KEYSTONE
EXPERTS + ENGINEERS

STRUCTURAL DAMAGE REPORT

ADDRESS:
Park Lake at Parsons Condominium Association Inc
806 Lake Haven Square
Brandon, Florida 33511

CLAIM NO: CLM-32797
POLICY NO: AMC-30613-05
KEYSTONE NO: 20605
DATE: May 7, 2020

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Signatures:

The opinions and findings expressed in this report are based upon the information available as of the date of this report. As such, Keystone assumes no liability for the misuse of this information by others and reserves the right to modify the conclusions contained herein upon receipt or discovery of additional information. Due to the limited access and the non-destructive nature of the investigation, Keystone cannot be held responsible for any hidden defects that may negatively impact the performance of the structure. This report is intended to provide an overview of the existing conditions, and should not be used as an indicator of future performance; no expressed or implied warranties or guarantees of any kind are given.

We at Keystone Experts & Engineers sincerely thank you for the opportunity to serve you.

Signatures
Prepared by: Reviewed by:

Frank DeJose, P.E.
Forensic Engineer

Ronald J. Goff
National Manager

This item has been digitally signed and sealed by Frank DeJose on the date adjacent to the seal.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Florida CA No: 31858, Exp. 02-28-2021

signed and sealed by Frank A DeJose, PE using a Digital Signature and date. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Frank A DeJose
2020.05.07 18:01:55 -04'00'

Investigation Summary:

Based upon Keystone's investigation, the available evidence, and the engineer's education, training, and experience, the following conclusions have been reached within a reasonable degree of engineering certainty:

A fire on April 16, 2020, caused the following damage to the subject building:

- The ground-story patio:
  - 16 LF of 7.25x9.25-inch columns charred and soot-stained
  - 24 LF of 2x8 charred beams
  - 32 LF of charred 2x10 rim boards
  - 24 LF of charred floor beams
  - 48 SF of plank and plywood (assumed) subfloor charred and soot-stained
  - Aluminum screen enclosure at three sides, non-structural
- The ground-story exterior near patio wall:
  - 15 LF of charred and soot wall with assumed 2x6 (or 2x4) studs, double top plates and single sill plate
  - Six-foot sliding glass door damaged with four total jack studs and two total kings studs with header beam
  - Wood siding to be replaced to match existing, non-structural
- The ground-story exterior at Unit 107 Entrance:
  - 4 LF of damaged wall with assumed 2x6 (or 2x4) studs, double top plates and single sill plate
  - Three-foot entrance door charred with four total jack studs and two total kings studs with header beam
  - Wood siding to be replaced to match existing, non-structural
- Metal Pan Stairs:
  - Three broken stair treads (1'-0" x 3'-4"), possible damage from heavy loads during fire department usage
- Second-story walkway:
  - Approximately 46 SF of fire-damaged and -stained wood framing and beams.
  - 10'-3" of charred rear ledger (mid-point)*
  - 20'-6" of charred front ledger (mid-point)*
  - 27 LF of charred 2x10 wood infill beams*
  - 18 LF of guard rail to be removed and reset
  - LF of handrail to be removed and reset
    - *(to replace these members the concrete slab will have to be removed and replaced as well)
  - Blistered wood siding two laps at 11 LF long (Appx 5.5 SF) along with required building wrap and sheathing
  - Walkway ceiling (9'-8"x 20'-6")*0.5 + (5'-0" x 4'-8") = 123 SF (+/-)
  - Approximately 20 LF of 4x8-inch wood header and 18 LF of wood column that supports truss members. Header beam notched splice with no hurricane strap
- The second-story floor patio:
  - 16 LF of 7.25x9.25-inch columns charred and soot-stained
  - 24 LF of 2x8 beams charred and soot-stained
  - 32 LF of 2x10 rim boards charred and soot-stained
  - 24 LF of floor beams charred and soot-stained
  - 48 SF of (assumed) plywood subfloor charred and soot-stained
  - Aluminum screen enclosure at three sides, non-structural

- Unit 207:
  - Floor to be inspected; the floor had deflection and noticeable bounce
- Trusses:
  - Eight trusses at rear elevation
  - 12 vertical members at mid-point of truss and wood stained
  - To replace trusses, all sheathing, fiberglass felt, shingles, and ceiling at full length of building (appx 58'-0" x 45'-0" = 2,610 SF), includes additional row outside of fire area to allow for splice replacement
- Unit 107 could not be confirmed as finishes were in-place and the framing was not exposed at the time of the site visit.

KEYSTONE
EXPERTS + ENGINEERS
509 Wilcox Street, Ste. 200
Castle Rock, Colorado 80104
281.891.3682 info@keystoneE2.com

May 7, 2020

VIA EMAIL: Tiffany.Bates@sedgwick.com

American Coastal Insurance Company
4408 Arendell Street
Morehead City, NC 28557

Re:	Policy No.	AMC-30613-05
	Claim No:	CLM-32797
	Claim Type:	Commercial
	Insured:	Park Lake at Parsons Condominium Association Inc
	Address:	806 Lake Haven Square Brandon, Florida 33511
	Date of Loss:	April 16, 2020

Dear American Coastal Insurance Company,

At your request, Keystone Experts and Engineers, LLC (Keystone) inspected the above-referenced property to determine the extent of damage to the structure due to a fire that occurred on or about April 16, 2020. The inspection took place on April 29, 2020. The persons present during Keystone's on-site investigation included Mr. Frank DeJose, P.E. (Keystone), and Mr. Adrian Sanchez (maintenance representative for Park Lake at Parsons Condominium Association, Inc.). This report contains the findings and conclusions reached as a result of that on-site investigation.

