



## CITY OF NEW BEDFORD

### Department of City Planning

133 William Street • Room 303 • New Bedford, MA 02740

508-979-1488 • [www.newbedford-ma.gov](http://www.newbedford-ma.gov)

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## MEMORANDUM

**TO:** New Bedford City Council

**FROM:** New Bedford Historical Commission

**DATE:** June 8, 2022

**RE: BUILDING DEMOLITION REVIEW**  
**1 Rear Coffin Avenue (Map 100 Lot 117) Circa 1902 masonry mill building**

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In accordance with the requirements of the New Bedford City Code, Article XI, Section 2-157 Demolition of Buildings, the New Bedford Historical Commission [NBHC] has examined the structure located at the above-captioned site in order to determine its historical significance and whether it is in the public interest to preserve such structure.

The NBHC reviewed the application for demolition at its June 6, 2022, meeting, and hereby forwards its findings and recommendation in this matter to the New Bedford City Council:

- The building is architecturally and historically significant and is a contributing resource within the Whitman Mills National Register District. It has associations with the city's cotton textile industry as well with internationally known mill architect/engineer Charles R. Makepeace, notable contractor Benjamin F. Smith, and leading textile manufacturer and commission agent William Whitman.
- A 2019 Board of Survey report drafted by a licensed structural engineer, documented substantial roof structural system collapse and declared the building unsafe and dangerous per the provisions of the State Building Code. The building is structurally compromised and beyond feasible rehabilitation to the extent that it presents as a public hazard.
- The City and the Massachusetts Historical Commission, with the NBHC as a concurring party, will be entering into a Memorandum of Agreement with stipulations to photo document the building in order to mitigate the adverse effect to historic resources.

**In light of these findings, the New Bedford Historical Commission has determined that the building at 1 Rear Coffin Avenue is a Historically Significant but not Preferably Preserved historic building.**

**Cc:** Beit Medrash of Great Neck Inc., property owner  
Department of Inspectional Services  
Mayor's Office

**Attachments:** NBHC Staff Report  
Survey Board Report



## CITY OF NEW BEDFORD DEPARTMENT OF CITY PLANNING

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### STAFF REPORT

NEW BEDFORD HISTORICAL COMMISSION MEETING

June 6, 2022

#### DEMOLITION REVIEW

##### CASE # 2022.10

1 Rear Coffin Ave (Map 100 Lot 117)

**OWNER:** Beit Medrash of Great Neck Inc  
DBA Teen Counseling Foundation  
P O Box 231006  
Great Neck, NY 11023



1 Rear Coffin Ave. Whitman Mill Weave Shed #2

**OVERVIEW:** The 1902 weave shed of the former Whitman Mills has been a long-term, vacant, blighted structure. The City has issued correction orders to the property owner and has sought demolition to cure the violations associated with this property.

**HISTORICAL CONTEXT:** The structure is associated with the Whitman Mills, a turn-of-the-20<sup>th</sup> century textile mill complex which became a National Register District in 2003. The Whitman Mills is representative of the large, self-contained, utilitarian, brick, pier and masonry spandrel, manufacturing facilities typically constructed in New Bedford as the city transformed from a whaling port to a major industrial city focused on the production of cotton textiles. The plant is also significant for its associations with internationally known mill architect/engineer Charles R. Makepeace, notable contractor Benjamin F. Smith and leading textile manufacturer and commission agent William Whitman.

**STATEMENT OF APPLICABLE GUIDELINES:** The provisions of the Demolition Delay Ordinance shall apply only to any building or structure that, in whole or in part, was built seventy-five (75) or more years prior to the date of the application for the demolition permit, and is:

- A building or structure listed or eligible to be listed on the National Register of Historic Places, or within an area listed on the National Register of Historic Places, or on the State Register of Historic Places;
- A building or structure importantly associated with one or more historic persons or events, or with the broad architectural, cultural, economic, political or social history of the city, or;
- A building or structure which is historically or architecturally significant in terms of period style, method of building construction or association with a significant architect or builder either by itself or as a part of a group of buildings, or;
- A building or structure located within one hundred fifty (150) feet of a federal, state or local historic district boundary.



1 Rear Coffin Ave. Locus Map

**STAFF RECOMMENDATION:**

A 2019 Board of Survey report drafted by a licensed structural engineer, documented substantial roof structural system collapse and declared the building unsafe and dangerous per the provisions of the State Building Code. The building is structurally compromised and beyond feasible rehabilitation to the extent that it presents as a public hazard.

The structure is a contributing resource within the Whitman Mills National Register District and the City has determined that the proposed demolition may have an adverse effect. Therefore, the City has consulted with the Massachusetts Historical Commission (MHC) pursuant to 36 CFR Part 800, the regulations implementing Section 106 of the National Historic Preservation Act.

The City and the Massachusetts Historical Commission, with the Historical Commission as a concurring party, will be entering into a Memorandum of Agreement with certain stipulations in order to mitigate the adverse effect to historic resources.

**STIPULATIONS**

The City shall ensure that the following measures are carried out:

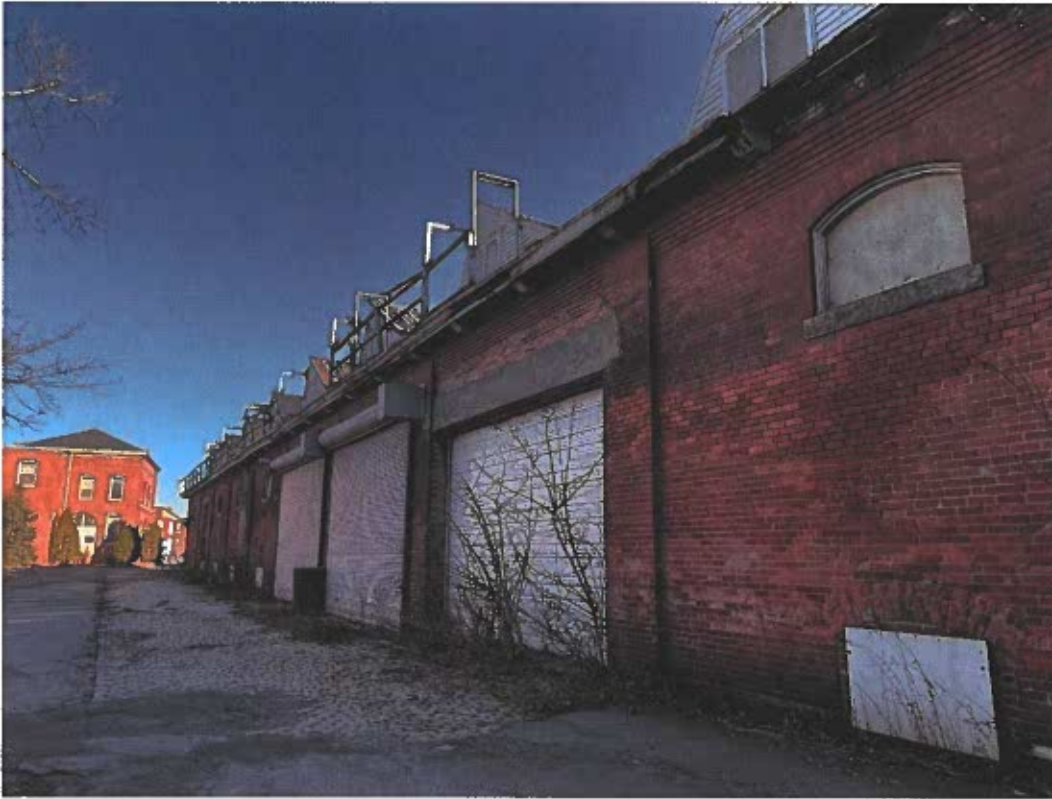
I. REQUIRED DOCUMENTATION

Prior to any demolition activity associated with the 1 rear Coffin Avenue undertaking, the City will ensure that documentation of the building is undertaken in accordance with the following, requirements:

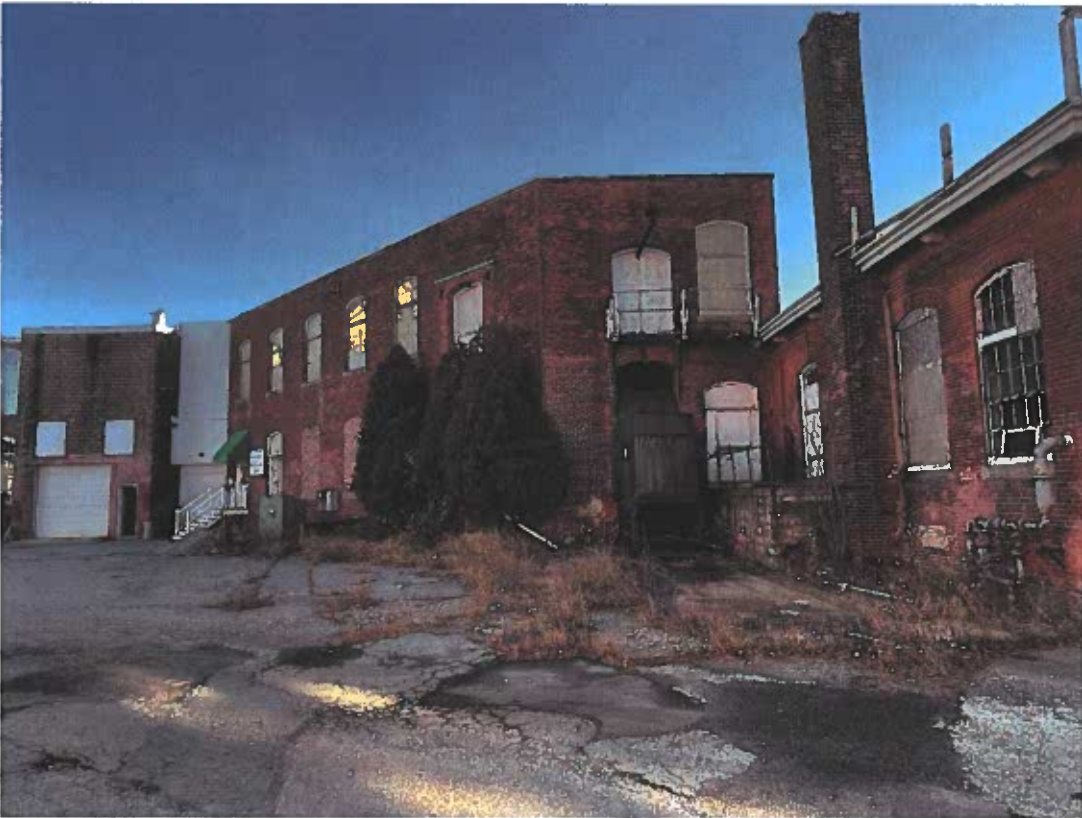
1. Prior interior photographs will be retained and used as documentation as interior access is not currently possible. Copies of said photographs shall be transmitted via flash drive to the MHC and New Bedford Historical Commission (NBHC); and
2. Current photographic documentation of exterior elevations and representative views of architectural details will be produced. Digital images shall be provided to the MHC and NBHC. These photos will be transmitted via flash drive before the demolition of the structure is conducted.

**SEE FOLLOWING EXTERIOR IMAGES**

1 Rear Coffin Ave, New Bedford, MA  
Exterior Photos Taken - 12/17/21



1 Rear Coffin Ave, New Bedford, MA  
Exterior Photos Taken - 12/17/21



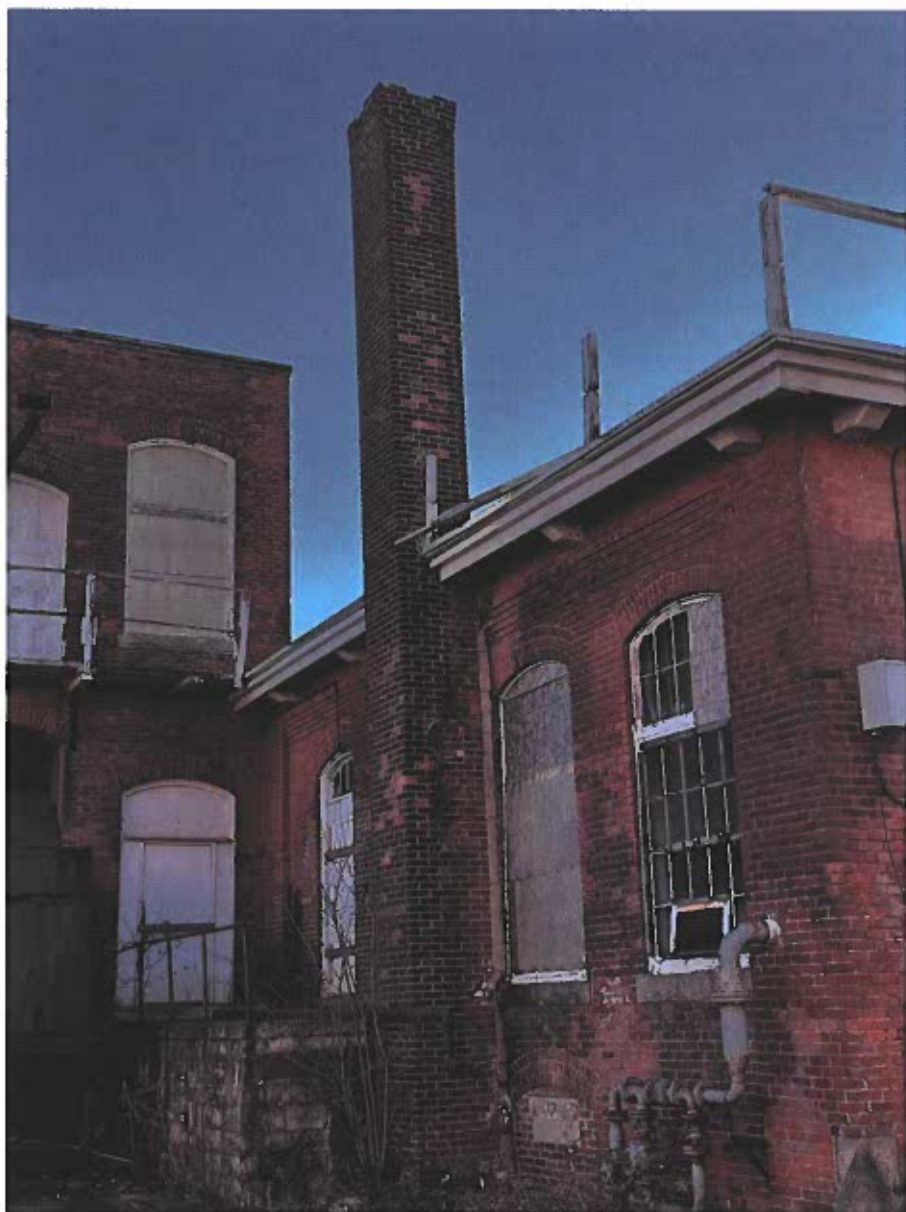
1 Rear Coffin Ave, New Bedford, MA  
Exterior Photos Taken - 12/17/21



