

**FAYETTE COUNTY
GLO CDBG-MIT
OVERALL PROJECT MAP
BEFCO JOB # 20-7687**

FILED

OCT 13 2020

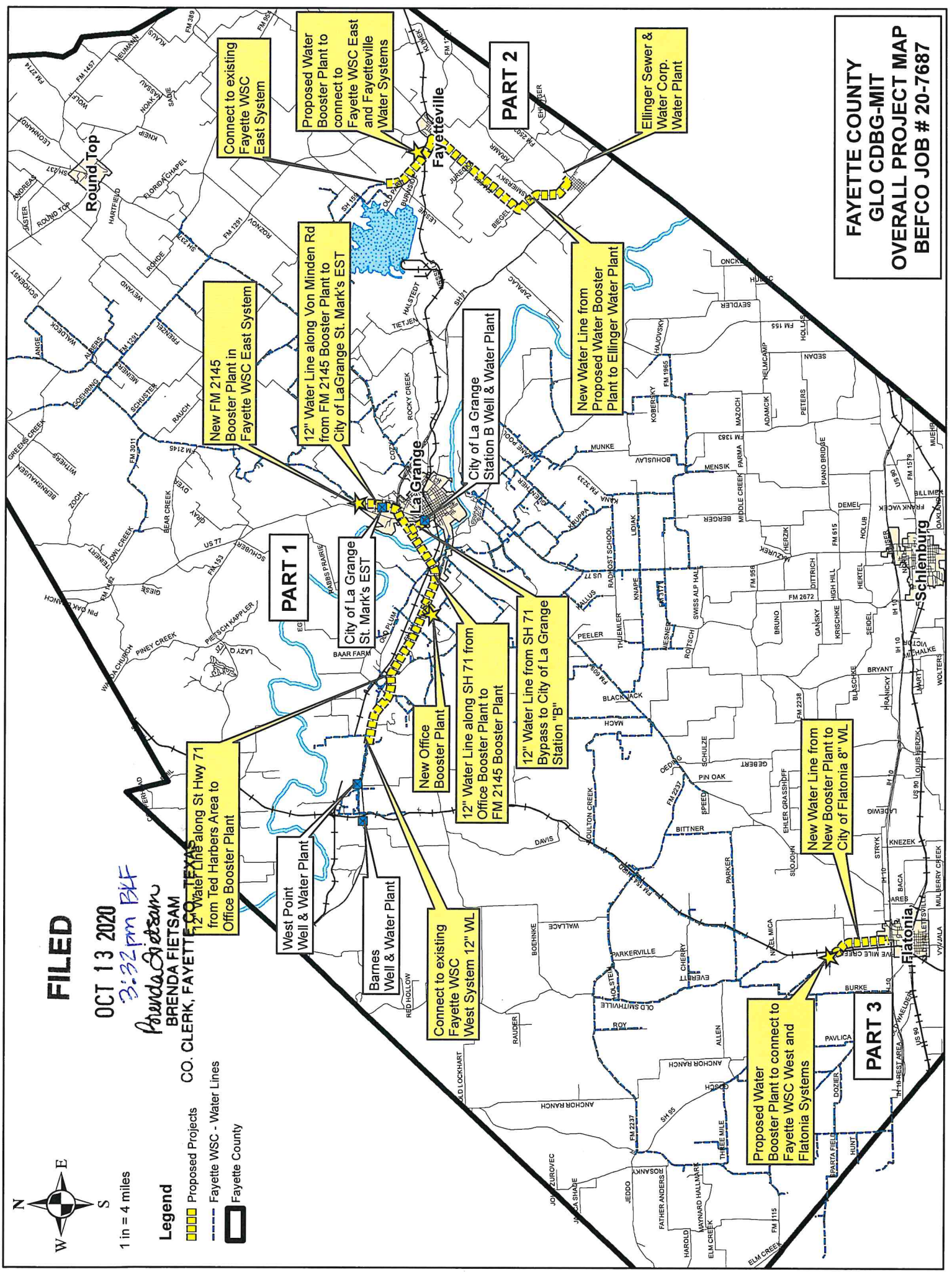
Brenda Frietsam
BRENDA FRIETSAM
CO. CLERK, FAYETTE COUNTY, TEXAS

12" Water Line along St Hwy 71 from Ted Harbers Area to Office Booster Plant



Legend

- Proposed Projects
- Fayette WSC - Water Lines
- Fayette County



Connect to existing Fayette WSC East System

Proposed Water Booster Plant to connect to Fayette WSC East and Fayetteville Water Systems

PART 2

Ellinger Sewer & Water Corp. Water Plant

New FM 2145 Booster Plant in Fayette WSC East System

12" Water Line along Von Minden Rd from FM 2145 Booster Plant to City of LaGrange St. Mark's EST

