BOOSTING MOBILITY BOND PROGRAM MANAGEMENT

CONSULTANT EFFICIENCY IN FORT BEND COUNTY

Today's Topics and Speakers

- Fort Bend County's need for PMO Ike Akinwande, PE / Assistant County Engineer FBC
- Who is RPS and How Have We Helped- Kevin Hoffman, PE / Director Transport at RPS
- **PMO Phases** Gabriel Odreman, PE / Senior PM at RPS

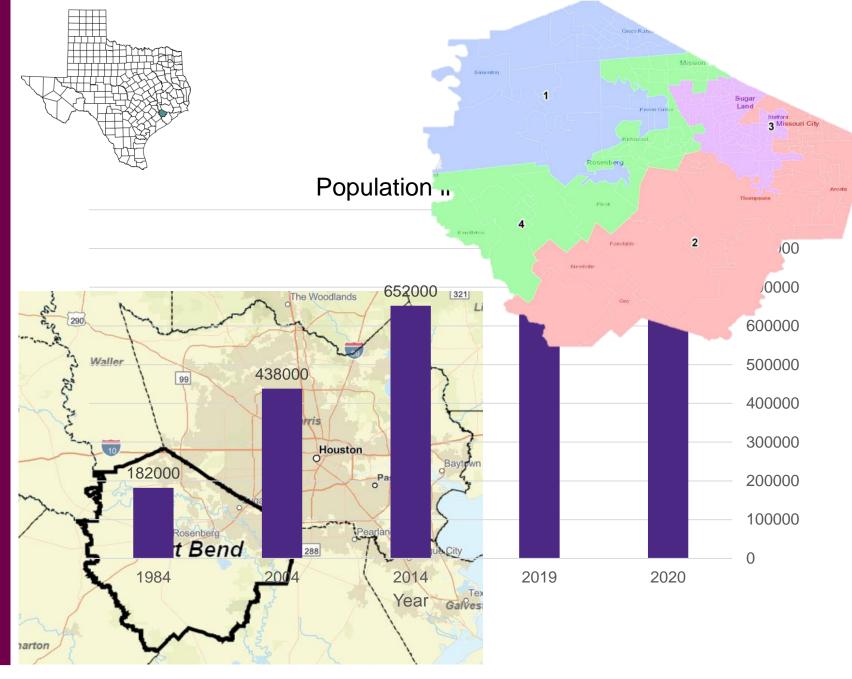




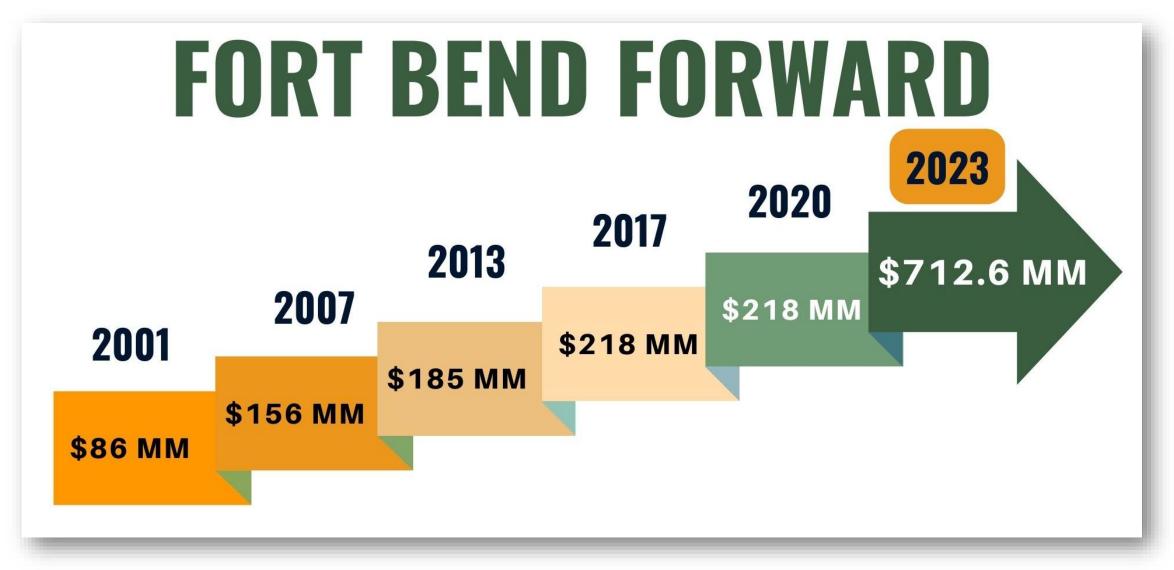




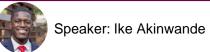
- Fort Bend County is located southwest of Houston
- Each of the 4 Precincts has different needs
- FBC is one of the fastest growing counties in the country







"In the past, the county had a position that all we do is maintain roadways, we don't build new ones. That shifted over the last two decades." Commissioner McCoy, Pct. 4



Fort Bend County

- How will we • accommodate growth?
- What types of projects will • be most impactful?
- How long will it take? •

Project Type	Bond Request
Proposition A – Mobility	\$712,630,000
Proposition B – Parks	\$ 153,000,000
TOTAL:	\$ 865,630,000



2023 FBC Bond Projects

Type of Project	Recommended Bond Amount
Partnerships with Cities/State/Local Ent.	\$ 177,998,844
Roadway Improvements - DRU	\$ 90,091,828
Roadway Improvements - All-In	\$ 112,405,400
Traffic Safety	\$ 31,000,000
Pedestrian Safety	\$ 13,000,000
Rehabilitation	\$ 43,058,928
Existing Projects	\$ 245,075,000
TOTAL:	\$ 712,630,000



2023 FBC Partnerships

Type of Project	Recommended Bond Amount
Beasley	\$ 4,137,000
Fulshear	\$ 3,910,000
Katy	\$ 3,957,000
Kendleton	\$ 13,679,000
Meadows Place	\$ 3,000,000
Missouri City	\$ 12,826,250
MUDs/Special Districts	\$ 39,378,676
Needville	\$ 6,200,000
Rosenberg	\$ 6,569,000
Stafford	\$ 2,899,418
Sugar Land	\$ 61,842,500
TxDOT	\$ 19,600,000
TOTAL:	\$177,998,844



