NORVELL & POE ENGINEERS

Registered Engineers & Land Surveyors

1101 Fox Meadows Blvd., Suite 105
Sevierville, Tennessee 37862

"SERVING SEVIER COUNTY SINCE 1998"

Phone (865) 429-4683 Fax (865) 429-4684 Email: email@norvellpoe.com

September 20, 2007

Mr. David W. Ball, City Planner
City of Gatlinburg
Post Office Box 5
Gatlinburg, Tennessee 37738

RE: Elevation Certificate for Marketplace Mall
643/645 Parkway
Gatlinburg, Tennessee

Dear Mr. Ball:

Please find included the revised Elevation Certificate for the above captioned site, a revised drawing by Trotter and Associates, Architects (T&A), showing the new placement of permanent flood openings, and published literature for **SMART VENT Foundation Flood Vents**. This submission is to replace the previously submitted certificate.

After discussions with Mr. Jay Defoe, T&A, concerning the previous placement of the permanent flood openings and how FEMA requires their placement, the drawing has been revised to change the two vents previously shown as "stacked" to normal placement at the same elevation. The **SMART VENT Foundation Flood Vents** are "tested, rated, and certified" to cover 200 square feet per unit. Six (6) of these units will be installed, two (2) for the restaurant storage area of 400 square feet and four (4) for the remaining basement area of 605 square feet. Therefore, based upon the number of these vents and their revised placement, I certify that this design meets the requirements of FEMA.

Please contact our office if you have any questions concerning this matter.

Sincerely,

Gary F. Norvell, P.E. (Tennessee, North Carolina, Virginia), R.L.S. (Tennessee)

GARY FRANK NORVELL
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 19203
STATE OF TENNESSEE

cc: Mr. Jay Defoe
Mr. Don Hubbard
file

U.S. DEPARTMENT OF HOMELAND SECURITY
Federal Emergency Management Agency
National Flood Insurance Program

ELEVATION CERTIFICATE

OMB No. 1660-0008
Expires February 28, 2009

Important: Read the instructions on pages 1-8.

SECTION A - PROPERTY INFORMATION

For Insurance Company Use:
Policy Number
Company NAIC Number

A1. Building Owner's Name
TAO ENTERPRISES INC

A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.
651 PARKWAY

City: GATLINBURG | State: TN | ZIP Code: 37738

A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)
SEVIER COUNTY TAX MAP 126K, GROUP E, PARCEL 8 (PART OF)

A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) NON-RESIDENTIAL COMMERCIAL

A5. Latitude/Longitude: Lat. N 35° 42' 48" Long. W 83° 30' 55" Horizontal Datum: ☐ NAD 1927 ☑ NAD 1983

A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.

A7. Building Diagram Number 7

A8. For a building with a crawl space or enclosure(s), provide:
a) Square footage of crawl space or enclosure(s) 1005 sq ft
b) No. of permanent flood openings in the crawl space or enclosure(s) walls within 1.0 foot above adjacent grade 6
c) Total net area of flood openings in A8.b N/A sq in
(See comments section D)

A9. For a building with an attached garage, provide:
a) Square footage of attached garage _____ sq ft
b) No. of permanent flood openings in the attached garage walls within 1.0 foot above adjacent grade _____
c) Total net area of flood openings in A9.b _____ sq in

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number	B2. County Name	B3. State
City of Gatlinburg, Tennessee 475426	SEVIER	TENNESSEE

B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	B7. FIRM Panel Effective/Revised Date	B8. Flood Zone(s)	B9. Base Flood Elevation(s) (Zone AO, use base flood depth)
475426 0002	C	10-30-1970	2-15-1984	A9 & B	1297.00' (500YR)

B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9.
☐ FIS Profile ☑ FIRM ☐ Community Determined ☐ Other (Describe) _____

B11. Indicate elevation datum used for BFE in Item 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 _____ ☐ CBRS ☐ OPA

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. Elevations – Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO. Complete Items C2.a-g below according to the building diagram specified in Item A7.
Benchmark Utilized CITY OF GATLINBURG MONUMENT GAT-7 Vertical Datum 1343.70' (NAVD 88)
Conversion/Comments 1292

Check the measurement used.