New Water Line from Proposed Water Booster Plant to Ellinger Water Plant

PART 1

City of La Grange St. Mark's EST

New Office Booster Plant

12" Water Line along SH 71 from Office Booster Plant to FM 2145 Booster Plant

12" Water Line from SH 71 Bypass to City of La Grange Station "B"

New Water Line from New Booster Plant to City of Flatonia 8" WL

West Point Well & Water Plant

Barnes Well & Water Plant

Connect to existing Fayette WSC West System 12" WL

Proposed Water Booster Plant to connect to Fayette WSC West and Flatonia Systems

PART 3

City of La Grange Station B Well & Water Plant

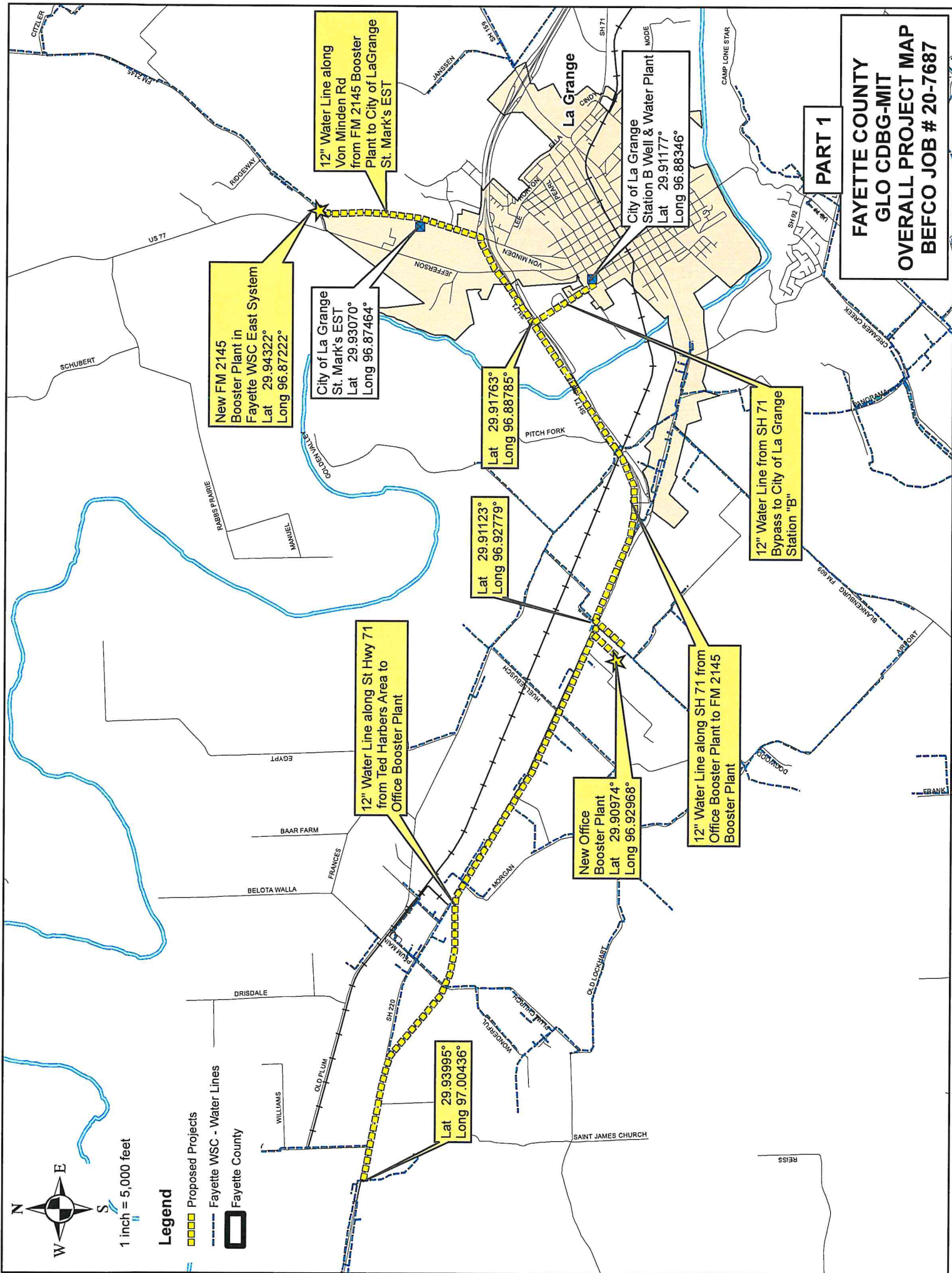
City of Flatonia



1 inch = 5,000 feet

Legend

- Proposed Projects
- Fayette WSC - Water Lines
- Fayette County

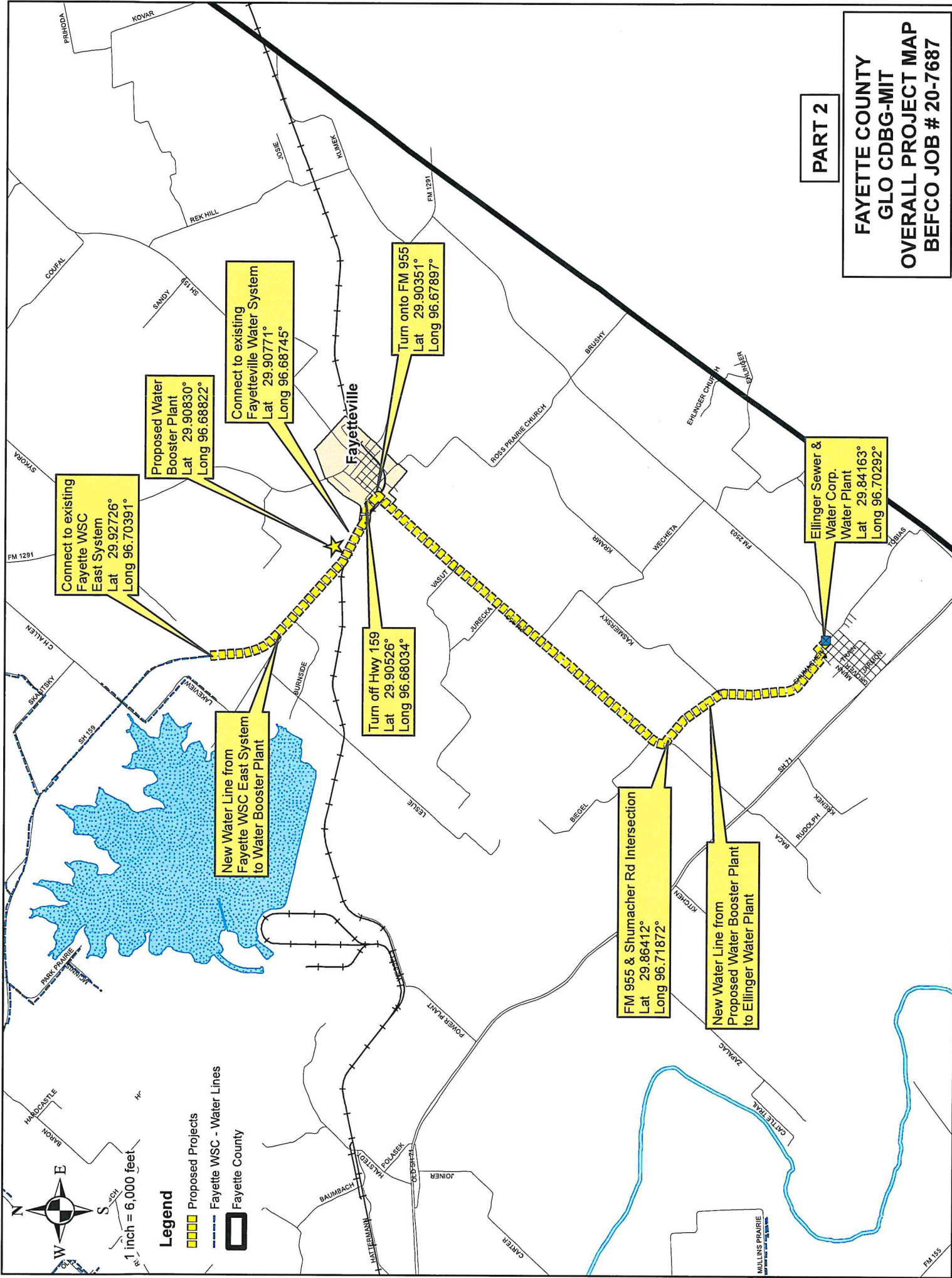


PART 1

**FAYETTE COUNTY
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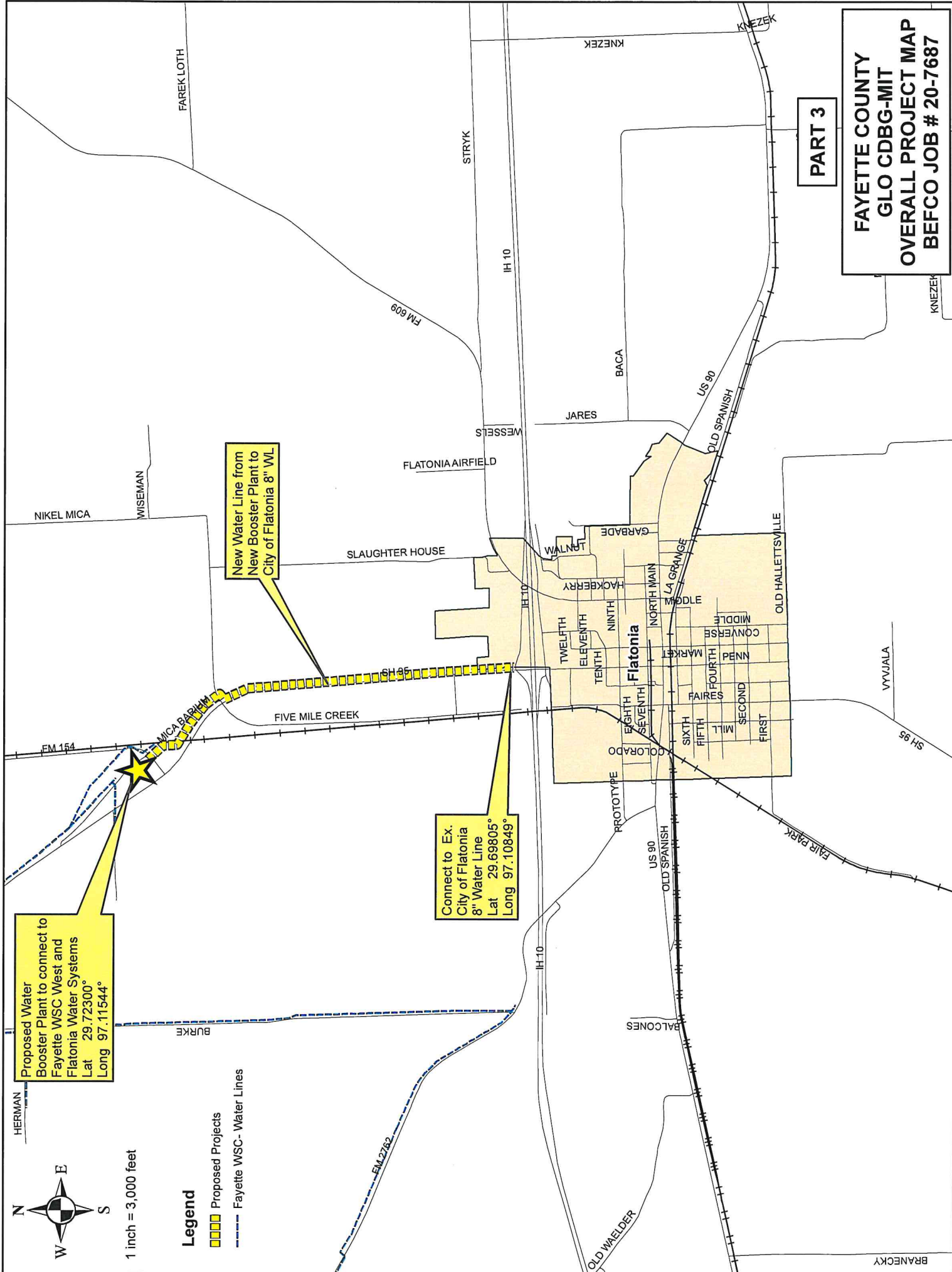
PART 2

**FAYETTE COUNTY
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**FAYETTE COUNTY
GLO CDBG-MIT
OVERALL PROJECT MAP
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PART 3



Proposed Water
Booster Plant to connect to
Fayette WSC West and
Flatonia Water Systems
Lat 29.72300°
