## **EXHIBIT #11**

FEMA BASE FLOOD ELEVATION



## COTHREN, GRAFF, SMOAK ENGINEERING, INC.

CIVIL & ENVIRONMENTAL & SANITARY & STRUCTURAL & MECHANICAL & ELECTRICAL

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CONSULTANT S.M. COTHREN, P.E., P.L.S.\*\*\*

\*Also licensed Engineer in AR, MS, TX \*\*Also licensed Engineer in AL, TN \*\*\*Also licensed Engineer in AR, MS

July 8, 2014

Re:

Ms. Juanita Fowler Director of Planning & Zoning City of Natchitoches Post Office Box 37 Natchitoches, Louisiana 71458-0037

> Proposed BFE South Industrial Park and Industrial Drive Site

Dear Ms. Fowler:

The Base Flood Elevation (BFE) of two industrial areas has been determined by this office and is given in our report dated February 12, 2010 (rev) and transmitted to you on February 16, 2010. FEMA has concurred with these determinations as stated in their letter to Mayor Posey on February 18, 2014. The two areas are 1.) South Industrial Park – located between LA Hwy 478 and LA Hwy 1 west of LA Hwy 1; 2.) The industrial area along Industrial Drive east of LA Hwy 1.

The Based Flood Elevations for the two areas should be as follows:

1.	South Industrial	Park	· · · · · ·	107' msl
		-		

Industrial Drive development area 109' msl

I have attached a map showing the revised BFE in the target area shaded in red and the area south of LA Hwy 1 that is unchanged shaded in orange. There is a small area just adjacent to LA Hwy 1 on the south side, shaded on the old FEMA map, that is above the revised BFE of 107' and is now not shaded.

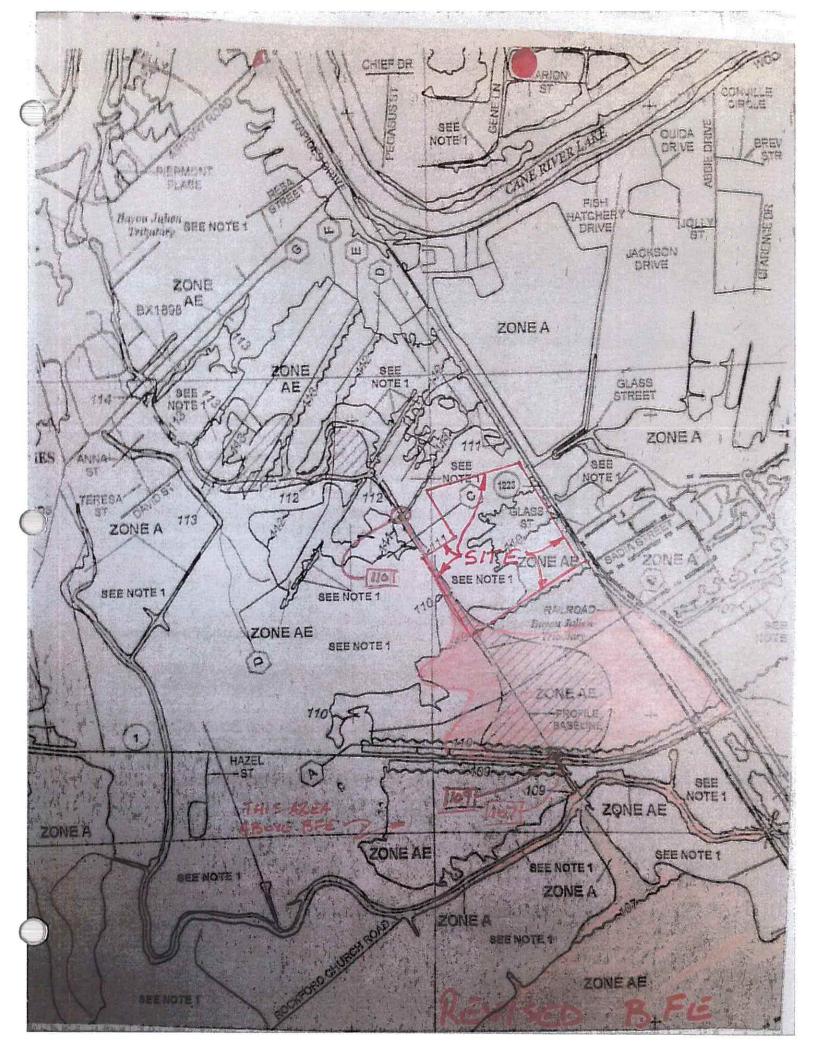
Please call if you have any questions.

Sincerely, COTHREN, GRAFF, SMOAK ENGINEERING, INC.

