



P.O. BOX 9536  
HUNTSVILLE, TX 77340  
FIRM NO. 18938

March 22, 2018

To whom it may concern,

We have been hired by Homeland Properties to determine the Base Flood Elevation ("BFE") for lots 37 & 38 of Ranch Acres Section 2 along Gourd Creek Rd in Walker County, Texas. To do this we followed the guidelines in Section V of the FEMA publication *The Zone A Manual: Managing Floodplain Development in Approximate Zone A Areas*. Using the simplified method of "Contour Interpolation," we extracted the Zone A map from the FEMA FIRM map 48471C0525D and the contours from the Texas Natural Resources Information System publication *StratMap 2017 50cm East Texas Lidar*.

Using the topographic map with 2 foot contour lines, the approximate Zone A boundary passes the two lots on east and west at an elevation of approximately 278 and 279, respectively, as shown in Exhibit A, "Contour Map – Gourd Creek Properties." The difference between the two water-surface elevations is approximately 1 foot, which is half of the contour interval of 2 feet. Therefore this method is acceptable for the use on this portion of the stream. Then adding the lowest interpolated water-surface elevation of 278 feet with 1 foot or half of the contour interval, yields a BFE of 279.

Sincerely,

A handwritten signature in blue ink, appearing to read "Daniel Hayden", is written over a light blue horizontal line.

Daniel Hayden, EIT

Attachments: Determination of Base Flood Elevation Form  
Exhibit A – "Contour Map – Gourd Creek Properties"

CC: File  
Michael Mathena, PE – Lightpoint Engineering  
Andy Flack – Homeland Properties

# DETERMINATION OF BASE FLOOD ELEVATION FORM

Copy all pages of this Determination and all attachments for (1) community official, (2) site/building owner.

SECTION A – PROPERTY INFORMATION				FOR COUNTY USE ONLY	
A1. Building/Site Owner's Name DPSI, a TX Joint Venture			Permit Number:		
A2. Building/Site Street Address TBT Gourd Creek Rd			Date of Submittal:		
City Huntsville	State TX		ZIP Code 77340		
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Ranch Acres - Sec. 2, Lots 37 and 38					
A5. Latitude/Longitude: Lat. <u>30.589235</u> Long. <u>-95.415227</u> Horizontal Datum: <input type="checkbox"/> NAD 1927 <input checked="" type="checkbox"/> NAD 1983					
SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION					
B1. NFIP Community Name & Community Number City of Huntsville; 480639#			B2. County Name Walker		B3. State TX
B4. Map/Panel Number 48471C0525	B5. Suffix D	B6. FIRM Index Date November, 2016	B7. FIRM Panel Effective/ Revised Date August 16, 2011		B8. Flood Zone(s) A
B11. Indicate elevation datum used for on FIRM Panel in Item B7: <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____					
B12. Is the site/building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? Yes <span style="background-color: yellow; border: 1px solid black; border-radius: 50%; padding: 2px;">No</span>					
Designation Date: <input type="checkbox"/> CBRS <input type="checkbox"/> OPA					
SECTION C – METHOD OF DETERMINATION					
<i>The below methods of determination are those listed and described in detail in publication FEMA 265/July 1995 "Managing Floodplain Development in Approximate Zone A Areas". Any determinations submitted shall utilize a method consistent with the publication, acceptable to FEMA, and considered appropriate by the determining engineer. (Please mark the method or methods used with an "X").</i>					
C1. <u>SIMPLIFIED METHODS</u>					
<input checked="" type="checkbox"/> Contour Interpolation Method					
<input type="checkbox"/> Data Extrapolation Method					
C2. <u>DETAILED METHODS</u> (Please select one item from each category)					
a) <u>Topography:</u>					
<input type="checkbox"/> Existing Topographic Maps					
<input type="checkbox"/> Field Survey					
b) <u>Hydrology:</u>					
<input type="checkbox"/> Discharge Drainage Area Relationships					
<input type="checkbox"/> Regression Equations					
<input type="checkbox"/> TR-55					
<input type="checkbox"/> Rational Formula					
<input type="checkbox"/> Other Hydrograph Methods: _____					
b) <u>Hydraulics:</u>					
<input type="checkbox"/> Normal Depth					
<input type="checkbox"/> Critical Depth					
<input type="checkbox"/> Step-Backwater Analysis					
<input type="checkbox"/> Hydraulic Structures					

**SECTION D -- BASE FLOOD ELEVATION (BFE) DETERMINATION**

(BFE shall be determined to within one tenth of a foot)

D1. Indicate elevation datum used for the Base Flood Elevation shown in section D3:

NGVD 1929     NAVD 1988     Other/Source: \_\_\_\_\_

D2. What is the site/location to which the determined Base Flood Elevation can be applied:

- a)  The entire lot/tract described in section A3
- b)  A specific building site on, or portion of, the lot/tract described in Section A3

*If D2(b) is selected a detailed scaled map/survey must be attached indicating the area of the lot subject to the BFE determined.*



D3. The Base Flood Elevation for the site described in section D2, determined utilizing FEMA approved methods is:

279 . 00 ft

**SECTION E – CERTIFICATION**

*This certification is to be signed and sealed by a professional engineer authorized by law to practice engineering in the State of Texas. I certify that the information on this form represents my best efforts to interpret the data available, and that the determinations herein were made in compliance with FEMA approved methodologies and standard engineering practices. I understand that any false statement may be punishable by fine or imprisonment.*

Were latitude and longitude in Section A provided by a licensed land surveyor?     Yes     No

