



Police Department Building



City Hall Building

BUILDING ANALYSIS OF

ALEXANDER CITY POLICE DEPARTMENT AND CITY HALL



**ALEXANDER
CITY**
ALABAMA

June 17, 2019

PREPARED BY:



IN CONSULTATION WITH:

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Table of Contents

	<i>pages</i>
INTRODUCTION	1
POLICE DEPARTMENT BUILDING	
General Building Description	3
Hazardous Materials	4
Americans with Disabilities Act	4
Life Safety/Fire Protection	5
Building Envelope	6
Interior Construction and Finishes	7
Structural	7
Fire Protection	7
Plumbing	7
HVAC	7
Electrical	8
Probable Cost	8
CITY HALL BUILDING	
General Building Description	9
Hazardous Materials	10
Americans with Disabilities Act	10
Life Safety/Fire Protection	11
Building Envelope	11
Interior Construction and Finishes	12
Structural	13
Fire Protection	13
Plumbing	13
HVAC	14
Electrical	14
Probable Cost	14
APPENDIX	
Cost Consultant	A
Environmental Engineering	B
Structural Engineering	C
Mechanical Engineering	D
Electrical Engineering	E



BUILDING ANALYSIS OF ALEXANDER CITY POLICE DEPARTMENT AND CITY HALL

INTRODUCTION

PH&J Architects, Inc. were retained to survey and analyze the condition of the Alexander City Police Department Building and City Hall Building. The reason for performing these surveys was to be able to create estimates of probable cost to renovate each of the buildings and probable cost to demolish each of the buildings. The standard for the renovations would be to bring the buildings up to the 2015 International Building Code for those parts of the buildings that would be affected by a renovation project and to bring the buildings into compliance with the ADA.

PH&J assembled a team of engineers – structural, mechanical-plumbing-fire protection, electrical, a hazardous materials consultant, and a third-party estimator to assist with the analysis and estimates. After an initial visit by the architect to review the buildings on March 2, 2020 the team returned on April 4th to make their surveys. The surveys that were conducted were visual in nature with no destructive investigations except for sampling by the hazardous materials consultant.

There are many judgments that must be made in the course of a review of this type. The planned Programs for the new uses, of the buildings that are to be renovated, can greatly affect the design decisions, thus impacting the cost. Challenges and deficiencies can be solved multiple ways each having a ripple effect on other decisions. This review is not a design effort and with no specific Program to address, our direction has been to solve the problems as they exist and to assume that the buildings will be used in the general configuration that they currently exist. Renovations that reconfigure floor plans or structural elements could possibly produce a more efficient layout – if there was a known use for the buildings, however that could also add additional cost.

The following report contains a summary of our team's findings and an additional appendix with each engineer's complete report.



Photo Credit: Rivers Langley, 2012



Photo Credit: Rivers Langley, 2012

POLICE DEPARTMENT BUILDING



GENERAL BUILDING DESCRIPTION

The building that houses the Alexander City Police Department was originally constructed as the City Hall. The building sits in a prominent location where Lee Street, Tallapoosa Street and Church Street join. The original building, completed in 1939, is three stories with a total area of approximately 14,745 square feet. In 1982 a three-story addition was built on the north side of the original building. This addition totals approximately 3,000 square feet, so that the total building area is approximately 17,745 square feet (5,915 sf per floor). The 1939 building incorporates a courtroom on the top floor (3rd Floor), administrative offices and 911 Dispatch on the second floor (2nd Floor), with the lowest level (1st Floor) containing a jail (now used for storage), police muster room, police offices, mechanical and electrical spaces, and archived evidence storage. The 1982 addition includes a public elevator that provides access to all three levels. This elevator is reached on the lowest level by an entrance on the north side of the building. Offices occur on the upper two floors and storage spaces on the lowest level. Public toilets are located on all three floors.

HAZARDOUS MATERIALS

Environmental Materials Consultants, Inc. from Montgomery, Alabama performed a survey of the Police Department Building in 2008 for the City. They were able to use the data from that survey along with observations from this effort to compile their report (see Appendix). As explained in EMC's report, the Police Department Building does contain hazardous/regulated materials including asbestos, fluorescent lamps with mercury, a few fluorescent light fixtures with ballasts containing PCBs, and lead based paint. The report discusses in some detail the requirements for abatement and disposal of these materials. If the building is demolished there will still be requirements for the abatement of some of the materials, but it should not be as extensive as it would be for a renovation.



Access to Boiler Room where Hazardous Materials were Discovered.

AMERICANS WITH DISABILITIES ACT

The Police Department Building has a number of non-compliant accessibility issues. Only one entrance located on the north side, ground floor is marked as accessible and it is not compliant. The ADA requires that the number of accessible entrances to be provided shall match the number of required exits, which would be at least two for this facility. The other non-compliant entrances should have signage directing handicapped users to an accessible entrance.

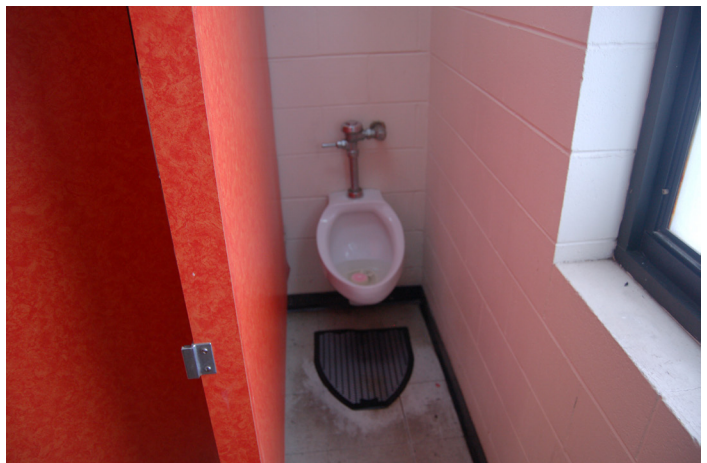
The handicap parking and ramps that serve the north entrance need to be upgraded. Parking signage and striping needs to be corrected. A van-accessible space needs to be added and the ramps need to have handrails added.



Current ADA Entrance

The accessible route vertically through the building is by means of the elevator in the 1982 addition. It is sized for ADA compliance. The controls and communications will need to be upgraded.

The toilets in the 1982 wing are not completely accessible but should not require major work to be made compliant. The remaining toilets in the building, which are generally small single user rooms are, for the most part, not accessible and would not be worth renovating. Additional restroom facilities, if needed, might be constructed in the location of the old jail cells on the Ground Floor. Plumbing exists there now, so constructing new restrooms would be feasible.



Current Non-Conforming Restroom

Interior handicap accessible signage needs to be provided throughout the building. The Courtroom should have space added to accommodate wheelchair seating by removing a portion of one of the wood pews.

LIFE SAFETY/FIRE PROTECTION

Under the 2015 International Building Code the Police Department Building is considered to be Type II B Construction. Meaning that it is a non-combustible structure. The Type II B designation means that the structure is not fire resistance rated. This is the case because the steel structure in the 1982 addition is not protected against fire.

The Police Department Building has two exit stairs. The stair on the east end serves the 2nd and 3rd Floors with an additional interior flight of steps down from the 2nd Floor to grade. The stair on the West end serves all 3 floors and exits on grade. The guardrails and handrails do not comply with current Code requirements. Neither of these stairs is located in an enclosed, fire-rated shaft as required by Code. The code requires that exits stairs be enclosed, but even if enclosed stairs were not required the building would be considered one Fire Area and therefore require sprinklers due to the total square footage. If the building were constructed today, the Courtroom on the 3rd Floor would have to be sprinkled along with the rest of that floor due to the Group A-3 Assembly Occupancy being located in a Fire Area more than one floor above the level of exit discharge.

The corridor doors and walls are not fire-rated and include non-rated view lights, breeze sash and transoms. The building is not sprinklered, which will require that corridors that receive an occupant load greater than 30 have a one-hour fire rating.

The building does not have a fire alarm system. This would be required in a new building with an Assembly Occupancy with 100 or more occupants above the lowest level of fire department access.

The mechanical systems are free-standing in the corridors. The return air is pulled through the corridors, which is a Code violation.

To summarize, from a Life Safety and Fire Protection standpoint the building does not meet the requirements of the 2015 IBC and associated Codes. These conditions are probably considered “grandfathered” by the Fire Marshal and Building Official as allowed by the Code. However, if the building is renovated or altered in a significant way or if the Occupancy of the building changes, these officials will likely require the deficiencies to be corrected.



Open Stairwell



Free Standing Mechanical Unit with Corridor Return Air

BUILDING ENVELOPE

The exterior walls of the 1939 building appear to be constructed of a double-wythe of brick with plaster on the interior side of finished spaces. The original wall construction would not have included insulation nor would it have a cavity for drainage as would a more modern construction. Renovations to the building would not require that wall insulation be added, although the walls could be furred with drywall creating a space for insulation and to run new electrical and data outlets. The walls of the 1980 addition are concrete masonry with brick veneer. They would have presumably been constructed with a drainage cavity and cavity insulation.



Uninsulated Steel Windows

The windows of the 1939 building are single-pane, steel frame window which are in a deteriorated condition. In a number of places the original panes and muntins have been replaced with larger panes. They offer no insulation and are probably subject to condensation when humidity and temperature are not optimal. There are at least 14 window unit air conditioners currently installed in these windows. The windows in the addition are aluminum frame, insulated units that are more energy efficient than the 1939 units.



Area of Major Leak

The roof is a modified bitumen roof system. The roof appears to be in reasonable shape with two exceptions. 1) Ponding water was noted on the northeast area of the roof at the junction of the original building and the 1982 addition. 2) There is a major leak on the northwest side of the building at this same juncture between the original building and the addition. This leak is probably due to a flashing problem where these parapets tie together. It is leaking into the corridor on the 3rd Floor and into the Chief's Office and the Training Room on the 2nd Floor. The roof was not cored as part of this survey, so the presence, condition and thickness of any roof insulation is unknown. Rainwater is removed through parapet scuppers and downspout.



Ponding Water

INTERIOR CONSTRUCTION AND FINISHES

The interior walls are a mix of plaster and concrete masonry. Some of the plaster is deteriorated – particularly in the location where the roof is leaking. Flooring is mostly resilient tile and carpet. The resilient tile is an area of concern mentioned in the Hazardous/Regulated Materials Report (see Appendix). Ceilings

are a mixture of suspended acoustical lay-in tiles in metal grid and plaster applied to the concrete structural slabs. Doors are a mixture of hollow metal, solid core flush wood doors and doors with view lights, doors with louvers. Doors are generally painted except in the Courtroom and in the 1982 addition, where they are stained wood veneer.

STRUCTURAL

The 1939 building appears to be a concrete framed structure with brick masonry exterior. The 1982 addition is steel framed with concrete floors on metal deck. The Structural Report (see Appendix) noted stepped cracking in the brick on some of the exterior corners of the building. These should be patched and monitored for worsening conditions. According to the report there do not appear to be any major structural concerns.

FIRE PROTECTION

The Police Department Building is not sprinkled. If as part of a renovation an Assembly Occupancy is planned to remain on the upper floor, the building should be sprinkled. If the building is sprinkled, it will allow more flexibility in the fire rating of corridors, housing mixed occupancies, etc.

PLUMBING

The plumbing in the original part of the Police Department Building is 80 years old and should be replaced if the building is renovated.

HVAC

The original 1939 building was not air conditioned. Window units and free-standing central units have been added over the years. The central units do not meet Code. If the building is renovated a complete new system should be installed (See Appendix).

ELECTRICAL

The Electrical Report (see Appendix) should be reviewed, and Code deficiencies in the electrical system should be corrected. The Electrical Report indicates that the electrical system is out-dated and there may not be parts available to repair panels, replace breakers, etc. The building appears to have multiple services, but that could not be verified. The



Cracks in Masonry



Existing Plumbing



Diverse Mixture of Mechanical Systems

building lacks electrical outlets and there are a number of plug strips in use which could be a fire hazard. The main electrical room has wiring conditions that are not Code compliant. Lighting is a mix of incandescent and older fluorescent fixtures and is not energy efficient. There is no lighting control system. There is no fire alarm system.

