

FEDERAL EMERGENCY MANAGEMENT AGENCY
NATIONAL FLOOD INSURANCE PROGRAM

O.M.B. No. 3067-0077
Expires December 31, 2005

ELEVATION CERTIFICATE

Important: Read the instructions on pages 1 - 7.

SECTION A - PROPERTY OWNER INFORMATION		For Insurance Company Use:	
BUILDING OWNER'S NAME <u>Mike Tackett</u>		Policy Number	
BUILDING STREET ADDRESS (Including Apt., Unit, Suite, and/or Bldg. No.) OR P.O. ROUTE AND BOX NO. <u>18 CR 2929</u>		Company NAIC Number	
CITY <u>North of Asteo</u>	STATE <u>NM</u>	ZIP CODE	
PROPERTY DESCRIPTION (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) <u>18 CR 2929</u>			
BUILDING USE (e.g., Residential, Non-residential, Addition, Accessory, etc. Use a Comments area, if necessary.) <u>Non-residential</u>			
LATITUDE/LONGITUDE (OPTIONAL) (##°-##-### or ##.#####)		HORIZONTAL DATUM:	
<u>N 36 50 59.5" W 107 58 50.2</u>		<input type="checkbox"/> NAD 1927 <input type="checkbox"/> NAD 1983 SOURCE: <input checked="" type="checkbox"/> GPS (Type): _____ <input checked="" type="checkbox"/> USGS Quad Map <input type="checkbox"/> Other _____	

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP COMMUNITY NAME & COMMUNITY NUMBER <u>SJC 350064</u>		B2. COUNTY NAME <u>SAN JUAN</u>		B3. STATE <u>NM</u>	
B4. MAP AND PANEL NUMBER <u>350</u>	B5. SUFFIX <u>B</u>	B6. FIRM INDEX DATE <u>8/4/1988</u>	B7. FIRM PANEL EFFECTIVE/REVISED DATE <u>8/4/1988</u>	B8. FLOOD ZONE(S) <u>A</u>	B9. BASE FLOOD ELEVATION(S) (Zone AO, use depth of flooding) <u>5642.72</u>

B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in B9.
 FIS Profile FIRM Community Determined Other (Describe): Eng Calculations

B11. Indicate the elevation datum used for the BFE in B9: NGVD 1929 NAVD 1988 Other (Describe): _____

B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? Yes No
Designation Date: _____

SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on: Construction Drawings* Building Under Construction* Finished Construction
*A new Elevation Certificate will be required when construction of the building is complete.

C2. Building Diagram Number 1 (Select the building diagram most similar to the building for which this certificate is being completed - see pages 6 and 7. If no diagram accurately represents the building, provide a sketch or photograph.)

C3. Elevations - Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, ARIA, ARIA/E, ARIA/A1-A30, ARIA/H, ARIA/O
Complete items C3.a-i below according to the building diagram specified in Item C2. State the datum used. If the datum is different from the datum used for the BFE in Section B, convert the datum to that used for the BFE. Show field measurements and datum conversion calculation. Use the space provided or the Comments area of Section D or Section G, as appropriate to document the datum conversion.
Datum 1000 Conversion/Comments Cross section of river to properties
Elevation reference mark used Finish floor Does the elevation reference mark used appear on the FIRM? Yes No

<input type="checkbox"/> a) Top of bottom floor (including basement or enclosure)	<u>5645</u> ft(m)	License Number, Embossed Seal, Signature, and Date
<input type="checkbox"/> b) Top of next higher floor	<u>NA</u> ft(m)	
<input type="checkbox"/> c) Bottom of lowest horizontal structural member (V zones only)	ft(m)	
<input type="checkbox"/> d) Attached garage (top of slab)	<u>5645</u> ft(m)	
<input type="checkbox"/> e) Lowest elevation of machinery and/or equipment servicing the building (Describe in a Comments area.)	<u>NA</u> ft(m)	
<input type="checkbox"/> f) Lowest adjacent (finished) grade (LAG)	<u>5644.5</u> ft(m)	
<input type="checkbox"/> g) Highest adjacent (finished) grade (HAG)	ft(m)	
<input type="checkbox"/> h) No. of permanent openings (flood vents) within 1 ft. above adjacent grade	<u>2</u>	
<input type="checkbox"/> i) Total area of all permanent openings (flood vents) in C3.h	<u>0</u> sq. in. (sq. cm)	



SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. I certify that the information in Sections A, B, and C on this certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

CERTIFIER'S NAME <u>Paul F. Martin</u>	LICENSE NUMBER <u>NM 8548</u>
TITLE <u>President</u>	COMPANY NAME <u>Sakura Engineering Inc.</u>
ADDRESS <u>2014 San Juan Blvd</u>	CITY <u>Farmington</u>
SIGNATURE <u>Paul F. Martin</u>	STATE <u>NM</u>
	ZIP CODE <u>87401</u>
	DATE <u>1-15-06</u>
	TELEPHONE <u>1-505-5642139</u>

IMPORTANT: In these spaces, copy the corresponding information from Section A.			For Insurance Company Use:
BUILDING STREET ADDRESS (Including Apt., Unit, Suite, and/or Bldg. No.) OR P.O. ROUTE AND BOX NO.			Policy Number
CITY	STATE	ZIP CODE	Company NAIC Number

SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION (CONTINUED)

Copy both sides of this Elevation Certificate for (1) community official, (2) insurance agent/company, and (3) building owner.