Long 97.11544°

Connect to Ex.
City of Flatonia
8" Water Line
Lat 29.69805°
Long 97.10849°

New Water Line from
New Booster Plant to
City of Flatonia 8" WL

Legend
 Proposed Projects
 Fayette WSC- Water Lines



1 inch = 3,000 feet

BRANECKY

FAYETTE COUNTY

2020 GLO CDBG-MIT PROJECT

Hazard, Risk Description - Describe how the risk(s) selected (Flooding, Hurricanes/Tropical Storms) are impacting the proposed project area. Reference where adopted local mitigation efforts are planned or underway where appropriate.

During Hurricane Harvey, Fayette County was impacted significantly, specifically homes in/around the City of La Grange and La Grange's water. The City was down to only one water well due to flooding, and it was located on the west side of the Colorado River, which is the opposite side of the river from all the City's water connections. The City additionally couldn't get an adequate amount of water to the east side of the river due to limitations of a single, undersized water line that hangs on the Colorado River SH 71 Business Bridge. The neighboring water system, Fayette WSC West System, fortunately was able to help the City with water supply. However, this supply was limited due to the aforementioned single, undersized water line. This incident brought to the forefront the lack of "regionalized" water system assistance and water sharing in Fayette County both during day-to-day operations, but more importantly, during a hurricane, tropical storm or similar disasters.

The City of La Grange is working on some internal water system upgrades through the GLO CDBG DR Program to help get water from their wells/plants on west side of the City to their distribution hub, Station B and the Hilltop Standpipe & Elevated Storage Tank. The Ellinger Sewer and Water Corporation has also applied to the Texas Water Development Board (TWDB) for water system funding to construct a new water plant. However, there are no current County-wide plans for water distribution & sharing. The County regularly applies for funding through the bi-annual Texas Community Development Block Grants (CDBG) on behalf of water & sewer systems in the County, but these grants typically have a construction budget of \$225,000-\$250,000 which unfortunately is insufficient for regionalized utility projects. Attached is an exhibit/map depicting the projects that Fayette County would like to construct using 2020 GLO CDBG-MIT funds.