Types of projects

Beechnut Rd – Turning a 2 lane roadway with roadside ditches into a full boulevard



Beechnut Rd – April 2006



Beechnut Rd – September 2023



Types of projects

Lake Olympia Segment 1– Construct a new 4 lane roadway to increase connectivity



Lake Olympia Segment 1 – August 2017



Lake Olympia Segment 1 – September 2023



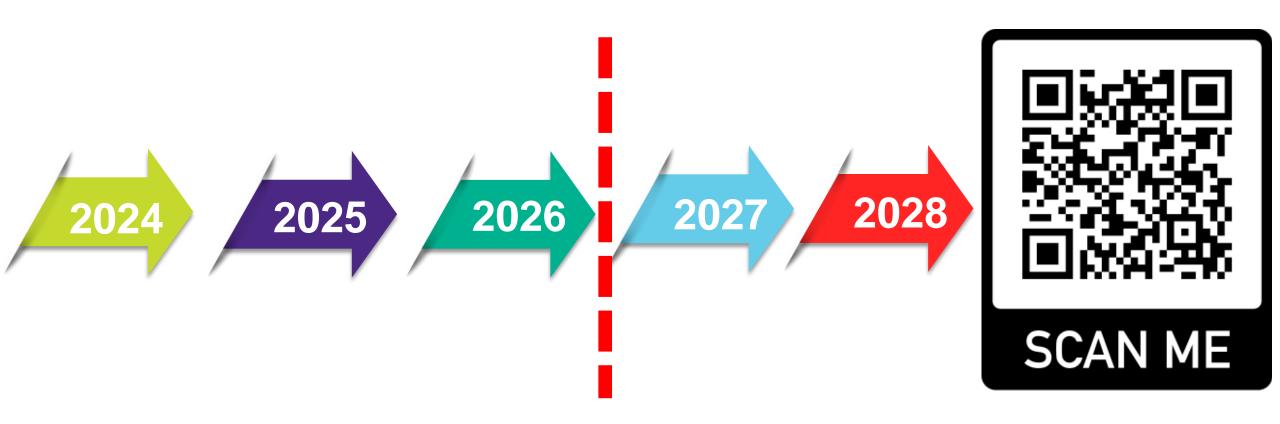
Types of Projects - Roundabout

Texas Heritage Parkway – Upgraded 2-lane Concrete Roundabout with Storm Sewer





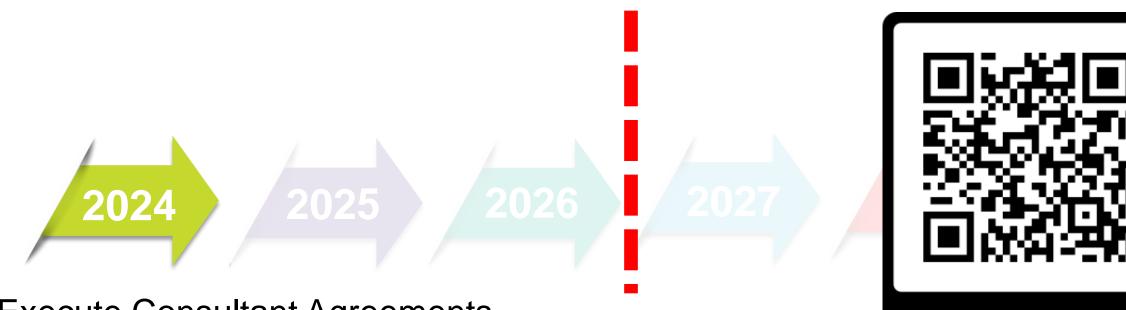
Project Timeline









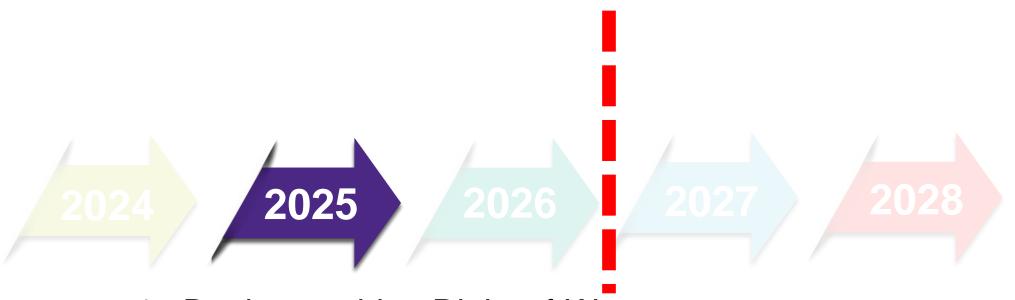


- 1. Execute Consultant Agreements
- 2. Complete Preliminary Engineering
- 3. Determine Right-of-Way needs