ELEVATOR

The existing elevator machine and controls should be renovated to comply with the ASME A17.1 and ADA requirements to the maximum extent feasible. Call features and passenger communications should be upgraded for compliance.

PROBABLE COST

Based on the GLEEDS Estimate of Probable Cost (see Appendix), a budget of **\$3,000,000** (rounded) should be considered for a full renovation of the Police Department Building including abatement of hazardous/regulated materials. This amount should be adequate to bring the building up to current Code, into ADA compliance and provide new finishes throughout.

Alternatively, a budget of **\$194,000** (rounded) should be included if the building is to be demolished. This would include complete demolition and disposal of all building materials including required abatement of hazardous/regulated material. The site would be left smoothly graded and grassed. Utilities would be removed and capped at the property line or point of service.



Existing Electrical Service



Existing Telephone/Low Voltage System

CITY HALL BUILDING



GENERAL DESCRIPTION

The City Hall Building was formerly a bank building. The building combines different structural systems and was probably originally two buildings that have been combined into one. It is located northeast of the Police Department building at the head of Main Street. The main first floor of the building is a split-level with approximately 24 inches of elevation difference from the south side rising to the north. The main entrance to the building enters through a vestibule into a large 2 story tall lobby space that runs almost the full length of the south side of the building. The old teller line located along the north side of the lobby is used for transactions with the public. There are public restrooms at the west end of the lobby and a secondary entrance located down a flight of steps. The north side of the main floor is up a short flight of steps and houses offices and workspaces behind the teller line. The main vault is located in this area. A second vault is located on this level on the west side of the building. The IT servers are located on this level. A pull-down attic stair from this level gives access to an attic space that contains an air-handler located over the main vault.

An intermediate level is located between the upper part of the main floor and the mezzanine. It is up a set of steps approximately 42 inches high. This intermediate level houses the break room and a set of restrooms and connects to the rear exit stair on the west side of the building. A stair leads from this level up to an attic space where the roof hatch is located.

The building has a second-floor mezzanine of approximately 3,500 square feet. This mezzanine floor contains offices, a large conference room and adjacent kitchen space.

There is a lower level about half of a story (approximately 42") below the main first floor on the west side of the building. The old drive-through teller is located here and houses the sprinkler riser. This lower level includes mechanical, electrical and telephone rooms. Access to the partial basement is from this area down a set of steps with an elevation change of approximately 42 inches. The basement is a storage space and houses the hydraulic elevator equipment and an old vault. It connects to a crawl space that is under the north and east sides of the building. Some of the foundation walls in this area are old masonry walls of uncut stone.

The building is fully sprinklered. Many areas are not handicap accessible due to the level changes as well as tight configurations of some of the rooms. The mechanical system includes a chiller on the roof that serves an air handler on the lower level and one in the attic space on the north side of the building.

HAZARDOUS MATERIALS

Environmental Materials Consultants, Inc. from Montgomery, Alabama performed a survey of the City Hall Building. Samples were taken for analysis (see Appendix). As explained in EMC's report, the building does contain hazardous/regulated materials including asbestos flooring and ceiling material, fluorescent lamps with mercury and some lead-based paint. The report discusses in some detail the requirements for abatement and disposal of these materials. If the building is demolished there will still be requirements for the abatement of some of the materials, but it should not be as extensive as it would be for a renovation.



Main Lobby

AMERICANS WITH DISABILITIES ACT

The City Hall Building has a number of non-compliant accessibility issues. Only one entrance located on the south side, main floor is compliant. The ADA requires that the number of accessible entrances to be provided shall match the number of required exits, which would be at least two for this facility. The other non-compliant entrances have signage directing handicapped users to the accessible entrance, but the signage is not compliant. The handicap parking in the lot to the west needs the signage upgraded and needs to be reconfigured for a van accessible space.



Non-Compliant Inaccessible Bathrooms

The interior of the building has a number of different levels as indicated above. This makes handicap accessibility to the different levels difficult. The only interior accessible route is between the main floor and the mezzanine by means of the elevator. The elevator serves both levels of the main floor.

Restrooms are located on the lower level of the main floor at the west end of the lobby and on the intermediate level above the upper level of the main floor. The main floor restrooms can be adjusted to comply with ADA requirements. The intermediate level restrooms cannot be reached by an accessible route and will require major configuration to be accessible and will require a reduction in toilet fixture count.



Break-room on Inaccessible Level

The sink in the kitchen on the mezzanine does not have the required knee space.

LIFE SAFETY/FIRE PROTECTION

Under the 2015 International Building Code the City Hall Building is considered to be Type III B Construction. Meaning that it contains combustible structure and is not fire resistance rated except for exterior bearing walls which must be 2-hour fire rated. The building has one well defined exit stair on the west side that serves the mezzanine (egress is through a kitchen, which is not permitted by Code) and the intermediate floor, exiting onto grade at the northwest corner. The mezzanine has two open stairs that land in the first-floor lobby.

The main floor of the building is primarily open plan with a few hallways, but portions of the plan are maze-like with level changes and turns that are confusing to first-time visitors. The building is sprinklered. The fire alarm appears to be in working order, but it is out of date and does not meet current NFPA requirements. The cooking range in the kitchen does not have a Code compliant hood extinguishing system.

BUILDING ENVELOPE

The City Hall Building is clad in a mix of precast concrete panels, natural stone, exterior insulation and finish system, storefront/curtainwall. The back up for these materials is a mix of concrete, brick, and other masonry and possibly some drywall infill.

The north wall had a stucco finish system which has been removed due to cracking. The masonry and concrete substrate remains, partially covered with what appears to be building paper or felt that was the weather barrier for the stucco. This wall needs to be cleaned back to the brick and sealed or covered with an exterior finish. The joint between this wall and the precast panels at the northeast corner of the building needs to be covered to prevent intrusion of water and vermin.

The walls below grade on the interior at the north side are experiencing water intrusion. As part of the work to protect this north wall, the cause of this water intrusion should be assessed and remediated. It is possible, but unlikely that a negative-side waterproofing material might solve this problem. That would be the least expensive fix, but again, may not correct the problem.



Exposed Wall Substrate where Stucco Removed



Unprotected Joint at Corner



Water Intrusion at Lower Level

As indicated in the Structural Report (see Appendix), the precast panels at the corners on the east, south and part of the west face exhibit movement. These panels need to be removed and the cause of the failure needs to be assessed. This should be a high priority maintenance item. All of the precast joints need to be re-sealed.

Some of the remaining stucco on the building needs to be patched and repaired and the EIFS system on the northwest part of the building should be recoated.

The doors, windows, and storefront/curtainwall appeared to be in good repair. Most of the openings are well protected by roof overhangs.

The roof is a modified bitumen system that appears to be in good shape. The northern half of the building, which is an older wood and masonry structure has the roof deck depressed lower than the surrounding parapet walls. Both halves of the roof are dependent on roof drains and interior rain leaders, however the north side is also dependent on emergency overflow drains if the roof drains are stopped. On the southern side water can flow over the roof edge in the event of a stoppage. The roof hatch needs to be replaced.

INTERIOR CONSTRUCTION AND FINISHES

The interior walls are a mix of drywall, paneling, and concrete masonry. Flooring is mostly resilient tile and carpet. The resilient tile is an area of concern mentioned in the Hazardous/Regulated Materials Report (see Appendix). Ceilings are mostly acoustical lay-in tiles in suspended metal grid with some areas of drywall. The finishes are in overall good shape, but dated.



Existing Roof



Current Interior Finishes

STRUCTURAL

As noted above, the building incorporates a mix of structural systems. The Structural Report (see Appendix) indicates that the building has some structural concerns. Except for the precast panel movement, which needs to be investigated and corrected, the other items appear to be relatively minor and should be monitored to determine if they are continuing to move.

Because of the mixture of structural systems in the building, any renovation that requires structural changes will be very difficult and expensive. The existing vaults are now part of the structure, having been incorporated into the load bearing systems of the building as they were installed. If the building is renovate, these vaults should be left as they are if possible; otherwise the cost to remove them and restructure the building will be prohibitive. However, leaving them will affect the efficiency of a future layout.

FIRE PROTECTION

The City Hall building is fully sprinklered, which will be a benefit if the building is renovated and particularly if the Occupancy changes or the building houses mixed Occupancies.

PLUMBING

While the plumbing systems appear to be in good working condition, it is recommended that they be replaced if the building undergoes an extensive renovation. In any event, the toilets and breakroom on the Intermediate floor are not accessible.



Movement in Pre-Cast Panels



Stone Walls in Crawlspace



Sprinkler Riser

HVAC

The HVAC system appears to be in reasonable shape (see Appendix) and should have remaining service with good maintenance. However, one air handler is not Code compliant due to its location. If the building is renovated this should be corrected. In the event of a major renovation, the City should consider replacing other components as part of that project.

ELECTRICAL

The Electrical Report (see Appendix) indicates that the main electrical switchboard manufactured in 1972 is past its expected life and parts will be difficult to obtain if they are even available. Other distribution panels throughout the building are the same age and will have the same problem with parts availability. The conductors and their insulation is old. The light fixtures are older fluorescent and incandescent fixtures that are not energy efficient and would not meet current energy Code. There is no lighting control system, which would be required to meet current Code requirements.

ELEVATOR

The existing elevator machine and controls should be renovated to comply with the ASME A17.1 and ADA requirements to the maximum extent feasible. Call features and passenger communications should be upgraded for compliance.

PROBABLE COST

Based on the GLEEDS Estimate of Probable Cost (see Appendix), a budget of **\$2,747,000** (rounded) should be considered for a full renovation of the City Hall Building including abatement of hazardous/regulated materials. This amount should be adequate to bring the building up to current Code, into ADA compliance and provide new finishes throughout.

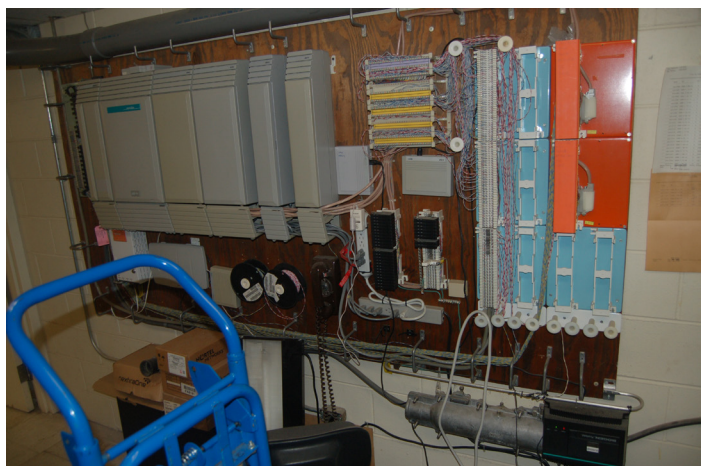
Alternatively, a budget of **\$221,000** (rounded) should be included if the building is to be demolished. This would include complete demolition and disposal of all building materials including required abatement of hazardous/regulated material. The site would be left smoothly graded and grassed. Utilities would be removed and capped at the property line or point of service.



Existing Chiller



Existing Electrical Service



Existing Telephone/Low Voltage System

APPENDIX A

GLEEDS USA



gleeds

Analysis of the City Hall and Police Station Buildings

Alexander City, AL

Budget Estimates

PH&J Architects

PN 2017

Version: 1

Date: 06/17/2020

DOCUMENT CONTROL

Project name	Analysis of the City Hall and Police Station Buildings	Project number	PN 2017
Date of Issue	06/17/2020	Version number	1
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Contents

Basis of Estimate	4
Basis of Estimate	5
Introduction	5
Building Data	5
Mark-Ups	5
General	5
Estimate Classification	6
Project Risk Notice	6
Summary of Costs	6

Budget Estimates	7
City Hall Building	8
Police Station Building	11

1

Basis of Estimate

Basis of Estimate

Introduction

The budget development cost estimate is based on the report from PH&J Architects dated June 2020. The estimates presented within this report are to assist the City of Alexander City in developing project budgets and make decisions regarding the future of the two buildings. A cost for the demolition of the buildings as well as the renovation of each building is included as part of the budget evaluation.

