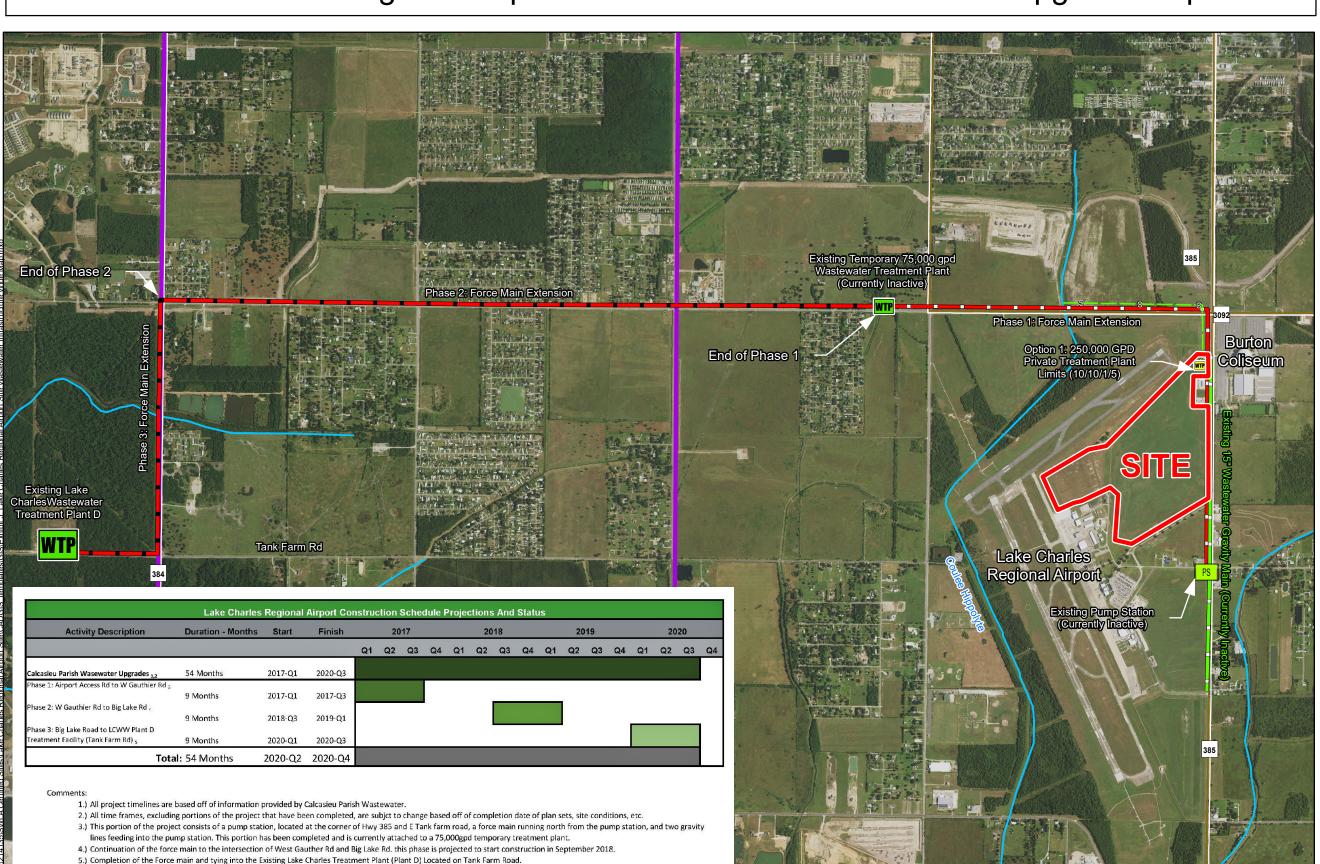
Exhibit K. Lake Charles Regional Airport Site Wastewater Infrastructure Upgrade Letter & Map





Lake Charles Regional Airport Site Wastewater Infrastructure Upgrade Map



Proposed Wastewater Upgrade Lake Charles Regional Airport Site Calcasieu Parish, LA

SWLA





Calcasieu Parish

LEGEND

- Site Boundary
- Option 1: Proposed Wastewater
 Treatment Plant
- Option 1: Proposed 6"
 Wastewater line
- **WTP** Existing Wastewater Treatment
- PS Existing Lift Station
- Existing 30" Force Main (Currently Inactive)
- Existing 15" Wastewater Gravity Main (Currently Inactive)
- Future Force Main

Existing Roadway

- 4-Lane State Highway
- Rural State Highway
- Local Roads
- Stream

Scale 1:24,000

2,500

1,250

ALLIANCE

Date:	7/18/2018
Project Number:	214135
Drawn By:	AMB
Checked By:	JAY



General Notes

- 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

Lake Charles Regional Airport Site Wastewater Upgrade Letter



CSRS, INC. 6767 Perkins Road, Suite 200 Baton Rouge, Louisiana 70808

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

July 18, 2018

Gus Fontenot SWLA Economic Development Alliance 4310 Ryan Street Lake Charles, Louisiana 70605