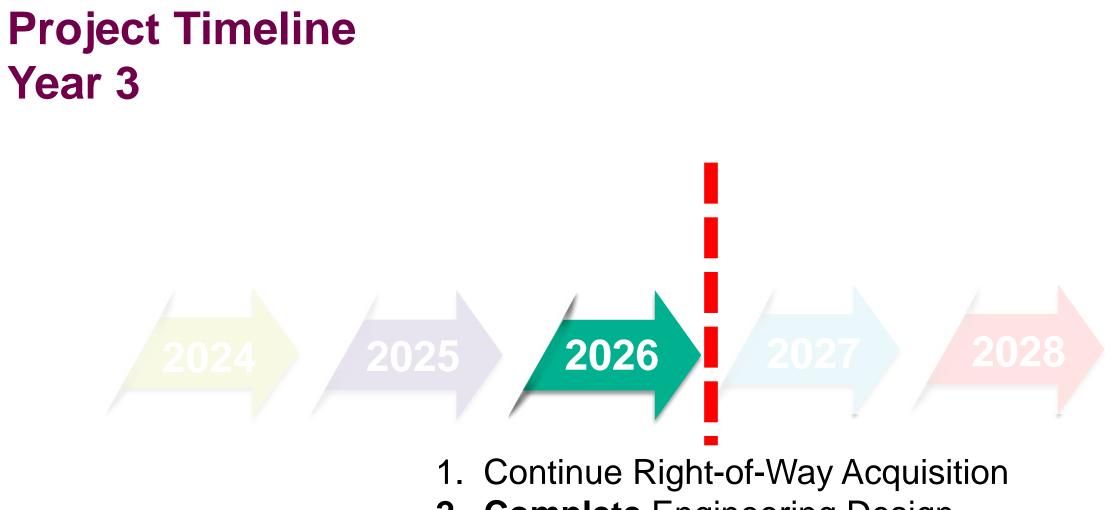


Project Timeline Year 2



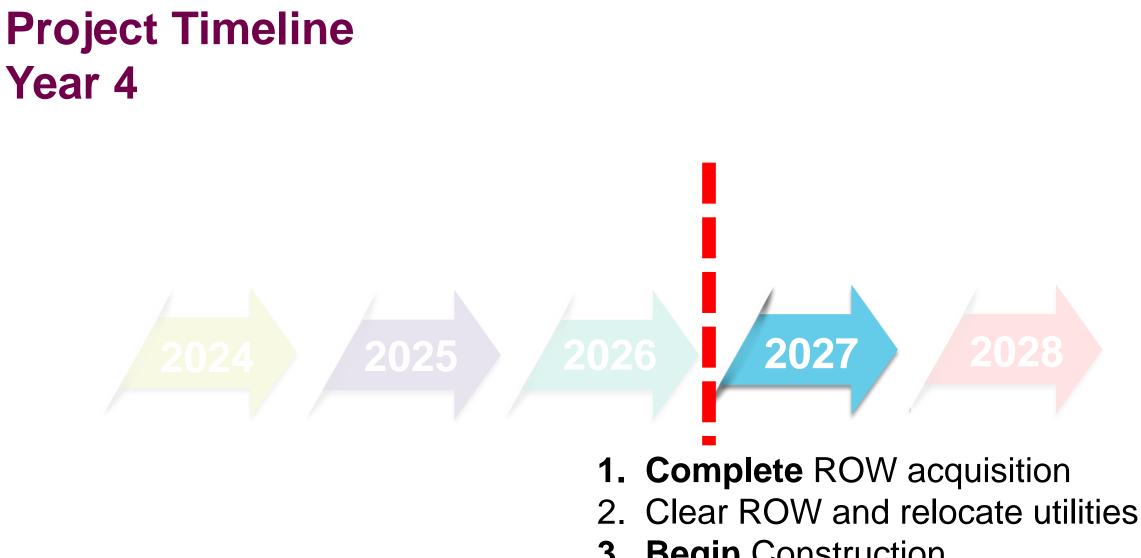
- 1. Begin acquiring Right-of-Way
- 2. Continue Engineering Design
- 3. Environmental Permitting