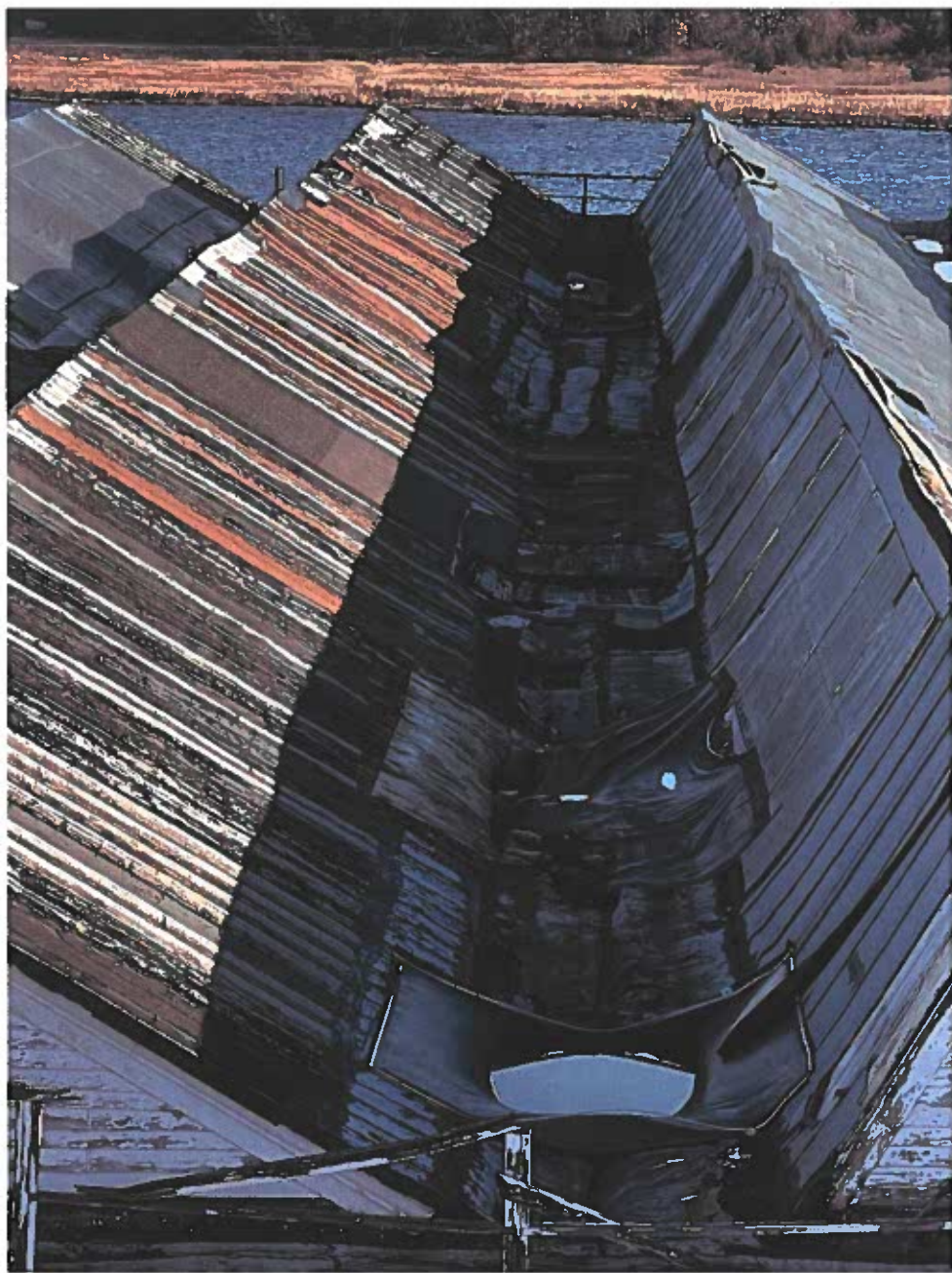
1 Rear Coffin Ave, New Bedford, MA  
Exterior Photos Taken - 12/17/21



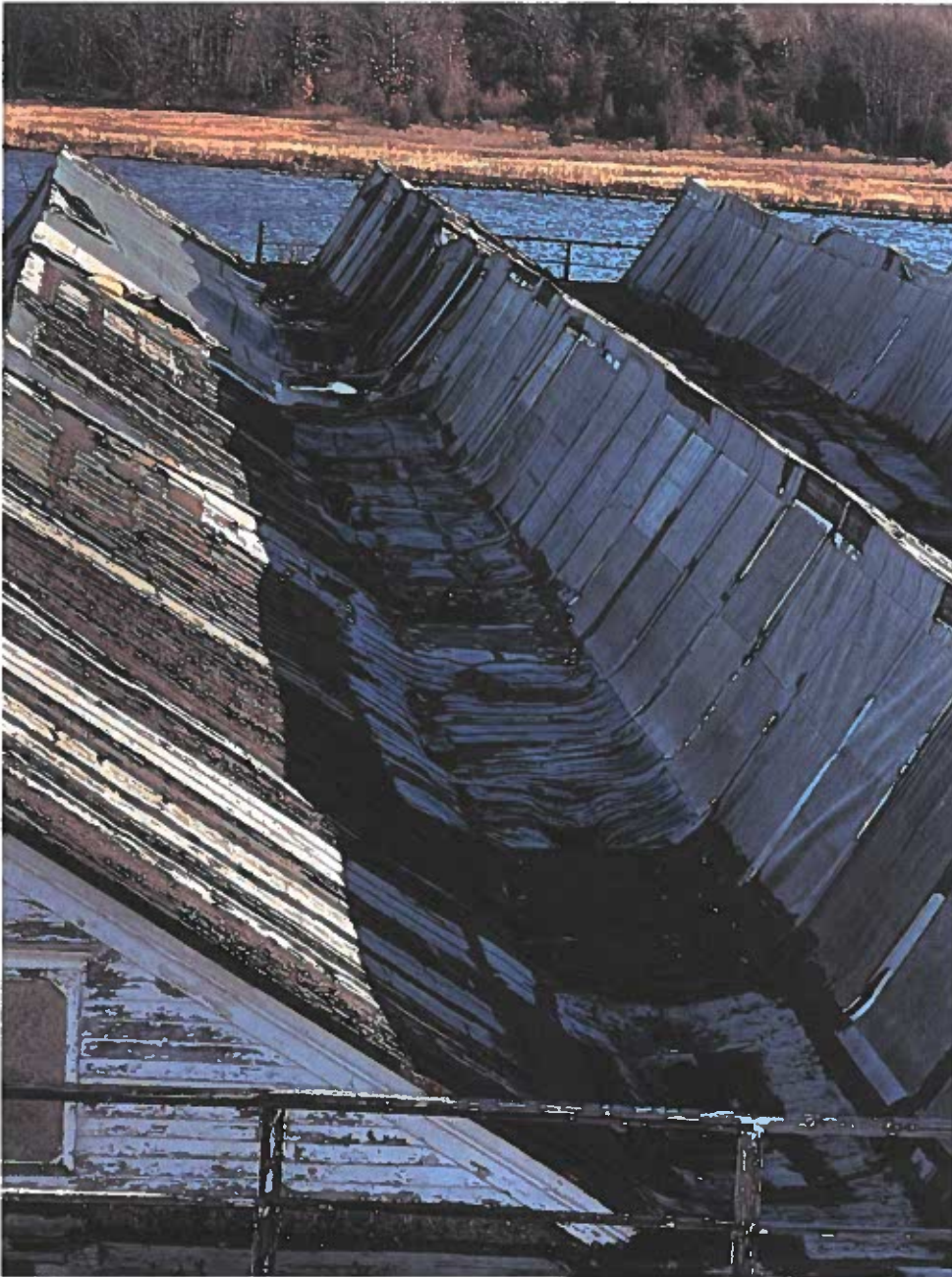
1 Rear Coffin Ave, New Bedford, MA  
Exterior Photos Taken - 12/17/21



