREBY MADE:

Add/Delete Construction Items and/or quantities to the Contract:

Item No.	Item Code	Description	Unit	Original Quantity	New Quantity	Unit Price	Amount
		DRAINAGE AND PAVING					
		ADDITION:					
423	001	RETAINING WALLS (DRIVEWAYS RESTRAINING WALLS)	LS	-	1.00	$3,060.00	$3,060.00
		WATER UTILITIES					
		ADDITION:					
708	005	MANHOLES - ADJUST & RETROFIT EXISTING FIBERGLASS SANITARY SEWER STRUCTURES, complete in place	EA	-	5.00	$2,312.40	$11,562.00
			CHANGE ORDER TOTAL AMOUNT ADDED				$14,622.00

ORIGINAL CONTRACT AMOUNT:	$16,478,838.95
NET FROM PREVIOUS CHANGE ORDERS :	$16,455,458.90
TOTAL AMOUNT OF THIS CHANGE ORDER:	$14,622.00
PERCENT OF THIS CHANGE ORDER:	0.09%
TOTAL PERCENT CHANGE ORDER TO DATE:	0.66%
NEW CONTRACT AMOUNT:	$16,470,080.90

NO CALENDAR DAYS HAVE BEEN ADDED IN THE CONTRACT BY THIS CHANGE ORDER

ACCEPTED BY:

BRYAN PHELPS, BYSTAR CONTRACTING, INC.

PREPARED BY:

RAFAEL G. MIRANDA
PROJECT MANAGER

APPROVED BY:

ZHENG TAN, P.E.
CITY ENGINEER

AMALIA VILLARREAL, P.E.
WATER UTILITIES ENGINEER

DR. JOSEPH MAJDALANI, P.E.
PUBLIC WORKS DIRECTOR

ATTESTED BY:

TINA BROUSSARD, CITY CLERK

KYLE HAYES, CITY MANAGER

RESOLUTION NO.

WHEREAS, on March 25, 2014, the City Council of the City of Beaumont, Texas, passed Resolution No. 14-067 awarding a contract in the amount of $16,478,838.95 to Brystar Contracting, Inc., of Beaumont, Texas, for the Washington Boulevard Pavement and Drainage Improvement Project – Phase I (Amarillo to Martin Luther King Parkway); and,

WHEREAS, on March 17, 2015, the City Council of the City of Beaumont, Texas, passed Resolution No. 15-051 authorizing Change Order No. 1, in the amount of ($99,838.41), for minor design changes to better accommodate field conditions, thereby decreasing the contract amount to $16,379,000.54; and,

WHEREAS, on November 17, 2015, the City Council of the City of Beaumont, Texas, passed Resolution No. 15-255 authorizing Change Order No. 2, in the amount of $85,093.00, to replace the existing piping system and fittings that connect the elevated water storage tank on Harriot Street to the City water distribution system, thereby increasing the total contract amount to $16,464,093.54; and

WHEREAS, on January 11, 2016, the City Manager executed Change Order No. 3 in the amount of ($8,634.64) for replacement of the roadway pavement markings that were not required with pavement markings that are required for installation to meet current State and Highway Standard Pavement Markings, thereby decreasing the total contract amount to $16,455,458.90; and

WHEREAS, Change Order No. 4, in the amount of $14,622.00, is necessary for additional changes to construct a concrete structure to retain and preserve the existing right-of-way landscape improvements and adjust existing sanitary sewer manhole tops to

match the proposed road pavement grade, thereby increasing the contract amount to $16,470,080.90;

NOW, THEREFORE, BE IT RESOLVED BY THE

CITY COUNCIL OF THE CITY OF BEAUMONT:

THAT the statements and findings set out in the preamble to this resolution are hereby, in all things, approved and adopted; and,

THAT the City Manager be and he is hereby authorized to execute Change Order No. 4 for additional work described above, thereby increasing the contract amount by $14,622.00 for a total contract amount of $16,470,080.90 for the Washington Boulevard Pavement and Drainage Improvement Project – Phase I (Amarillo to Martin Luther King Parkway).

PASSED BY THE CITY COUNCIL of the City of Beaumont this the 14th day of June, 2016.

_____

- Mayor Becky Ames -

BEAUMONT
TEXAS

REGULAR MEETING OF THE CITY COUNCIL
COUNCIL CHAMBERS JUNE 14, 2016 1:30 P.M.

AGENDA

CALL TO ORDER

* Invocation Pledge Roll Call
* Presentations and Recognition
* Public Comment: Persons may speak on scheduled agenda items 1-3/Consent Agenda
* Consent Agenda

GENERAL BUSINESS

1. Consider an ordinance approving CenterPoint Energy's 2016 GRIP rates

2. Consider a resolution approving a depository agreement with Wells Fargo Bank, N.A.

3. Consider a resolution authorizing the City Manager to submit an application for grant funding through the Texas Water Development Board for the Master Drainage Plan Project

COMMENTS

* Councilmembers/City Manager comment on various matters
* Public Comment (Persons are limited to 3 minutes)

EXECUTIVE SESSION

* Consider matters related to the appointment, employment, evaluation, reassignment, duties, discipline or dismissal of a public officer or employee in accordance with Section 551.074 of the Government Code to wit:

  Kyle Hayes, City Manager

Persons with disabilities who plan to attend this meeting and who may need auxiliary aids or services are requested to contact Mitchell Normand at 880-3777.

1

June 14, 2016

Consider an ordinance approving CenterPoint Energy's 2016 GRIP rates

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BEAUMONT
TEXAS

TO: City Council

FROM: Kyle Hayes, City Manager

PREPARED BY: Tyrone E. Cooper, City Attorney

MEETING DATE: June 14, 2016

REQUESTED ACTION: Council consider an ordinance approving CenterPoint Energy's 2016 GRIP rates.

BACKGROUND
On March 31, 2016, CenterPoint Energy filed with the City of Beaumont its Annual Gas Reliability Infrastructure Program (GRIP) Interim Rate Adjustment Notice to increase gas rates in the Beaumont/East Texas Division service area. The City Council on May 17, 2016, suspended the effective date of the requested increase until July 14, 2016, in order to have the request reviewed for compliance with the Gas Utility Regulatory Act. This review is generally a ministerial process limited to ensuring that the request complies with the GRIP statute. The review has determined that the company's filing is in compliance with the statute and can be approved.

FUNDING SOURCE
All reasonable expenses associated with rate cases are reimbursable by the Company.

RECOMMENDATION
Approval of ordinance.

ORDINANCE NO.

ORDINANCE OF THE CITY OF BEAUMONT, TEXAS, APPROVING THE RATES PROPOSED BY CENTERPOINT ENERGY RESOURCES CORP., d/b/a CENTERPOINT ENERGY ENTEX AND CENTERPOINT ENERGY TEXAS GAS ("CENTERPOINT" OR "COMPANY") COMPANY'S GAS RELIABILITY INFRASTRUCTURE PROGRAM ("GRIP") FILING MADE WITH THE CITY ON MARCH 31, 2016; FINDING THAT THE MEETING COMPLIES WITH THE OPEN MEETINGS ACT; MAKING OTHER FINDINGS AND PROVISIONS RELATED TO THE SUBJECT, AND DECLARING AN EFFECTIVE DATE.

WHEREAS, on or about March 31, 2016, CenterPoint Energy Resources Corp., d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas ("CenterPoint" or "Company") filed an Annual GRIP adjustment for the Beaumont/East Texas Service Area with the City of Beaumont ("City") to increase gas rates in the Beaumont/East Texas Service Area pursuant to *Gas Utility Regulatory Act*, TEX. UTIL. CODE ("Gas Utility Regulatory Act") § 104.301; and

WHEREAS, the City has exclusive original jurisdiction over the rates, operations and services of a gas utility in areas in the municipality pursuant to Gas Utility Regulatory Act § 103.001; and

WHEREAS, the Gas Utility Regulatory Act § 104.301 requires a streamlined process for the recovery of the costs of incremental investment by a gas utility; and

WHEREAS, the Company proposed an effective date of May 30, 2016, for the rate increase; and

WHEREAS, the City suspended the proposed May 30, 2016, effective date until July 14, 2016; and

WHEREAS, the City's consultant has reviewed the GRIP filing and has concluded that the proposed GRIP rates are correctly calculated; and

WHEREAS, the reasonableness of the Company's investment will be reviewed in CenterPoint's subsequent base rate case where all costs included in CenterPoint's GRIP filing will be subject to refund;

NOW THEREFORE, BE IT ORDAINED BY THE

CITY COUNCIL OF THE CITY OF BEAUMONT, TEXAS, THAT:

Section 1.

The statement and findings set out in the preamble to this ordinance are hereby in all things approved and adopted.

Section 2.

The Company's proposed GRIP rate increase is approved effective July 14, 2016.

Section 3.

The meeting at which the ordinance was approved was in all things conducted in strict compliance with the Texas Open Meetings Act, Texas Government Code, Chapter 551.

Section 4.

This Ordinance shall become effective from and after its passage.

PASSED BY THE CITY COUNCIL of the City of Beaumont this the 14th day of June, 2016.

ATTEST:

_____
- Mayor Becky Ames -

_____
Tina Broussard
City Clerk

2

June 14, 2016

Consider a resolution approving a depository agreement with Wells Fargo Bank, N.A.

BEAUMONT
TEXAS

TO:	City Council
FROM:	Kyle Hayes, City Manager
PREPARED BY:	Laura Clark, Chief Financial Officer
MEETING DATE:	June 14, 2016
REQUESTED ACTION:	Council consider a resolution approving a depository agreement with Wells Fargo Bank, N.A.

BACKGROUND

The current depository agreement with Wells Fargo Bank expires on September 30, 2016, and all options to renew have been exhausted. In accordance with the requirements set forth in Chapter 105 of the Texas Local Government Code, the City has undergone the process of Bank Depository Service Request for Applications (RFA), including the preparation of the RFA, responding to questions, analyzing the responses and making a recommendation as to the best value for the City.

As required, notice for applications were published in a local paper and RFA's were sent to three (3) local banks including: Capital One Bank, Compass Bank and Wells Fargo Bank. Only two (2) RFA's were received: Capital One Bank and Wells Fargo Bank.

After analyzing the responses, Wells Fargo bank was determined to be the best value to the City. Both of the responding banks exhibit the financial strength required to serve the City but Wells Fargo Bank excells in the areas of fee structure and services provided. With Wells Fargo Bank, all fees will be absorbed by the earnings credit provided that the City maintains a minimum balance of $17 Million. Balances in excess of $17 Million would be available to earn interest income and/or more earnings credit. Excess earnings credit can be used to pay for printing services that the City needs. In addition, the City will receive an allowance up to $1,500 to offset the cost of check stock, free daily armored car service from one location for making deposits to the bank, and free tamper evident deposit bags for the life of the contract.

The agreement is for two (2) years with three (3) options to renew for one (1) year at a time.

FUNDING SOURCE

Not Applicable.

RECOMMENDATION

Approval of resolution.

RESOLUTION NO.

BE IT RESOLVED BY THE CITY COUNCIL OF THE

CITY OF BEAUMONT:

THAT the proposal of Wells Fargo Bank, N.A., for banking services is hereby accepted and the City Manager be and he is hereby authorized to execute a depository agreement with Wells Fargo Bank, N.A., for the period commencing October 1, 2016, to September 30, 2018. The contract may be renewed for three (3) additional one (1) year periods by mutual consent of both parties.

PASSED BY THE CITY COUNCIL of the City of Beaumont this the 14th day of June, 2016.

_____

- Mayor Becky Ames -

3

June 14, 2016

Consider a resolution authorizing the City Manager to submit an application for grant funding through the Texas Water Development Board for the Master Drainage Plan Project

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BEAUMONT
TEXAS

TO:	City Council
FROM:	Kyle Hayes, City Manager
PREPARED BY:	Dr. Joseph Majdalani, P.E., Public Works Director JM
MEETING DATE:	June 14, 2016
REQUESTED ACTION:	Council consider a resolution authorizing the City Manager to submit an application for grant funding through the Texas Water Development Board for the Master Drainage Plan Project.

BACKGROUND

On November 12, 2014, by Resolution No. 14-244, City Council authorized the City Manager to execute an agreement with Lockwood, Andrews, Newman, Inc. (LAN) of Houston, Texas in an amount not to exceed $500,000 to fund the first of three (3) phases in the development of a Master Drainage Plan for the City of Beaumont.

On October 13, 2015, by Resolution No. 15-229, City Council authorized the City Manager to execute Amendment No. 1 to the original agreement with Lockwood, Andrews, Newman, Inc. (LAN) of Houston, Texas in an amount not to exceed $500,000 to fund the second of three (3) phases in the development of a Master Drainage Plan for the City of Beaumont.

The Texas Water Development Board (TWDB) is currently offering grants to political subdivisions of the State of Texas for the evaluation of structural and non-structural solutions to flooding issues. The Master Drainage Plan project meets the qualifying project requirements and therefore makes the City of Beaumont a likely candidate to receive grant funding.

Grant funding in the amount of $287,000 would allow for a significant expansion of the scope for the third and final year of the study.

FUNDING SOURCE

Not applicable.

RECOMMENDATION

Approval of resolution.

RESOLUTION NO. 14-244

BE IT RESOLVED BY THE CITY COUNCIL

OF THE CITY OF BEAUMONT:

THAT the City Manager be and he is hereby authorized to execute an Agreement with Lockwood, Andrews, Newnam, Inc. (LAN), of Houston, Texas, in an amount not to exceed $500,000 to develop a Master Drainage Plan for the drainage infrastructure within the City limits and update the current City of Beaumont Master Drainage Plan. The Agreement is substantially in the form attached hereto as Exhibit "A" and made a part hereof for all purposes.

PASSED BY THE CITY COUNCIL of the City of Beaumont this the 12th day of November, 2014.

THE CITY OF BEAUMONT, JEFFERSON COUNTY, TEXAS
BEAUMONT, TEXAS

Becky Ames

- Mayor Becky Ames -

RESOLUTION NO. 15-229

BE IT RESOLVED BY THE CITY COUNCIL

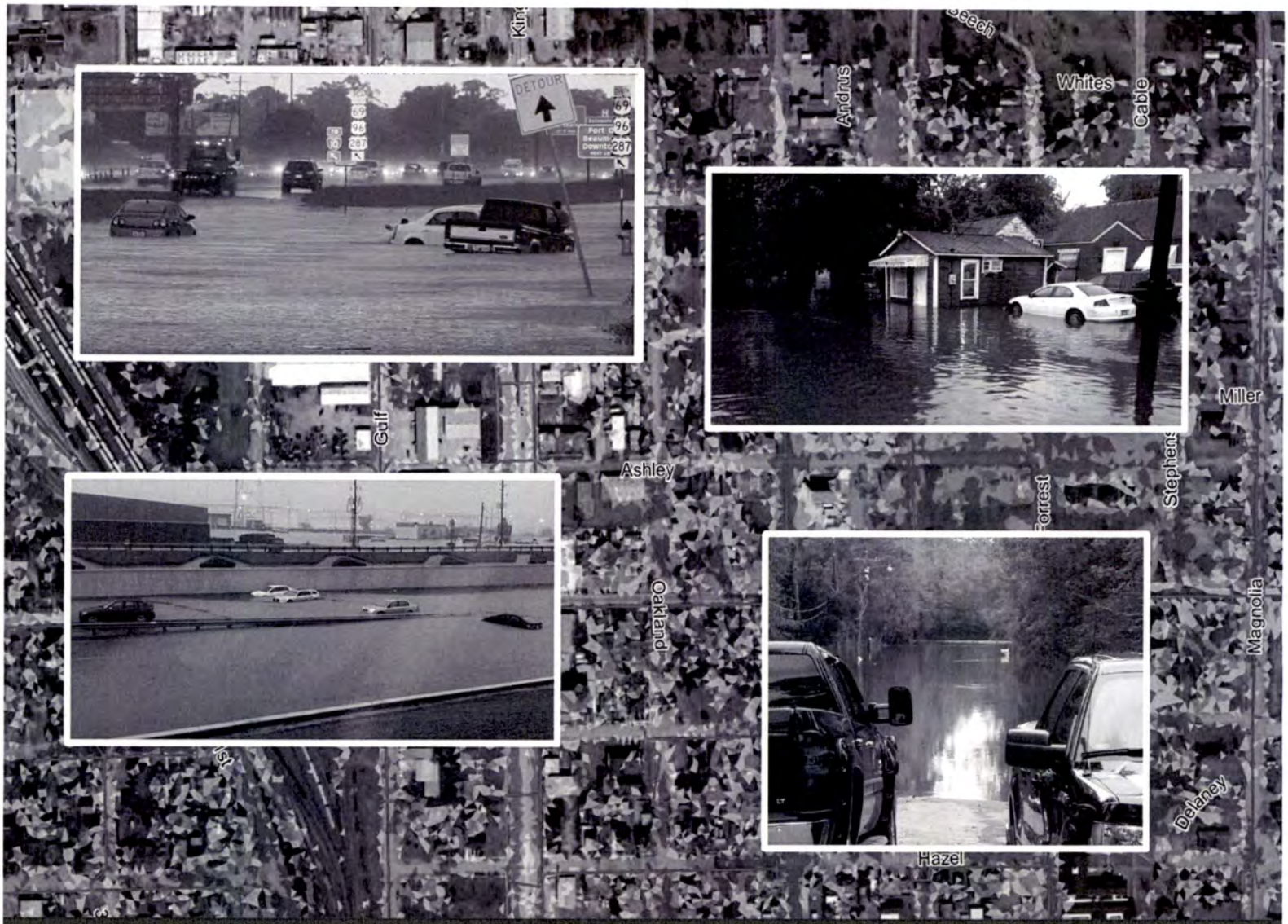
OF THE CITY OF BEAUMONT:

THAT the City Manager be and he is hereby authorized to execute Amendment No. 1 to the Engineering Services Contract between the City of Beaumont and Lockwood, Andrews & Newnam, Inc., (LAN), in the amount of $500,000, for Phase Two (2) of the Storm Water Master Plan. The Amendment is attached hereto as Exhibit "A" and made a part hereof for all purposes.

