ADDRESS: 502-04 S JUNIPER ST

Proposal: Demolish buildings Review Requested: Final Approval Owner: Jay Ernst Applicant: Vern Anastasio, Anastasio Law History: 1830 Individual Designation: 12/31/1984 District Designation: None Staff Contact: Kim Chantry, kim.chantry@phila.gov

BACKGROUND:

This application proposes to demolish the historic three-story building at 504 S Juniper Street and the adjacent non-historic, one-story garage at 502 S Juniper Street. This application proposes a complete demolition and is therefore prohibited by the preservation ordinance unless the Historical Commission finds that the buildings cannot be feasibly adaptively reused or that the demolition is necessary in the public interest. The application makes no reuse or public interest arguments.

The Historical Commission and its advisory Architectural Committee reviewed an application for this property in late 2017 which proposed demolition of the rear wall and roof of the historic building, demolition of the non-historic garage, and construction of a four-story addition. At that time, the Historical Commission voted to deny the application pursuant to Standards 2, 9, the Roofs Guideline, and the prohibition against demolition, Section 14-1005(6)(d) of the historic preservation ordinance. The Architectural Committee, in its recommendation of denial at that time, suggested that the applicant produce a letter from a structural engineer that substantiates the reasoning for the proposal. This current application includes two engineering reports from 2021 which recommend demolition of the buildings owing to the condition.

The Department of Licenses and Inspections (L&I) issued Unsafe violations for this property in 2018 but have not since ungraded the condition to Imminently Dangerous, nor has L&I informed the Historical Commission that demolition is the only means of abating the unsafe condition of the historic building.

SCOPE OF WORK:

• Demolish buildings

STANDARDS FOR REVIEW:

- Standard 2: The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
 - The proposed work will destroy the features, materials, and spaces of the property.
- 14-1005(6)(d) Restrictions on Demolition. No building permit shall be issued for the demolition of a historic building, structure, site, or object, or of a building, structure, site, or object located within a historic district that contributes, in the Historical Commission's opinion, to the character of the district, unless the Historical Commission finds that issuance of the building permit is necessary in the public interest, or unless the Historical Commission finds that the building, structure, site, or object cannot be used for any purpose for which it is or may be reasonably adapted. In order to show that building, structure, site, or object cannot be used for any purpose for which it is or may be

reasonably adapted, the owner must demonstrate that the sale of the property is impracticable, that commercial rental cannot provide a reasonable rate of return, and that other potential uses of the property are foreclosed.

• This application proposes a complete demolition and is therefore prohibited by the preservation ordinance unless the Historical Commission finds that the buildings cannot be feasibly adaptively reused or that the demolition is necessary in the public interest. The application makes no reuse or public interest arguments.

STAFF RECOMMENDATION: Denial, pursuant to Standard 2 and the prohibition against demolition, Section 14-1005(6)(d) of the historic preservation ordinance.



939 Montrose Street • Philadelphia, Pennsylvania 19147 215.609.4165(p) • 215.689.4129 (f) www.anastasiolawfirm.com • www.phillyzoning.com

Vern Anastasio, Esq. Harry B. Cook, Esq. (NJ & PA) vern@alawphilly.com harry@alawphilly.com

April 19, 2022

VIA EMAIL EXCLUSIVELY

Philadelphia Historical Commission One Parkway, 13th Floor Philadelphia, PA 19102 kim.chantry@phila.gov

RE: Project Review: 502-04 S. Juniper Street

Dear Members of the Historical Commission and Staff:

This office represents Jay Earnst, the owner of the above referenced address. The address has two structures, a three-story home at 502 S. Juniper ("Home") and a garage at 504 S. Juniper ("Garage") (collectively, "Structures").

This project was previously denied in October of 2017 for lack of an engineering report and was up for review again in January 2019 but the request was withdrawn prior to the hearing with the intention to resubmit at a later date.

Mr. Earnst is serving in the United States Armed Forces and stationed in Europe, and by and through undersigned counsel proposes the following plan for review. We intend to submit an application to demolish the structures as per the proposed plans attached hereto at Exhibit "A".

The instant review request includes an engineering report and conclusions from the structural engineer, attached hereto at Exhibit "B", which address the poor condition of the Structures and the overall lack of salvageability.

Thank you for your time and consideration.