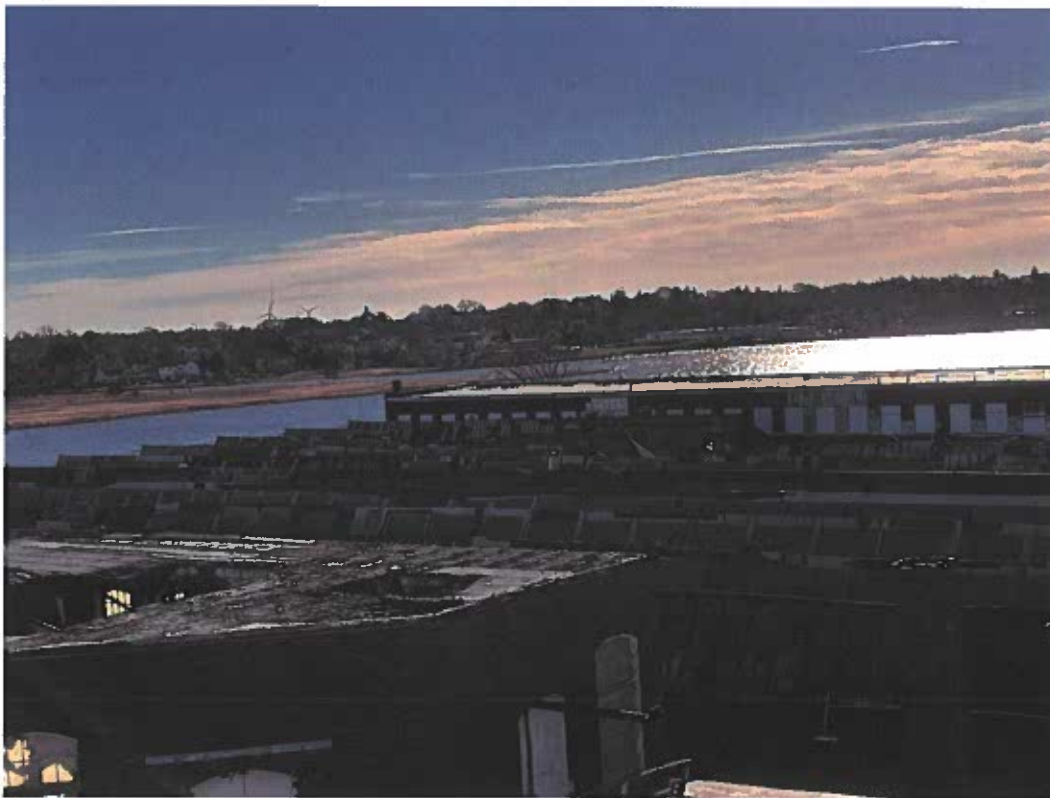
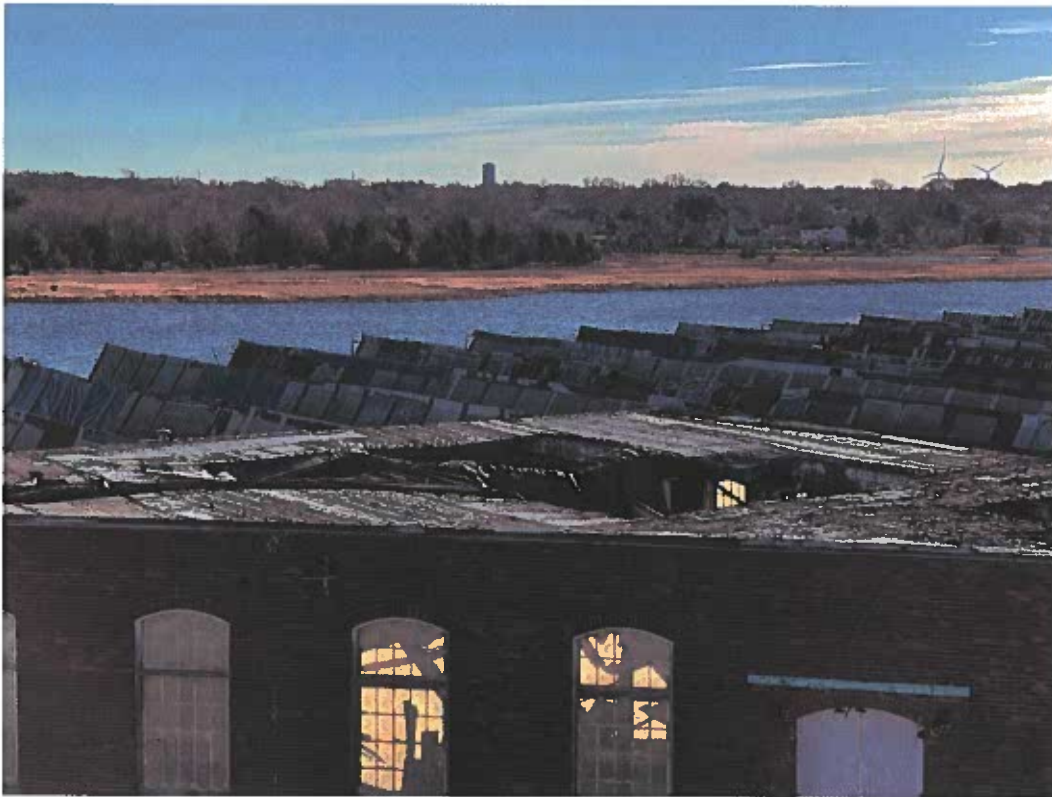
1 Rear Coffin Ave, New Bedford, MA  
Exterior Photos Taken - 12/17/21



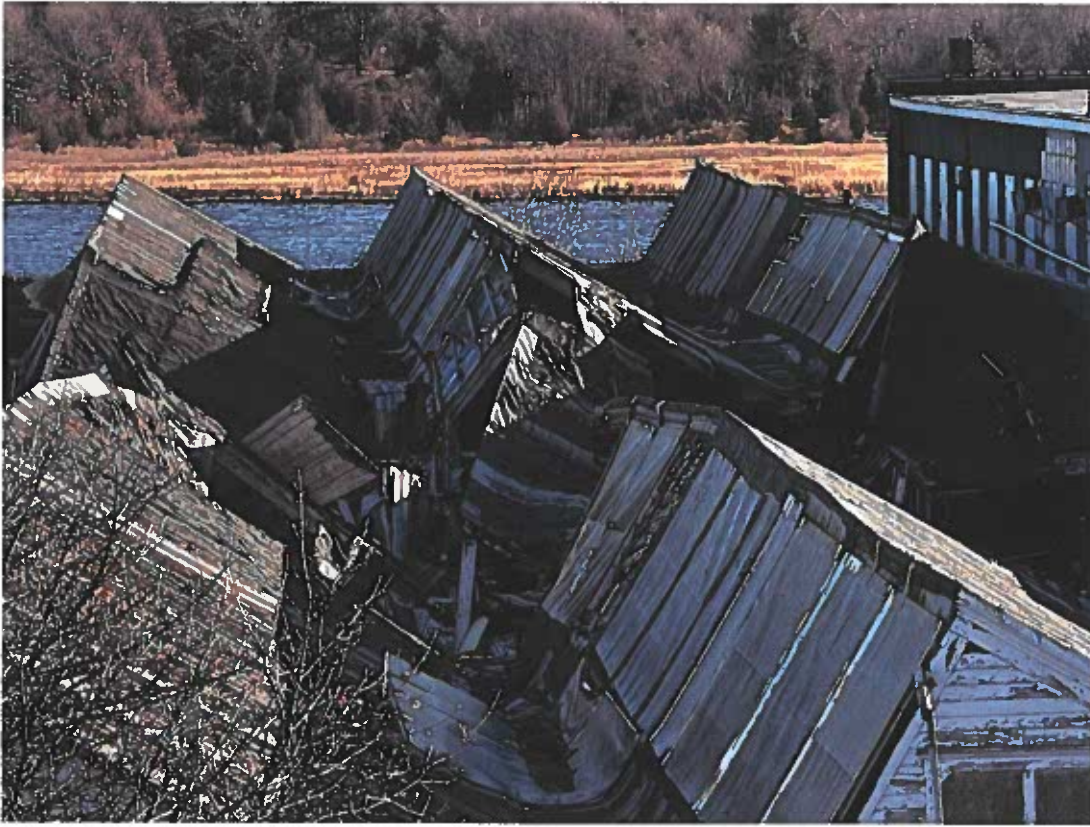
1 Rear Coffin Ave, New Bedford, MA  
Exterior Photos Taken - 12/17/21



1 Rear Coffin Ave, New Bedford, MA  
Exterior Photos Taken - 12/17/21



1 Rear Coffin Ave, New Bedford, MA  
Exterior Photos Taken - 12/17/21



**CLUNIE  
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May 13, 2019

City of New Bedford  
Department of Inspectional Services  
133 William Street, Room 308  
New Bedford, MA 02740

Attention: Danny Romanowicz, Commissioner

Subject: Survey Board Report  
1 R Coffin Avenue, New Bedford, MA

Dear Mr. Romanowicz:

Clunie Engineering, Inc. participated in an inspection of the subject building on April 23, 2019 as part of a Survey Board convened by City of New Bedford officials in accordance with provisions of the State Building Code. Photos that I acquired during the Survey Board from atop a New Bedford Fire Department ladder truck are included on the last two pages herein to highlight the survey findings.

