

REQUEST FOR QUALIFICATIONS

DATE ISSUED: April 29, 2025

CITY OF SOUTHPORT

REQUEST FOR QUALIFICATIONS

FOR:

Southport Old City Hall Police Conversion

DUE DATE / TIME:
May 20, 2025 @ 11:00 AM

Deadline for Inquiries

May 14, 2025 @ 11:00 AM

Time and Date Set for Submittal

May 20, 2025 @ 11:00 AM

Anticipated Notice of Selection

June 5, 2025

REQUEST FOR QUALIFICATIONS (RFQ)
FOR
Southport Old City Hall Police Conversion

INFORMATION AND INSTRUCTIONS

I. GENERAL INFORMATION

- A. The City of Southport ("Southport") (<http://www.cityofsouthport.com>) seeks professional consulting services, from qualified architectural firms, licensed to do business in North Carolina, to provide architectural design services to convert the Southport Old City Hall to the Police Department building
- B. The Statement of Qualifications ("SOQ") must be received by the Deputy City Clerk at 1029 N. Howe Street, Southport, NC 28461 by the date and times listed on the cover page of this RFQ.
- C. Questions pertaining to the selection process should be directed to Southport City Engineer, Tom Zilinek at tzilinek@cityofsouthport.com.
- D. Southport shall not be held responsible for any oral instructions. Any changes, or clarifications, to this Request for Qualifications ("RFQ") will be in the form of an addendum, which will be furnished to all registered RFQ holders.
- E. Southport reserves the right to reject any or all SOQ's, to waive any informality or irregularity in any SOQ received, and to be the sole judge of the merits of the respective SOQ received.
- F. Questions regarding this RFQ may be directed to Tom Zilinek via email at tzilinek@cityofsouthport.com and shall be received no later than five (5) business days prior to the opening date to allow for the timely preparation and posting of addenda. Questions received, and the decisions regarding each question, shall be set forth in a written addendum. No oral interpretations shall be made to any respondent as to the meaning of any portion of the RFQ documents.
- G. Any addenda to this RFQ will be posted on the City's website. Therefore, all interested respondents should check the website from now through procurement opening. It is the sole responsibility of the respondent to be knowledgeable of all addenda related to this procurement.
- H. The consulting firm will be selected based on qualifications and other factors. Refer to **Section IV.C.**
- I. The City does not discriminate on the basis of race, color, sex, national origin, religion, age, or disability. Any contractors or vendors who provide services, programs or goods for the City are expected to fully comply with the City's non-discrimination policy.

II. BACKGROUND

The Old City Hall/Courthouse was built in 1844. It is a two-story stuccoed brick building three bays wide spanning approximately 8,500 square feet. It holds historical significance as the Old Brunswick County Courthouse (BW0007), recognized on the National Register of Historic Places (Reg #79001663).

The interior plan is the conventional lengthwise hall flanked by offices on the first floor and the courtroom on the second. The interiors offices have undergone changes over the years. The interior woodwork dates mainly from the 1890s and 1920s. The building was covered in stucco when two wings were added in the 1960s. It is the only antebellum courthouse surviving in the southeastern quadrant of North Carolina. Abandoned by the County in the summer of 1978, it became the Southport City Hall and Police Department until 2018. The building has been vacant since 2018.

A Property Conditions Assessment Report was completed in November 2023 and indicates the building is generally in good condition. A Limited Structural Review was completed in July of 2024 and indicates the structural framing to be generally satisfactory condition and adequate for its previous occupancy. In November of 2024 an asbestos abatement and mold remediation of the building were completed. Temporary HVAC has been installed to condition the building.

III. SCOPE OF WORK

The Southport Old City Hall needs to be renovated and reconfigured to accommodate the City of Southport Police Department as its main occupant. As part of the renovation the second-floor courtroom will need to be upgraded for use by the Southport Board of Alderman, Planning Board, Board of Adjustment, and other City Boards and Committees as their public meeting space.

Design shall include comprehensive Americans with Disabilities (ADA) assessment and subsequent required improvements for compliance with the most recent ADA standards.

Design must be done in accordance with SHPO standards and meet the Secretary of the Interior's Standards for the Treatment of Historic Properties.

The selected firm will provide architectural, engineering, and construction oversight services to the City. These services shall include, without limitation:

1. Schematic Design
 - a. Conduct a preliminary kickoff meeting with the City of Southport to discuss needs, expectations, and a project schedule
 - b. Measure the building to create base drawings for use during design.
 - c. Create conceptual layouts and configurations. At the end of this phase there should be defined schematic floor plans

- d. Prioritized list of recommendations for the appropriate treatment of deteriorated historic elements. Recommendations must be consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties, consider the potential impact of recommended treatments, and avoid significantly altering the property's historic character and context.
2. Design Development - Development of in-depth designs based on the approved schematic design with respect to materials, construction, detailing, etc.
 - a. Work with SHPO for plan approval
 - b. Identification of all permits needed for the project including preparation and/or review of such permit applications
 - c. Prepare preliminary cost estimate.
3. Contract Documents – Develop construction documents in accordance with building codes, SHPO requirements, and ADA requirements. These will include:
 - a. Site Plan
 - b. Demolition Plans
 - c. Floor Plans
 - d. Sections
 - e. Interior and exterior elevations
 - f. Ceiling Plans
 - g. Door and window details
 - h. Materials and fixtures lists
 - i. Construction details
 - j. General notes
 - k. Cost Estimate based on the final construction drawings and documents.
4. Bid Phase Services
 - a. Preparation of bid and construction documents that will serve as a basis for the City's selection of a contractor and for the construction
 - b. Answer queries from potential bidders
 - c. Assist City in reviewing all submitted bids and make recommendation for award.
5. Construction Management of project to ensure all agreed upon construction documents are fully complied with and all actions required by permits associated with this project are completed in a timely manner and providing the City with reports on construction progress;

Other Requirements

1. The successful proposer shall be required to attend various meetings with City staff to include:
 - a. Initial meeting(s) with staff at project commencement.
 - b. Meeting(s) with staff to present draft and final plans.
 - c. Presentation(s) of the final Plans to Southport Board of Aldermen.

2. Assist City with grant finding and applications
3. Preparation of any documents needed to secure funding for the project

IV. STATEMENT OF QUALIFICATIONS SELECTION CRITERIA

A. Interested firms must submit a Statement of Qualifications (SOQ) that addresses the following evaluation criteria. Respondents are encouraged to organize their submissions in such a way as to follow the general evaluation criteria listed below. Information included within the SOQ will be used to evaluate your firm as part of any criteria regardless of where that information is found within the SOQ. Information obtained from the SOQ, and from any other relevant source, may be used in the evaluation and selection process. The project proposal must outline the firm's qualifications and describe the process planned to provide the deliverables listed above. Proposals should include team members, past relevant project experience, knowledge and awareness of the City of Southport and any other commonly included information with such studies. It is the City's intent to make the selection after reviewing the qualifications of each submitting firm.

B. REQUIRED INFORMATION:

All qualifications statements shall include the following information, at minimum:

1. Cover Letter (1-page)
2. Tab A: Proposed Scope of Services / Approach
3. Tab B: Project Experience
4. Tab C: Project Schedule
5. Appendix A: Key Personnel Resumes
6. Appendix B: Professional References

COVER LETTER

The cover letter shall not exceed one (1) page and shall contain, at minimum, the following information: Company name of the primary consultant and any planned sub-consultants as well as the contact names, addresses, phone numbers and email addresses for each primary consultant and sub-consultant. The cover letter should also identify the project manager with associated contact information.

TAB A- PROPOSED SCOPE OF SERVICES / APPROACH

Describe the firm's approach to performing the required services in the Anticipated Scope of Work described above. Supplement the Anticipated Scope of Work as necessary to adequately meet the desired goals of the City. Identify how your firm plans to utilize internal or external consultants or sub-consultants to complete the project.

TAB B- PROJECT EXPERIENCE

Identify at least two (2) but no more than three (3) similar projects where you were the Primary Consultant. Demonstrate the experience of your firm, including all sub-consultants, on similar projects. The projects submitted should demonstrate that the consultant and/or the team have performed the same or similar type of services to be considered relevant.

TAB C – PROJECT SCHEDULE

Describe the project timeline for completion. The proposed project schedule should illustrate the firm's capability to meet schedule requirements. Provide a Project Work Plan/schedule showing key project milestones and deliverables. The schedule shall demonstrate the firm's ability to meet the designated milestones.

Appendix A – EXPERIENCE OF KEY PERSONNEL

For each key person identified, list their length of time with the firm and at least two comparable projects in which they have played a primary role. There are no limitations on the number of key positions the firm may provide. However, at a minimum the firm must provide the primary consultant, or project manager, and at least one (1) person from each sub-consultant identified, if applicable. Resumes should provide information for key staff (no company profiles) and should not include general firm information. Provide an organizational chart at the end of this tab, chart may be submitted in 11"X17". The chart should depict the project team organization, lines of authority and primary responsibilities of team members. Clearly indicate superior/subordinate reporting relationships. Provide names of each position and identification of firm or sub-consultant.

Appendix B – PROFESSIONAL REFERENCES

The SOQ should include a minimum of three (3) professional references, with contact information. The references should be projects performed by the consultant in small-to-medium sized municipalities, preferably in North Carolina.

- C. Qualifications Criteria: A rating system will be utilized by Southport to score and rank each proposal. Respondents are encouraged to keep their proposals concise and to include a minimum of marketing materials. At a minimum, each proposal must address the following criteria:

Item	Evaluation Criteria	Maximum Points
1	General Information & Relevant Firm Experience	15
2	Team Staff Experience and Qualifications	15
3	Project Understanding	15
4	Experience with Historic Buildings	15
5	Experience with Police Department Designs	15
6	Subconsultants Experience	10

7	Schedule	5
8	Other Factors	10
Total Possible Points		100

V. SUBMITTAL REQUIREMENTS

- A. The SOQ shall include a one-page cover letter plus a maximum of ten (10) pages (front and back) to address the SOQ criteria specified in Section III. Table of Contents, section divider pages, and Appendices A and B do not count toward the total page count. Resumes for each key team member shall be limited to no more than two pages. Resumes shall be attached as Appendix A.
- B. Qualifications must be placed in a sealed envelope clearly marked "Response to RFQ for **Southport Old City Hall Police Conversion**" and five (5) hard copies and (1) electronic copy (complete electronic copy of the qualifications package on a USB Drive using a searchable ".pdf" file format) of the Statement of Qualifications and Appendix A must be **submitted to the City of Southport Deputy City Clerk, 1029 N. Howe Street, Southport, NC 28461 by May 20, 2025 at 11:00 am local time.**
- C. Failure to comply with the following criteria may be grounds for disqualifications: Receipt of submittal by the specified cut-off date and time; The number of originals and/or copies of the submittal specified; or Adherence to maximum page requirements.
- D. Adherence to the maximum page criteria is critical; each page side with criteria information will be counted. Pages shall be generally 8-1/2" x 11" paper. A maximum of two (2) pages may be on 11" x 17" size paper.

VI. SELECTION PROCESS AND SCHEDULE

- A. Reviewers for Southport will evaluate each Statement of Qualifications ("SOQ") according to the above criteria. A short-list of finalists will be developed based on qualification packages received and the above considerations. The City of Southport may elect to meet with any, all, or none of the consultants prior to selection. Following these steps, Southport will select and notify the selected firm. Those firms not selected for further consideration will be notified as well.
- B. The following tentative schedule has been prepared for this project. Firms interested in this project must be available on the interview meeting date, if an interview is held.
 1. SOQ's due: May 20, 2025 @ 11:00 AM
 2. Anticipated Firms notified of Selection: June 5, 2025

- C. Southport will enter into negotiations with the selected firm. Upon Board of Alderman's approval, it is anticipated that the professional services contract will be executed by the City Manager by the end of June 2025. Southport reserves the right to terminate the selection process at any time.

VII. ATTACHMENTS

Attachment A: *"Property Condition Assessment Report for Southport Old City Hall" dated November 28, 2023. Prepared by HICAPS*

Attachment B: *"Old Southport City Hall Limited Structural Review" dated July 16, 2024. Prepared by Andrew Consulting Engineers.*

PROPERTY CONDITION ASSESSMENT REPORT

PREPARED FOR:

Mr. Tom Zilinek
City Engineer
City of Southport
1010 N. Howe Street
Southport, NC 28461



PROPERTY CONDITION ASSESSMENT
OF
SOUTHPORT OLD CITY HALL / UYA
201 E. MOORE STREET
SOUTHPORT, NC 28461

PREPARED BY:

HICAPS Inc.
600 N Regional Road
Greensboro, NC 27409
336.665.1234
www.hicaps.com

HICAPS CONTACT:

Jonathan Layton
Manager of Building
Diagnostics
336.665.1234 x377
jonathan@hicaps.com

HICAPS PROJECT
NUMBER
2023BD018

DATE OF REPORT
11/28/2023

SITE VISIT DATE:
October 30, 2023



TELECOMMUNICATIONS
CONSTRUCTION SERVICES
BUILDING DIAGNOSTICS
CONTRACT INTERIOR DIVISION



December 4, 2023

Mr. Tom Zilinek
City of Southport
1010 N. Howe Street
Southport, NC 28461

Re: Property Condition Assessment: City of Southport Municipal Building Assessments
201 East Moore Street
Southport, NC 28461

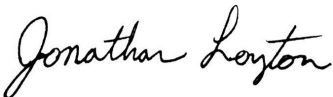
Dear Mr. Tom Zilinek:

HICAPS, Inc. (hereinafter HICAPS) is pleased to provide the results of the property condition assessment performed on the above-referenced property. This assessment was performed in general conformance with the scope and limitations as set forth by ASTM E2018-15 "Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process". The findings are detailed in the attached report.

This assessment was performed utilizing methods and procedures consistent with good commercial or customary practices designed to conform to acceptable industry standards. The independent conclusions represent HICAPS' best professional judgment based upon existing conditions and the information and data available to us during the course of this assignment.

We appreciate the opportunity to provide these assessment services. If you have any questions concerning this report, or if we can assist you in any other matter, please contact Jonathan Layton at (336) 341-3073.

Sincerely,

A handwritten signature in black ink that reads "Jonathan Layton". The signature is fluid and cursive.

Jonathan Layton
Manager of Building Diagnostics

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Southport Old City Hall/UYA
201 East Moore Street
Southport, NC 28461
Assessment Date: October 30, 2023

Property Type: Municipal Building
Year(s) Built: 1854, renovation & addition 1983
Gross Site Area: 0.48 Acres
Building Size: 8,500 sq ft

Construction System	Condition			Recommendations		
	Good	Fair	Poor	Immediate	Short Term	Over Term Years 1-10
4.1 Topography	X					
4.2 Drainage System and Erosion Control		X				
4.3 Access and Egress	X					
4.4 Paving, Curbing, and Parking		X		\$45,000		
4.5 Flatwork, Patios, and Railing			X	\$27,500		
4.6 Landscaping	X			\$5,000		
4.7 Property Signage	X					
5.1 Foundation		X		\$5,000		
5.2 Building Frame						
5.3 Facades		X				
5.4 Roofing	X			\$5,000		
5.5 Windows & Exterior Doors			X	\$40,000		
6.1 Mechanical			X	\$170,000		
6.2 Electrical		X		\$27,625		
6.3 Plumbing		X		\$51,000		
6.4 Vertical Transportation			X	\$200,000		
7.1 Interior Finishes			X	\$3,337,500		
8.1 Life Safety & Fire Protection		X		\$35,000		
Totals				\$3,948,625	\$0	\$0

Repairs and Reserve Summary

	Today's Dollars	\$/ w/8.00% Inflation
Immediate Needs	\$3,948,625	\$inf
Short Term Needs	\$0	\$nan
Years 1-10 Replacement Reserves	\$0	\$0

1.0 EXECUTIVE SUMMARY

HICAPS, Inc (HICAPS) has finished a Property Condition Assessment including a Capital Needs Plan for Southport Old City Hall/UYA situated at 201 E. Moore Street, Southport in Brunswick County, North Carolina (hereinafter known as the subject property). This assessment was carried out following the general principles set forth by the American Society for Testing and Materials (ASTM) in the Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process / Designation E 2018-15 (ASTM Standard Practice E 2018-15).

The main goal of the Property Condition Assessment (PCA) was to visually assess and inspect the current state of property components, buildings, and associated structures. This PCA procedure was carried out to support the client in appraising the potential financial responsibilities linked to the state of these property elements, buildings, and related structures. HICAPS acknowledges that the client intends to depend on this report for the purpose of due diligence in relation to the capital needs planning for the City of Southport.

The scope of the Property Condition Assessment encompassed an examination of the subject property, which involved walking through the building and conducting interviews with the individuals mentioned in this report. Within the framework of this PCA, significant, self-contained building components were observed as representative samples, and their physical state was evaluated in alignment with ASTM E2018-15. These components comprised the exteriors of the property and building, along with characteristic interior spaces. Furthermore, the formulation of this PCA involved reviewing readily available local tax assessment records, records from the local fire department, and records from the local building department. Additionally, informative conversations were held with individuals knowledgeable about the property. It is important to note that this PCA did not involve inspections or functional tests of mechanical, electrical, and plumbing (MEP) systems, nor did it include material testing of building or property materials.

The property in question comprises a single parcel of land covering roughly 0.48 acres and is positioned on the western side of E. Moore Street, in Southport, NC. The Subject Property was purportedly built in 1854, initially serving as the County Courthouse, and underwent renovations in 1983. It is a two-story building spanning approximately 8,500 square feet, and it holds historical significance as the Old Brunswick County Courthouse (BW0007), recognized on the National Register of Historic Places. Additionally, a triangular asphalt parking lot linked to the property is located along the building's northern (rear) side, as well as asphalt parking located along E. Moore Street and N. Howe Street.

2.0 PURPOSE, SCOPE AND LIMITATIONS

2.1 Purpose

The objective of this report is to aid the Client in assessing the physical attributes of the property and how its condition might impact the Client's financial choices over time. Within the context of this Property Condition Assessment (PCA), significant, self-contained building elements were observed, and their physical states were assessed following the guidelines outlined in ASTM E 2018-15. These elements encompass the property and building exteriors, characteristic interior spaces, as well as a random selection of building areas. The approximated costs for repairs and potential capital reserve requirements are detailed in Tables 1 and 2 of this report. All findings pertinent to these cost assessments are expounded upon within the corresponding narrative segments of this report.

Conversations were held with the property management personnel to gather precise details pertaining to the physical attributes of the property, accessible maintenance protocols, existing drawings, and any other relevant documentation.

The condition of building systems and associated components is generally categorized into three states: Good, Fair, or Poor. In the context of this report, the ensuing definitions are applied:

GOOD: The current state necessitates solely regular maintenance throughout the duration of the reserve period.

FAIR: Acceptable in its current state. However, repairs or substitutions are needed due to the existing physical condition and/or the projected remaining useful lifespan.

POOR: Urgent repair, replacement, or substantial maintenance is imperative.

2.2 Scope of Work

HICAPS's Scope of Services is established on the basis of its purchase order dated October 10, 2023, and the terms and conditions outlined in the RFQ. This Property Condition Assessment (PCA) encompassed the following aspects:

- Characteristics of the property and site;
- Structural components and foundation;
- Electrical system evaluation;
- Examination of heating, ventilation, and air conditioning system (HVAC) elements;
- Assessment of plumbing system and fixtures;
- Evaluation of the roof surface, including flashings, drainage, and chimneys;
- Scrutiny of interior components, with emphasis on functional rather than cosmetic considerations;
- Inspection of exterior wall components, encompassing walkways, driveways(excluding sewer systems), and retaining walls;

Opinions of Cost

This section furnishes approximations for the repair and capital reserve items identified in this report. These estimations are founded on invoices and/or documents furnished by the Owner and/or facility, as well as construction costs compiled by reliable construction resources like R.S. Means and Marshall & Swift. They also draw upon HICAPS's historical knowledge of past expenses linked to comparable properties, municipal cost indices, and suppositions regarding forthcoming economic circumstances.

Methodology

Drawing from on-site observations, research, informed judgment, and consultation of expected Useful Life (EUL) references from diverse industry sources, HICAPS offers informed assessments regarding the probable timeframe for the replacement of systems or components. In cases where accurate historical records of replacements are available, these records typically serve as the most reliable source of insight.

Various factors such as exposure to environmental elements, initial quality upon installation, extent of use, the adequacy and frequency of preventive maintenance, and other considerations all contribute to the effective age of a system or component. Consequently, a system or component might exhibit an effective age that is either greater or lesser than its actual chronological age. The Remaining Useful Life (RUL) of a system or component equals its EUL minus its effective age. Projections for Remaining Useful Life (RUL) are grounded in the presumption that the property will be used in a manner akin to its past usage. It is important to note that substantial changes in occupants and/or usage patterns could potentially impact the service life of specific systems or components.

In cases where direct quantities cannot be deduced from a specific assessment, lump-sum costs or allowances are utilized. Estimated costs are derived from professional judgment, encompassing the probable or confirmed extent of the identified defect.

Immediate Repairs

Immediate repairs entail cost assessments that demand urgent action due to (1) the presence of unsafe material conditions either existing or imminent, (2) violations of building or fire codes pertaining to materials, or (3) circumstances that, if unaddressed, hold the potential to lead to or exacerbate critical element or system failures within a year, or are expected to lead to a substantial increase in the cost of rectification.

Short-term Repairs

Each of the Short-Term Repair items identified during the survey is detailed in Table 1 and is summarized in the Executive Summary Table. These items are categorized and cross-referenced within the Report section. Short-term repairs represent cost assessments aimed at rectifying physical shortcomings, such as deferred maintenance. While they might not necessitate immediate action, they should be prioritized for repair or replacement alongside regular preventive maintenance. These estimated costs could also encompass expenses for testing, exploratory probing, and additional analysis if considered necessary by HICAPS. Short-term repairs are expected to be addressed within 12 months following the initial or final approval of the mortgage.