PASSED BY THE CITY COUNCIL of the City of Beaumont this the 13th day of October, 2015.

THE CITY OF BEAUMONT, JEFFERSON COUNTY, TEXAS

- Mayor Becky Ames -



Application for Flood Protection Grant
Texas Water Development Board

Comprehensive Flood Protection Plan
Tributaries of the Hillebrandt Bayou and Neches River Watersheds

Applicant: City of Beaumont

June 17, 2016

RICH WITH OPPORTUNITY
BEAUMONT
T • E • X • A • S

This document is printed on recycled paper.

Mr. David Carter
Texas Water Development Board
P.O. Box 13231 - Capitol Station
Austin, Texas 7871 1-5231

RE: Tributaries of the Hillebrandt Bayou and Neches River Watersheds Flood Protection Grant

Dear Mr. Carter:

The City of Beaumont is pleased to submit a grant application to the Texas Water Development Board (TWDB) for the Comprehensive Flood Protection Plan for Tributaries of the Hillebrandt Bayou and Neches River Watersheds. The proposed plan will provide flood protection and identify Flood Early Warning System measures to reduce flood risk to property, public safety and critical public infrastructure.

The proposed flood protection plan does not duplicate any existing planning projects and is necessary to insure public welfare and safety and reduce flood risk to property within the plan area. The proposed planning study will include data collection and development of a baseline hydraulic model that will reflect latest landuse, development, and topography and be comprehensive in nature; taking into account cross basin overland flow, open channel flow, and storm sewer conveyance. The outcome of the proposed planning study will include quantification of flooding extents and prioritized cost effective structural and non-structural flood prevention solutions.

The attached application includes general information, existing systems information, and a detailed scope of work, task budget, and project schedule. The City of Beaumont and Jefferson County Drainage District No. 6 participate in the National Flood Insurance Program (NFIP). Letters of support from each participating member of the plan are included. The City of Beaumont and Jefferson County Drainage District No. 6 are highly committed to the success of this plan. The City of Beaumont has dedicated $500,000 in matching funds and Drainage District No. 6 has dedicated $75,000 in matching funds. The City of Beaumont would be honored to have further support dedicated by the Texas Water Development Board to aid in this important endeavor.

If you have any questions regarding this application, please do not hesitate to contact me at (409) 880-3770.

Sincerely,

Kyle Hayes,
City Manager

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II. Planning / Project Information

III. Written Assurances

IV. Resolution

APPENDIX

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Proposed Plan Area Map

Tab C **Exhibit C**
Scope of Work

Tab D **Exhibit D**
Schedule

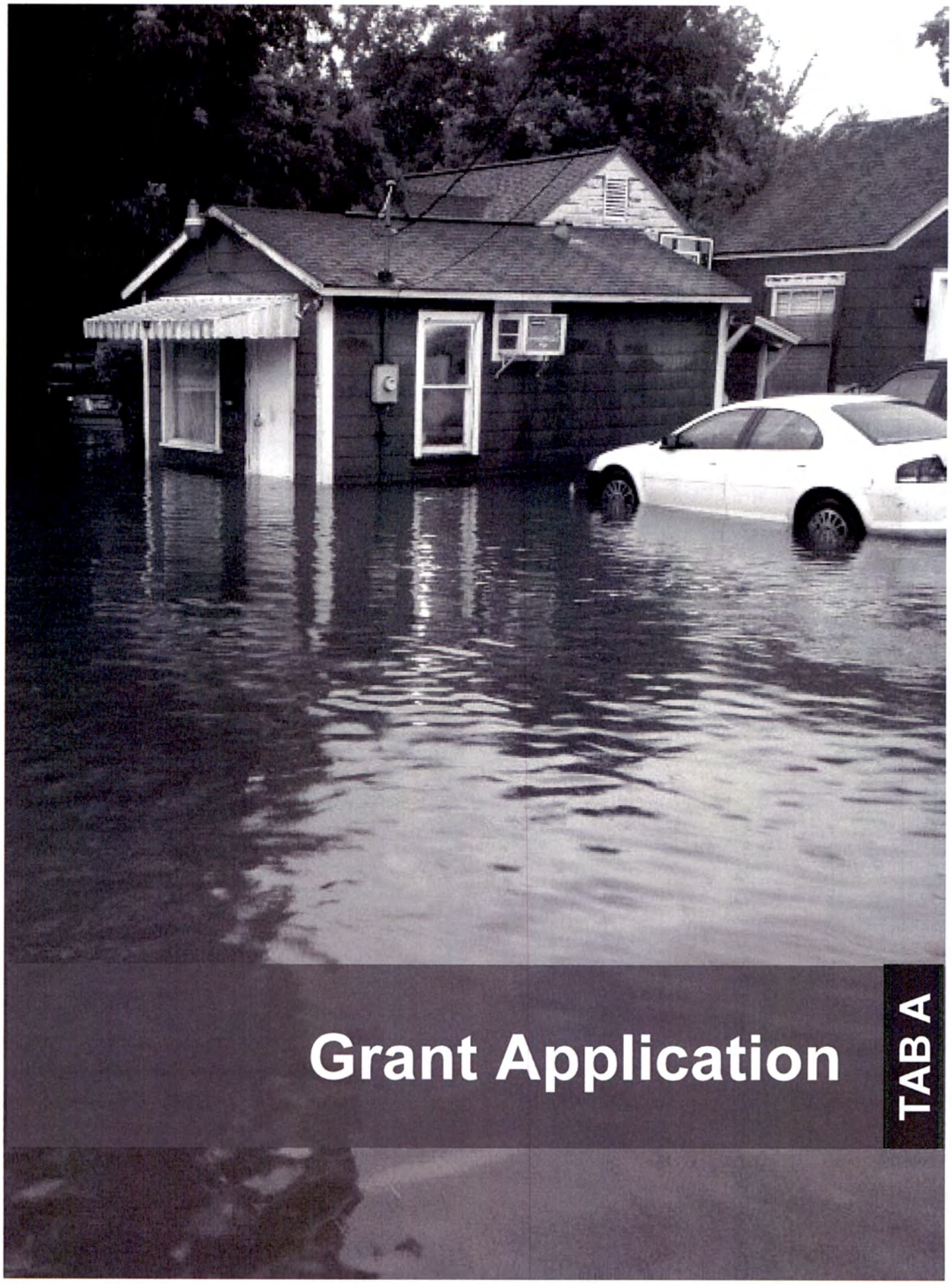
Tab E **Exhibit E – 1**
Budget

Exhibit E – 2
Phasing Map

Tab F **Exhibit F**
Written Assurances

Tab G **Exhibit G**
Resolution & Interlocal Agreement

Tab H **Exhibit H**
Letters of Support



Grant Application

TAB A

I. General Information

1. Legal Name of Applicant.

City of Beaumont
801 Main Street
Beaumont, Texas 77701
Mr. Kyle Hayes, City Manager
Phone: (409) 880-3770
Fax: (409) 880-3112
E-mail: khayes@beaumonttexas.gov

2. Participating political subdivisions.

Letters of Support from the participating political subdivisions are included in the application Appendix as Exhibit H.

Jefferson County Drainage District No. 6
6550 Walden Road
Beaumont, Texas 77707
Mr. Doug Canant, P.E., RPLS, CFM, District Engineer
Phone: (409) 842-1818
Fax: (409) 842-2729
Email: dscanant@dd6.org

Jefferson County Engineering Department
1149 Pearl Street, 5th Floor
Beaumont, Texas 77701
Mr. Don Rao, Engineering Director
Phone: (409) 835-8584
Fax: (409) 835-8718
Email: drao@co.jefferson.tx.us

Texas Department of Transportation
Beaumont District, Beaumont Area Office
8450 Eastex Freeway
Beaumont, Texas 77708
Mr. Kenneth Wiemers, P.E., Area Engineer
Phone: (409) 924-6523
Fax: (409) 924-6549
Email: Kenneth.wiemers@txdot.gov

Beaumont Emergency Management
700 Orleans, 2nd Floor
Beaumont, Texas 77708
Captain Tim Ocnaschek, Emergency Management Coordinator
Phone: (409) 980-7280
Fax: (409) 980-7240
Email: tocnaschek@beaumonttexas.gov

Beaumont Independent School District
3395 Harrison Avenue
Beaumont, Texas 77706
Dr. John W. Frossard, Superintendent
Phone: (409) 617-5001
Fax: (409) 617-5184
Email: sdavis@setrpc.org

Lower Neches Valley Authority
7850 Eastex Freeway
Beaumont, Texas 77708
Mr. Scott Hall, P.E., General Manager
Phone: (409) 892-4011
Fax: (409) 898-2468
Email: scott.hall@lnva.dst.tx.us

Southeast Texas Regional Planning Commission
2210 Eastex Freeway
Beaumont, Texas 77703
Mr. Shaun P. Davis
Phone: (409) 899-8444
Fax: (409) 347-0138
Email: sdavis@setrpc.org

3. **Official representative: Name, Title, Mailing Address, Phone number, Fax number, E-mail Address, and Vendor ID number, if applicable.**

Mr. Kyle Hayes
City Manager
801 Main Street
Beaumont, Texas 77701
Phone: (409) 880-3770
Fax: (409) 880-3112
E-mail: khayes@beaumonttexas.gov
Vendor ID: 74-6000278

4. **Total project cost.**

$862,000

5. **Total grant funds requested from the Texas Water Development Board.**

$287,000

6. **Applicant cash contribution to the study.**

$575,000

7. **Source of cash contribution.**

$500,000 City of Beaumont
$75,000 Jefferson County Drainage District No. 6

8. Applicant In-kind contribution, including a description of in-kind services to be provided.

Not applicable.

II. Planning/Project Information

9. Identify the watershed(s) for which flood protection needs will be addressed.

The flood protection plan area is primarily located in Hillebrandt Bayou and Neches River Watersheds. Urban development within the plan area extends into small portions of Pine Island Bayou and Black Creek Watersheds. A map of the plan area is included in the application Appendix as Exhibit B.

10. If the project area is economically disadvantaged:

a. Current unemployment rate in the proposed project area.

The current unemployment rate for the City of Beaumont is 5.3%; Jefferson County is 6.2%. (Bureau of Labor Statistics, April 2016).

b. Current per-capita income in the proposed project area.

The current per-capita income for the City of Beaumont is $23,687; Jefferson County is $23,563 (ACS, 2014).

11. The purpose of the project (Will the project [a] create or enhance an early warning system, [b] develop a flood response plan, or [c] create a flood protection plan?).

The objective of the proposed project is twofold:

a. Early Warning System: Perform Data Collection and development of a Baseline Hydraulic Model to serve as the basis for a Flood Early Warning System (FEWS). The proposed baseline hydraulic model will reflect latest landuse and development and be comprehensive; taking into account cross basin overland flow, open channel flow, and storm sewer conveyance. Perform a gap analysis on the current informal FEWS system and propose solutions to decrease response time and increase flood prediction accuracy.

c. Flood Protection Plan: To provide the City of Beaumont and Drainage District No. 6 a practical plan to address critical drainage problems with effective tools to manage future development and identify preventive/corrective measures for reducing loss of life and property within the study area.

Several drainage studies have been performed for portions of the proposed flood protection plan area over the last 20 years; however, none of these plans took into account the impact of cross basin overland flow. For this reason, in addition to a 1 Dimensional hydrologic model a 2 Dimensional stormwater model with rainfall applied directly to the 2D surface will be used to verify basin delineations. Given the plan areas mild slopes and dense development it is expected that the addition of 2D hydrologic and hydraulic analysis will more accurately quantify the flooding impacts in the area.

In addition, there is not a current comprehensive study that reflects stormwater project improvements, increased development, and changes in landuse for the plan area. Without an updated flood protection plan in place it will become increasingly difficult to reduce the impact of future flood events to existing and future infrastructure.

Recent flooding throughout Texas has brought attention to the many benefits of Flood Early Warning Systems (FEWS). FEWS projects typically consist of five major steps: Data Collection, Baseline Model, External Threat Feed, Analyze, and Act. In addition to completing a formal review of the FEWS process, the outcome of the proposed plan would include assessment of existing stormwater infrastructure capacity including culverts, bridges, open channels, and storm sewer; identification of flooding problem areas; quantification of flooding

extents; and development of prioritized cost effective structural and non-structural flood prevention solution that take into account critical environmental constraints.

12. Describe the severity of the existing or potential flood hazard.

The City of Beaumont, located in Jefferson County Drainage District No. 6, lies on Texas' coastal plain about 30 miles inland from the Gulf of Mexico. The community is subject to threat of coastal storms and flooding from both the coastal front and inland as runoff makes its way to the Gulf. Jefferson County has had 16 disaster declarations since 1973, 14 of those included damages caused by flooding. The local population has increased 9% over the last 10 years; primarily in the urban corridor which is subject to frequent flooding due to undersized stormwater conveyance infrastructure. The last major flood in October 2002 damaged hundreds of homes and caused one flood related death.

The flood hazards in the proposed study area within Hillebrandt Bayou and Neches River Watersheds are varied. The proposed study area has several low lying areas with undersized stormwater conveyance structures; therefore, roadways become creeks and ponds. Drainage ditches overflow into private properties causing risk to pedestrians, specifically children that risk getting swept away or sucked into culverts and storm drains. Emergency responders in the area are frequently prevented from getting to and from hospitals during a rainfall event due to flooded roadways. Critical care facilities in the proposed study area have been evacuated and closed due to inundation and lack of access. There are a number of neighborhoods that are often cutoff to emergency responders because all access points to the neighborhood are flooded. People traveling to school or work during a heavy rain often end up stranded when their vehicle takes on water on flooded roadways; this causes particular concern to local ISDs. Water doesn't have to be moving fast to wash a car off the road; just 18" of water can float a car. Most people who die in floods are trapped in flooded cars which is why flooded roadways are not just a nuisance but a real threat to the community.

13. A detailed scope of work for proposed project, not to exceed six pages.

A detailed scope of work is included in the application Appendix as Exhibit C.

14. Describe how the project would reduce loss of life.

The majority of the local population is located within the urban corridor that spans the watershed boundary between Hillebrandt Bayou and Neches River Watershed. This portion of the plan area is subject to frequent flooding due to undersized stormwater conveyance infrastructure. Based on preliminary mapping of the plan area, there are approximately 525 miles of open channels and 800 miles of enclosed storm sewer that make up the comprehensive stormwater conveyance system. The proposed plan would include assessment of the capacity of existing stormwater infrastructure including culverts, bridges, open channels, and storm sewer; identification of flooding problem areas; quantification of flooding extents; and development of prioritized cost effective structural and non-structural flood prevention solution that will reduce risk of flood and loss of life, resulting in increased safety and an overall decrease in flood damages in the plan area.

