

6767 Perkins Road, Suite 200 Baton Rouge, Louisiana 70808

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

# Exhibit J. The Lakes at Madison Park Site Wastewater Infrastructure Upgrade Letter & Map

October 5, 2015

Ms. Judy Darby Darby Holdings, LLC 810 Main Street Madisonville, LA 70447

Re. The Lakes at Madison Park Site Waste Water System Cost Estimate

CSRS Job No. 215029

Dear Ms. Darby:

According our research, the Lakes at Madison Park Site located near Vista Street in St. Tammany Parish, Louisiana has no existing wastewater infrastructure on site. An existing eight inch wastewater line is located approximately 250 feet from the site, but the capacity of the line is 25,000 gallons per day (GPD), which is below the required Louisiana Economic Development Certified Site required capacity of 250,000 GPD.

In order to provide a wastewater treatment facility to treat 250,000 GPD, a wastewater treatment facility would need to be constructed on site which would discharge to the drainage lateral canal north of the site.

Before the individual industry discharges to the proposed treatment facility, pretreatment requirements necessitate strengths less than or equal to 200 mg/L 5-day Biological Oxygen Demand (BOD) and 200 mg/L Total Suspended Solids. After treatment at the wastewater treatment facility, treated wastewater then may be discharged to the lateral drainage canal to Fox Branch via a wastewater line constructed from the proposed treatment facility. Expected discharge limits of BOD<sub>5</sub>, TSS, NH<sub>3</sub>, 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 is estimated to be \$1,250,000, which includes the cost for an effluent pump station and discharge line to the drainage canal.

An alternate method of disposing of wastewater would be to upgrade an existing sewer system to accept an additional 46,000 GPD. An existing lift station services the Palm Courts subdivision adjacent to the site and is currently designed to handle 25,000 GPD. In addition, a legal agreement between Palm Courts subdivision and Darby Holdings, LLC allows the Lakes at Madison Park Site the option to tie-in the existing sewer system and make any necessary upgrades to the system to allow adequate wastewater treatment of the Lakes at Madison Park Site. This method does not meet LED requirements but considers the size and zoning of the site. The treatment volume has been pro-rated based on available acreage of the site and considers the permitted zoning uses.

The construction cost of upgrading the sewer system to accept an additional 46,000 GPD is estimated to be \$250,000, which includes the cost of sewer line, connections, and upgrading the influent pump station.

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 180 days based on preliminary engineering judgment.