Hazard Mitigation Actions - Describe how the proposed project will mitigate against the identified lists. Reference where adopted local mitigation efforts are being enhanced where appropriate.

The proposed project includes new large water lines and water plants to construct Fayette County's county-wide regionalized water system to be able to share water between Fayette WSC's East & West Systems, City of La Grange, City of Fayetteville, Ellinger Sewer and Water Corporation and City of Flatonia. Fayette WSC's West Water System has large water wells in the Carrizo Wilcox Aquifer System with overall good water quality. Water from these wells & associated plants would be transported down State Highway 71 from the West Point Community to a new booster plant adjacent to Fayette WSC's office on Bordovsky Road. From the Office Water Booster Plant, water would be pumped to the City of La Grange's Station B Water Plant and St. Mark's Elevated Storage Tank for distribution to the City's customers. Water to Station B could be supplied by the Office Booster Plant, but water to the St. Mark's Elevated Storage Tank & Upper Pressure Plane would have to be provided from a new Fayette WSC East System Booster Plant located at/near the FM 2145/Von Minden Road Intersection. The FM 2145 Booster Plant would be supplied water by the Fayette WSC West System Office Booster Plant. The FM 2145 Booster Plant would also distribute water to Fayette WSC's East System. The St. Mark's EST & Upper Pressure Plant could then

distribute water to its customers and the Fayette WSC East System's existing Ruterville Water Plant on SH 159, northeast of La Grange through an existing interconnect/dedicated water supply line. Fayette WSC's Ruterville & FM 2145 Plants would then pump water through existing infrastructure to the west side of the City of Fayetteville to a new booster plant. The proposed Fayetteville West Booster Plant would be constructed at the western edge of Fayetteville's water line infrastructure so that water could be distributed to/from the City of Fayetteville. A new water line would be constructed from the Fayetteville West Booster Plant to the existing Ellinger Sewer and Water Corporation's existing Water Plant. As stated previously, Ellinger has also applied to the TWDB for a new water plant. Either the existing or this proposed water plant will distribute water to Ellinger's customers. This shared water system will be set up to allow Fayette WSC's West System to help all systems to the east, City of La Grange to receive water and pass on to Fayette WSC's East System, who in turn will transport water to the City of Fayetteville & Ellinger. Fayetteville will be able to pass on water to Fayette WSC's East System, who in turn can transport water back to the City of La Grange. The City of La Grange can assist to some lower elevation areas of Fayette WSC's East and West Systems, but due to their low elevations, they are not able to supply water back to Fayette WSC's West System. The Ellinger System would not be able to provide any water back to any of the aforementioned water systems.

Fayette WSC's West System will also be connected to the City of Flatonia's Water System on the north side of Flatonia. Improvements include a new booster plant at/near the FM 154/SH 95 Intersection and water line to interchange water between the two systems.

These improvements will provide resiliency and redundancy to help multiple water systems in Fayette County help each other during hurricanes, tropical storms and other disasters.

This project will enhance the City of La Grange's current GLO CDBG DR Project to help the City's internal water distribution efforts by being able to transport water to the City's St. Marks EST & Upper Pressure Plane.

Provide a Project Summary - Summary must identify each Activity and Site required for successful mitigation, and identify the risk being mitigated.

The overall project will consist of four booster water plants and water distribution lines to connect the following water systems: Fayette WSC West, City of La Grange, Fayette WSC East, City of Fayetteville, Ellinger Sewer and Water Corporation and the City of Flatonia. Lack of an adequate water supply during disasters and providing a shared, resilient county wide water sharing system are the risks being mitigated.

October 2020

BUDGET TABLE:

Project Title:	Total Benes	LMI Benes	LMI %	CDBG-DR Construction	CDBG-DR Engineering	CDBG-DR Acquisition	CDBG-DR Environmental	CDBG-DR Admin	Total CDBG-DR Request	Other Funds	Activity Total	+
Water Project -Fayette County	5,367	2,741	51.07%	15,268,170	\$2,962,105.5	\$4,479,200.0	\$30,000.00	\$1,786,758.0	24,526,233.5	\$245,262.00	24,771,495.5	X
SUMMARY TOTALS:	5,367	2,741	51.07%	15,268,170	\$2,962,105.5	\$4,479,200.0	\$30,000.00	\$1,786,758.0	24,526,233.5	\$245,262.00	24,771,495.5	

Beneficiary Identification Method(s) Per Project:

Project Title: Water Project - Fayette County

HUD National Objective: Benefiting low- and moderate- (L/M) income persons

Select One Benefit Type: City-wide Benefit County-wide Benefit Area Benefit Direct Benefit

Select Beneficiary Identification Method:

SURVEY: An approved TxCDBG survey was used to identify the beneficiaries for this activity.

How many families surveyed will be assisted by this activity?

When was the survey started?

When was the survey completed?