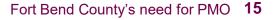


- 2. Complete Engineering Design
- 3. Coordinate with Private Utilities

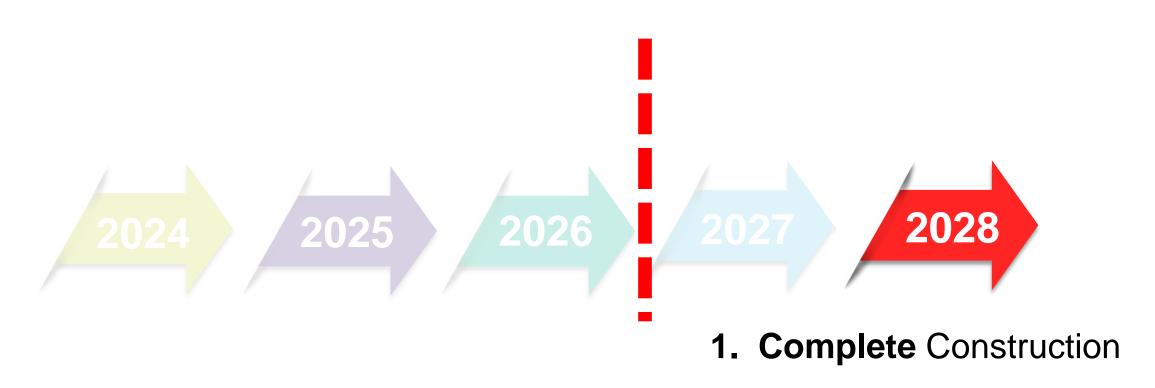




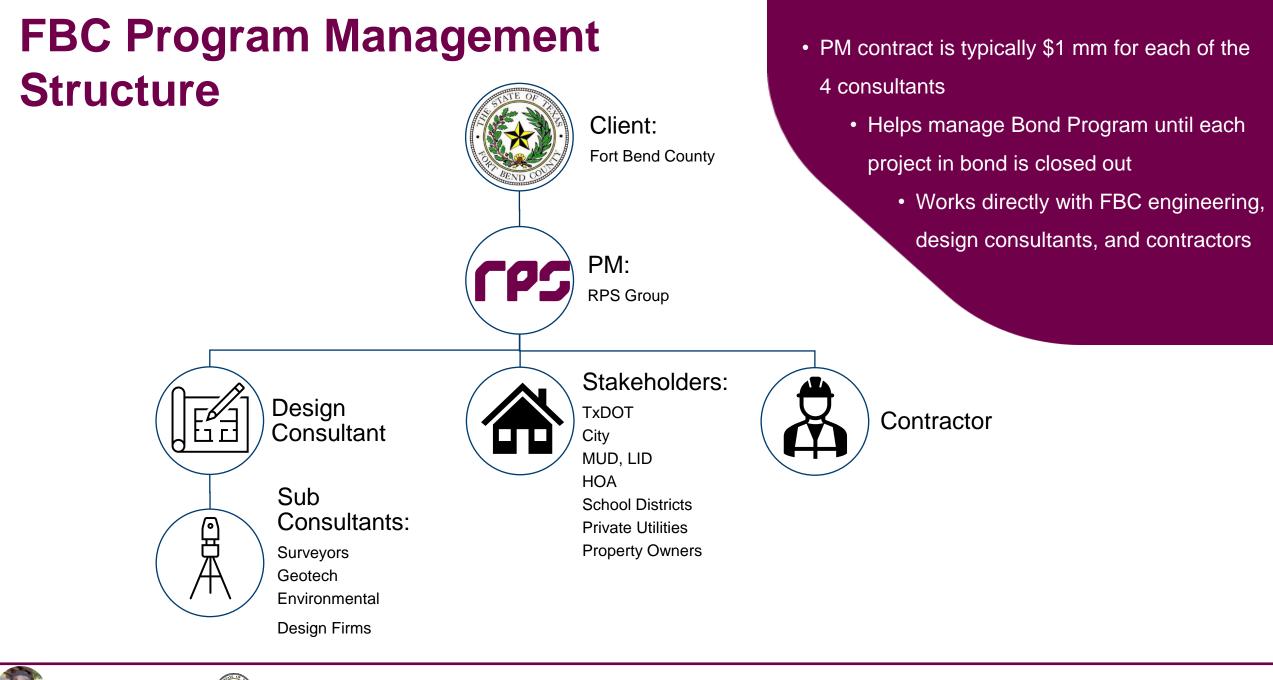
3. Begin Construction



Project Timeline Year 5







The Value of PMO

- Consultant program managers help as remote staff augmentation since current county staff has 5 people working with the active projects.
- PMO assist to manage 99 active projects with over 100 consultants.

Total

Vatts Plantatio

20208 Tramel Fresno

20205

Blueridge Roa

- Ensures all projects are done on time and to FBC standards.
- Helps lower the cost of engineering fees when negotiating contracts.
- Aids to decrease problem projects, change orders, and delayed execution.
- Have additional connections and contacts at TxDOT, Cities, and utility companies.

In this exercise back in 2020, a saving of around \$200K was seen after PMO developed conceptual schematics before contract negotiation with design engineers.







Project Scope

Upgrade FM 2759 to be a 4-lane road with shoulders and ditches. May require re-alignment to avoid encroaching into the railroad ROW. Offsite or in-line detention will be required.

Challenges to Overcome



Bond Amount

\$19,600,000

Coordination with TxDOT, Sugar Land & City of Thompsons. Right of way, utility relocation, and RR coordination for a signalized intersection.

For Informational Purposes Only

Proposition A - Mobility 2023 Fort Bend County Bond

WHO IS RPS

- Managing Fort Bend County's Mobility Bond Programs since 2002 (since the 1st bond)
- Helped over 50 projects from negotiation to ribbon cutting
- RPS has managed around \$216 Million worth of projects





Resources we helped develop

Fortt Bernd County Speidaistng Design Manual:

FBC Identifier	Spec Used	Spe
T00100001	TxDOT	10
H00102001	HC	10
H00102002	HC	10
H00102003	HC	10
H00104001	HC	10
H00104002	HC	10
H00104003	HC	10
H00104004	HC	10
H00104005	HC	10
H00110001	HC	11
H00110002	HC	11
H00110003	HC	11
H00120001	HC	12
H00120002	нс	12
H00120003	нс	12
H00120004	HC	12
H00130001	HC	13
T00132001	TXDOT	13
H00160001	HC	16
H00162001	HC	16
H00162002	HC	16
H00164001	HC	16
H00164002	HC	16

FORT BEND COUNTY CONSTRUCTION DETAILS

(UNDER REVIEW BY FORT BEND COUNTY ENGINEERING) FEBRUARY 1, 2021

TITLE SHEET AND GENERAL NOTES

1. PROJECT COVER SHEET

- 2. CONSTRUCTION GENERAL NOTES
- 3. PUBLIC WORKS & SUBDIVISION GENERAL NOTES 4. TRAFFIC SIGNAL GENERAL NOTES
- 4. TRAFFIC SIGNAL GENERAL NUTE:

PAVEMENT CONSTRUCTION

CONCRETE PAVEMENT DETAILS (SHEET 1 OF 2)
 CONCRETE PAVEMENT DETAILS (SHEET 2 OF 2)
 SPECIAL PAVINE DETAILS
 TURN LANES AND MEDIAN OPENINGS
 TURN LANES AND MEDIAN OPENINGS
 TURVEWAY DETAILS FOR MAJOR ROADWAY CONSTRUCTION
 DRIVEWAY DETAILS
 SIDEWALT DRIVEWAY DETAILS
 SIDEWALK DETAILS
 SIDEWALK DETAILS (SHEET 1 OF 4)
 PED-18 RAMP DETAILS (SHEET 2 OF 4)
 PED-18 RAMP DETAILS (SHEET 2 OF 4)
 PED-18 RAMP DETAILS (SHEET 3 OF 4)
 PED-18 RAMP DETAILS (SHEET 4 OF 4)

STORM SEWER CONSTRUCTION

STORM SEWER CONSTRUCTION DETAILS
 CAST-IN-PLACE CONCRETE STORM SEWER MANHOLE DETAILS
 PRECAST CONCRETE STORM SEWER MANHOLE DETAILS
 JUNCTION/BOX/MANHOLE DETAILS
 TYPE "A" INLET DETAILS FOR MAXIMUM 30" O.D. PIPE
 MODIFIED TYPE "A" INLET DETAILS FOR BEHIND THE CURB SWALES
 TYPE "B-B" INLET DETAILS
 MODIFIED TYPE "B-B" INLET FOR BACK OF CURB GRATE
 TYPE "C", "C-1", "C-2", AND "C-24" INLET DETAILS
 H-2 INLET DETAIL