The prioritization process for the problem areas will specifically identify impassable intersections. As mentioned above, a significant risk plaguing the study area is the inundation of roadways caused by undersized stormwater conveyance infrastructure. Flooded roadways and overtopped channels are of particular risk to vehicles and pedestrians. A benefit of the plan will be identify the areas of greatest risk and developing solutions that reduce risk of flood and loss of life for future flood events.

The plan will also include a gap analysis of the current informal Flood Early Warning System (FEWS) and provide recommendations that will reduce response time and increase flood prediction accuracy. These improvements will aid emergency responders to better inform the community of potential flood risk and in effect reduce the

number of high water rescues. The combined approach of structural and non-structural flood mitigation solutions with early warning system improvements together is the best approach to reducing loss of life.

15. Describe how the project would reduce loss of property.

The last major flood in October 2002 damaged hundreds of homes. According to FEMA flood damage statistics, "people outside of mapped high-risk areas file over 20-percent of all National Flood Insurance Program flood insurance claims". This has certainly been the case for the plan area which has several flood-prone areas that are outside of the mapped high-risk flood zones as shown on the latest FEMA flood maps. These areas experience localized flooding caused by undersized stormwater conveyance infrastructure. The proposed plan will include quantifying the impacts of localized flooding through the use of a more holistic hydraulic modeling approach, namely InfoWorks-ICM 2-Dimensional modeling which will quantify both open channel and storm sewer conveyance in the study area. This approach will provide a more accurate depiction of the flood risk to structures in the plan area and result in more effective flood prevention solutions.

Similar to how the project will reduce loss of life, the proposed project will reduce loss of property by identifying critical structural and non-structural flood prevention solutions to reduce risk of flood to property, resulting in an overall decrease in flood damages in the plan study area. The plan will also evaluate the current informal FEWS to identify means to more accurately predict flood risk. Early warning systems save property by providing a community estimates on where the greatest flood impacts will occur for a particular storm event. This provides the public and emergency responders necessary lead time for focused temporary flood proofing of homes.

16. A schedule for completing detailed scope of work by task.

A schedule for completing the scope of work by task is included in the application Appendix as Exhibit D.

17. Include a task budget for detailed scope of work by task.

A budget for the scope of work by task is included in the application Appendix as Exhibit E-1. Due to the comprehensive nature of the plan it has been broken into three consecutive phases to meet the budgetary constraints of the City. Geographic phases are shown the application Appendix as Exhibit E-2. Phase 1 is nearing completion, Phase 2 is underway. Both Phase 1 and Phase 2 were fully funded by the City. Phase 3 will be a continuation of the efforts performed in Phase 1 and Phase 2 with the addition of specific initiatives to be carried out for the entire project area to execute flood protection goals and objective identified by the Texas Water Development Board in the Flood Protection Grant including evaluation of the Flood Early Warning System (FEWS) and execution of 1 Dimensional channel modeling for a selection of flood problem areas identified by Jefferson County Drainage District No. 6 (DD6). Phase 3 of the plan has a total estimated budget of $862,000. The City of Beaumont would be honored to have support of the Texas Water Development Board to aid in the execution of Phase 3 of the plan to continue this important endeavor. The City of Beaumont fully intends to contribute $500,000 in cash to Phase 3 of the plan. In addition, Jefferson County Drainage District No. 6 has committed $75,000 in cash to Phase 3 of the plan. Both the City of Beaumont and Jefferson County participate in the National Flood Insurance Program (NFIP).

18. Include an expense budget by category for detailed scope of work (see attached example).

Category	Budget			
	Total	Phase 1	Phase 2	**Phase 3**
Salaries and Wages[1]	$1,331,000	$323,000	$323,000	**$685,000**
Fringe[2]	$0	$0	$0	**$0**
Travel[3]	$4,500	$1,500	$1,500	**$1,500**
Subcontract Services	$525,000	$175,000	$175,000	**$175,000**
Other Expenses[4]	$1,500	$500	$500	**$500**
Overhead[5]	$0	$0	$0	**$0**
Profit	$0	$0	$0	**$0**
Total	$1,862,000	$500,000	$500,000	**$862,000**

[1] Salaries and Wages is defined as the cost of salaries of engineers, stenographers, surveymen, clerks, laborers, etc. for time directly chargeable to this contract.

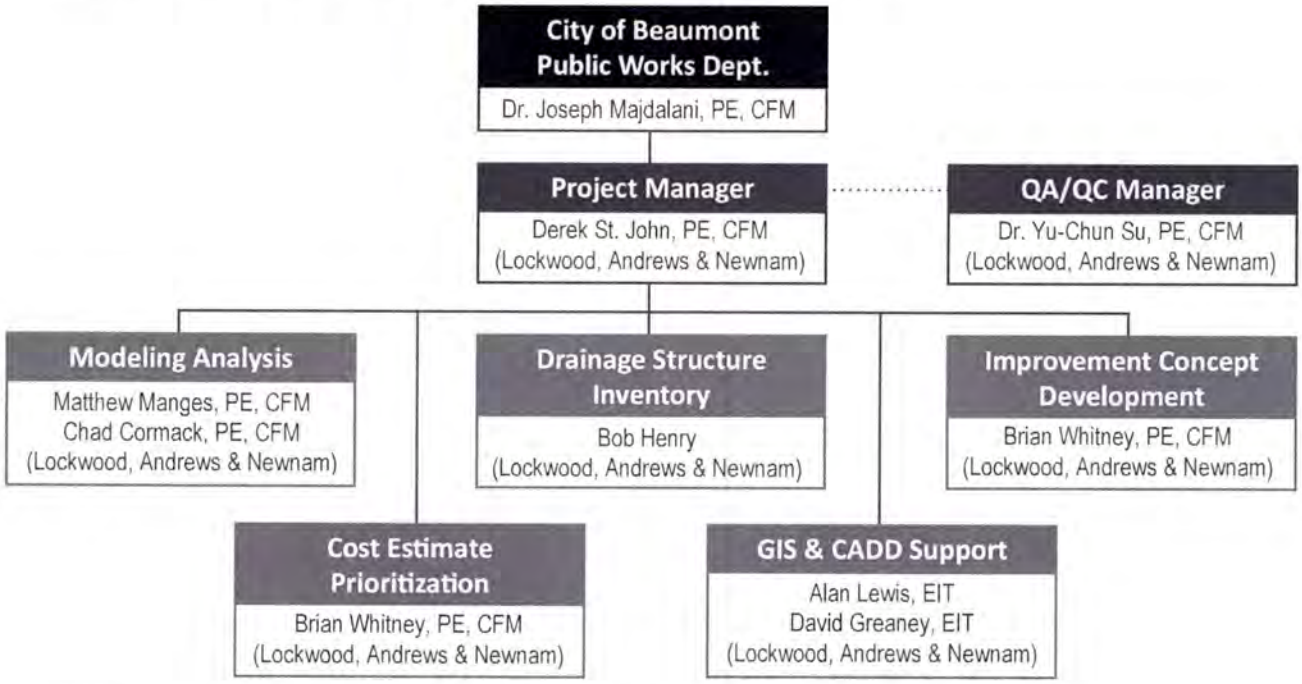
[2] Fringe is defined as the cost of social security contributions, unemployment, excise, payroll taxes, workers' compensation insurance, retirement benefits, medical and insurance benefits, sick leave, vacation, and holiday pay acceptable thereto.

[3] Travel is limited to the maximum amounts authorized for state employees by the General Appropriations Act, Tex. Leg. Regular Session, 2011, Article IX, Part 5, as amended or superseded.

[4] Other expenses is defined to include expendable supplies, communications, reproduction, and postage directly chargeable to this contract.

[5] Overhead is defined as the costs incurred in maintaining a place of business and performing professional services similar to those specified in this contract. These costs shall include the following: indirect salaries, including that portion of the salary of principals and executives that is allocable to general supervision; indirect salary fringe benefits; accounting and legal services related to normal management and business operations; travel costs incurred in the normal course of overall administration of the business; equipment rental; depreciation of furniture, fixtures, equipment, and vehicles; dues, subscriptions, and fees associated with trade, business, technical, and professional organizations; other insurance; Rent and utilities; and Repairs and maintenance of furniture, fixtures, and equipment.

19. Qualifications and direct experience of proposed project staff.



Dr. Joseph Majdalani, PE, CFM – Public Works Director, City of Beaumont

License

Texas Professional Engineer No. 73380

Education

Doctor of Engineering, Lamar University, 2010

Master of Science, Civil Engineering, University of Southwestern Louisiana, 1984 Bachelor of Science, Civil Engineering, University of Southwestern Louisiana, 1983

Qualifications

Dr. Majdalani is an accomplished engineer and Public Works Director with more than 31 years of experience. As Senior Assistant Director of Public Utilities for the City of Houston Public Works and Engineering Department, he managed $112 million annual operating budget, $156 million capital improvement projects budget, and more than 700 wastewater operations facilities. As Public Works Director for the City of Beaumont, he manages the Engineering Department and oversees all aspects of capital improvement projects, city drainage systems, street rehabilitation, and pretreatment programs. He is responsible for coordinating with other City and County departments, as well as external consultants and in-house engineers for various design and planning projects to improve public safety and livelihood.

Derek St. John, PE, CFM – Project Manager, Lockwood, Andrews & Newnam, Inc.

License

Texas Professional Engineer No. 96623

Certified Flood Plain Manager No. 0169-04

Education

Bachelor of Science, Civil Engineering, Texas A&M University, 2001

Qualifications

Mr. St. John has 15 years of civil engineering experience, and leads LAN's Stormwater Management

team specializing in hydrology and hydraulics (H&H) analysis and design. He has managed numerous regional mitigation planning and design efforts for a variety of improvement projects, including drainage system master planning, watershed level H&H studies, and flood damage reduction feasibility studies. He has managed numerous master drainage plans over the last five years using traditional and advanced modeling applications. He is highly skilled in the latest H&H GIS-related technologies and is recognized as an industry leader in this fast-growing area. Mr. St. John has utilized the skill sets and tools described above to manage, lead, and perform several successful 2D drainage improvement initiatives within the last several years. He has utilized 2D modeling from the concept and feasibility project phase through design and construction, and has witnessed the performance of the improved system in an extreme event.

Matthew Manges, PE, CFM – Modeling Analysis Lead, Lockwood, Andrews & Newnam, Inc.

License

Texas Professional Engineer No. 108735

Certified Flood Plain Manager No. 1623-09N

Education

Master of Civil Engineering, Water Resources, Texas A&M University, 2008 Bachelor of Science, Civil Engineering, Texas A&M University, 2007

Qualifications

Mr. Manges is one of the top urban stormwater modeling engineers in southeast Texas specializing in dynamic and 2D modeling. In the last three years, he has performed five complex drainage master plans using advanced 2D modeling. He is responsible for engineering services relating to H&H analysis for watershed master planning, preliminary engineering reports, and floodplain delineation. His career to this point is highlighted by the creation and development of one of the largest 2D InfoWorks models in NorthAmerica. Through his efforts, this Texas CEC Engineering Excellence Silver Award winning project has brought understanding and feasible/cost-effective improvement projects to an area needing solutions.

20. Method of monitoring project progress.

The City of Beaumont, DD6, the participating entities, the Consultant, and other interested parties will participate in meeting as required by the TWDB. Major milestone meetings include: one (1) project kick-off meeting with project stakeholders and one (1) public meeting to present project alternatives, cost/benefit analysis, and study recommendations.

Project progress will be monitored through regularly scheduled meetings to be held with City staff to discuss study action items, review progress of the work effort, and information requests. DD6 will be copied on meeting notes and action items.

III. Written Assurances

21. Assurances that the applicant has the authority to plan and implement projects in the project area.

The City of Beaumont Public Works Director has the authority to plan and implement projects in the plan area. A letter of assurance for this information is included in the application Appendix as Exhibit F.

22. Assurance that the applicant or the beneficiaries of the application are participants in the National Flood Insurance Program or have applied or intent to apply to the participants in the National I Flood Insurance Program.

Both the City of Beaumont and Jefferson County participate in the National Flood Insurance Program (NFIP). A letter of assurance for this information is included in the application Appendix as Exhibit F.

23. Assurance that the proposed project does not duplicate existing project with the exception of replacing outdated equipment.

Several drainage studies have been performed for portions of the proposed flood protection plan area over the last 20 years; however, none of these plans took into account the impact of cross basin overland flow. For this reason, in addition to a 1 Dimensional hydrologic model a 2 Dimensional stormwater model with rainfall applied directly to the 2D surface will be used to verify basin delineations. Given the plan areas mild slopes and dense development it is expected that the addition of 2D hydrologic and hydraulic analysis will more accurately quantify the flooding impacts in the area. In addition, there is not a current comprehensive study that reflects stormwater project improvements, increased development, and changes in landuse for the plan area.

Therefore, the proposed plan effort will build off of work previous completed but does not duplicate any existing plan or implementation projects and is necessary to ensure the welfare and safety of the citizens of Beaumont. A letter of assurance for this information is included in the application Appendix as Exhibit F.

IV. Resolution

24. Include an expense budget by category for detailed scope of work.

See Item 18 above.

25. A resolution for the governing body of each applicant and/or participant:

Indicating the entity's representative is authorized to apply for a grant from the Texas Water Development Board;

Granting authority for the entity to enter into a contract with the Texas Water Development Board; and

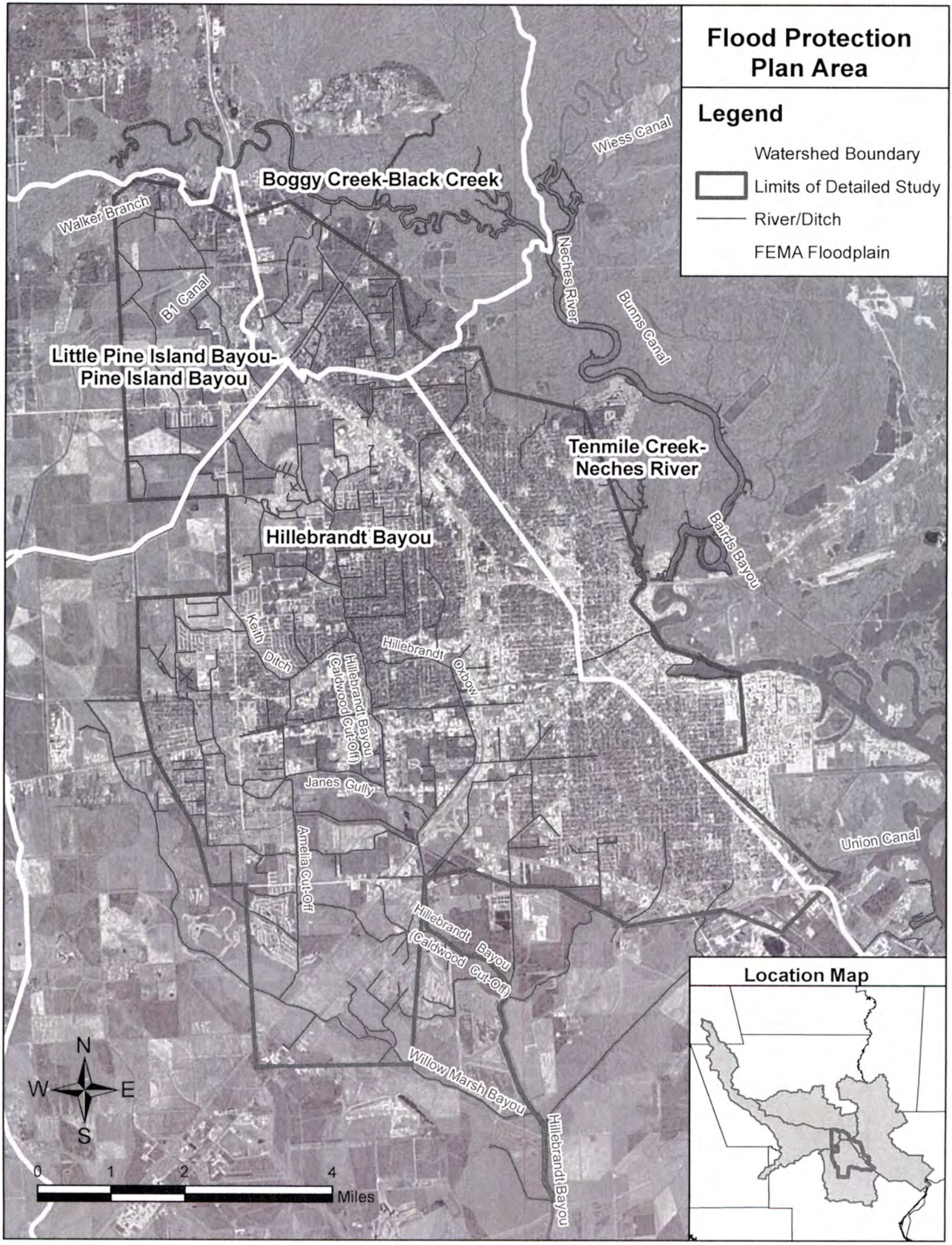
Stating the intent to commit local matching funds in cash and/or in-kind services.