Documents Provided by Others for Review:

- "Park Lake #4170185-New assignment", emailed engineer request dated April 23, 2020, sent by Sedgwick
- American Coastal Insurance Company document package, provided by Sedgwick
    a. Claims introduction letter
    b. Notice of Change in Policy Terms
    c. Important Disclosures
    d. Policy Declaration and Endorsements
    e. AmRisc Application / Schedule of Values
    f. Photographs
    g. Residential Lease, Unit 107
    h. Bay Area DKI Repair Agreement dated April 16, 2020
    i. Claim Notice
    j. Property Loss Notice
- "Photos For Structural.PDF", provided by Sedgwick
- "Photos For Structural(1).PDF", provided by Sedgwick

Available information was documented and photographed during the investigation. The photographs depicted herein are a sampling of the many photographs taken by Keystone during the investigation. The remaining photos may be provided upon request.

Keystone did not review the insurance policy terms, limits, conditions, or coverages; therefore, the recommendations/findings presented in this report may (or may not) be covered. The issue of insurance coverage is beyond the scope of this report and coverage is provided at the sole discretion of the insurance policy.

Claim Information/Background:

Purpose: American Coastal Insurance Company retained Keystone to determine the extent of damage to the structure due to a fire that occurred on or about April 16, 2020.

Property History, Description, and Observations: Records obtained from the Hillsborough County Property Appraiser indicated the building was originally constructed in 1988. The front of the structure faced north-northwest but is referenced hereinafter as facing north toward Lake Haven Square in Brandon, Florida **(Figure 1)**. Descriptions in this document reference front, right, left, and right. Orientation is based on the view toward the structure's front elevation **(Photo 1).**

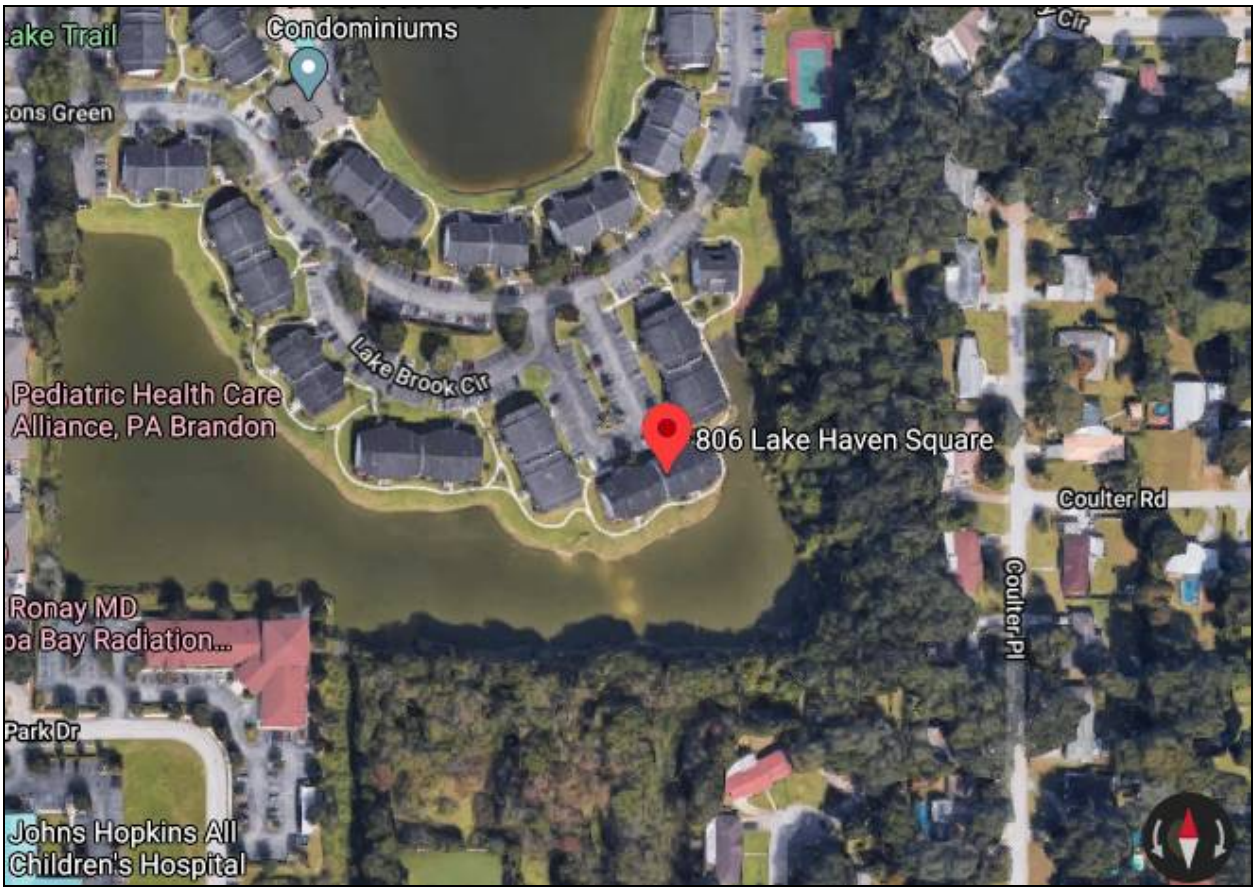


Figure 1. *Aerial overview of subject property (Photograph provided by Google Maps).*

Keystone inspected the subject property, noting the structure was a multi-family, two-story condominium building, enclosing both tenant and owner-occupied, principal residences. No structural additions were divulged to Keystone. The exterior wall cladding system consisted of wood siding.

The gable roof had ridgelines oriented parallel with the front elevation and was covered with architectural asphalt composition shingles over 4:12 (four units of vertical rise over 12 units of horizontal run) roof slopes.

Owner Interview:

The condominium association's maintenance representative was present at the time of the site investigation. Mr. Sanchez provided access to the building as well as the following information about the subject property.

- The condominium building was constructed in 1988.
- A fire occurred on April 16, 2020, around 1:00 to 1:30 p.m.
- Mr. Sanchez stated that he was at the scene of the fire, and believed that the fire started at the kitchen of Unit 107a and spread upward toward the second floor Unit 207. He also believes the fire-rated gypsum drywall located in the attic contained the fire to these units only.
- No repairs had been made to the building with respect to the fire.