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



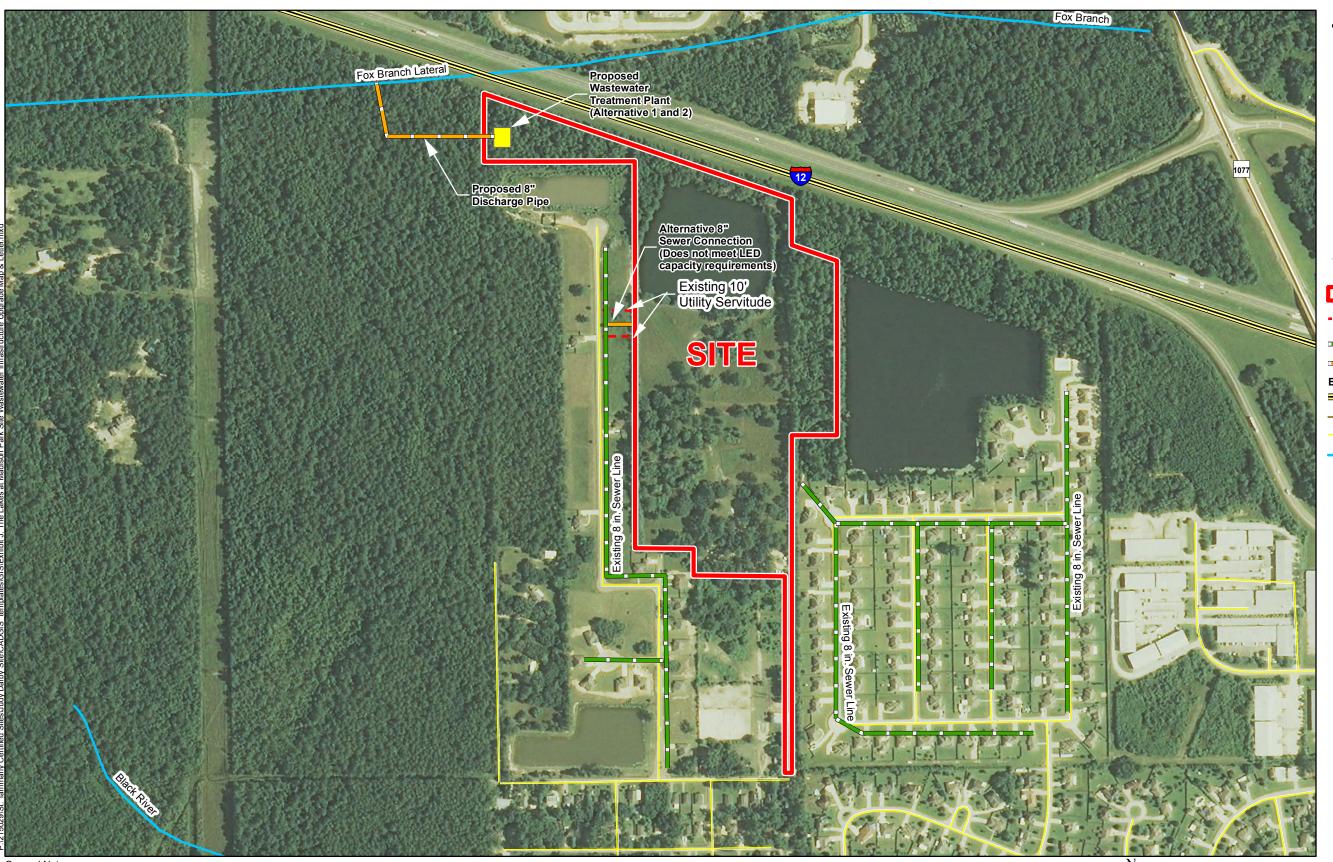
Thank you for the opportunity to assist you in this project. Should you have any questions or require additional information, feel free to contact me. TAYLOR M. GRAVOIS
REG. No. 33928
REGISTERED
PROFESSIONAL ENGINEER
IN
ENGINEER

Sincerely,

CSRS, Inc.

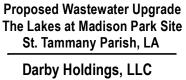
Taylor M. Gravois, PE, PLS

### Exhibit J. The Lakes at Madison Park Site Wastewater Infrastructure Upgrade Letter & Map



- 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. 2013 aerial imagery from USDA-APFO National Agricultural Inventory Project (NAIP) and may not reflect current ground conditions.







### **LEGEND**

- Site Boundary (33.548 Acres +/-)
- Existing 10' Utility Servitude (Not to Scale)
- = Existing 8 in. Sewer Line
- Proposed 8 in. Sewer Line
- **Existing Roadway**
- Interstate
- Rural State Highway
- Local Roads
- Stream



Date:	6/24/2015
Project Number:	215029
Drawn By:	AMB
Checked By:	JAY



Scale 1:5,000



# Exhibit J. The Lakes at Madison Park Site Wastewater Infrastructure Upgrade Letter & Map

The Lakes At Madison Park Site
Wastewater Rough Order of Magnitude Cost Estimate

	Rough Order of Magnitude Cost Estimate - 250,000 GPD Option							
Item No.	Description	Unit	Est. Quantity	Unit Price	Extension			
1	250,000 gpd Advanced Secondary Wastewater Treatment Plant (10/15/2/5 Limits) with influent Pump Station <sub>3</sub>	L.S.	1	\$1,000,000.00	\$1,000,000.00			
				Subtotal <sub>1</sub> :	\$1,000,000.00			
			25%	6 Contingency :	x 1.25			
	Rough Order of Magnitude (ROM) <sub>2.3</sub> :							
Rough Order of Magnitude Cost Estimate - 46,000 GPD Option								
Item No.	Description	Unit	Est. Quantity	Unit Price	Extension			
1	46,000 gpd Influent Pump Station <sub>4</sub> with sewer line and connections	L.S.	1	\$200,000.00	\$200,000.0			
				Subtotal <sub>1</sub> :	\$200,000.00			
			25%	6 Contingency :	x 1.25			