How many housing units surveyed will be assisted by this activity?

Provide a detailed explanation of the reason a survey was used to identify the beneficiaries for this activity as opposed to using the applicable HUD LMISD information. A response such as " ...to reach the required low-and-moderate income percentage" is not acceptable.

HUD LMISD information was used to identify the beneficiaries for this activity.

The required Census or Texas State Data Center map has been provided.

Provide the number of beneficiaries identified through each of the following methods for this activity:

TxCDBG Survey: 0 HUD LMISD: 5,367 Area Benefit: 0 Housing Activity: 0 Limited Clientele: 0

Race	# Non-Hispanic Beneficiaries	# Hispanic Beneficiaries	Total Activity Beneficiaries	+
White	3,837	1,007	4,844	X
Black African American	341	0	341	X

American Indian/Alaskan native	3	0	3	X
Asian	25	0	25	X
Native Hawaiian / Other Pacific Islander	0	0	0	X
Black African American/White	9	2	11	X
American Indian/Alaskan Native/White	17	4	21	X
American Indian/Alaskan Native/Black African A	1	0	1	X
Other Multi-Racial	18	103	121	X
	4,251	1,116	5,367	
Gender	Total Males	Total Females	Total Benes	
	2645	2722	5367	

REQUIRED - Census Geographic Area Data
Identify the census tract and block group(s) in which the project will take place

Census Tract (6-digit): 9703.00

01	02	03	04	05	06	07	08	09	10
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

County Code: 149

[Click here to ADD ANOTHER Table 1](#) [Click here to REMOVE the last Table 1](#)

Fayette County GLO CDBG MIT
 Cost Estimate - October 2020
 BEFCO Job No. 20-7687

PART 1 - Water Line from Ted Harbers at West Point to Office Booster Plant

Item	Quantity	Unit	Description	Unit Price	Total Price
1	24,480	LF	12" PVC, C-900 DR-18	\$55.00	\$1,346,400
2	3,420	LF	12" Certa-LOK PVC, C-900 DR-18	\$80.00	\$273,600
3	19	EA	12" Gate Valves	\$4,000.00	\$76,000
4	17	EA	6" & Smaller Gate Valves	\$2,750.00	\$46,750
5	1,805	LF	12" UnCased Bores for Driveways & Trees	\$120.00	\$216,600
6	1,620	LF	18" Cased Bores for CRs/Business Dwys	\$270.00	\$437,400
7	60	LF	18" Casing by Open Cut for Pipelines	\$150.00	\$9,000
8	26	EA	Short Meter Connections	\$1,400.00	\$36,400
9	1	EA	Tie-In to Ex. 12" Water Line	\$4,000.00	\$4,000
10	13	EA	Tie-In to Ex. 6" & Smaller Water Lines	\$2,250.00	\$29,250
11	1	LS	Tie-In to Office BP w/ Fill Control Valve	\$40,000.00	\$40,000
12	5,700	LF	Brush Clearing	\$5.00	\$28,500
13	418,500	SF	15-ft Easement Acquisition	\$3.00	\$1,255,500
				Construction Subtotal	\$3,799,400

NOTE : All meters on opposite side of SH 71 from Main Line are served by small lines, not meter crossings.

PART 1 - New Booster Plant at/near FWSC Office

Item	Quantity	Unit	Description	Unit Price	Total Price
1	Lump Sum		Intruder-Proof Fencing	\$27,500	\$27,500
2	Lump Sum		Yard Piping with Fill Control Valve	\$150,000	\$150,000
3	Lump Sum		Plant Building	\$140,000	\$140,000
4	Lump Sum		Booster Pumps with VFD Drives	\$140,000	\$140,000
5	Lump Sum		Pressure Tank	\$125,000	\$125,000
6	Lump Sum		Electrical	\$140,000	\$140,000
7	Lump Sum		SCADA	\$45,000	\$45,000
8	Lump Sum		200,000-Gallon Ground Storage Tank	\$200,000	\$200,000
9	Lump Sum		Tank Mixer	\$30,000	\$30,000
10	Lump Sum		Generator	\$175,000	\$175,000
11	Lump Sum		Chlorination Equipment	\$22,500	\$22,500
				Construction Subtotal	\$1,195,000

PART 1 - Water Line from the Fayette WSC Office Booster Plant to FM 2145 Booster Plant