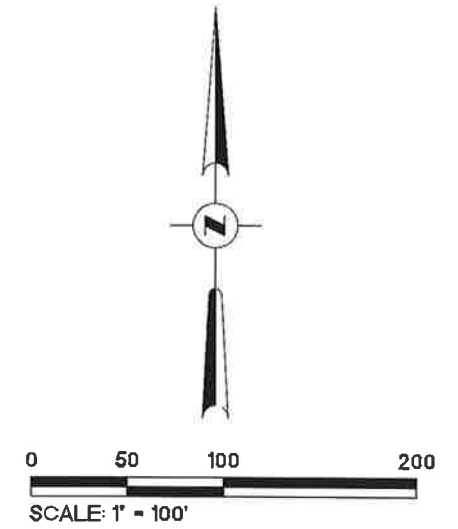
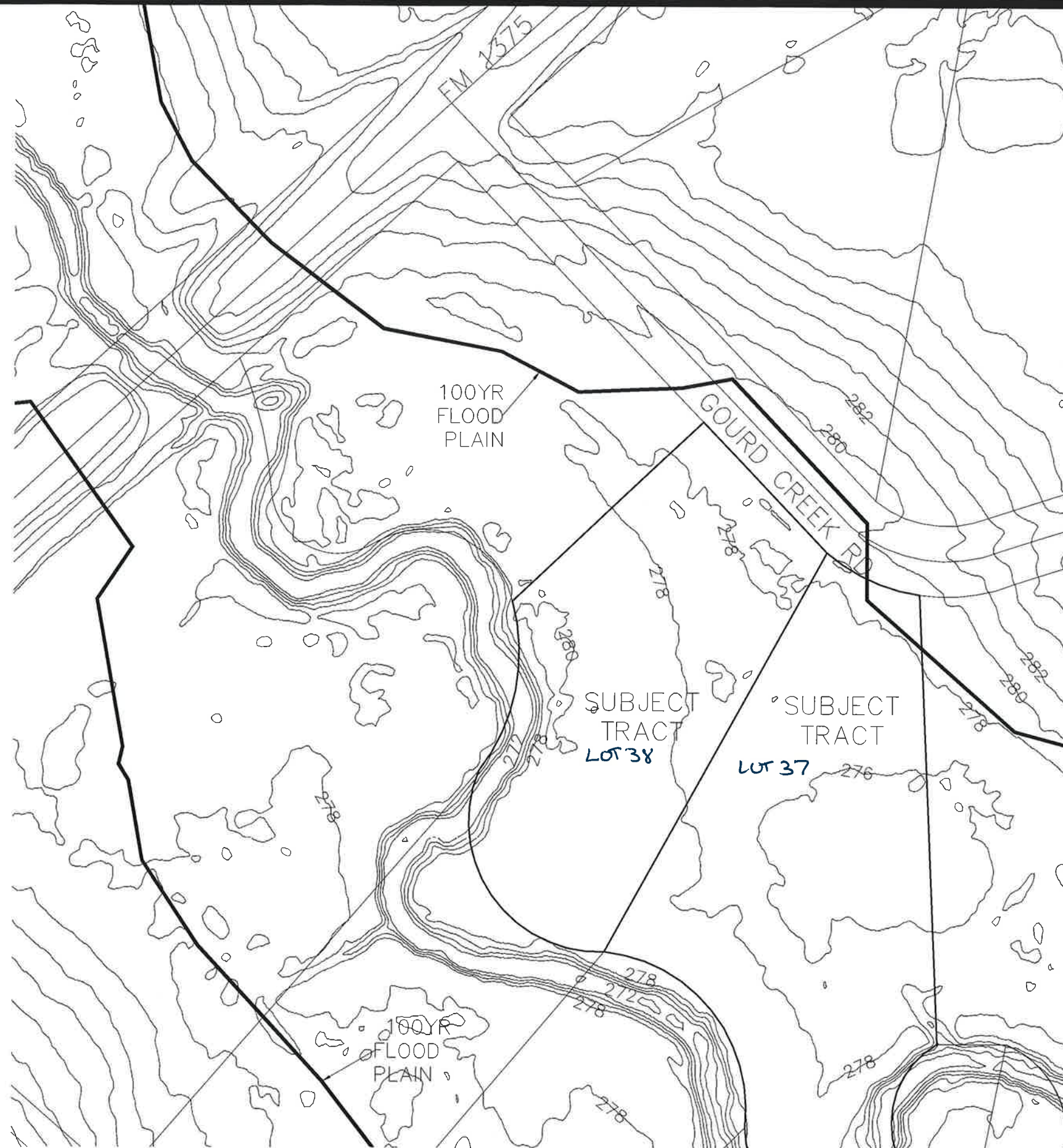
<b>Certifier's Name</b> Michael W. Mathena, PE	<b>License Number</b> Texas License No. 91895		
<b>Title</b> President			
<b>Company Name</b> LightPoint Engineering, LLC			
<b>Address</b> 1314 10th Street, Suite 240			
<b>City</b> Huntsville	<b>State</b> TX		<b>ZIP Code</b> 77320
<b>Signature</b> 	<b>Date</b> 3/22/2018		<b>Telephone</b> 936-207-9984
<i>The owner of the site certifies that he/she has reviewed this form including but not limited to sections A1-A3 and is not aware of any errors or discrepancies herein.</i>			

<b>Signature</b>	<b>Date</b>
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Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) building/site owner.

Comments and Attachments (One copy of the current FIRM with the subject lot/tract overlaid, a copy of any engineering studies completed in support of this determination, and a copy of any detailed map required by section D2 shall be included and listed along with any other attachments). Please list all attachments along with the number of pages of that attachment.





*Michael W. Mathena*  
3/20/18

# LIGHT POINT Consulting Engineers

TBPE Firm No. 18938  
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HUNTSVILLE, TX 77320  
936-207-9984

GOURD CREEK RD  
JOB #118  
3-21-18