Modified Capital Reserves

Modified Capital Reserves pertain to recurring expenditures that don't fall under the category of operational or maintenance expenses, yet should be allocated for in the annual budget. These reserves involve costs that are reasonably foreseeable both in terms of their occurrence frequency and associated expenses. It's worth noting that modified Capital Reserves might also encompass elements or systems that lack a definitive lifespan but still pose a potential risk of failure within a projected time frame. Modified Capital Reserves do not encompass systems or components projected to exceed their useful life during the reserve period. Additionally, these reserves exclude elements that aren't deemed critical to the structural and mechanical soundness of the subject property. Similarly, systems and components lacking a substantial impact on the property's use are also omitted from these reserves. Costs arising from acts of nature, accidents, or other incidents that are typically covered by insurance and not earmarked for in the reserves are also excluded.

More details pertaining to the replacement costs (in present-day currency), anticipated average useful lifespans, and the remaining useful lifespans of systems or components

were determined to facilitate the creation of the funding schedule. The Modified Capital Reserve Schedule operates under the assumption that all necessary corrective actions have been executed, or that funds for rectification have been allocated for items delineated in the Immediate Repairs Cost Estimate.

2.3 Limitations

This report is designed to offer an evaluation of the property's conditions as observed during the property reconnaissance. If a third party employs this report, any reliance upon it or decisions based on it are the responsibility of those third parties. If other parties require reliance on this report, they can contact HICAPS to extend this reliance. HICAPS takes no responsibility for the financial consequences on transactions or property values nor for follow-up actions and expenses resulting from the information provided in this report.

The findings, conclusions, and recommendations presented here reflect the assessment of HICAPS based on visual inspections of accessible and exposed building elements, coupled with information collected and discussions with property representatives mentioned in this report. Unless otherwise specified in HICAPS's proposal for this PCA, no physical tests or intrusive investigations were conducted, and no samples of building materials were collected to substantiate the observations made.

In evaluating the subject property, HICAPS has relied in good faith on information provided by other individuals as noted in this report. The findings presented in this report are based on the information supplied by property representatives. HICAPS assumes no responsibility for any shortcomings, inaccuracies, or misstatements within this report due to omissions, misinterpretations, or fraudulent acts of the individuals interviewed or contacted.

HICAPS does not assert any claims regarding the legal significance of its findings, which encompass matters such as property ownership or the application of any laws to the information presented herein. When it comes to matters of regulatory compliance, the interpretation of regulatory statutes can evolve and change over time. As a result, any entity utilizing this report should consult appropriate legal counsel to address these matters.

HICAPS conducted its services in accordance with the care and expertise typically exercised by other reputable consulting firms operating under similar conditions, during the same period, and within the same or similar location. While compiling the assessment report, HICAPS might have relied on information sourced from others. HICAPS does not guarantee the accuracy or completeness of information gathered from external sources or subcontracted services. No form of warranty, guarantee, or certification, whether expressed or implied, through common law or statutory provisions, is given, made, or intended through the provision of these consulting services or the presentation of this written report. It's essential to consider the entire report as a whole rather than relying solely on any individual page. Furthermore, because the facts stated in this report are subject to professional interpretation, different professionals might arrive at different conclusions.

Any reports, field data, field notes, laboratory testing, calculations, estimates, or other documents produced by or relied upon by HICAPS are the property of HICAPS. If these documents are accessed or obtained by parties other than the client, HICAPS may not engage in project discussions with those parties unless the original contracted client informs HICAPS of the situation and authorizes the disclosure of information and discussion of the project with others. HICAPS also states that it does not hold any duty towards any individual or entity other than the client in preparing this report unless otherwise agreed upon with the client.

HICAPS does not assume liability for any losses or damages incurred by the client or third parties due to the outcomes or conclusions presented in this report.

2.4 Property Access and Non-Access Disclosure

Inspector: Jonathan Layton; HICAPS, Inc

Date of Inspection: Monday, October 30, 2023

Weather Conditions: Fair skies, average temperature of 77° Fahrenheit, 29.96 atmospheric pressure in Hg, and 64% humidity.

Property Contact: Tom Stanley

Property Escort: None

Areas Accessed: property grounds, structural frame and building envelope, interior elements, MEP systems, and life safety-fire protections

Inaccessible Areas: crawlspace, the attic, and the first office on the on the 1st floor (supervisor's office)

Exceptions/Deletions from Scope: None

3.0 PROPERTY DESCRIPTION

3.1 Property Details

Property Type: Municipal Office
Number of Floors: Two
Gross Floor Area: 8,500 square feet
Foundation: Crawl Space
Frame Construction: Combination of wood and steel framing
Facade: Combination of stucco and brick
Roof Type: Sloped asphalt shingled
Site Area: 0.48 acres
Year of Construction: 1854
Year of Substantial Renovation: 1983
Parking Spaces: 18
Number of ADA Parking Spaces: 1
Heating Type: Electric heat pumps
Cooling Type: Electric heat pumps
Hot Water Source: Individual electric water heater
Electrical Wiring Type: Copper brack wiring
Plumbing Piping Type: Cooper, aluminum, CPVC, PVC plumbing
Elevator Type: None
Fire Protection Type: Not applicable
Flood Zone: X (Non-shaded)
Wind Zone: II
Seismic Zone: 1
Visibility From Street: limited visibility from the street

Site Information

Primary Use:
Ownership Entity: City of Southport
Property Management Firm: City of Southport
Gross Site Area: 0.48 Acres

Visit Information

Site Assessor: Jonathan Layton
Date of Site Visit: 10/30/2023
Weather: Clear
Temperature: 73 F
Accompanied By: N/A

3.2 Neighboring Properties

North of property: Southport Fire Substation; 111 E Nash Street

East of property: St. Philip's Episcopal Church; 205 E Moore Street

South of property: NC Maritime Museum of Southport; 204 E Moore Street

West of property: String and Beyond; 109 N Davis Street

4.0 PROPERTY GROUNDS

4.1 Topography

Description: The examination encompassed a review of the United States Geological Survey (USGS) 7.5-minute series topographic map. Upon analyzing this map, it was observed that the Property occupies mainly level terrain, with intentionally designed slopes to channel stormwater movement. The subject property is situated at an elevation of roughly 7 feet above mean sea level (AMSL).

Recommendation: The topography of the area and the land uses of neighboring properties do not seem to indicate any conditions that could adversely affect the subject property.

4.2 Drainage System and Erosion Control

Description: Stormwater is predominantly managed through the natural flow of water across paved surfaces, a process known as sheet flow, which directs water into stormwater drains positioned across the subject property and within the public right of way. Rainwater flows off the roof slopes since there is no external perimeter guttering or downspout system. Stormwater that collects in landscaped areas typically infiltrates the soil, while any excess overflow is directed toward paved surfaces. The stormwater system on the subject property is said to be connected to a storm drain system owned and maintained by the municipality.

Recommendation: For more comprehensive information about roof drainage, please refer to section 5.4.

4.3 Access and Egress

Description: The main entry and exit points for the subject property are facilitated by a sole, parking area situated along the northern perimeter of the parcel, accessible via N Davis Street and N Dry Street.

Recommendation: No instances of postponed maintenance were identified during the assessment.

4.4 Paving, Curbing, and Parking

Description: The building features asphalt driveways and parking areas on the north side of the property. The parking area accommodates a total of 18 vehicles, which includes one (1) space for handicap accessibility.

The asphalt drives and parking areas exhibit deteriorated asphalt pavement conditions, characterized by faded striping, alligator cracking, and latitudinal and longitudinal cracking.

Recommendation: In the near future, we suggest allocating a budget for comprehensive measures, including complete crack sealing, seal coating, and restriping for all asphalt surfaces. Applying seal coating and crack sealing should be repeated every three to five years. This routine maintenance not only revitalizes the appearance of your parking lot but also prolongs the lifespan of the pavement by an additional 10 to 15 years.

It is recommended to address these issues through isolated repairs and replacements, which can be carried out as a regular maintenance activity as the need arises.

ASSOCIATED PHOTOGRAPHS



Current condition of asphalt paved parking area



Deterioration of the asphalt paved parking area



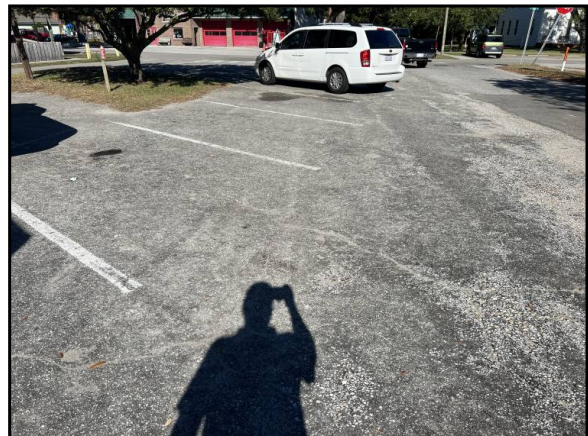
Deterioration of the asphalt paved parking area



Faded parking stripping



Deterioration of the asphalt paved parking area



Faded parking stripping and deterioration of asphalt paved parking area

COST SUMMARY

Recommendation	EUL	EFF AGE	RUL	Year	Cost
Complete asphalt replacement w/ restriping				Immed	\$45,000
Total					\$45,000

4.5 Flatwork, Patios, and Railing

Description: The front and rear entrances of the building, along with the pedestrian walkways, are made of cast-in-place concrete. Both sides of the ADA concrete ramp at the rear entrance are equipped with metal railing. Moreover, there is a metal post-supported stairway at the rear of the building, facilitating access to the second floor.

Recommendation: The pedestrian concrete walkways were noted to be generally in fair to poor condition, with isolated instances of cracking and deterioration evident. Similar issues, including cracking and deterioration, were observed along the concrete ADA ramp. Additionally, moderate rusting was noted in various locations along the metal post-supported stairway. It is advisable to address these identified deficiencies, and their correction should be taken into account during budget planning for the subject property.

ASSOCIATED PHOTOGRAPHS



Current condition of concrete walkway



Current condition of the concrete porch at the front main entrance



Cracked and deteriorated concrete walkway



Cracked and deteriorated concrete walkway

ASSOCIATED PHOTOGRAPHS continued



Cracked and deteriorated concrete walkway



Current condition of concrete walkway at the rear of the building



Concrete ADA ramp that provided access to the rear entrance



Damage and deterioration of foundation wall for the ADA concrete ramp



Current condition of metal railings along the concrete ADA ramp



Overall view of the metal pole supported stairs that provides access to the 2nd story rear entrance

ASSOCIATED PHOTOGRAPHS continued



Observed rust at the metal pole supported stairs



Closeup view of the rusted condition of the metal pole supported stairs

COST SUMMARY

Recommendation	EUL	EFF AGE	RUL	Year	Cost
Replace Concrete Sidewalk				Immed	\$22,500
Repair damaged CMC - ADA Ramp				Immed	\$5,000
Total					\$27,500

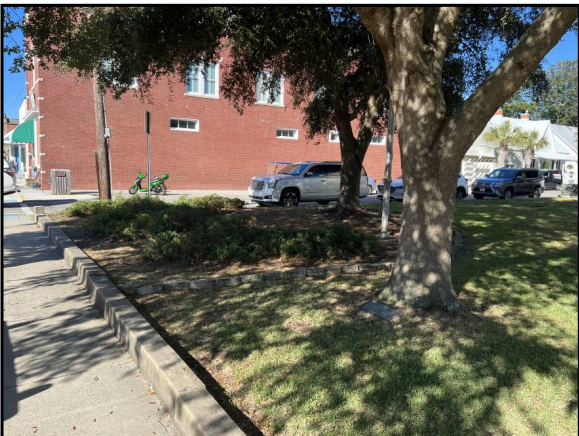
4.6 Landscaping

Description: Landscaped areas, including trees, shrubs, grassy patches, and flower plantings, are appropriately positioned along the street front to adhere to municipal code requirements.

Recommendation: To safeguard the building and roof from potential damage and minimize the risk of pests infiltrating, it's recommended to trim tree limbs that are in proximity to the building.

Addressing these landscaping concerns should be incorporated into the property's routine maintenance plan.

ASSOCIATED PHOTOGRAPHS



Current condition of landscaping



Current condition of landscaping

ASSOCIATED PHOTOGRAPHS continued



Current condition of landscaping



Shrubs and vines in contact with the building's exterior



Tree limbs overhanging and in contact with the building's exterior



Tree limbs overhanging and in contact with the building's exterior

COST SUMMARY

Recommendation	EUL	EFF AGE	RUL	Year	Cost
Trim vegetation away from the building				Immed	\$5,000
Total					\$5,000

4.7 Property Signage

Description: Tenant identification is facilitated through wall-mounted signage positioned near the front main entrance.

Recommendation: No noteworthy issues regarding insufficient property signage were identified during the assessment. The management of property signage falls within the scope of routine property maintenance and should be addressed accordingly.

ASSOCIATED PHOTOGRAPHS



View of signage at the building's front main entrance



View of marquee for the history of the building located along East Moore Street

5.0 STRUCTURAL FRAME & BUILDING ENVELOPE

5.1 Foundation

Description: The basic construction of the subject property is a crawl space foundation. The interior of the crawl space could not be assessed due to inaccessible openings. Ventilation openings were observed along the perimeter, facilitating air circulation.

Recommendation: Isolated areas of the foundation systems are exposed, which allows for limited observation. Due to historic classification, substantial compliance with current essential service facility and code requirements is not likely feasible or cost-effective. Review and analyze the capacity of original systems and strengthen critical elements. Historical building code may be used to lessen structural requirements. A critical review of essential service facility occupancy is recommended.

ASSOCIATED PHOTOGRAPHS



View of exterior indicating a crawl space type foundation



View of foundation vents and access door for the crawl space

COST SUMMARY

Recommendation	EUL	EFF AGE	RUL	Year	Cost
Further evaluation - Structural engineer				Immed	\$5,000
Total					\$5,000

5.2 Building Frame

Description: The building frame, originally constructed in 1854, was subjected to a thorough examination as part of the PCA. With limited visibility, the frame, predominantly comprised of historical materials, exhibited signs of age and wear consistent with its considerable lifespan. Visual inspections revealed certain areas of weathering, checking, and minor deterioration in localized sections of the wooden elements.

Recommendation: The building frame, given its historical significance and age, requires ongoing attention to preserve its structural integrity. A current structural analysis, as well as regular monitoring, maintenance, and periodic assessments, are advised to address any emerging concerns and to contribute to the long-term preservation of this historically significant property.

The estimated cost for a structural evaluation of the building is listed under the Foundation section of this report.

5.3 Facades

Description: The exterior facade of the building, a combination of stucco and brick, was scrutinized as part of the Property Condition Assessment. Dating back to its construction in 1854, the facade showcases architectural elements indicative of its historical significance. The stucco finish, although exhibiting signs of weathering consistent with its age, remains largely intact and contributes to the building's distinctive aesthetic.

Visual assessments of the brickwork revealed localized areas of efflorescence and minor mortar erosion, typical considerations for structures of this era. Overall, the brick facade displayed commendable durability, with no significant compromise to its structural integrity noted during the inspection.

Recommendation: The stucco and brick facade of the building, originally constructed in 1854, presents a testament to its historical legacy. While exhibiting signs of weathering and age-related wear, the facade seems to be structurally sound. Periodic monitoring, routine maintenance, and targeted repairs, where necessary, are recommended to preserve the architectural and historical character of this significant property.

The estimated cost for a structural evaluation of the building is listed under the Foundation section of this report.

ASSOCIATED PHOTOGRAPHS



Aerial view of the building's facade



View of the South (front) elevation



Current view of the building's facade



Current view of the building's facade

ASSOCIATED PHOTOGRAPHS continued



Current view of the building's facade



Current view of the building's facade

5.4 Roofing

Description: During the interior inspection of the deck and office areas, it was discovered that there were signs of past water damage and leaks. An infrared scan was conducted in these areas during the assessment. No thermal anomalies were detected, suggesting no current presence of moisture.

The primary roofing system on the building is sloped, dutch style, covered with architectural asphalt shingles. The roofs have sheet metal flashing elements. There is no exterior perimeter guttering and downspouts to direct stormwater drainage.

Roof penetrations are present for sanitary stacks, vent fans, HVAC equipment, plumbing and electrical lines, etc.

Recommendation: According to the Property Contact, the roof finishes were replaced approximately 5 years ago. It is advisable to explore the possibility of installing gutters and downspouts for the current roof system. The inclusion of a well-designed gutter and downspout system offers various crucial advantages, such as effective water management, safeguarding the roof, preventing erosion, avoiding water staining, and preserving the foundation. As part of the property management's routine maintenance program, incorporating annual roof inspections, debris removal, and addressing minor repairs is recommended.

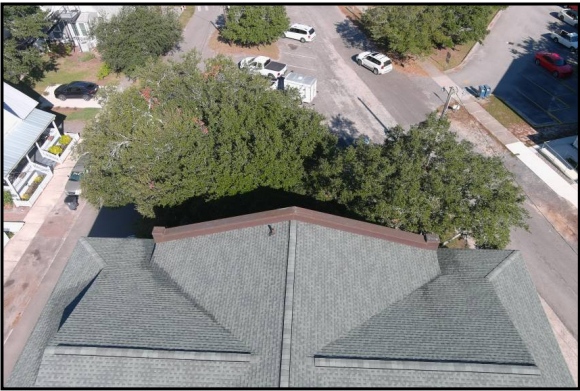
ASSOCIATED PHOTOGRAPHS



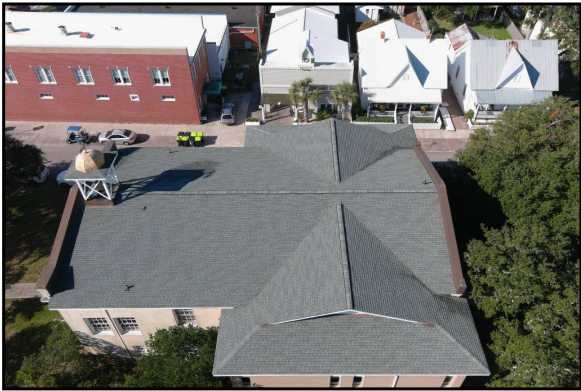
Aerial view of the current condition of the roof



Aerial view of the current condition of the roof



Aerial view of the current condition of the roof



Aerial view of the current condition of the roof



Aerial view of the current condition of the roof

COST SUMMARY

Recommendation	EUL	EFF AGE	RUL	Year	Cost
Add gutters and downspouts				Immed	\$5,000
Total					\$5,000

5.5 Windows & Exterior Doors

Description Windows: The wooden windows were assessed for their condition, functionality, and overall integrity. Visual inspections revealed the presence of wood rot, surface wear, and paint deterioration, consistent with natural exposure to the elements.

Doors: Similarly, the wooden doors were inspected for signs of wear, structural soundness, and functionality. Some doors exhibited minor surface cracks, which, while not compromising their stability, may warrant periodic maintenance. Hardware, such as handles and hinges, was checked for proper operation

Recommendation: Including window replacement in the property's budget and maintenance plan is recommended to address this aspect of the building envelope comprehensively. Timely replacement will not only enhance the property's overall condition but also contribute to long-term cost savings and sustainability.

No significant issues were immediately apparent with the doors, but ongoing monitoring and preventive measures, such as sealing and repainting, are recommended to preserve the wood and prevent potential deterioration.

ASSOCIATED PHOTOGRAPHS



Current condition of the windows



Current condition of the windows



Current condition of the windows



Current condition of the windows

ASSOCIATED PHOTOGRAPHS continued



Current condition of the windows



Current condition of the windows



Current condition of the front entrance door



Current condition of the rear entrance door

COST SUMMARY

Recommendation	EUL	EFF AGE	RUL	Year	Cost
Window replacement				Immed	\$30,000
Exterior door replacement				Immed	\$10,000
Total					\$40,000

6.0 MECHANICAL, ELECTRICAL, & PLUMBING SYSTEMS

6.1 Mechanical

Description: Individual electrical heat pumps are responsible for providing both heating and cooling functions within the property. These heat pump units differ in both size and age. Air distribution is facilitated through ducts concealed above the ceilings, delivering conditioned air to supply air registers. The control of the heating and cooling systems is managed by localized thermostats.

Recommendation: The noted condition, along with the varied ages of the package units, suggests a potential decrease in efficiency and reliability. Recommending the replacement of the mechanical systems aims to reduce the risk of unforeseen failures, enhance energy efficiency, and improve overall occupant comfort. An alternative consideration is adopting a phased approach to system replacement, giving priority to the most crucial units. This approach allows alignment with budget limitations and operational needs.

ASSOCIATED PHOTOGRAPHS



Luxaire 10-ton heat pump; manufactured in 1996



Rheem heat pump; unknown size and manufacturing date



Heat pump; unknown manufacturer, size, and manufacturing date



Goodman 2.5 ton heat pump; manufacturer in 2014

COST SUMMARY

Recommendation	EUL	EFF AGE	RUL	Year	Cost
Mechanical equipment evaluation & replacement				Immed	\$170,000
Total					\$170,000

6.2 Electrical

Description: Electrical Service: The facility is served by a 240/120V, single phase, 3-wire, 200A electrical service provided by Brunswick Electric Membership Corporation (BEMC). The incoming utility service equipment, including the current transformer (CT) cabinet, disconnect switch, and meter socket are wall-mounted on the west elevation of the building. Distribution for the building is provided via 200A, 240/120V single-phase panelboard(s) located inside of the building. The panel is in good condition and has a lot of space for additional breaks. Receptacles are located throughout the office area and are located to serve the desired function of the facility. Lighting within the building is from fluorescent lights mounted to the ceiling.

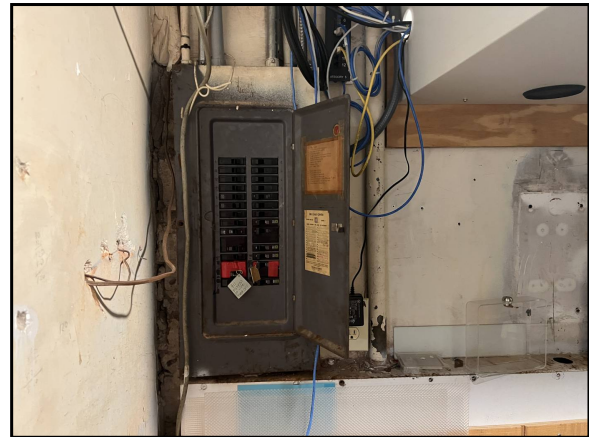
Wiring: Branch wiring was noted to be copper.