Building Data

City Hall Building – 24,000 Square Feet

Police Station Building – 17,745 Square Feet

Project Site – N/A

Mark-Ups

The following mark-ups were used in the cost model:

Estimate Contingency	15.0%
General Requirements & Conditions	10.0%
Insurances	1.0%
Permits	1.5%
GC Fee	3.5%

It should be noted that the cost represented within the report are representative of anticipated costs as of the date of the estimate. The costs should be escalated at a rate of 4% per year from the date of the cost estimate to the anticipated start of construction.

Gleeds further recommends that the Owner retain an additional 5% of the construction cost for change orders during construction.

General

Gleeds has created the budget estimates showing forecasted costs for all building and site development elements including, but not limited to, substructure, superstructure, mechanical, electrical, plumbing, exterior and interior construction, landscaping, hardscaping, and on-site utility improvements.

This resultant estimate, formulated on the basis of experience, qualifications, and best judgment of professional construction consultants familiar with the construction industry, reflects probable current construction costs in the location indicated in the estimate, and is based on a determination of fair market value for the construction of this project.

Pricing assumes the project will be a Design/Bid/Build delivery method with competitive bidding for trade package subcontractors and with General Contractors competitively bidding Fee, General Requirements and General Conditions. This Cost Plan, however, is not a prediction of low bids and Gleeds has no control over the cost of labor and materials, the contractor's or any subcontractor's method of determining price. Gleeds does not guarantee that proposals, bids or actual construction costs will not vary from this or subsequent cost estimates.

This Cost Plan addresses the estimated cost of construction only. No consideration or allowances have been made in connection with future maintenance, operation or replacement costs.

Estimate Classification

It should be noted that this Cost estimate reflects a level of information which corresponds to a Class 5 Estimate per AACE guidelines. The average range of accuracy for this level of estimate is -30% to +50%.

Project Risk Notice

No risk allowances have been included in this estimate for potential risks caused as a consequence of the coronavirus (Covid-19) outbreak. It is therefore, recommended that TCSG make sufficient budgetary allowances for such risks in their investment or development appraisal for the project.

Summary of Costs

City Hall Building

Demolition Option Budget \$221,000 (rounded)

Renovation Option Budget \$2,747,000 (rounded)

Police Station Building

Demolition Option Budget \$194,000 (rounded)

Renovation Option Budget \$3,000,000 (rounded)

2

Budget Estimates

City Hall Building



City Hall Options Budget Estimates

Building Demolition Option

Hazardous material removal					
	Asbestos	24000 sf	\$	2.25	\$ 54,000.00
	Lead Paint	24000 sf	\$	0.35	\$ 8,400.00
	Flourescents and Mercury	24000 sf	\$	0.25	\$ 6,000.00
Building Demoliton					
		24000 sf	\$	4.00	\$ 96,000.00
Cost of Work					
					\$ 164,400.00
Estimate Contigency		15%			\$ 24,660.00
General Requirements & Conditions		10%			\$ 18,906.00
Insurances		1%			\$ 2,079.66
Permits		1.5%			\$ 3,150.68
GC Fee		3.5%			\$ 7,461.87

Demolition Option Cost	\$ 220,658.22
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Renovation Option

				Note #	
Hazardous Mtl removal			\$ 68,400.00	1	
Selective Demo			\$ 108,000.00	2	
ADA Compliance					
Add Entrance for ADA	1 sum		\$ 25,000.00		
ADA Parking	1 sum		\$ 750.00	3	
ADA Intern. Bath	1 sum		\$ 15,000.00		
ADA Kitchen Sink	1 sum		\$ 4,500.00	4	
Redesign West Exit Stair	24000 sf	\$	0.63	\$ 15,000.00	5
Add Hood Exhaust System	24000 sf	\$	0.35	\$ 8,500.00	
Demo North Wall Stucco	24000 sf	\$	0.15	\$ 3,500.00	6
Seal or Cover North Wall	24000 sf	\$	0.35	\$ 8,500.00	7
Watertght North Wall	24000 sf	\$	0.21	\$ 5,000.00	8
Waterproof Below Grade North Walls	24000 sf	\$	0.21	\$ 5,000.00	9
Demolition of East, South & West Precast Panels	24000 sf	\$	0.27	\$ 6,500.00	10
New Precast Panels	24000 sf	\$	0.63	\$ 15,000.00	11
Structural Reinforcement of East,South, & West Corners	24000 sf	\$	1.25	\$ 30,000.00	
Seal Precast Joints	24000 sf	\$	0.10	\$ 2,500.00	12
Patch Stucco	24000 sf	\$	0.21	\$ 5,000.00	
Recoat EIFS on North Wall	24000 sf	\$	0.42	\$ 10,000.00	13
Replace Roof Hatch	24000 sf	\$	0.21	\$ 5,000.00	
Flooring	24000 sf	\$	5.83	\$ 140,000.00	14
Suspended Ceiling	24000 sf	\$	5.21	\$ 125,000.00	15
Paint	24000 sf	\$	3.33	\$ 80,000.00	16
Mechanical & Plumbing Renovation	24000 sf	\$	45.00	\$ 1,080,000.00	17
Electrical Renovation					
Wiring and Panels	24000 sf	\$	6.88	\$ 165,000.00	18
Lightiing	24000 sf	\$	5.38	\$ 129,000.00	19
Update Fire Alarm	24000 sf	\$	2.41	\$ 57,750.00	
Cost of Work					
					\$ 2,117,900.00

Estimate Contingency	15%	\$ 317,685.00
General Requirements & Conditions	10%	\$ 243,558.50
Insurances	1%	\$ 26,791.44
Permits	1.5%	\$ 40,589.02
GC Fee	3.5%	\$ 96,128.34

Renovation Option Cost **\$ 2,746,523.96**

Note #

- 1 Per testing report
- 2 Assumes gut of interior
- 3 assumes 1 space
- 4 assumes 1 sink
- 5 Complete redesign to be egress appropriate
- 6 Entire Façade
- 7 Base for EIFS
- 8 up to 5000 sf
- 9 up to 5000 sf
- 10 4 panels at each location
- 11 Replace 4 panels at each location
- 12 Reseal all joints
- 13 Assume entire North façade
- 14 Replace all
- 15 Complete new
- 16 Entire interior wall surface area
- 17 Full replacement of all systems
- 18 Full replacement of all systems
- 19 Full replacement of all systems

Police Station Building



Police Station Options Budget Estimates

Building Demolition Option

Hazardous material removal					
	Asbestos	17745 sf	\$	3.38	\$ 60,000.00
	Lead Paint	17745 sf	\$	0.09	\$ 1,560.00
	Flourescents and Mercury	17745 sf	\$	0.68	\$ 12,000.00
Building Demoliton					
		17745 sf	\$	4.00	\$ 70,980.00
Cost of Work					
					\$ 144,540.00
Estimate Contingency		15%			\$ 21,681.00
General Requirements & Conditions		10%			\$ 16,622.10
Insurances		1%			\$ 1,828.43
Permits		1.5%			\$ 2,770.07
GC Fee		3.5%			\$ 6,560.46

Demolition Option Cost **\$ 194,002.06**

Renovation Option

					Note #	
Hazardous Material removal		17745 sf	\$	4.15	\$ 73,560.00	1
Selective Demolition		17745 sf	\$	5.00	\$ 88,725.00	2
ADA Compliance						
	Add Entrance for ADA	17745 sf	\$	1.41	\$ 25,000.00	
	Make Current Entry Compliant	17745 sf	\$	0.42	\$ 7,500.00	
	ADA Parking	17745 sf	\$	0.04	\$ 750.00	3
Upgrade Elevator Communications & Controls		17745 sf	\$	5.64	\$ 100,000.00	4
Fire Sprinkler System		17745 sf	\$	5.41	\$ 96,000.00	5
Stair Renovations		17745 sf	\$	8.45	\$ 150,000.00	6
Furr Exterior Walls		17745 sf	\$	3.66	\$ 65,000.00	7
Window Retrofit		17745 sf	\$	0.79	\$ 14,000.00	8
Roof Repair - Mod Bit		17745 sf	\$	0.68	\$ 12,000.00	9
Plaster Repair		17745 sf	\$	0.85	\$ 15,000.00	10
Resilient Flooring		17745 sf	\$	8.00	\$ 141,960.00	11
Suspended Ceiling		17745 sf	\$	6.76	\$ 120,000.00	12
Paint		17745 sf	\$	4.79	\$ 85,000.00	13
Tuck and Point Brick		17745 sf	\$	4.23	\$ 75,000.00	14
Mechanical Renovation		17745 sf	\$	33.81	\$ 600,000.00	15
Plumbing Renovation		17745 sf	\$	13.52	\$ 240,000.00	16
Electrical Renovation						
	Fire Alarm System	17745 sf	\$	3.85	\$ 68,250.00	17
	Lighting	17745 sf	\$	8.18	\$ 145,200.00	18
	Wiring and Panels	17745 sf	\$	10.99	\$ 195,000.00	19

Cost of Work **\$ 2,317,945.00**

Estimate Contingency	15%	\$ 347,691.75
General Requirements & Conditions	10%	\$ 266,563.68
Insurances	1%	\$ 29,322.00
Permits	1.5%	\$ 44,422.84
GC Fee	3.5%	\$ 105,208.08

Renovation Option Cost **\$ 3,005,945.27**



Note #

- 1 Per testing report
- 2 Assumes gut of interior
- 3 1 space conversion
- 4 New communications and controls system and minor cab refinishing
- 5 All new
- 6 Complete redesign to be egress appropriate
- 7 Fur all exterior walls full height to allow for new data and electrical
- 8 retrofit 14 windows with current window units
- 9 Assume 10ft strip entire length of building
- 10 assume 50% of surface
- 11 All new
- 12 All new
- 13 All interior gypsum areas
- 14 65% of exterior façade
- 15 All new
- 16 All new
- 17 All new
- 18 All new
- 19 All new

APPENDIX B

ENVIRONMENTAL MATERIALS CONSULTANTS, INC.



April 17, 2020

Mr. Harrell G. Gandy, AIA
PH&J Architects, Inc.
807 South McDonough Street
Montgomery, AL 36104

Subject: Hazardous/Regulated Materials Assessments
Alexander City's City Hall and Police Department Buildings

Dear Mr. Gandy:

In accordance with our proposal EMC has completed hazardous materials surveys/testing at Alexander City's City Hall. Using that data, and data from our 2008 hazardous materials survey of their Police Department Building we have also compiled general information regarding likely "environmental-related" costs associated with renovating or demolishing each building. This report presents our findings.

BACKGROUND INFORMATION

The City of Alexander City is considering options for their City Hall and Police Department buildings. In order to make informed decisions the City needs to know what hazardous/regulated materials are present within those buildings, and what costs may be associated with dealing with those hazardous/regulated materials if they decide to renovate or demolish the buildings. Hazardous/regulated materials surveys/testing was required for City Hall, but not for the Police Department, because that work was performed by EMC in 2008, and no renovations have since occurred. Roofing materials were not included in either asbestos survey because collecting samples of roofing materials requires cutting holes in the roof, which can cause leaks and void the roofing bond.

ASBESTOS SURVEY OF CITY HALL

I initially toured City Hall on April 2nd and then returned with my colleague Hadley Smith on April 10th. During those tours Hadley and I noted forty materials that are considered suspect to contain asbestos. Except for the soffit panels on the front of the building, which we could not safely sample, bulk samples of the other suspect materials were obtained in general accordance with EPA recommendations. After sampling, the bulk samples were forwarded to EMSL Analytical in Smyrna, GA, a NVLAP accredited laboratory. Hadley and I are accredited asbestos inspectors, Alabama Accreditation Numbers AIN0619539627 and APL032034206. The NVLAP lab code for EMSL's Smyrna lab is 101048-1.

The bulk samples were analyzed by polarized light microscopy (PLM) coupled with dispersion staining. This technique is used to identify asbestos fibers by their shape and unique optical properties. The analyses identified five asbestos-containing materials (ACM), a spray-applied ceiling finish, a 9" floor tile, two floor tile mastics, and a white coating/sealant on fiberglass pipe insulation. Although our samples of the 9" floor tile did not include mastic, we have assumed the mastic used with that tile does contain asbestos. A summarization of the analytical results is provided in a table included with this report. Specific data for each sample analysis is shown on the enclosed analytical data sheets and chain of custody form.