A signed Resolution granting the City of Beaumont authority to apply for this TWDB grant, enter into a contract with the TWDB, and commit local matching funds is included in the application Appendix as Exhibit G. Additionally an Interlocal Agreement between the City of Beaumont and Jefferson County Drainage District No. 6 to work together to mutually fund and execute the plan is included in the application Appendix following the signed Resolution Exhibit G.

Exhibit B

Proposed Plan Area Map

TAB B


Flood Protection Plan Area
Legend
Watershed Boundary
Limits of Detailed Study
River/Ditch
FEMA Floodplain
Boggy Creek-Black Creek
Little Pine Island Bayou-Pine Island Bayou
Hillebrandt Bayou
Tenmile Creek-Neches River
Walker Branch
B1 Canal
Wiess Canal
Neches River
Bunns Canal
Bairds Bayou
Keith Ditch
Hillebrandt Bayou (Caldwood Cut-Off)
Hillebrandt Oxbow
Janes Gully
Amelia Cut-Off
Union Canal
Hillebrandt Bayou (Caldwood Cut-Off)
Willow Marsh Bayou
Hillebrandt Bayou
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Location Map

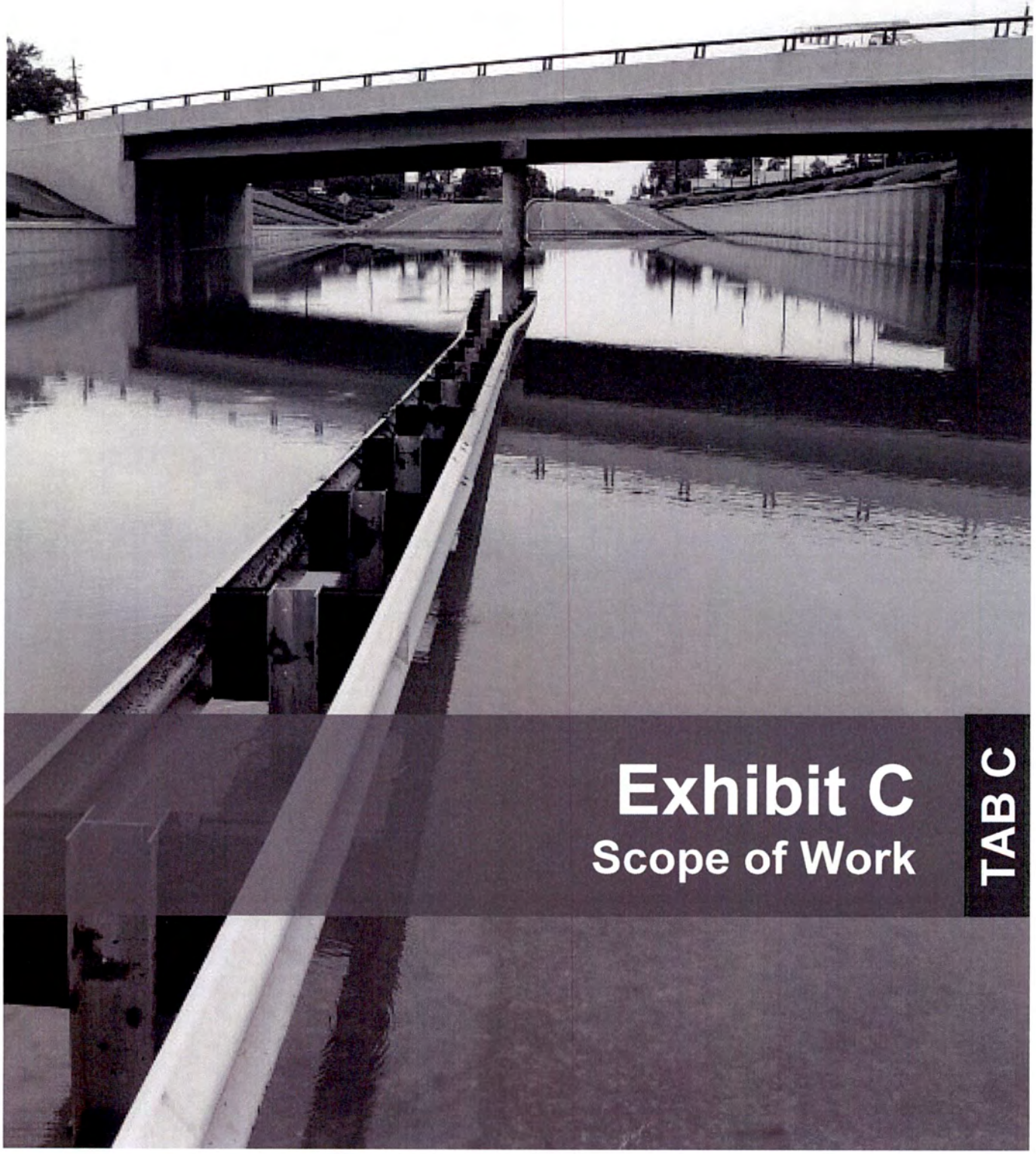


Exhibit C
Scope of Work

TAB C

The City of Beaumont has prepared an application for flood protection grant assistance to the Texas Water Development Board (TWDB). The grant will assist the following political subdivision in the development of a flood protection plan to serve existing and future populations located in the Hillebrandt Bayou and Neches River Watersheds. Political subdivision applying for this grant application include:

- City of Beaumont
- Jefferson County Drainage District No. 6

These applicants participate in the National Flood Insurance Program (NFIP).

The City of Beaumont, located in Jefferson County Drainage District No. 6, lies on Texas' coastal plain about 30 miles inland from the Gulf of Mexico. The community is subject to threat of coastal storms and flooding from both the coastal front and inland as runoff makes its way to the Gulf. Jefferson County has had 16 disaster declarations since 1973, 14 of those included damages caused by flooding. The local population has increased 9% over the last 10 years; primarily in the urban corridor which is subject to frequent flooding due to undersized stormwater conveyance infrastructure.

Several drainage studies have been performed for portions of the proposed flood protection plan area over the last 20 years. Currently there is not a comprehensive study that reflects stormwater project improvements, increased development, and changes in landuse for the plan area. Without an updated flood protection plan in place it will become increasingly difficult to reduce the impact of future flood events to existing and future infrastructure.

Recent flooding throughout Texas has brought attention to the many benefits of Flood Early Warning Systems (FEWS). FEWS projects typically consist of five major steps: Data Collection, Baseline Model, External Threat Feed, Analyze, and Act. The objective of this flood protection plan effort is twofold:

1. To provide the City of Beaumont and Drainage District No. 6 a practical plan to address critical drainage problems with effective tools to manage future development and identify preventive/corrective measures for reducing loss of life and property within the plan area.
2. Perform Data Collection and development of a Baseline Hydraulic Model to serve as the basis for a flood early warning system. The proposed baseline hydraulic model will reflect latest landuse and development and be comprehensive; taking into account cross basin overland flow, open channel flow, and storm sewer conveyance. Perform a gap analysis on the current informal FEWS system and propose solutions to decrease response time and increase flood prediction accuracy.

In addition to completing a formal review of the FEWS process, the outcome of the proposed plan would include assessment of existing stormwater infrastructure capacity including culverts, bridges, open channels, and storm sewer; identification of flooding problem areas; quantification of flooding extents; and development of prioritized cost effective structural and non-structural flood prevention solution that take into account critical environmental constraints.

The City of Beaumont will serve as the overall project sponsor with support from Jefferson County Drainage District No. 6 and professional engineering services provided by Lockwood, Andrews, & Newnam, Inc. The following lists the tasks to be completed as part of the flood protection plan.

1. Data Collection, Organization, and Initial Assessment

Flood protection plan participants will be requested to aid in the collection of relevant record data for the project area in Hillebrandt Bayou and Neches River Watersheds. Data to be collected from:

- City of Beaumont
- Drainage District No. 6
- Texas Department of Transportation, Beaumont District
- FEMA

A. Review of Previously Completed Drainage Studies and Support Data

Previously completed drainage studies and relevant support documentation will be collected, reviewed and organized to define the baseline existing stormwater conditions in the flood protection plan area. Data collection to include:

- Previously completed drainage studies, LOMRs, geotechnical reports, models, and GIS data
- Relevant as-builts and record drawings
- Future improvement schematic and design plans
- Current FIS and USACE hydrologic and hydraulic models
- GIS data to include parcels, zoning, current and future landuse, soils, storm sewer infrastructure
- Current and historical aerial images
- Current LiDAR topography for the watershed area
- Records of rainfall, street closures, and flood rescues/deaths

B. Digital Drainage Inventory Development

The GIS digital drainage inventory will serve as the basemap for the plan area. The information compiled will be utilized in developing a comprehensive hydrologic and hydraulic model for the plan area. The compiled data will be used to determine stormwater infrastructure performance for multiple frequency storm events. The GIS inventory will include stormwater infrastructure pipes, manholes, inlets, road side ditches, culverts, bridges, and detention/retention ponds. The inventory will be built from City GIS data and cross checked against stormwater infrastructure as-builts and record drawings. Site visits will be performed to verify as-built and record drawing data. Digital schematics will be produced in GIS and the data stored in a geodatabase.

C. Condition Assessment

Condition assessment forms will be created to document field condition of stormwater assets. Type of data to be collected includes: condition, siltation, clogging factors, photos. Work order management software employed by the City will be used to identify potential drainage problem areas within the plan area. Specific areas within the study area will be identified for condition assessment to include: areas of known flooding, stormwater conveyance tunnels, and historically older stormwater assets.

2. Survey

The drainage analysis will utilize 2006 Jefferson County LiDAR data; this will provide significant cost savings for the project. Areas for field survey will be identified following a review of available project data including LiDAR topography, previously completed hydraulic models, and as-built drawings. Field survey will be requested for critical stormwater conveyance infrastructure such as culverts, bridges, drainage channels, storm sewer mains, detention outlet structures, and roadways. Field survey to be

collected will include, but is not limited to: upstream and downstream flowline elevations, structure size verification, and top of roadway elevation. Critical benchmarks will be surveyed throughout the study area to tie in topographic reference data to a common vertical datum. It is anticipated that between 5-25% of the stormwater assets in the plan area will be surveyed.

3. Drainage System Evaluation

A. Hydrology

The Jefferson County Drainage District No. 6 Flood Protection Planning Study dated March 2008 included a 1 Dimensional hydrologic analysis for a portion of the proposed plan study area. The proposed study will integrate the 2008 study with other studies performed for the plan study area including studies prepared by the Federal Emergency Management Agency (FEMA), Jefferson County Drainage District No. 6, and the City of Beaumont. The proposed study will include updating hydrologic data with the latest GIS-based hydrologic parameters including existing landuse, including development changes made over the last 8 years, and future landuse. Some portions of the plan area are fully developed so no landuse changes are anticipated for the most urban of the study area. Hydrologic parameters will be updated to reflect latest aerial imagery, topography, and field survey collected as part of this study. Time of concentrations from previous studies will be evaluated against the City of Beaumont drainage design criteria for each drainage basin within the plan area.

Rainfall intensity and storm frequency are important elements in the analysis. In accordance to City of Beaumont drainage criteria, runoff hydrographs will be developed for the 2-, 5-, 10-, 25- and 100-year storm events. Every effort will be made to calibrate the hydrologic models to historic rainfall/flood events, including the use of high water marks and steam gauge data from historic flood events.

Based on City of Beaumont and Drainage District No. 6 personnel observations, familiarity with the plan area, and preliminary mapping the plan area is described as relatively flat with poorly define watershed boundaries. Personnel have observed cross basin overland flow contributing to known flooding issues within the plan area. Previously completed 1D hydrologic analysis did not capture the impact of cross basin overland flow. For this reason, in addition to a 1 Dimensional hydraulic model a 2 Dimensional stormwater model with rainfall applied directly to the 2D surface will be used to verify overland flow. The 2D basin delineations will be based on the 2006 LiDAR, as-built, survey, and site visit information. Hydrologic parameters developed for the 2D analysis will be consistent with the parameters developed for the 1D analysis. The 2D modeling approaches will be used in order to ensure that cross basin overland flow is properly accounted for. Quality Control checks will be performed of the draft and final hydrologic assessment to ensure modeling approach and assumptions are consistent with local, state, and federal drainage design guidance.

B. Hydraulics

The Jefferson County Drainage District No. 6 Flood Protection Planning Study dated March 2008 included a 1 Dimensional hydraulic analysis for a portion of the proposed plan area. The proposed study will integrate the 2008 hydraulic analysis in with other studies performed for the plan area including studies prepared by and for the Federal Emergency Management Agency (FEMA), Jefferson County Drainage District No. 6, and the City of Beaumont. The proposed study will include incorporating drainage improvements constructed following the 2008 FPPG study into the compiled hydraulic assessment. Hydraulic parameters will be updated to reflect the latest topography and field survey to

be collected as part of this study. The hydraulic network will incorporate the latest GIS digital drainage inventory and field observations performed as part of this study. The resultant existing conditions hydraulic network will include open channels, culverts, cross culverts, bridges, and storm sewer.

Based on preliminary mapping of the plan area, there are approximately 525 miles of open channels and 800 miles of enclosed storm sewer that make up the comprehensive stormwater management conveyance system in the plan area. For a detailed network that includes both open channel and storm sewer conveyance a more holistic hydraulic modeling approach will be needed. For this reason InfoWorks-ICM 2-Dimensional modeling will be utilized for the proposed study. InfoWorks input parameters will be consistent with 1D modeling elements previously defined for the plan study area. The existing conditions InfoWorks hydraulic model stability will be evaluated for the 2-, 5-, 10-, 25- and 100-year storm frequencies and compared to 1D results to properly calibrate the 2D results. Due to the size of the plan area, emphasis for refining the hydraulic model will be focused on more densely populated regions and/or areas with the most critical flooding issues. Following calibration of the model, locations where additional survey data and/or site visits are needed will be documented and performed to improve the function of the models.

The InfoWorks-ICM 2D Model will be validated for the latest major flooding events. The City of Beaumont Emergency Management Office has documentation from the latest flood events to include photos, highwater marks, and damage assessment forms. The 2D model results will be compared to the known flooding documentation and the model will be refined accordingly. Final results taken from the hydraulic analysis will be used to help the City of Beaumont and Drainage District No. 6 more adequately plan for development to reduce future flood risk. The resultant InfoWorks ICM 2D Model will also be used as the basis for flood early warning system recommendations.

FEMA mapped streams in the plan area include named and unnammed Tributaries to the Neches River and Hillebrandt Bayou. It is not cost effective to perform a detailed riverine 1D channel modeling for the full project extents. Instead, ID channel modeling to define flood profiles for 100-year and 500-year events will only be performed for portions of the major streams and tributaries that correlate to known flood problem areas. Quality Control checks will be performed of the draft and final hydraulic assessment to ensure modeling approach and assumptions are consistent with local, state, and federal drainage design guidance.