### **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. Actual costs can vary based on availability of material, site conditions, labor, final engineering design, and regulatory approvals.
- 3.) Wastewater Treatment Plant capacity based on LED required capacity of 250,000 GPD
- 4.) 46,000 GPD Influent Pump Station pro-rated based on available acreage for development and considers permitted zoning uses.

## Exhibit J. The Lakes at Madison Park Site Wastewater Infrastructure Upgrade Letter & Map

From: Tim Brown <tbrown@stpgov.org>

Subject: RE: Sewer and Water Availability / SITE CERTIFICATION

**Date:** June 11, 2015 at 10:01:19 AM CDT **To:** Judy Darby <<u>judydarby@charter.net</u>> **Cc:** Greg Gordon <<u>ggordon@stpgov.org</u>>

Ms. Darby, you are correct that we are planning to expand our wastewater treatment capacity on the north side of I-12...our W. St. Tammany Regional Wastewater Treatment Plant. We currently have a design engineer under contract to prepare the plans for the expansion. However, we do not currently have the funding to actually build the plant. I would speculate that it would be constructed within 5 years but we cannot guarantee anything. Hope this helps - Tim

Timothy G. Brown
Tammany Utilities
Department of Environmental Services
St. Tammany Parish Government
P.O. Box 628
Covington, Louisiana 70434
985-898-2535

Any e-mail may be construed as a public document, and may be subject to a public records request. The contents of this e-mail reflect the opinion of the writer, and are not necessarily the opinion or policy of St. Tammany Parish Government.

## Exhibit J. The Lakes at Madison Park Site Wastewater Infrastructure Upgrade Letter & Map

From: Tim Brown < tbrown@stpgov.org > Subject: RE: Sewer and Water Availability Date: October 2, 2015 at 9:49:51 AM CDT To: Judy Darby < judydarby@charter.net >

The reason is because the lift station was designed to handle 25,000 gpd but because the subdivision had not been built out and only had a few homes at the time, the peak flows we were seeing at the time were significantly less. The subdivision reserved the capacity for its full build out. We cannot allow your development to use capacity that the subdivision paid for.

Timothy G. Brown
Tammany Utilities
Department of Environmental Services
St. Tammany Parish Government
P.O. Box 628
Covington, Louisiana 70434
985-898-2535

Any e-mail may be construed as a public document, and may be subject to a public records request. The contents of this e-mail reflect the opinion of the writer, and are not necessarily the opinion or policy of St. Tammany Parish Government.

From: Judy Darby [mailto:judydarby@charter.net]
Sent: Tuesday, September 29, 2015 12:28 PM

**To:** Tim Brown

**Subject:** Re: Sewer and Water Availability

### Hi Tim,

The AECOM reviewer working on my application for site certification for the Dept. of Economic Development has asked for clarification on the availability of wastewater capacity. To refresh your memory the subject property is between Madison Fams and Palm Courts subdivisions, west of Hwy. 1077 and south of I-12.

• We are not sure why there is no extra wastewater capacity when a lift station with a capacity of 25,000 gpd is only processing 6,000 gpd on peak days. Please clarify. It appears that there are at least 19,000 gpd of available capacity. This may be more than sufficient for many possible prospects.

Thank you. We are in the final review now.

Judy Darby 810 Main Street Madisonville, LA 70447 <u>judydarby@charter.net</u> 985-845-1633 home 985-869-7074 cell