MISCELLANEOUS CONSTRUCTION DETAILS

30. SINGLE GUARDRAIL TERMINAL 31. METAL BEAM GUARD FENCE 32. PROJECT SIGN DETAILS 33. COUNTY FUNDED PROJECT SIGN DETAILS 34. COUNTY/OTHER FOUNDED PROJECT SIGN DETAILS 35. PRECINCT FUNDED PROJECT SIGN DETAILS 36. CHAIN LINK FENCING DETAILS 37. CHAIN LINK FENCING ROLLING GATE DETAILS 38. BARBED WIRE FENCING DETAILS 39. ROUNDABOUT CONSTRUCTION DET I 40. ROUNDABOUT CONSTRUCTION DET II 41. ROUNDABOUT CONSTRUCTION DET III 42. EXPANSION JOINTS AND SAWCUTS 43. MID BLOCK CROSSING WITH RESIDENTIAL FRONTAGE 44. MID BLOCK CROSSING WITHOUT RESIDENTIAL FRONTAGE 45. MID BLOCK BOULEVARDS

SIGNING AND PAVEMENT MARKINGS

46. PAVEMENT MARKING DETAILS (SHEET 1 OF 2)
47. PAVEMENT MARKING DETAILS (SHEET 2 OF 2)
48. TYPE III BARRICADE DETAILS
49. TYPICAL GROUND SIGN INSTALLATION
50. STREET SIGN NAME AND INSTALLATION DETAIL

STORM WATER POLLUTION PREVENTION AND STORM WATER QUALITY

51. STORM WATER POLLUTION PREVENTION PLAN DETAILS

		1
	Alt Section	Notes
	STORM SEWER	
	RETAINING WALL	
LAN		



Program Estimate

- RPS collaborated with FBC Engineering to develop interactive spreadsheet
- Produces a budget for a project in under an hour
- Provides a breakdown of the project budget
 - Construction
 - Engineering
 - Program & Escalation
 - CM&I, CMT and Environmental
 - Right of Way and Utilities

	COST SU	MMARY
CONSTRUCTION	\$	1,262,000
ENGINEERING	\$	189,300
PROGRAM & ESCALATION	\$	113,600
ENVIRONMENTAL	\$	8,000
CM&I & CMT	\$	100,900
RIGHT OF WAY & UTILITIES	\$	-
TOTAL PROJECT BUDGET	\$	1,666,000
OTHER CONTRIBUTIONS	\$	-
COUNTY BOND AMOUNT	\$	1,666,000

PROJECT NO:	2-13				-	co	ST SUMMARY
ROAD NAME: ENTER LIMITS:	Julia Avenue FROM NA				TRUCTION		\$ 1,262,000
ENTER LIMITS:	FROM NA TO NA				RAM & ESC.	AL ATION	E 189,300 E 113,600
ENTER LENGTH:	FEET + 2,700				ONMENTAL		\$ 113,600 \$ 8,000
Contraction of the	5TA = 27.0			CMAH			\$ 100,900
	MLE5 = 0.51		Ste	RIGHT	OF WAY &		s .
SELECT ROADWA	NY TYPE HMAC 24" WIDE LANE		27			CT BUDGET	\$ 1,666,000
	NONE		0	OTHER		JTIONS.	1 .
	NONE		9	COU	NTY BOND	AMOUNT	\$ 1,666,000
DESCRIPTION	Reconstruct wailing Jula Avenue and provide a 24-ft wide asphalt road	way (2-lan-)	with press				
a anna a martal	additional ROW is anticipated.	and in cardings					
				PREPA	ARED BY:	Gabriel Odreman, 1 4/20/2022	PE
		_		-			
	DESCRIPTION	UNIT	QTY		COST	AMOUNT	COMMENTS/ ASSUMPTIONS
CONSTRUCTION							
A	SITE PREPARATION Typical		27.0	5	6,000.00	\$ 162,000	
	EARTHWORK HMAC 24' WIDE LANE	STA	27.0		3,000.00	\$ \$1,000	
	NONE	STA	0	ŝ		0	
	NONE	STA	D	\$	1	\$	
	PAVING	1 1		Tota	d Earthwork	\$ \$1,000	
	HMAC 24' WIDE LANE	STA	27.0	\$	14.000.00	\$ 378.000	24-8 wide aspiral meetway
C	NONE	STA	0	5		\$	
	NONE	STA	0	s .	Table of the	\$ 378,000	
D	STORM SEWER	STA	27.0	10	Total paving	\$ 378,000	
	OPTIONAL ADDITIONAL STORM SEWER	STA	27.0	Ľ		8	
Ę	DETENTION None	STA	27.0	1		1	
F C	TCP Typical SIGNING & PAVEMENT MARKINGS	1 STA	27.0 27.0	3	6,000.00	\$ 162,000 \$ 16,200	
н	TRAFFIC SIGNAL	EA	0	1	305.000.00	5 .	
1	SWPPP Typical	1 STA	27.0	5	2,000.00	\$ 54,000	
J K	EXTRA WORK ITEMS SIDEWALKS (5) None	STA			500.00		
L.	BRIDGE Name	SF		i i	20	1	
M	OPEN DITCH	UF .	27	1	3.000.00	\$ 81,000	Open Ditch and Cross Culverts
N	RETAINING WALLS None TRAFFIC ROUNDABOUT	SF EA		1	100.000.00	5	in the second
P	DRIVEWAYS	EA	15	5	5.000.00	\$ 75.000	15 Driveways
	OTHER	EA		5		\$.	
	OTHER	EA		1	10	1	
PUBLIC UTILITIE	OTHER	EA		5		\$	
- source or during	RELOCATE WATER DISTRIBUTION	STA		5	1,500.00	\$	
	RELOCATE WATER TRANSMISSION	STA		\$	3,500.00	\$ -	
	RELOCATE SANITARY SEWER RELOCATE FORCE MAIN	STA STA		5	6,500.00 6,500.00		
CONTINGENCY	(% x CONST ITEMS)	BUDGET	1	1	6,500.00	\$ 252,300	
	SUBTOTAL CONSTRUCTION COST					\$ 1,267,000	
ENGINEERING &	BOW SLEVEY	PARCEL		-	3,000.00		
	TOPO SURVEY (% x CONST COST)	BUDGET			1.00%	\$ 12,600	
	GEOTECH ENGINEERING (% x CONST COST)	BUDGET			1.00%	\$ 12,600	
	PRELIMINARY ENGINEERING (% x CONST COST) FINAL DESIGN (% x CONST COST)	BUDGET			4.00%	\$ 50,500 \$ 107,300	
	BID & CONSTRUCTION PHASE SER (% & CONST COST)	BUDGET			0.50%	\$ 107,300 \$ 6,300	
2	SUBTOTAL ENGINEERING	-		1		\$ 189,360	
PROGRAM MAN	AGEMENT & ESCALATION PROGRAM MANAGEMENT (% + CONST)	RUDGET			3.0%	\$ 37,900	
	PROGRAM MANAGEMENT (% x CONST) ESCALATION	BUDGET			3.0%	\$ 37,900 \$ 75,700	
	SUBTOTAL CONSTRUCTION SERVICES					\$ 113,600	
ENVIRONMENTA	L.	100000				2 222	
	ENVIRONMENTAL MITIGATION ENVIRONMENTAL CONSTRAINTS ANALYSIS (DESKTOP REVIEW)	BUDGET BUDGET		3	8.000.00	\$ 8,000	
	ENVRONMENTAL ANALYSIS & PERMITTING	BUDGET	1	5	200.000.00	5 .	
	SUBTOTAL ENVIRONMENTAL					\$ 8,000	-
CONSTRUCTION	I MANAGEMENT, INSPECTION & MATERIAL TESTING CONSTRUCTION MANAGEMENT (% # CONST)	RUDGET			2.0%	\$ 25,200	6
	INSPECTION (% x CONST)	BUDGET			2.0%	\$ 25,200	
	LABORATORY TESTING (% x CONST)	BUDGET			4.0%	\$ 50,500	
RIGHT OF WAY	SUBTOTAL CONSTRUCTION SERVICES	-	-	-	-	\$ 100,900	
MART OF WAY	UNDEVELOPED	SF		5		5	
	HARD CORNERS	EA		5	5,000.00	5 .	
	STRUCTURES ROW APPRAISAL & ACQUISITION COSTS	EA PARCEL		1	6.000.00	5	
	ROW APPRAISAL & ACQUISITION COSTS PIPELINE RELOCATION (<8")	PARCEL	0	1	6,000.00		
	PIPELINE RELOCATION (8"-16")	EA		5	600,000.00	\$.	
	PPELNE RELOCATION (>16")	EA.		\$	800.000.008	\$.	
CONTINGENCY	OTHER UT&ITES (% x ROW &UT&ITY COST)	BUDGET			25%	5	
- on a future f	SUBTOTAL RIGHT OF WAY & UTILITIES	and the s				\$	
	TOTAL PROJECT COST					\$ 1,666,000	
CONTRIBUTION		-		_			
	CATEGORY	LOCAL			LOCAL		
		SHARE		- L - L	AMOUNT		
	CONSTRUCTION ENGINEERING	0%		5	100		
	PROGRAM	0%		ŝ	2		
	CMM	0%		5	-		
	RIGHT OF WAY & UTILITIES OTHER	0%		5	-		
	OTHER						
	OTHER						
	SUBTOTAL OTHER CONTRIBUTION	5		_		3	
	COUNTY BOND AMOUNT					5 1,666.000	