C. System Level of Service and Problem Area Identification

A system level of service for the stormwater conveyance system will be determined based on the results of the existing conditions hydrologic and hydraulic modeling. According to City of Beaumont drainage criteria, storm sewer and open channels should be able to convey the 25-year event with consideration to 100-year stormwater conveyance. It is anticipated that much of the existing stormwater conveyance infrastructure conveys less than the 10-year storm event. Specific problem areas and infrastructure deficiencies will be identified based on the existing conditions hydrologic and hydraulic modeling.

D. Problem Area Ranking and Prioritization

Problem areas will be ranked by their severity. For the purpose of this study, severity is a function of:

- Number of potentially flooded habitable structures
- Number of impassable intersections

As part of the proposed study, improvement alternatives will be developed for the top problem areas identified. Remaining problem areas will be incorporated into a phasing plan based on rank to be addressed in future studies. Prioritized problem areas will include input from City of Beaumont and DD6 staff and will be consistent with the City's objectives and future Capital Improvement Plan funding.

4. Flood Prevention Plan Development

A. Design Criteria Establishment

Design criteria for proposed improvements will be defined based on local, state, and federal drainage design guidance. City and DD6 staff will be consulted in the development of criteria goals for the proposed level of service for improvement alternatives.

B. Flood Prevention Alternative Refinement and Evaluation

Alternatives evaluation will focus on cost effective flood prevention solutions that reduce flood risk to the public and damage to habitable structures. Recommended alternatives will focus on improvements to roadway and drainage infrastructure and will consist of both structural and non-structural solutions.

Structural Alternatives

- Regional Detention/Retention
- Channel improvements
- Levees
- Storm sewer improvements
- Culvert/Bridge upgrades

Non-Structural Alternatives

- Dry Flood Proofing
- Updates to floodplain management ordinances and criteria
- Property buy-out
- Elevation of homes

Solutions will be evaluated to ensure no adverse impact to adjacent property (both upstream and downstream of the evaluated improvement).

C. Flood Early Warning System

Currently there is not a formal Flood Early Warning System in place for the plan area. The plan area is primarily served by the City of Beaumont Emergency Management (EM) personnel who monitor numerous weather intelligence sources to determine rainfall potential and severity. Based on this preliminary information, EM personnel generate "potential rain event" or "potential severe weather" messages which include public safety announcements, such as flood safety messages, to Emergency Responders and to local media outlets. When a determination is made that there is a potential risk of flooding, EM personnel will barricade roadways that are known to flood based on past flood events. Numerous high water rescues are conducted during flooding events; 95% are for stranded motorists. The remaining 5% involve residents unable to leave their residences or places of business.

In order to protect lives and minimize property damage related to flood events, the City must be able to obtain timely and accurate rainfall data, analyze said data and produce warnings, guidance and recommendations which will allow residents to take action to protect themselves and minimize loss or damage during flood events. The proposed plan will include performing a gap analysis on the current informal Flood Early Warning System to determine what improvements can be made to better meet the needs of the emergency responders and reduce response time and increase the accuracy of early warning predictions. The gap analysis will consider formal methods for compiling rain and river gauge data for the area, best management practices for GIS historical flood data, and incorporation of real time precipitation data with the comprehensive hydraulic models prepared in this plan.

As an extension of the flood prevention alternatives Flood Early Warning System (FEWS) solutions will be evaluated for the top ranked problem areas. FEWS solutions will include evaluation of cost effective flood alarm systems and identification of optimum placement throughout the plan area.

D. Environmental Constraints

It is the goal of this study to avoid adverse environmental impacts. Environmental constraints such as critical environmental features (CEF) will be defined for the study area and taken into account when developing proposed alternatives. Priority will be given to design alternatives that avoid environmental impacts. For stormwater problem areas that are adjacent to environmentally sensitive features, every effort will be made to work with project stakeholders to develop solutions that limit impacts. This task will not include a detailed environmental survey but will include establishing a protocol for when a detailed environmental survey will be needed when the selected alternative go to design.

E. Planning Level Cost Estimates and Benefit Determination

Planning level cost estimates will be prepared for the recommended alternatives. Project benefits will be developed using GIS to quantify reduction in flooding to habitable structures, roadways, and utilities.

F. Recommended Flood Prevention Project Prioritization

Flood prevention projects will be prioritized and ranked according to reduction in flooded structures, reduction in overall damage, benefit/cost ratios, and passable intersections. The final project ranking will be presented to the project stakeholders for review and comment. A public meeting will be held to ensure final recommendations meet the expectations of the public.

5. Communication

The City of Beaumont, DD6, the participating entities, the Consultant, and other interested parties will participate in meeting as required by the TWDB. Major milestone meetings include: one (1) project kick-off meeting with project stakeholders and one (1) public meeting to present project alternatives, cost/benefit analysis, and study recommendations. Additionally, regularly scheduled meetings will be held with City staff to discuss study action items, review progress of the work effort, and information requests. DD6 will be copied on meeting notes and action items.

6. Final Report

The Final Report will include a summary of the tasks performed in the scope of work including a discussion of the study goal and work performed, general methodology and assumptions applied during the course of the study, summary of the hydrologic and hydraulic analysis, a summary of the drainage problem areas broken out by structural flooding and system capacity insufficiencies, a list of prioritized problem areas, summary of alternatives evaluation including cost/benefit, and study recommendations. The final report will also include a discussion on potential funding sources for the identified solutions including Capitol Improvement Project bond funds, FEMA grants, TWDB loans, and public/private partnerships. A draft report will be compiled to include text, model output, exhibits, and appendices for review by the City, DD6, and the TWDB. As part of their in-kind service contribution, the City of Beaumont will provide six (6) double-sided copies on recycled paper and one digital copy of the draft and final report for TWDB review and comment. Quality Control review will be completed internally for the draft and final report deliverables prior to issuing review copies to project stakeholders.

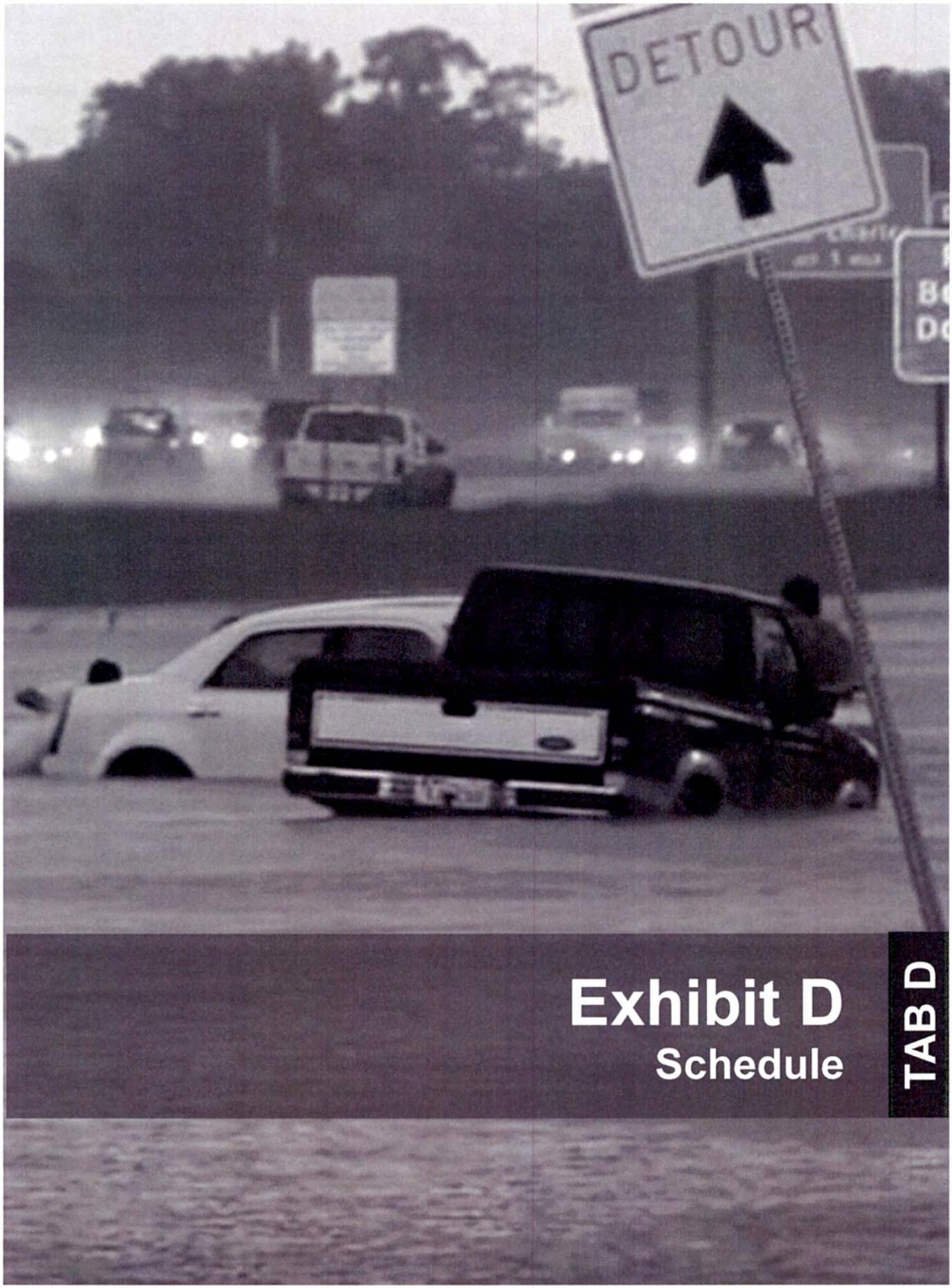


Exhibit D

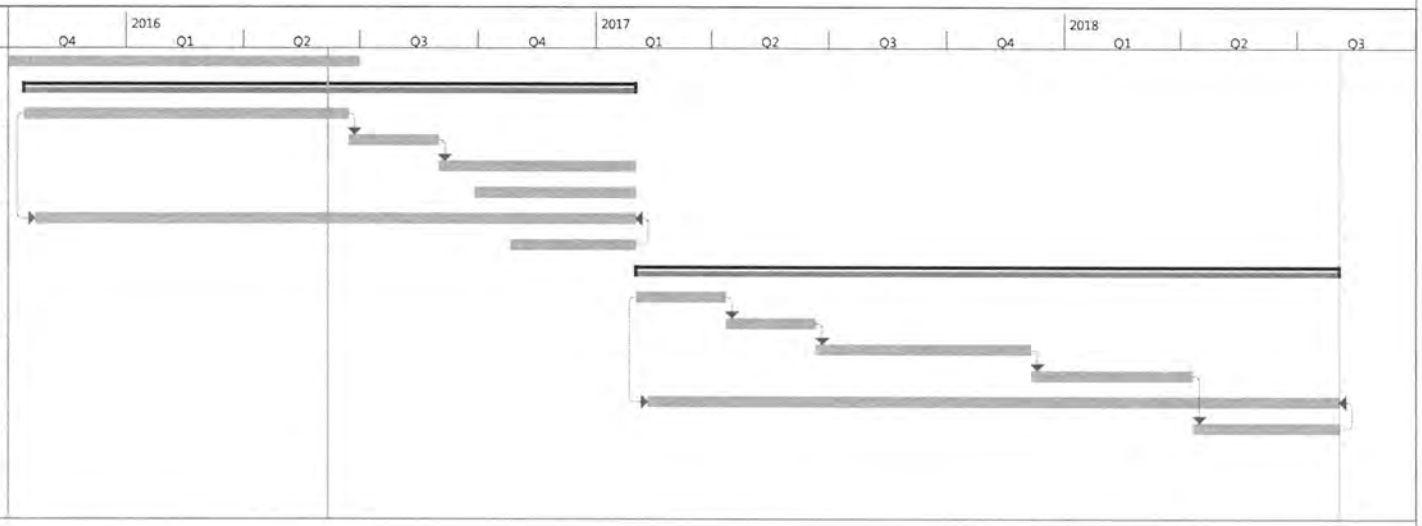
Schedule

TAB D

Exhibit D

Comprehensive Flood Protection Plan
Tributaries of the Hillebrandt Bayou and Neches River Watersheds

ID	Task Name	Duration	Start	Finish
1	**Phase 1**	**470 days**	**Fri 9/12/14**	**Thu 6/30/16**
2	**Phase 2**	**341 days**	**Tue 10/13/15**	**Tue 1/31/17**
3	Data Collection	181 days	Tue 10/13/15	Tue 6/21/16
4	Survey	50 days	Wed 6/22/16	Tue 8/30/16
5	System Evaluation	110 days	Wed 8/31/16	Tue 1/31/17
6	Flood Prevention Plan	90 days	Wed 9/28/16	Tue 1/31/17
7	Communication & PM	334 days	Thu 10/22/15	Tue 1/31/17
8	Final Report	70 days	Wed 10/26/16	Tue 1/31/17
9	**Phase 3**	**392 days**	**Wed 2/1/17**	**Thu 8/2/18**
10	Data Collection	50 days	Wed 2/1/17	Tue 4/11/17
11	Survey	50 days	Wed 4/12/17	Tue 6/20/17
12	System Evaluation	120 days	Wed 6/21/17	Tue 12/5/17
13	Flood Prevention Plan	90 days	Wed 12/6/17	Tue 4/10/18
14	Communication & PM	385 days	Fri 2/10/17	Thu 8/2/18
15	Final Report	82 days	Wed 4/11/18	Thu 8/2/18
16				
17				
18				



Project: CoBeaumont_FPG_Sche

Task		Project Summary		Manual Task		Start-only		Deadline	
Split		Inactive Task		Duration-only		Finish-only		Progress	
Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress	
Summary		Inactive Summary		Manual Summary		External Milestone			

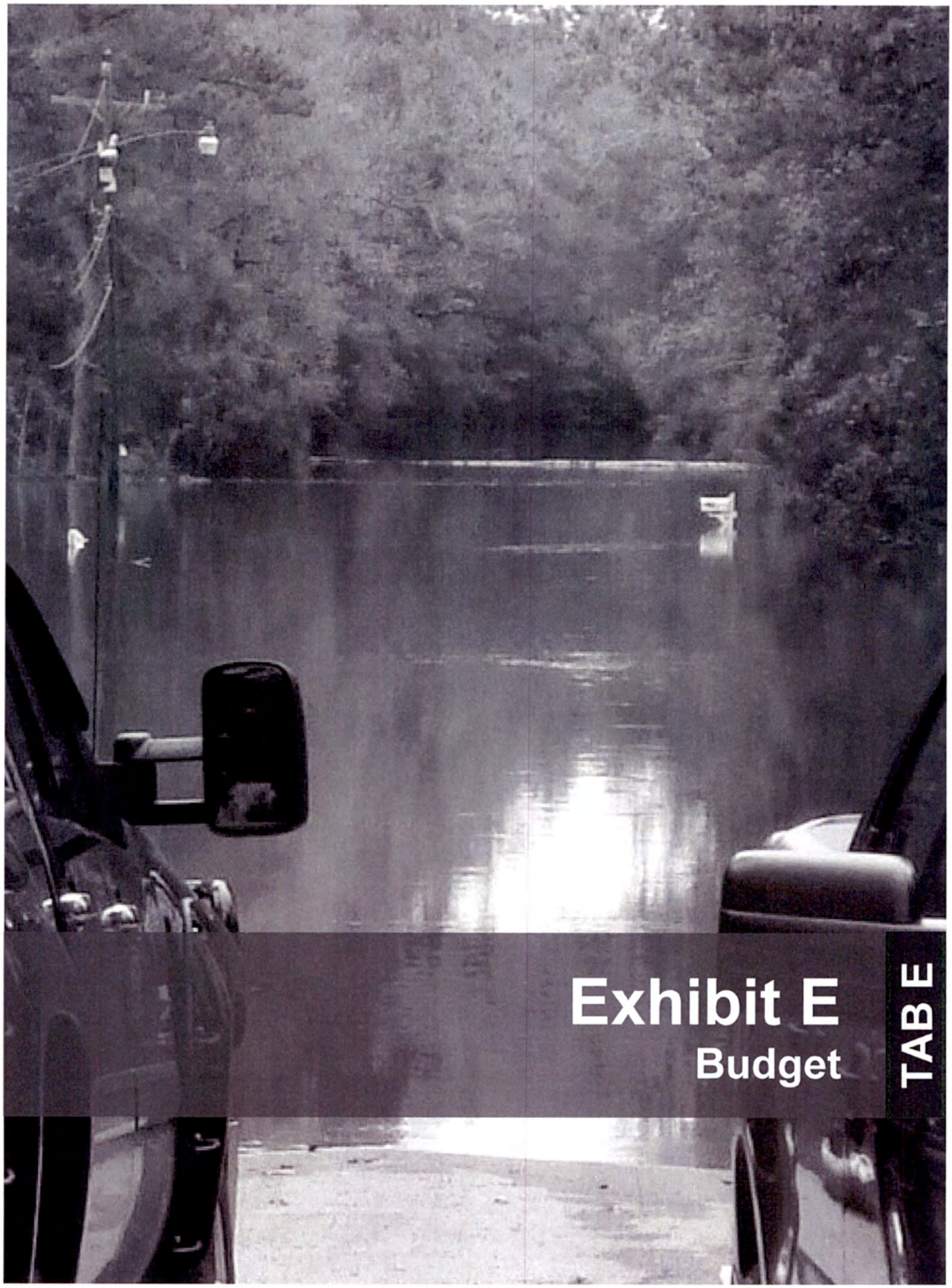


Exhibit E

Budget

TAB E

Exhibit E-1

Comprehensive Flood Protection Plan
Tributaries of the Hillebrandt Bayou and Neches River Watersheds