ASBESTOS SURVEY OF THE POLICE DEPARTMENT

EMC's 2008 survey of the Police Department revealed the following asbestos-containing materials: cementitious boiler insulation, cementitious boiler flue insulation, cementitious boiler door insulation, cementitious pipe run insulation, cementitious pipe fitting insulation, heat shield, white duct tape, glazing putty, caulk, floor tile (six types), and floor tile mastic (seven types). For reference, a copy of the text and tables from EMC's 2008 report is included with this report.

ASBESTOS COMMENTS

Roofing and roof-mounted materials were not included in the scope of either asbestos survey. The exposed roofs of both buildings appear to be modified bitumen, which is unlikely to contain asbestos. There are however areas where roofing cements and other coatings/sealants are applied, and those

materials are more likely to contain asbestos. There may also be underlying roofing materials that are more likely to contain asbestos.

At City Hall the spray-applied ceiling finish is a friable asbestos-containing material. At the Police Department, EMC's 2008 asbestos survey identified the following friable asbestos-containing materials: cementitious boiler insulation, cementitious boiler flue insulation, cementitious boiler door insulation, cementitious pipe run insulation, cementitious pipe fitting insulation, heat shield, white duct tape, glazing putty, and caulk. EPA's NESHAP regulation classifies all friable asbestos-containing materials as regulated asbestos containing-materials (RACM) and requires that they be properly removed and disposed prior to renovation or demolition activities that will disturb them.

The asbestos floor tiles identified in both buildings, and any asphalt roofing materials containing asbestos, are classified by the EPA as category I non-friable asbestos-containing materials. Category I non-friable materials are only regulated under NESHAP if they become friable, or will be, or have been subjected to sanding, grinding, cutting, or abrading.

The floor tile mastics, white coating/sealant, and soffit panels at City Hall, and the floor tile mastics at the Police Department are classified by the EPA as category II non-friable asbestos-containing materials. Category II non-friable materials are only regulated under NESHAP if they become friable, or have a high probability of becoming or have become crumbled, pulverized, or reduced to a powder by forces expected to act on them.

EPA requires all asbestos be removed from a building before that building is intentionally burned.

OSHA considers removal of the spray-applied ceiling finish, the heat shield, and all of the asbestos insulations to be class I asbestos work, and removal of the other identified asbestos-containing materials, or demolition of buildings containing those type materials, to be class II asbestos work. OSHA's requirements for class I asbestos work are more stringent than their requirements for class II work, and for both classes they require establishment of regulated areas, supervision by a competent person, worker training, adherence to specified work practices, and respiratory protection (or documentation that it is not required).

The Alabama Department of Environmental Management (ADEM) requires that all asbestos wastes be disposed in a permitted facility. Friable asbestos waste must be properly contained and labeled, and can only be disposed in a landfill that is specifically permitted to accept friable asbestos waste. ADEM does not allow asbestos materials to be recycled.

LEAD-BASED PAINT TESTING AT CITY HALL

On April 2nd I also made observations of City Hall for painted/glazed surfaces. Based on those observations I performed x-ray fluorescence (XRF) testing to determine if significant areas of lead-based paint/glaze are present. A total of sixty-four lead level readings were taken, of which six were calibration readings. I am an accredited lead paint inspector, AL Accreditation No. LIN081834206.

EPA defines lead-based paint (LBP) as paint with a lead content equal to or in excess of 1.0 mg/cm². Paints/glazes tested during this job are considered LBP if the testing revealed a lead concentration greater than or equal to 1.0 mg/cm². Any readings that fell within the instrument's inconclusive range are reported as 1.0 mg/cm², and are therefore shown to be LBP.

Lead-based paint was identified at four of the tested locations. Those tests were on a metal stair rail, a wooden column, and the door and door casing of the basement vault. At twelve tested locations lesser amounts of lead were detected, and at forty-two tested locations no lead was detected in the paint/glaze. Testing data for each tested location is provided in the attached table. That data represents the lead content of paint at the specific tested locations on the date of testing, and within the accuracy range of the XRF instrument.

LEAD-BASED PAINT TESTING AT THE POLICE DEPARTMENT

EMC's 2008 lead-based paint testing at the Police Department revealed lead-based paint at seven of the sixty-nine tested locations. Those locations were on plaster walls within the courtroom and a 1st floor training room, on two metal window sashes, and on a metal wall within cell block A. At twenty-eight tested locations lesser amounts of lead were detected, and at thirty-four of the sixty-nine tested locations

no lead was detected in the paint/glaze.

LEAD COMMENTS

I am not aware of any regulatory requirement to remove lead-based paint, except in residential or child occupied facilities under certain circumstances.

OSHA regulations require contractors to protect their employees from exposure to elevated airborne lead concentrations, and those concentrations could result from disturbing paints/glazes with even trace amounts of lead.

EPA regulations for determining if a lead-containing waste stream is hazardous are based on the amount of lead that will leach out of the waste stream, not the total amount of lead in the waste stream, and therefore require specific testing of the renovation or demolition waste stream. EPA regulations require that waste streams containing lead be tested to determine if they are hazardous and then properly disposed.

OTHER HAZARDOUS/REGULATED MATERIALS

Other hazardous/regulated materials issues that could impact renovation or demolition activities include:

Fluorescent Lamps and Ballasts - There are fluorescent light fixtures throughout both buildings. All fluorescent lamps contain mercury, and light ballasts not marked "No PCBs" could contain PCB oil. All mercury lamps and fluorescent light ballasts that are taken out of service must be removed and properly disposed or recycled.

Mercury Switches - Many older thermostats, and switches within older HVAC equipment, contain vials of mercury. I did not note any mercury thermostats during my tours of the two buildings, but if any are present they should not be landfilled, but instead be properly disposed/recycled prior to renovation or demolition activities that will disturb them.

Lead Components - There are lead flashings around rooftop plumbing vent penetrations on both buildings, and there may be other lead components within the buildings. Lead components that will be removed during renovation or demolition work must be properly recycled.

Electronic Equipment/Components - Electronic equipment/components must be removed for use elsewhere, or be properly disposed, prior to building demolition.

Paints, Chemicals, and Cleaning Products - Paints, chemicals, and cleaning products should be removed for use elsewhere, or be properly disposed, prior to building demolition.

Refrigerants - Prior to renovations that will impact HVAC equipment or building demolition, Freon and other refrigerants must be properly reclaimed from HVAC and refrigeration equipment.

LIKELY ABATEMENT COSTS

ASBESTOS - I believe the greatest costs associated with hazardous/regulated materials will be removing and disposing of asbestos materials.

Asbestos removal is only required where renovation or demolition activities will disturb the asbestos materials. Additionally, only those asbestos materials that are, or will become, "regulated" under EPA's NESHAP regulations are required to be removed prior to building demolition. One caveat however is that asbestos materials cannot be recycled, so if concrete floor slabs are intended to be recycled, any associated asbestos floor tile and mastic, which can usually be demolished with the structure, will have to be properly removed and disposed.

Before City Hall can be demolished the asbestos ceiling finish and the cement-asbestos soffit panels will have to be removed, while all of the other identified asbestos materials can likely be demolished and disposed with the non-asbestos building components. Based on current asbestos removal costs, pre-demolition removal of the asbestos ceiling finish and the cement-asbestos soffit panels from City Hall is likely to cost in the range of \$20,000.

Before the Police Department can be demolished the cementitious boiler insulation, cementitious boiler flue insulation, cementitious boiler door insulation, cementitious pipe run insulation,

cementitious pipe fitting insulation, heat shield, white duct tape, glazing putty, and caulk will have to be removed, while all of the other identified asbestos materials can likely be demolished and disposed with the non-asbestos building components. The boiler and flue insulations, glazing putty and caulk are relatively easy to quantify, but there could be significant quantities of pipe insulation and duct tape within walls/chases or at other locations that were inaccessible to EMC during our site visits. Based on current asbestos removal costs, and assumptions regarding quantities of asbestos pipe insulation and duct tape that may be within walls, chases, or other inaccessible locations, I anticipate pre-demolition removal of the regulated asbestos-containing materials from the Police Department building is likely to cost in the range of \$50,000.

Because the asbestos floor tile, mastic, and similar non-regulated asbestos materials can usually be demolished/disposed with the non-asbestos building materials there are not likely to be significant additional demolition cost associated with those materials. Asbestos removal should be included in the demolition project, so the demolition bidders are aware of the asbestos materials, and their associated responsibilities. If a bidder chooses to salvage or recycle building components to which non-regulated asbestos materials are attached, costs for removal of those asbestos materials will be offset by the salvage value, or savings in disposal cost, of the building component from which the asbestos materials were chosen to be removed.

Asbestos removal costs associated with renovations are dependent on the type and quantity of asbestos materials that must be removed, along with phasing and coordination requirements. For renovations OSHA regulations usually dictate removal of both regulated and non-regulated asbestos materials. Because of that requirement, and owner imposed phasing/coordination requirements, the cost of asbestos removal associated with renovation can be significantly higher than for demolition. For renovation budgeting purposes I suggest the following asbestos removal unit pricing. For small quantities, difficult access, and/or unusual phasing/coordination requirements, the costs will be higher.

mobilization	\$3,000 each	ceiling finish	\$12/sf
boiler/flue insulation	\$15/sf	pipe insulation	\$10/lf
heat shield	\$10/sf	duct tape	\$10/lf
soffit panels	\$10/sf	white coating/sealant	\$2/lf
floor tile and/or mastic	\$2/sf	caulk and glazing putty	\$250/window or door
roofing	\$5/sf		

LEAD COMPONENT/PAINT - For building demolition the contractor will need to remove/recycle the lead components, and have TCLP lead testing of the demolition waste stream. Based on EMC's lead paint testing I believe it is highly unlikely that testing will show the waste stream to be hazardous. For demolition, I therefore anticipate the cost of dealing with lead components and paints will be about \$1,000 per building.

EMC's testing revealed very little lead-based paint within City Hall, and I anticipate little or no additional cost for renovation. If lead components are impacted by renovations they will need to be recycled. I anticipate that additional cost to be no more than \$200.

EMC's lead paint testing at the Police Department revealed lead-based paint on the walls in the courtroom and a first floor training room. There may also be lead-based paint on the walls in rooms that were not tested. If renovations require significant sanding/scraping of those walls, or of other components with lead-based paint, lead-safe work practices should be employed, and painting costs may double. If lead components are impacted by renovations they will need to be recycled. I anticipate that additional cost to be no more than \$300.

FLUORESCENT LAMPS/BALLASTS AND MERCURY SWITCHES - For building demolition I suggest budgeting \$5,000 for removal/recycling of fluorescent lamps/ballasts and mercury switches from City Hall and \$10,000 for removal/recycling of those items from the Police Department building. For renovations the costs will be proportionately smaller based on the number of fluorescent fixtures and switches that are impacted.

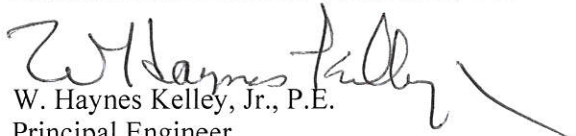
OTHER HAZARDOUS/REGULATED MATERIALS - Electronic equipment/components, paints, chemicals and cleaning products are not likely to be impacted by renovation projects, and are likely to be removed from the building for use elsewhere prior to building demolition. They therefore should have little cost impact on renovation or demolition projects. Whether for renovation or demolition, costs for reclaiming/recycling of refrigerants are typically included with mechanical estimates.

LIMITATIONS

EMC's observations, surveys, and testing were limited to exposed materials within City Hall and the Police Department buildings. We did not perform demolition of walls, ceilings, flooring materials, insulations, or ductwork to observe, sample, or test underlying materials. Determination of whether a suspect material contains asbestos was generally based on analyses of the minimum number of samples allowed by the EPA's AHERA regulations. Because of variations in the composition of some materials, and our inability to visually identify those variations, it is possible that not all asbestos-containing materials were identified. This report has been prepared for the use of PH&J Architects, Inc. and the City of Alexander City. No other warranties are expressed or implied.