Photos 1 through 3 on Page 2 herein are presented in a panoramic sweep from East-to-Southeast-to-South in order to provide acclimation to the roof layout and show overall roof conditions, while Photos 4 through 6 show some of the peaks of sawtooth roof systems that are misaligned and out of level. Photos 7 through 9 on Page 3 show several large holes through a flat roof and expanses of sawtooth roof systems that have collapsed.

A summary of survey findings is quite simply that large areas of the roof structural systems have collapsed and that many other areas of roof structures continue to deflect out of alignment from their baseline positions that I observed when I first inspected this building 6½ years ago. One area of sawtooth roof systems that has collapsed at the South end of the building as shown in Photo 9 encompasses an area that I estimate to be approximately 5,000 square feet. Ongoing deterioration of other areas of this building can easily be gauged by referring to the information contained within my April 14, 2019 letter to you that I have attached to this document, which includes my several other letters that were dated February 15, 2013 and December 24, 2014 and March 23, 2015.

As I stated in my April 14, 2019 letter, this building is a danger to life or limb. I have accordingly joined Survey Board members in signing a document declaring that the building is dangerous as prescribed by provisions of the State Building Code since it has partially collapsed and it is unused, uninhabited or abandoned, and open to the weather. As such, I recommend demolition of this unsafe building as soon as possible.

Please contact me with any questions or comments you may have regarding the information contained herein.

Sincerely,

CLUNIE ENGINEERING, INC.

*Alan R. Clunie*

Alan R. Clunie, P.E.  
President



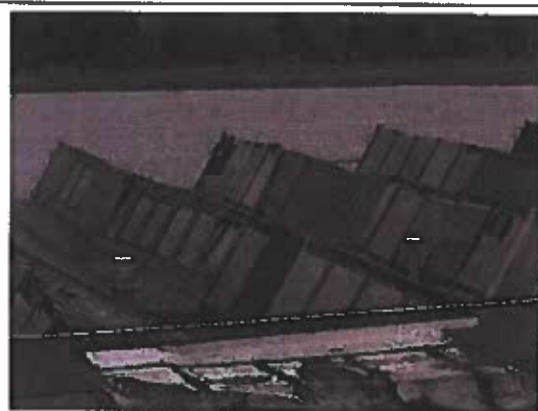
**COPY**  
5-14-19

Attachments: Letters noted above

**SURVEY BOARD REPORT FOR 1 R COFFIN AVENUE, NEW BEDFORD, MA**



**1** Holes in roof at Northwest corner of building and sawtooth roof beyond (facing East)



**4** Close-up of misaligned areas of sawtooth roof systems shown in Photo 1 (facing East)



**2** Flat roof at Northwest corner of building and sawtooth roof beyond (facing Southeast)



**5** Misaligned areas of sawtooth roof systems shown in Photos 1 & 2 (facing Southeast)



**3** Flat roof at Northwest corner of building and sawtooth roof beyond (facing South)



**6** Close-up of misaligned areas of sawtooth roof systems shown in Photo 2 (facing SSE)

SURVEY BOARD REPORT FOR 1 R COFFIN AVENUE, NEW BEDFORD, MA



**7** Holes through roof near Northwest corner of building (facing East) – refer to Photo 1



**8** Holes through roof near Northwest corner of building (facing South) – refer to Photo 3



**9** Two bays of sawtooth roof systems located near the middle of the South end of the building have collapsed along approximately one-third of their 303 foot length from East-to-West (facing South) – ref. Photos 2 & 3

April 14, 2019

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City of New Bedford  
Department of Inspectional Services  
133 William Street, Room 308  
New Bedford, MA 02740

Attention: Danny Romanowicz, Commissioner  
Department of Inspectional Services

Subject: 1 R Coffin Avenue, New Bedford, MA  
Review Records of Building Conditions

Dear Mr. Romanowicz:

Per your request, I have reviewed photographs that you provided which depict conditions at the subject building as of November 13, 2018. Six of your photographs are contained on Page 2 herein for convenient reference.

In order to develop an understanding of the rate of deterioration of building components, I subsequently reviewed findings from my inspection of the building in late-2012 and late-2014 as described in my letters to you that were dated February 15, 2013 and December 24, 2014. Copies of these two letters are attached to this document, as is my March 23, 2015 letter to you.

Even though I have not seen the building since my last inspection 4½ years ago, it is evident from your photos that areas of the building that have collapsed are susceptible to further failure. And as noted in my February 2013 letter to you, failure mechanisms could cause sudden and catastrophic collapse of these areas and/or progressive collapse of adjacent building areas. The entire building is therefore a danger to life or limb.

Deterioration of building components will likely accelerate rapidly because the building is open to the weather and is thus subjected to more widespread environmental attack. Since many building components and structural systems were already technically infeasible to repair or reconstruct as defined by the State Building Code, I infer that many more already are or soon will be. Considering many factors cumulatively, it appears that it is also not economically feasible to attempt to keep this building in service.

In order to protect public safety, I accordingly recommend demolition of this unsafe building as soon as possible.

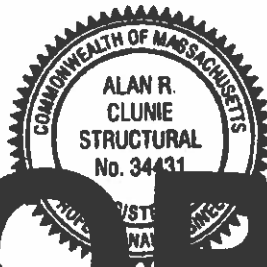
Please contact me with any questions or comments you may have regarding the information contained herein.

Sincerely,

CLUNIE ENGINEERING, INC.

*Alan R. Clunie*

Alan R. Clunie, P.E.  
President



Attachments: 3 Letters noted above

*4-15-19*

**PHOTOGRAPHIC DOCUMENTATION OF 1 R COFFIN AVENUE, NEW BEDFORD, MA**



**1** Photo provided by New Bedford Department of Inspectional Services is identified as being created on November 13, 2018



**2** Photo provided by New Bedford Department of Inspectional Services is identified as being created on November 13, 2018



**3** Photo provided by New Bedford Department of Inspectional Services is identified as being created on November 13, 2018



**4** Photo provided by New Bedford Department of Inspectional Services is identified as being created on November 13, 2018



**5** Photo provided by New Bedford Department of Inspectional Services is identified as being created on November 13, 2018



**6** Photo provided by New Bedford Department of Inspectional Services is identified as being created on November 13, 2018

February 15, 2013

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City of New Bedford  
Department of Inspectional Services  
133 William Street, Room 308  
New Bedford, MA 02740

Attention: Dan Romanowicz, Commissioner  
Buildings & Inspectional Services

Subject: Building Inspection  
1 R Coffin Avenue  
New Bedford, MA

Dear Mr. Romanowicz:

Clunie Engineering, Inc. participated in a visual and limited tactile inspection of the subject building on October 11, 2012 along with City of New Bedford building and fire officials in order to determine the overall general conditions within the building.

A description of conditions is contained within the inspection findings below, followed by conclusions and recommendations. Photos included on the last six pages herein augment the inspection findings.



**SAWTOOTH ROOF OVER FIRST FLOOR OF BUILDING**

**INSPECTION FINDINGS**

While specific conditions regarding fire safety and electrical safety are not contained herein, other conditions that were observed during the inspection are as follows:

1. Many of the deficiencies that were observed throughout the interior of this building appear to have been caused by water infiltrating the building envelope at various locations through areas of the roof systems. As shown in the photo above, most of this mill building is comprised of a single-story factory covered by a sawtooth roof system, while a small percentage of the building area is covered by flat roofing.

Daniel Weinstein, Principal of American Engineered Fabrics, Inc., stated during the inspection that new roofing has recently been installed along areas of the sawtooth roof and that other areas of the roof will be repaired in the future. New membrane roofing has also been installed along the flat roof above the second floor rooms at the South end of the building.

2. As shown in Photos 1 on Page 5 herein, water has stained roof sheathing boards over areas of the second floor at the South end of the building. Potential wood decay or mold propagation along the boards was not determined during inspection since no tactile examination of the boards was performed. Since the blue tarp that had been hung from the roof to collect water was dry, it appears that roof seepage has been arrested.