Evaluation and Assessments:

General Observations:
Keystone made the following observations during the investigation of the general surroundings of the building:

- The structure was a 16-unit, two-story, multi-family, wood-framed condominium building covered with asphalt composition shingles and clad with wood siding and stucco. **(Photos 1 through 4)**
- The Park Lake at Parsons condominiums consisted of 18 condominium buildings situated on strips of land between two lakes. The property was covered primarily with asphalt drives and parking areas and buildings, with the balance covered with maintained grass lawn and scattered trees. **(Photos 1 through 4)**
- The second-story unit was being cleaned during Keystone's on-site investigation.

Fire Damage Assessment

Observations:

- There were two units affected by fire (Units 107 and 207) on the rear side of the building. **(Photo 5)**
- The units were accessed from the exterior of the building. The second story was accessed via a steel staircase with concrete treads that provide access to a wood-framed walkway. **(Photos 5, 6)**
- There were screened patios/balconies for each unit that extended from sliding glass doors. **(Photo 5)**
- The fire impacted the exterior of the building, including the siding, the eaves, the soffits, the screened porch areas, the second-story floor framing of the porch area and the walkway, and the roof trusses and roof decking. **(Photos 5 through 12, 17, 18, 19, 27, 28, 29)**
- There were three broken treads near the top of the stairs. **(Photos 13, 14)**
- The interior of Unit 107 was significantly damaged by fire but no framing was exposed in the unit. **(Photos 20, 21, 22)**

- The interior of Unit 207 had some soot damage on the walls and ceiling. The ceiling in the kitchen, dining room, and living room was partially torn out, exposing the wood trusses and roof decking. **(Photos 23 through 26)**
- There was a concrete masonry unit (CMU) party wall on the right side of Unit 208 and a drywall separation on the left, both exposed in the attic. **(Photos 36, 37, 38)**
- Trusses, vertical framing members, and sheathing were consumed or damaged by fire in the attic.
- A detailed breakdown of the structural members damaged in the April 16, 2020, fire is provided below in the Conclusions section.

Evaluation:
Keystone carried out an investigation of the subject property to determine the extent of damage caused by a fire on or about April 16, 2020. The investigation included an on-site meeting with property maintenance staff, an interior and exterior evaluation for evidence of damage and cause, and a review of supporting documentation.

Park Lake at Parsons was a condominium community with fourteen 16-unit buildings and two four-unit buildings, together with a clubhouse/office, tennis courts, racquetball court, and a community pool. The reported fire occurred at Building 806, a lake-front building situated at the southeast portion of the property. Building 806 was a two-story, 16-unit building, with eight units at the front and eight units at the rear. The building contained metal pan stairs at the rear which led to a wood-framed concrete walkway that allowed access to the second-story units, as well as screen-enclosed patios for each unit.

A fire reportedly started in Unit 107, which is located at the ground-story right right-center portion of the building. The units were replicated floor plans of approximately 777 square feet and comprised a wood-framed structure, with exterior bearing walls finished with wood siding. Openings were framed with jack and king studs, with necessary headers and sill plates.

FIre damage was observed at the ground-floor unit 107. The unit was under investigation by the fire department and investigators at the time of Keytone's visit. Also, the structural supports were not exposed and could not be examined during our visit.

The ground-floor patio consisted of an approximate 6x8-foot area, framed with 7.25x9.25-inch columns that were supported on a concrete slab and assumed thickened edge or footing. The columns supported the second-story framing, which consisted of 2x8 beams at 18 inches on-center that framed into a double 2x8 beam in the short direction and a quadruple 2x10 rim beam assembly in the long span. The second-story balcony appeared to mirror this construction, but access was unavailable due to the entrance having been boarded. The roof trusses were supported by the header beams in the long direction at the second floor patio assembly. The floor-to-floor height for both balconies was approximately eight feet and both were enclosed with an aluminum screen system. The patio exterior walls at the ground and second-story levels contained a six-foot sliding glass door opening with assumed jack and king studs, with headers to support the opening.

The ground-story exterior wall was finished with painted wood lap siding; the thickness of the interior wall studs was unknown due to limited access of the field conditions and on-going investigation by the fire department, but the studs can be assumed to be 2x4 or 2x6 members.

Interior access to Unit 107 was provided, but the area was under investigation and orange signs were posted that the area was not to be disturbed until the fire department investigation was complete. The

unit contained the furnished items and finishes, and could not be reviewed to determine the structural condition.

Access to the second-story units were provided by a metal stringer stair with concrete treads, a landing, guardrails, and handrails. The stairs consisted of four steel stringers, approximately 34 linear feet (total), with 16 concrete stair treads (12x40 inches), approximately 48 linear feet of guard rail at the stairs and landing, and approximately 19 linear feet of handrail.

The second-story walkway was a wood-framed structure secured to the exterior building wall with a 2x10 ledger beam, 2x8 infill framing spaced at 24 inches on-center and a double 2x10 front rim beam. The walkway was topped with an assumed concrete surface (approximately four inches deep) and had an area of 4.5x20.5 feet. The balcony ceiling was finished with an assumed painted plywood and the exterior of the ceiling was supported by a 4x8 header beam that was connected to two 4x6 columns spaced at 11 feet to the balcony supports on each side.

The second-story Unit 207 was a replica of the ground floor unit.

The attic area consisted of an apparent 4:12 slope truss assembly with 2x4 trusses in an apparent modified queen truss at 24 inches on-center with panel point plates and hurricane straps to double top-plate bearing walls. The trusses spanned in the front-rear direction and were flanked by a CMU fire wall at the right, and fire-rated drywall at the truss midpoint and left end. The unit contained 18 trusses, with six at the roof step and 12 at the main roof area. Further, the roof assembly contained a step-down, as an assumed architectural feature to the right of the balcony support. The bearing dimension was approximately 58 feet and had two-foot tails. The trusses were supported by header beams and bearing walls near the patio assemblies. The roof was finished with 4x8-foot sheathing panels, felt, and asphalt shingles.

Conclusions:
Based on the observations presented from the on-site investigation, Keystone concluded the following structural members were damaged by fire on or about April 16, 2020.