I appreciate the opportunity for EMC to provide these services. Please do not hesitate to contact me if you have questions about this report.

Sincerely,
Environmental-Materials Consultants, Inc.


W. Haynes Kelley, Jr., P.E.
Principal Engineer

Enclosures

ASBESTOS SURVEY SUMMARY
CITY HALL
ALEXANDER CITY, ALABAMA

EMC Project Number MA-3989
 April 2020

EMC HSA#	Material Description	General Location	Asbestos
3989-01	floor tile, 12", gray and white mottled	public areas and vaults on main floor level, west side stairway, and much of lower level	none detected
3989-01a	mastic, yellow		none detected
3989-01b	mastic, black *		5% chrysotile
3989-02	ceiling tile, 1' x 1', crevassed surface	public areas and vaults on main floor	none detected
3989-03	carpet adhesive	throughout the building	none detected
3989-04	wallboard and joint compound (composite analyses)	scattered locations throughout the building	none detected
3989-05	ceiling tile, 2' x 2', gouges and pin holes, recessed grid	offices on main and upper floor levels	none detected
3989-06	caulk, interior	south wall of lobby	none detected
3989-07	ceiling tile, 2' x 2', gouges and pin holes	west side stairway and areas of middle and lower levels	none detected
3989-08	stair tread, tan with cream and gray mottling	stairways from lobby	none detected
3989-08a	mastic, yellow		none detected
3989-09	cove base adhesive (composite analyses)	scattered locations throughout the building	none detected
3989-10	stair tread, beige, cream, and gray mottled	main floor level stairs adjacent to elevator throughout the building	none detected
3989-10a	mastic, yellow		none detected
3989-11	plaster (composite analyses)	throughout the building	none detected
3989-12	floor tile, 18" x 10", stone pattern	data processing	none detected
3989-12a	mastic, yellow		none detected
3989-13	stair tread, gray	stairs adjacent to data processing	none detected
3989-13a	mastic, yellow		none detected
3989-14	stair tread, black	stairs from main floor to lower level	none detected
3989-14a	mastic, yellow		none detected
3989-15	ceiling tile, 2' x 2', crevasses and many pin holes	break room	none detected
3989-16	floor tile, 12", cream with gray and brown spots	break room	none detected
3989-16a	mastic, black		3% chrysotile
3989-17	ceiling tile, 1' x 1', holes in row/column pattern	upper floor level attic areas	none detected

Materials shown in bold have tested or are assumed to contain asbestos.

General location information is provided to assist in identifying the material, but may not list all locations where the material exists.

Reported asbestos percentages are visual estimations made by the microscopist.

Roofing and roof-mounted materials were not included in the scope of the asbestos survey.

No "suspect asbestos materials" were noted within the fire doors we checked, but it is possible that some fire doors within the building have asbestos cores.

* The asbestos-containing black mastic was only present in the sample collected from the lower level.

** We were unable to safely sample the soffit panels, but they appear to be cement-asbestos.

ASBESTOS SURVEY SUMMARY
CITY HALL
 ALEXANDER CITY, ALABAMA

Continued

<u>EMC_HSA#</u>	<u>Material Description</u>	<u>General Location</u>	<u>Asbestos</u>
3989-18	duct sealant, gray	mechanical room and AHU attic	none detected
3989-19	white coating/sealant on pipe insulation (composite analyses)	mechanical room and AHU attic	6% chrysotile
3989-20	glue dots (composite analyses)	upper floor level attic areas	none detected
3989-21	rock lath (composite analyses)	upper floor level attic areas	none detected
3989-22	ceiling tile, 1' x 1', crevasses and gouges	conference room	none detected
3989-23	ceiling tile, 1' x 1', gray, maze pattern	Mayor's office	none detected
3989-24	cementitious coating of fiberglass pipe fitting insulation	mechanical room	none detected
3989-25 3989-25a	floor tile, 9", beige with black and gray spots mastic	telephone room	2% chrysotile assumed asbestos
3989-26	spray-applied ceiling finish	telephone room and adjacent corridor	8% chrysotile
3989-27	stair tread, brown	stairs to basement	none detected
3989-27a	mastic, black		none detected
3989-28	stucco	west side of building	none detected
3989-29	caulk, exterior	exterior of building	none detected
3989-30	soffit panels **	south side of building	assumed asbestos

Materials shown in bold have tested or are assumed to contain asbestos.

General location information is provided to assist in identifying the material, but may not list all locations where the material exists.

Reported asbestos percentages are visual estimations made by the microscopist.

Roofing and roof-mounted materials were not included in the scope of the asbestos survey.

No "suspect asbestos materials" were noted within the fire doors we checked, but it is possible that some fire doors within the building have asbestos cores.

* The asbestos-containing black mastic was only present in the sample collected from the lower level.

** We were unable to safely sample the soffit panels, but they appear to be cement-asbestos.

LEAD PAINT TESTING DATA
CITY HALL
 ALEXANDER CITY, ALABAMA
 XRF Testing using an RMD LPA-1

April 2020

TEST NO.	ROOM	WALL	COMPONENT	COMPONENT LOCATION	SHOT LOCATION	SUBSTRATE	PAINT COLOR	READING (mg/cm2)
1	Calibration							1.0
2	Calibration							1.0
3	Calibration							1.0
4	Lobby	N	door casing	right	upper left	metal	dk bronze	-0.1
5		N	door	right	upper right	wood	natural	0.0
6		N	wall		upper right	wood	natural	-0.2
7		E	stair stringer	left	upper left	metal	tan	-0.1
8		E	stair rail	left	lower right	metal	tan	-0.1
9		E	door casing	left	upper left	metal	dk bronze	-0.3
10		E	door	left	upper right	metal	dk bronze	-0.2
11		E	window casing	right	lower right	metal	dk bronze	-0.1
12		S	wall	left	upper right	wallboard	cream	-0.1
13		S	stair rail	right	lower center	metal	tan	1.0
14		S	wall	right	upper right	concrete	tan	0.3
15		S	stair stringer	right	upper right	metal	tan	-0.1
16		W	wall	left	upper right	wallboard	cream	0.0
17		W	wall	right	upper left	wallboard	cream	-0.1
18	Men's Restroom	N	wall	right	upper right	wallboard	peach	-0.2
19		N	wall	right	lower right	ceramic	tan	-0.1
20		N	toilet	right	upper left	ceramic	white	-0.5
21		N	floor		right	ceramic	gray	-0.1
22		S	urinal	left	upper center	ceramic	white	-0.2
23		S	sink	right	upper right	ceramic	white	-0.1
24	Lobby Balcony	E	column	center	upper center	metal	tan	-0.1

Each XRF reading shows the approximate lead content of the paint, to a depth of $\approx 3/8"$, at the tested location. At other locations the lead content may be different. Paints with lead concentrations equal to or greater than 1.0 mg/cm2 are considered to be lead-based paints. Elevated airborne lead exposure can occur when disturbing paints with any amount of lead.

LEAD PAINT TESTING DATA
CITY HALL

ALEXANDER CITY, ALABAMA

XRF Testing using an RMD LPA-1

April 2020

TEST NO.	ROOM	WALL	COMPONENT	COMPONENT LOCATION	SHOT LOCATION	SUBSTRATE	PAINT COLOR	READING (mg/cm2)
25	Lobby Balcony (continued)	E	railing	right	upper center	metal	tan	-0.1
26		W	door casing	right	lower left	wood	natural	0.0
27		W	door	right	lower right	wood	natural	0.0
28	Upstairs Vault	N	wall	center	upper left	plaster	tan	0.2
29		N	door casing	center	upper right	metal	gray	-0.1
30		S	wall		upper right	plaster	tan	0.1
31	Building Official Office	N	wall		upper left	plaster	cream	0.2
32		N	base trim		left	wood	natural	0.1
33		E	door casing	right	upper left	metal	cream	-0.1
34		E	door	right	upper left	wood	natural	-0.1
35	Data Processing	N	wall	right	upper right	wallboard	tan	-0.1
36		N	wall	right	lower right	wood	natural	0.1
37		S	door casing	right	upper left	metal	dk bronze	-0.1
38		S	door	right	upper right	wood	cream	-0.1
39		S	cabinet door	right	upper right	wood	natural	-0.1
40	Data Processing Attic	N	wall		upper center	plaster	white	-0.1
41		S	beam		left	wood	white	0.3
42		S	column	center	upper center	wood	white	1.0
43		S	ceiling coffer	right	center	wood	white	0.1
44	Breakroom	N	wall	left	upper left	wallboard	gray	0.0
45		N	door casing	left	upper left	wood	cream	0.0
46		N	door	left	upper right	wood	cream	0.0
47		N	base trim	right	left	wood	cream	0.0
48		W	wall		upper left	plaster	gray	-0.1

Each XRF reading shows the approximate lead content of the paint, to a depth of ~3/8", at the tested location. At other locations the lead content may be different. Paints with lead concentrations equal to or greater than 1.0 mg/cm2 are considered to be lead-based paints. Elevated airborne lead exposure can occur when disturbing paints with any amount of lead.

LEAD PAINT TESTING DATA
CITY HALL

ALEXANDER CITY, ALABAMA

XRF Testing using an RMD LPA-1

April 2020

TEST NO.	ROOM	WALL	COMPONENT	COMPONENT LOCATION	SHOT LOCATION	SUBSTRATE	PAINT COLOR	READING (mg/cm2)
49	Basement Hall @ Mech Room	N	wall		upper center	plaster	tan	0.0
50		N	ceiling		center	plaster	cream	0.3
51		S	wall		upper left	cmu	tan	0.0
52		S	door casing	center	upper left	metal	tan	0.0
53		S	door	center	upper right	metal	tan	-0.1
54	Basement File Storage	N	wall	left	upper right	wallboard	cream	0.1
55		N	column	center	upper center	metal	cream	0.3
56		N	floor		left	concrete	gray	-0.2
57		W	vault door	right	upper left	metal	gray	>9.9
58		W	vault door casing	right	upper right	metal	gray	8.1
59	Basement Vault	S	wall		upper center	plaster	cream	0.2
60		S	ceiling		center	plaster	cream	-0.1
61	Roof Access Room	E	roof ladder	right	upper center	metal	green	-0.1
62	Calibration							1.0
63	Calibration							1.0
64	Calibration							1.2

Each XRF reading shows the approximate lead content of the paint, to a depth of $\approx 3/8"$, at the tested location. At other locations the lead content may be different. Paints with lead concentrations equal to or greater than 1.0 mg/cm2 are considered to be lead-based paints. Elevated airborne lead exposure can occur when disturbing paints with any amount of lead.