Photos 2 through 4 show water stains and wood decay at several areas of the finish floor boards along the second floor. Finish floor boards have sustained moderate-to-severe decay in a few areas, each measuring about 100 square-feet, and some areas of sub-flooring are also decayed. Photo 3 shows areas of floor that have been covered with plywood, while Photo 4 shows an area where decay has crumbled both the finish floor boards and subflooring. It appears that some mold or other fungi have begun to propagate.

3. Water has also infiltrated many areas of the sawtooth roof system above the main factory. Photos 5 and 6 show water stains and mold growth in areas towards the South end of the building, while Photos 7 and 8 on Page 6 show several stained roof sheathing boards and other roof members near beams that support valleys of the sawtooth roof system.

Areas of daylight can be seen through several deteriorated areas near valleys of the sawtooth roof, as shown in Photos 9 through 11; these openings in the roof would allow significant water infiltration. A plastic tarp hung above roller equipment near the North end of the building to collect water was wet during inspection of the building even though the weather was dry (see Photo 12); such continued seepage after precipitation has subsided subjects wood to prolonged exposure to wet/dry cycles that cause decay.

4. Photos 13 through 15 on Page 7 show one of several areas of standing water atop the concrete floor of the main factory that is located near the middle of the first North-South beam/column line from the East wall of the building (at the East valley of the sawtooth roof). Notwithstanding whatever cause-and-effect the water infiltration through the roof in this area may have had on the roof and beam/column structural supports, the deficiencies of the repaired and replaced beams and columns are of concern.

As shown in Photos 13 and 14, sections of beams that have been replaced are out of level and misaligned from the adjacent original beams. Our visual inspection cannot determine whether these installations were to accommodate then-existing settlements or misalignments of the roof system and/or columns supported by the foundations in the basement since no detailed building survey was performed and no building plans were available for reference. Additionally, steel pipe columns are not plumb.

As also shown in Photo 15, the 6x6 wood posts are not properly attached to the concrete floor or supporting structural system but are instead simply propped atop the floor; further, the bottom 8" of the wood posts are waterlogged due to capillary action from surrounding puddles of standing water. As such, the entire system of beam and post bent repairs is not compliant with requirements of the building code and should not have been installed even as a temporary system of repairs.

5. As shown in Photo 16, one roof support beam has been supplemented by a steel channel and diagonal brace where it frames into a wood column that is located near the middle of the factory. Such a repair is nowhere near adequate to provide load transfer to the column in lieu of the deteriorated connection, especially since the bottom of the brace is supported by a single lag screw connected to the column. As noted above, this repair system is not compliant with requirements of the building code and should not have been installed even as a temporary repair.

By comparison, Photo 17 shows another system of repairs to beams and columns adjacent to the office near the West side of the building that appears to be more substantial than the systems noted above. LVL beams installed under this valley of the sawtooth roof are supported by the original round wood columns that have been supplemented by steel columns, all of which contain connections top and bottom. While several other steel bent repairs that have been installed near the Northwest corner of the building also appear to be fairly substantial and do not exhibit signs of distress, nothing definitive can be concluded regarding their overall adequacy or code-compliance.

6. Photos 18 through 29 on Pages 8 and 9 show several areas of significant damage and deterioration that are visible in the Southeast corner of the basement, all within an area that extends about 50-feet from the South wall and about two-thirds of the width of the building from the East wall. Some of the damage is severe at localized areas of the wood beams that support the first floor and structural system above, in addition to the several areas of the original wood floor planking that has been overlaid with a concrete slab.

Photos 18 and 19 show a wood beam that has completely decayed away along its span between the South

wall of the building and the adjacent column where it abuts a CMU wall that is located under the machine shop area on the first floor of the building. Subject to potential disclaimers due to unknown conditions, a general conclusion can be inferred that this beam and the adjacent tributary area of wood flooring could be susceptible to sudden and catastrophic failure and collapse.

While it is possible that what appears to be an infill CMU curtain wall might provide some support to the wood flooring and overlaid concrete slab behind the wall, this decayed beam is what supports the original wood flooring that is sandwiched between the beam and the concrete slab that overlays the wood flooring. As such, any loss of this or other beams or wood flooring will adversely affect the concrete slab and may similarly affect the structural systems above the first floor slab. Once such deterioration creates gaps in any portion of the load path through the structural systems from the roof to the basement, failure mechanisms at these areas could lead to localized collapses or even progressive collapses of adjacent building areas.

While it is also possible that the concrete slab might be able to span such localized failures or gaps, nothing is known about the capacity of the slab; unknowns include slab depth, concrete mix, aggregate, admixtures, type of steel reinforcement, steel sizes, steel distribution and location, top and bottom cover clearances, etc. More importantly, nothing is known about the alignment or connections between members along the load path through the structural systems from the roof to the basement. As such, the level of significance of this and other similar potentially severe hazards is currently indeterminate until a thorough building survey and subsequent structural analysis is performed.

7. Photos 20 through 23 show a beam that has sustained shear failure on both sides of a column that is located about 40-feet northeast of the beam noted above. In addition to inadequate capacity to transfer load to the column, much of the width and depth of the beam has completely decayed away along the first two-feet on the North side of the column (right side shown in photos). In addition to the existence of the same hazards noted in Item 6 above, decayed areas of the beam are wet and appear to be full of mold or other fungi. This could pose a serious health hazard, not only in the basement but also throughout the entire building.

Photos 24 and 25 show another nearby beam that has sustained similar damage due to decay and presence of mold; all hazards and considerations noted above are similarly applicable to this beam. Deterioration of the wood flooring adjacent to this beam must also be investigated and addressed as noted above, as it must for the wood flooring shown in Photos 26 through 29.

8. Photos 30 through 35 on Page 10 show typical conditions in the basement to the North of a curtain wall that separates the areas described in Items 6 and 7 above. It appears that much of the original wood flooring in basement areas North of the wall have been replaced with a concrete deck atop steel pan plates, and some of the columns have been replaced with steel pipe columns and round concrete footings.

As shown in Photos 30 through 32, areas of the remaining wood flooring and beams are decayed to various degrees and it appears that mold or other fungi is growing. All hazards and considerations noted above are similarly applicable to wood flooring and beams located in this part of the basement. As shown in Photos 33 through 35, areas of the steel pans and pipe columns have corroded to various degrees; several areas of the pipe column shown in Photo 35 have completely corroded away, allowing penetration by a screwdriver. These conditions will likely worsen over time since areas along the underside of the pans were wet during inspection. While some of the white stains along the pans may be attributable to seepage of chlorides from the concrete slab above, it appears that at least some areas might be growths of mold or other fungi. Mold or fungi has grown over and around a piece of wood atop the basement floor; covering an area that exceeds 2-feet by 4-feet, it is located under the office area near the West side of the building. This very crystalline growth is bright white with pronounced tentacle-like hyphae around its perimeter, indicating the growth is likely very active. As noted above, this health hazard must be remediated.

### CONCLUSIONS AND RECOMMENDATIONS

Many areas of the building are damaged and deteriorated to significant degrees that require immediate attention. A thorough building survey and subsequent structural analysis of such areas must be performed in order to determine the severity of specific hazards and to subsequently design and construct repairs to the structural systems described above; immediate action is also required to identify and remediate environmental hazards noted above. Ongoing work to replace roofing should be limited to localized patches that prevent infiltration until completion of required structural repairs since it is not economically feasible to have to repair new roofing that might be adversely affected by other repairs.

My narrative of conditions and recommendations provided during the site inspection to Daniel Weinstein, Principal of American Engineered Fabrica, Inc. identified essentially everything described above. I noted that inaccessible or concealed areas that are also likely deteriorated must be determined in detail by a competent registered professional during a thorough investigation and evaluation. I also noted it is most cost-efficient to obtain all available building plans prior to investigation, both from city building department records as well as records the owner might possess.

Prior to commencement of in-depth evaluation and repairs, I recommend that the building owner cordon off and remove equipment from areas of the machine shop that are located over the failed beam shown in Photos 18 and 19. The owner should also address the holes that have been drilled through the concrete floor slab to facilitate drainage of water that pools on the slab; holes should be filled and the water otherwise removed, or drainage through the slab should be channeled away from wood beams and flooring in the basement in order to prevent exacerbation of wood decay. Even if some drains might be required after water infiltration through the building envelope is arrested, they must be properly installed in order to prevent such wood decay as well as to prevent damage to the concrete slab.