a) Top of bottom floor (including basement, crawl space, or enclosure floor)	1292 . 10	☑ feet	☐ meters (Puerto Rico only)
b) Top of the next higher floor	1299 . 10	☑ feet	☐ meters (Puerto Rico only)
c) Bottom of the lowest horizontal structural member (V Zones only)	_____ . _____	☐ feet	☐ meters (Puerto Rico only)
d) Attached garage (top of slab)	_____ . _____	☐ feet	☐ meters (Puerto Rico only)
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment in Comments)	_____ . _____	☐ feet	☐ meters (Puerto Rico only)
f) Lowest adjacent (finished) grade (LAG)	_____ . _____	☐ feet	☐ meters (Puerto Rico only)
g) Highest adjacent (finished) grade (HAG)	_____ . _____	☐ feet	☐ meters (Puerto Rico only)

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 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.*

☑ Check here if comments are provided on back of form.

STEVEN D. CRAIG REGISTERED LAND SURVEYOR XVI STATE OF TENNESSEE AGRICULTURE COMMERCE 9-20-2007 TENNESSEE NO. 1812

Certifier's Name: STEVEN D CRAIG | License Number: TN RLS # 1812
Title: RLS | Company Name: NORVELL & POE ENGINEERS
Address: 1101 FOX MEADOWS BLVD, SUITE 105 | City: SEVIERVILLE | State: TN | ZIP Code: 37862
Signature: Steven D. Craig | Date: 9-20-2007 | Telephone: 865-429-4683

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. 651 PARKWAY			Policy Number
City GATLINBURG	State TN	ZIP Code 37738	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 "SMART VENT" foundation flood vents are being used. This unit is approved by FEMA to allow for 200 sq. ft. for each unit. 6 units will cover 1200 sq ft which exceeds the basement area of 1005 sq. ft.

Signature Date

☑ Check here if attachments

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

For Zones AO and A (without BFE), complete Items E1-E5. If the Certificate is intended to support a LOMA or LOMR-F request, complete Sections A, B, and C. For Items E1-E4, use natural grade, if available. Check the measurement used. In Puerto Rico only, enter meters.

E1. Provide elevation information for the following and check the appropriate boxes to show whether the elevation is above or below the highest adjacent grade (HAG) and the lowest adjacent grade (LAG).
a) Top of bottom floor (including basement, crawl space, or enclosure) is _____.____ ☐ feet ☐ meters ☐ above or ☐ below the HAG.
b) Top of bottom floor (including basement, crawl space, or enclosure) is _____.____ ☐ feet ☐ meters ☐ above or ☐ below the LAG.

E2. For Building Diagrams 6-8 with permanent flood openings provided in Section A Items 8 and/or 9 (see page 8 of Instructions), the next higher floor (elevation C2.b in the diagrams) of the building is _____.____ ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E3. Attached garage (top of slab) is _____.____ ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E4. Top of platform of machinery and/or equipment servicing the building is _____.____ ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E5. 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, 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, 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. Check the measurement used in Items G8. and G9.

G1. ☐ The information in Section C was taken from other documentation that has been signed and sealed by a licensed surveyor, engineer, or architect who is authorized by 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: ☐ New Construction ☐ Substantial Improvement

G8. Elevation of as-built lowest floor (including basement) of the building: _____.____ ☐ feet ☐ meters (PR) Datum_____

G9. BFE or (in Zone AO) depth of flooding at the building site: _____.____ ☐ feet ☐ meters (PR) Datum_____