Recommendation: The electrical power service was deemed sufficient for the current demands of the building. However, a more in-depth evaluation of the electrical system may be necessary to assess its suitability for the intended future use of the facility. It is crucial to address the observed rust on one of the pad-mounted transformers, and the local utility provider should be contacted for necessary maintenance. Routine upkeep, including periodic infrared surveys, is anticipated throughout the evaluation period.

ASSOCIATED PHOTOGRAPHS



Typical condition of electrical panel box



Typical condition of electrical panel box

ASSOCIATED PHOTOGRAPHS continued



Electrical disconnects for some of the mechanical equipment



Electrical components for the natural gas generator



View of natural gas generator



Electrical feeds and disconnects for the outside mechanical equipment



View of onsite electrical transformers



View of onsite electrical transformer

ASSOCIATED PHOTOGRAPHS continued



Observed rust atop the main electrical transformer

COST SUMMARY

Recommendation	EUL	EFF AGE	RUL	Year	Cost
Electrical evaluation & replacement				Immed	\$27,625
Total					\$27,625

6.3 Plumbing

Description: Supply Piping: The supply lines are copper.

Drainage/Wastewater: Drainage/wastewater piping was not observed during this assessment. Plumbing components from the faucets at the subject property to the coupling at the wall penetration were observed to be polyvinyl chloride (PVC) or aluminum, depending on location. Roof-mounted vent lines were observed to be PVC.

Hot Water Production: Individual 30-gallon electric water heaters are located within the restrooms and provide domestic hot water. Observed units were manufactured by A.O. Smith and Ruud.

Recommendation: The observed water heaters appeared to be in poor overall condition. Based on age and EUL, replacement is anticipated and costs are included in the Short-Term Costs Table.

The plumbing was deemed sufficient for the current demands of the building. However, a more in-depth evaluation of the electrical system may be necessary to assess its suitability for the intended future use of the facility.

ASSOCIATED PHOTOGRAPHS



Typical plumbing components and fixtures for the bathrooms



Typical condition of the plumbing components



View of a on-demand electrical water heater located in one of the bathrooms



View of 30-gallon electrical water heater located in one of the bathrooms

COST SUMMARY

Recommendation	EUL	EFF AGE	RUL	Year	Cost
Plumbing system evaluation and maintenance				Immed	\$51,000
Total					\$51,000

6.4 Vertical Transportation

Description: The subject property currently lacks vertical transportation. Nevertheless, should there be a renovation of the building, the installation of an elevator would be necessary to comply with the Americans with Disabilities Act (ADA).

Recommendation: The estimated cost for installing an elevator is detailed in the Cost Table.

COST SUMMARY

Recommendation	EUL	EFF AGE	RUL	Year	Cost
Installation of elevator				Immed	\$200,000
Total					\$200,000

7.0 INTERIOR ELEMENTS

7.1 Interior Finishes

Description: Walls: The interior walls consist primarily of painted gypsum board, with other varying wall finishes. In some areas, the CMU exterior walls are exposed.

Ceilings: The ceilings are primarily suspended ceiling systems with either 2'x2' or 2'x4' lay-in ceiling panels and light fixtures or gypsum boards.

Flooring: Flooring consists of a variety of VCT floor tiles, carpeting, ceramic tiles, etc.

Interior Stairs: A flight of wood stairs with a carpet runner leading to the second floor was noted.

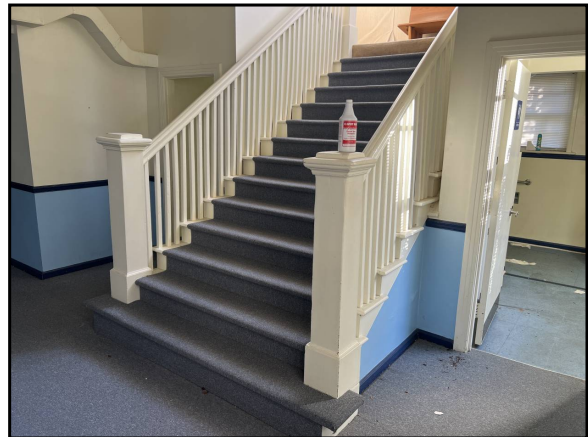
Interior Doors: Interior doors consist of a variety of solid and hollow core wood in metal frames set in wooden frames.

Recommendation: Upon observation, the interior finishes were assessed to be in fair to poor condition, with discernible evidence of past water intrusion. Anticipated actions include maintenance, repairs, and potential replacements of the interior elements. These measures should be aligned with the projected future use of the building.

ASSOCIATED PHOTOGRAPHS



View of current condition of interior finishes



View of current condition of interior finishes



View of current condition of interior finishes



View of current condition of interior finishes

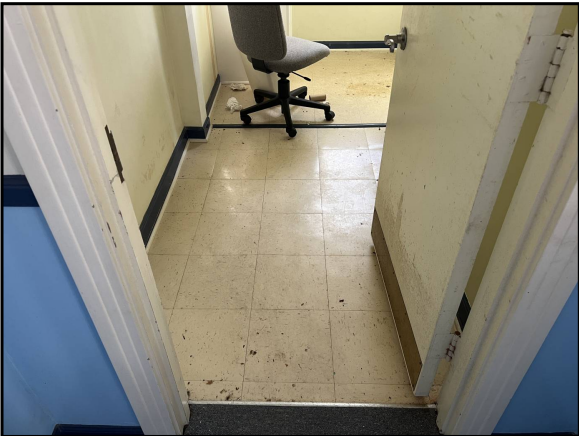
ASSOCIATED PHOTOGRAPHS continued



View of current condition of interior finishes



View of current condition of interior finishes



View of current condition of interior finishes



View of current condition of interior finishes



View of current condition of interior finishes



View of current condition of interior finishes

ASSOCIATED PHOTOGRAPHS continued



View of current condition of interior finishes



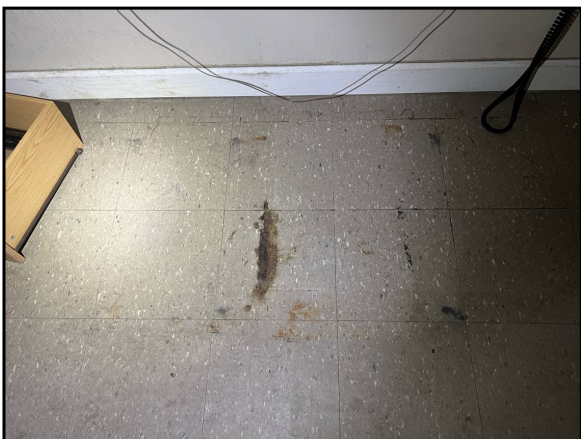
View of current condition of interior finishes



View of current condition of interior finishes



View of current condition of interior finishes



View of current condition of interior finishes



View of current condition of interior finishes

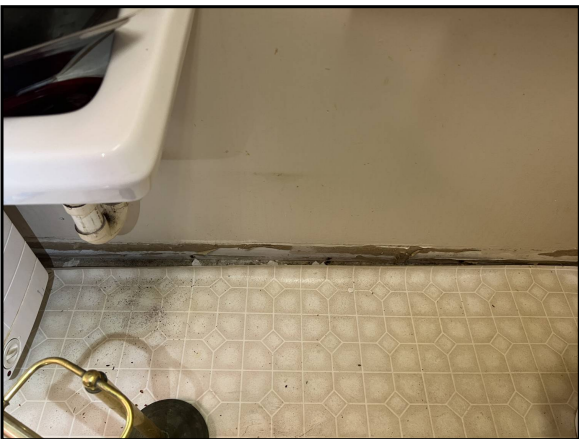
ASSOCIATED PHOTOGRAPHS continued



View of current condition of interior finishes



View of current condition of interior finishes



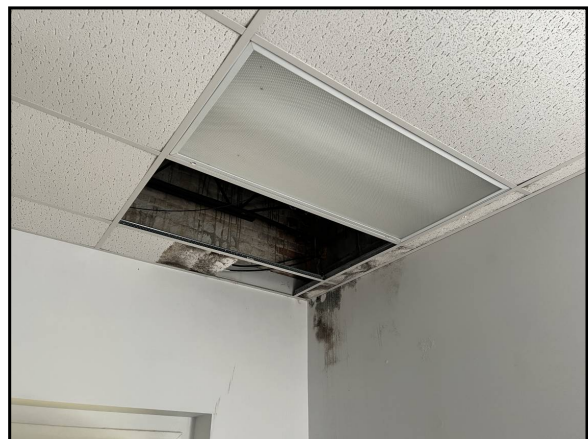
View of current condition of interior finishes



View of current condition of interior finishes



View of current condition of interior finishes

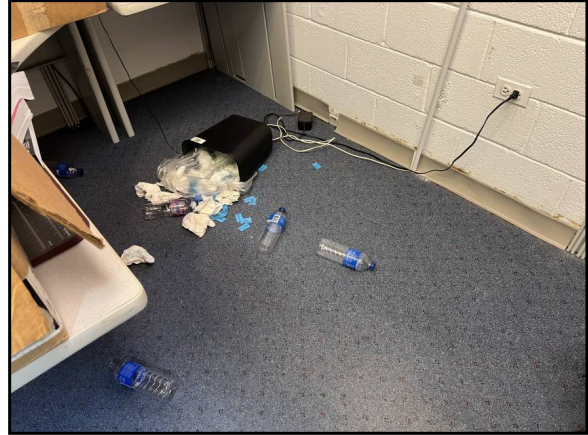


View of current condition of interior finishes

ASSOCIATED PHOTOGRAPHS continued



View of current condition of interior finishes



View of current condition of interior finishes



View of current condition of interior finishes



View of current condition of interior finishes



View of current condition of interior finishes



View of current condition of interior finishes

ASSOCIATED PHOTOGRAPHS continued



View of current condition of interior finishes



View of current condition of interior finishes



View of current condition of interior finishes



View of current condition of interior finishes



View of current condition of interior finishes



View of current condition of interior finishes

ASSOCIATED PHOTOGRAPHS continued



View of current condition of interior finishes



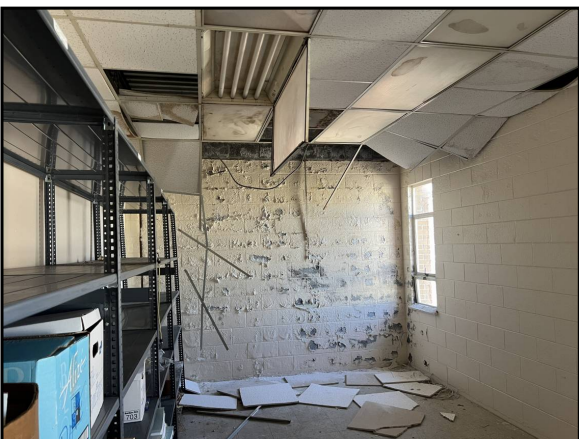
View of current condition of interior finishes



View of current condition of interior finishes



View of current condition of interior finishes



View of current condition of interior finishes



View of current condition of interior finishes

COST SUMMARY

Recommendation	EUL	EFF AGE	RUL	Year	Cost
Complete renovation of interior finishes				Immed	\$3,187,500
Mold remediation (not included potential asbestos abatement, cleaning of architectural components, or cleaning of structural or components to remain)				Immed	\$150,000
Total					\$3,337,500

8.0 LIFE SAFETY / FIRE PROTECTION

8.1 Life Safety & Fire Protection

Description: The building currently lacks sprinkler systems. However, life safety equipment such as hardwired smoke detectors, heat detectors, pull stations, and illuminated exit signs have been observed. Additionally, intrusion alarms, security systems, and video surveillance systems are in place.

Recommendation: It is highly probable that the life safety and fire protection systems will require updating and alignment with current codes to meet the anticipated use of the building in the future.

ASSOCIATED PHOTOGRAPHS



Typical condition of fire extinguishers located throughout the interior of the building



Typical condition of illuminated exit signs located throughout the interior of the building

COST SUMMARY

Recommendation	EUL	EFF AGE	RUL	Year	Cost
Evaluation and reconfigure				Immed	\$35,000
Total					\$35,000

9.0 OPINIONS OF PROBABLE COST TO REMEDY PHYSICAL DEFICIENCIES

Tables indicating cost estimates for immediate repairs, short-term repairs, and replacement reserve costs are included in this report.

Immediate repair costs are for deficiencies observed during the Property Condition Assessment that require immediate action in order to prevent further deterioration of the element or to prevent possible injury due to an unsafe condition and/or code violation. The immediate repair items identified represent an estimated cost of \$3,948,625.

Short-term repairs include opinions of probable costs to remedy physical deficiencies, such as deferred maintenance, that may not warrant immediate attention but require repairs or replacements that should be undertaken on a priority basis in addition to routine preventative maintenance. Such opinions of probable costs include costs for testing, exploratory probing, and further analysis should this be deemed warranted. Generally, the time frame for such repairs is one (1) year. The short-term repair items identified represent an estimated cost of \$0.00.

Replacement reserves are costs anticipated for repairs, part replacements associated with the maintenance of building systems, and elements that will have exceeded the expected useful life (EUL) over the 10-year evaluation period.

10.0 OUT OF SCOPE CONSIDERATIONS

10.1 Flood Plain

HICAPS conducted an assessment of the Flood Insurance Rate Map released by the Federal Emergency Management Agency. As per Map Number 3720209600K, dated August 28, 2018, it appears that the property in question is situated within Flood Zone X, which is an area situated beyond both the 100-year and 500-year flood zones.

10.2 Wind Zone

HICAPS conducted an evaluation of the Wind Zone Map released by the Federal Emergency Management Agency. According to the map, it seems that the property in question is situated in Wind Zone 3 an area characterized by design wind speeds reaching up to 200 miles per hour. The subject property does indeed seem to be positioned within a designated high-wind area or a zone susceptible to hurricanes.

10.3 Seismic Zone

HICAPS conducted an assessment of the seismic zone map found in the Uniform Building Code 1997, Volume 2, Table 16.2. According to this map, it appears that the property in question is situated within Seismic Zone 1, which is characterized as an area with a low likelihood of experiencing significant ground motion damage.

10.4 Mold Inspection

HICAPS utilized Terracon's Indoor Environmental Quality Report for this segment of the evaluation. Refer to the report in the Appendix section of this document.

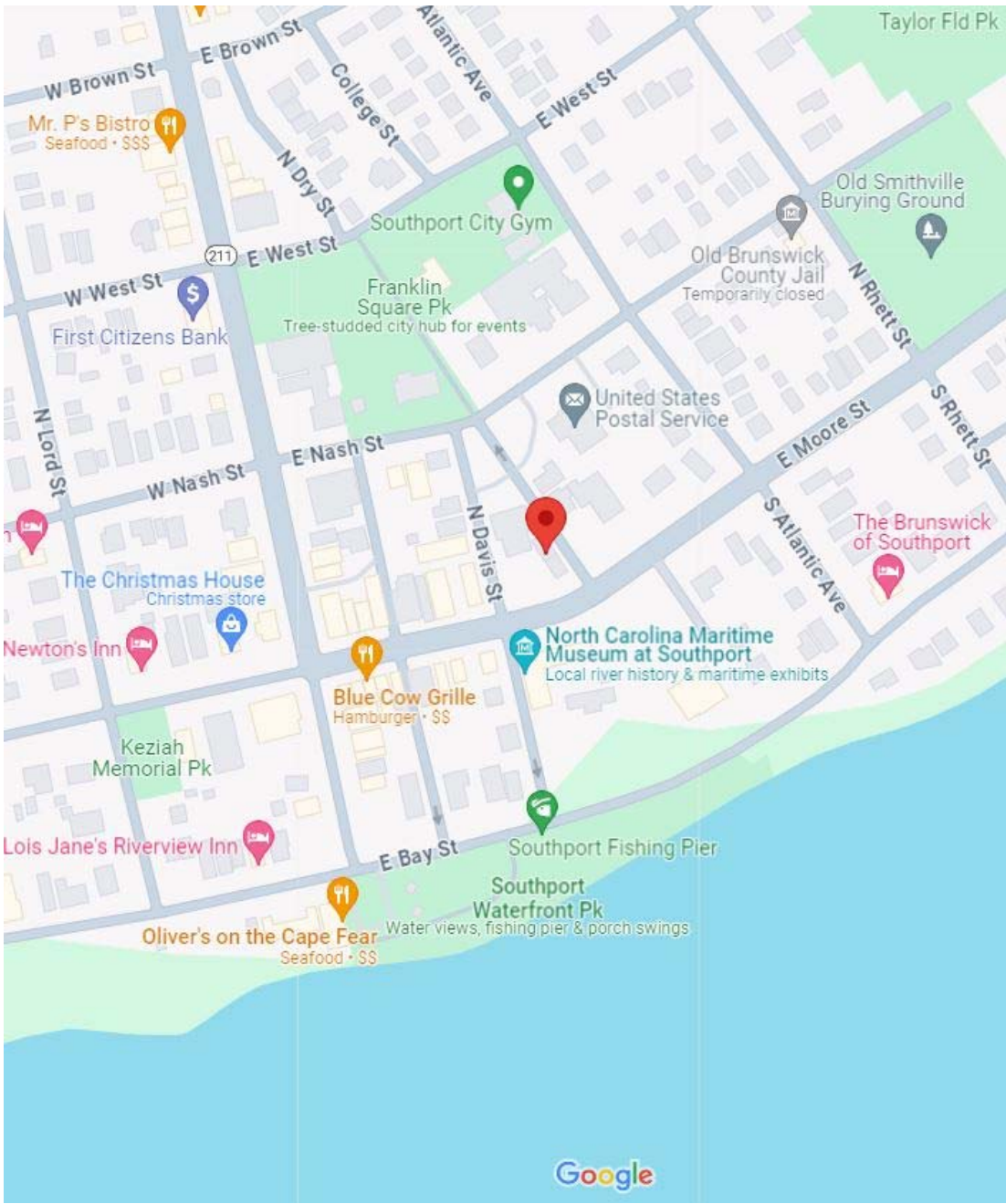
Southport Old City Hall/UYA
201 East Moore Street
Southport, NC 28461
November 22, 2023
Project Number: 2023BD018

Item	Quantity	Unit	Unit Cost	Cycle Replacement	Replacement Percent	Immediate Total	Short Term Total
4.4 PAVING, CURBING, AND PARKING							
Complete asphalt replacement w/ restriping	10,000	SF	\$4.50	\$45,000	100%	\$45,000	\$0
4.5 FLATWORK, PATIOS, AND RAILING							
Replace Concrete Sidewalk	1,500	SF	\$15.00	\$22,500	100%	\$22,500	\$0
Repair damaged CMC - ADA Ramp	1	LS	\$5,000.00	\$5,000	100%	\$5,000	\$0
4.6 LANDSCAPING							
Trim vegetation away from the building	1	LS	\$5,000.00	\$5,000	100%	\$5,000	\$0
5.1 FOUNDATION							
Further evaluation - Structural engineer	1	LS	\$5,000.00	\$5,000	100%	\$5,000	\$0
5.4 ROOFING							
Add gutters and downspouts	500	LF	\$10.00	\$5,000	100%	\$5,000	\$0
5.5 WINDOWS & EXTERIOR DOORS							
Window replacement	20	EA	\$1,500.00	\$30,000	100%	\$30,000	\$0
Exterior door replacement	1	LS	\$10,000	\$10,000	100%	\$10,000	\$0
6.1 MECHANICAL							
Mechanical equipment evaluation & replacement	8,500	SF	\$20.00	\$170,000	100%	\$170,000	\$0
6.2 ELECTRICAL							
Electrical evaluation & replacement	8,500	SF	\$3.25	\$27,625	100%	\$27,625	\$0
6.3 PLUMBING							
Plumbing system evaluation and maintenance	8,500	SF	\$6.00	\$51,000	100%	\$51,000	\$0
6.4 VERTICAL TRANSPORTATION							
Installation of elevator	1	LS	\$200,000	\$200,000	100%	\$200,000	\$0
7.1 INTERIOR FINISHES							
Complete renovation of interior finishes	8,500	SF	\$375.00	\$3,187,500	100%	\$3,187,500	\$0
Mold remediation (not included potential asbestos abatement, cleaning of architectural components, or cleaning of structural or components to remain)	1	LS	\$150,000	\$150,000	100%	\$150,000	\$0
8.1 LIFE SAFETY & FIRE PROTECTION							
Evaluation and reconfigure	1	LS	\$35,000.00	\$35,000	100%	\$35,000	\$0
Total Repair Cost						\$3,948,625	\$0

Appendix A:

Property Maps

Property Location Map



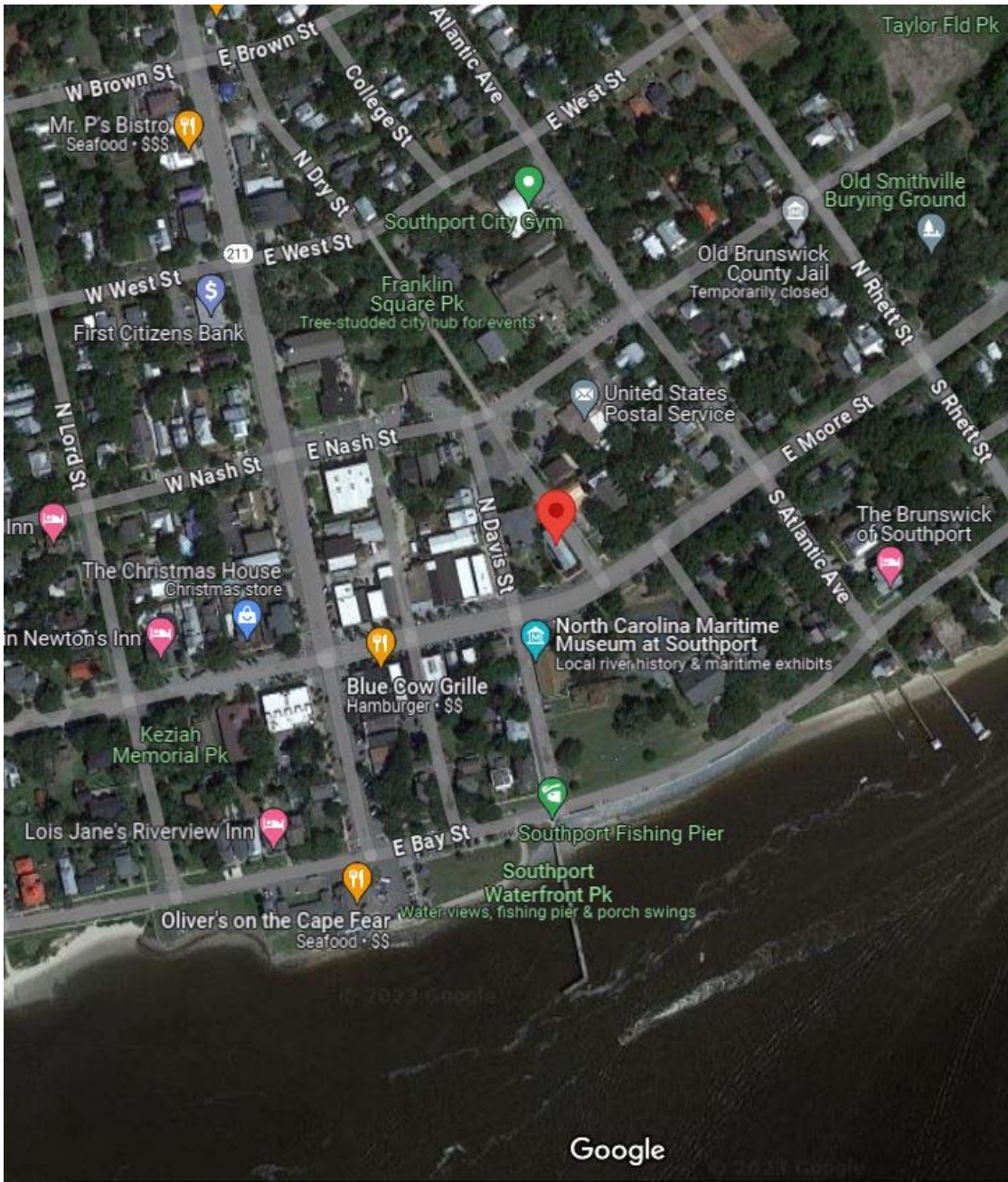
Southport Old City Hall/UYA
201 E. Moore Street
Southport, NC 28461
Brunswick County



North

Google Maps

Property Aerial Map



Southport Old City Hall/UYA
201 E. Moore Street
Southport, NC 28461
Brunswick County



North

Google Maps

Parcel Map



Southport Old City Hall/UYA
201 E. Moore Street
Southport, NC 28461
Brunswick County



North

Brunswick County GIS

Topographic Map



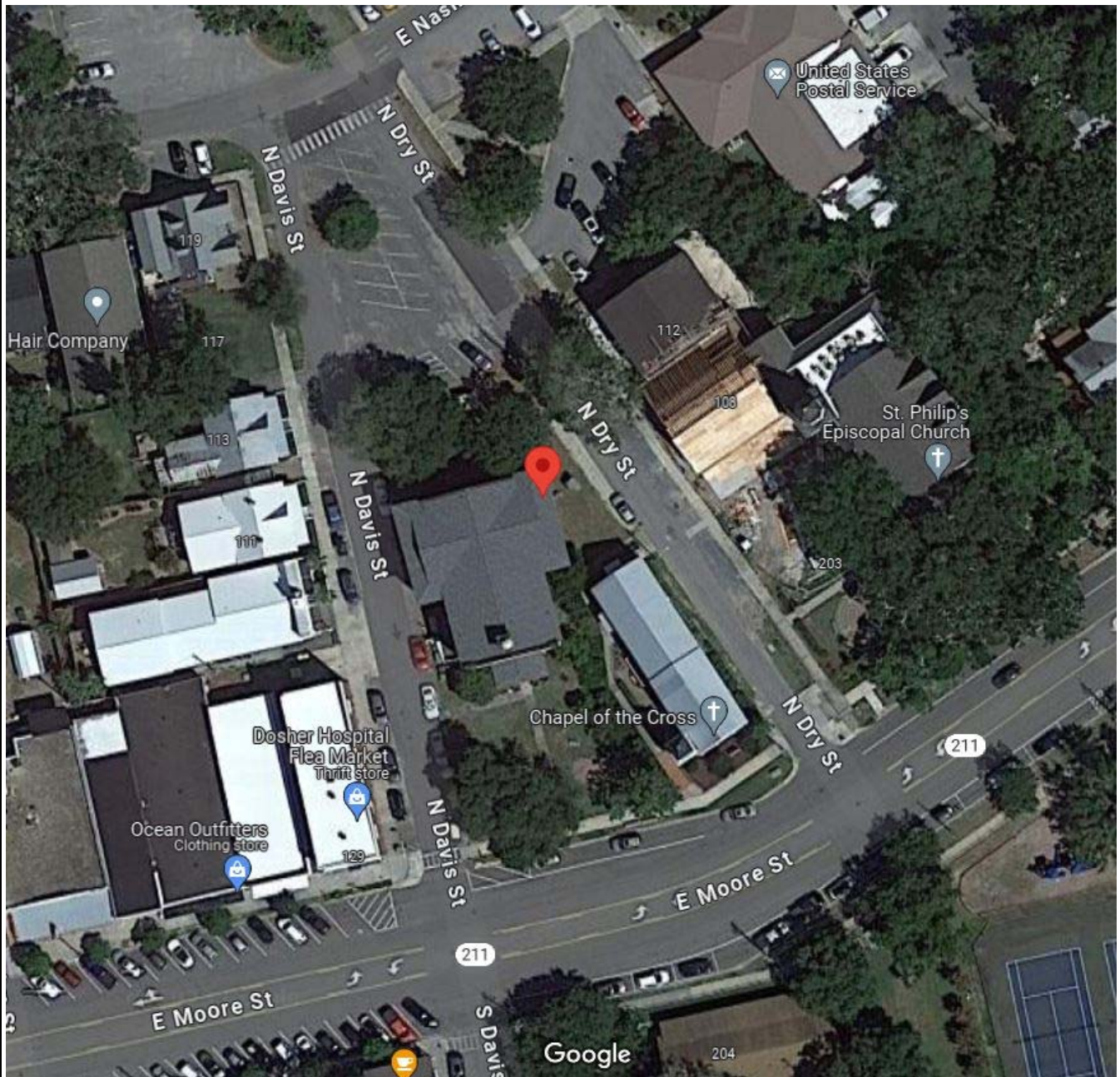
Southport Old City Hall/UYA
201 E. Moore Street
Southport, NC 28461
Brunswick County



North

USGS

Access & Egress Map



Southport Old City Hall/UYA
201 E. Moore Street
Southport, NC 28461
Brunswick County

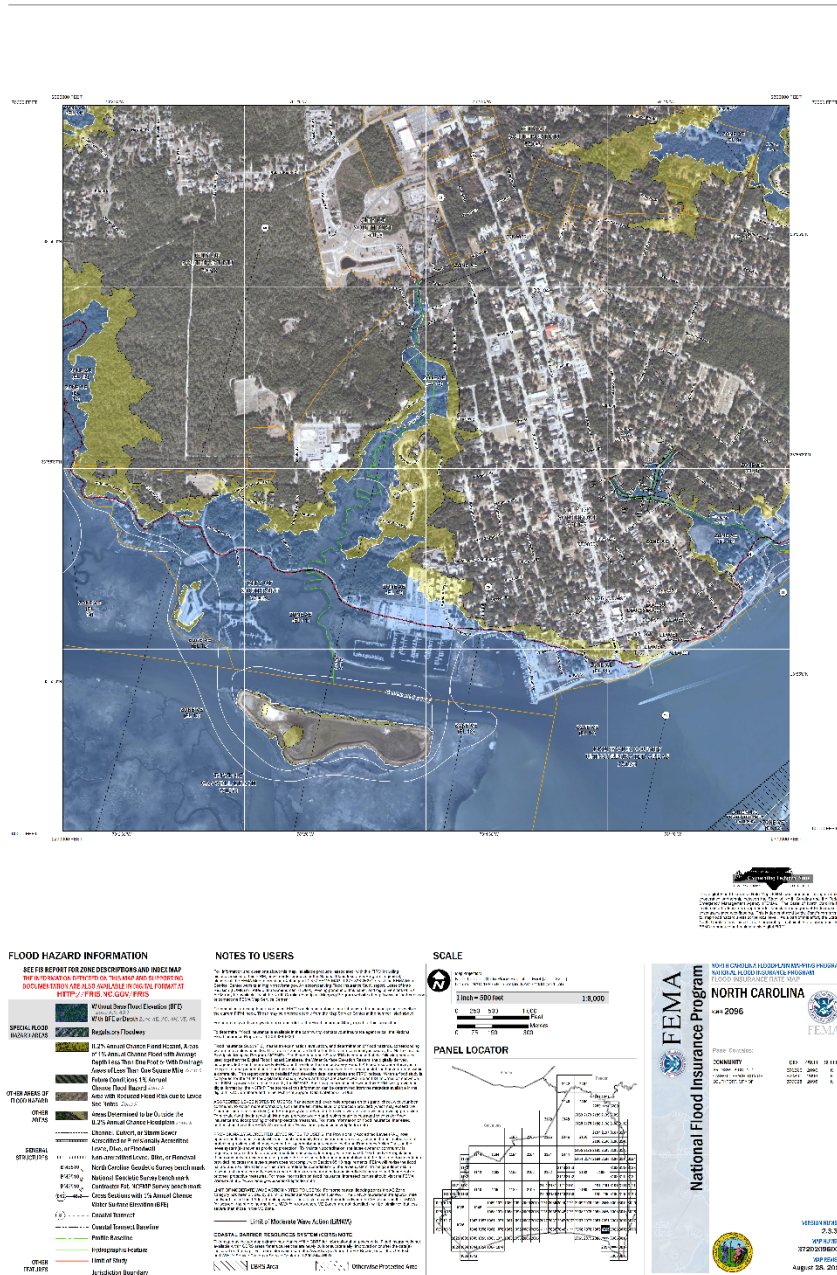


North

Google Maps

HICAPS

Flood Plain Map



Southport Old City Hall/UYA
201 E. Moore Street
Southport, NC 28461
Brunswick County



North

FEMA

Wind Zone Map

6
 FEDERAL EMERGENCY MANAGEMENT AGENCY

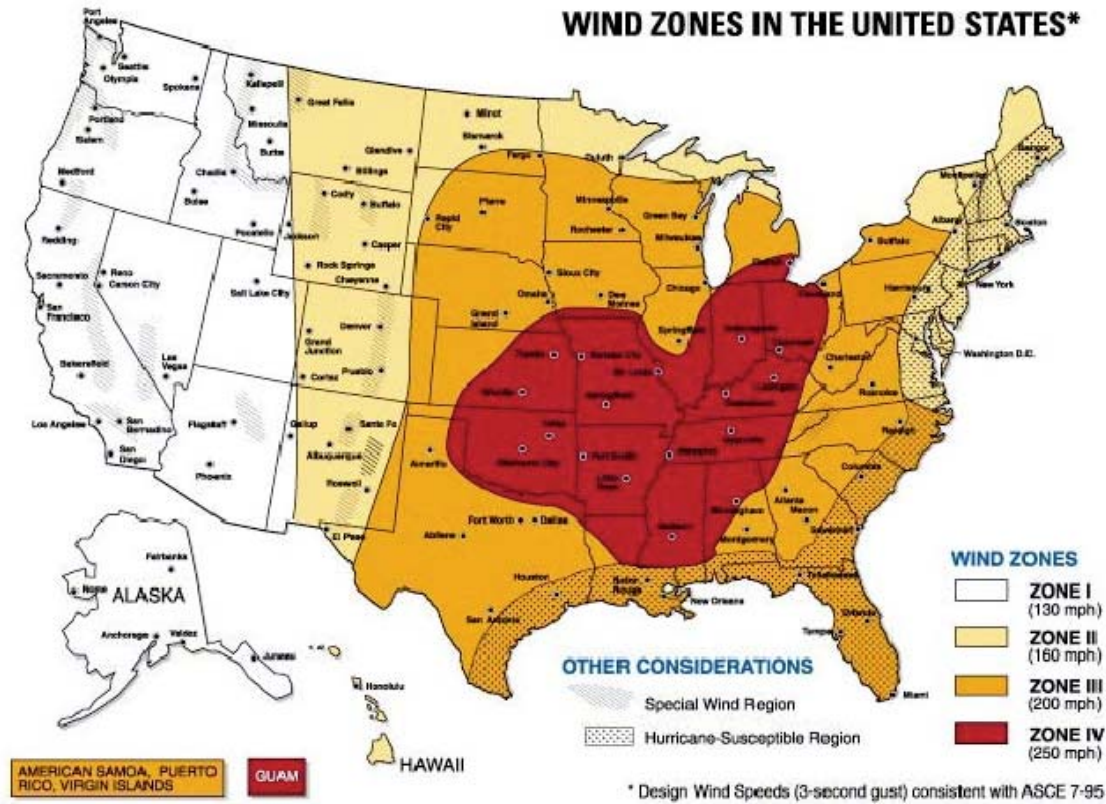


Figure 12 Wind zones in the United States

SECTION I UNDERSTANDING THE HAZARDS

Southport Old City Hall/UYA
 201 E. Moore Street
 Southport, NC 28461
 Brunswick County



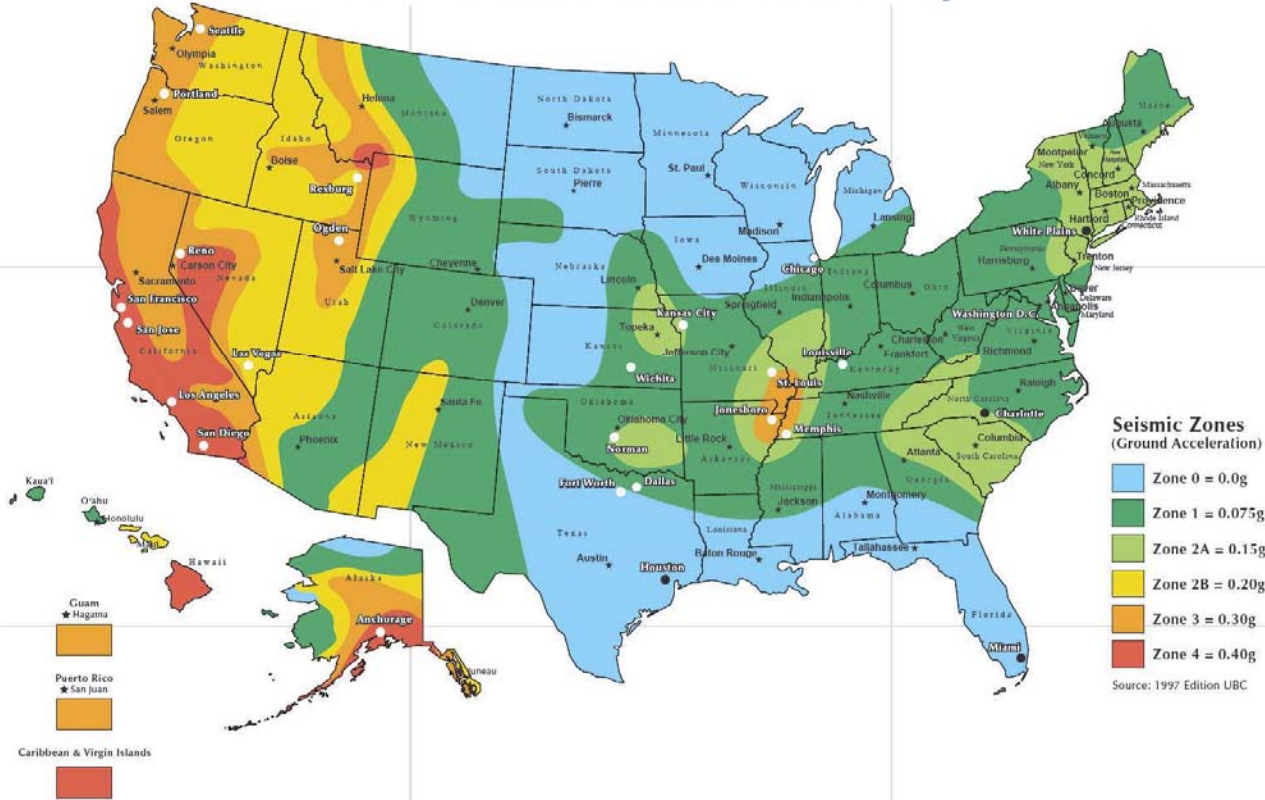
North

FEMA

Seismic Zone Map

NRC-070
Submitted: 5/8/2015

United States Seismic Zones Map



Southport Old City Hall/UYA
201 E. Moore Street
Southport, NC 28461
Brunswick County



North

USGS

Appendix B:

Indoor Environmental Quality Report



2108 Capital Drive, Suite 103
Wilmington, North Carolina 28405
P (910) 478-9915
Terracon.com

October 27, 2023

Attn: Mr. Dave Smith
HICAPS
600 North Regional Road
Greensboro, NC 27409
P: (336) 420-6636
E: dave@hicaps.com

Re: Indoor Environmental Quality Assessment Report
Southport Former City Hall
201 E. Moore Street
Southport, North Carolina 28461
Terracon Project No. K6237078

Dear Mr. Smith:

The purpose of this report is to present the results of the limited indoor environmental quality assessment performed on October 17, 2023, at the Southport Former City Hall located at 201 E. Moore Street in Southport, North Carolina. This assessment was conducted in general accordance with Terracon proposal PK6237078, dated October 5, 2023, and authorized on October 16, 2023.

Terracon appreciates the opportunity to provide these services to HICAPS. If you have questions regarding this report, please contact the undersigned at (910) 478 -9915.

Sincerely,
Terracon Consultants Inc.

A handwritten signature in black ink, appearing to read 'Amy C. DeSaix'.

Amy C. DeSaix, REM, CIEC
Environmental Department Manager

A handwritten signature in black ink, appearing to read 'Russell Harrings'.

Russell Harrings, CIH
Senior Industrial Hygienist

Indoor Environmental Quality Report

Southport Former City Hall

201 E. Moore Street

Southport, North Carolina 28461

October 27, 2023 | Terracon Project No. K6237078



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1.0 Introduction

Terracon Consultants, Inc. (Terracon) conducted an Indoor Environmental Quality (IEQ) assessment at the Southport Former City Hall located at 201 E. Moore Street in Southport, North Carolina. The assessment was conducted October 17, 2023, by Terracon representatives Amy DeSaix and Shaenaz Mirmohamed in general accordance with Terracon proposal PK6237078, dated October 5, 2023, and authorized on October 16, 2023.

1.1 Project Objective

Terracon also understands the client has been contracted to perform facility inspections and is concerned about employee exposure to mold spores and other airborne contaminants. Terracon understands that no asbestos inspection has been performed in the building, however, based on the age of the building, it is assumed that asbestos-containing materials may be present. We understand the purpose of this assessment consisted of two objectives. The first objective was the evaluation of the air quality at the Southport Former City Hall due to concerns for personnel required to perform building inspection activities. The second objective was to document the general microbial impact and water damage to assist in determining the future of the building, such as whether the building will be renovated or demolished.

The building was reportedly constructed in 1854 as the County Courthouse and was later renovated in 1983. The building is two story and consists of approximately 8,500 square feet. The building is listed on the National Register of Historic Places as Old Brunswick County Courthouse (BW0007). Terracon was provided with a mold inspection report dated December 10, 2018, and prepared by Fire Water and Mold. The report provided photographs of water intrusion and visible mold growth in numerous locations within the structure. Information in the report stated the building had been unoccupied for “quite some time” and had “recently received a new roof”. Air samples collected at that time within the building indicated elevated airborne mold spore concentrations of *Aspergillus/Penicillium* (193,000 counts/m³), *Chaetomium* (40 counts/m³), and *Stachybotrys/Memnoniella* (400 counts/m³).

Terracon’s IEQ assessment consisted of a physical inspection and indoor environmental observations limited to accessible areas of the Southport Former City Hall. Areas which were not accessible included the crawlspace, the attic, and the first office on the right on the first floor (supervisors office). Visibility of additional areas was limited due to furniture, equipment, and office supplies. The physical inspection and assessment included building hygiene and maintenance. Terracon measured the following indoor environmental

parameters: temperature, relative humidity, and carbon dioxide (CO₂). We also performed airborne sampling for mold spores and for asbestos fibers.

1.2 Standard of Care

This assessment was conducted based on information provided to Terracon relating to existing conditions and was conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale. The results, findings, conclusions, and recommendations expressed in this report are based on conditions observed during our assessment.

1.3 General Conditions and Limitations

This IEQ assessment was conducted at the subject site on October 17, 2023. The level of effort and associated tasks completed for this evaluation were limited to the request from the Client to evaluate the accessible areas of the Southport Former City Hall, as stated in our proposal PK6237078, dated October 5, 2023, and authorized on October 16, 2023. Terracon did not attempt to identify every potential exposure or hazard present in the subject building; but focused on typical hazards present in a building of this age and condition.

Molds are common to the environment, are naturally occurring, and have specific requirements for survival and growth. Elevated mold concentrations in indoor environments occur when both moisture and food sources are present. Indoor food sources for mold growth can include organic materials such as those resulting from a flood or sewer backup, dust, and other airborne particulates, or building materials high in cellulose such as, but not limited to, carpet backing, drywall paper, or ceiling panels. Moisture sources inside buildings can occur because of leaks from water or sewer lines, moisture intrusion through windows, roofs, walls, and foundations, as condensation in heating, ventilation, and air conditioning (HVAC) systems, or as condensation on windows. In areas of the United States, relative humidity during certain times of the year is high enough to serve as a moisture source. In order to reduce the potential occurrence or recurrence of mold growth in indoor environments, sources of indoor moisture must be eliminated or controlled. In addition, no mandatory regulations or standards have been established for the maximum allowable concentration of bioaerosols such as mold spores.

The results, findings, and conclusions expressed in this report are based on conditions observed during our October 17, 2023, assessment activities. Many factors such as weather conditions, building occupancy, ventilation patterns, and seasonal variations in mold levels can affect the conditions observed. The information contained in this report should not be relied upon to represent conditions that existed previously or a later date. Terracon does not warrant the services of regulatory agencies, laboratories, or other third parties supplying

information that may have been used in the preparation of this report. No warranty, express or implied, is made.

1.4 Reliance

This report is prepared for the exclusive use and reliance of HICAPS (Client). Use or reliance by any other party is prohibited without the written authorization of the Client and Terracon.