A fire on April 16, 2020, caused the following damage to the subject building:

- The ground-story patio:
  - 16 LF of 7.25x9.25-inch columns charred and soot-stained
  - 24 LF of 2x8 charred beams
  - 32 LF of charred 2x10 rim boards
  - 24 LF of charred floor beams
  - 48 SF of plank and plywood (assumed) subfloor charred and soot-stained
  - Aluminum screen enclosure at three sides, non-structural
- The ground-story exterior near patio wall:
  - 15 LF of charred and soot wall with assumed 2x6 (or 2x4) studs, double top plates and single sill plate
  - Six-foot sliding glass door damaged with four total jack studs and two total kings studs with header beam
  - Wood siding to be replaced to match existing, non-structural
- The ground-story exterior at Unit 107 Entrance:
  - 4 LF of damaged wall with assumed 2x6 (or 2x4) studs, double top plates and single sill plate

    - Three-foot entrance door charred with four total jack studs and two total kings studs with header beam
    - Wood siding to be replaced to match existing, non-structural
- Metal Pan Stairs:
    - Three broken stair treads (1'-0" x 3'-4"), possible damage from heavy loads during fire department usage
- Second-story walkway:
    - Approximately 46 SF of fire-damaged and -stained wood framing and beams.
    - 10'-3" of charred rear ledger (mid-point)*
    - 20'-6" of charred front ledger (mid-point)*
    - 27 LF of charred 2x10 wood infill beams*
    - 18 LF of guard rail to be removed and reset
    - LF of handrail to be removed and reset
        - *(to replace these members the concrete slab will have to be removed and replaced as well)
    - Blistered wood siding two laps at 11 LF long (Appx 5.5 SF) along with required building wrap and sheathing
    - Walkway ceiling (9'-8"x 20'-6")*0.5 + (5'-0" x 4'-8") = 123 SF (+/-)
    - Approximately 20 LF of 4x8-inch wood header and 18 LF of wood column that supports truss members. Header beam notched splice with no hurricane strap
- The second-story floor patio:
    - 16 LF of 7.25x9.25-inch columns charred and soot-stained
    - 24 LF of 2x8 beams charred and soot-stained
    - 32 LF of 2x10 rim boards charred and soot-stained
    - 24 LF of floor beams charred and soot-stained
    - 48 SF of (assumed) plywood subfloor charred and soot-stained
    - Aluminum screen enclosure at three sides, non-structural
- Unit 207:
    - Floor to be inspected; the floor had deflection and noticeable bounce
- Trusses:
    - Eight trusses at rear elevation
    - 12 vertical members at mid-point of truss and wood stained
    - To replace trusses, all sheathing, fiberglass felt, shingles, and ceiling at full length of building (appx 58'-0" x 45'-0" = 2,610 SF), includes additional row outside of fire area to allow for splice replacement
- Unit 107 could not be confirmed as finishes were in-place and the framing was not exposed at the time of the site visit.

Appendix A

Inspection Photographs

PHOTO 1

Description:

- Front (north) elevation overview.

PHOTO 2

Description:

- Right elevation overview.

PHOTO 3

Description:

- Rear elevation overview.

PHOTO 4

Description:

- Left elevation overview.

PHOTO 5

Description:

- Overview of fire-damaged units

PHOTO 6

Description:

- View of fire-exposed balcony at the second story, with charred and soot-stained members

PHOTO 7

Description:

- Alternate view of Photo 6

PHOTO 8

Description:

- View of second-story balcony-to-wall transition

PHOTO 9

Description:

- View of second-story balcony-to-roof transition with charred and consumed members

PHOTO 10

Description:

- Overview of second-story walkway with soot-stained and charred framing

PHOTO 11

Description:

- View of walkway underside with soot and charred framing near fire-damaged unit

PHOTO 12

Description:

- View of walkway underside near center of walkway

PHOTO 13

Description:

- Overview metal stair with concrete treads

PHOTO 14

Description:

- View of broken concrete treads

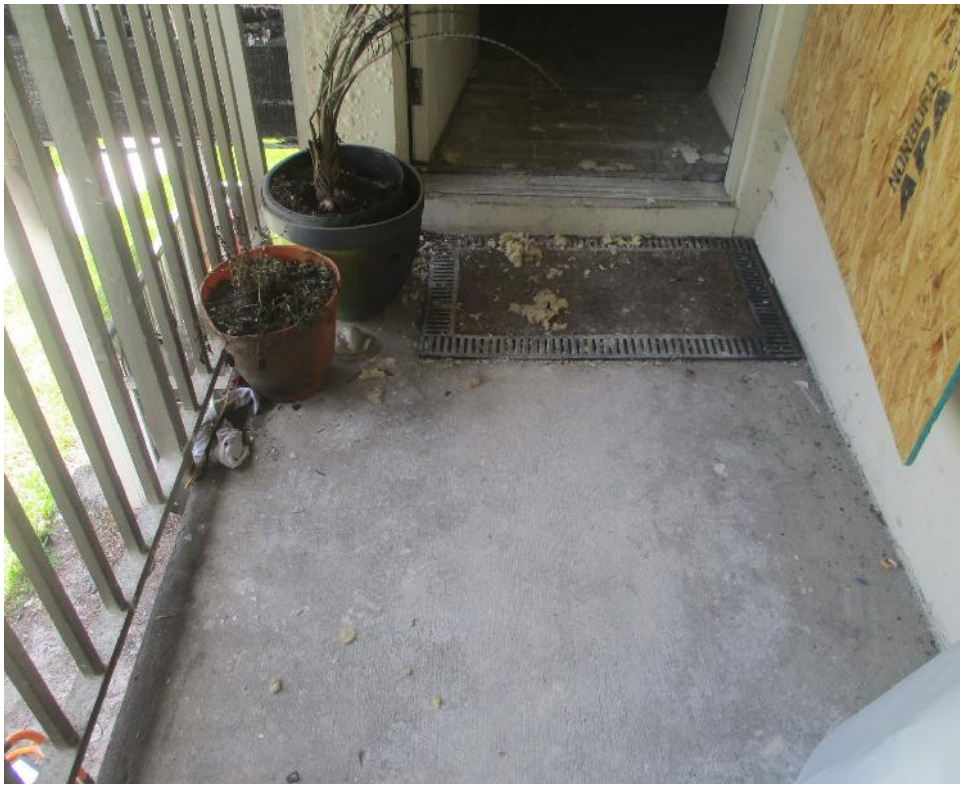


PHOTO 15

Description:

- View of topside concrete finish on second-story walkway

PHOTO 16

Description:

- Alternate view

PHOTO 17

Description:

- View of blistered exterior siding, second-story balcony, charred ceiling, header, column and trusses

PHOTO 18

Description:

- Alternate view

PHOTO 19

Description:

- View of double-height charred and soot-stained wood column and header splice

PHOTO 20

Description:

- Overview of ground-story Unit 107 where fire reportedly started

PHOTO 21

Description:

- Overview of kitchen area with posted sign

PHOTO 22

Description:

- Ceiling overview with charred and deflected drywall boards
- Note that the second-story truss was not exposed

PHOTO 23

Description:

- Second-story apartment overview Unit 207

PHOTO 24

Description:

- View of exposed truss framing assembly

PHOTO 25

Description:

- Alternate view

PHOTO 26

Description:

- View of second-story bedroom

PHOTO 27

Description:

- Truss frame assembly above balcony with consumed top and bottom chords

PHOTO 28

Description:

- Alternate view of Photo 27

PHOTO 29

Description:

- View of charred trusses and sheathing

PHOTO 30

Description:

- View of truss plate connector with charred and consumed top chord, web, and plywood sheathing

PHOTO 31

Description:

- Alternate view of Photo 30

PHOTO 32

Description:

- View of truss plate connector with charred and consumed top chord, web and plywood sheathing

PHOTO 33

Description:

- View of truss plate connector with charred and consumed top chord, web, and plywood sheathing

PHOTO 34

Description:

- View of truss plate connector with charred and consumed top chord, web, and plywood sheathing

PHOTO 35

Description:

- View of truss assembly looking left

PHOTO 36

Description:

- View of concrete masonry unit (CMU) firewall

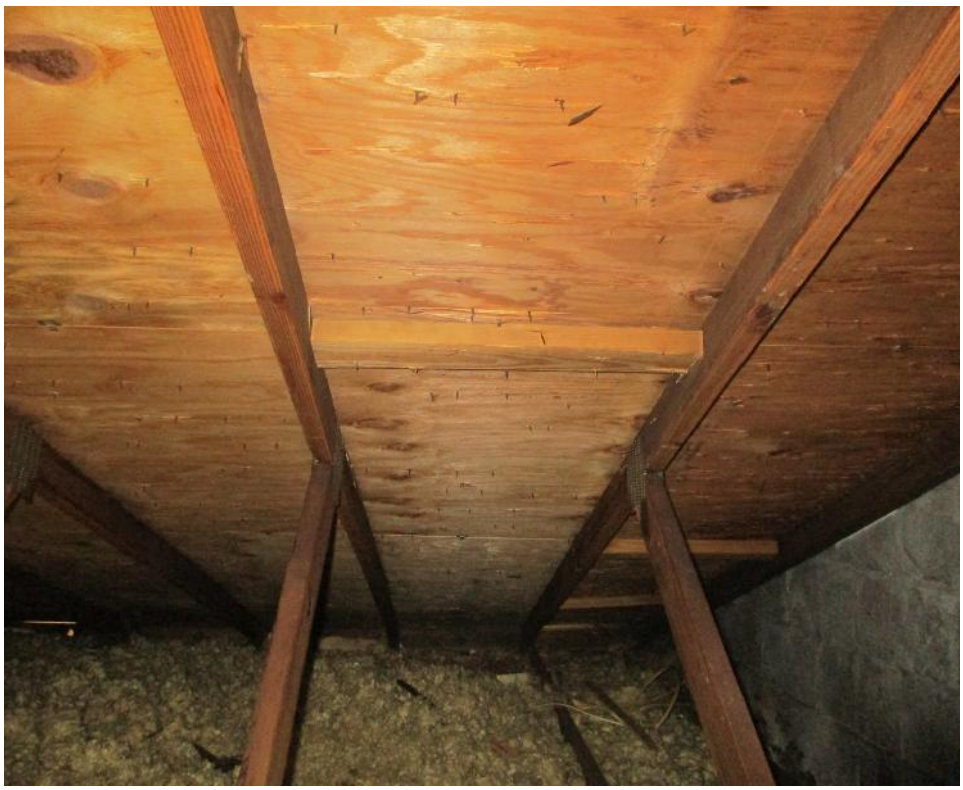


PHOTO 37

Description:

- View of truss framing and CMU firewall assembly

PHOTO 38

Description:

- Fire-rated rear wall and truss assembly
- Charred and soot-stained members

PHOTO 39

Description:

- View looking left

PHOTO 40

Description:

- Alternate view of Photo 39

PHOTO 41

Description:

- View of fire-rated rear wall and truss assembly looking forward with roof slope step at photograph right

Appendix C

Research Documents

Bob Henriquez
Hillsborough County Property Appraiser

https://www.hcpafl.org/
15th Floor County Ctr.
601 E. Kennedy Blvd, Tampa, Florida 33602-4932
Ph: (813) 272-6100

Folio: 071433-2298

Owner Information

Owner Name	BLOIS DAVID
Mailing Address	23 ST HILDA'S WHARF 106 WAPPING HIGHT STREET LONDON E1W 3PG, UNITED KINGDOM
Site Address	806 LAKE HAVEN SQ, UNIT 107, BRANDON
PIN	U-26-29-20-892-000011-00013.0
Folio	071433-2298
Prior PIN	U-26-29-20-ZZZ-000002-63020.0
Prior Folio	070559-0050
Tax District	U - UNINCORPORATED
Property Use	0400 CONDOMINIUM
Plat Book/Page	20/221
Neighborhood	223010.00 | South Brandon Area, N of Lumsden
Subdivision	892 | PARK LAKE AT PARSONS A CONDOMINIUM

Value Summary

Taxing District	Market Value	Assessed Value	Exemptions	Taxable Value
County	$81,391	$77,912	$0	$77,912
Public Schools	$81,391	$81,391	$0	$81,391
Municipal	$81,391	$77,912	$0	$77,912
Other Districts	$81,391	$77,912	$0	$77,912

Note: This section shows Market Value, Assessed Value, Exemptions, and Taxable Value for taxing districts. Because of changes in Florida Law, it is possible to have different assessed and taxable values on the same property. For example, the additional $25,000 Homestead Exemption and the non-homestead CAP do not apply to public schools, and the Low Income Senior Exemption only applies to countywide and certain municipal millages.