Task	Description	Budget			
		Total	Phase 1	Phase 2	**Phase 3**
1	Data Collection				
A	Review of Previously Completed Drainage Studies & Support Data	$36,000	$12,000	$12,000	**$12,000**
B	Digital Drainage Inventory Development	$288,000	$96,000	$96,000	**$96,000**
C	Condition Assessment	$33,000	$11,000	$11,000	**$11,000**
2	Survey	$233,000	$76,000	$76,000	**$81,000**
3	Drainage System Evaluation				
A	Hydrology	$200,000	$40,000	$40,000	**$120,000**
B	Hydrualics	$275,000	$50,000	$50,000	**$175,000**
C	System Level of Service and Problem Area Identification	$105,000	$29,000	$29,000	**$47,000**
D	Problem Area Ranking and Prioritiziation	$80,000	$20,000	$20,000	**$40,000**
4	Flood Prevention Plan Development				
A	Design Criteria Establishment	$12,500	$4,000	$4,000	**$4,500**
B	Flood Prevention Alternative Refinement and Evaluation	$30,000	$8,000	$8,000	**$14,000**
C	Flood Early Warning System	$30,000			**$30,000**
D	Environmental Constraints	$12,000	$4,000	$4,000	**$4,000**
E	Planning Level Cost Estiamtes and Benefite Determination	$75,000	$20,000	$20,000	**$35,000**
F	Recommended Flood Prevention Project Prioritization	$75,000	$20,000	$20,000	**$35,000**
G	Undeveloped Improvement Plan	$51,000	$13,000	$13,000	**$25,000**
H	Community Rating System	$10,500			**$10,500**
5	Communication & Project Mangement	$210,000	$65,000	$65,000	**$80,000**
6	Final Report	$100,000	$30,000	$30,000	**$40,000**
	Travel	$4,500	$1,500	$1,500	**$1,500**
	Other Expenses	$1,500	$500	$500	**$500**
	Total	$1,862,000	$500,000	$500,000	**$862,000**

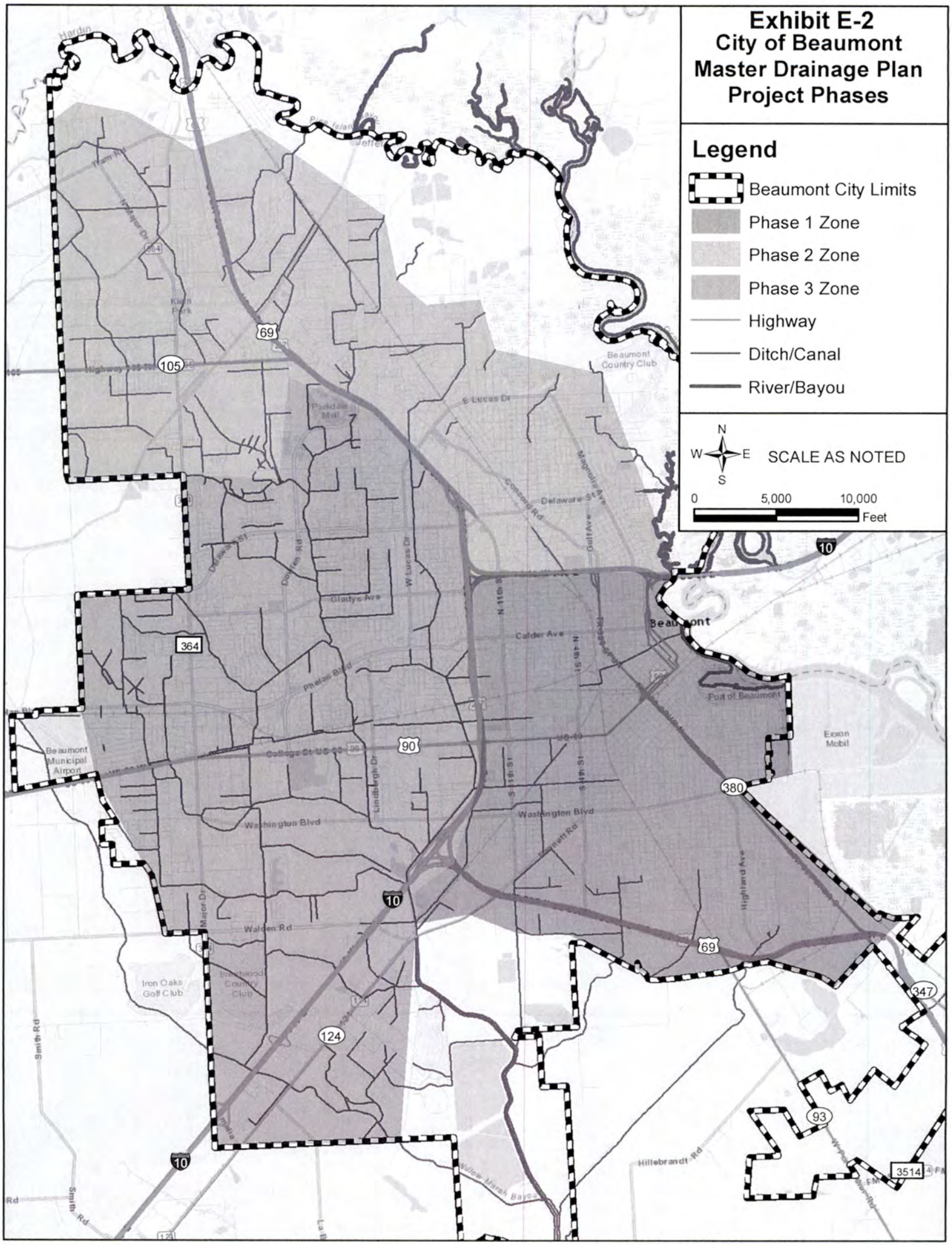


Exhibit E-2
City of Beaumont
Master Drainage Plan
Project Phases
Legend
Beaumont City Limits
Phase 1 Zone
Phase 2 Zone
Phase 3 Zone
Highway
Ditch/Canal
River/Bayou
N
W
E
S
SCALE AS NOTED
0
5,000
10,000
Feet
Beaumont
Beaumont Country Club
Port of Beaumont
Exxon Mobil
Beaumont Municipal Airport
Iron Oaks Golf Club
Brentwood Country Club
Parkdale Mall
Klein Park
Hardin
Tram Rd
N Major Dr
Highway 105 Tel
E Lucas Dr
Concord Rd
Delaware St
Magnolia Ave
Gulf Ave
Dowlen Rd
W Lucas Dr
Gladys Ave
N 11th St
Calder Ave
N 4th St
Phelan Blvd
College St US 90
US 90
Lindbergh Dr
S 11th St
S 4th St
Washington Blvd
Fannett Rd
Highland Ave
Walden Rd
Major Dr
Smith Rd
Willow Marsh Bayou
Hillebrandt Rd
69
105
364
90
10
380
347
124
93
3514

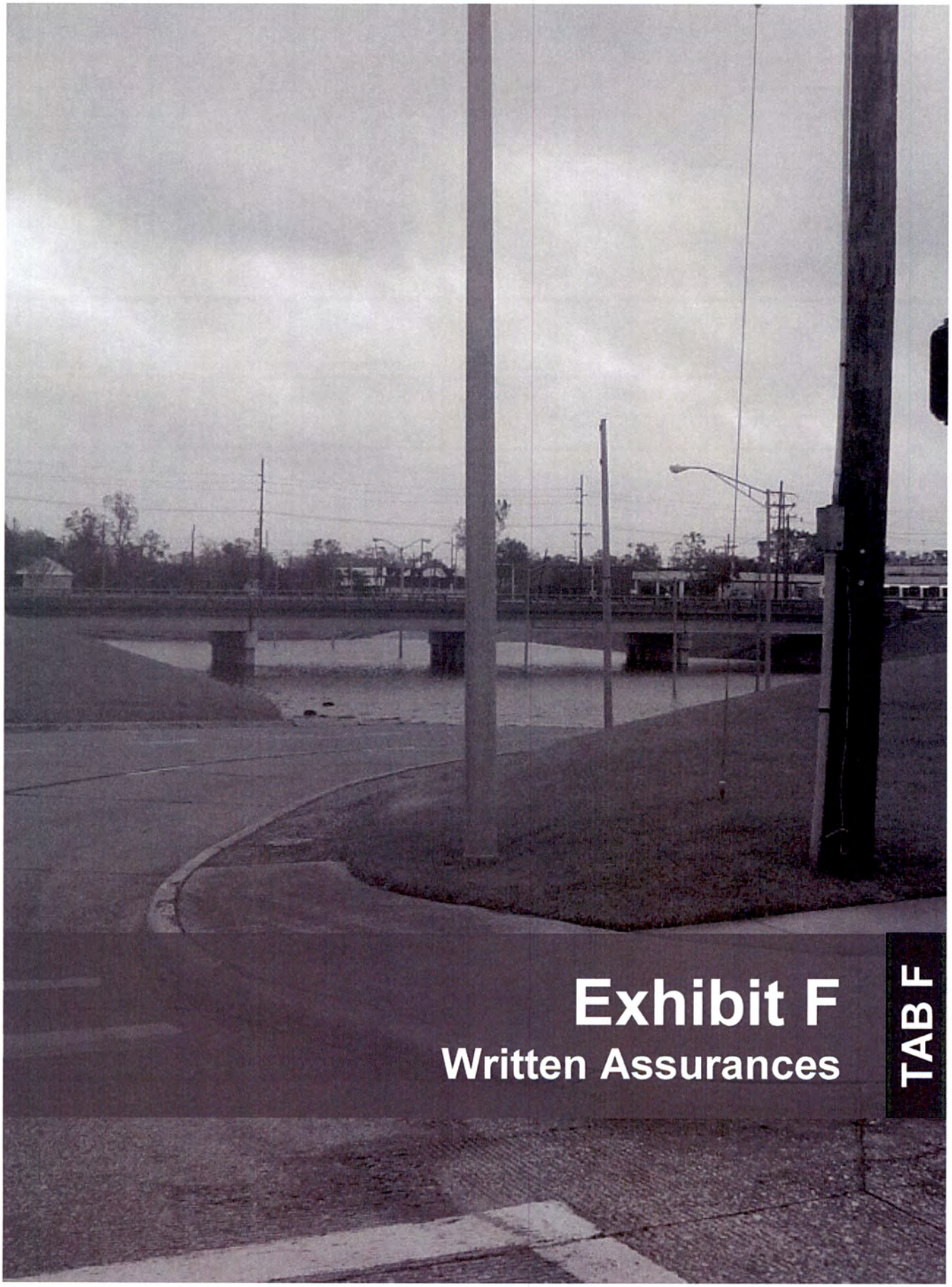


Exhibit F

Written Assurances

TAB F

Mr. David Carter
Texas Water Development Board
P.O. Box 13231 – Capitol Station
Austin, Texas 78711-3231

RE: Tributaries of the Hillebrandt Bayou and Neches River Watersheds Flood Protection Grant

Dear Mr. Carter:

The City of Beaumont is pleased to submit a grant application to the Texas Water Development Board (TWDB) for a flood protection plan for Tributaries of the Hillebrandt Bayou and Neches River Watersheds. This plan has the support of Jefferson County Drainage District No. 6, Jefferson County Engineering Department, Texas Department of Transportation Beaumont District, Beaumont Emergency Management, Beaumont ISD, Lower Neches River Authority, and Southeast Texas Regional Planning Commission.

The proposed plan will provide flood protection solutions to reduce the risk to property, public safety, and critical infrastructure for future flood events in a rapidly developing area. The plan boundary involving portions of Hillebrandt Bayou and Neches River Watersheds was selected in order to address flood protection needs for the densely populated urban corridor. Structural and non-structural methods to reduce flooding will be considered for the plan. The plan will include a gap analysis of the informal Flood Early Warning System (FEWS) currently in place and propose FEWS measures to increase flood prediction accuracy and decrease response time. As Public Works Director, I have authority to plan and implement flood reduction projects within the plan area. The proposed planning effort does not duplicate any exiting planning study for the plan area. A letter of support from each participant of the plan is included with the application. In addition, a proposed scope of work, schedule, task budget, expense budge and plan information are provided.

Due to the comprehensive nature of the plan it has been broken into three consecutive phases to meet the budgetary constraints of the City. Phase 1 is nearing completion, Phase 2 is underway. Both Phase 1 and Phase 2 were fully funded by the City. Phase 3 will be a continuation of the efforts performed in Phase 1 and Phase 2 with the addition of specific initiatives to be carried out for the entire project area to execute flood protection goals and objective identified by the Texas Water Development Board in the Flood Protection Grant. Phase 3 of the plan has a total estimated budget of $862,000. The City of Beaumont would be honored to have support of the Texas Water Development Board to aid in the execution of Phase 3 of the plan to continue this important endeavor. The City of Beaumont fully intends to contribute $500,000 in cash to Phase 3 of the plan. In addition, Jefferson County Drainage District No. 6 has committed $75,000 in cash to Phase 3 of the plan. Both the City of Beaumont and Jefferson County participate in the National Flood Insurance Program (NFIP). If you have any questions or need additional information, please do not hesitate to contact us.