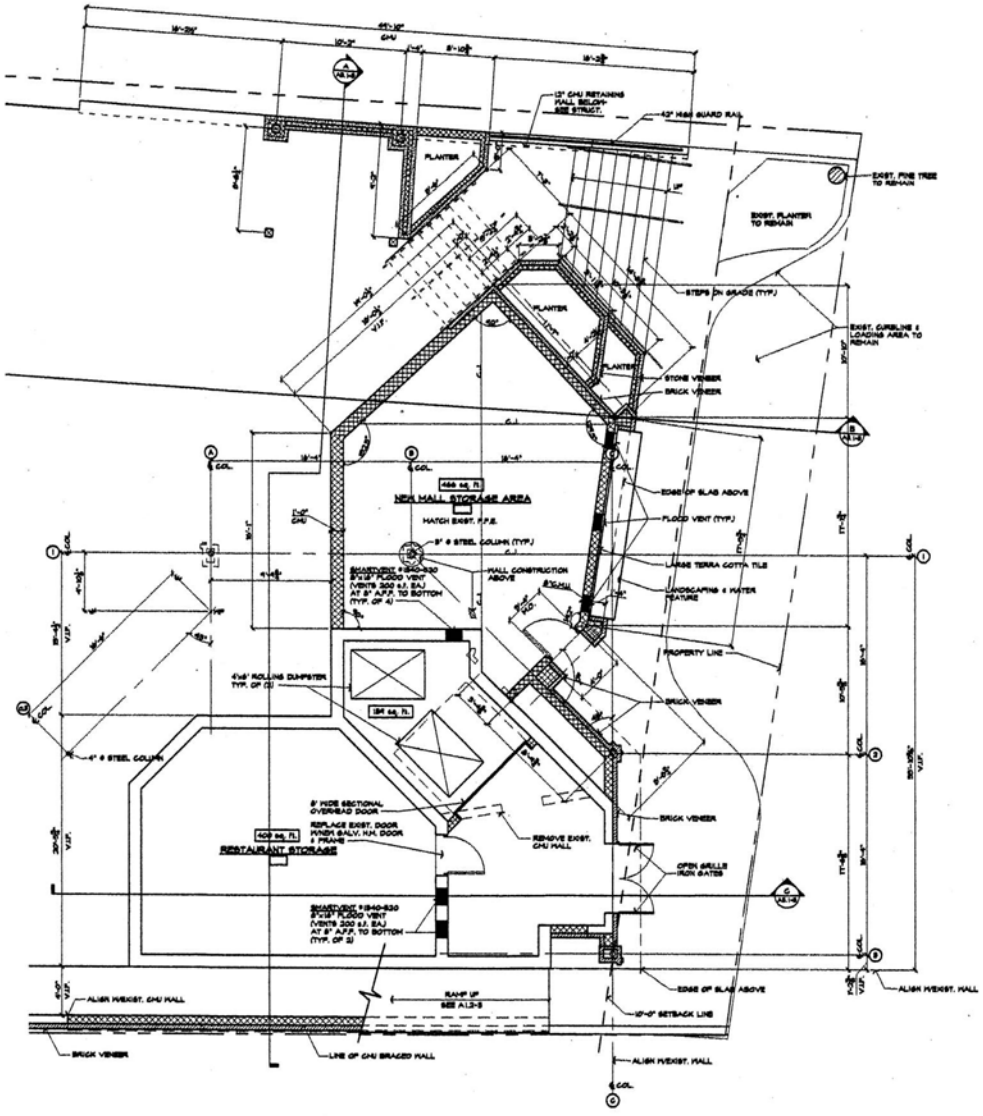
Local Official's Name Title

Community Name Telephone

Signature Date

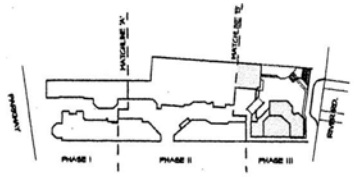
Comments

☐ Check here if attachments



BASEMENT FLOOR PLAN - PHASE 5

SCALE 1/4" = 1'-0"



KEY PLAN

SCALE N.T.S.

PHASE THREE - FOUNDATION PACKAGE

REVISION	BY

BASEMENT FLOOR PLAN
PHASE 5
PHASE THREE - FOUNDATION PACKAGE

906 EAST PARKWAY • SUITE 1
GATLINBURG, TENNESSEE 865-436-9436

MARKETPLACE MALL - ADD. & ALT.
FOR: TAO ENTERPRISES
651 PARKWAY GATLINBURG, TENNESSEE

TROTTER & ASSOCIATES • ARCHITECT

THOMAS B. TROTTER, SR. REGISTERED ARCHITECT NO. 07179 STATE OF TENNESSEE

DRAWN	JPH
CHECKED	JDO
DATE	8/16/07
SCALE	AS SHOWN
JOB NO.	2005664.00
SHEET	A1.1-3
OF	SHEETS

Home
Contractors
Code Officials
Architects
Surveyors
Insurance Agents
Realtors & Home Inspectors
Homeowners
F.A.Q.