Sales Information

Book	Page	Month	Year	Type Inst	Qualified or Unqualified	Vacant or Improved	Price
24041	1819	04	2016	WD	Unqualified	Improved	$350,000
21776	1147	03	2013	WD	Qualified	Improved	$66,000
21231	1848	07	2012	WD	Unqualified	Improved	$2,089,000

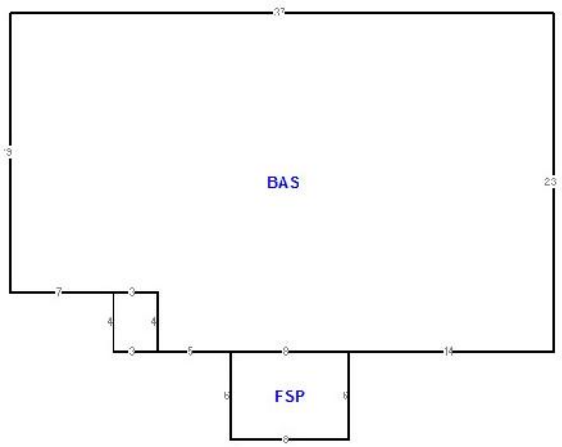
Building Information

Building 1

Type	25 | CONDOMINIUM
Year Built	1988

Building 1 Construction Details

Element	Code	Construction Detail
Class	D	Wood Frame
Exterior Wall	4	Wood/Masonry Siding
Roof Structure	3	Gable or Hip
Roof Cover	3	Asphalt/Comp. Shingle
Interior Walls	5	Drywall
Interior Flooring	8	Carpet
Heat/AC	2	Central
Condition	3	Average
Bathrooms	2.0	
Bedrooms	2.0	
Stories	1.0	
Units	1.0	



Building 1 subarea

Area Type	Gross Area	Heated Area	Depreciated Value
BAS	811	811	$67,250
FOP	12		$249
FSP	48		$1,161
Totals	**871**	**811**	**$68,660**

Land Information

Use Code	Description	Zone	Front	Depth	Land Type	Total Land Units	Land Value
0040	CONDO/TOWNHOUSE	PD	0.0	0.0	UT | UNITS	1.00	$100

Legal Description

PARK LAKE AT PARSONS A CONDOMINIUM UNIT 13 BLDG 11 AND AN UNDIV INT IN COMMON ELEMENTS

Appendix D

Curriculum Vitae

FRANK ANDREW DEJOSE
PROFESSIONAL ENGINEER

Professional Summary

A graduate of Florida State University with a Bachelor of Science degree in Civil Engineering in 2004 and earned a Masters of Civil Engineering in Structural Engineering in 2013. Experienced in structural foundation/substructure design, superstructure design in steel, concrete, masonry, and timber. Also experienced in residential and commercial design, analysis and forensic reviews. Performed engineering investigations for insurance companies, law firms, and property owners. Knowledgeable in evaluating buildings and structures for various conditions and forms of damage, including code compliance, construction defects, moisture intrusion/water damage, structural failure analysis, differential foundation movement, and hurricane/storm damage.

Education, Licenses, and Skills

Academic base in Civil Engineering enriched by pertinent work and organizational leadership experience.

Specialized coursework includes: Concrete Design, Engineering Hydrology, Foundation Design, Geotechnical Design, Highway Geometric Design, Hydraulic Engineering, Transportation Engineering, and Steel Design.

Skilled in operating PCs and Macs and proficient in using Windows-based software including: AutoCAD • ETABS • SAFE • RAM • STADD • RISA3-D • 3-D Field.

Utilized and Applied rules, codes, and specifications of: ASCE 7-2010 •IBC/IPC •UPC •NYC Building Code•Florida Building Code •ACI 318/530 •AISC •ASD •LRFD •NDS.

Experience with non-destructive testing methods including: Ground Penetrating Radar •Ultra-Sonic Testing (Concrete) •Fiber Reinforced Polymer Concrete •Infrared Moisture Scan.

Familiar with shoring, scaffolding and swing-stage temporary structure systems.

Florida State University - Tallahassee, Florida; Conferred: December 11th, 2004
Bachelor of Science, Civil Engineering; emphases; Structures, Geotechnical, and Highway Design

University of South Florida - Tampa, Florida; Conferred: December 14th, 2013
Masters of Civil Engineering, Structural Engineering; emphases: Structures, Foundations, Construction, Rehabilitation and Renovations

Professional Engineering License in New York State, obtained: April 201; Florida State, obtained: June 2011
NCEES Record obtained September 2011

Work History

Responsible for structural and architectural forensic consultation and investigation to determine the cause and origin of various site issues, including design and construction defects, and weather-related damage to residential, commercial and industrial properties. Capable of performing site evaluations, field analysis, and assessments of structural and architectural systems, low/steep-slope roofing systems, and foundation systems. Provide evaluations for failures as a result of hail damage, wind damage, moisture intrusion, flooding, building envelope failures, and general construction failures, as well as providing general recommendations for remediation and repair. Performs structural failure analysis, and evaluation of damage from hurricanes, construction vibrations, and differential foundation movement. Completes forensic investigations and professional damage assessment reports for properties affected by storm events. This includes damage from Flood, Wind, Hail, etc.