Item	Quantity	Unit	Description	Unit Price	Total Price
1	23,460	LF	12" PVC, C-900 DR-18	\$55.00	\$1,290,300
2	1,420	LF	12" Certa-LOK PVC, C-900 DR-18	\$80.00	\$113,600
3	10	EA	12" Gate Valves	\$4,000.00	\$40,000
4	2	EA	6" & Smaller Gate Valves	\$2,750.00	\$5,500
5	880	LF	12" UnCased Bores for Driveways & Trees	\$120.00	\$105,600
6	940	LF	18" Cased Bores for CRs & Businesses	\$270.00	\$253,800
7	160	LF	18" Cased Dry Bore under RR Tracks/OPH	\$400.00	\$64,000
8	360	LF	18" Casing by Open Cut for Pipelines	\$150.00	\$54,000
9	1,200	LF	16" HDPE Cased Bore Under River	\$350.00	\$420,000
10	1	EA	Tie-In to Ex. 12" Water Line	\$4,000.00	\$4,000
11	1	LS	Tie-In to FM 2145 BP w/ Fill Cont Vlv	\$45,000.00	\$45,000
12	4,100	LF	Brush Clearing	\$5.00	\$20,500
13	298,200	SF	15-ft Easement Acquisition near La Grange	\$4.00	\$1,192,800
14	1	Lump Sum	Railroad Permit & RR Const Observation	\$35,000.00	\$35,000
				Construction Subtotal	\$3,644,100

NOTE : 0 Long & Short Meters on this stretch.

PART 1 - Water Line from the FM 2145 Booster Plant to City of La Grange St. Mark's Elevated Storage Tank

Item	Quantity	Unit	Description	Unit Price	Total Price
1	4,480	LF	12" PVC, C-900 DR-18	\$55.00	\$246,400
2	520	LF	12" Certa-LOK PVC, C-900 DR-18	\$80.00	\$41,600
3	5	EA	12" Gate Valves	\$4,000.00	\$20,000
4	120	LF	12" UnCased Bores	\$120.00	\$14,400
5	180	LF	18" Cased Bores	\$270.00	\$48,600
6	300	LF	18" Casing by Open Cut	\$150.00	\$45,000
7	2	EA	Meter Connections	\$1,400.00	\$2,800
8	1	EA	Tie-In to Ex. 6" Water Line	\$2,250.00	\$2,250
9	1	LS	Tie-In to Ex. City of LG EST WL with Fill Cont Vlv	\$45,000.00	\$45,000
10	3,300	LF	Brush Clearing	\$5.00	\$16,500
11	75,000	SF	15-ft Easement Acquisition near La Grange	\$4.00	\$300,000
				Construction Subtotal	\$782,550

PART 1 - New Booster Plant at/near FM 2145/Von Minden Intersection

Item	Quantity	Unit	Description	Unit Price	Total Price
1	Lump Sum		Property Acquisition	\$25,000	\$25,000
2	Lump Sum		Intruder-Proof Fencing	\$27,500	\$27,500
3	Lump Sum		Yard Piping with Fill Control Valve	\$150,000	\$150,000
4	Lump Sum		Plant Building	\$140,000	\$140,000
5	Lump Sum		Booster Pumps with VFD Drives	\$140,000	\$140,000
6	Lump Sum		Pressure Tank	\$125,000	\$125,000
7	Lump Sum		Electrical	\$140,000	\$140,000
8	Lump Sum		SCADA	\$45,000	\$45,000
9	Lump Sum		300,000-Gallon Ground Storage Tank	\$225,000	\$225,000
10	Lump Sum		Tank Mixer	\$30,000	\$30,000
11	Lump Sum		Generator	\$150,000	\$150,000
12	Lump Sum		Chlorination Equipment	\$22,500	\$22,500
				Construction Subtotal	\$1,220,000

PART 1 - 12" Water Line from SH 71 Bypass to City of La Grange Station B

Item	Quantity	Unit	Description	Unit Price	Total Price
1	3,000	LF	12" PVC, C-900 DR-18	\$55.00	\$165,000
2	540	LF	12" Certa-LOK PVC, C-900 DR-18	\$80.00	\$43,200
3	2	EA	12" Gate Valves	\$4,000.00	\$8,000
4	520	LF	18" Cased Bores	\$270.00	\$140,400
5	1	LS	Tie-In to City of LG Sta B w/ Fill Cont Vlv	\$45,000.00	\$45,000
6	53,100	SF	15-ft Easement Acquisition near La Grange	\$4.00	\$212,400
				Construction Subtotal	\$614,000

PART 2 - Water Line Improvements to Extend Water from Fayette WSC East System to Ellinger