How do the vents provide so much coverage?
Are the vents more expensive than other flood solutions?
How do the models differ?
Do they come in custom sizes? What sizes do you have?
Do they come in different colors?
Can I install the vent in an entry door?
My grade changes(/slopes/dips), or my house is built on a hill.
How do I place my vents?
The floor of my basement/crawlspace is lower than grade; what do I do?
How do the vents attach?
Can animals open the vents?
Do the vents have insect screening?
Do the vents open only in flood?
Do the vents keep the cold air out?
Do you offer quantity discounts?
What about discounts for stores?
Contractors?
Do you know of any other company that makes a similar product?
What can I do to finish the inside of the opening?
Does the vent require any electricity?

How does one of your vents provide so much coverage? -Top-
You may have heard that you FEMA requires a vent with "one square inch per one square foot", referring to vent dimensions in proportion to the space to be vented. This is only partially correct. FEMA guidelines (as outlined in technical bulletin 1-93) do state that a non-engineered flood vent solution must (among other requirements) provide one square inch of opening per square foot of space vented. This is only in reference to non-engineered openings, however; all of our flood vent products are certified engineered openings. In accordance with the further guidelines of TB 1-93, these have been tested, rated, and certified for their coverage of 200 square feet per unit.

Please have us contact your code official, surveyor, or insurance agent if they require more information.

SEP 2 0 2007

Are the vents more expensive than other flood solutions? -Top-
Our vents are made from stainless steel, and are manufactured and assembled entirely in the United States. Additionally (and perhaps more importantly), each of our vents is an engineered flood opening certified for 200 square feet of flood protection. It is physically impossible for a non-engineered opening of comparable dimensions to provide as much coverage within FEMA guidelines; most air vents, in fact, provide less than 20% of that (overlooking that they do not fulfill other requirements of the flood code). Where a house may require 30-35 air vents to provide enough flood protection, about 8 of our vents would provide more than necessary. Our vents are cost-competitive with anything else we have seen on the market.

How do the models differ? -Top-
We have two primary models: The dual-function model (SmartVENT) provides 50 square inches of air ventilation opening in addition to 200 square feet of certified flood ventilation coverage. These vents would be almost exclusively used in unconditioned crawlspaces, where air ventilation is required in addition to any flood ventilation.

The insulated flood-only model (FloodVENT) is appropriate for most other applications. It provides only flood protection for garages, living spaces, basements (though rare in flood plains), conditioned crawlspaces, etc.

Do they come in custom sizes? What sizes do you have? -Top-
Our vents are the size of a standard concrete masonry unit (CMU), 8" tall _ 16" wide. They can be stacked as many high (although two is typical) and arrayed as many side-by-side as needed. For large industrial and municipal projects, we have been able to fabricate custom mountings to contain various arrangements of vents in a single steel frame.

Do they come in different colors? -Top-
Yes. We have four standard colors, and can (for an additional fee, plus an approximately three week lead time) match almost any color needed for your application. We use enamel powder coatings designed for use in harsh environments. Our standard colors are: black, grey, wheat and white. Your Smart VENT Inc. regional sales representative should have sample paint chips and prices available for each standard color. White vents are available direct from our stock with no delay.

SEP 2 0 2007

Can I install the vent in an entry door? -Top-
Yes. For overhead (garage) doors, we have developed a specific product that installs easily and contains a mechanism to prevent the vent from opening when the door is lifted overhead. For standard personnel doors, we recommend using the standard foundation/wall vents. Simply drill four holes into the flange, and drive screws through these holes, into the door. Please be careful only to drill the exterior flange, or you risk voiding the warranty.

The ground level around my house changes(slopes/dips), or my house is built into a hill.
How do I place my vents? -Top-
Regardless of changes in grade, vents must be placed on a minimum of two different walls, with each vent no more than twelve inches (or less, depending on local code) of adjacent grade. The adjacent grade for each vent is the grade (essentially, ground) level closest to that specific vent. Vents should, if possible, be arranged so that more are placed near the lowest possible grade, to allow easiest drainage when a flood recedes.