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Project ID:

Attention: Haynes Kelley
Environmental Materials Consultants
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Montgomery, AL 36106

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Fax: (334) 265-4043

Received Date: 04/14/2020 8:40 AM

Analysis Date: 04/14/2020 - 04/15/2020

Collected Date:

Project: PH & J, Alexander City, City Hall, MA-3989

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
3989-01-01-Floor Tile <i>072002707-0001</i>	Floor Tile, 12", Gray And White Mottled	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-01-01-Mastic <i>072002707-0001A</i>	Floor Tile, 12", Gray And White Mottled	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-01-02-Floor Tile <i>072002707-0002</i>	Floor Tile, 12", Gray And White Mottled	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-01-02-Mastic <i>072002707-0002A</i>	Floor Tile, 12", Gray And White Mottled	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-01-03-Floor Tile <i>072002707-0003</i>	Floor Tile, 12", Gray And White Mottled	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-01-03-Mastic 1 <i>072002707-0003A</i>	Floor Tile, 12", Gray And White Mottled	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-01-03-Mastic 2 <i>072002707-0003B</i>	Floor Tile, 12", Gray And White Mottled	Black Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
3989-02-01 <i>072002707-0004</i>	Ceiling Tile, 1'x1', Crevassed Surface	Gray Fibrous Homogeneous	5% Cellulose 60% Min. Wool	35% Non-fibrous (Other)	None Detected
3989-02-02 <i>072002707-0005</i>	Ceiling Tile, 1'x1', Crevassed Surface	Gray Fibrous Homogeneous	5% Cellulose 60% Min. Wool	35% Non-fibrous (Other)	None Detected
3989-02-03 <i>072002707-0006</i>	Ceiling Tile, 1'x1', Crevassed Surface	Gray Fibrous Homogeneous	5% Cellulose 60% Min. Wool	35% Non-fibrous (Other)	None Detected
3989-03-01 <i>072002707-0007</i>	Carpet Adhesive	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-03-02 <i>072002707-0008</i>	Carpet Adhesive	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-03-03 <i>072002707-0009</i>	Carpet Adhesive	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-04-01 <i>072002707-0010</i> <i>This is a composite result of wallboard, jt. compound, and tape</i>	Wallboard And Joint Compound (Composite Analysis)	Various Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
3989-04-02 <i>072002707-0011</i> <i>This is a composite result of wallboard, jt. compound, and tape</i>	Wallboard And Joint Compound (Composite Analysis)	Various Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
3989-04-03 <i>072002707-0012</i> <i>This is a composite result of wallboard, jt. compound, and tape</i>	Wallboard And Joint Compound (Composite Analysis)	Various Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
3989-04-04 <i>072002707-0013</i> <i>This is a composite result of wallboard, jt. compound, and tape</i>	Wallboard And Joint Compound (Composite Analysis)	Various Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
3989-04-05 <i>072002707-0014</i> <i>This is a composite result of wallboard, jt. compound, and tape</i>	Wallboard And Joint Compound (Composite Analysis)	Various Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
3989-05-01 <i>072002707-0015</i>	Ceiling Tile, 2'x2', Gouges And Pin Holes, Recessed Grid	Gray Fibrous Homogeneous	60% Cellulose 10% Min. Wool	30% Non-fibrous (Other)	None Detected
3989-05-02 <i>072002707-0016</i>	Ceiling Tile, 2'x2', Gouges And Pin Holes, Recessed Grid	Gray Fibrous Homogeneous	60% Cellulose 10% Min. Wool	30% Non-fibrous (Other)	None Detected
3989-05-03 <i>072002707-0017</i>	Ceiling Tile, 2'x2', Gouges And Pin Holes, Recessed Grid	Gray Fibrous Homogeneous	60% Cellulose 10% Min. Wool	30% Non-fibrous (Other)	None Detected
3989-06-01 <i>072002707-0018</i>	Caulk, Interior	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-06-02 <i>072002707-0019</i>	Caulk, Interior	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-07-01 <i>072002707-0020</i>	Ceiling Tile, 2'x2', Gouges And Pin Holes	Gray Fibrous Homogeneous	60% Cellulose 5% Min. Wool	35% Non-fibrous (Other)	None Detected
3989-07-02 <i>072002707-0021</i>	Ceiling Tile, 2'x2', Gouges And Pin Holes	Gray Fibrous Homogeneous	60% Cellulose 5% Min. Wool	35% Non-fibrous (Other)	None Detected
3989-07-03 <i>072002707-0022</i>	Ceiling Tile, 2'x2', Gouges And Pin Holes	Gray Fibrous Homogeneous	60% Cellulose 5% Min. Wool	35% Non-fibrous (Other)	None Detected
3989-08-01-Stair Tread <i>072002707-0023</i>	Stair Tread, Tan With Cream And Gray Mottling	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-08-01-Mastic <i>072002707-0023A</i>	Stair Tread, Tan With Cream And Gray Mottling	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-08-02-Stair Tread <i>072002707-0024</i>	Stair Tread, Tan With Cream And Gray Mottling	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-08-02-Mastic <i>072002707-0024A</i>	Stair Tread, Tan With Cream And Gray Mottling	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-09-01 <i>072002707-0025</i>	Cove Base Adhesive (Composite Analysis)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-09-02 <i>072002707-0026</i>	Cove Base Adhesive (Composite Analysis)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-09-03 <i>072002707-0027</i>	Cove Base Adhesive (Composite Analysis)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
3989-10-01-Stair Tread <i>072002707-0028</i>	Stair Tread, Beige, Cream, And Gray Mottled	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-10-01-Mastic <i>072002707-0028A</i>	Stair Tread, Beige, Cream, And Gray Mottled	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-10-02-Stair Tread <i>072002707-0029</i>	Stair Tread, Beige, Cream, And Gray Mottled	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-10-02-Mastic <i>072002707-0029A</i>	Stair Tread, Beige, Cream, And Gray Mottled	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-11-01 <i>072002707-0030</i> <i>Composite Analysis</i>	Plaster (Composite Analysis)	Various Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-11-02 <i>072002707-0031</i> <i>Composite Analysis</i>	Plaster (Composite Analysis)	Various Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-11-03 <i>072002707-0032</i> <i>Composite Analysis</i>	Plaster (Composite Analysis)	Various Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-11-04 <i>072002707-0033</i> <i>Composite Analysis</i>	Plaster (Composite Analysis)	Various Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-11-05 <i>072002707-0034</i> <i>Composite Analysis</i>	Plaster (Composite Analysis)	Various Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-11-06 <i>072002707-0035</i> <i>Composite Analysis</i>	Plaster (Composite Analysis)	Various Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-12-01-Floor Tile <i>072002707-0036</i>	Floor Tile, 18"x10", Stone Pattern	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-12-01-Mastic <i>072002707-0036A</i>	Floor Tile, 18"x10", Stone Pattern	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-12-02-Floor Tile <i>072002707-0037</i>	Floor Tile, 18"x10", Stone Pattern	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-12-02-Mastic <i>072002707-0037A</i>	Floor Tile, 18"x10", Stone Pattern	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-13-01-Stair Tread <i>072002707-0038</i>	Stair Tread, Gray	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-13-01-Mastic <i>072002707-0038A</i>	Stair Tread, Gray	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-13-02-Stair Tread <i>072002707-0039</i>	Stair Tread, Gray	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
3989-13-02-Mastic <i>072002707-0039A</i>	Stair Tread, Gray	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-14-01-Stair Tread <i>072002707-0040</i>	Stair Tread, Black	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-14-01-Mastic <i>072002707-0040A</i>	Stair Tread, Black	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-14-02-Stair Tread <i>072002707-0041</i>	Stair Tread, Black	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-14-02-Mastic <i>072002707-0041A</i>	Stair Tread, Black	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-15-01 <i>072002707-0042</i>	Ceiling Tile, 2'x2', Crevasses And Many Pin Holes	Gray Fibrous Homogeneous	60% Cellulose 10% Min. Wool	30% Non-fibrous (Other)	None Detected
3989-15-02 <i>072002707-0043</i>	Ceiling Tile, 2'x2', Crevasses And Many Pin Holes	Gray Fibrous Homogeneous	60% Cellulose 10% Min. Wool	30% Non-fibrous (Other)	None Detected
3989-16-01-Floor Tile <i>072002707-0044</i>	Floor Tile, 12", Cream With Gray And Brown Spots	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-16-01-Mastic <i>072002707-0044A</i>	Floor Tile, 12", Cream With Gray And Brown Spots <i>Result includes a small amount of inseparable attached material</i>	Black Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
3989-16-02-Floor Tile <i>072002707-0045</i>	Floor Tile, 12", Cream With Gray And Brown Spots	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-16-02-Mastic <i>072002707-0045A</i>	Floor Tile, 12", Cream With Gray And Brown Spots <i>Result includes a small amount of inseparable attached material</i>	Black Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
3989-17-01 <i>072002707-0046</i>	Ceiling Tile, 1'x1', Holes In Row/ Column Pattern	Brown Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
3989-17-02 <i>072002707-0047</i>	Ceiling Tile, 1'x1', Holes In Row/ Column Pattern	Brown Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
3989-18-01 <i>072002707-0048</i>	Gray Duct Sealant	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-18-02 <i>072002707-0049</i>	Gray Duct Sealant	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-18-03 <i>072002707-0050</i>	Gray Duct Sealant	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-19-01 <i>072002707-0051</i>	White Coating/ Sealant On Pipe Insulation (Composite Analysis)	White Non-Fibrous Homogeneous		94% Non-fibrous (Other)	6% Chrysotile
3989-19-02 <i>072002707-0052</i>	White Coating/ Sealant On Pipe Insulation (Composite Analysis)	White Non-Fibrous Homogeneous		94% Non-fibrous (Other)	6% Chrysotile

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
3989-19-03 072002707-0053	White Coating/ Sealant On Pipe Insulation (Composite Analysis)	White Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
3989-20-01 072002707-0054	Glue Dots (Composite Analysis)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-20-02 072002707-0055	Glue Dots (Composite Analysis)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-20-03 072002707-0056	Glue Dots (Composite Analysis)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-21-01 072002707-0057	Rock Lath (Composite Analysis)	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-21-02 072002707-0058	Rock Lath (Composite Analysis)	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-22-01 072002707-0059	Ceiling Tile, 1'x1', Crevasses And Gouges	Gray Fibrous Homogeneous	60% Cellulose 5% Min. Wool	35% Non-fibrous (Other)	None Detected
3989-22-02 072002707-0060	Ceiling Tile, 1'x1', Crevasses And Gouges	Gray Fibrous Homogeneous	60% Cellulose 5% Min. Wool	35% Non-fibrous (Other)	None Detected
3989-23-01 072002707-0061	Ceiling Tile, 1'x1', Gray, Maze Pattern	Gray Fibrous Homogeneous	60% Cellulose 5% Min. Wool	35% Non-fibrous (Other)	None Detected
3989-23-02 072002707-0062	Ceiling Tile, 1'x1', Gray, Maze Pattern	Gray Fibrous Homogeneous	60% Cellulose 5% Min. Wool	35% Non-fibrous (Other)	None Detected
3989-24-01 072002707-0063	Cementitious Coating On Fiberglass Pipe Fitting Insulation	Gray Fibrous Homogeneous	40% Min. Wool	60% Non-fibrous (Other)	None Detected
3989-24-02 072002707-0064	Cementitious Coating On Fiberglass Pipe Fitting Insulation	Gray Fibrous Homogeneous	40% Min. Wool	60% Non-fibrous (Other)	None Detected
3989-24-03 072002707-0065	Cementitious Coating On Fiberglass Pipe Fitting Insulation	Gray Non-Fibrous Homogeneous	40% Min. Wool	60% Non-fibrous (Other)	None Detected
3989-25-01 072002707-0066	Floor Tile, 9", Beige With Black And Gray Spots	Beige Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
3989-25-02 072002707-0067	Floor Tile, 9", Beige With Black And Gray Spots	Beige Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
3989-26-01 072002707-0068	Ceiling Finish	Gray Fibrous Homogeneous		92% Non-fibrous (Other)	8% Chrysotile
3989-26-02 072002707-0069	Ceiling Finish	Gray Fibrous Homogeneous		92% Non-fibrous (Other)	8% Chrysotile
3989-26-03 072002707-0070	Ceiling Finish	Gray Fibrous Homogeneous		92% Non-fibrous (Other)	8% Chrysotile

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
3989-27-01-Stair Tread <small>072002707-0071</small>	Stair Tread, Brown	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-27-01-Mastic <small>072002707-0071A</small>	Stair Tread, Brown	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-27-02-Stair Tread <small>072002707-0072</small>	Stair Tread, Brown	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-27-02-Mastic <small>072002707-0072A</small>	Stair Tread, Brown	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-28-01 <small>072002707-0073</small>	Stucco	Various Non-Fibrous Homogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
3989-28-02 <small>072002707-0074</small>	Stucco	Various Non-Fibrous Homogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
3989-28-03 <small>072002707-0075</small>	Stucco	Various Non-Fibrous Homogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
3989-29-01 <small>072002707-0076</small>	Caulk, Exterior	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-29-02 <small>072002707-0077</small>	Caulk, Exterior	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3989-29-03 <small>072002707-0078</small>	Caulk, Exterior	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Analyst(s)

Kyle Rich (81)

Violedah Richardson (15)

Michael Murphy
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. 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. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc Smyrna, GA NVLAP Lab Code 101048-1

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Chain of Custody

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072002707

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Address2:		Address2:	
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Country:		Country:	
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EMSL Rep:		P.O. Number:	
Project Name/Number:	PH&J, Alexander City, City Hall, MA 3989		

MATRIX			TURNAROUND			
<input type="checkbox"/> Air	<input type="checkbox"/> Soil	<input type="checkbox"/> Micro-Vac	<input type="checkbox"/> 3 Hours	<input type="checkbox"/> 6 Hours	<input type="checkbox"/> Same Day or 12 Hours*	<input type="checkbox"/> 24 Hours (1 day)
<input checked="" type="checkbox"/> Bulk	<input type="checkbox"/> Drinking Water		<input checked="" type="checkbox"/> 48 Hours (2 days)	<input type="checkbox"/> 72 Hours (3 days)	<input type="checkbox"/> 96 Hours (4 days)	<input type="checkbox"/> 120 Hours (5 days)
<input type="checkbox"/> Wipe	<input type="checkbox"/> Wastewater		<input type="checkbox"/> 144+ hours (6-10 days)			

TEM AIR, 3 hours, 6 hours, Please call ahead to schedule. There is a premium charge for 3-hour tat, please call 1-800-220-3675 for price prior to sending samples. You will be asked to sign an authorization form for this service.