FDJ Engineering and Design, LLC, Tampa, Fl **Oct. 2017 — Present**

President-Principle Structural Engineer

Conduct analysis, inspections, and surveys to determine project scope for residential new construction, renovation and remediation projects. Projects include new and existing buildings. Conduct forensic review and analysis of wind and flood effects from the storm created forces to residential and commercial buildings. Use International Building, International Existing Building, Energy, and Plumbing codes to analyze project requirements. Design and analyze existing commercial building renovation/remediation/repair projects for buildings ranging in age of up to 100 years old. Compile the above information and write project scope of work and project manual for the Contactor bidding process. Bid and bid summation with comparative process includes bid meeting, addendums (as required), project details drawings (AutoCad) and comparative bid analysis for Owner. Florida based projects designed per Florida Product Approvals and Miami-Dade based project specified per NOA requirements. All projects coordinated with system Manufacturer for conformance and clarity.

Southern Roof Consults, Tampa, Fl **Jan. 2013 — Oct. 2017**

Structural Engineer/Project Manager

Conduct analysis, inspections, and surveys to determine project scope for commercial roof projects ranging in size from 10,000 square feet to 1,000,000 plus square feet projects throughout the United States. Projects include new and existing buildings. Conduct wind load analysis using the components and cladding method from ASCE 7-10 to determine uplift pressures and design new roof system attachment and characteristic requirements. Use the International Building and Plumbing code to analyze stormwater roof drainage systems and determine if the system is adequate to withstand rain loads. Determine attachment requirements for perimeter metal flashings, attachments, and finishes (i.e. coping cap, edge metal, cleat, etc…). Compile the above information and write project scope of work and project manual for the Contactor bidding process. Bid and bid summation with comparative process includes bid meeting, addendums (as required), project details drawings (AutoCad) and comparative bid analysis for Owner. Florida based projects designed per Florida Product Approvals and Miami-Dade based project specified per NOA requirements. All projects coordinated with system Manufacturer for conformance and clarity. Created an annual database and historical cost programs for pricing and estimation purposes. Summation of annual work into Pivot Table for informational and forecast purposes

Reserve Advisors, Tampa, Fl **Jan. 2011 — Jan. 2013**

Civil Engineer

Conduct field investigations, non-destructive inspections, visual condition assessments and quantify property, building and site elements to produce 30-year reserve studies for Home Owners Associations, Community Development Districts, Town Home Associations, Mid-Rise and High-Rise Tower Associations. Coordinate meetings with Property Managers, Board Association Members, and Home Owners to establish current property site conditions and concerns in order to produce 30-year Reserve Studies. Compile field data and review construction documents/drawings of property, building and site elements to determine material quantities for cost and schedule. Analyze site data to construct a repair and/or replacement schedule of property elements that display amounts and phases for annual reserve budget contributions to a 30-year study. Review Home Owners Associations, Community Development Districts, Town Home Associations, Mid-Rise and High-Rise Tower Associations financial documents and compare with future cost recommendations based on field investigation findings. Review, compare and qualify contractor bid costs for property element repair and/or replacement. Write detailed reports outlining findings of visual, non-invasive condition assessments, cost analysis and scheduling replacement of property, building and site elements. Explain element components, conditions, and recommendations for a replacement to determine proper timing/scheduling for a 30-year study. Elements consist of:

- Exterior walls, roofs, gutters, doors and windows, asphalt pavement, concrete flatwork, pool elements.
- Clubhouse exteriors/interiors, security systems, mechanical systems,
- Mid- and High-Rise facades, interiors, exteriors, parking garages, pools, Heating, Ventilating, and Air Conditioning systems.

Haag Engineering, Tampa, Fl **Jan. 2010 — August 2010**

Forensic Associate Engineer

Performed an array of structural engineering inspections, assessments, and analysis duties, under the supervision of licensed Professional Engineers for a Forensic Engineering Failure and Damage Firm. The scope of work included: industrial, commercial, mix-use, and residential projects. Worked under the supervision of structural engineering experts to report foundation, wind, and overall structural damage conditions. Compiled information and authored written reports, floor elevation surveys, photographs, and documents/drawings to determine the cause and extent of damage to the structure. Referenced construction compliance with Florida Building code and statuettes, ASCE -7, and IBC 2005. Failure and damage reports conducted on behalf of the client for such projects as:

- Hurricane wind and/or hail damage to residential and commercial roofs (wood shake/shingle, asphalt composition shingle, concrete flat, or rolled tiles, EPDM rubber roofing, bituthene, and modified bituthene roofing.
- Foundation settlement, movement, and sinkhole assessment for residential, commercial, and mobile homes. Conducted floor elevation surveys, contour maps, and floor levelness evaluations.

DeSimone Consulting Engineers, New York, NY **Jan. 2007 — January 2010**

Project Engineer

Executed a variety of engineering design, analysis, and fieldwork duties, under the supervision of licensed professional and structural (PE and SE) Engineers for a Structural Engineering Consulting Firm. The scope of work included industrial, commercial, mix-use, and residential projects. Worked directly with architects, owners, and developers to establish conceptual and feasibility studies of new and existing concrete, masonry, and steel buildings. Design and construction operations liaison between clients and General Contractors; provided hands-on consultation and development for project-specific elements. Shared management responsibility for up to 10 assigned design and analysis projects. Executed a variety of engineering design, analysis, and fieldwork duties, under supervision. Responsibilities consisted of Schematic Design, Design Development, and Contract Documents drawings sets. Drawings sets consisted of building plans, elevations and details; site data, geotechnical, and interior coordination for: concrete, steel. Masonry, timber, and light gauge steel structures. Structural design consisted of computer model analysis of buildings lateral system (Seismic and Wind), foundation systems, gravity supports, floors slabs, and misc. supports of facades, MEP equipment attachments, and architectural elements. Drafted, coordinated, and reviewed AutoCAD drawings design, as well as the developed scope of work for material and project specifications. Conducted full-scale shop drawing review for concrete, steel, masonry, timber, and light gauge steel contract documents.

