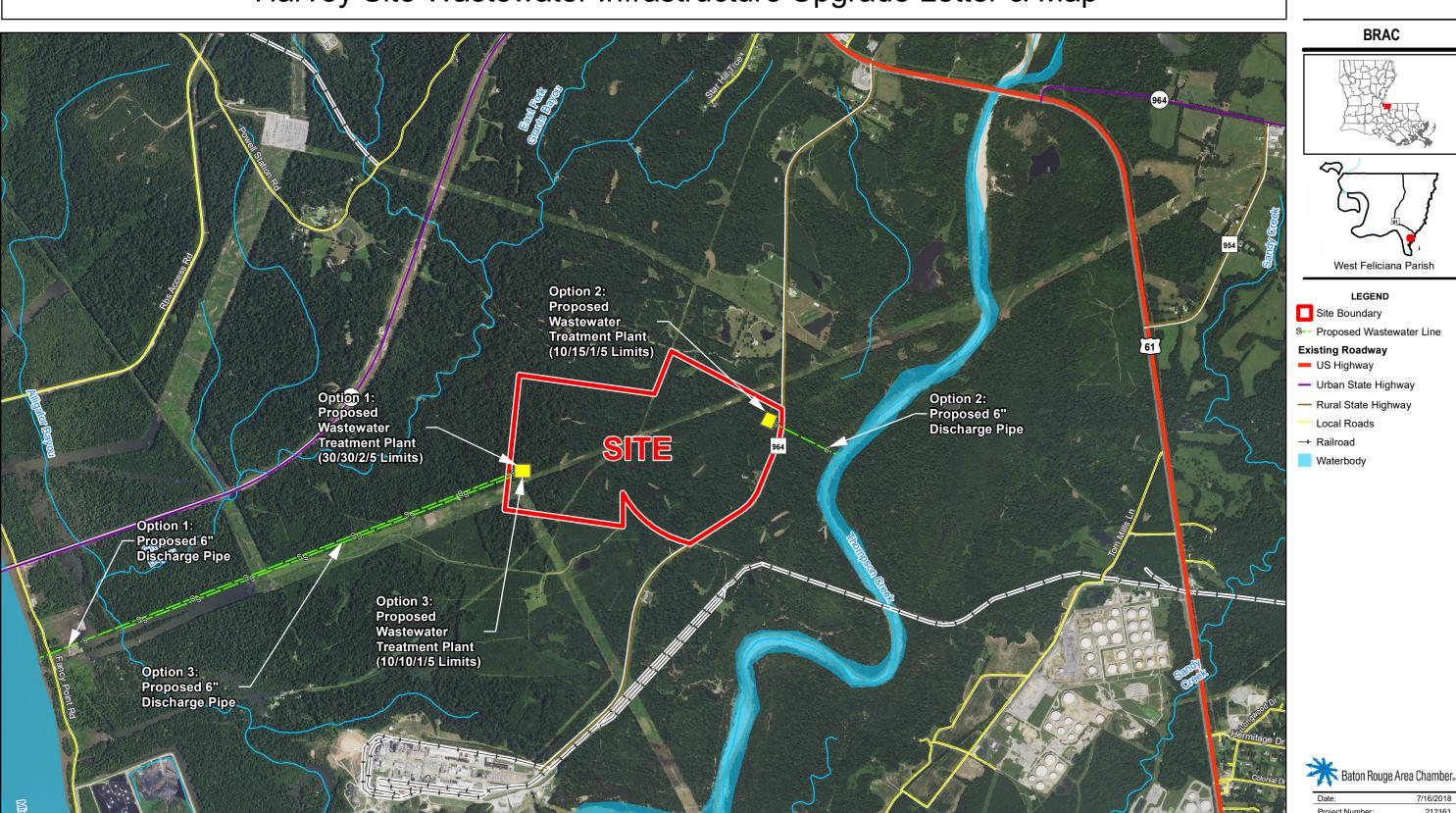
Exhibit K. Harvey Site Wastewater Infrastructure Upgrade Letter & Map





Harvey Site Wastewater Infrastructure Upgrade Letter & Map

Harvey Site West Feliciana Parish, LA



- 1. No attempt has been made by CSRS, Inc. to verify site boundary, title, actual legal ownership, deed restrictions, servitudes, easements, or other burdens on the property, other than that furnished by the client or his representative.
- 2. Transportation data from 2013 TIGER datasets via U.S. Census Bureau at ftp://ftp2.census.gov/geo/tiger/TIGER2013.

 3. Proposed wastewater upgrade shown is for representational purposes only, depicting the intent of the cost estimate provided with this exhibit to meet LED minimum requirements, and is subject to revision.

 4. 2015 aerial imagery from USDA-APFO National Agricultural Inventory Project (NAIP) and may not reflect current ground conditions.

Project Number Drawn By: DWC TMK Checked By:



Scale 1:22,700

1,100

Harvey Site Wastewater Infrastructure Upgrade Letter

CSRS IMAGINE SHAPE DELIVER CSRS, INC.

6767 Perkins Road, Suite 200 Baton Rouge, Louisiana 70808

> Phone: (225) 769-0546 Fax: (225) 767-0060

July 16, 2018

Mr. Russell Richardson Baton Rouge Area Chamber 564 Laurel Street Baton Rouge, LA 70801

Re. Harvey Site Wastewater System Cost Estimate CSRS Job No. 212161

Dear Mr. Richardson:

According our research, the Harvey Site located along Highway 964 in West Feliciana Parish, Louisiana has no existing wastewater infrastructure on site. In order to provide a wastewater treatment facility to treat 250,000 gallons per day (GPD), a wastewater treatment facility would need to be constructed on site. Three options are outlined below for discharging the pretreated wastewater.