The floor of my basement/crawlspace is lower than the adjacent ground level; what do I do? -Top-
What you do is pay extremely high flood insurance premiums. According to FEMA guidelines in technical bulletin 1-93, if all four sides of the structure are below grade by even one inch, the structure has a basement. In a flood zone, having a basement almost guarantees very high flood insurance rates. To lower your premium, you need to equalize the interior and exterior grade on at least one side of the house. The easiest way to do this is to either add fill to the inside of the basement until at least one wall is at or above exterior grade, or to dig-out the ground outside until it is at or below the interior grade (floor) level. This will turn your basement into a crawlspace, which (if properly vented) should have drastically lower flood insurance rates.

How do the vents attach? -Top-
One can attach the vents using any of several methods. The vents were designed to install with four stainless steel straps, included in each package. These straps bend around the back of a wall, and fasten into the vent frame. The exterior flange holds the vent against the front of the wall. If an even more secure hold is desired, a concrete adhesive (Lexel, Liquid Nails, etc.) can be applied to the inside surface of the flange. Be careful to avoid getting any of this adhesive onto any part of the frame but the back surface of this flange; you do

SEP 2 0 2007

not want to accidentally prevent the vent door from opening in case of flood.

Can animals open the vents? -Top-
A A bear might be able, but not most creatures small enough to fit into the vent opening. With the floats at rest within the frame, a minimum of ten to fifteen pounds of pressure are required to open the vent door. When they first arrive, the vents might seem looser or easier to open; there is a small amount of oil that naturally gets on the floats during the manufacturing process. Simply wipe both the floats and their grooves within the frame with a rag wet with isopropyl alcohol. This should remove the oil responsible for any perceived looseness.

Do the vents have insect screening? -Top-
On the flood-only and overhead door models, the only space through which insects could theoretically pass is the extremely narrow space between the vent door and frame. In these models, this space is lined with a thick weather-stripping, which should prevent any insects from entering. The air-ventilated SmartVENT model, meanwhile, has a set of internal louvers behind a rodent screen. The purpose of a rodent screen is to protect the opening from vermin without preventing the natural flow of air; as such, openings in the screen must fit a very narrow set of dimensions (between _ and 3/8 inch). Our SmartVENT screen has _ openings, the smallest allowed by code while maintaining airflow necessary to prevent undue mold, mildew, and other threats to the wellbeing of the residents of a building. This model lacks the weather-stripping.

Do the vents open only in flood? -Top-
For the most part, yes. The dual-acting SmartVENT model also opens for air ventilation, but the door itself remains closed; louvers inside the door rotate open in response to temperature changes. The single-acting FloodVENT model is designed to open only in response to rising flood waters. The vents can be opened manually by inserting a credit card into the upper portion of each of the two slots on the front of the door, if you so desire.

Do the vents keep the cold air out? -Top-
The insulated flood-only model (FloodVENT) has a styrofoam core (two inches thick, equivalent to a 2.5 R factor), and weather-stripping between the door and the frame. The air-ventilated model (SmartVENT) contains louvers that rotate open in warm weather, and close as the weather cools. The SmartVENT lacks any weather-stripping. However, we have never had a vent returned for reasons of poor insulative quality. If you are in an area such as Alaska or parts of New

SEP 2 0 2007

England where winter temperatures are especially low, you may want to use the insulated FloodVENT model, even if in an unconditioned crawlspace, and a reduced number of dual-acting SmartVENTs. (An approved vapor barrier is necessary for this solution.)

Do you offer quantity discounts?
What about discounts for stores? Contractors? -Top-
For pricing and discount information, as well as a list of dealers in your region, please contact our offices at 877 441 8368.

Do you know of any other company that makes a similar product? -Top-
No. There are certainly other companies that make foundation vents, and some that claim that their vents are usable as foundation flood vents, but our vents are (the last time we checked) the only FEMA-approved, ICC-certified engineered opening for flood venting. In fact, many of the vents that claim to be foundation flood vents do not comply with flood ventilation codes and FEMA guidelines, let alone having a certification.