The VSA Group, New York, NY **Jan. 2005 — Jan. 2007**

Project Manager

Completed a multitude of engineering fieldwork and office support duties under the supervision of Professional Engineers and Registered Architect for an Engineering and Architectural Consulting Firm. Project types included: Industrial, Commercial, and residential (i.e. apartment and co-op areas) construction. Traveled to area job sites to survey and develop construction requirements and specifications for new projects. Also performed job-progress inspections as well as, reviewed project drawings and verify compliance of completed work within design standards. Included buildings in height up to 48 Stories, concrete sidewalks up 3,000 square feet, and roofing systems up to 2,000 square feet.
Main liaison between clients and contractors to provide hands-on engineering consultation; managing responsibility for up to 15 assigned projects. Assisted in designing/reviewing steel, concrete and masonry details, drawing data, review of shop drawings and AutoCAD design, as well as developing the scope of work and drawing specifications. Drafted, compiled, analyzed, and reviewed AIA contracts, requisitions, contractor bid proposals, and change order documents.

RONALD J. GOFF
ENGINEERING MANAGER

Professional Summary

A graduate of the University of Wyoming and earned a Bachelor of Science degree in Civil Engineering with a Structural Emphasis in 1996. Earned a Bachelor of Science degree in Zoology/Pre-Medicine in 1994. Licensed in numerous states with experience in design, project management, and planning of residential and light-commercial projects. Extensive experience in the design and manufacturing of engineered wood products and the certification of quality control operations surrounding the manufacturing processes. Performed hundreds of engineering investigations for insurance companies, law firms, construction firms, and property owners. Expertise in evaluating buildings and structures for various conditions and forms of damage, including code compliance, construction defects, risk assessment, moisture intrusion/water damage, structural failure analysis, differential foundation movement, construction vibration, and blasting/explosion damage, hurricane/tornado/storm damage, and fire damage. Experience as a design engineer for construction and observation projects including sanitary and storm sewer replacement, foundation and site design, drainage review, and water supply management review. Testified in court, attended arbitrations, mediations, and been deposed several times. Given presentations on various design and forensic engineering topics to the engineering community.

Education and Licenses

B.S. Civil Engineering – Structural Emphasis, University of Wyoming, 1996
B.S. Zoology, University of Wyoming, 1994
Professional License in AZ, CO, DE, FL, GA, ID, KY, LA, ME, MN, MT, NJ (Pending), ND, NY (pending), OH, OK, OR, PA, RI, TX, UT

Work History

Keystone Experts and Engineers, LLC – Castle Rock CO **2018 to present**

Managing Engineer

Responsible for structural and architectural forensic consultation and investigation to determine the cause and origin of various site issues, including design and construction defects, and weather-related damage to residential, commercial and industrial properties. Capable of performing site evaluations, field analysis, and assessments of structural and architectural systems, low/steep-slope roofing systems, and foundation systems. Provide evaluations for failures as a result of hail damage, wind damage, moisture intrusion, flooding, building envelope failures, and general construction failures, as well as providing general recommendations for remediation and repair. Performs structural failure analysis, and evaluation of damage from hurricanes, tornados, ice/wind/snow, fires, explosions, blasting, construction vibrations, and differential foundation movement.

Completes forensic investigations and professional damage assessment reports for properties affected by storm events. This includes damage from Flood, Wind, Hail, etc.

Pronet Group, Inc. – Golden, CO **2017 to 2018**

Senior Project Engineer

Performs forensic engineering investigations, evaluating buildings and structures for various conditions and forms of damage, including: code compliance, construction defects, risk assessment, moisture intrusion/water damage, structural failure analysis, differential foundation movement, construction vibration and blasting/explosion damage, hail and wind/hurricane/tornado/storm damage, and fire damage.
Responsible for market support and expansion of the local workforce.

Rimkus Consulting Group – Centennial, CO **12/2015 to 06/2017**

Consultant

Responsible for investigation and evaluation of residential, multi-family, commercial, and industrial projects to determine the cause and origin of apparent engineering concerns, general contracting issues, and building envelope evaluations. Provided evaluations for failures as a result of construction and design defects, hail damage, wind damage, water intrusion, building envelope failures, and general construction failures. Performed structural failure analysis, and evaluation of damage from hurricanes, tornados, ice/wind/snow, fires, explosions, blasting, construction vibrations, and differential foundation movement. Proficient with design and construction practices with regard to residential and commercial light-frame construction and structural sites. Developed cost estimates and designs repair protocol for structural and civil projects.

PT&C Forensic Consulting Services – Denver, CO **10/2012 to 12/2015**

Project Engineer/Consultant

Performed hundreds of investigations for insurance companies, law firms, and property owners involving construction defects, structural failure analysis, and damage from hurricanes, tornados, earthquakes, ice/wind/snow, fires, explosions, blasting, construction vibrations, and differential foundation movement. Conducted continuing education courses and seminars for insurance professionals.

Particular expertise with wood construction, light-frame construction, construction defects, and engineered wood manufacturing.

American Institute of Timber Construction (AITC) – Centennial, CO **04/2001 to 09/2012**

Director, Inspection Bureau

Primary duties included managing a national inspection bureau for timber products, facilitating the drafting and revision of American National Standards, technical support for glulam manufacturers around the world and facilitating the expansion of the Association.

Solely responsible for gaining and maintaining accreditation with the International Accreditation Service as a Type A Inspection Agency for a number of wood products, and was acknowledged as the highest quality inspection agency in the world under the IAS.

Instructor and designer of IACET Accredited Continuing Education courses in wood design and quality control; he also served as secretariat for the AITC American National Standards (ANSI) committee.

Imperial Laminators – Eager, AZ **1999 - 2001**

Engineer

Responsible for the design of specialty projects, product development, marketing of new products, maintenance and supervision of the mechanically graded lumber program, and liaison between plant quality control personnel, management, and production personnel.

Crank Companies, Inc. – Kemmerer, WY **1996 - 1999**

Design Engineer

Responsible for construction and observation projects including sanitary and storm sewer replacement, foundation and site design, drainage review, and water supply management review.

Professional Affiliations

ASTM International
American National Standards Institute
International Accreditation Service
International Code Council