

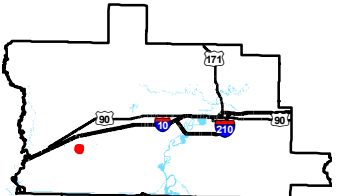
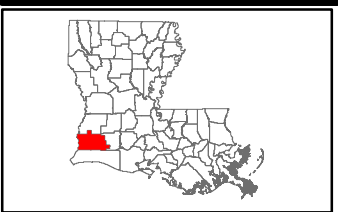
Exhibit X. Port of Vinton Site FEMA 100 Year Flood Plain Fill Letter & Map



Port of Vinton Site FEMA 100 Year Flood Plain Fill Letter & Map

Port of Vinton Site
Calcasieu Parish, LA

SWLA



Calcasieu Parish

LEGEND

- Site Boundary
- Ground Elevation Contours
- Flood Zone
 - AE (100-year with Base Flood Elevation)
 - X (area outside of 100-year)
 - Area Requiring Fill (9.5 Ac. ±)
 - Pond (3.25 Ac.±)
 - Local Roads
 - Stream

Site Details

Appx. Site Size: 156.39 Ac. ±
Area in 1% Flood Zone: 30.06 Ac. ±



Date: 10/16/2018
Project Number: 214135
Drawn By: DWC
Checked By: TMK



6767 Perkins Road Suite 200 Baton Rouge, LA 70808
Telephone: 225 769-0546 Fax: 225 767-0060
www.csrsonline.com

P:\214135\SWLA Certified Sites\Port of Vinton Site\CAD\GIS templates\GIS\Exhibit X: Port of Vinton Site FEMA 100 Year Flood Plain Fill Letter & Map.mxd

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. 2015 aerial imagery from USDA-APFO National Agricultural Inventory Project (NAIP) and may not reflect current ground conditions.
4. Effective FIRM Flood data provided by FEMA Flood Map Service Center (msc.fema.gov), FIRM panel no. 22019C0420F effective 02/18/2011.



Scale 1:7,000

0 375 750 Feet

Port of Vinton Site FEMA 100 Year Flood Plain Fill Letter



CSRS, INC.
6767 Perkins Road, Suite 200
Baton Rouge, Louisiana 70808
Phone: (225) 769-0546
Fax: (225) 767-0060

September 4, 2018

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

Re. Port of Vinton Site
CSRS Job No. 214002

Dear Mr. Fontenot:

According to the FEMA Digital Flood Insurance Rate Map (DFIRM) preliminary panel no. 22019C0420F issued February 29, 2016 and the effective panel no. 22019C0420F of Calcasieu Parish, Louisiana, effective 02/18/2011, the Port of Vinton site is located in Flood Zone "AE". The base flood elevation is 8 feet. The LiDAR contours downloaded from LSU's ATLAS site indicate that the site ranges in elevation from 6 feet to 12 feet, however, the majority of the developable property on the site is at elevation 9 feet.

In order to raise the northeast portion of the site within the flood zone to one foot above the BFE of 8 feet, approximately 6,120 cubic yards of in-place select fill will be required, thus bringing the twenty-five (25) contiguous acres to an elevation of 9 feet. The estimated construction cost to elevate the site is \$46,000-\$104,000 depending on source of fill.

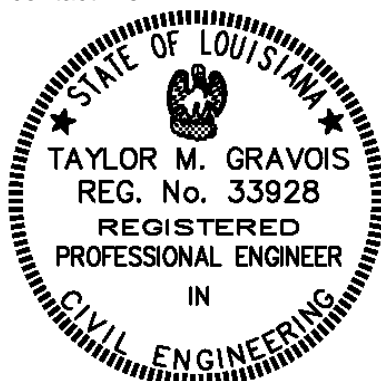
Please note this estimate does not include engineering, required rights of way, environmental impacts, or operation and maintenance costs. This cost estimate was prepared with the best information available at the time of certification. The actual costs can vary based on the availability of material, site conditions and labor availability. This plan can be executed within a reasonable timetable of 180 days or less 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



Port of Vinton Site
Fill Cost Estimate
Job No. 214135

Rough Order of Magnitude Cost Estimate					
Item No.	Description	Unit	Est. Quantity	Unit Price	Extension
1	Raising to one foot above BFE (Off Site Fill) ₄	C.Y.	6,120	\$ 14.00	\$ 85,680.00
Subtotal:					\$ 85,680.00
20% Contingency₁:					x 1.20
Rough Order of Magnitude (ROM):					\$ 104,000.00

Rough Order of Magnitude Cost Estimate					
Item No.	Description	Unit	Est. Quantity	Unit Price	Extension
1	Raising to one foot above BFE (On Site Fill) ₅	C.Y.	6,120	\$ 6.00	\$ 36,720.00
Subtotal:					\$ 36,720.00
20% Contingency₁:					x 1.20
Rough Order of Magnitude (ROM):					\$ 46,000.00

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.) Off site fill would require off site mitigation of fill per Calcasieu Parish ordinance.
- 5.) On site fill would require the creation of a 3.25 Ac.± pond for fill mitigation .