Respectfully,

Ser

Vern Anastasio, Esq. Anastasio Law, LLC

EXHIBIT A



I. MY VISUAL INSPECTION OF THE PROPERTIES ON THE ONE SIDE IS AS FOLLOWS: THE PROPERTY ON THE LEFT SIDE IS A 3 STORY HOUSE AND ON THE RIGHT SIDE IS A 3 STORY HOUSE. 2. WE WILL PUT AN 8' TEMP FENCE IN THE FRONT & REAR OF THE BUILDING THAT IS BEING DEMOLISHED.

- DEMOLITION OF THE STRUCTURE THERE WILL BE NO HAZARDS. 4. THE UTILITY CONFIRMATION # IS THE SERIAL NUMBER BELOW (20211510198)
- 6. TYPE OF CONSTRUCTION: 3B NON-COMBUSTIBLE / COMBUSTIBLE CONDITION OF STRUCTURE: THE STRUCTURE IS IN FAIRLY GOOD CONDITION.
- . HEIGHT OF BUILDING: APPROX. HGT. 33'-6"±
- 10. POTENTIAL HAZARDS NONE

SITE LOCATOR



502-04 S JUNIPER STREET

SAFETY PROTECTION SIGN:

PEDESTRIAN REDIRECTION SIGN





SITE SAFETY PLAN SCALE: N.T.S.

SAFETY PROTECTION SIGN: PEDESTRIAN REDIRECTION SIGN USE OTHER SIDE OF STREET 3. THE DEMOLITION COMPANY HAS ALL SAFETY MEASURES IN PLACE SO THAT DURING THE 5. THERE ARE NO KNOWN ENVIRONMENTAL ISSUES AT THE SITE.

8. THE ROOF ON THE LEFT IS APPROX. 31'-6"± AND TO THE RIGHT IS APPROX. 34'-6"±

9. FOR SHORING NECESSARY WILL BE PUT IN PLACE IF NECESSARY BY DEMOLITION COMPANY.

SUPERVISOR AND SITE SAFETY PLAN TO BE ON SITE AT ALL TIMES

CONTRACTOR TO CALL PAI SYSTEM INC. BEFORE DEMOLITION WORK TO VERIFY UNDERGROUND UTILITY LOCATION & SHUT OFF. (1-800-242-1776)

HAND DEMO. BACKFILL HOLE. & PARGE WALLS



LEFT SIDE (2 STORY HOUSE)



502-04 S JUNIPER STREE1



RIGHT SIDE (CORNER)





BUILDING DEMOLITION SITE SAFETY PLAN CONTRACTOR WORK PLAN

LICENSES - INSPECTIONS

A written document, which contains a comprehensive set of minimum safety requirements for demolition sites, is required to ensure the safety of the Demolition Contractor's personnel as well as the safety of the general public and the protection of adjoining property. The Demolition Contractor shall provide the requested information and/or documentation as detailed in this document. <u>"Attach additional sheets as necessary."</u>

CC)N'		PLAN	(
Pre	ojec	t Address: <u>502 -</u>	504 5 Uuniper	JIGG]		
Ą .	DESCRIPTION OF STRUCTURE					
	1. Materials of Construction (check all that apply)					
		EXTERIOR WALLS	INTERIOR W	ALLS FLC	DORS	
		Masonry	Masonry	□ S	teel Framing	
		□ Wood Frame	Gypsum	Me	lood Framing	
		Reinforced Concrete	Wood Fram	e oC	oncrete	
		Steel Skeleton	Plaster	□ O	ther	
		Other	Other			
		FOUNDATIONS	INTERNAL C	OLUMNS RO	OF STRUCTURE	
		Masonny	Reinforced	Concrete XV	lood Framing	
		Reinforced Concrete	Steel Posts	_ S	teel Framing	
		n Rubble Stone	Masonry	o C	ther	
		n Other	D Wood			
			Not Applica	ble		
	2.	The building suffered damage resulting from fire, flood, explosion or other cause				
	3.	Other (attach additiona	il sheets as necessary)			
		Describe		n generalism men og sjørget som som en generalism ander av andere som en en en en angener en andere ander ander		
R	DF	MOLITION MEANS &	METHODS (check all that	apply)		
The Methods of Demolition for safe demolition of the structure shall be provided below. A detailed Seq					ded below. A detailed Sequence of	
Demolition shall be provided to clearly detail the Demolition Contractor's plans for safely demolishing the buil					or safely demolishing the building.	
	1	1 EQUIDMENT.				
	2 4	Exterior Mollo	Eloore/Cailings	Interior Walls	Foundation	
		A Handhold Davicas	Handheld Devices	Handheld Device	s Handheld Devices	
		- Machanical		n Mechanical	D Mechanical	
				1.77		
		Mechanical demolition	equipment to be utilized. Des	cribe_N/A		
	2.	Lateral bracing of the upper story walls will be required as the demolition proceeds. Describe				
	3.	Dust control measures to be utilized. Describe 11/h				
	4.	METHOD OF DEMOLITION (check all that apply; include additional sheets as necessary)				
		Describe method of demolition, including any of the following items which apply:				
		Method to be used for demolishing walls and partitions to ensure work above each tier of floor beams				
		will be completed before any of the supporting structural members are disturbed.				
Measures to be taken to ensure that masonry walls, or othe					er sections of masonry, will not be	
		loosened or permitted to fall upon the floors of the building in such masses as to exceed the safe				
		carrving car	pacities of the floors or the sta	oility of structural supp	orts.	
				Il anotion which is mo	re then one story or 12 feet in height	
		A Methods to	be used to ensure that no wa	Il section, which is mo	ie and the story of the look at horging	