Sincerely,

Dr. Joseph Majdalani, PE, CFM
Public Works Director
City of Beaumont
(409) 880-3725
jmajdalani@beaumonttexsd.gov

Mr. Doug Canant, PE, RPLS, CFM
District Engineer
Jefferson County Drainage District No. 6
(409) 842-1818
dscanant@dd6.org

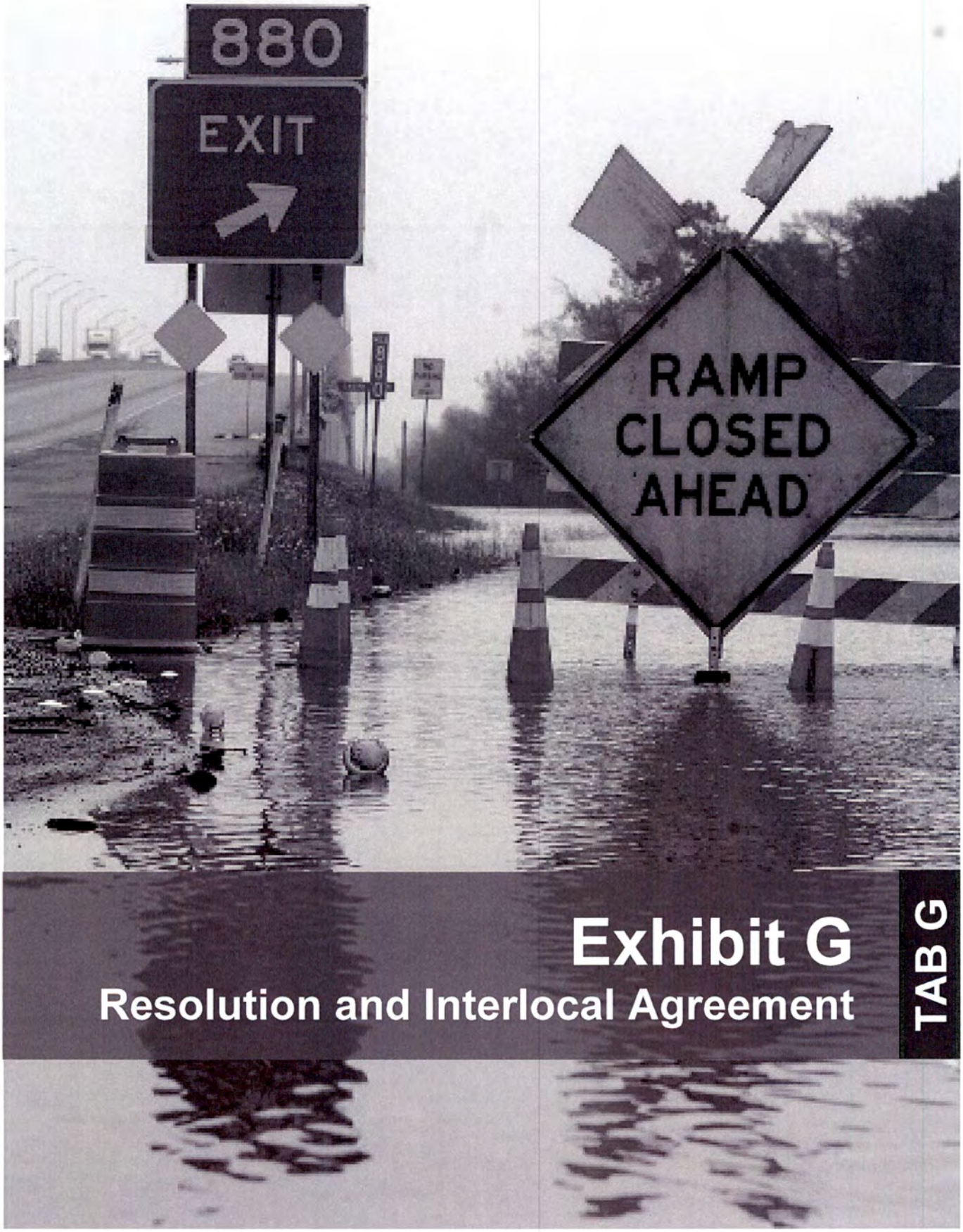


Exhibit G

Resolution and Interlocal Agreement

TAB G

Jefferson County

Drainage District No. 6

6550 Walden Rd., Beaumont, Texas 77707

Telephone (409) 842-1818

Fax (409) 842-2729

Established in 1920

Board of Directors:
Joshua W. Allen, Sr.
James D. McNicholas
William F. Miranda
Charles "Chuck" Guillory
Miriam K. Johnson

Richard P. LeBlanc, Jr.
General Manager
Jim Broussard
Operations Manager
Doug S. Canant, Jr., PE, RPLS, CFM
District Engineer
Chuck Oakley, CPA
Chief Financial Officer
Karen J. Stewart, MBA, CTP
Business Manager
Andrew J. Jones
Superintendent

June 3, 2016

Via E-mail Transmission to:
jmajdalani@BeaumontTexas.gov

Dr. Joseph Majdalani, PE
Public Works Director
City of Beaumont

Re: Flood Study

Dear Joe;

DD6 is excited about your flood study and the potential grant from the Texas Water Development Board that will help defer some of the costs of the study.

DD6 hereby pledges that we will contribute $75,000 cash as matching funds toward the grant, if the grant is awarded, for the drainage study that Lockwood, Andrews, & Newnam (LAN) is proposing for the City of Beaumont.

Additionally, I will work with LAN and Chase Mann on the details for an Interlocal Agreement, which will be presented to the Board of Directors for DD6 at their next meeting on June 28, 2016. We talked about this study at our last board meeting during the workshop session, and they unanimously consented to DD6's participation in this study.

DD6 is looking forward to having some input toward the direction of the study.

Sincerely,

Doug Canant

Doug S. Canant, PE, RPLS, CFM
District Engineer

DC/pa

CC: Honorable Becky Ames – Mayor City of Beaumont – bames@BeaumontTexas.gov
Mr. Kyle Hayes – Beaumont City Manager - khayes@BeaumontTexas.gov
Mr. Chase Mann –City of Beaumont Engineering Department – cmann@BeaumontTexas.gov
DD6 Board of Directors
Richard P. LeBlanc, Jr. – DD6 General Manager
Chuck Oakley – DD6 Chief Financial Officer

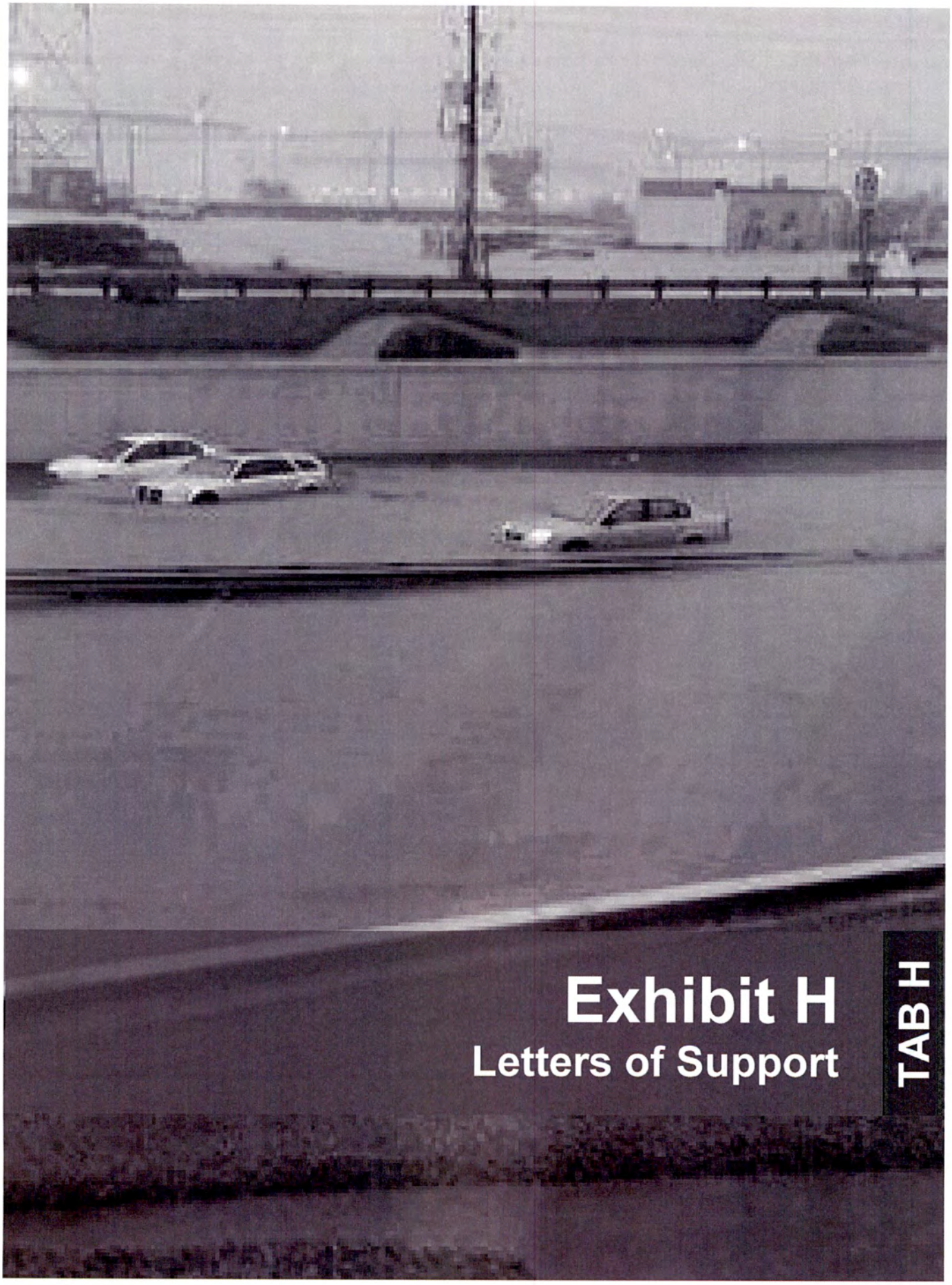


Exhibit H

Letters of Support

TAB H

Mr. Doug Canant, P.E., RPLS, CFM
District Engineer
Jefferson County Drainage District No. 6
6550 Walden Road
Beaumont, Texas 77707

RE: Request for Support of the Proposed Texas Water Development Board Flood Protection Grant for the Comprehensive Flood Protection Plan of Tributaries of the Hillebrandt Bayou and Neches River Watersheds

Dear Mr. Canant:

The City of Beaumont (City) is submitting a grant application to the Texas Water Development Board (TWDB) for a flood protection plan. The plan area covers portions of the Hillebrandt Bayou and Neches River Watersheds that roughly correspond to the 90 square-mile city limits of Beaumont. The plan area includes 525 miles of open channel and 800 miles of enclosed storm sewer that make up the comprehensive stormwater conveyance system.

The purpose of the study is to develop an accurate and current understanding of the drainage infrastructure and areas prone to flood risk. The study will include a comprehensive drainage infrastructure asset inventory, condition assessment, problem area identification; quantification of flooding extents; and development of prioritized cost effective structural and non-structural flood prevention solution that will reduce risk of flood and loss of life, resulting in increased safety and an overall decrease in flood damages in the planning study area. The plan will include a gap analysis of the informal Flood Early Warning System (FEWS) currently in place and propose FEWS measures to increase flood prediction accuracy and decrease response time. The study will serve as the City's and DD6's guide for future drainage improvements in the area.

The City of Beaumont is requesting that the Jefferson County Drainage District No. 6 be listed as a participating political subdivision in support of the study. Applications are due to the Texas Water Development Board by June 17th, 2016. If the Jefferson County Drainage District No. 6 is amendable to being listed as a supporting participant please complete the attached **Letter of Support** and return to our office on or **before June 10th** at:

City of Beaumont
P.O. Box 3827
Beaumont, Texas 77704-3827
Attn: Dr. Joseph Majdalani, PE, CFM, Public Works Director

If you have any questions or need additional information, please contact me at (409) 880-3725.

Sincerely,

Dr. Joseph Majdalani, PE, CFM
Public Works Director, City of Beaumont

Mr. Don Rao
Engineering Director
Jefferson County Engineering Department
1149 Pearl Street, 5th Floor
Beaumont, Texas 77701

RE: Request for Support of the Proposed Texas Water Development Board Flood Protection Grant for the Comprehensive Flood Protection Plan of Tributaries of the Hillebrandt Bayou and Neches River Watersheds

Dear Mr. Rao:

The City of Beaumont (City) with support from Jefferson County Drainage District No. 6 (DD6) is submitting a grant application to the Texas Water Development Board (TWDB) for a flood protection plan. The plan area covers portions of the Hillebrandt Bayou and Neches River Watersheds that roughly correspond to the 90 square-mile city limits of Beaumont. The plan area includes 525 miles of open channel and 800 miles of enclosed storm sewer that make up the comprehensive stormwater conveyance system.

The purpose of the study is to develop an accurate and current understanding of the drainage infrastructure and areas prone to flood risk. The study will include a comprehensive drainage infrastructure asset inventory, condition assessment, problem area identification; quantification of flooding extents; and development of prioritized cost effective structural and non-structural flood prevention solution that will reduce risk of flood and loss of life, resulting in increased safety and an overall decrease in flood damages in the planning study area. The plan will include a gap analysis of the informal Flood Early Warning System (FEWS) currently in place and propose FEWS measures to increase flood prediction accuracy and decrease response time. The study will serve as the City's and DD6's guide for future drainage improvements in the area.

The City of Beaumont is requesting that the Jefferson County Engineering Department be listed as a participating political subdivision in support of the study. Applications are due to the Texas Water Development Board by June 17th, 2016. If the Jefferson County Engineering Department is amendable to being listed as a supporting participant please complete the attached **Letter of Support** and return to our office on or **before June 10th** at:

City of Beaumont
P.O. Box 3827
Beaumont, Texas 77704-3827
Attn: Dr. Joseph Majdalani, PE, CFM, Public Works Director

If you have any questions or need additional information, please contact me at (409) 880-3725.

Sincerely,

Dr. Joseph Majdalani, PE, CFM
Public Works Director, City of Beaumont

Mr. Kenneth Wiemers, P.E.
Area Engineer
Texas Department of Transportation
Beaumont District, Beaumont Area Office
8450 Eastex Freeway
Beaumont, Texas 77708

RE: Request for Support of the Proposed Texas Water Development Board Flood Protection Grant for the Comprehensive Flood Protection Plan of Tributaries of the Hillebrandt Bayou and Neches River Watersheds

Dear Mr. Wiemers:

The City of Beaumont (City) with support from Jefferson County Drainage District No. 6 (DD6) is submitting a grant application to the Texas Water Development Board (TWDB) for a flood protection plan. The plan area covers portions of the Hillebrandt Bayou and Neches River Watersheds that roughly correspond to the 90 square-mile city limits of Beaumont. The plan area includes 525 miles of open channel and 800 miles of enclosed storm sewer that make up the comprehensive stormwater conveyance system.

The purpose of the study is to develop an accurate and current understanding of the drainage infrastructure and areas prone to flood risk. The study will include a comprehensive drainage infrastructure asset inventory, condition assessment, problem area identification; quantification of flooding extents; and development of prioritized cost effective structural and non-structural flood prevention solution that will reduce risk of flood and loss of life, resulting in increased safety and an overall decrease in flood damages in the planning study area. The plan will include a gap analysis of the informal Flood Early Warning System (FEWS) currently in place and propose FEWS measures to increase flood prediction accuracy and decrease response time. The study will serve as the City's and DD6's guide for future drainage improvements in the area.

The City of Beaumont is requesting that the Texas Department of Transportation Beaumont District, Beaumont Area Office be listed as a participating political subdivision in support of the study. Applications are due to the Texas Water Development Board by June 17th, 2016. If the Texas Department of Transportation Beaumont District, Beaumont Area Office is amendable to being listed as a supporting participant please complete the attached **Letter of Support** and return to our office on or **before June 10th** at:

City of Beaumont
P.O. Box 3827
Beaumont, Texas 77704-3827
Attn: Dr. Joseph Majdalani, PE, CFM, Public Works Director

If you have any questions or need additional information, please contact me at (409) 880-3725.

Sincerely,

Dr. Joseph Majdalani, PE, CFM
Public Works Director, City of Beaumont

Dr. John W. Frossard
Superintendent
Beaumont Independent School District
3395 Harrison Avenue
Beaumont, Texas 77706

RE: Request for Support of the Proposed Texas Water Development Board Flood Protection Grant for the Comprehensive Flood Protection Plan of Tributaries of the Hillebrandt Bayou and Neches River Watersheds

Dear Dr. Frossard:

The City of Beaumont (City) with support from Jefferson County Drainage District No. 6 (DD6) is submitting a grant application to the Texas Water Development Board (TWDB) for a flood protection plan. The plan area covers portions of the Hillebrandt Bayou and Neches River Watersheds that roughly correspond to the 90 square-mile city limits of Beaumont. The plan area includes 525 miles of open channel and 800 miles of enclosed storm sewer that make up the comprehensive stormwater conveyance system.

The purpose of the study is to develop an accurate and current understanding of the drainage infrastructure and areas prone to flood risk. The study will include a comprehensive drainage infrastructure asset inventory, condition assessment, problem area identification; quantification of flooding extents; and development of prioritized cost effective structural and non-structural flood prevention solution that will reduce risk of flood and loss of life, resulting in increased safety and an overall decrease in flood damages in the planning study area. The plan will include a gap analysis of the informal Flood Early Warning System (FEWS) currently in place and propose FEWS measures to increase flood prediction accuracy and decrease response time. The study will serve as the City's and DD6's guide for future drainage improvements in the area.

The City of Beaumont is requesting that the Beaumont Independent School District be listed as a participating political subdivision in support of the study. Applications are due to the Texas Water Development Board by June 17th, 2016. If the Beaumont Independent School District is amendable to being listed as a supporting participant please complete the attached **Letter of Support** and return to our office on or **before June 10th** at:

City of Beaumont
P.O. Box 3827
Beaumont, Texas 77704-3827
Attn: Dr. Joseph Majdalani, PE, CFM, Public Works Director

If you have any questions or need additional information, please contact me at (409) 880-3725.