Reliance on the report by the client and all authorized parties will be subject to the terms, conditions, and limitations stated in Terracon's proposal.

2.0 Evaluation Criteria and Methods

2.1 Visual Assessment

Based on the multiple sources of potential indoor and outdoor contaminants that can affect indoor air quality, the visual assessment is conducted to evaluate general indoor hygiene, building maintenance practices, moisture intrusion, uncontrolled condensate formation, and odors. The assessment focuses primarily on collecting observational data (i.e., information obtained by visual assessment of the accessible sections of the building and interviews with the building management, owners, and occupants). The visual assessment can help to formulate plans for more in-depth investigation.

The visual assessment included:

- an observation of the physical structure and potential indoor and outdoor sources of indoor air pollutants;
- the determination of the type of enclosure (walls, windows, roof, and foundation), age, location, and condition;
- the determination of the types of finishes on walls, floors, and ceilings, the types of furnishings;
- an observation of readily accessible heating, ventilation, and air conditioning (HVAC) equipment serving the designated areas for microbial growth; and,
- the identification of noticeable discoloration or odor that could indicate moisture intrusion, water damage, and microbial growth.

Destructive sampling or testing to inspect interior wall cavity spaces or mechanical enclosures was not within the scope of work for this project. A summary of general building information and results of the visual assessment are contained in Table 1.0 in Section 3.1. A general site location map and diagrams are included in Appendix A.

2.2 Temperature and Relative Humidity

Indoor air temperature and relative humidity are physical conditions important to the perception of comfort. American National Standards Institute (ANSI) / American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 55-2021, Thermal Environmental Conditions for Human Occupancy, recommends a temperature range between 73 and 79 degrees Fahrenheit (°F) and relative humidity between 20 and 60 percent (%) for persons performing “office” work and wearing light summer clothing. Higher temperatures require lower humidity for comfort. For persons in winter clothing, temperatures can range between 68 and 75°F, with relative humidity between 20% and 60%, with preferred conditions falling between 30% and 50% for both winter and summer temperatures.

Temperature and relative humidity were monitored using a TSI Q-Track Indoor Air Quality meter at locations where air samples were collected.

2.3 Carbon Dioxide and Outside Air

Carbon dioxide (CO₂) concentrations are often measured to evaluate the effectiveness of the building ventilation system to dilute and control bioeffluents (body odors) and other odors from cosmetics, perfumes, and products carried in by building occupants. ASHRAE Standard 62.1-2019, Ventilation for Acceptable Indoor Air Quality (Appendix C), states that, in terms of the control of odors, maintaining a steady-state CO₂ concentration no greater than about 700 parts per million (ppm) above the outdoor concentration will ensure that most people entering the space will be satisfied with respect odors and available fresh air. Indoor CO₂ concentrations that exceed the recommended indoor/outdoor differential are likely to result in higher rates of odor complaints and may indicate inadequate outdoor air delivery and/or air exchange. The Occupational Safety and Health Administration (OSHA) has established a permissible exposure limit (PEL) for CO₂ in the workplace at 5,000 parts per million as an 8-hour time-weighted average (TWA).

The CO₂ concentrations were measured using a TSI Q-Track Indoor Air Quality meter at locations where air samples were collected.

2.4 Microbial Air Sampling

There are no State or Federal limits established for fungal growth in, or contamination of, building materials. There are currently no regulatory standards, medically based threshold limits, or dose-response relationships for exposure to airborne or surface concentrations of fungal spores. Terracon relies upon experience, professional judgment, current scientific literature, guidelines, and recommendations made by professional organizations and experts in interpreting fungal sampling results.

Building materials or building surfaces commonly have resident fungal spores that have settled out of the air or have been filtered out of the air with other particles. Fungal structures, such as hyphae and conidiophores (or other fruiting bodies) seen microscopically in surface samples, typically indicate fungal growth on surfaces and are associated with the presence of moisture.

High variability in mold spore concentrations will exist in different geographic locations, during different seasons and weather patterns, and over the course of a given day. Generally, indoor mold spore concentrations in a typical, HVAC-supplied building are usually less than, but generally qualitatively similar to, spore concentrations found in the outside environment.

Samples for airborne fungi are interpreted by comparing total airborne concentrations and the distributions of fungal genera in samples from indoor locations to samples from outdoor locations. The following comparisons are performed. Other information may be used for interpretation on a case-by-case basis.

In general, total airborne fungal concentrations measured at indoor test locations should be lower than those outdoors. If total indoor air fungal concentrations are higher than those measured outdoors, indoor fungal sources may be suspected. In general, airborne fungal genera distributions observed in samples at indoor test locations should be similar to those at outdoor locations. The dominating presence of one or more kinds of moisture indicator fungal spores at test locations and the absence of the same types of spores at background reference locations typically indicates an indoor source and potentially degraded air quality.

Fungal (mold) spore trap samples were collected at representative locations using Air-O-Cell® sampling cassettes and a Zefon Bio-Pump® Plus at a flow rate of 15 liters per minute for five minutes. The samples were labeled with unique identifiers. Sample locations are shown on the figures included in Appendix A.

After air sample collection, the sample cassettes were delivered under chain-of-custody (COC) protocol to EMSL Analytical, Inc., accredited by the American Industrial Hygiene Association (AIHA®) Laboratory Accreditation Programs, LLC under the Environmental Microbiology Laboratory Accreditation Program (EMLAP #192283). The samples were analyzed for fungal spore and particulates by Optical Microscopy using ASTM D7391 and EMSL's internal MICRO-SOP-201.

2.5 Asbestos Air Sampling

Due to the age of the building, asbestos-containing materials (ACMs) were likely used in the building process. These materials could include wall materials (wallpaper, plaster, drywall and joint compound), ceiling tiles, flooring materials, insulation, glues, caulks, etc. Based

on condition of the building with damaged suspect ACMs, a potential health concern would be the presence of airborne asbestos fibers as a result of disturbance of ACMs.

A Terracon North Carolina accredited air monitor performed asbestos air sampling at the site at representative locations during our assessment to determine if airborne asbestos fibers were present. Five high volume air sampling pumps with cassettes were placed within the building following an initial walk-thru to determine if airborne asbestos fibers would be created by a non-destructive building assessment. After air sample collection, the sample cassettes were delivered under COC protocol to EMSL Analytical, Inc., accredited by the National Voluntary Laboratory Accreditation Program (NVLAP Lab Code 200841-0).

The samples were analyzed for asbestos fibers using Transmission Electron Microscopy (TEM) analysis using AHERA 40 CFR, Part 763. The analytical results are compared the North Carolina Asbestos Exposure Standard for Public Areas, which is 70 structures per square millimeter (s/mm²). Sample locations are shown on the figures included in Appendix A.

3.0 Findings

This section includes the findings and a discussion of our physical assessment, indoor air quality sampling, and surface sampling. Appendix B includes photographs of notable features and/or findings associated with this assessment.

3.1 Physical Inspection and Assessment

Table 1.0 contains an overview of findings from the physical assessment performed on October 17, 2023. Detailed findings are discussed in the section that follows. Photographs showing the site conditions are included in Appendix B.

Table 1.0 - Physical Assessment Findings

Assessment Parameter	Observations/Comments
Year Constructed	1854
Type of Occupancy	Unoccupied – Furniture and general office and personal items remain; however, HVAC system was operational
Major Renovations	East and West wings appear to be additions
Floors Above/Below Grade	Crawlspace with two stories
Physical Examination (odors, housekeeping)	Noticed areas of concern, see bullets below

Assessment Parameter	Observations/Comments
Types of Finishes	
Walls	Drywall, plaster, wood paneling, brick and concrete masonry unit (CMU) with brick on the original exterior walls and CMU on the addition exterior walls
Ceilings	Suspended ceiling tiles throughout the original section, above which is the original wood ceiling panels. Ceiling panels on the east and west wing additions open to the roof deck. The ceiling in the meeting room/court room appears to be metal ornamental panels
Floors	Carpet, numerous styles of vinyl floor tile, and ceramic tile
Exterior	Brick and CMU
Discoloration/Water Staining/Other	Noticed areas of concern, see bullets below
Average Outside Temperature and Relative Humidity	69.5°F and 41.6%
Occupancy Periods	Currently not occupied

The rooms listed below were identified based on field designations or markings identified on the door. The room identifications are labeled on the figures included in Appendix A. It should be noted the surficial, humidity related mold growth was observed on most of the furniture, clothing, papers, and personal items left within the building. In addition, the majority of the ceiling fans were observed to be dropped, indicative of elevated humidity.

First Floor Hallway

- Contains carpeted floors, wooden baseboards, plaster walls, suspended drop ceiling tiles with original wooden ceiling above. HVAC duct work is located between the suspended ceiling tiles and the original wooden ceiling.
- Water damage was observed on the carpet, ceiling tiles, plaster walls, and lower metal door casings.

Room 1 – First floor, First room on the left

- Room contains carpeted floors over vinyl floor tile, wood panel wainscoting and plaster walls and suspended ceiling tiles.
- Water damage was observed on the carpet, ceiling tiles, plaster walls, window framing, and on the wooden panels, especially around the phone jack. The paint on the plaster walls was bubbling and water damaged.

Room 2 – First floor, second room on the left

- Room contains carpeted floors over residual floor tile mastic, wood panel wainscoting and plaster walls and suspended ceiling tiles.
- Water damage was observed on the carpet, ceiling tiles, plaster walls, window framing, and on the wooden panels. The paint on the plaster walls was bubbling and water damaged.

Rooms 3– Mechanical Room, First floor, third room on the left

- Room contains carpeted and concrete floor, CMU and brick walls, possible cement board ceiling.
- Water damage was observed to plaster and brick walls.
- Rust and damage were observed along door frame.

Rooms 4 – First floor, fourth room on the left (third office on the left)

- Room contains carpeted floors, plaster walls, suspended ceiling tiles with original wood roof above. The floor slopes down.
- Signs of elevated humidity were observed.

Room 5 – First floor, fifth room on the left (accessible from Room 6)

- Room contains carpeted floors, suspended ceilings tile, plaster and brick walls.
- Water damage was observed on the exterior and interior walls with cracking walls.
- Water damage was observed on the ceiling tiles and the wooden window frames.
- Visible suspected mold was present.
- The evidence and ammunitions vault connecting to this room was inaccessible.

Room 6 – First floor, sixth room on the left

- Room contains carpeted floors, suspended ceilings tile, plaster and brick walls.
- Water damage was observed on the exterior and interior walls with cracking walls.
- Water damage was observed on the ceiling tiles and the wooden window frames.
- Visible suspected mold was present.

Rooms 7a and 7b – First floor, last rooms on the left

- Room contains floor tiles, suspended ceilings tile, wood paneling over CMU walls.
- Water damage was observed on the exterior and interior walls with cracking walls.
- Water damage was observed on the ceiling tiles and the wooden window frames.
- Visible suspected mold was present.

Vestibule – First floor, end of the hallway

- Area contains carpeted floors, plaster and brick walls, suspended ceiling tiles with original wooden ceiling above. A previously cut hole was observed in the ceilings showing cast iron plumbing pipes and additional piping with suspect ACM pipe insulation.
- Water damage was observed on the ceiling tiles and the wooden doors frames.

First floor front bathrooms

- Rooms contain ceramic floor tiles with plaster walls
- Gypsum lath observed behind the plaster in the understairs closet
- Residual 9"x9" floor tile (likely ACM) present in the under stairs closet
- Suspected mold was observed on the backside of gypsum walls in the understairs closet
- Water damage was observed around windows

Room 9

- Contains carpeted floors with suspended ceiling tiles
- Appears to be former electronics room

Room 10 – Right Central Room – Former Squad Room

- Room contains carpeted floors over vinyl floor tile, wall texture on the plaster walls, and a vaulted ceiling

Rooms 11, 12, and 13 – First floor, far rooms on the right

- Rooms contain carpeted and concrete floors, plaster, CMU and brick walls with wood panel wainscoting in Room 11, and suspended ceiling tiles.
- Water damage was observed on the exterior CMU walls.
- Significant water damage and suspected mold was observed on the ceiling tiles.
- Water damage was observed on the carpet and around the windows
- Significant suspected mold was observed on the exterior wall in Room 12. Appears to be possible ceiling leak which corresponds with damage in second floor room above this one.

Room 14 and Hallway

- The rooms contain vinyl floor tile, drywall and CMU walls, and suspended ceiling tiles.
- Room 14 appears to be used as a storage locker. Visibility behind the lockers was limited and mold growth should be assumed to be present behind the lockers.
- Water damage was observed was observed on the floors, walls, and ceiling.

Room 15 and Adjacent Bathroom

- The rooms contain vinyl floor tile in Room 15 with sheet vinyl floor in the bathroom, drywall and CMU walls, and suspended ceiling tiles.
- Significant suspected mold was observed on the drywall in Room 15 along with water damage to the CMU wall.

Second floor stairwell

- This area had wallpaper and wood wainscoting and plaster walls, carpet floors, and wood panel ceiling.

- The attic access was visible in the 2nd floor landing; however, significant water damage was visible on the carpeted floor under the access.
- Water damage was observed on the wood panel walls, plaster walls and the wood ceiling at the light fixture.
- There appears to have been a prior roof leak at this location.
- Suspected mold was observed on the duct chase located above the courtroom door.

2nd floor room off of landing/second floor mechanical room

- This room contains vinyl floor tiles covering a plywood floor, overlaying additional floor tiles. The walls consist of wallpaper over plaster. The ceiling consists of suspended ceiling tiles.
- The wall, floor, and ceiling near the front of the room contains significant damage.
- Water damage was observed on the ceiling tiles, on the brick wall, and on the wooden window frames.

Courtroom

- This room contains carpeted floors, wood wainscoting, and plaster walls with an ornamental tiled ceiling.
- Water damage was observed on the wood wainscoting and plaster walls on the exterior walls.
- Water damage was observed on the wooden portions of the windows (framing and panes)
- Rust was observed on the ceiling tiles

Room 203 and 205

- These rooms contain vinyl floor tile floors, CMU exterior walls, and suspended ceiling tiles.
- Water damage was observed to the ceiling tiles and exterior walls

Room 207

- This room contains carpeted floors, wood panel walls, and suspended ceiling tiles
- Suspected mold growth on carpet
- Suspected mold along the base of the wood panel walls
- CMU efflorescence adjacent to wood paneling

2nd Floor Restrooms

- This room contains ceramic flooring and walls tile, plaster walls and suspended ceiling tile.
- No significant damage

2nd Floor Hallway and Back Door

- Vinyl floor tile and wooden plywood floor with plaster walls and suspended ceiling tiles.

- Evidence of interstitial space between the plaster walls and the brick exterior wall.
- Water damage observed around the base of the back door.

2nd floor rear right rooms

- This room contains carpeted floors, CMU wall and suspended ceiling tiles.
- Significant water damage and suspected mold growth to ceiling tiles with efflorescence on CMU walls.
- Potential animal activity above the ceiling tiles.
- Sunlight was observed at the penetrations above the ceiling tiles and cracks were present at the junction of the original building and the wing addition.

2nd floor conference room

- This room contains carpeted floor, plaster walls and suspended ceiling tiles
- Water damage was observed to the ceiling tiles
- Significant damage was observed to wall adjacent to courtroom, at the junction of the wing addition and the original structure.

3.2 Temperature, Relative Humidity, and Carbon Dioxide Measurements

A summary of temperature and relative humidity measurements collected during the site visit are presented in Table 2.0.

Table 2.0 - Temperature, Relative Humidity, and CO₂ Measurements

Location	Temperature	Relative Humidity	CO ₂
Indoor Target Levels	68°-75°F	20%-60%	<1,197 ppm
Exterior	69.5°F	41.6%	463 ppm
2 nd room on the left	72.8°F	43.1%	487 ppm
Hallway – Towards the end of the 1 st floor	72.1°F	43.0%	473 ppm
Far back right room 1 st floor	71.1°F	45.6%	486 ppm
Courtroom	70.0°F	45.2%	478 ppm
Far back right room 2 nd floor	69.7°F	45.8%	477 ppm

Temperature and relative humidity were monitored at representative indoor and outdoor locations. The outdoor temperature was 69.5 °F and the outdoor relative humidity was 41.6%. In the indoor areas that were assessed, the temperature ranged from 69.7° F to 72.8° F, and the relative humidity ranged from 43.0% to 45.8% with an average of 44.4% across the monitored areas. The relative humidity measurements in the selected locations did not exceed

the referenced ASHRAE guideline for thermal comfort (maximum recommended relative humidity of 60%). The interior temperatures were within the range of acceptable guidelines during the assessment (68° F -75° F).

The outdoor CO₂ concentration measured was 463 ppm. Therefore, based on ASHRAE Standard 62.1-2019, indoor locations with CO₂ concentrations greater than 1,163 ppm (463 ppm {outdoor CO₂ concentration} + 700 ppm) may have insufficient outdoor air delivery. The CO₂ concentrations measured at the referenced indoor locations ranged from a low of 473 ppm to a high of 487 ppm and were within ASHRAE recommended values. It should be noted that the building was unoccupied during our assessment and the above measurements do not representative conditions during normal occupancy.

3.3 Microbial Air Sampling

Terracon collected five interior mold air samples during the October 27, 2023, site visit. The samples were collected from rooms selected by Terracon personnel. Two exterior mold air samples were collected for comparison purposes. Table 3.0 on the following pages summarizes the results of the spore trap sampling. The results are reported in counts per cubic meter of air (count/m³).

Table 3.0 – Mold Air Sampling Results

Sample Number and Location:	Average of Outside Samples	A2 1 st floor 2 nd room on left	A3 1 st floor hallway	A4 1 st floor back right	A5 Courtroom	A6 2 nd floor back right
Sample volume (liters)	75	75	75	75	75	75
Mold Species						
Alternaria	5	40	-	-	80	-
Ascospores	120	200	100	200	300	40
Aspergillus / Penicillium	100	3600	7670	3300	2000	570
Basidiospores	3840	2200	2300	900	2900	940
Bipolaris	20	80	40	40	100	10
Chaetomium	-	-	-	-	10*	-
Cladosporium	250	690	1300	740	1600	80
Curvularia	5	80	-	-	100	40
Epicoccum	20	10*	-	-	40	-
Ganoderma	5	-	10	-	40	40
Myxomycetes	40	200	100	100	200	80
Pithomyces	15	-	-	-	40	10

Sample Number and Location:	Average of Outside Samples	A2 1 st floor 2 nd room on left	A3 1 st floor hallway	A4 1 st floor back right	A5 Courtroom	A6 2 nd floor back right
Sample volume (liters)	75	75	75	75	75	75
Mold Species						
Rusts	-	40	-	-	-	-
Stachybotrys	-	40	10	100	40	-
Arthrospores	-	-	300	-	-	-
Cercospora	-	10*	-	10	10	-
Nigrospora	20	-	-	-	80	-
Pestalotia	-	-	-	-	80	-
Pyricularia	-	-	-	-	-	40
Spegazzinia	-	-	-	-	40	-
Torula	-	-	40	-	10	-
Total Fungi	4440	7190	11,870	5390	7670	1850
Insect Fragments	-	40	30	40	80	80
Pollen Count	-	-	10	-	80	-
Hyphal Fragments	-	-	-	-	-	-

- Total indoor airborne fungal spore concentrations were elevated when compared to the average total outdoor airborne fungal spore concentration.
- Most of the interior samples collected **had elevated indoor airborne fungal spore concentrations of *Aspergillus/Penicillium* and *Cladosporium*** compared to the average concentrations of the outdoor samples. In addition, concentration of ***Aspergillus/Penicillium*** were greater than six times the outside concentration. However, it should be noticed that the concentrations were less than those detected in 2018.
- There were indoor spore concentrations for other fungal genera that were slightly elevated when compared to the average outdoor spore concentrations of the outdoor samples; however, they were considered to be within the same order of magnitude as outdoor concentrations.

The analytical report is provided in Appendix C.

3.4 Asbestos Air Sampling

Five asbestos air samples were collected by (Terracon) representative Shaenaz Mirmohamed (North Carolina Air Monitor Accreditation No. 80882). Samples were placed in sealable containers and labeled with unique sample numbers using an indelible marker. The selection

of sample locations was based on Terracon's observations as a part of the above referenced IEQ assessment. Samples were analyzed by Transmission Electron Microscopy (TEM).

Samples were collected within the 1st floor hallway, the 1st floor rear right room (Room 12), the 2nd floor rear right room, the mechanical room off of the landing, and in the landing. Based on the results of laboratory analyses, **asbestos was not detected** in the samples collected. The analytical report is provided in Appendix C.

In addition, Terracon observed potentials ACMs that could be disturbed by future renovations or demolition. These included, but are not limited to:

- Black pipe wrap above original wood ceiling
- Carpet mastic – 1st and 2nd Floors
- Acoustic Ceiling tiles
- Vinyl floor tiles and Mastic
- Residual floor tile mastic
- Wall paper
- Window caulking
- Door Caulking
- Plaster Walls
- Gypsum Lath
- Drywall and Joint Compound
- Window caulks and glazing
- Exterior caulks, stucco, texture

4.0 Conclusions and Recommendations

4.1 Conclusions

Terracon has concluded the following based on this IEQ assessment:

- **Suspect mold growth and apparent water damage was observed throughout the building.**
- Total indoor airborne fungal spore concentrations were elevated when compared to the average total outdoor airborne fungal spore concentration. However, the concentrations were less than those detected in 2018.
- Airborne asbestos fibers were not detected in the interior samples which were collected in areas of significant damage.
- The interior relative humidity measurements did not exceed the referenced ASHRAE guideline for thermal comfort (maximum recommended relative humidity of 60%).
- The interior temperatures were generally within the range of acceptable guidelines during the assessment (68° -75° F).

- The CO₂ concentrations measured at the referenced indoor locations were within ASHRAE recommended values.

4.2 Recommendations

For the first objective, which was to determine the safety of facilities inspection personnel for non-destructive assessments, as it pertains to potential mold and asbestos materials, Terracon makes the following recommendations.

- Due to the elevated airborne mold spore concentrations and suspected asbestos-containing materials, the building would be reasonable to occupy for nondestructive assessments.
- Terracon recommends that personnel entering the building wear personal protective equipment to include, at minimum an N95 respirator protection, hand protection (nitrile gloves), and eye protection. This recommendation is based on OSHA's recommendation for remediation of isolated areas or areas in which mold disturbance would be less than 10 square feet total.