Re. Lake Charles Regional Airport Site Wastewater System Cost Estimate CSRS Job No. 214135

Dear Mr. Fontenot:

According to our research, the Lake Charles Regional Airport Site located in Calcasieu Parish, Louisiana has no available wastewater infrastructure on site. CSRS contacted both the Lake Charles Wastewater Department and Calcasieu Parish Wastewater Department to determine if it would be feasible to obtain city/parish treatment options on our site. It was determined that in order to provide immediate wastewater treatment capabilities to treat 250,000 gallons per day (GPD), a wastewater treatment facility would need to be constructed on site discharging to the Coulee Hippolyte Canal north of the site. If tying into the city/parish treatment system is the desired option, delaying construction or temporary on-site treatment may be needed.

The first option to provide wastewater treatment on site is to construct a wastewater treatment facility on the northeastern portion of the property. The proposed treatment plant will discharge to the Coulee Hippolyte Canal. Expected discharge limits of BOD5, TSS, NH3, and Phosphorous will be 10/15/1/5 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 of this new wastewater treatment facility plus the cost for an effluent pump station and discharge line to the Coulee Hippolyte is estimated to be \$1,450,000.

The second option is to tie into the gravity line located along the eastern boundary of the site. Currently this line is in the process of being routed to a 75,000 GPD temporary treatment plant until the completion of the remaining portion of the force main. This line is part of a Calcasieu Parish sewer system upgrade that will eventually outfall to the City of Lake Charles Treatment Plant D located on Tank Farm Road. The entire project's estimated completion date is quarter 3 of 2020. Until completion of the project, a limited amount of capacity will be available to the site.

Please note that these estimates do not include engineering, rights of way acquisition, environmental impacts and permitting or operation and maintenance costs. This cost estimate was 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. Both plans can be executed within a reasonable timetable of 6 months based on preliminary engineering judgment.



6767 Perkins Road, Suite 200 Baton Rouge, Louisiana 70808

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

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. TAYLOR M. GRAVOIS
REG. No. 33928
REGISTERED
PROFESSIONAL ENGINEER
IN
ENGINEER

Sincerely,

CSRS, Inc.

Taylor M. Gravois, PE, PLS

WWW.CSRSONLINE.COM



Lake Charles Ragional Airport Site Wastewater Cost Estimate Job No. 214135

Option 1: Rough Order of Magnitude Cost Estimate								
Item No.	Description	Unit	Est. Quantity	Un	it Price	Exte	ension	
1	250,000 gpd Wastewater Treatment Plant (10/15/1/5 Limits) with influent Pump Station ₄	L.S.	1	\$	1,000,000.00	\$	1,000,000.00	
3	6" C900 PVC Effluent Force Main	L.F.	4,020	\$	37.50	\$	150,750.00	
4	6" DR11 HDPE Effluent Force Main (J&B)	L.F.	80	\$	125.00	\$	10,000.00	
5	Ductile Iron Fittings	Tons	4	\$	8,850.00	\$	35,400.00	
				Subtotal:		\$	1,196,150.00	
			20% Contingency 1:		x 1.20			
Rough Order of Magnitude (ROM):						\$	1,450,000.00	

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

DIVISION 2. - USE OF PUBLIC AND PRIVATE SEWERS AND DRAINS [3]

Footnotes:

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Editor's note— Ord. No. 9414, § 1, adopted Aug. 21, 1991, amended Art. II, Div. 2 of Chapter 21 to read as herein set out in §§ 21-71—21-78. Prior to inclusion of said ordinance, Art. II, Div. 2, §§ 21-71—21-78 pertained to similar subject matter and derived from Ord. No. 4992, §§ 1—8, adopted Feb. 16, 1972; Ord. No. 7174, §§ 1, 2, adopted Jan. 6, 1982; Ord. No. 8742, § 1, adopted Sept. 21, 1988; Ord. No. 9194, § 1, adopted Nov. 7, 1990; Ord. No. 9234, § 1, adopted Dec. 19, 1990.

Charter reference— Public works department, director, § 4-12 et seq.

Cross reference— Building, construction and occupancy codes and regulations, Ch. 6; plumbing code, § 7-176 et seq.; plumbing inspection, § 6-186 et seq.

Sec. 21-71. - Definitions.

The following words, terms and phrases are hereby defined and shall be interpreted as such throughout this chapter. Terms not herein defined shall have the meaning customarily assigned to them.

Act or "the Act" means the Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. 1251 et seq.