- Where structural or load-supporting floor beams are located below stories that have yet to be demolished, and which will be cut for the disposal of materials or for the installation of demolition equipment, describe how this work will be accomplished to ensure that the cutting does not negatively impact the safety of the floor system.
- Reinforced concrete, and heavy timber buildings, or portions thereof, shall be demolished column length-by-column length and tier-by-tier. Describe "chain or lashed in place" methods to be used to prevent any uncontrolled swing or drop of these structural members N

See Altacked papprwork

C. RESTORATION OF SITE (check all that apply)

- Where a building, or any portion, has been demolished to grade, the floor slab or foundation of such building, or portion, shall be removed and the site backfilled to grade. Will the floor slab remain and not be backfilled? Yes he lifety a Department approved waiver is required along with justification for the floor slab, including a demonstration of positive cellar drainage prepared by a registered design professional. A copy of all relevant documents shall be attached to this Site Safety Plan.
- Details shall be provided regarding the future maintenance of the premises free from all unsafe or hazardous conditions, which may include the erection of necessary retaining walls and fences. Describe

Details shall be provided for the means and methods for restoration of established prades including description of backfill material to be used. Describe <u>Curractor</u> Fo <u>Dackfill</u> <u>V</u> <u>C</u> <u>Fa</u>

D. DISPOSAL OF DEBRIS

All demolition waste materials (debris) shall be removed from the site and disposed of at an approved facility / site. The Demolition Contractor shall provide L&I with the following information:

Provide name and contact information of the landfill (or facility) where the debris will be disposed of:_____

Provide ap estimate of the volume of the debris (not including recycled materials) to be disposed of:_____

E. MISCELLANEOUS

- Provide PA One Call Number 2021/510198
- Describe any additional hazards

F. PROFESSIONAL ENGINEER'S CERTIFICATION

If required in accordance with Chapter 33 of the Philadelphia Building Code.

Signature of Design Professional



AP#

FOR OFFICIAL USE ONLY 81-1023 Reverse Demolition Supervisor's Name_<u>Manual</u>



BUILDING DEMOLITION SITE SAFETY PLAN PUBLIC INFORMATION

A written document, which contains a comprehensive set of minimum safety requirements for demolition sites, is required to ensure the safety of the Demolition Contractor's personnel as well as the safety of the general public and the protection of adjoining property. The Demolition Contractor shall provide the requested information and/or documentation as detailed in this document. <u>"Attach additional sheets as necessary."</u>