What can I do to finish the inside of the opening? -Top-
There are a variety of options for trimming the interior of the opening. We offer a stainless steel trim flange (with available interior sleeve to line the hole, if necessary) that you as customer can paint without voiding the warranty. (Please do not attempt to paint the vent units themselves. This can void the warranty.) This is adaptable to fit any wall depth from three to sixteen inches. Additionally, any variety of trim designs could be fabricated by a homeowner or contractor for the interior: for instance, a wood frame similar to those used for framing windows.

Does the vent require any electricity? -Top-
Does the vent require any electricity? No. The air-ventilation louvers on the dual-acting SmartVENT operate by means of a bimetallic coil, and the flood mechanism on all models works via rising flood water.

SEP 2 0 2007

Carpenter Wright Engineers
Structural Consultants

September 24, 2007

Post-it® Fax Note 7671	Date 9/25/07	# of pages ▶ 2
To JAY HORNER	From DON HUBBARD	
Co./Dept.	Co.	
Phone #	Phone # 389-4601	
Fax # 430-1359	Fax #	

Mr. Jay De Foe
Trotter & Associates
906 East Parkway - Suite 1
Gatlinburg, Tennessee 37919

Re: Marketplace Mall – Basement Wall Subject to Hydrostatic Forces
CWE Project No. 2006185.00

Dear Jay:

As you requested, we have reviewed the design of the new basement walls that are being constructed as a part of phase 3 of the above referenced project. Based on the information sent to us from Gary Norvell of Batson, Himes, Norvell & Poe, these walls are subject to a buildup of up to 4.2 feet (AFF) of hydrostatic fluid pressure due to water that would enter this basement area via flood relief panels under a 100 year flood. Based on our evaluation, the walls that we have designed as a part of the new construction (highlighted in the attachment) are adequately reinforced to resist the hydrostatic pressures resulting from the water elevation listed above.

In addition, we have reviewed the structure of buoyancy as a result of the water level rising to this elevation of 4.2 feet above finish floor. Based on the presence of flood panels at an elevation within 8" above finish floor, there is no net buoyancy on this structure.

Please contact us if you have any questions or wish to discuss further.

Sincerely,

CARPENTER WRIGHT ENGINEERS, P.L.L.C.

KEN L. GRIFFIN
REGISTERED ENGINEER
AGRICULTURE COMMERCE
No. 023005
STATE OF TENNESSEE
9/24/07

Ken L. Griffin, P.E.
Principal

CARPENTER WRIGHT ENGINEERS, P.L.L.C.
152-F Market Place Blvd. • Knoxville, TN 37922 • (865) 539-8227 Phone • (865) 539-8237 Fax

U.S. DEPARTMENT OF HOMELAND SECU.
Federal Emergency Management Agency
National Flood Insurance Program

ELEVATION CERTIFICAT

OMB No. 1660-0008
Expires February 28, 2009

Important: Read the instructions on pages 1-8.

SECTION A - PROPERTY INFORMATION

For Insurance Company Use:
Policy Number
Company NAIC Number

A1. Building Owner's Name: Buie Properties LLC - Buie Hancock

A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: U.S. Highway 321

City: Gatlinburg State: TN ZIP Code: 37738

A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.): Tax Map 127C Group A Parcels 7.00 & 8.00

A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.): Non-Residential - Commercial Building

A5. Latitude/Longitude: Lat. N 35° 43' 33" Long. W 83° 28' 18" Horizontal Datum: ☐ NAD 1927 ☑ NAD 1983

A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.

A7. Building Diagram Number: 1

A8. For a building with a crawl space or enclosure(s), provide:
a) Square footage of crawl space or enclosure(s): 5,945 sq ft
b) No. of permanent flood openings in the crawl space or enclosure(s) walls within 1.0 foot above adjacent grade: 0
c) Total net area of flood openings in A8.b: 0 sq in

A9. For a building with an attached garage, provide:
a) Square footage of attached garage: 260 sq ft
b) No. of permanent flood openings in the attached garage walls within 1.0 foot above adjacent grade: 0
c) Total net area of flood openings in A9.b: 0 sq in

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number	B2. County Name	B3. State
Gatlinburg, Tennessee	Sevier County	Tennessee

B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	B7. FIRM Panel Effective/Revised Date	B8. Flood Zone(s)	B9. Base Flood Elevation(s) (Zone AO, use base flood depth)
475426 0003	C	10-30-1970	2-15-1984	A3	1462.50'