*12 hours (must arrive by 11:00a.m. Mon -Fri.), Please Refer to Price Quote

<p>PCM - Air</p> <input type="checkbox"/> NIOSH 7400(A) Issue 2: August 1994 <input type="checkbox"/> OSHA w/TWA <input type="checkbox"/> Other:	<p>TEM Air</p> <input type="checkbox"/> AHERA 40 CFR, Part 763 Subpart E <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II	<p>TEM WATER</p> <input type="checkbox"/> EPA 100.1 <input type="checkbox"/> EPA 100.2 <input type="checkbox"/> NYS 198.2
<p>PLM - Bulk</p> <input checked="" type="checkbox"/> EPA 600/R-93/116 <input type="checkbox"/> EPA Point Count <input type="checkbox"/> NY Stratified Point Count <input type="checkbox"/> PLM NOB (Gravimetric) NYS 198.1 <input type="checkbox"/> NIOSH 9002: <input type="checkbox"/> EMSL Standard Addition:	<p>TEM BULK</p> <input type="checkbox"/> Drop Mount (Qualitative) <input type="checkbox"/> Chatfield SOP - 1988-02 <input type="checkbox"/> TEM NOB (Gravimetric) NYS 198.4 <input type="checkbox"/> EMSL Standard Addition:	<p>TEM Microvac/Wipe</p> <input type="checkbox"/> ASTM D 5755-95 (quantative method) <input type="checkbox"/> Wipe Qualitative
<p>SEM Air or Bulk</p> <input type="checkbox"/> Qualitative <input type="checkbox"/> Quantitative	<p>PLM Soil</p> <input type="checkbox"/> EPA Protocol Qualitative <input type="checkbox"/> EPA Protocol Quantitative <input type="checkbox"/> EMSL MSD 9000 Method fibers/gram	<p>XRD</p> <input type="checkbox"/> Asbestos <input type="checkbox"/> Silica NIOSH 7500
		<p>OTHER</p> <input type="checkbox"/> CARB 435 A (PLM to 0.25%)



Chain of Custody

Asbestos Lab Services

EMSL Analytical, Inc.
Suite 135
1770 The Exchange
Atlanta, GA 30339
Phone: (770) 956-9150
Fax: (770) 956-9181
<http://www.emsl.com>

Please print all information legibly.

Client Sample # (s) 3989-01-01 - 3989-29-03 Total Samples #: 78

Relinquished: *[Signature]* Date: 4/13/20 Time: 1630

Received: *[Signature]* Date: 4-14-20 Time: 8:40 EFL

Relinquished: _____ Date: _____ Time: _____

Received: _____ Date: _____ Time: _____

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
3989-01-01	floor tile, 12", gray and white mottled	
3989-01-02	floor tile, 12", gray and white mottled	
3989-01-03	floor tile, 12", gray and white mottled	
3989-02-01	ceiling tile, 1' x 1', crevassed surface	
3989-02-02	ceiling tile, 1' x 1', crevassed surface	
3989-02-03	ceiling tile, 1' x 1', crevassed surface	
3989-03-01	carpet adhesive	
3989-03-02	carpet adhesive	
3989-03-03	carpet adhesive	
3989-04-01	wallboard and joint compound (composite analysis)	
3989-04-02	wallboard and joint compound (composite analysis)	
3989-04-03	wallboard and joint compound (composite analysis)	
3989-04-04	wallboard and joint compound (composite analysis)	
3989-04-05	wallboard and joint compound (composite analysis)	

CHAIN OF CUSTODY (continued)**PH&J, Alexander City, City Hall, MA 3989**

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
3989-05-01	ceiling tile, 2' x 2', gouges and pin holes, recessed grid	
3989-05-02	ceiling tile, 2' x 2', gouges and pin holes, recessed grid	
3989-05-03	ceiling tile, 2' x 2', gouges and pin holes, recessed grid	
3989-06-01	caulk, interior	
3989-06-02	caulk, interior	
3989-07-01	ceiling tile, 2' x 2', gouges and pin holes	
3989-07-02	ceiling tile, 2' x 2', gouges and pin holes	
3989-07-03	ceiling tile, 2' x 2', gouges and pin holes	
3989-08-01	stair tread, tan with cream and gray mottling	
3989-08-02	stair tread, tan with cream and gray mottling	
3989-09-01	cove base adhesive (composite analysis)	
3989-09-02	cove base adhesive (composite analysis)	
3989-09-03	cove base adhesive (composite analysis)	
3989-10-01	stair tread, beige, cream, and gray mottled	
3989-10-02	stair tread, beige, cream, and gray mottled	
3989-11-01	plaster (composite analysis)	
3989-11-02	plaster (composite analysis)	
3989-11-03	plaster (composite analysis)	
3989-11-04	plaster (composite analysis)	
3989-11-05	plaster (composite analysis)	
3989-11-06	plaster (composite analysis)	
3989-12-01	floor tile, 18" x 10", stone pattern	
3989-12-02	floor tile, 18" x 10", stone pattern	
3989-13-01	stair tread, gray	
3989-13-02	stair tread, gray	
3989-14-01	stair tread, black	
3989-14-02	stair tread, black	
3989-15-01	ceiling tile, 2' x 2', crevasses and many pin holes	
3989-15-02	ceiling tile, 2' x 2', crevasses and many pin holes	
3989-16-01	floor tile, 12", cream with gray and brown spots	
3989-16-02	floor tile, 12", cream with gray and brown spots	
3989-17-01	ceiling tile, 1' x 1', holes in row/column pattern	
3989-17-02	ceiling tile, 1' x 1', holes in row/column pattern	

CHAIN OF CUSTODY (continued)

PH&J, Alexander City, City Hall, MA 3989

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
3989-18-01	gray duct sealant	
3989-18-02	gray duct sealant	
3989-18-03	gray duct sealant	
3989-19-01	white coating/sealant on pipe insulation (composite analysis)	
3989-19-02	white coating/sealant on pipe insulation (composite analysis)	
3989-19-03	white coating/sealant on pipe insulation (composite analysis)	
3989-20-01	glue dots (composite analysis)	
3989-20-02	glue dots (composite analysis)	
3989-20-03	glue dots (composite analysis)	
3989-21-01	rock lath (composite analysis)	
3989-21-02	rock lath (composite analysis)	
3989-22-01	ceiling tile, 1' x 1', crevasses and gouges	
3989-22-02	ceiling tile, 1' x 1', crevasses and gouges	
3989-23-01	ceiling tile, 1' x 1', gray, maze pattern	
3989-23-02	ceiling tile, 1' x 1', gray, maze pattern	
3989-24-01	cementitious coating on fiberglass pipe fitting insulation	
3989-24-02	cementitious coating on fiberglass pipe fitting insulation	
3989-24-03	cementitious coating on fiberglass pipe fitting insulation	
3989-25-01	floor tile, 9", beige with black and gray spots	
3989-25-02	floor tile, 9", beige with black and gray spots	
3989-26-01	ceiling finish	
3989-26-02	ceiling finish	
3989-26-03	ceiling finish	
3989-27-01	stair tread, brown	
3989-27-02	stair tread, brown	
3989-28-01	stucco	
3989-28-02	stucco	
3989-28-03	stucco	
3989-29-01	caulk, exterior	
3989-29-02	caulk, exterior	
3989-29-03	caulk, exterior	



February 19, 2008

Mr. Randy M. Thomas
The City of Alexander City
4 Court Square
P.O. Box 552
Alexander City, Alabama 35011-0552

Reference: Hazardous Materials Surveys
Alexander City Police Department

Dear Mr. Thomas:

In accordance with EMC's proposal we have completed the hazardous materials surveys of the Alexander City Police Department, Alexander City, Alabama. This report presents our findings.

BACKGROUND INFORMATION

The old City Hall building, which currently houses the Alexander City Police Department, is a three-story masonry structure that the city has planned to restore and renovate. Before restoration/renovation activities can commence surveys must be performed to identify asbestos-containing building materials, lead-based paints, mercury lamps, PCB ballasts and other hazardous materials, so they can be dealt with properly.

ASBESTOS SURVEYS

On the days of January 25th and 28th, 2008 EMC personnel toured the Alexander City Police Department. During their tour they recorded the location of forty materials that are considered suspect to contain asbestos. Bulk samples for asbestos analysis were obtained in general accordance with EPA recommendations. The EPA's recommended procedures involve representative sample site selection within sampling areas. Bulk samples of materials were collected by Marlinah McCall, an accredited asbestos inspector, and forwarded to the laboratory for analysis.

The bulk samples were analyzed by polarized light microscopy (PLM) coupled with dispersion staining. This procedure is a technique that is used to identify asbestos fibers by their shape and unique optical properties. Floor tile that could not be shown conclusively to contain asbestos by PLM was then sent for analysis by transmission electron microscopy (TEM). TEM is a method of analysis that can identify the smaller milled asbestos fibers present in many floor tiles. The analyses identified twenty-three asbestos-containing materials; floor tile (six types), mastic (six types), window glazing putty, window caulk, furnace heat shield, white duct tape, cementitious pipe run insulation (two types), pipe fitting insulation (two types), cementitious boiler insulation, cementitious boiler flue insulation, and cementitious boiler door insulation. A summarization of our results is provided in a table included with this report. Specific data for each sample analysis is shown on the enclosed analysis sheets.

FLUORESCENT LIGHT SURVEY

EMC personnel toured the Alexander City Police Department and noted the presence of mercury lamps in fluorescent light fixtures. An inventory of fluorescent light fixtures was made, identifying eight different types. A representative number of fixtures were then checked

for the presence of ballasts that are not labeled "No PCB's". The ratio of ballasts marked "No PCB's" to those not marked was noted for each type of fixture checked. From those ratios, an estimation of the total number of PCB containing ballasts was calculated. A summarization of those results is provided in a table included with this report.

LEAD-BASED PAINT TESTING

On January 28, 2008 Haynes Kelley, an accredited lead paint inspector, made visual observations of the Alexander City Police Department to identify exposed interior painted/glazed surfaces. Based on those observations X-Ray Fluorescence (XRF) testing was performed using a Radiation Monitoring Devices, Inc. LPA-1 Lead Paint Analyzer. Paint was tested to determine if significant areas of lead-based paints are present. A total of seventy-five lead level readings were taken, including six calibration readings.

The RMD, Inc. LPA-1 utilizes an XRF spectrum analyzing system for the quantitative measurement of lead in paint. The LPA-1 method of measurement is based on spectrometric analysis of lead K-shell x-ray fluorescence within a controlled depth of interrogation. The calibration of the XRF machine was verified with a NIST supplied standard before and after testing.

In accordance with the HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, lead-based paint is defined as paint with lead content equal to or in excess of 1.0 mg/cm². This level of 1.0 mg/cm² is known as the action level. The HUD action level is currently used for testing in the state of Alabama. Therefore paints tested during this job are classified as "positive" if the lead concentration is greater than or equal to 1.0 mg/cm² and "negative" if the lead concentration is less than 1.0 mg/cm². OSHA does not recognize the HUD action level because OSHA's regulations address elevated airborne lead concentrations and those concentrations could result from work on paints with lead concentrations less than the HUD action level.