Pl	UBLIC INFORMATION				
Pr	oject Address: <u>502-09</u> D Unifer Street				
A.	DESCRIPTION OF STRUCTURE				
	Building Height Maximum height above grade 33'6 feet Number of stories above grade Building Dimensions Length 34'/feet by Width _/6'feet				
8.	SAFETY PROVISIONS				
	 Safety Exposures & Environmental Issues (check all that apply) All potential site hazards shall be identified, along with method for their remediation (encapsulation and/or removal). These materials shall be removed from the site prior to the commencement of the demolition work. A pipes, tanks, boilers or similar devices containing fuel shall be purged of such fuel. 				
	Present – yes/no Removed – yes/no Describe method of disposal				
	• Asbestos (An asbestos inspection report, which is a prerequisite for a demolition permit, is required for all buildings, exception those constructed after January 1, 1980, or for buildings last legally used as 3-family or less)				
	2. Other (attach additional sheets as necessary)				
	Describe				
C.	PROTECTION OF ADJACENT PROPERTIES, WALKWAYS AND PUBLIC WAY (check all that apply) Means of Protection to be utilized within the site shall be identified to ensure the safety of the general public and the protection of adjoining property, buildings, appurtenances, and related structures. Demolition operations shall not commence until the applicable protection is in place.				
	1. <u>SITE SAFETY ZONE</u>				

- If mechanical demolition methods will be used, the minimum Safety Zone shall be equal to or greater than half the height of the building to be demolished. Otherwise, the minimum Safety Zone shall be equal to or greater than one-quarter the height of the building to be demolished.
- A Site Plan has been prepared to indicate the location of all property lines; adjacent walkways, streets, and easements; all existing buildings; neighboring structures on adjacent lots; location of utilities; extent of demolition; and, planned pedestrian protections.

2. ADJACENT BUILDINGS IN SAFETY ZONE

Building to be demolished is higher than the roof of adjoining building. Indicate height differential and method(s) of protection, if applicable. Describe

BUILDING DEMOLITION: SITE SAFETY PLAN - PUBLIC INFORMATION

PAGE 2

Temporary shoring provided to protect adjacent structures. Describe D Lateral bracing or underpinning to protect footings, foundations, exterior walls, party walls, chimneys, etc. of adjacent structures. Describe Note: If protection is required of any adjoining property, the Demolition Contractor shall obtain a license from the owner of the adjoining property prior to entering such property. Adjacent property owner must be notified of any impact to jointly owned party walls/ foundations a minimum of 10 days in advance of work. 3. STRUCTURES IN SAFETY ZONE a Miscellaneous structures are present within the Safety Zone. Describe type/location in relation to the demolition work, and protection measures to be used Contractor to Traffic/Utility poles and trees to be protected. Describe protection_ VWOOD 4. WALKWAYS IN SAFETY ZONE Walkways/Public ways within the Safety Zone, Provide description of protection to be used Contractor Cover Sidewa PIY WOGO 5. RESTORATION OF SITE (check all that apply) 💥 Adjacent foundation walls shall be properly treated prior to backfilling of areas below grade. Contractor to parge prior to backfulling Describe Exposed walls shall be covered in accordance with Chapter 14 of the Building Code ontractor to skin coat walls w/ CEMENT Describe Fra.C.1 lon Openings in exposed party walls will require closing. Describe_ plaor to skim Coa emant D. PROFESSIONAL ENGINEER'S CERTIFICATION If required in accordance with Chapter 33 of the Philadelphia Building Code. FARL F. BUSER Signature of Design Professional Demolition Supervisor's Name Maurice AP# **Demolition Supervisor's Signature** FOR OFFICIAL USE ONLY 81-1022 Page 2

EXHIBIT B

STRUCTURAL REPORT

Project site: 504 S. Juniper Street

Philadelphia, PA 19147

Prepared for:

James J. Ernst CMR 402 Box 1824 APO, AE 09180 e-mail: jayernst1@gmail.com

Prepared by:

Earl F. Buser, PE 43 Lawrence Drive Manahawkin, NJ 08050

Professional Engineer: PA 12184-E Philadelphia Business License Number: 477281



October 10th, 2021

Dear Mr. Ernst,

Earl F. Buser, PE inspected the property at 504 South Juniper Street, Philadelphia, PA 19147 on September 24, 2021. The building structure consists of brick masonry bearing walls and wood floor framing.

The scope of our work was limited to inspecting the readily visible and accessible areas of the building and determining the structural condition. The scope of work did not cover the inspection of any non-structural elements such as roofing, HVAC, electrical elements, etc.

During the time of inspection, we noted deteriorations in the following areas:

- 1) Cracks to the exterior of the building that has continued to increase over time
- 2) Deteriorating masonry conditions at the front wall of the main building, the party wall between the main building, garage, the interior brick chimney, and alley facing side wall
- 3) Deteriorating masonry conditions in the garage structure
- 4) Garage roof framing is partially unsupported
- 5) The deterioration around the windows / doors in the front of the house

Based on the field inspection and engineering judgment, it is my conclusion that the building exhibits deficiencies that has deteriorated further over time since the first report was completed in 2018 (ie: front wall bulging) as well as new deficiencies that need to be addressed (items listed above). Based on the building's age and the current structural condition, it is my recommendation that the main building and the garage should be torn down.