Sincerely,

Dr. Joseph Majdalani, PE, CFM
Public Works Director, City of Beaumont

Mr. Scott Hall, P.E.
General Manager
Lower Neches Valley Authority
7850 Eastex Freeway
Beaumont, Texas 77708

RE: Request for Support of the Proposed Texas Water Development Board Flood Protection Grant for the Comprehensive Flood Protection Plan of Tributaries of the Hillebrandt Bayou and Neches River Watersheds

Dear Mr. Hall:

The City of Beaumont (City) with support from Jefferson County Drainage District No. 6 (DD6) is submitting a grant application to the Texas Water Development Board (TWDB) for a flood protection plan. The plan area covers portions of the Hillebrandt Bayou and Neches River Watersheds that roughly correspond to the 90 square-mile city limits of Beaumont. The plan area includes 525 miles of open channel and 800 miles of enclosed storm sewer that make up the comprehensive stormwater conveyance system.

The purpose of the study is to develop an accurate and current understanding of the drainage infrastructure and areas prone to flood risk. The study will include a comprehensive drainage infrastructure asset inventory, condition assessment, problem area identification; quantification of flooding extents; and development of prioritized cost effective structural and non-structural flood prevention solution that will reduce risk of flood and loss of life, resulting in increased safety and an overall decrease in flood damages in the planning study area. The plan will include a gap analysis of the informal Flood Early Warning System (FEWS) currently in place and propose FEWS measures to increase flood prediction accuracy and decrease response time. The study will serve as the City's and DD6's guide for future drainage improvements in the area.

The City of Beaumont is requesting that the Lower Neches Valley Authority be listed as a participating political subdivision in support of the study. Applications are due to the Texas Water Development Board by June 17th, 2016. If the Lower Neches Valley Authority is amendable to being listed as a supporting participant please complete the attached **Letter of Support** and return to our office on or **before June 10th** at:

City of Beaumont
P.O. Box 3827
Beaumont, Texas 77704-3827
Attn: Dr. Joseph Majdalani, PE, CFM, Public Works Director

If you have any questions or need additional information, please contact me at (409) 880-3725.

Sincerely,

Dr. Joseph Majdalani, PE, CFM
Public Works Director, City of Beaumont

Mr. Shaun P. Davis
Executive Director
Southeast Texas Regional Planning Commission
2210 Eastex Freeway
Beaumont, Texas 77703

RE: Request for Support of the Proposed Texas Water Development Board Flood Protection Grant for the Comprehensive Flood Protection Plan of Tributaries of the Hillebrandt Bayou and Neches River Watersheds

Dear Mr. Davis:

The City of Beaumont (City) with support from Jefferson County Drainage District No. 6 (DD6) is submitting a grant application to the Texas Water Development Board (TWDB) for a flood protection plan. The plan area covers portions of the Hillebrandt Bayou and Neches River Watersheds that roughly correspond to the 90 square-mile city limits of Beaumont. The plan area includes 525 miles of open channel and 800 miles of enclosed storm sewer that make up the comprehensive stormwater conveyance system.

The purpose of the study is to develop an accurate and current understanding of the drainage infrastructure and areas prone to flood risk. The study will include a comprehensive drainage infrastructure asset inventory, condition assessment, problem area identification; quantification of flooding extents; and development of prioritized cost effective structural and non-structural flood prevention solution that will reduce risk of flood and loss of life, resulting in increased safety and an overall decrease in flood damages in the planning study area. The plan will include a gap analysis of the informal Flood Early Warning System (FEWS) currently in place and propose FEWS measures to increase flood prediction accuracy and decrease response time. The study will serve as the City's and DD6's guide for future drainage improvements in the area.

The City of Beaumont is requesting that the Southeast Texas Regional Planning Commission be listed as a participating political subdivision in support of the study. Applications are due to the Texas Water Development Board by June 17th, 2016. If the Southeast Texas Regional Planning Commission is amendable to being listed as a supporting participant please complete the attached **Letter of Support** and return to our office on or **before June 10th** at:

City of Beaumont
P.O. Box 3827
Beaumont, Texas 77704-3827
Attn: Dr. Joseph Majdalani, PE, CFM, Public Works Director

If you have any questions or need additional information, please contact me at (409) 880-3725.

Sincerely,

Dr. Joseph Majdalani, PE, CFM
Public Works Director, City of Beaumont

Mr. Tim Ocnaschek
Emergency Management Coordinator
Beaumont Emergency Mangement
700 Orleans, 2nd Floor
Beaumont, Texas 77701

RE: Request for Support of the Proposed Texas Water Development Board Flood Protection Grant for the Comprehensive Flood Protection Plan of Tributaries of the Hillebrandt Bayou and Neches River Watersheds

Dear Mr. Ocnaschek:

The City of Beaumont (City) with support from Jefferson County Drainage District No. 6 (DD6) is submitting a grant application to the Texas Water Development Board (TWDB) for a flood protection plan. The plan area covers portions of the Hillebrandt Bayou and Neches River Watersheds that roughly correspond to the 90 square-mile city limits of Beaumont. The plan area includes 525 miles of open channel and 800 miles of enclosed storm sewer that make up the comprehensive stormwater conveyance system.

The purpose of the study is to develop an accurate and current understanding of the drainage infrastructure and areas prone to flood risk. The study will include a comprehensive drainage infrastructure asset inventory, condition assessment, problem area identification; quantification of flooding extents; and development of prioritized cost effective structural and non-structural flood prevention solution that will reduce risk of flood and loss of life, resulting in increased safety and an overall decrease in flood damages in the planning study area. The plan will include a gap analysis of the informal Flood Early Warning System (FEWS) currently in place and propose FEWS measures to increase flood prediction accuracy and decrease response time. The study will serve as the City's and DD6's guide for future drainage improvements in the area.

The City of Beaumont is requesting that the Beaumont Emergency Mangement be listed as a participating political subdivision in support of the study. Applications are due to the Texas Water Development Board by June 17th, 2016. If the Beaumont Emergency Mangement is amendable to being listed as a supporting participant please complete the attached **Letter of Support** and return to our office on or **before June 10th** at:

City of Beaumont
P.O. Box 3827
Beaumont, Texas 77704-3827
Attn: Dr. Joseph Majdalani, PE, CFM, Public Works Director

If you have any questions or need additional information, please contact me at (409) 880-3725.

Sincerely,

Dr. Joseph Majdalani, PE, CFM
Public Works Director, City of Beaumont

Mr. David Carter
Texas Water Development Board
P.O. Box 13231 – Capitol Station
Austin, Texas 78711-3231

RE: Letter of Support for the Tributaries of the Hillebrandt Bayou and Neches River Watersheds Flood Protection Plan

Dear Mr. Carter:

This letter is to confirm that the Jefferson County Drainage District No. 6 supports the City of Beaumont's application to the Texas Water Development Board for funding under the Flood Protection Grant Program. The proposed plan will include a comprehensive asset inventory, condition assessment, problem area identification; quantification of flooding extents; and development of prioritized cost effective structural and non-structural flood prevention solution that will reduce risk of flood and loss of life in the planning study area. The plan will include a gap analysis of the informal Flood Early Warning System (FEWS) currently in place and propose FEWS measures to increase flood prediction accuracy and decrease response time.

We are committed to partnering with the City of Beaumont to identify flood protection solutions to reduce risk to property, public safety, and critical infrastructure for future flood events.

Sincerely,

Mr. Doug Canant, P.E., RPLS, CFM
District Engineer
Jefferson County Drainage District No. 6

Mr. David Carter
Texas Water Development Board
P.O. Box 13231 – Capitol Station
Austin, Texas 78711-3231

RE: Letter of Support for the Tributaries of the Hillebrandt Bayou and Neches River Watersheds Flood Protection Plan

Dear Mr. Carter:

This letter is to confirm that the Jefferson County Engineering Department supports the City of Beaumont's application to the Texas Water Development Board for funding under the Flood Protection Grant Program. The proposed plan will include a comprehensive asset inventory, condition assessment, problem area identification; quantification of flooding extents; and development of prioritized cost effective structural and non-structural flood prevention solution that will reduce risk of flood and loss of life in the planning study area. The plan will include a gap analysis of the informal Flood Early Warning System (FEWS) currently in place and propose FEWS measures to increase flood prediction accuracy and decrease response time.

We are committed to partnering with the City of Beaumont to identify flood protection solutions to reduce risk to property, public safety, and critical infrastructure for future flood events.

Sincerely,

Mr. Don Rao
Engineering Director
Jefferson County Engineering Department

Mr. David Carter
Texas Water Development Board
P.O. Box 13231 – Capitol Station
Austin, Texas 78711-3231

RE: Letter of Support for the Tributaries of the Hillebrandt Bayou and Neches River Watersheds Flood Protection Plan

Dear Mr. Carter:

This letter is to confirm that the Texas Department of Transportation Beaumont District, Beaumont Area Office supports the City of Beaumont's application to the Texas Water Development Board for funding under the Flood Protection Grant Program. The proposed plan will include a comprehensive asset inventory, condition assessment, problem area identification; quantification of flooding extents; and development of prioritized cost effective structural and non-structural flood prevention solution that will reduce risk of flood and loss of life in the planning study area. The plan will include a gap analysis of the informal Flood Early Warning System (FEWS) currently in place and propose FEWS measures to increase flood prediction accuracy and decrease response time.

We are committed to partnering with the City of Beaumont to identify flood protection solutions to reduce risk to property, public safety, and critical infrastructure for future flood events.

Sincerely,

Mr. Kenneth Wiemers, P.E.
Area Engineer
Texas Department of Transportation
Beaumont District, Beaumont Area Office

Mr. David Carter
Texas Water Development Board
P.O. Box 13231 – Capitol Station
Austin, Texas 78711-3231

RE: Letter of Support for the Tributaries of the Hillebrandt Bayou and Neches River Watersheds Flood Protection Plan

Dear Mr. Carter:

This letter is to confirm that the Beaumont Independent School District supports the City of Beaumont's application to the Texas Water Development Board for funding under the Flood Protection Grant Program. The proposed plan will include a comprehensive asset inventory, condition assessment, problem area identification; quantification of flooding extents; and development of prioritized cost effective structural and non-structural flood prevention solution that will reduce risk of flood and loss of life in the planning study area. The plan will include a gap analysis of the informal Flood Early Warning System (FEWS) currently in place and propose FEWS measures to increase flood prediction accuracy and decrease response time.

We are committed to partnering with the City of Beaumont to identify flood protection solutions to reduce risk to property, public safety, and critical infrastructure for future flood events.

Sincerely,

Dr. John W. Frossard
Superintendent
Beaumont Independent School District

Mr. David Carter
Texas Water Development Board
P.O. Box 13231 – Capitol Station
Austin, Texas 78711-3231

RE: Letter of Support for the Tributaries of the Hillebrandt Bayou and Neches River Watersheds Flood Protection Plan

Dear Mr. Carter:

This letter is to confirm that the Lower Neches Valley Authority supports the City of Beaumont's application to the Texas Water Development Board for funding under the Flood Protection Grant Program. The proposed plan will include a comprehensive asset inventory, condition assessment, problem area identification; quantification of flooding extents; and development of prioritized cost effective structural and non-structural flood prevention solution that will reduce risk of flood and loss of life in the planning study area. The plan will include a gap analysis of the informal Flood Early Warning System (FEWS) currently in place and propose FEWS measures to increase flood prediction accuracy and decrease response time.

We are committed to partnering with the City of Beaumont to identify flood protection solutions to reduce risk to property, public safety, and critical infrastructure for future flood events.

Sincerely,

Mr. Scott Hall, P.E.
General Manager
Lower Neches Valley Authority

Mr. David Carter
Texas Water Development Board
P.O. Box 13231 – Capitol Station
Austin, Texas 78711-3231

RE: Letter of Support for the Tributaries of the Hillebrandt Bayou and Neches River Watersheds Flood Protection Plan

Dear Mr. Carter:

This letter is to confirm that the Southeast Texas Regional Planning Commission supports the City of Beaumont's application to the Texas Water Development Board for funding under the Flood Protection Grant Program. The proposed plan will include a comprehensive asset inventory, condition assessment, problem area identification; quantification of flooding extents; and development of prioritized cost effective structural and non-structural flood prevention solution that will reduce risk of flood and loss of life in the planning study area. The plan will include a gap analysis of the informal Flood Early Warning System (FEWS) currently in place and propose FEWS measures to increase flood prediction accuracy and decrease response time.

We are committed to partnering with the City of Beaumont to identify flood protection solutions to reduce risk to property, public safety, and critical infrastructure for future flood events.

Sincerely,

Mr. Shaun P. Davis
Executive Director
Southeast Texas Regional Planning Commission

Mr. David Carter
Texas Water Development Board
P.O. Box 13231 – Capitol Station
Austin, Texas 78711-3231

RE: Letter of Support for the Tributaries of the Hillebrandt Bayou and Neches River Watersheds Flood Protection Plan

Dear Mr. Carter:

This letter is to confirm that the Beaumont Emergency Mangement supports the City of Beaumont's application to the Texas Water Development Board for funding under the Flood Protection Grant Program. The proposed plan will include a comprehensive asset inventory, condition assessment, problem area identification; quantification of flooding extents; and development of prioritized cost effective structural and non-structural flood prevention solution that will reduce risk of flood and loss of life in the planning study area. The plan will include a gap analysis of the informal Flood Early Warning System (FEWS) currently in place and propose FEWS measures to increase flood prediction accuracy and decrease response time.

We are committed to partnering with the City of Beaumont to identify flood protection solutions to reduce risk to property, public safety, and critical infrastructure for future flood events.

Sincerely,

Mr. Tim Ocnaschek
Emergency Management Coordinator
Beaumont Emergency Mangement

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Application for Flood Protection Grant

Texas Water Development Board

City of Beaumont

801 Main Street
Beaumont, Texas 77701

RESOLUTION NO.

WHEREAS, the Texas Water Development Board (TWDB) published a request for applications for flood protection planning on April 20, 2016; and,

WHEREAS, TWDB offers grants to political subdivision of the State of Texas for the evaluation of structural and non-structural solutions to flooding problems with consideration of flood protection needs of the entire watershed(s); and,

WHEREAS, the City of Beaumont has the authority to apply for a grant, enter into a contract, and participate in a study with the TWDB for this planning grant program; and,

WHEREAS, the proposed planning study would be conducted in order to develop an accurate and current understanding of the City's drainage infrastructure and areas prone to flood risk. The study would include the following: comprehensive asset inventory; condition assessment; problem area identification; quantification of flooding extents; and development of prioritized cost effective structural and non-structural flood prevention solutions that will reduce risk of flood to property; and, an evaluation of the existing Flood Early Warning System and development of recommendations to increase flood prediction accuracy and reduce emergency response time; and,

WHEREAS, on November 12, 2014, City Council of the City of Beaumont, Texas, approved Resolution No. 14-244 authorizing the City Manager to execute and Agreement with Lockwood, Andrews, & Newman, Inc. (LAN), of Houston, Texas, in an amount not to exceed $500,000, to fund the first of three (3) phases in the development of a Master Drainage Plan for the City of Beaumont; and

WHEREAS, on October 13, 2015, City Council of the City of Beaumont, Texas, approved Resolution No. 15-229 authorizing the City Manager to execute Amendment

No. 1 to the original agreement with LAN of Houston, Texas, in an amount not to exceed $500,000, to fund the second of three (3) phases in the development of a Master Drainage Plan for the City of Beaumont;

NOW, THEREFORE, BE IT RESOLVED BY

THE CITY COUNCIL OF THE CITY OF BEAUMONT:

THAT the statements and findings set out in the preamble to this resolution are hereby, in all things, approved and adopted; and,

THAT the City Manager be and he is hereby authorized to apply for and receive grant funding for the City of Beaumont through the TWDB in the amount of $287,000 for an expansion of the scope of the final phase of a three (3) phase study, within the City's limits, of its current drainage infrastructure and areas prone to flood risk.

PASSED BY THE CITY COUNCIL of the City of Beaumont this the 14th day of June, 2016.

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- Mayor Becky Ames -