The first option would be to construct a wastewater treatment facility on site which would discharge through a 10,240-linear foot to the Mississippi River. Expected discharge limits of BOD₅, TSS, NH₃, and Phosphorous are 30/30/2/5 mg/L, respectively. Providing service for a total capacity of 250,000 GPD would yield a peak demand of approximately 250,000 GPD with no excess capacity. The construction cost of this new wastewater treatment facility plus the cost for an effluent pump station and discharge line to the Mississippi River is estimated to be \$2,025,000.

The second option would be to construct a wastewater treatment facility on site which would discharge through a 1,370-linear foot to Thompson Creek. Expected discharge limits of BOD₅, TSS, NH₃, and Phosphorous are 10/15/1/5 mg/L, respectively. Providing service for a total capacity of 250,000 GPD would yield a peak demand of approximately 250,000 GPD with no excess capacity. The construction cost of this new wastewater treatment facility plus and discharge line is estimated to be \$1,350,000.

The third option would be to construct a wastewater treatment facility on site which would discharge to Alligator Bayou. Before the individual industry discharges to the proposed treatment facility, pretreatment requirements must be determined by Louisiana Department of Environmental Quality. After treatment at the wastewater treatment facility, treated wastewater then may be discharged to Alligator Bayou via an 8,570-linear foot wastewater line constructed from the proposed treatment facility. Expected discharge limits of BOD₅, TSS, NH₃, and Phosphorous are 10/10/1/5 mg/L, respectively. Providing service for a total capacity of 250,000 GPD would yield a peak demand of approximately 250,000 GPD with no excess capacity. The construction cost of this new wastewater treatment facility and discharge line is estimated to be \$1,800,000.



6767 Perkins Road, Suite 200 Baton Rouge, Louisiana 70808

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Please note that these estimates do not include engineering, rights of way acquisition, environmental impacts and permitting or operation and maintenance costs. This cost estimates were prepared with the best information available at the time of certification. The actual costs can vary based on the availability of material, site conditions and labor availability. These plans can be executed within a reasonable timetable of 180 days based on preliminary engineering judgment. Thank you for the opportunity to assist you in this project. Should you have any questions or require additional information, feel free to contact me.

Sincerely,

CSRS. Inc.

Taylor M. Gravois, PE, PLS



Harvey Site Wastewater Cost Estimate Job No. 212161

	Rough Order of Magnitude Cost Estimate - Option 1: Discharge to Mississppi River						
Item No.	Description	Unit	Est. Quantity	Unit Price		Extension	
1	250,000 gpd Advanced Secondary Wastewater Treatment Plant (30/30/2/5 Limits)	L.S.	1	\$	1,050,000.00	\$	1,050,000.00
2	175 gpm Duplex Effluent Pump Station	Each	1	\$	75,000.00	\$	75,000.00
3	6" C900 PVC Effluent Force Main	L.F.	10,240	\$	37.50	\$	384,000.00
4	6" DR11 HDPE Effluent Force Main (Jack &Bore) Under Alligator Bayou	L.F.	45	\$	125.00	\$	5,625.00
5	Ductile Iron Fittings	Tons	11	\$	8,850.00	\$	97,350.00
6	Air Release Valve	Each	11	\$	5,000.00	\$	55,000.00
			Subtotal:		\$	1,666,975.00	
			20% Contingency 1:			x 1.	20
Rough Order of Magnitude (ROM):						\$	2,025,000.00

Rough Order of Magnitude Cost Estimate - Option 2: Discharge to Thompson Creek								
Item No.	Description	Unit	Est. Quantity	Un	it Price	Ext	Extension	
1	250,000 gpd Average Daily Flow		4	۲	050 000 00	د	050 000 00	
1	Wastewater Treatment Plant (10/15/1/5 Limits) ₄	L.S.	1	\$	950,000.00	\$	950,000.00	
2	175 gpm Duplex Effluent Pump Station	Each	1	\$	75,000.00	\$	75,000.00	
3	6" C900 PVC Effluent Force Main	L.F.	1,370	\$	37.50	\$	51,375.00	
4	Air Release Valve	Each	2	\$	5,000.00	\$	10,000.00	
5	Ductile Iron Fittings	Tons	2	\$	8,850.00	\$	17,700.00	
6	6" DR11 HDPE Effluent Force Main (Jack & Bore)	L.F.	150	\$	125.00	\$	18,750.00	
					Subtotal:	\$	1,122,825.00	
			2	20% Contingency 1:			x 1.20	
	Rough Order of Magnitude (ROM):						1,350,000.00	

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Rough Order of Magnitude Cost Estimate - Option 3: Discharge to Alligator Bayou							
Item No.	Description	Unit	Est. Quantity	Unit Price		Extension	
1	250,000 gpd Average Daily Flow Wastewater Treatment Plant (10/15/1/5 Limits) ₄	L.S.	1	\$	950,000.00	\$	950,000.00
2	175 gpm Duplex Effluent Pump Station	Each	1	\$	75,000.00	\$	75,000.00
3	6" C900 PVC Effluent Force Main	L.F.	8,570	\$	37.50	\$	321,375.00
4	Air Release Valve	Each	9	\$	5,000.00	\$	45,000.00
5	Ductile Iron Fittings	Tons	9	\$	8,850.00	\$	79,650.00
				Subtotal:		\$	1,471,025.00
			20% Contingency 1:			x 1	20
Rough Order of Magnitude (ROM):						Ś	1.775.000.00

Footnotes:

- 1.) Does not include costs for engineering, permitting, or general project management.
- 2.) This cost estimate was prepared with the best information available at the time of certification.
- 3.) Actual costs can vary based on availability of material, site conditions, and labor.
- 4.) Wastewater Treatment Plant capacity based on LED required capacity of 250,000 gpd

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