The findings and conclusions of this report with respect to the inspection of the property at 504 South Juniper Street are based on normal visual observations of the site. No conclusions, expressed or implied, shall represent that I, Earl F. Buser, has made an evaluation of the material, fabrication, or erection deficiencies beyond that which would be detectable by a normal visual inspection. Please feel free to contact me or my partner Chris Hammel (609) 504-0224 if you have any questions. Thank you.

Regards, Earl F. Buser, PE





Image No. 1- Above View of 504 S. Juniper Street, Philadelphia, PA, 19147



Image No. 2- Street View of 504 S. Juniper Street, Philadelphia, PA, 19147



Image No.3- Streetview of the attached garage structure



Image No. 4- View of brick masonry in the garage structure



Image No. 5- View of garage corner



Image No. 6- View of unsupported roof framing in the garage structure



Image No. 7- Loose masonry/ masonry voids at the exterior wall



Image No. 8- View of sidewall, masonry, and joints show deterioration w/ a vine the is making its way into the mortar joints



Image No. 9- Closer look of the deteriorating sidewall



Image No. 10- Front door of the main housing structure & the continuation of the deterioration around the door







Images 11,12, and 13- View of windows located on the front of main structure & the continuation of the deterioration around the windows

HOME INSPECTION ENGINEERS

Phone 856-482-6615

October 24, 2021

Mr. Jay Ernst Jayernst1@gmail.com

> RE: 502-504 Juniper Street Philadelphia, PA

Dear Mr. Ernst,

You have asked for my opinion concerning the structural integrity of the subject property. You have asked that I inspect the house and attached garage and determine the structural integrity of the house.

I am presently the owner of Home Inspection Engineers, which I have operated since 1983. I have earned a Bachelor of Engineering degree, with a major in Mechanical/Structural Engineering, as well as a Masters of Science in Engineering. My company conducts a variety of services, including inspection of commercial and residential properties, construction inspections, structural design work, plan approval/specification, consulting on various aspects of building and acting as an expert witness in building construction, home inspections, code compliance and construction related accidents. I am a Registered Professional Engineer with active licenses in Delaware, Maryland, New Jersey, Pennsylvania, Virginia, and New York. I am also a member of the National Society of Professional Engineers and National Academy of Building Inspection Engineers. A copy of my complete CV is attached.

This building is a three story (trinity) single family home with an attached two car garage. The building has brick exterior walls with a sloped roof surfacing. The house is approximately 100 plus years old.

In preparation for this report, I have reviewed a report from AR Engineers dated May 11, 2018 and prepared by Alex Rong P.E. I have received no other documentation or discovery on this property. This report is based solely on this visit to the property plus review of this report.

Site Inspection

In accordance with your request, I visited the subject property on October 22, 2021. The weather during the inspection was sunny and approximately 65 degrees F.

The purpose of this structural inspection was to view the building including the garage to determine the structural integrity of the building and its safety for use and occupancy. The exterior of the building and the accessible areas of the interior were viewed.

The basic structure of the building is masonry/brick foundation and bearing walls supporting side to side wood joists for the various floors. The attached garage has a wood frame roof and brick exterior perimeter walls. This is a standard method of construction for this age house.

I was able to inspect the exterior of the building, the garage and the first floor of the building. This inspection showed the following major structural issues:

- Garage
 - The roof of the garage is not sound. There is unsupported roof framing in the rear of the building.
 - There is rotted roof underlayment.
 - The perimeter brick walls have deteriorated brick and mortar joints
- Interior
 - The interior has had ceilings and walls and steps removed.
 - The interior brick walls have much missing mortar, loose bricks, deteriorating bricks.
 - The wood floor system has deteriorated wood ends in the brick pockets.
 - The front star washer supports on the brick walls are not properly fastened to floor systems. There is no blocking/solid bridging and fastening of the rear end.
- Exterior
 - The exterior bricks are deteriorating. There are loose bricks, missing bricks, missing and porous mortar.
 - The roof level of the left side around and below the chimney area has much missing and loose bricks and not supporting roof.
 - The left side bricks are cracking and deteriorating and many are broken and missing.
 - The front brick wall has a bulge in it. There are four star washers on it but the washers are not holding the bricks properly. There are new cracks and movement especially at window lintels.
 - The front roof edge is bowing out. The roof is collapsing.