Approving authority or approval authority means the regional administrator of the Environmental Protection Agency (EPA) while the "control authority" means the director of public works of the city or his duly authorized deputy, agent or representative.

Authorized or duly authorized representative of the user means:

- (1) If the user is a corporation:
 - (a) The president, secretary, treasurer, or a vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decisionmaking functions for the corporation; or
 - (b) The manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; can ensure that the necessary systems are established or actions taken to gather complete and accurate information for individual wastewater discharge permit requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- (2) If the user is a partnership or sole proprietorship, a general partner or proprietor, respectively.
- (3) If the user is a federal, state, or local governmental facility: a director or highest official appointed or designated to oversee the operation and performance of the activities of the government facility, or their designee.
- (4) The individuals described in paragraphs (1) through (3), above, may designate a duly authorized representative if the authorization is in writing, the authorization specifies the individual or position responsible for the overall operation of the facility from which the discharge originates or having overall responsibility for environmental matters for the company, and the written authorization is submitted to the city.

provisions or permits issued thereunder, or any more stringent State or local regulations: section 405 of the Act; the Solid Waste Disposal Act, including Title II commonly referred to as the Resource Conservation and Recovery Act (RCRA); any state regulations contained in any state sludge management plan prepared pursuant to Subtitle D of the Solid Waste Disposal Act; the Clean Air Act; the Toxic Substances Control Act; and the Marine Protection, Research, and Sanctuaries Act.

Letter of intent shall mean notification from an industrial user to the city of that user's intent to utilize a publicly owned treatment facility for a given period of time.

Local limit means specific discharge limits developed and enforced by the city upon industrial or commercial facilities to implement the general and specific discharge prohibitions listed in 40 CFR 403.5(a)(1) and (b).

Mass loading shall mean the total mass of any given pollutant discharged to the city's collection system over a specified period of time (i.e., pounds per day). Mass loading in pounds per day shall be determined as follows:

Mass Loading = Concentration \times Flow \times 8.34 \times 10-6 where:

- (1) Mass loading is in pounds per day;
- (2) Concentration is the arithmetic mean of all analyses performed for the specified pollutant parameter over the 24-hour day (midnight to midnight) for which mass loading is to be determined. Concentration is in milligrams per liter (mg/l);
- (3) Flow is the total number of gallons of wastewater containing the pollutant parameter for which mass loading is to be determined that have been discharged to the city's collection system over the 24-hour day (midnight to midnight) for which mass loading is to be determined.

Medical waste means isolation wastes, infectious agents, human blood and blood products, pathological wastes, sharps, body parts, contaminated bedding, surgical wastes, potentially contaminated laboratory wastes, and dialysis wastes.

Minor industrial users shall mean an industrial user not classified as a significant industrial user.

National Categorical Pretreatment Standard or pretreatment standard shall mean any regulation containing pollutant discharge limits promulgated by the EPA in accordance with Section 307(b) and (c) of the Act (33 U.S.C. 1317) which applies to a specific category of industrial users.

Monthly average means the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

Monthly average limit means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

National Prohibitive Discharge Standard or prohibitive discharge standard shall mean any regulation developed under the authority of Section 307(b) of the Act and the General Pretreatment Regulations (40 CFR 403.5).

Natural outlet shall mean any outlet, including storm sewers and combined sewer overflows, into a watercourse, pond, ditch, lake or other body of surface or groundwater.

New source shall mean any building, structure, facility or installation from which there is or may be a discharge of pollutants, the construction of which commenced after the publication of proposed pretreatment standards under Section 307(c) of the Act which will be applicable to such source if such standards are thereafter promulgated in accordance with that section, provided that: (1) The building, structure, facility or installation is constructed at a site at which no other source is located; or (2) the building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or (3) the production or wastewater generating processes of the building, structure, facility or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the

Wastewater facilities (see Sewage works).

Wastewater treatment plant (see Sewage treatment plant).

Watercourse shall mean a natural or artificial channel for the passage of water either continuously or intermittently.

(Ord. No. 9414, § 1, 8-21-91; Ord. No. 9439, § 2, 9-18-91; Ord. No. 12063, § 1, 1-3-01; Ord. No. 13366, § 1, 5-4-05; Ord. No. 13931, § § 1, 2, 10-4-06; Ord. No. 15522, § 2, 8-4-10)

Sec. 21-72. - Required use of public sewers.