K. hand

K. Randal Smoak, P.E.

Natchitoches Office: 112 Horn Street Natchitoches, LA 71457 Phone (318) 354-6888 Fax (318) 354-6888





U.S. Department of Homeland Security -FEMA Region 6 Federal Regional Center 800 North Loop 288 Denton, TX 76209-3698

HHN

February 18, 2014

JAN B

The Honorable Lee Posey Mayor, City of Natchitoches 700 Second Street Natchitoches, LA 71457

RE: Appeal Resolution for City of Natchitoches, Natchitoches Parish, Loiusiana, Community No. 220131

Dear Mayor Posey:

This is in response to correspondence dated January 12, 2010, from Juanita Fowler, Floodplain Adminstrator, City of Natchitoches, appealing the proposed Base Flood Elevations (BFEs), Special Flood Hazard Area (SFHA) boundary, and regulatory floodway for Bayou Julien Tributary north of Bayou Julien 1 as presented on preliminary Flood Insurance Rate Map (FIRM) Panel 22069C0505D for the City of Natchitoches, Natchitoches Parish, Louisiana, dated May 21, 2009. This appeal was assigned case tracking number NAT\_LA\_1367 in an acknowledgment letter sent to your community on February 24, 2010.

Please note that your request is considered an appeal because it satisfied the data requirements defined in Title 44, Chapter I, Part 67 of the Code of Federal Regulations (44 CFR Part 67), and was submitted during the 90-day appeal period for the aforementioned preliminary FIRM and Flood Insurance Study (FIS) Report.

1.

The following scientific and/or technical data, prepared by Cothren, Graff, Smoak Engineering Inc. and dated February 12, 2010, were submitted in support of this request:

- An Appeal Engineering Analysis Report summarizing current conditions, errors in the preliminary FIRM's engineering analysis, and revised engineering conclusions
- Revised HEC RAS model
- Annotated FIRM map
- Two WSPRO models

We received all data necessary to resolve this appeal by September 24, 2010.

The submitted engineering data indicates that Bayou Julien appears to have been modified at Highway 1 and Relief Lateral L-4C. It was determined that the the hydrology did not change but the distribution of flows did change (149cfs to existing path, 346cfs to Relief Lateral L-4C). The resulting analysis shows a BFE of 107.4 feet at the confluence of the tributary,

The Honorable Lee Posy February 18, 2014 Page 2

which is lower than the BFE of 108.94 feet from the preliminary study. The area of Bayou Julien Tributary that changed is just downstream of modeling station 4,300 feet. This appeal indicated that the BFE is reduced by one foot, the floodplain width is reduced by 130 feet, and the floodway should also be reduced.

We have resolved this appeal in accordance with the requirements of 44 CFR Part 67. We have determined that the proposed BFEs, SFHA boundary, and regulatory floodway for Bayou Julien Tributary as shown on preliminary FIRM Panel 22069C0505D dated May 21,2009, should be revised based on the submitted data. However, due to the presence of flood protection levees in the area, we will be reverting back to the mapping as shown on the September 18, 1987, effective FIRM as part of Seclusion. Your community agreed to Seclusion for all areas protected by levees in correspondence dated August 16, 2013.

Please submit any comments regarding this appeal resolution within 30 days of the date of this letter to the following address:

Federal Emergency Management Agency (FEMA) Region 6 Mitigation Division 800 North Loop 288, Denton, TX 76209 Attention: Shona Gibson

When submitting comments, please reference case tracking number NAT\_LA\_1367 in the letter and indicate the comments are in response to the final resolution.

If you feel that the technical issues originally raised have not been adequately addressed by this resolution letter and that an acceptable resolution will not be feasible through the submittal of additional comments as outlined above, please note that FEMA makes Scientific Resolution Panels (SRPs) available to support the appeal resolution process. SRPs are independent panels of experts in hydrology, hydraulics, and other pertinent sciences established to review conflicting scientific and technical data and provide recommendations for resolution. An SRP is an option after FEMA and a local community have been engaged in a collaborative consultation process without a mutually acceptable resolution.

Your community may contact Shoria Gibson at our FEMA Regional Office in Denton, Texas at the telephone number listed below for additional information on the specific eligibility requirements for the SRP or refer to the enclosed SRP Fact Sheet. To request that an SRP review your scientific or technical data, your community must complete the enclosed SRP Request Form and submit it to the address above within 30 days of the date of this letter.

If we do not receive any comments or the completed SRP Request Form from your community during the 30-day review period associated with this resolution, we will consider the appeal and protest resolution period complete for the preliminary FIRM and FIS for Natchitoches Parish and incorporated Areas dated May 21, 2009.

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Please note that the Seclusion process is ongoing within Natchitoches Parish and incorporated areas. The products of this process will result in a revised preliminary FIRM and FIS Report anticipated to be released later this year. There will be an additional comment period for this FIRM and FIS and then FEMA will issue a Letter of Final Determination (LFD). The LFD will explain the adoption/compliance process and will state the date when the FIRM and FIS report will become effective.

We appreciate your community's comments and commitment to having the most accurate flood hazard information available reflected on the FIRM and in the FIS Report. If you have any questions regarding this matter, please contact Shona Gibson at our FEMA Regional Office in Denton, Texas, by telephone at (940) 383-7326 or by e-mail at Shona.Gibson@fema.dhs.gov.

Sincerely, Frank Pag

Mitigation Division Director

Enclosures: SRP Fact Sheet SRP Request Form

cc: Juanita Fowler, Floodplain Administrator, City of Natchitoches K. Randal Smoak, Cothren, Graff, Smoak Engineering, Inc. Cindy O'Neal, NFIP State Coordinator, Louisiana Department of Transportation and Development Rigel Rucker, RSC 6 Coordinator