Based on this inspection of the building, this building has many very significant structural issues in it and the building is not safe and not sound. as a minimum all of the roofs (house and garage) need to be totally removed and replaced with new framing, new roof sheathing, etc. The exterior brick walls of the building need to be replaced. The brick walls are not sound and require all bricks to be removed and replaced with new bricks and new mortar. The interior wood floor joist system needs replacement.

Basically the building needs to be demolished to be able to be rebuilt into a safe condition. Therefore, the building is not safe and not sound and needs to be taken down. At this time, the building should not be entered and should be closed off. The building is not safe.

I have also reviewed the report written by Alex Rong on May 11, 2018. This report basically has the same conclusion as my evaluation. The conditions shown on Mr. Rong's report have continued to deteriorate as shown on my inspection.

Following are pictures taken at the time of inspection:



FRONT



FRONT SHOWING BUILDING AND GARAGE ON RIGHT SIDE



RIGHT WALL



FRONT AND SHOWING STAR WASHERS





LEFT WALL



ROTTED WOOD IN BRICK



LEFT FRONT CORNER



LEFT SIDE





FRONT BOWING ROOF



FRONT ROOF CORNICE



LEFT BRICK WALL NEAR CHIMNEY



LEFT WALL



INTERIOR OF GARAGE



UNSUPPORTED ROOF



GARAGE WALLS



UNSUPPORTED ROOF IN GARAGE



REAR YARD



REAR WALL



REAR WALL



INTERIOR



INTERIOR DETERIORATED BRICK



STAR WASHER BRACE



STAR WASHER BRACE ON JOISTS



STAR WASHER BRACE



INTERIOR



INTERIOR



INTERIOR

Conclusions and Recommendations

In conclusion, this building and its attached garage are not structurally sound and not safe. The perimeter bearing walls and the roof structures and many floor joists are deteriorating and pose a significant safety concern. This house could collapse at any time and should be demolished to prevent collapse.

These conclusions have been reached with a reasonable degree of professional certainty, based on a review of materials provided to me as well as my site inspection. I reserve the right to supplement this report upon the provision of any additional material or facts.

Should you need anything further from me, please let me know.

Sincerely, Stuart F. Rosenbaum PA PE # 030223

NJ PE # 28903 NJ home inspector license #24GI00041700





HOME INSPECTION ENGINEERS

Phone 856-482-6615

QUALIFICATIONS

STUART F. ROSENBAUM P.E.

Education

The Cooper Union, New York, NY Graduated June, 1975 with a Bachelor of Engineering Degree with a major in Mechanical/Structural Engineering

The University of Delaware, Newark, DE 18 graduate credits in Mechanical/Structural Engineering

The University of Pittsburgh, Pittsburgh, PA Graduated December, 1981 with a Master of Science Degree in Engineering with a major in Engineering Management

Work Experience

- 1970 to 1975 Employed in construction and building maintenance part time (full time in summers) Undergraduate School-Roofing, sheet metal work, air conditioning maintenance, some general construction
- 1976 to 1983 Employed in various companies as a structural/mechanical engineer engaged in the design of structures and structural components, supervision of drafters, testing of structures.
- 1983 to pres. Owner of and Licensed Professional Engineer in Home Inspection Engineers. Engaged in the inspection of commercial and residential properties, construction inspection, structural design work, plan approval/specification, consulting on various aspects of buildings and acting as an expert witness in building construction, home inspections, code compliance in regards to buildings, accidents due to faulty building construction, etc. Have been qualified as an expert in various courts in New Jersey and Pennsylvania. Supervision of site safety personnel on high rise construction.

Other Credentials

Awarded full tuition scholarship to the Cooper Union

Awarded Research Fellowship to the University of Delaware

Member of Omega Rho National Honorary Society in Management Science

Registered Professional Engineer with active licenses in Delaware, Maryland, New Jersey, Pennsylvania, Virginia and New York.

Licensed Home Inspector in New Jersey

Member National Society of Professional Engineers

Executive Member National Academy of Building Inspection Engineers