For the second objective, which was to assist in determining the salvageability of the structure, Terracon makes the following recommendations.

- Due to the age and history of the building, Terracon recommends having a Historical Preservationist conduct an assessment and provide further regulatory guidance in regards to historical requirements. Additional ramifications could be present for demolition of a historical structure in regards to future funding.
- Due to the elevated indoor airborne fungal spore concentration, Terracon recommends mold remediation be conducted to include removal of the interior building materials (flooring, walls, ceiling tiles, interior plaster, and gypsum walls, etc.). We recommend coordinating the work through a historical preservationist to determine if architectural details of significance could be salvaged. A rough cost estimate for an interior gut, not included potential asbestos abatement, cleaning of architectural components, or cleaning of structural or components to remain is estimated at \$150,000. It should be noted this estimate is purely based on square foot and not based on a remediation protocol or site visits. The final price will vary based on conditions observed and finalized scope.
- Additional cleaning/remediation should follow ANSI/IICRC S520 Standard and Reference Guide for Professional Mold Remediation (latest edition). This should include air scrubbing using HEPA filtration and cleaning semi-porous and non-porous remaining materials

For either option, demolition or renovation, an asbestos inspection would be required along with abatement of asbestos-containing materials prior to any renovation or demolition.

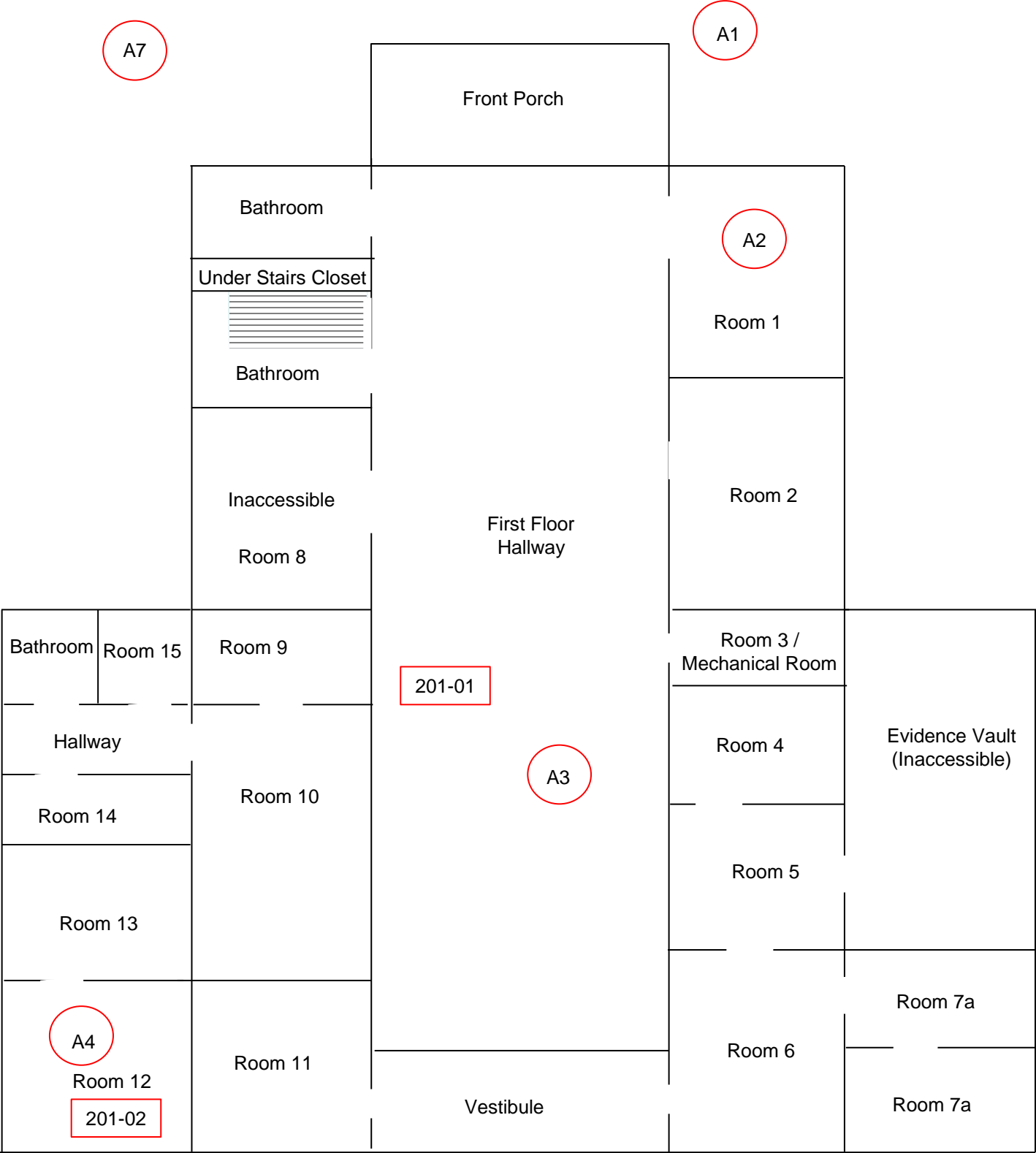
APPENDIX A

FIGURES

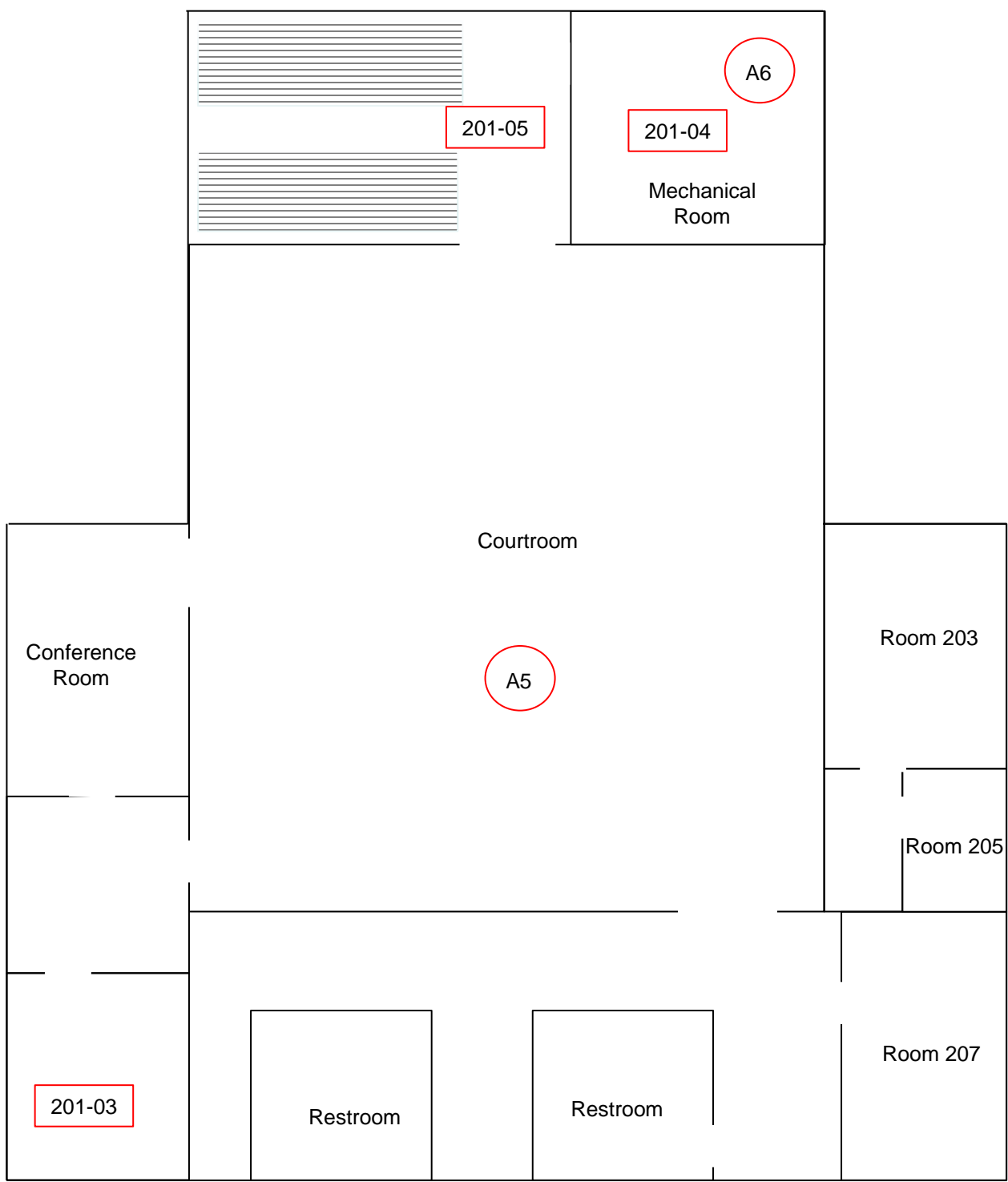


Aerial photograph provided by Brunswick County GIS, year 2023

Project Manager: ACD	Project No. K6237078	 Terracon 2108 Capitol Drive, Suite 103 Wilmington, NC 28405	SITE LOCATION MAP		FIGURE
Drawn by: ACM	Scale: N.T.S.		Southport Former Town Hall 201 E. Moore Street Southport, North Carolina		1
Checked by: SJM	File Name: FIGURES				
Approved by: RH	Date: 10/27/2023				



MOLD AND ASBESTOS TEM SAMPLE LOCATIONS	SYMBOL
MOLD AIR SAMPLE LOCATIONS	A#
TEM SAMPLE LOCATIONS	201-#



MOLD AND ASBESTOS TEM SAMPLE LOCATIONS	SYMBOL
MOLD AIR SAMPLE LOCATIONS	A2
TEM SAMPLE LOCATIONS	201-#

APPENDIX B

PHOTOGRAPHS



Photograph 1 – View of the front of the building.



Photograph 2 – View of the rear of the building.



Photograph 3 – View of typical exterior window damage on the east side of the building of the original section.



Photograph 4 – View of typical exterior on the east or west wing additions.



Photograph 5 – View of typical water damage in Rooms 1 and 2.



Photograph 6 – View of typical humidity impacted ceiling fan in Rooms 1 and 2.



Photo 7 – View of the first floor mechanical room.



Photo 8 – View of suspect ACM cement board ceiling in the mechanical room.



Photo 9 – View of water damage on wall in the first floor hallway.



Photo 10 – View of Room 11 with exterior wall water damage.



Photo 11 – View of Rooms 9 and 10.



Photo 12 – View of the suspected mold and water intrusion in Room 12.



Photo 13 – View of suspected mold and water damage ceiling in Room 12.



Photo 14 – View of the humidity related suspected mold growth on furniture in Room 14.



Photo 15 – View of the water damage and suspected mold growth in Room 15.



Photo 16 – View of the understairs closet by the bathroom with suspected mold growth on the gypsum lath.



Photo 17 – View of the understairs closet by the bathroom with suspected mold growth on the gypsum lath.



Photo 18 – View of the suspect ACM pipe insulation (black wrap) within the interstitial space between the first and second floor, above the wooden ceiling.



Photo 19 – View of water damage on floor on the second floor landing from a presumed roof leak.



Photo 20 – View of water damage on wainscoting on the second floor landing.



Photo 21 – View of water damage to the wood ceiling on the second floor landing. This ceiling is present throughout the first floor original section.



Photo 22 – View of suspected mold on the duct insulation leading into the courtroom.



Photo 23 – View of significant water damage in the mechanical room on the second floor.



Photo 24 – View of water damaged plaster on the second floor landing.



Photo 25 – View of plaster on the second floor landing behind the wallpaper.



Photo 26 – View of plaster damage on the second floor landing.



Photo 27 – View of courtroom on the second floor. Assume porous materials are mold impacted (carpet, fabric, benches, etc.).



Photo 28 – View of rust on the ceiling tiles in the courtroom.



Photo 29 – View of room 203 with water damaged CMU walls.



Photo 30 – View of room 207 with suspected mold on the wood paneling and carpet with evidence of CMU wall damage behind.



Photo 31 – View of the second floor back door with evidence of water damage around the base.

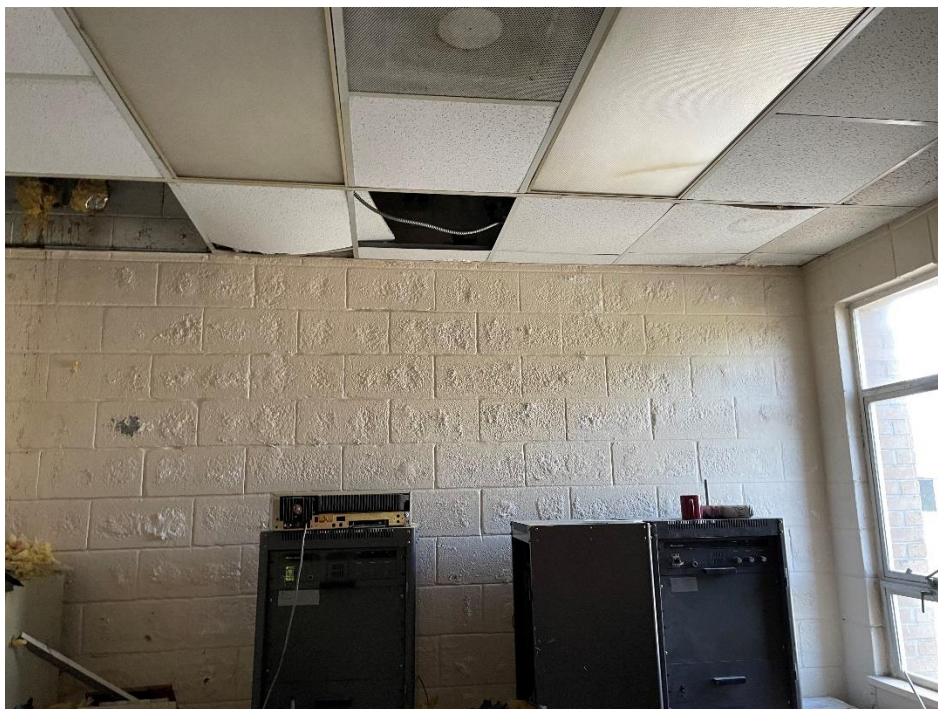


Photo 32 – View of the second floor back room to the right where sunlight (exterior penetrations) were observed along with animal activity.



Photo 33 – View of the second floor back area joint of original building to east wing addition, area of suspected mold growth on the first floor.

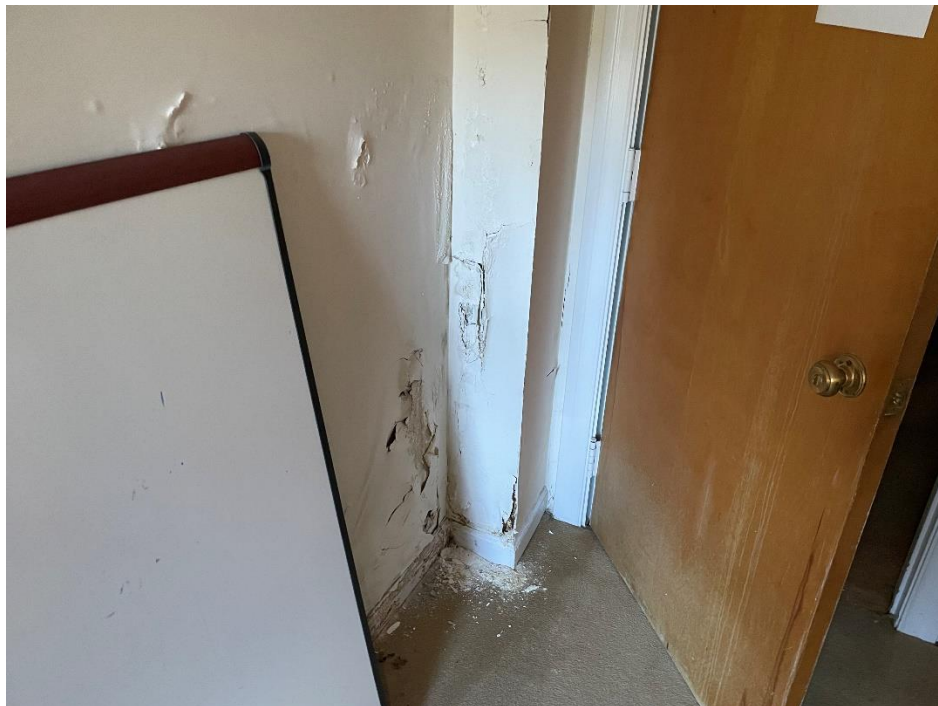


Photo 34 – View of the water damage at second floor conference room, where the east wing abuts the original structure.

APPENDIX C

ANALYTICAL LABORATORY REPORTS



EMSL Analytical, Inc.

10801 Southern Loop Blvd Pineville, NC 28134

Tel/Fax: (704) 525-2205 / (704) 525-2382

<http://www.EMSL.com> / charlottelab@emsl.com

EMSL Order: 412312223

Customer ID: TRHQ42N

Customer PO: K6237078

Project ID:

Attention: Shaenaz Mirmohamed

Terracon Consultants, Inc.

2108 Capitol Drive

Suite 103

Wilmington, NC 28405

Project: Southport Town Hall K6237078

Phone: (803) 427-5687

Fax:

Collected Date: 10/17/2023

Received Date: 10/18/2023 09:45 AM

Analyzed Date: 10/20/2023

Test Report: Air-O-Cell™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	412312223-0001			412312223-0002			412312223-0003		
Client Sample ID:	A1			A2			A3		
Volume (L):	75			75			75		
Sample Location:	Exterior Front			1st Fl, 2nd Rm on Left			1st Fl Hallway		
Spore Types	Raw Count†	Count/m²	% of Total	Raw Count†	Count/m²	% of Total	Raw Count†	Count/m²	% of Total
Alternaria (Ulocladium)	-	-	-	1	40	0.6	-	-	-
Ascospores	1	40	1	4	200	2.8	3	100	0.8
Aspergillus/Penicillium	4	200	4.9	88	3600	50.1	125(188)	7670	64.6
Basidiospores	88	3600	87.6	53	2200	30.6	57	2300	19.4
Bipolaris++	-	-	-	2	80	1.1	1	40	0.3
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	4	200	4.9	17	690	9.6	32	1300	11
Curvularia	-	-	-	2	80	1.1	-	-	-
Epicoccum	1	40	1	1*	10*	0.1	-	-	-
Ganoderma	-	-	-	-	-	-	1*	10*	0.1
Myxomycetes++	-	-	-	4	200	2.8	3	100	0.8
Pithomyces++	2*	30*	0.7	-	-	-	-	-	-
Rust	-	-	-	1	40	0.6	-	-	-
Stachybotrys/Memnoniella	-	-	-	1	40	0.6	1*	10*	0.1
Arthrospores	-	-	-	-	-	-	8	300	2.5
Cercospora++	-	-	-	1*	10*	0.1	-	-	-
Nigrospora	-	-	-	-	-	-	-	-	-
Pestalotia++	-	-	-	-	-	-	-	-	-
Pyricularia	-	-	-	-	-	-	-	-	-
Spegazzinia	-	-	-	-	-	-	-	-	-
Torula++	-	-	-	-	-	-	1	40	0.3
Total Fungi	100	4110	100	175	7190	100	295	11870	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	1	40	-	2*	30*	-
Pollen	-	-	-	-	-	-	1*	10*	-
Analyt. Sensitivity 600x	-	41	-	-	41	-	-	41	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	2	-	-	2	-

† Due to method stopping rules, extrapolated raw counts are reported in parenthesis.

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

Lee Plumley, Laboratory Manager
or other Approved Signatory

No discernable field blank was submitted with this group of samples.

Skin Fragment and Fibrous Particulate ratings are based on the percent of non-fungal material they represent: 1 (1-25%), 2 (26-50%), 3 (51-75%), or 4 (76-100%). Background ratings are based on the total area covered by non-fungal particles: 1 (1-25%), 2 (26-50%), 3 (51-75%), 4 (76-99%), or 5 (100%; overloaded, prohibiting accurate detection and quantification). High levels of background will obscure spores and other particulates, leading to underestimation. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. *** Denotes particles found at 300X. *- Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. When the information supplied by the customer can affect the validity of the result, it will be noted on the report.

Samples analyzed by EMSL Analytical, Inc. Pineville, NC AIHA LAP, LLC-EMLAP Accredited #192283

Initial report from: 10/23/2023 08:28 AM

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com



EMSL Analytical, Inc.

10801 Southern Loop Blvd Pineville, NC 28134

Tel/Fax: (704) 525-2205 / (704) 525-2382

<http://www.EMSL.com> / charlottelab@emsl.com

EMSL Order: 412312223

Customer ID: TRHQ42N

Customer PO: K6237078

Project ID:

Attention: Shaenaz Mirmohamed

Terracon Consultants, Inc.

2108 Capitol Drive

Suite 103

Wilmington, NC 28405

Project: Southport Town Hall K6237078

Phone: (803) 427-5687

Fax:

Collected Date: 10/17/2023

Received Date: 10/18/2023 09:45 AM

Analyzed Date: 10/20/2023

Test Report: Air-O-Cell™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	412312223-0004			412312223-0005			412312223-0006		
Client Sample ID:	A4			A5			A6		
Volume (L):	75			75			75		
Sample Location:	1st Fl, Back Right			Courtroom			2nd Fl Back Right		
Spore Types	Raw Count†	Count/m³	% of Total	Raw Count†	Count/m³	% of Total	Raw Count†	Count/m³	% of Total
Alternaria (Ulocladium)	-	-	-	2	80	1	-	-	-
Ascospores	6	200	3.7	8	300	3.9	1	40	2.2
Aspergillus/Penicillium	81	3300	61.2	48	2000	26.1	14	570	30.8
Basidiospores	22	900	16.7	71	2900	37.8	23	940	50.8
Bipolaris++	1	40	0.7	3	100	1.3	1*	10*	0.5
Chaetomium++	-	-	-	1*	10*	0.1	-	-	-
Cladosporium	18	740	13.7	38	1600	20.9	2	80	4.3
Curvularia	-	-	-	3	100	1.3	1	40	2.2
Epicoccum	-	-	-	1	40	0.5	-	-	-
Ganoderma	-	-	-	1	40	0.5	1	40	2.2
Myxomycetes++	3	100	1.9	6	200	2.6	2	80	4.3
Pithomyces++	-	-	-	1	40	0.5	1*	10*	0.5
Rust	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	3	100	1.9	3*	40*	0.5	-	-	-
Arthrospores	-	-	-	-	-	-	-	-	-
Cercospora++	1*	10*	0.2	1*	10*	0.1	-	-	-
Nigrospora	-	-	-	2	80	1	-	-	-
Pestalotia++	-	-	-	2	80	1	-	-	-
Pyricularia	-	-	-	-	-	-	1	40	2.2
Spegazzinia	-	-	-	1	40	0.5	-	-	-
Torula++	-	-	-	1*	10*	0.1	-	-	-
Total Fungi	135	5390	100	193	7670	100	47	1850	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	1	40	-	2	80	-	-	-	-
Pollen	-	-	-	2	80	-	2	80	-
Analyt. Sensitivity 600x	-	41	-	-	41	-	-	41	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	2	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	3	-	-	3	-	-	2	-

† Due to method stopping rules, extrapolated raw counts are reported in parenthesis.