Program Management Software Masterworks -

Utilized throughout design to:

							2018	
REQUEST FOR INFORMATION	0 IC	D Task ID	Task Name	Duration	Start	Finish	May 厦海 Mark OI	ífline
							07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 01 02	
	1	1	PER	57 days	08/28/2018	10/23/2018		
Cancel	0 2	2	Design	404 days	10/23/2018	11/30/2019	DER	
GENERAL	0з	3	RoW, Env, Utilities	32 days	11/30/2019	12/31/2019		
	4	4	Bidding	64 days	12/31/2019	03/03/2020		
RFIID : RFI-13219x-0006	5	5	Construction	183 days	03/03/2020	09/01/2020		-
Created By : Bob Baker	6	6	▼ PER Phase	116 days	05/08/2018	08/31/2018	BUDGET ESTIMATE DETAILS BUDGET ESTIMATE ITEMS	
Identified Date : 05/23/2022	7	6.1	Consultant Contract Sig	0 days	05/08/2018	05/08/2018	J Edit J Customize List Y Associate Fund * Image: Social of the second se	
Contract *: Construction of Lift Station a	8	6.2	Survey	30 days	05/08/2018	06/06/2018	Save New Delete Pi Excel Import / Export +	
	9	6.3	Geotech	30 days	05/08/2018	06/06/2018	Interview Interview <t< th=""><th></th></t<>	
LINKED OBJECTS	1	0 6.4	PER Drafting	57 days	06/04/2018	07/30/2018		
	1	1 6.5	PER Meeting	0 days	08/21/2018	08/21/2018	PER PER	î
BUDGET ESTIMATE REVISION DETAILS BUDGET ESTIMATE REVISION ITEMS		2 6.6	PER Complete/Final Sub	-	08/21/2018	08/31/2018	Design Design	
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Design Design	1	8 7.5	Agreements with Agend	90 days	05/08/2018	08/05/2018	□ 🕅 🖫 301 7 Engineer Estimate LS 5,618,874,7500 1.00 <u>100% Mobility</u>	
RoW, Env, Utilities RoW, Env, Utilities	1	9 7.6	Agreements with Lando	638 days		02/04/2020 🚽		
Bidding Bidding					Ready	2	201: LS 168,566.2425 1.00 100% Mobility	
Construction Construction					Ready	2	2011 🖸 📧 🖫 402 9 Construction Management LS 168,566,2425 1.00 -MA-	-
			- Deeeder - 202				Total Amount in \$: 6,86	9,282.47







Feasibility study - Bond Planning

Design Stage

3 Bidding and Construction Phase Services

PHASE 1 – FEASIBILITY STUDY ROADWAY BOND PROGRAM PLANNING

- Evaluate potential projects
- We work closely with Engineering department at FBC
- Assess viability of project



rpsgroup.com Speaker: Gabriel Odreman Phase 1 – Feasibility Study Steps:

STEP 1: INITIAL PROJECT SITE VISIT STEP 2: DEVELOP KMZ MODEL STEP 3: PROGRAM ESTIMATE STEP 4: PRIORITIZATION LIST STEP 5: EXHIBITS AND SCHEMATICS STEP 6: PUBLIC ENGAGEMENT





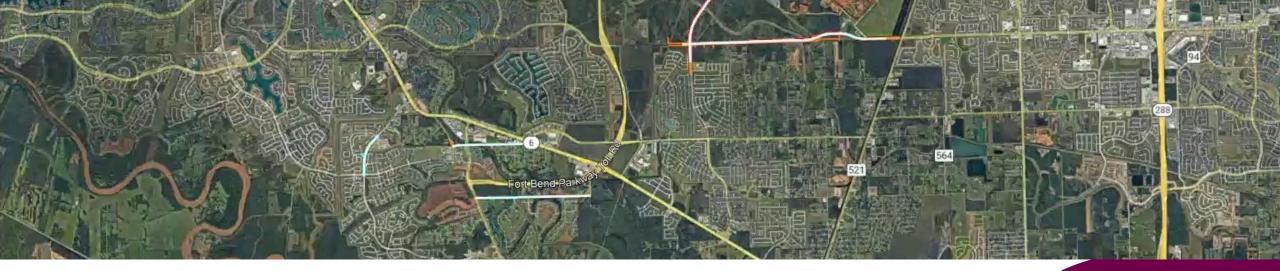
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Initial Project Site Visit

- Go onsite to walk limits of potential project
- Assess the project:
 - Site conditions
 - Potential conflicts
 - Drainage needs
 - Water Crossings (Bridge or Culvert)







Develop KMZ Model

- Shows potential project on top of current conditions in google earth
- Provides visual idea of project scope:
 - Right of Way (ROW) needs
 - Potential detention
 - Utility conflicts



10

Prioritization List

- Develop a prioritization matrix
- Client criteria is used to list projects by most impactful
- Weighted score helps identify projects to pursue

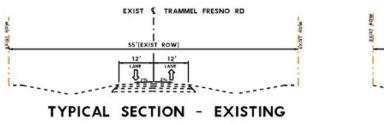
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FM 734 - Seg 1	8	6	4	4	8	6	6.3	:
SH 22	3	4	5	4	4	3	3.9	
FM 753	3	4	4	7	6	7	5.1	
FM 734 - Seg 2	5	8	2	4	2	8	<mark>4.5</mark>	
SH 21	5	4	5	4	3	1	3.9	
FM 734 - Seg 3	8	5	7	8	7	6	7	
FM 1100	5	3	3	3	3	3	3.4	
FM 734 - Seg 5	4	1	6	10	9	5	6.1	
FM 734	1	1	1	1	4	2	1.8	
US 79	3	5	5	2	2	2	3.1	
FM 969	4	3	3	3	3	7	3.4	:
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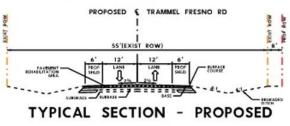


Exhibits and Schematics

- PMO develops exhibits and schematics of the projects in the prioritization list to show:
 - Roadway Footprint and Cross Section
 - Proposed Right of Way & Impacts to Property
 - Potential utilities in conflict
 - Environmental conflicts

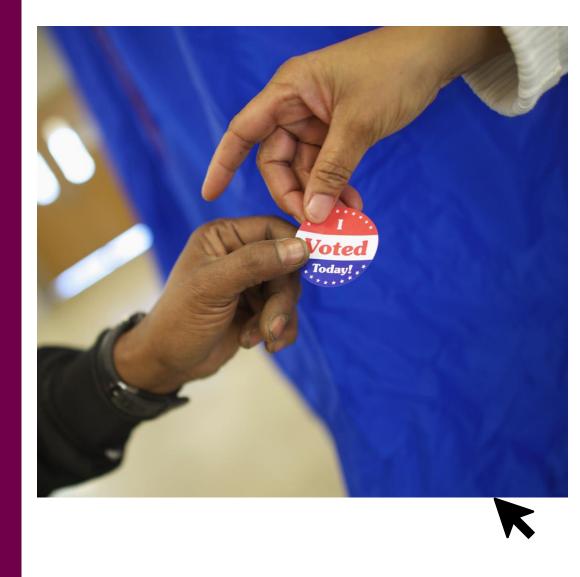






Public Engagement

- All data is uploaded to Fort Bend County website for public engagement
- Residents can go online to view proposed projects
 - Location
 - Exhibits
 - Estimates
- On election day, the Bond Projects are voted on by residents





Feasibility study – Bond Planning

) Design Stage

2

3

Bidding and Construction Phase Services

Phase 2 – Design Stage

- PMO represents FBC in all aspects of design for each bond project
- Develops Plans, Specifications and Estimates
- PMO manages the design from negotiation to letting





Speaker: Gabriel Odreman

Submittal Documents

PER Report	30% submittal
ROW and Temporary Construction Easement acquisition	Begin after PER approval
Utility Conflict table	Coordinates with utility company at every submittal
Ea Plans, Specifications and Estimates	sements 30%, 60%, 95% and 100% submittal