- (a) Unsanitary deposits. It is unlawful for any person to cause to be deposited in an unsanitary manner, upon public or private property, any human or animal excrement, garbage, or other objectionable waste matter.
- (b) Discharge to natural outlets. It is unlawful to discharge to any natural outlet any sewage or other polluted liquid or solid except where such discharge is from sewage treatment facilities constructed in accordance with this division and in a manner approved by the Louisiana State Board of Health.
- (c) Construction, maintenance of privies, septic tanks, etc. Except as hereinafter provided, it is unlawful to construct or maintain any privy, privy vault, septic tank, cesspool, or other facility intended or used for the treatment or disposal of sewage.
- (d) Mandatory connection to public sewer. Within 90 days of receipt of notice from the plumbing inspector that a public sanitary sewer is accessible to a house or building used for human occupancy, employment, or recreation, the owner shall, at his own expense, install suitable toilet facilities therein and shall connect the facilities by means of a building drain and a building sewer to the said accessible public sanitary sewer.

(Ord. No. 9414, § 1, 8-21-91)

Sec. 21-73. - Private sewage disposal.

- (a) Unavailability of public sewer. Where a public sanitary sewer is not available under the provisions of section 21-72(d), the building sewer shall be connected to a private sewage disposal system complying with the provisions of this section.
- (b) Permit—Required. Before commencement of construction of a private sewage disposal system the owner shall obtain a written permit signed by an official of the board of health after first obtaining approval by the Calcasieu Parish Health Officer.
- (c) Same—When effective; inspections; notification of readiness for inspection. A permit for a private sewage disposal system shall not become completely effective until the installation has been completed to the satisfaction of the board of health, and the Calcasieu Parish Health Officer. They shall be allowed to inspect the work at any stage of construction, and in any event the applicant for the permit shall notify the health department when the work is ready for final inspection and before any underground portions are covered. The inspection shall be made within 48 hours of the receipt of notice by the board of health, Saturdays, Sundays and holidays excepted.
- (d) Type, capacity, location and layout. The type, capacities, location and layout of a private sewage disposal system shall comply with all regulations of the Louisiana State Board of Health, Sanitary Code of State of Louisiana, Chapter X-A, Plumbing.
- (e) Connection required when public sewer available. At such times as a public sewer becomes available to a property served by a private sewage disposal system, as provided in section 21-72(d), a direct connection shall be made to the public sewer in compliance with this division; and any septic

- tanks, cesspools and similar private sewage disposal facilities shall be abandoned and filled with suitable material.
- (f) Operation, maintenance generally. The owner shall operate and maintain the private sewage disposal facilities in a sanitary manner at all times, at no expense to the city.
- (g) Additional requirements. No statement contained in this section shall be construed to interfere with any additional requirements that may be imposed by the plumbing code of the City of Lake Charles and the Louisiana State Board of Health.

(Ord. No. 9414, § 1, 8-21-91)

Sec. 21-74. - Building sewer and connections.

- (a) Permit required. It is unlawful to uncover, make any connection with or opening into, use, alter or disturb any public sewer or appurtenance thereof without first obtaining a written permit from the plumbing inspector's department.
- (b) Classes of permits; application. There are two classes of building sewer permits:
 - (1) For residential, commercial, minor industrial and institutional service; and
 - (2) For service to establishments producing industrial wastes.

In either case, the owner or his agent, shall make application on a special form furnished by the city. The permit application shall be supplemented by any plans, specifications or other information considered pertinent in the judgment of the plumbing inspector or director of public works.

- (c) Installation cost and expense to be borne by owner. All costs and expenses incident to the installation and connection of the building sewer shall be borne by the owner. The owner shall indemnify the city from any loss or damage that may directly or indirectly be occasioned by the installation of the building sewer.
- (d) Separate building sewer required. A separate and independent building sewer shall be provided for every building except where one building stands at the rear of another on an interior lot, and no private sewer is available or can be constructed to the rear building and the whole considered as one building sewer.
- (e) Use of old building sewers. Old building sewers may be used in connection with new buildings only when they are found, on examination and test by the plumbing inspector, to meet all requirements of this division.
- (f) Materials and specifications generally. The building sewer shall be cast-iron soil pipe, ASTM specification (A74-42) or equal; vitrified clay sewer pipe, ASTM specification (C13-447) or equal; or other suitable material approved by the city plumbing code. Joints shall be tight and waterproof. Cast-iron pipe with waterproof joints may be required by the plumbing inspector where the building sewer is exposed to damage by tree roots. If installed in filled or unstable ground, the building sewer shall be of cast-iron soil pipe, except that nonmetallic material may be accepted if laid on a suitable concrete bed or cradle as approved by the plumbing inspector.
- (g) Size and slope. The size and slope of the building sewer shall be subject to the approval of the city plumbing code. In general, the building sewer shall be the same size as the service branch but in no event less than four inches in diameter. The slope of the building sewer shall in no event be less than 1/8 inch per foot for four-inch pipe.
- (h) Elevation laying of sewer; changes in direction. Whenever possible the building sewer shall be brought to the building at an elevation below the basement floor. No building sewer shall be laid parallel to and within three feet of any bearing wall which might thereby be weakened. The depth shall be sufficient to afford protection from frost. The building sewer shall be laid at uniform grade