I further recommend that the capacity of the concrete slab be determined for specific loads in localized areas due to some of the heavy machinery, in addition to statutory uniform loading. As has been customary, floor loads should be posted since it is a valuable tool that facilitates planning for movement of material as well as for potential future change of equipment loadings.

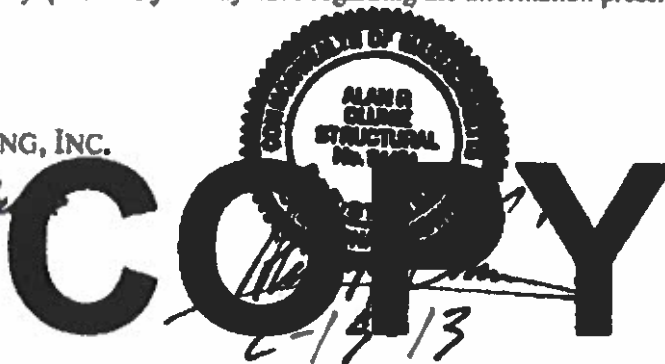
Please contact me with any questions you may have regarding the information presented herein.

Sincerely,

CLUNIE ENGINEERING, INC.

*Alan R. Clunie*

Alan R. Clunie, P.E.  
President



ORIGINAL DOCUMENT CONTAINS ENGINEER SEAL AND ORIGINAL SIGNATURE

**INSPECTION REPORT FOR 1 R COFFIN AVENUE, NEW BEDFORD, MA**



**1** Water-stained roof sheathing boards at South end of building (second floor facing South)



**2** Water-stained and decayed wood floorboards on second floor at South end of building



**3** Water-stained and decayed wood floorboards on second floor at South end of building



**4** Severely decayed wood flooring and sub-floor on second floor at South end of building



**5** Water stains and mold or fungi growths below sawtooth roof towards South end of building



**6** Water stains and mold or fungi growths below sawtooth roof towards South end of building

**INSPECTION REPORT FOR 1 R COFFIN AVENUE, NEW BEDFORD, MA**



**7** Typical water-stained roof sheathing boards at valley near beam supporting sawtooth roof



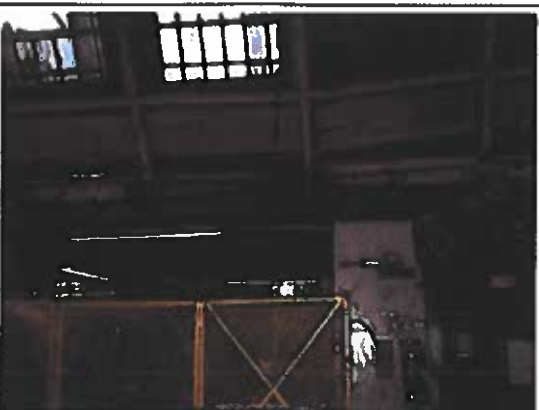
**8** Typical water-stained roof sheathing boards at valley near beam supporting sawtooth roof



**9** Daylight through openings in roof sheathing boards of sawtooth roof (facing South)



**10** Daylight through openings in roof sheathing boards of sawtooth roof (facing Southeast)



**11** Daylight through openings in roof sheathing boards of sawtooth roof (facing West)



**12** Water seepage in plastic tarp hung above equipment near North end of building

**INSPECTION REPORT FOR 1 R COFFIN AVENUE, NEW BEDFORD, MA**



**13** Water atop floor near repaired beams and posts at East side of building (facing East)



**14** Misaligned beams, wood posts and steel pipe columns and inadequate connections



**15** Base of wood post is waterlogged and is not connected to floor slab (facing Southeast)



**16** Inadequate steel channel and brace repair at beam and column near middle of building



**17** New wood beam and steel column installed at bent near office area (facing Southwest)

INSPECTION REPORT FOR 1 R COFFIN AVENUE, NEW BEDFORD, MA



**24** Decayed beam and floorboards in Southeast portion of basement (facing Northeast)



**25** Mold or other fungi contained along decayed beam shown in Photo 24 (facing East)



**26** Decayed wood floorboards and beam near interior wall in basement (facing North)



**27** Decayed wood floorboards near East side of beam shown in Photo 26 (facing Northwest)



**28** Severely decayed wood floorboards at brick pillar in basement (facing Southwest)



**29** Severely decayed wood floorboards at brick pillar in basement (facing Southeast)

INSPECTION REPORT FOR 1 R COFFIN AVENUE, NEW BEDFORD, MA



**18** Decayed wood beam and floorboards near South wall of basement (facing Southwest)



**19** Decay has completely disintegrated the wood beam shown in Photo 18 (facing West)



**20** Shear failure of beam at South side of column near South end of basement (facing West)



**21** Decay and shear failure of beam at North side of column shown in Photo 20 (facing West)



**22** Decay and shear failure of beam at column shown in Photo 20 (facing Southwest)



**23** Decayed beam shown in Photo 20 contains mold or other fungi (facing Northwest)

INSPECTION REPORT FOR 1 R COFFIN AVENUE, NEW BEDFORD, MA



**30** Steel bent installed near brick pillar North of curtain wall in basement (facing North)



**31** Wet and decayed wood floorboards contain mold or other fungi



**32** Severely decayed wood beam supplemented by steel beams at pillar shown in Photo 30



**33** Steel forms under first floor concrete deck are wet and have corroded to various degrees



**34** Corrosion along top of steel pipe column near steel beam and along bottom of steel forms



**35** Corrosion along bottom of steel pipe column near concrete footing

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December 24, 2014

City of New Bedford  
Department of Inspectional Services  
133 William Street, Room 308  
New Bedford, MA 02740

Attention: Dan Romanowicz, Commissioner  
Buildings & Inspectional Services

Subject: Building Inspection  
1 R Coffin Avenue  
New Bedford, MA

Dear Mr. Romanowicz:

Clunie Engineering, Inc. participated in a visual and limited tactile inspection of the subject building on November 3, 2014 along with City of New Bedford officials in order to determine the general conditions within the building. We had also participated in the inspection of this building on October 11, 2012, and issued you a letter report on February 15, 2013.



**AERIAL VIEW OF BUILDING – FACING EAST**

**EXECUTIVE SUMMARY**

All deterioration described within my February 2013 letter still exists and some has worsened severely. Additional damages have since obtained, some of which are even more critical than those described within that letter.

Conditions have advanced to such a critical mass of major issues that I am concerned for the safety of people inside this building. Recommendations in my February 2013 letter such as “deteriorated to significant degrees that require immediate attention” cannot adequately underscore the importance of addressing these existing conditions.

**SURVEY FINDINGS**

After having compared conditions to those described in my February 2013 letter, I have concluded that presentation of a detailed summary of multiple problematic issues would be counterproductive. Such a summary of details and minutiae would obfuscate the necessary focus on the severity of overall conditions throughout the building and the urgency of immediate remediation. Further, such details would be of limited value because they are based upon a perfunctory visual inspection instead of the thorough building investigation that is required to properly evaluate all conditions and subsequently effect necessary remediation; and note that most basement areas were never inspected.

Only four of many problems that exist are presented herein as representative samples of key issues to be addressed, and just a few photos are provided to highlight the severity of these problems. The first two problems are located within the two-story portion of the building at its northwest corner, which is the truncated rectangular ell shown in the lower left of the photo above. The third problem is in an adjacent area directly to the right of the ell, and the fourth is towards the mid-third of the one-story sawtooth-roof structure that comprises most of the building.

1. Upon commencement of inspection, we observed water dripping from the ceiling over the first floor onto a light fixture and switch controls for an electrical device located on the floor below. I informed Electrical Inspector Michael Baker that water seepage in this area of the first floor of the building had not been visible during the October 2012 inspection. Inspector Baker then discussed the critical nature of such an electrical shock hazard with building operator Daniel Weinstein and his associate.