COMMENTS the determination was found by GPS + Quad map from map tech + field observations.

Check here if attachments

SECTION E - BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)

For Zone AO and Zone A (without BFE), complete items E1. through E5. If the Elevation Certificate is intended for use as supporting information for a LOMA or LOMR-F, Section C must be completed.

- E1. Building Diagram Number 1 (Select the building diagram most similar to the building for which this certificate is being completed - see pages 6 and 7. If no diagram accurately represents the building, provide a sketch or photograph.)
- E2. The top of the bottom floor (including basement or enclosure) of the building is ft. (m) in. (cm) above or below (check one) the highest adjacent grade. (Use natural grade, if available.)
- E3. For Building Diagrams 6-8 with openings (see page 7), the next higher floor or elevated floor (elevation b) of the building is ft. (m) in. (cm) above the highest adjacent grade. Complete items C3.h and C3.i on front of form.
- E4. The top of the platform of machinery and/or equipment servicing the building is ft. (m) in. (cm) above or below (check one) the highest adjacent grade. (Use natural grade, if available.)
- E5. For Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance? Yes No Unknown. The local official must certify this information in Section G.

SECTION F - PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION

The property owner or owner's authorized representative who completes Sections A, B, C (items C3.h and C3.i only), and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. The statements in Sections A, B, C, and E are correct to the best of my knowledge.

PROPERTY OWNER'S OR OWNER'S AUTHORIZED REPRESENTATIVE'S NAME			
ADDRESS	CITY	STATE	ZIP CODE
SIGNATURE	DATE	TELEPHONE	
COMMENTS			

Check here if attachments

SECTION G - COMMUNITY INFORMATION (OPTIONAL)

The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and sign below.

- G1. The information in Section C was taken from other documentation that has been signed and embossed by a licensed surveyor, engineer, or architect who is authorized by state or local law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)
- G2. A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.
- G3. The following information (items G4-G9) is provided for community floodplain management purposes.

G4. PERMIT NUMBER	G5. DATE PERMIT ISSUED	G6. DATE CERTIFICATE OF COMPLIANCE/OCCUPANCY ISSUED
G7. This permit has been issued for: <input type="checkbox"/> New Construction <input type="checkbox"/> Substantial Improvement		
G8. Elevation of as-built lowest floor (including basement) of the building is:		<u> </u> ft. (m) Datum: <u> </u>
G9. BFE or (in Zone AO) depth of flooding at the building site is:		<u> </u> ft. (m) Datum: <u> </u>

LOCAL OFFICIAL'S NAME	TITLE
COMMUNITY NAME	TELEPHONE
SIGNATURE	DATE
COMMENTS	

Check here if attachments

①

← N

5645

P1 997.90

Water Valve

0.0046 slope

HI = 998.67

1044.50

993.15

993.15

993.15

P16

273

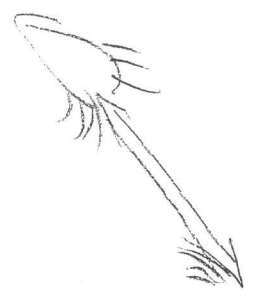
221
675

Water 42.035 sec
100 ft

2.137 sec

HI #1 996.670
HI #2 996.326

1174.98



Distance to Cedar hill 9.552 miles
18.163

~~2675'~~

$$\frac{9.552}{27120} = 35 = 983.29$$

$$+ 18,700$$

$$\underline{19,683.29 \text{ cfs}}$$

$$- 221$$

$$Q \quad \underline{19462.3 \text{ cfs}}$$

$$Q = VA =$$

from Summary

$$V = 2.37 \text{ ft/sec}$$

$$A = 8,211.94 \text{ sf.}$$

$$V = \frac{1.49}{.03} R^{2/3} S^{1/2} (.71)(.0046) = 2.36$$

$$.03 \quad .06 \quad .0046$$

calculated

0.5

Brush area ~~not~~

$$R = \frac{A}{WP} = \frac{93.24}{15512} = .0595'$$

$$S = \frac{.6}{4343} = .0046$$

$$Q = VA$$

$$221 = 2.37 \text{ ft/sec} \quad A = \frac{93.24}{154} .6 \text{ ft}$$

Need 8,212 sf

$$997.96 - 985 = 12.96' - 1' = 11.96'$$

8'

$$154.2 \times 8' = 1233.60 \text{ sf}$$

$$794 \times 8 \times \frac{1}{2} = 3176.0 \text{ sf}$$

add 2 ft

$$1175.2 \times 2 = 2350.4 \text{ sf}$$

$$\frac{2}{.0046} = 434 \times 2 \times \frac{1}{2} \quad \underline{434.28 \text{ sf}}$$

$$\text{sub total } 7194.88 \text{ sf} - 8212 \text{ sf} = 1017.12$$

Add additional x ft

$$\frac{1017.12 \text{ sf}}{1608} = .6325'$$

10.632 ft above 985'

995.632 elevation 2.28 ft.

mean elevation at site is 5645' by Bps