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION EDOM ANV INSTRUMENT THAT TRANSFERS AN INTEREST IN DEAL BRODERTV FORT BEND COUNTY ENGINEERING DEPARTMENT CONSTRUCTION PLANS FOR BELKNAP ROAD PAVEMENT AND DRAINAGE IMPROVEMENTS WEST BELFORT BOULEVARD TO HARRIS COUNTY LINE 30% PLANS FORT BEND COUNTY PROJECT NO. 2-11 FORT BEND COUNTY COMMISIONERS COURT PRECINCT 3 ROBERT E. HERBERT - COUNTY JUDGE NOBERT E. HENBERT - COUNTY JU VINCENT MORALES - PRECINCT J GRADY PRESTAGE - PRECINCT 2 ANDY MEYERS - PRECINCT 2 JAMES PATTERSON - PRECINCT 4 FORT BEND COUNTY ENGINEER Richard W. Stolleis, P.E. THESE SIGNATURES ARE VOID IF CONSTRUCTION HAS NOT COMMENCED IN (1) YEAR FROM DATE OF APPROVAL. VACINITY MAP N.T.S. KEY MAP NO. 528X, T, P DESIGN SPEED: 40 MPH POSTED SPEED: 35 MPH DESIGN LENGTH: 4693 FT = 0.89 MILE TDLR INSPECTION REQUIRED TDLR NO. XXXXXX SEPTEMBER 2018 MELININARY-FOR NEVILE O These Documents are for Dealign Review and not intended for Construction, Bidaling or Fermit Purposes, They were prepared by an under the supervision of EJES C. Base Unit Price Table (Subgrade and Paving) Unit Price (This Column Spec Ref. Unit of Estimated Base Unit Short Title Total in figures Measure Quantity Controls) Full Depth Repair of Concrete Pavement SY 52.000.00 Estimated quantity idewalk, All Thicknesses) CY 14,000.00 ,000 Linear feet of retaining wall as shown in Detail No. 4 taining Wall (Detail No. 4) Cement Stabilized Sand. Complete In Place CY resents one mile of construction where CSS is required per detail 150.000.00 (Detail No. 3, 5, 9, 10, 11, 12, and 13) Represents 68% of budget. One mile of 5' wide sidewalk is 4-1/2" Thick Concrete Sidewalk SY 4,127,760.00 approx. 2,940 SY. Quantity represents 27 miles of sidewalk. vised unit price upwards for 95% Price from TxDOT Statewide 12 SY Thick Concrete Sidewalk 191,100.00 onth average. Represents one mile of 6" thick sidewalk that would oss residential driveways. evised unit price upwards for 95% Price from TxDOT Statewide 12 Thick Concrete Sidewalk SY 205,800.00 onth average. Represents one mile of 7" thick sidewalk that would oss commercial driveways 6" Concrete Curb LF 26,400.00 Ided for 95%. Cost from TxDOT Statewide 3M average awtooth Concrete Curb (Detail Nos. 8 and LF 68,640.00 esents one mile of sawtooth curb ssed using EA as unit for 95%. With an array of ramps in the etail set getting a good price per ramp may be difficult. The details all early call out limits of payment which helps determine quantity onsider using SY as the unit of measure. Increased quantity for 95% 4-1/2" Thick Concrete ADA Ramp, Complete In SY 75,000.00 ng 10 square yards per ramp. Assuming 50 ram Total Base Unit Prices (For Subgrade and Paving Items) 4,910,700.00

Item

No.

19 0361

20 0420

21 0433

22 0530

23 0530

24 0530

25 0530

26 0530

27 0530



Feasibility study – Bond Planning

Design Stage

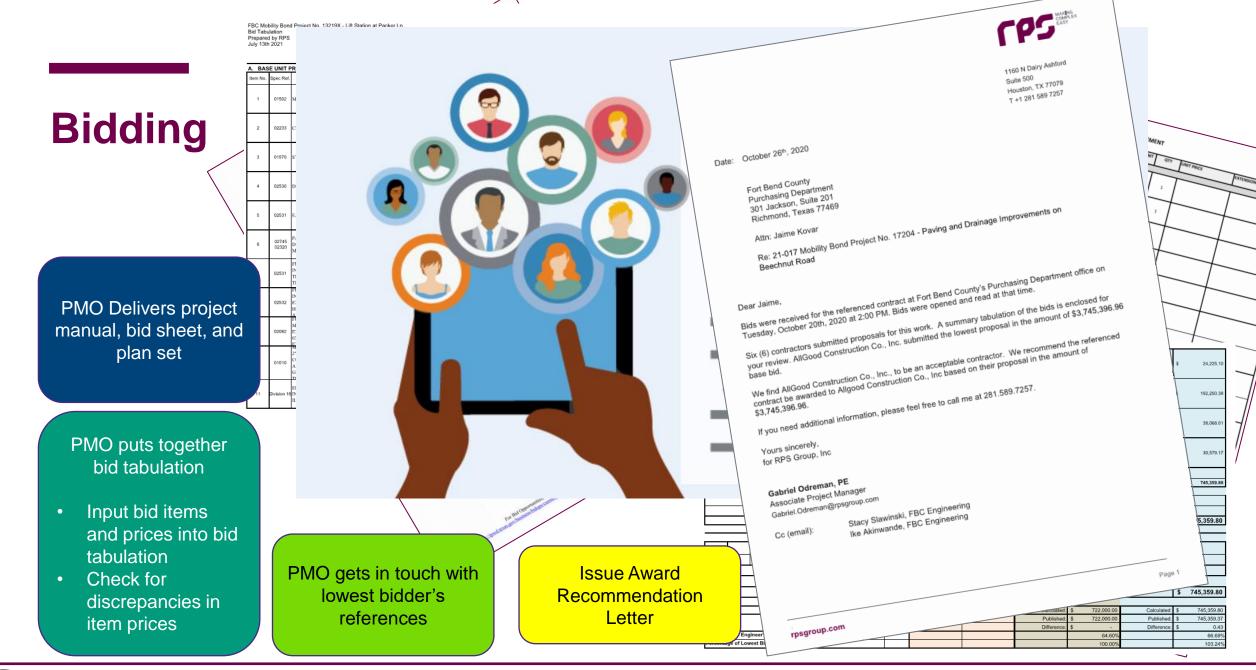
3) Bidding and Construction Phase Services

PHASE 3 – BIDDING AND CONSTRUCTION PHASE SERVICES

- Helps bidding process and recommends Contractor
- Continues to work with Design Consultant, FBC Engineering and stakeholders throughout construction
- Assists in RFIs and Submittals









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Construction Phase Services Managing the design consultant







Even Attend Ribbon Cutting Ceremonies!





Summary

Program managers help identify the needs of projects....

....PM is there until the project is complete...

....so that means less phone calls, less emails and less stress for our client!