2. While conditions throughout the second floor above the shock hazard have deteriorated significantly since the October 2012 inspection, none of the problems described in my 2013 letter have been addressed. Some of these issues are best highlighted by Photos 1 and 2 on Page 3 herein, which show critical crushing and shear failures along two roof rafter beams.

My concern is that such beam failures could result in a sudden and catastrophic failure when the beams are subjected to snow loads atop the building roof or even just continued deterioration of the existing failures. And if a progressive collapse is triggered by a localized sudden failure, then everybody on all floors below the roof would be endangered. Such events leave nowhere for anybody to run and no time to even react.

3. Conditions have also deteriorated significantly in the area of the basement under the machine shop adjacent to the two-story ell since the October 2012 inspection. Photos 3 and 4 show conditions that have worsened along two wood beams that were described and shown in the 2013 letter.

These and other beams remain susceptible to sudden failure and they pose an environmental hazard due to the presence of what appears to be mold and/or other fungi, all as was identified in the 2013 letter. Such hazards will continue to escalate as they remain unattended.

4. Photos 5 and 6 show an area of the first floor concrete slab that has sustained a critical type of failure since the 2012 inspection. Areas of the floor have migrated downward almost a foot, and an area of the slab near one column has disintegrated.

Since access to framing in the basement below the failure was not possible, I will not speculate about the cause or mechanism of what appears to be punching shear failure. However, based upon the conditions we observed elsewhere in conjunction with engineering judgment, it appears likely that such failure is related to deterioration of the framing system that supports the floor and/or its supporting foundation system.

#### CONCLUSIONS AND RECOMMENDATIONS

All of the above brings us full-circle to the same two main issues, specifically that conditions are critical enough to threaten life and safety and that they must be addressed immediately. I note that my review of invoices provided to you by Mr. Weinstein indicated that many of the conditions could have been stabilized if some of the money spent to evaluate relocation of this business operation to buildings elsewhere had been spent on this building instead.

I accordingly recommend that you compel the building owner to immediately take all actions required to facilitate "make-safe" conditions throughout the entire building or alternatively to immediately vacate the building.

Sincerely,

CLUNIE ENGINEERING, INC.

*Alan R. Clunie*

Alan R. Clunie, P.E.  
President



**COPY**  
12-24-14

**ORIGINAL DOCUMENT CONTAINS ENGINEER SEAL AND ORIGINAL SIGNATURE**

**INSPECTION REPORT FOR 1 R COFFIN AVENUE, NEW BEDFORD, MA**



**1** Failure of roof rafter beam over second floor near Northwest corner of building



**2** Ongoing failure of another roof beam in an area near the beam shown in Photo 1



**3** Decayed wood beam disintegrating under machine shop near NW corner of building



**4** Decay and shear failure of wood beam at a column near the beam shown in Photo 3



**5** Area of first floor concrete slab and subfloor that has migrated downward by almost a foot



**6** Close-up of damaged concrete slab at base of column shown in Photo 5 (left side of photo)

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March 23, 2015

City of New Bedford  
Department of Inspectional Services  
133 William Street, Room 308  
New Bedford, MA 02740

Attention: Danny D. Romanowicz, Commissioner  
Buildings & Inspectional Services

Subject: Building Roof Survey  
1 R Coffin Avenue  
New Bedford, MA

Dear Mr. Romanowicz:

Clunie Engineering, Inc. reviewed photographs of the subject roof that were taken by the New Bedford Fire Department on March 12, 2015. We attempted to correlate the subject photos with conditions inside the building that were described within our letters to you on February 15, 2013 and December 24, 2014.



AERIAL VIEW OF BUILDING – FACING EAST

Photos 1 through 6 on Page 2 herein are presented in a panoramic sweep from North-to-East-to-South to provide acclimation to the roof layout and to show overall roof conditions. Photos 7 and 8 on Page 3 show two areas of the roof that concern me due to their proximity to where problems have been documented to exist inside the building.

Photo 2 shows a hole through a sagging roof near the middle of the 9<sup>th</sup> sawtooth gable from the North end of the building and the misaligned adjacent peak of the 10<sup>th</sup> gable. Since this area is located near the South of the middle third of the building, it appears to be near the floor slab failure that I described in Item 4 of the Survey Findings in my December 24, 2014 letter to you. As such, the adjacent framing and foundation systems may be failing.

Photo 3 shows peaks of the sawtooth gables at the Southeast corner of building that are misaligned and out of level along their lengths. As I understand the findings of New Bedford Fire Department officials who investigated the sprinkler system failure several weeks ago, a shifting of building framing burst the pipe system. As noted above, these areas of roof may also be symptomatic of failing framing and foundation systems.

As I have continuously recommended since my initial survey of the building almost 2½ years ago, the building owner must be held accountable to take all actions required to comply with requirements of the State Building and Fire and Sanitary Codes. Since you have danced this dance with him for several years, it is time to stop the music and have him pay the piper.

Sincerely,

CLUNIE ENGINEERING, INC.

*Alan R. Clunie*

Alan R. Clunie, P.E.  
President



**COPY**

ORIGINAL DOCUMENT CONTAINS ENGINEER SEAL AND ORIGINAL SIGNATURE

**BUILDING ROOF SURVEY AT 1 R COFFIN AVENUE, NEW BEDFORD, MA**



**1** Northwest corner of sawtooth roof located South of two-story ell (Facing North)



**2** North and Northeast areas of sawtooth roof (Facing Northeast)



**3** Center and Northeast areas of sawtooth roof (Facing East-Northeast)



**4** Center and Southeast areas of sawtooth roof (Facing East-Southeast)



**5** Center and Southeast areas of sawtooth roof (Facing Southeast)

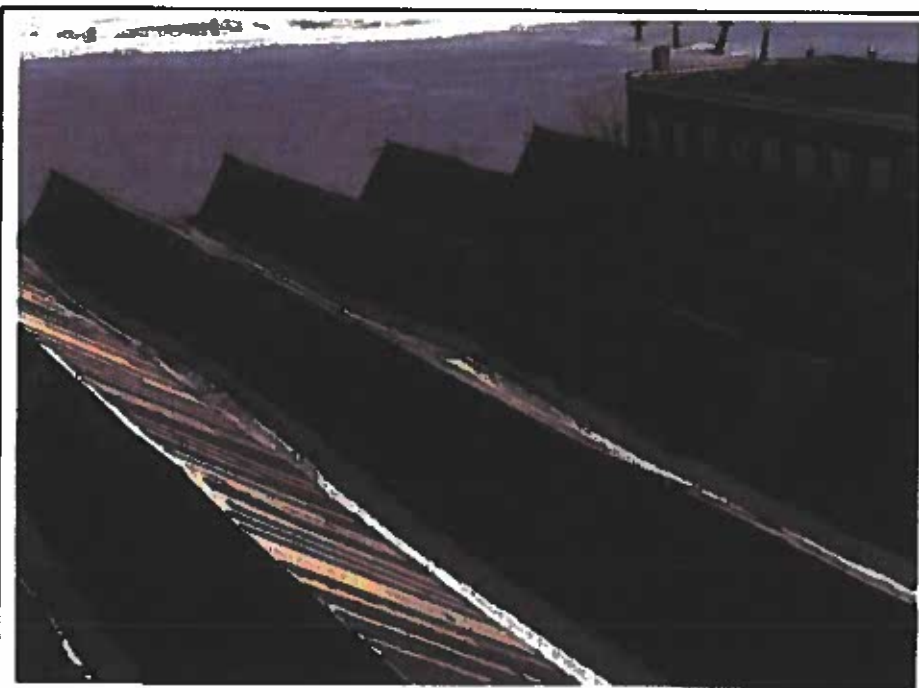


**6** Southwest area of sawtooth roof (Facing South)

**BUILDING ROOF SURVEY AT 1 R COFFIN AVENUE, NEW BEDFORD, MA**



**7** Hole through sagging roof is near middle of the 9<sup>TH</sup> sawtooth gable from the North end of the building and the adjacent peak of the 10<sup>TH</sup> gable is sagging (facing South)



**8** Zoom of Photo 4 shows peaks of sawtooth gables at Southeast corner of building that are misaligned and out of level along their lengths (facing East-Southeast)