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

Lee Plumley, Laboratory Manager
or other Approved Signatory

No discernable field blank was submitted with this group of samples.

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Samples analyzed by EMSL Analytical, Inc. Pineville, NC AIHA LAP, LLC-EMLAP Accredited #192283

Initial report from: 10/23/2023 08:28 AM

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com



EMSL Analytical, Inc.

10801 Southern Loop Blvd Pineville, NC 28134

Tel/Fax: (704) 525-2205 / (704) 525-2382

<http://www.EMSL.com> / charlottelab@emsl.com

EMSL Order: 412312223

Customer ID: TRHQ42N

Customer PO: K6237078

Project ID:

Attention: Shaenaz Mirmohamed

Terracon Consultants, Inc.

2108 Capitol Drive

Suite 103

Wilmington, NC 28405

Project: Southport Town Hall K6237078

Phone: (803) 427-5687

Fax:

Collected Date: 10/17/2023

Received Date: 10/18/2023 09:45 AM

Analyzed Date: 10/20/2023

Test Report: Air-O-Cell™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	412312223-0007					
Client Sample ID:	A7					
Volume (L):	75					
Sample Location:	Exterior Front					
Spore Types	Raw Count†	Count/m³	% of Total			
Alternaria (Ulocladium)	1*	10*	0.2	-	-	-
Ascospores	4	200	4.2	-	-	-
Aspergillus/Penicillium	-	-	-	-	-	-
Basidiospores	100	4080	85.5	-	-	-
Bipolaris++	1	40	0.8	-	-	-
Chaetomium++	-	-	-	-	-	-
Cladosporium	8	300	6.3	-	-	-
Curvularia	1*	10*	0.2	-	-	-
Epicoccum	-	-	-	-	-	-
Ganoderma	1*	10*	0.2	-	-	-
Myxomycetes++	2	80	1.7	-	-	-
Pithomyces++	-	-	-	-	-	-
Rust	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-
Arthrospores	-	-	-	-	-	-
Cercospora++	-	-	-	-	-	-
Nigrospora	1	40	0.8	-	-	-
Pestalotia++	-	-	-	-	-	-
Pyricularia	-	-	-	-	-	-
Spegazzinia	-	-	-	-	-	-
Torula++	-	-	-	-	-	-
Total Fungi	119	4770	100	-	-	-
Hyphal Fragment	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-
Pollen	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	41	-	-	-	-
Analyt. Sensitivity 300x	-	13*	-	-	-	-
Skin Fragments (1-4)	-	1	-	-	-	-
Fibrous Particulate (1-4)	-	1	-	-	-	-
Background (1-5)	-	1	-	-	-	-

† Due to method stopping rules, extrapolated raw counts are reported in parenthesis.

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

Lee Plumley, Laboratory Manager
or other Approved Signatory

No discernable field blank was submitted with this group of samples.

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Initial report from: 10/23/2023 08:28 AM

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Microbiology Chain of Custody Form

EMSL Order Number / Lab Use Only

EMSL Analytical, Inc.
10801 Southern Loop Blvd

Pineville, NC 28134
PHONE: (704) 525-2205

EMAIL:

If Bill-To is the same as Report-To leave this section blank. Third-party billing requires written authorization.

Customer Information	Customer ID:	TRHQ42N		Billing Information	Billing ID:				
	Company Name:	Terracon Consultants, Inc.			Company Name:				
	Contact Name:	Shaenaz Mirmohamed			Billing Contact:				
	Street Address:	2103 Capital Drive, Suite 103			Street Address:				
	City, State, Zip:	Wilmington NC 28405	Country:		US	City, State, Zip:		Country:	
	Phone:	910-859-5390			Phone:				
	Email(s) for Report:	Shaenaz.Mirmohamed@terracon.com			Email(s) for Invoice:				

Project Information				
Project Name/No:	Southport Town Hall K6237078		Purchase Order:	K6237078
EMSL LIMS Project ID:	State	Zip Code	State of Connecticut (CT) must select project location:	
(If applicable, EMSL will provide)	Samples Collected:	Samples Collected:	<input type="checkbox"/> Commercial (Taxable)	<input type="checkbox"/> Residential (Non-taxable)
Sampled By Name:	Sampled By Signature:		No. of Samples in Shipment	
Shaenaz Mirmohamed	[Signature]			
Sterile, Sodium Thiosulfate Preserved Bottle Used: <input type="checkbox"/> Biocide Used in Source (specify)				
Public Water Supply Samples: <input type="checkbox"/> Note: All results may automatically be reported to DOH if required by State.				
Turn-Around-Time (TAT) Please call ahead for large projects and/or turnaround times 6 Hours or Less. *32 Hour TAT available for select tests only; samples must be submitted by 11:30am.				
<input type="checkbox"/> 3 Hour	<input type="checkbox"/> 6 Hour	<input type="checkbox"/> 24 Hour	<input type="checkbox"/> 32* Hour	<input checked="" type="checkbox"/> 48 Hour
<input type="checkbox"/> 96 Hour	<input type="checkbox"/> 1 Week	<input type="checkbox"/> 2 Week		

MICROBIOLOGY TEST CODES			
M001 Air-O-Cell	M174 MoldSnap	M012 Pseudomonas aeruginosa (P/A***)	M115 Sewage Screen - Water (P/A***)
M030 Micro 5	M032 Allergenco-D	M024 Pseudomonas aeruginosa (MFT*)	M116 Sewage Screen - Water (MPN**)
M041 Fungal Direct Examination		M015 Heterotrophic Plate Count	M117 Sewage Screen - Swab (P/A***)
M169 Pollen ID & Enumeration		M017 Total Coliform & E. Coli (Colliert P/A***)	M013 Sewage Screen - Swab (MFT*)
M280 Dust Characterization Level-1		M018 Total Coliform & E. Coli (MFT*)	M730 Methicillin-resistant Staph. aureus (MRSA)
M281 Dust Characterization Level-2		M114 Total Coliform & E. Coli Enumeration (Colliert MPN**)	M031 Rapid-growing non-TB Mycobacteria Detection & Enumeration
M005 Viable Fungi-Air Samples (Genus ID & Count)		M019 Fecal Coliform (MFT*)	M014 Endotoxin Analysis
M006 Viable Fungi-Air Samples (Includes Penicillium, Aspergillus, Cladosporium, Stachybotrys Species ID & Count)		M020 Fecal Streptococcus (MFT*)	M044 Group Allergen (Cat, Dog, Cockroach, Dust Mite)
M007 Culturable Fungi-Surface Samples (Genus ID & Count)		M029 Enterococci (MFT*)	M095 Bacteroides
M008 Culturable Fungi-Surface Samples (Includes Penicillium, Aspergillus, Cladosporium, Stachybotrys Species ID & Count)		M129 Enterococci (Enterolert P/A***)	Other - See Analytical Price Guide for Test Code
M009 Bacteria Culture Gram Stain & Count		M180 Real Time qPCR-ERMI 36 Panel	Legionella Analysis Please use EMSL Legionella COC
M010 Bacteria Count & ID - 3 Most Prominent		M025 Sewage Screen - Water (MFT*)	
M011 Bacteria Count & ID - 5 Most Prominent		*MFT= Membrane Filtration Technique	
		**MPN = Most Probable Number	
		***P/A = Presence/Absence	

Sample #	Sample Location/Description	Sample Type (Matrix)	Potable / Non-Potable (Only for Water)	Test Code	Volume/Area	Date / Time Collected	Temperature (Lab Use Only)
Example: Sample 1	Kitchen	Water	Potable	M017	1,000 ml	1/1/2021 3:30pm	
A1	Exterior Front	Air		M001	75L	10/17/23 11:19	
A2	1st fl, 2nd rm on left	Air		M001	75L	11:30	
A3	1st fl hallway	Air		M001	75L	11:31	
A4	1st fl, back right	Air		M001	75L	11:40	
A5	Courtroom	Air		M001	75L	11:42	
A6	2nd fl back right	Air		M001	75L	11:43	

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Method of Shipment:		Sample Condition Upon Receipt:	
Relinquished by:	Date/Time:	Received by:	Date/Time:
[Signature]	10/17/23 5:00	[Signature]	10/18/23
Relinquished by:	Date/Time:	Received by:	Date/Time:
		[Signature]	9/4/24

Controlled Document - COC-34 Micro R13 03/02/2021

☐ AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.

EMSL Order Number / Lab Use Only

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information.

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Controlled Document - COC-34 Micro R13 3/02/2021

☐ **AGREE TO ELECTRONIC SIGNATURE** (By checking, I consent to signing this Chain of Custody document by electronic signature.)

Page 2 Of 2



EMSL Analytical, Inc.

10801 Southern Loop Blvd Pineville, NC 28134

Tel/Fax: (704) 525-2205 / (704) 525-2382

<http://www.EMSL.com> / charlottelab@emsl.com

EMSL Order: 412312177

Customer ID: TRHQ42N

Customer PO: K6237078

Project ID:

Attention: Shaenaz Mirmohamed
Terracon Consultants, Inc.
2108 Capitol Drive
Suite 103
Wilmington, NC 28405

Project: K6237078

Phone: (803) 427-5687

Fax:

Received Date: 10/18/2023 09:45 AM

Analysis Date: 10/19/2023

Collected Date: 10/17/2023

Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Appendix A to Subpart E

Sample	Location	Volume (Liters)	Area Analyzed (mm ²)	Non Asb	Asbestos Type(s)	#Structures ≥0.5μ < 5μ	≥5μ	Analytical Sensitivity (S/cc)	Asbestos Concentration (S/mm ²)	(S/cc)
201-01 412312177-0001	1st Floor Hallway	1208.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
201-02 412312177-0002	1st Floor Rear Right Room	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
201-03 412312177-0003	2nd Floor Rear Right Room	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
201-04 412312177-0004	Mechanical Room Off Landing	1200.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049
201-05 412312177-0005	Landing	1206.00	0.0650	0	None Detected	0	0	0.0049	<15.00	<0.0049

Analyst(s)

Maggie Pasour (5)

Lee Plumley, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. Results reported in structures/cm³ are not covered by the laboratory's NVLAP accreditation. Measurement of uncertainty available upon request.

Samples analyzed by EMSL Analytical, Inc. Pineville, NC NVLAP Lab Code 200841-0, VA 3333 00312

Initial report from: 10/20/2023 14:46 PM



Asbestos Chain of Custody (Air, Bulk, Soil)

EMSL Order Number / Lab Use Only

 EMSL Analytical, Inc.
 200 Route 130 North
 Cinnaminson, NJ 08077

PHONE: (800) 220-3675

EMAIL: CinnAslab@EMSL.com

 EMSL ANALYTICAL, INC.
 TESTING LABS • PRODUCTS • TRAINING

412312177

Customer Information Customer ID: Company Name: <u>TERRACON</u> Contact Name: <u>Shoeratz, Miriam</u> Street Address: <u>2108 Capital Drive Suite 105</u> City, State, Zip: <u>Wilmington NC</u> Country: Phone: Email(s) for Report: <u>Shoeratz.Miriam@terracon.com</u>		Billing ID: Company Name: <u>SAME</u> Billing Contact: Street Address: City, State, Zip: Country: Phone: Email(s) for Invoice:	
Project Information			
Project Name/No: <u>16237078</u>		Purchase Order:	
EMSL LIMS Project ID: (If applicable, EMSL will provide)		US State where samples collected: <u>NC</u> State of Connecticut (CT) must select project location:	
Sampled By Name: <u>Shoeratz M.</u>		<input type="checkbox"/> Commercial (Taxable) <input type="checkbox"/> Residential (Non-Taxable) No. of Samples In Shipment: <u>5</u>	
Turn-Around-Time (TAT) <input type="checkbox"/> 3 Hour <input type="checkbox"/> 4-4.5 Hour AHERA ONLY <input type="checkbox"/> 6 Hour <input checked="" type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week <small>TEM Air 3-6 Hour, please call ahead to schedule. 32 Hour TAT available for select tests only; samples must be submitted by 11:30 am.</small>			
Test Selection			
PCM Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> NIOSH 7400 w/ 8hr. TWA PLM - Bulk (reporting limit) <input type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) <input type="checkbox"/> POINT COUNT <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1,000 (<0.1%) POINT COUNT w/ GRAVIMETRIC <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1,000 (<0.1%) <input type="checkbox"/> NIOSH 9002 (<1%) <input type="checkbox"/> NYS 198.1 (Friable - NY) <input type="checkbox"/> NYS 198.6 NOB (Non-Friable - NY) <input type="checkbox"/> NYS 198.8 (Vermiculite SM-V)		TEM - Air <input checked="" type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312* TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (Non-Friable-NY) <input type="checkbox"/> TEM EPA 600/R-93/116 w Milling Prep (0.1%) Other Test (please specify)	
		TEM - Settled Dust <input type="checkbox"/> Microvac - ASTM D5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Qualitative via Filtration Prep <input type="checkbox"/> Qualitative via Drop Mount Prep Soil - Rock - Vermiculite (reporting limit)* <input type="checkbox"/> PLM EPA 600/R-93/116 with milling prep (<0.25%) <input type="checkbox"/> PLM EPA 600/R-93/116 with milling prep (<0.1%) <input type="checkbox"/> TEM EPA 600/R-93/116 with milling prep (<0.1%) <input type="checkbox"/> TEM Qualitative via Filtration Prep <input type="checkbox"/> TEM Qualitative via Drop Mount Prep	
<small>*Please call with your project-specific requirements.</small>			
<input type="checkbox"/> Positive Stop - Clearly Identified Homogeneous Areas (HA)		Filter Pore Size (Air Samples) <input type="checkbox"/> 0.8um <input type="checkbox"/> 0.45um	
Sample Number	Sample Location / Description	Volume, Area or Homogeneous Area	Date / Time Sampled (Air Monitoring Only)
201-01	1st Floor Hallway	1208L	10/17/23
201-02	1st floor rear right room	1200L	
201-03	2nd floor rear right room	1202L	
201-04	Mechanical Room off laundry	12002L	
201-05	Laundry	1206L	
Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)			
Method of Shipment: <u>Fedex</u>		Sample Condition Upon Receipt:	
Relinquished by: <u>[Signature]</u>	Date/Time: <u>10/17/23</u>	Received by: <u>[Signature]</u>	Date/Time: <u>10/18/23</u>
Relinquished by:	Date/Time:	Received by: <u>SK 7967 2329 1256</u>	Date/Time: <u>945AM</u>

Controlled Document - COC-05 Asbestos R15 10/28/2021

☐ AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.

Appendix C:

Acronyms and Out-Of-Scope Items

Abbreviations and Acronyms

This report may use various construction abbreviations to describe various site, building or system components. Not all abbreviations may be applicable to all reports. The abbreviations most often utilized are defined below.

ADA – The Americans with Disabilities Act
ASTM – ASTM International
BOMA – Building Owners and Managers Association
BUR – Built-up Roofing
EIFS – Exterior Insulation and Finish System
EMF – Electro Magnetic Fields
EMS – Energy Management System
EUL – Expected Useful Life
FEMA – Federal Emergency Management Agency
FFHA – Federal Fair Housing Act
FIRMS – Flood Insurance Rate Maps
FOIA – U.S. Freedom of Information Act (5 USC 552 et seq.) and similar state statutes
FOIL – Freedom of Information Letter
FM – Factory Mutual
HVAC – Heating, Ventilating, and Air Conditioning
IAQ – Indoor Air Quality
NFPA – National Fire Protection Association
PCA – Property Condition Assessment
PCR – Property Condition Report
PML – Probable Maximum Loss
RTU – Rooftop Unit
RUL – Remaining Useful Life
STC – Sound Transmission Class

	Out of Scope Considerations Unless identified in the scope of work detailed in this report, these items are excluded and are considered outside the scope of this PCA / PNA.
Ref #	Section 11 : ASTM E 2018-15 Out of Scope Considerations
11.1	<i>Activity Exclusions</i> —The activities listed below generally are excluded from or otherwise represent limitations to the scope of a PCA prepared in accordance with this guide. These should not be construed as all-inclusive or imply that any exclusion not specifically identified is a PCA requirement under this guide.
11.1.1	Identifying capital improvements, enhancements, or upgrades to building components, systems, or finishes. The consultant must be aware of the distinction between repair and replacement activities that maintain the property in its intended design condition, versus actions that improve or reposition the property.
11.1.2	Identifying improvements, capital expenditures, repairs, maintenance and other activities that are or may be required at a future date, except as needed in the review of short term and long term needs.
11.1.3	Removing, relocating, or repositioning of materials, ceiling, wall, or equipment panels, furniture, storage containers, personal effects, debris material or finishes; conducting exploratory probing or testing; dismantling or operating of equipment or appliances; or disturbing personal items or property, that obstructs access or visibility.
11.1.4	Determining adequate pressure and flow rate, fixture-unit values and counts, verifying pipe sizes, or verifying the point of discharge for underground drains.
11.1.5	Determining NFPA hazard classifications, identifying, classifying, or testing fire rating of assemblies. Determination of the necessity for or the presence of fire areas, fire walls, fire barriers, accessible routes, construction groups or types, or use classifications.
11.1.6	Preparing engineering calculations (civil, structural, mechanical, electrical, etc.) to determine any system's, component's, or equipment's adequacy or compliance with any specific or commonly accepted design requirements or building codes, or preparing designs or specifications to remedy any physical deficiency.
11.1.7	Taking measurements or quantities to establish or confirm any information or representations provided by the owner or user, such as size and dimensions of the subject property or subject building; any legal encumbrances, such as easements; dwelling unit count and mix; building property line setbacks or elevations; number and size of parking spaces; etc.
11.1.8	Reporting on the presence or absence of pests such as wood damaging organisms, rodents, or insects.
11.1.9	Reporting on the condition of subterranean conditions, such as soil types and conditions, underground utilities, separate sewage disposal systems, wells, manholes, utility pits; systems that are either considered process-related or peculiar to a specific tenancy or use; or items or systems that are not permanently installed.
11.1.10	Entering or accessing any area of the premises deemed to potentially pose a threat of dangerous or adverse conditions with respect to the field observer's health or safety, including, but not limited to: entering of plenum, crawl, or confined-space areas, entering elevator/escalator pits or shafts, walking on pitched roofs, or any roof areas that appear to be unsafe, or roofs without built-in access, and removing of electrical panel and device covers.
11.1.11	Performing any procedure, that may damage or impair the physical integrity of the property, any system, or component.
11.1.12	Providing an opinion on the condition of any system or component, that is shutdown. However, the consultant is to provide an opinion of its physical condition to the extent

	reasonably possible considering its age, obvious condition, manufacturer, etc.
11.1.13	Evaluating the Sound Transmission Class or acoustical or insulating characteristics of systems or components.
11.1.14	Evaluating the flammability of materials and related regulations.
11.1.15	Providing an opinion on matters regarding security of the subject property and protection of its occupants or users from unauthorized access.
11.1.16	Operating or witnessing the operation of lighting, lawn irrigation, or other systems typically controlled by time clocks or that are normally operated by the building's operation staff or service companies.
11.1.17	Providing an environmental assessment or opinion on the presence of any environmental issues such as potable water quality, asbestos, hazardous wastes, toxic materials, the location or presence of designated wetlands, mold, fungus, IAQ, etc.
11.1.18	Providing an environmental assessment or opinion on the presence of any environmental issues such as potable water quality, asbestos, hazardous wastes, toxic materials, the location or presence of designated wetlands, mold, fungus, IAQ, etc.
11.1.19	Evaluating systems or components that require specialized knowledge or equipment, including but not limited to: flue connections, interiors of chimneys, flues or boiler stacks; electromagnetic fields, electrical testing and operating of any electrical devices; examination of elevator and escalator cables, sheaves, controllers, motors, inspection tags; or tenant owned or maintained equipment.
11.1.20	Process related equipment or condition of tenant owned/maintained equipment. Entering of plenum or confined space areas. Testing or measurements of equipment or air flow.
11.1.21	Observation of flue connections, interiors of chimneys, flues or boiler stacks, or tenant-owned or maintained equipment. Entering of plenum or confined space areas.
11.2	<i>Warranty, Guarantee, and Code Compliance Exclusions</i> —By conducting a PCA and preparing a PCR, the consultant merely is providing an opinion and does not warrant or guarantee the present or future condition of the subject property, nor may the PCA be construed as either a warranty or guarantee of any of the following:
11.2.1	Any system's or component's physical condition or use, nor is a PCA to be construed as substituting for any system's or equipment's warranty transfer inspection;
11.2.2	Compliance with any federal, state, or local statute, ordinance, rule or regulation including, but not limited to, fire and building codes, life safety codes, environmental regulations, health codes, zoning ordinances, compliance with trade/design standards, or standards developed by the insurance industry.
11.2.3	Compliance of any material, equipment, or system with any certification or actuation rate program, vendor's or manufacturer's warranty provisions, or provisions established by any standards that are related to insurance industry acceptance/approval, such as FM, State Board of Fire Underwriters, etc.
11.3	<i>Additional/General Considerations:</i>
11.3.1	Further Inquiry—There may be physical condition issues or certain physical improvements at the subject property that the parties may wish to assess in connection with a commercial real estate transaction that are outside the scope of this guide. Such issues are referred to as non-scope considerations, and if included in the PCR, should be identified under Section 10.9.
11.3.2	Out of Scope Considerations—Whether or not a user elects to inquire into non-scope considerations in connection with this guide is a decision to be made by the user. No assessment of such non-scope considerations is required for a PCA to be conducted in compliance with this guide.