1	38470	LF	8" PVC BY OPEN CUT	\$30.00	\$1,154,100.00
			8" PVC YELLOMINE WITH 12" STEEL		
2	310	LF	CASING BY WET BORE (TXDOT)	\$230.00	\$71,300.00
			8 PVC YELLOMINE WITH 12" STEEL CASING		
3	125	LF	BY DRY BORE (RAILROAD)	\$300.00	\$37,500.00
			8" UNCASSED BORES & 8" PVC YELLOMINE		
4	5095	LF	FOR TREES, DRIVEWAYS, STREETS, ETC.	\$120.00	\$611,400.00
			GRAVEL REPAIRS-FAYETTEVILLE STREETS +		
5	410	LF	DWYS ALONG SCHUMACHER	\$15.00	\$6,150.00
			SCHUMACHER ROAD CREEK		
6	LUMP SUM		CROSSINGS		\$15,000.00
			FAYETTE WSC/FAYETTEVILLE TIE-IN		
7	2	EA	INCLUDING METERS/VAULTS	\$35,000.00	\$70,000.00
8	LUMP SUM		ELLINGER WATER PLANT TIE-IN		\$20,000.00
9	10	EA	8" GATE VALVE & BOX	\$2,500.00	\$25,000.00
10	38470	LF	TRENCH SAFETY	\$1.00	\$38,470.00
11	50	EA	TRACER WIRE RISERS	\$250.00	\$12,500.00
12	10	EA	CONCRETE VALVE PADS	\$500.00	\$5,000.00
13	20	EA	SAMPLING/AIR BLEEDING TAPS	\$750.00	\$15,000.00
14	7000	LF	BRUSH CLEARING	\$5.00	\$35,000.00
15	1	LS	RAILROAD PERMIT & ONE-WEEK OF RI	\$35,000.00	\$35,000.00
16	660,000	SF	15-ft Easement Acquisition	\$3.00	\$1,980,000

PART 2 - Water Plant Improvements at Fayette WSC East System/Fayetteville/Ellinger "Take" Point

17	1	LS	Property Acquisition	\$25,000	\$25,000
18	1	LS	Intruder-Proof Fencing	\$27,500	\$27,500
19	1	LS	Yard Piping with Fill Control Valve	\$150,000	\$150,000
20	1	LS	Plant Building	\$140,000	\$140,000
21	1	LS	Booster Pumps with VFD Drives	\$140,000	\$140,000
22	1	LS	Pressure Tank	\$125,000	\$125,000
23	1	LS	Electrical	\$140,000	\$140,000
24	1	LS	SCADA	\$45,000	\$45,000
25	1	LS	300,000-Gallon Ground Storage Tank	\$225,000	\$225,000
26	1	LS	Tank Mixer	\$30,000	\$30,000
27	1	LS	Generator	\$150,000	\$150,000
28	1	LS	Chlorination Equipment	\$22,500	\$22,500

Water Construction Subtotal \$5,351,420.00

PART 3 - New Flatonia North Booster Plant

Item	Quantity	Unit	Description	Unit Price	Total Price
1	Lump Sum		Property Acquisition	\$25,000	\$25,000
2	Lump Sum		Intruder-Proof Fencing	\$27,500	\$27,500
3	Lump Sum		Yard Piping with Fill Control Valve	\$150,000	\$150,000
4	Lump Sum		Plant Building	\$140,000	\$140,000
5	Lump Sum		Booster Pumps with VFD Drives	\$140,000	\$140,000
6	Lump Sum		Pressure Tank	\$125,000	\$125,000
7	Lump Sum		Electrical	\$140,000	\$140,000
8	Lump Sum		SCADA	\$45,000	\$45,000
9	Lump Sum		300,000-Gallon Ground Storage Tank	\$225,000	\$225,000
10	Lump Sum		Tank Mixer	\$30,000	\$30,000
11	Lump Sum		Generator	\$150,000	\$150,000
12	Lump Sum		Chlorination Equipment	\$22,500	\$22,500
Construction Subtotal					\$1,220,000

PART 3 - Water Line from the Flatonia North Booster Plant to City of Flatonia's Existing 8" Water Line

Item	Quantity	Unit	Description	Unit Price	Total Price
1	6,960	LF	12" PVC, C-900 DR-18	\$55.00	\$382,800
2	3,340	LF	12" Certa-LOK PVC, C-900 DR-18	\$80.00	\$267,200
3	8	EA	12" Gate Valves	\$4,000.00	\$32,000
4	3	EA	8" & Smaller Gate Valves	\$3,500.00	\$10,500
5	22	EA	Fire Hydrant Assembly	\$6,000.00	\$132,000
6	1,590	LF	12" UnCased Bores for Driveways & Trees	\$120.00	\$190,800
7	530	LF	18" Cased Bores for CRs & Businesses	\$270.00	\$143,100
8	100	LF	18" Cased Dry Bore under RR Tracks	\$400.00	\$40,000
9	600	LF	18" Directional Bore under Trees and 2 Creeks	\$360.00	\$216,000
10	2	EA	Tie-In to Ex. 6" & 8" Water Lines	\$4,000.00	\$8,000
11	154,500	SF	15-ft Easement Acquisition	\$3.00	\$463,500
12	1	Lump Sum	Railroad Permit & RR Const Observation	\$35,000.00	\$35,000
Construction & Acquisition Subtotal					\$1,920,900

NOTE : 0 Long & Short Meters on this stretch as there is no line along SH 95 north of Flatonia.

Construction & Acquisition Total \$19,747,370
 Engineering (15%) \$2,962,106
 Grant Administration (8%) \$1,816,758
Project Total \$24,526,234

FILED

OCT 13 2020

3:32 pm BCF

Brenda Fietsam

BRENDA FIETSAM

CO. CLERK, FAYETTE CO., TEXAS