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

B11. Indicate elevation datum used for BFE in Item 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 ☐ CBRS ☐ OPA

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. Elevations – Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO. Complete Items C2.a-g below according to the building diagram specified in Item A7.
Benchmark Utilized: Continental Aerial Survey GPS point 3016 Vertical Datum: 1460.52'
Conversion/Comments: GPS point 3016 established from NGS data point Seviport. Seviport elevation = 990.30'

Check the measurement used.

a) Top of bottom floor (including basement, crawl space, or enclosure floor)	1466.00'	☑ feet	☐ meters (Puerto Rico only)
b) Top of the next higher floor		☐ feet	☐ meters (Puerto Rico only)
c) Bottom of the lowest horizontal structural member (V Zones only)		☐ feet	☐ meters (Puerto Rico only)
d) Attached garage (top of slab)		☐ feet	☐ meters (Puerto Rico only)
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment in Comments)	1465.00'	☑ feet	☐ meters (Puerto Rico only)
f) Lowest adjacent (finished) grade (LAG)	1464.70'	☑ feet	☐ meters (Puerto Rico only)
g) Highest adjacent (finished) grade (HAG)	1470.70'	☑ feet	☐ meters (Puerto Rico only)

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 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.*

☑ Check here if comments are provided on back of form.

STEVEN D. CRAIG REGISTERED LAND SURVEYOR XVI AGRICULTURE COMMERCE 12-13-2007 TENNESSEE NO. 1812

Certifier's Name: Steven D. Craig License Number: TN RLS # 1812
Title: RLS Company Name: Norvell & Poe Engineers
Address: 1101 Fox Meadows Blvd., Suite 105 City: Sevierville State: TN ZIP Code: 37862
Signature: Steven D. Craig Date: DEC. 13, 2007 Telephone: (865) 429-4683

IMPORTANT: In these spaces, copy 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. U.S. Highway 321			Policy Number
City Gatlinburg	State TN	ZIP Code 37738	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 Lowest elevation of machinery or equipment is an a/c unit as shown in pictures.

Signature Date ☐ Check here if attachments

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

For Zones AO and A (without BFE), complete Items E1-E5. If the Certificate is intended to support a LOMA or LOMR-F request, complete Sections A, B, and C. For Items E1-E4, use natural grade, if available. Check the measurement used. In Puerto Rico only, enter meters.

E1. Provide elevation information for the following and check the appropriate boxes to show whether the elevation is above or below the highest adjacent grade (HAG) and the lowest adjacent grade (LAG).
a) Top of bottom floor (including basement, crawl space, or enclosure) is _____. _____ ☐ feet ☐ meters ☐ above or ☐ below the HAG.
b) Top of bottom floor (including basement, crawl space, or enclosure) is _____. _____ ☐ feet ☐ meters ☐ above or ☐ below the LAG.

E2. For Building Diagrams 6-8 with permanent flood openings provided in Section A Items 8 and/or 9 (see page 8 of Instructions), the next higher floor (elevation C2.b in the diagrams) of the building is _____. _____ ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E3. Attached garage (top of slab) is _____. _____ ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E4. Top of platform of machinery and/or equipment servicing the building is _____. _____ ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E5. 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, 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, 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. Check the measurement used in Items G8. and G9.

G1. ☐ The information in Section C was taken from other documentation that has been signed and sealed by a licensed surveyor, engineer, or architect who is authorized by 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: ☐ New Construction ☐ Substantial Improvement

G8. Elevation of as-built lowest floor (including basement) of the building: _____. _____ ☐ feet ☐ meters (PR) Datum_____

G9. BFE or (in Zone AO) depth of flooding at the building site: _____. _____ ☐ feet ☐ meters (PR) Datum_____

Local Official's Name Title

Community Name Telephone

Signature Date

Comments

☐ Check here if attachments

Building Photographs

Continuation Page

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. U.S. Highway 321			For Insurance Company Use: Policy Number
City Gatlinburg	State TN	ZIP Code 37738	Company NAIC Number

If submitting more photographs than will fit on the preceding page, affix the additional photographs below. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View."