11.3.3	Other Standards—Other standards or protocols may exist for the discovery or assessment of physical deficiencies. Such standards and protocols are expressly excluded from the scope of the assessment unless otherwise agreed between the User and Consultant.
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Appendix D:
Personnel Resumes

JONATHAN LAYTON **Manager of Building Diagnostics**

Current Manager of Building Diagnostics. Assess comprehensive building-facility conditions on a wide range of building types and structures. Manage the measurement, verification, and testing of installed systems and building enclosures. Specialize in quantitative and qualitative testing of building envelopes and glazing systems including air tightness testing, water infiltration testing, and infrared thermal imaging. Provide project support for the implementation of construction management and claims projects.



Professional Experience

Franklin Energy Services – Energy Advisor

2015 - 2018

Franklin Energy Services took over the client's project contract. My responsibilities remained the same.

TSI Energy Solutions – Energy Advisor

2009 - 2015

Duties include energy and water audits for Duke Energy account holders to evaluate the condition and efficiency of building enclosures, mechanical and plumbing systems and lighting. Provide direction to building owners about energy issues and potential energy efficiency conservation measures (ECM) that may qualify for utility rebates. Responsible for analyzing ECMs and developing reports implementation's financial, comfort, and reduced maintenance benefits implementation. Responsible for the development scopes of work for energy efficiency projects.

DAC Products – Product Design Engineer

2008 - 2009

Created design concepts for new and existing customers that conform to applicable specifications and performance requirements using AutoCAD. Conducted preliminary research and generated concepts to define and meet customer and product requirements. Worked closely with the existing design and project management teams to create products that worked seamlessly with existing and future design ideas. Managed product documentation including bill of materials and assembly work instructions for multiple configurations and products. Sourced and engaged with manufacturers/vendors about materials and supplies.

E.J. Hanes Construction – Construction Superintendent

2006 - 2008

Planned, scheduled implemented, and coordinated quality-built homes from development through final construction in a timely and economical manner. Oversaw the scheduling, delivery, and use of materials, the quality of construction, worker productivity, and compliance with building/safety codes. Maintained safe, clean, and compliant job sites. Scheduled and managed subcontractors and sub-contractor relationships in order to build homes on schedule and close on time. Conducted customer walk-throughs prior to closing.

E.J. Hanes Construction – Construction Warranty Technician

2005 - 2006

Developed building owner's confidence by responding to service calls within 24 hours. Inspected concerns within 72 hours and resolve issues or make recommendations. Complete clear and concise reports and other service documentation in order to facilitate the timely closure of all service requests. Identified subcontractors and vendors responsible for original work and enforce their commitment to meet warranty obligations. Observed the completion of work and satisfaction of repairs. Administered warranty cost controls by having complete knowledge of all scopes of work. Engaged with Sales, Purchasing, and Construction to ensure timely and comprehensive follow-up to building owner's expectations and concerns.



Education

Forsyth Technical Community College
Forsyth Technical Community College
North Carolina State University

Associate in Applied Science-Architectural Technology
Certificate in Architectural Technology-CAD/Digital Imaging
Construction Management Diploma

Credentials & Certifications

Certified FAA SUAS Drone Pilot
Construction Manager in Training, Construction Manager Certification Institute
Licensed Field Auditor, Air Barrier Association of America
Buildings/Roofs Specific, Level II Thermographer, The Snell Group
Certificate in Commercial Inspections, AHIT
Building Analyst Certification, Building Performance Institute

ANDREW CONSULTING ENGINEERS, P.C.

July 16, 2024

HICAPS

600 North Regional Road

Greensboro, NC 27409

Attention: Jonathon Layton

Reference: Old Southport City Hall Limited Structural Review
201 E Moore Street, Southport, NC
ACE Project No. 24027

Dear Jonathon:

Pursuant to your request, on July 1st, 2024, Andrew Consulting Engineers, PC conducted an initial structural review of the existing building, referenced above, to visually observe the current condition, record photographs, and perform limited measurements of the exposed structural framing. We experienced severe thunderstorms and heavy rain during our visit, which occurred between 1 pm and 3 pm. Our visit complied with a "Level A - Visual Inspection," as defined by the National Academy of Building Inspection Engineers Standard of Practice.

Scope of Assessment

We observed the exterior of the building from the adjacent ground. Most of the second-floor framing and roof framing was concealed by the ceilings and other interior finishes, but there were a few small areas of exposed framing that we could observe from the first and second floor. We were able to access the crawlspace underneath the west wing addition but could not gain access underneath the original building or the east wing. We did not observe the superstructure of the bell tower.

Description of Structure

The center of the building was originally constructed in 1854 as the Brunswick County Courthouse. Around 1980, the east and west wings of the building were added. It served as Southport City Hall from the late 1970s until 2014 and is currently unoccupied. A new roof has been installed within the past decade. There was water damage that reportedly occurred prior to the new roof, rendering the building uninhabitable.

The walls of the original building appear to be multi-wythe brick with a cementitious exterior coating. The walls of the additions appear to be made of concrete masonry units (CMU) with a brick veneer exterior. The second floor of the original building appears to consist of 2x12 wood



Old Southport City Hall Limited Structural Review

July 16, 2024

Page 2 of 5

joists, and the roof framing appears to be constructed of field framed wood trusses. The second floor and roof framing of the additions appear to consist of 14-inch-deep steel bar joists with steel bridging angles. In the crawl space of the west wing, we observed 12-inch-deep steel bar joists. Additionally, there appeared to be a structural concrete slab without joists in a portion of the west wing crawl space, supported by the CMU walls and the original multi-wythe masonry. Although we did not observe the first-floor framing of the original building, buildings of this age are typically built on crawl spaces constructed with wood joists and timbers bearing on brick pier walls and footings. The first-floor framing of the east wing may be similar to what was observed in the west wing crawl space.

Observations

During our visit we observed the following:

1. Crawl Space:
 - a. Surface corrosion was widespread on the underside of the crawl space framing of the west addition.
2. First Floor:
 - a. A large plate and threaded rod with a nut were observed on the old east exterior wall of the original building. We did not observe the other end of the threaded rod. These typically act as cross building tie rods to help laterally stabilize walls.
 - b. A wide crack was observed in the CMU block, at the end of the east wing southern wall, where it abuts the original building east wall. This crack appears to be from long term shrinkage of the CMU and not due to a structural issue.
3. Second Floor:
 - a. The southwest corner of the second floor of the original building appeared to be experiencing water damage to the subfloor, exhibiting deflections when walked upon. We were unable to observe the underlying floor framing, but this water damage could have also affected it.
4. Roof:
 - a. We observed four timber posts protruding through the roof from the second floor, adjacent to the southern stairs. These posts appeared to be supporting the bell tower. During our visit, water was actively dripping from each of the posts onto the top of the second floor (and apparently responsible for wet first floor ceiling directly below this area). These posts appeared to be bearing on the bottom chord of the roof trusses. The apex of the top chords of the trusses appeared to be butted together and toe-nailed.
 - b. We observed metal deck above on the second floor of the west wing that appeared to be an acoustic profile and not the actual structural roof deck. There seemed to be an old penetration in this deck that had been filled in at the west wing.
 - c. Surface corrosion was typically present on the underside of the second-floor metal deck in the east wing. This could be from moisture infiltrating the building interior.

Old Southport City Hall Limited Structural Review
July 16, 2024
Page 3 of 5

5. Exterior:

- a. The steel stairs on the north exterior were experiencing severe corrosion, with multiple instances of corrosion penetrating completely through sections of the metal stair stringers. **THIS IS AN UNSAFE CONDITION. THE STAIRS NEED TO BE BARRICADED TO PREVENT ANYONE FROM USING THEM.**
- b. The north exterior ramp has a CMU failure on the west side that is beginning to undermine the concrete slab on the fill contained by the cmu.
- c. The cementitious coating on the northern and eastern walls of the original building appeared to be experiencing efflorescence. Vegetation appeared to be blocking sunlight, leading to mildew stains being widespread on the walls.
- d. The joint between the southern corbels and wall of the original building appear to be experiencing staining from high concentrations of moisture.
- e. The wood window framing of the original building was visibly deteriorated, allowing moisture and rainwater to access the building.
- f. The joint between the northern wall of the original building and the east wing appears to be exhibiting staining along its full height, likely due to high concentrations of moisture. This could be attributed to water being present behind the joint, due to improper roof drainage from either the east wing or the original building.
- g. We observed thin cracks in the mortar joints at the ends of two east wall lintels that have severe corrosion. We also observed a couple of stair-stepped cracks that appear to originate from these lintels.

Conclusions

The condition of the structural framing was poor in a few locations. However, there were also multiple areas where the structural framing appeared to be in satisfactory condition and adequate for its previous occupancy. Any increase in occupancy loads should be accompanied by further investigation of the floor framing. Increasing the occupancy loads in an older building like this one can lead to costly improvements due to the existing capacity and in some cases the existing condition of many of the structural components and uncertainties of the building's original construction. The original floor framing may not have been designed for higher occupancy loads. In addition, a change in occupancy may trigger requirements for the structural framing to comply with current building code requirements, including seismic and wind load resistance.

Old Southport City Hall Limited Structural Review
July 16, 2024
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Recommendations

We recommend the following:

1. Further investigation should be completed of the roof framing below the bell tower and the second-floor framing at the southwest corner of the original building so that recommendations for structural improvements can be made. This may require partial demolition of the ceiling below the bell tower and partial demolition of the 2nd floor subfloor at the southwest corner.
2. The metal deck with surface corrosion needs to be coated with a penetrating corrosion inhibitor primer to reduce further corrosion.
3. The metal stairs on the northside of the building need to be replaced.
4. The two corroded lintels on the east wall of the east wing need to be replaced. The adjacent mortar joint cracks should be repointed after the lintels have been replaced.
5. The damaged CMU at the north ramp should be replaced. This will require demolishing the slab in the area of CMU damage, adding and compacting new fill, and repouring a new slab section.
6. We recommend keeping all areas at or below their current occupancy category to limit the need for possible costly improvements. If a change to a higher occupancy category is going to be considered, the proposed floor plans for the future use of the building will need to be reviewed so we can determine if the occupancy and code required design loads are increasing. If it is determined that an increase in design loads will be occurring, then further investigation will need to be completed. This may require selective partial demolition to observe more of the affected structural framing.
7. The exterior envelope components need to be reviewed. Specifically, the cementitious coating on the original building, the joints between the original building and additions, the joints between the southern corbels and wall, the window openings of the original building, and the roofing assembly so recommendations can be made to prevent the ongoing water intrusion into the interior. This will most likely require selective partial demolition of the exterior at the noted areas.

Limitations and Qualifications

Our current scope of work does not include the design and drawings for these items, but we are prepared to assist you with providing a proposal for these consulting services upon request.

Our review was limited to the visual observations of the structural framing in the areas and perspectives noted in this report. We did not review any other items during our visual observation. We did not remove any finishes or structural components, conduct any tests, or

Old Southport City Hall Limited Structural Review
July 16, 2024
Page 5 of 5

perform any calculations. We did not review any flashing, waterproofing, architectural, or M/E/P items.

We trust this report provides the information requested of us at this time. Please contact us with any questions or comments.

Sincerely,

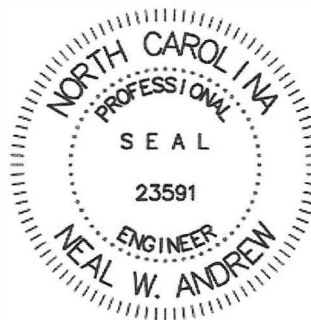
ANDREW CONSULTING ENGINEERS, PC

NC PE Firm License C-2461

Neal W. Andrew, P.E., NABIE

Enclosure: Photo Exhibit

DocuSigned by:
Neal Andrew
330AAE236A904CC...



7/16/2024

ANDREW CONSULTING ENGINEERS, P.C.



North and South Elevations:



Northern Elevation



Southern Elevation

East and West Elevations:



East Wing (Brick Veneer)



*West Wing (Brick Veneer), Original Building with
Cementitious Exterior Coating*

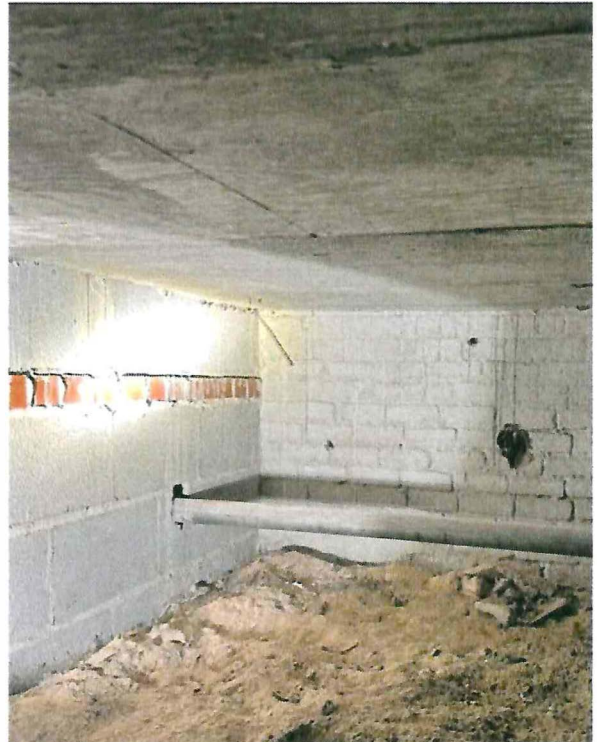
STRUCTURAL, MARINE & FORENSIC ENGINEERING & PROJECT MANAGEMENT

3811 PEACHTREE AVE., SUITE 300, WILMINGTON, NC 28403 :: PHONE: 910-202-5555 :: ANDREWENGINEERS.COM

West Addition Crawlspace:



Joists and Metal Decking with Surface Corrosion

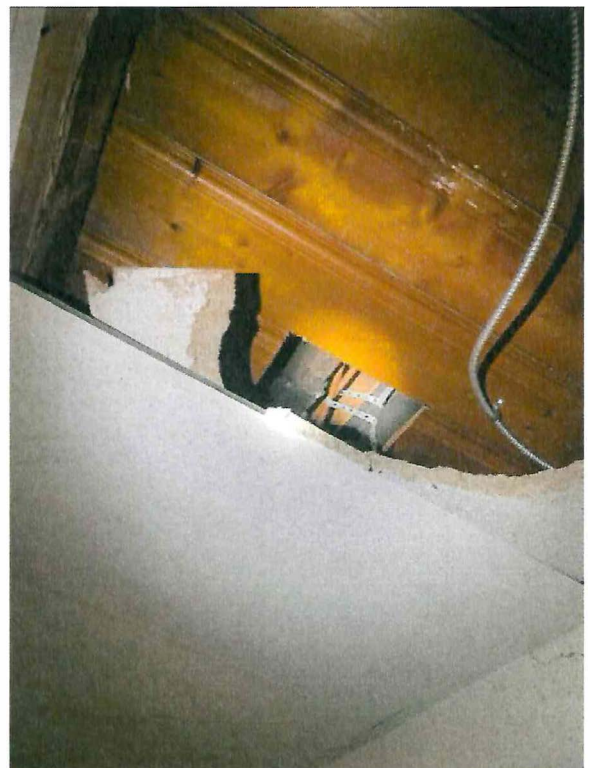


Concrete Slab. 8" CMU, Original Building Multi-Wythe Brick

First Floor:



Typical View of Suspended Ceiling

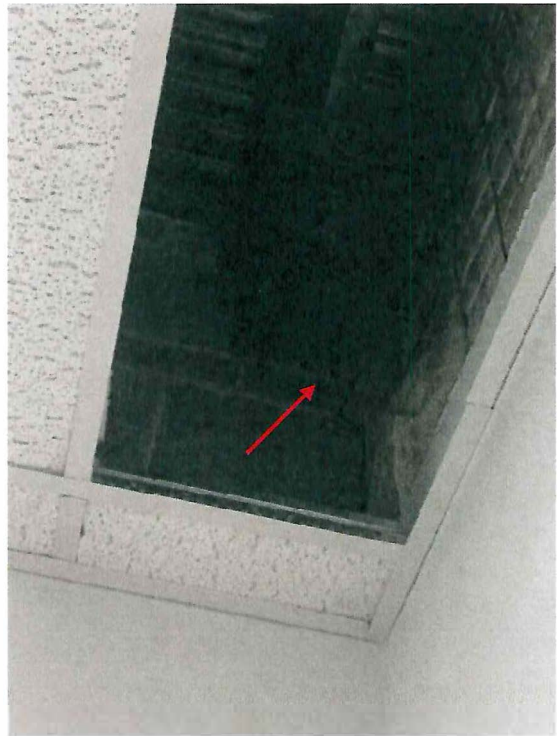


Wood Tongue and Groove Ceiling Above Suspended Ceiling

First Floor (Continued):



Steel Joist with Decking Above Suspended Ceiling, Plate with Threaded Rod for Assumed Building Cross Tie



Crack Observed in CMU Wall Above Suspended Ceiling at Interface with Original Masonry Wall

Second Floor:



Interior Southern Stairs

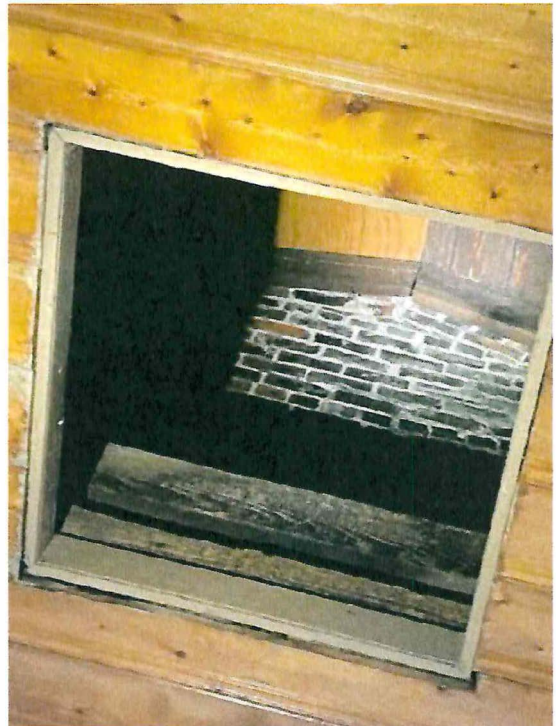


Southwest Corner of Original Building with Water Damage to Floor (Mechanical Room)

Roof:



Timber Post Supporting Bell Tower (Active Water Leak Observed at all Four Posts at Roof Interface)



Timber Trusses with Toe Nailed Top Chord at Apex



Metal Decking with Surface Corrosion



Filled Penetration in Metal Deck Above Second Floor

Exterior:



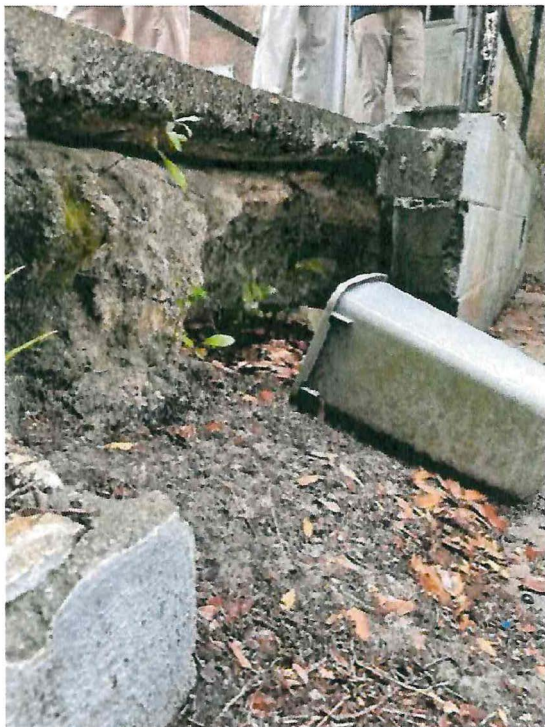
*Northern Stair Entrance with Severe Corrosion and Deterioration – **UNSAFE CONDITION***



*Northern Stair Stringers with Severe Corrosion – **UNSAFE CONDITION***



CMU Failure and Undermined Concrete Slab at West Side of North Exterior Ramp



CMU Failure and Undermined Concrete Slab at West Side of North Exterior Ramp

Exterior (Continued):



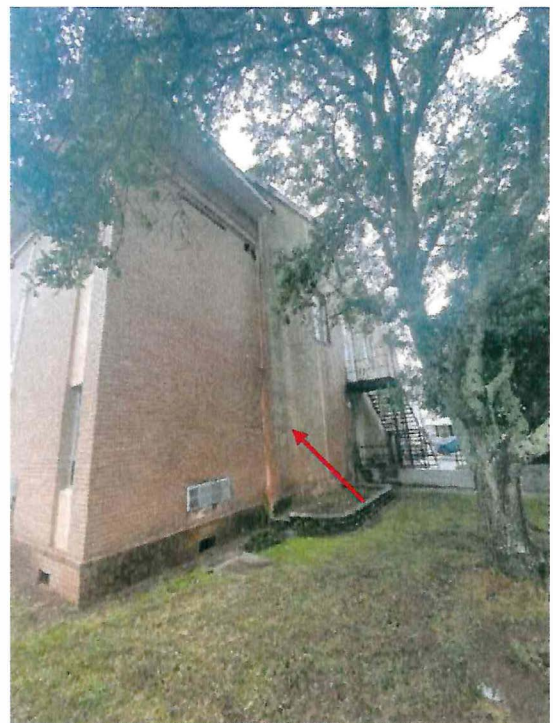
Eastern Wall Exhibiting Efflorescence



Typical Condition of Severely Deteriorated Wood Window Framing



Southern Corbels and Walls of the Original Building Appear to be Experiencing Staining from High Concentrations of Moisture



Joint Between the Northern Wall of the Original Building and the East Wing Appears to be Exhibiting Staining Along its Full Height

Exterior (Continued):



Advanced Lintel Corrosion and Joint Crack Above Window



Stair Step Mortar Joint Crack