All readings that fell within the inconclusive range have been treated as positive readings. Positive lead levels were found on a concrete block wall, plaster walls, a wood panel wall, and a metal wall. Our test results and detailed information are provided in the enclosed inspection report.

ASBESTOS COMMENTS

The window glazing putty, window caulk, white duct tape, furnace heat shield, cementitious pipe run insulation, cementitious pipe fitting insulation, cementitious boiler insulation, cementitious boiler flue insulation, and cementitious boiler door insulation identified within the building are classified as friable asbestos-containing materials. EPA's NESHAP regulation classifies all friable asbestos-containing materials (ACM) as regulated asbestos containing-materials (RACM) and requires that they be properly removed and disposed prior to renovation activities which may disturb them.

The floor tiles and mastics identified within the building are classified by the EPA as a category I non-friable asbestos-containing materials. Category I non-friable materials are regulated under NESHAP if they become friable or are to be subjected to grinding, cutting, sanding, or abrading.

OSHA considers removal of the cementitious pipe run insulation, cementitious pipe fitting insulation, cementitious boiler insulation, cementitious boiler flue insulation, and cementitious boiler door insulation to be class I asbestos work and the removal of the other asbestos-containing materials to be class II asbestos work. OSHA's requirements for class I work are more stringent than for class II and for both classes they require establishment of regulated

areas, supervision by a competent person, worker training, adherence to specified work practices and respiratory protection (or documentation that it is not required). The Alabama Department of Environmental Management (ADEM) requires that all asbestos wastes be disposed in a permitted facility.

FLUORESCENT LIGHTS COMMENTS

The Alexander City Police Department contains approximately one hundred sixty individual fixtures having a total of approximately five hundred fifty mercury lamps. The majority of the light ballasts checked were marked "No PCB's". An estimate of the total number of PCB containing ballasts, based on our findings, is fifteen. EPA and ADEM Universal Waste regulations require that PCB and mercury wastes be properly packaged and disposed or recycled if they are not to be reused. Because most disposal facilities cannot accept these wastes they are normally recycled.

LEAD-BASED PAINT COMMENTS

In regard to renovation projects, OSHA regulations require contractors to protect their workers from exposure to elevated concentrations of airborne lead dust. EPA regulations require that lead containing wastes be tested for leachability to determine if they are hazardous, and then disposed properly. There is not a direct correlation between the amount of lead in a painted surface and airborne or leachable lead concentrations associated with renovation and/or demolition of that surface. Only by testing the air during the renovation work and by testing the waste stream from the work can those concentrations be determined.

LIMITATIONS

Environmental-Materials Consultants, Inc. surveys were limited to exposed materials in the building. Environmental-Materials Consultants, Inc. did not perform demolition of walls, ceilings, flooring materials or insulations to sample or test underlying materials. Occasional corners of carpeting were lifted to try to identify underlying floor tiles. This report has been prepared for the use of The City of Alexander City. No other warranties are expressed or implied.

We are glad to have been able to provide these services. Please do not hesitate to call if you have questions about this report.

Sincerely,
Environmental-Materials Consultants, Inc.


W. Haynes Kelley, Jr., P.E.
President

Enclosure

**ASBESTOS SURVEY RESULTS
ALEXANDER CITY POLICE DEPARTMENT
ALEXANDER CITY, ALABAMA**

EMC Project No. MA-1968

January 2008

EMC HSA#	Material Description	General Location*	Asbestos
01	plaster	throughout the building	none detected
02	12"x12" floor tile: tan with brown and cream specks	west hall on the second floor	none detected
02a	mastic		none detected
03	9"x9" floor tile: brown with tan streaks	west hall on the second floor (under A/C unit) and under HSA 04	15% chrysotile
03a	mastic		none detected
04	12"x12" floor tile: white with grey specks		none detected
04a	mastic		none detected
05	window glazing putty	interior and exterior side of the windows	10% chrysotile
06	2"x2' ceiling tile: small pocks and holes	courtroom	none detected
07	carpet glue	in some rooms throughout the building	none detected
08	wallboard		none detected
09	2"x2' ceiling tile: large crevices and small holes		none detected
10	12"x12" floor tile: cream with brown and white specks		none detected
10a	mastic		20% chrysotile
11	12"x12" floor tile: white with black specks		none detected
11a	mastic		none detected
12	12"x12" floor tile: brown with cream specks		none detected
12a	mastic		none detected
13	ceiling finish		none detected
14	2"x4' ceiling tile: long crevices and small holes		none detected
15	12"x12" floor tile: cream with beige specks		none detected
15a	mastic		none detected
16	12"x12" floor tile: cream, brown and green mottle		none detected
16a	mastic		20% chrysotile
17	2"x4' ceiling tile: white	Court Clerk's office on the first floor	none detected
18	cementitious pipe fitting insulation	boiler room	60% chrysotile
19	cementitious pipe run insulation (small pipes)	boiler room	70% chrysotile
20	12"x12" floor tile: light grey with grey and white specks	dispatch breakroom and adjoining equipment room	none detected
20a	mastic		none detected
21	white duct tape	first floor halls, dispatch office, restroom, and Janitor's closet	90% chrysotile
22	mastic	first floor AC closet	none detected
23	12"x12" floor tile: cream with white and brown specks	ground floor monitoring room lobby	none detected
23a	mastic		none detected
24	12"x12" floor tile: grey, brown and cream mottle	locker room	none detected
24a	mastic		none detected
25	12"x12" floor tile: cream with brown streaks	locker room	none detected
25a	mastic		none detected
26	white coating on fiberglass pipe run insulation	booking	none detected

continued

**ASBESTOS SURVEY RESULTS
ALEXANDER CITY POLICE DEPARTMENT
ALEXANDER CITY, ALABAMA**

EMC Project No. MA-1968

January 2008

EMC HSA#	Material Description	General Location*	Asbestos
27	cementitious pipe run insulation (large pipes)	boiler room	60% chrysotile
28	cementitious boiler insulation	boiler room	40% chrysotile
29	cementitious boiler flue insulation	boiler room	60% chrysotile
30	cementitious boiler door insulation	boiler room	35% chrysotile
31	window caulk	throughout the building	10% chrysotile
32	floor tile in the elevator	under carpet in the elevation	none detected
32a	mastic		none detected
33	floor tile: tan		35% chrysotile
33a	mastic		20% chrysotile
34	floor tile: black		none detected
34a	mastic		20% chrysotile
35	floor tile: grey	under carpet in the operations office	25% chrysotile
35a	mastic		20% chrysotile
36	floor tile: beige	under HSA 23	20% chrysotile
36a	mastic		20% chrysotile
37	panel above furnace	above furnace in the jail	85% chrysotile
38	boiler gasket: white	boiler room	none detected
39	boiler gasket: cotton-like	boiler room	none detected
40	boiler gasket: rope-like	boiler room	none detected

Materials shown in bold contain asbestos

* General location information is provided to assist in identifying the material and may not list all locations where the material exists.

*** No TEM analysis intended because the underlying floor tile and mastic have been determined to contain asbestos.

**Analyzed by PLM and TEM

**FLUORESCENT LIGHT SURVEY RESULTS
ALEXANDER CITY POLICE DEPARTMENT
ALEXANDER CITY, ALABAMA**

January 2008

Description	Length (ft)	# of Lamps	# of Ballasts	# Checked	Ballast Type	Marked No PCB's	# of Fixtures
2'x4' lay-in, plastic mini-diamond cover	4'	4	2	6	Advance, Magnetek Universal, Universal GE, GE	yes, yes yes, yes yes, yes	81
1/2'x8', flush mount, no cover	8'	2	1	3	Advance, Universal Universal, Universal Universal, Universal	yes, yes yes yes	32
1'x4' flush mount, no cover	4'	2	1	2	Universal Advance	yes yes	20
1/4'x4', flush mount, no cover	4'	1	1	1	Magnetek	yes	3
4'x4' flush mount, smooth plastic cover, wood casing	4'	6	3	3	GE, Magnetek, GE Advance, Magnetek, Magnetek	no, yes, yes yes, yes, yes	12
1/2'x4', flush mount, no cover	4'	2	1	1	Universal	no	7
2'x4' lay-in, metal ice-cube cover	4'	4	2	2	GE, GE	yes, yes	3
2'x2' lay-in, plastic mini-diamond cover	2	2	1	1	Advance	yes	2

SEQUENTIAL REPORT OF LEAD PAINT INSPECTION FOR: City of Alexander City

Inspection Date: 01/28/08 Alexander City Police Department
 Report Date: 4/4/2008
 Abatement Level: 1.0
 Report No. S#01333 - 01/28/08 14:25
 Total Readings: 75
 Job Started: 01/28/08 14:25
 Job Finished: 01/28/08 15:58

Read No.	Rm No.	Room Name	Wall	Structure	Location	Member	Paint			Lead (mg/cm ²)	Mode
							Cond	Substrate	Color		
1		CALIBRATION								1.1	TC
2		CALIBRATION								1.1	TC
3		CALIBRATION								1.2	TC
4	001	2nd FL N St	A	Wall		U Rgt		F Plaster	White	0.2	QM
5	001	2nd FL N St	A	Window		Lft Sash		P Metal	White	0.2	QM
6	001	2nd FL N St	A	Window		Rgt Sill		P Slate	White	0.3	QM
7	001	2nd FL N St	A	Floor				I Ceramic	Brown	0.0	QM
8	001	2nd FL N St	B	Wall		U Rgt		I Plaster	White	-0.1	QM
9	001	2nd FL N St	C	Column		Rgt L column		I Plaster	White	0.2	QM
10	002	2 FL N Hall	A	Wall		L Lft		I Wood	White	0.2	QM
11	002	2 FL N Hall	B	Wall		U Rgt		I Plaster	White	-0.1	QM
12	002	2 FL N Hall	B	Door		Rgt Lft casing		I Wood	White	-0.1	QM
13	002	2 FL N Hall	C	Door		Lft U Rgt		I Wood	Natural	0.1	QM
14	002	2 FL N Hall	C	Wall		U Rgt		I Conc Block	White	0.0	QM
15	003	Courtroom	A	Wall		L Lft		I Conc Block	Brown	-0.1	QM
16	003	Courtroom	A	Wall		U Rgt		I Plaster	Tan	2.6	QM
17	003	Courtroom	B	Window		Lft Sash		I Metal	Tan	0.2	QM
18	003	Courtroom	B	Window		Rgt Sill		I Slate	Tan	-0.1	QM
19	003	Courtroom	C	Bench		Ctr		I Wood	Natural	0.1	QM
20	003	Courtroom	D	Jury Box		Rgt		I Wood	Brown	0.0	QM
21	003	Courtroom	D	Wall		U Ctr		I Plaster	Tan	3.2	QM
22	003	Courtroom	D	Wall		U Rgt		I Plaster	Tan	2.5	QM
23	003	Courtroom	D	Base Mldg		Rgt		I Wood	Brown	-0.1	QM
24	004	1FL C Hall	A	Wall		U Lft		I Plaster	White	0.0	QM
25	004	1FL C Hall	A	Door		Lft L Rgt		I Wood	Grey	0.0	QM
26	004	1FL C Hall	A	Door		Lft Rgt casing		I Wood	Grey	0.2	QM
27	004	1FL C Hall	A	Base Mldg		Ctr		I Wood	Grey	-0.1	QM
28	004	1FL C Hall	A	Window		Rgt Rgt casing		I Wood	Grey	-0.1	QM
29	004	1FL C Hall	C	Window		Rgt Sash		P Metal	White	1.0	QM
30	004	1FL C Hall	A	Wall		U Lft		I Plaster	White	0.0	QM
31	004	1FL C Hall	A	Door		Ctr L Rgt		I Wood	White	0.1	QM
32	004	1FL C Hall	B	Base Mldg		Lft		I Wood	Black	-0.1	QM
33	004	1FL C Hall	B	Column		Lft U column		I Plaster	White	0.1	QM
34	004	1FL C Hall	B	Wall		L Rgt		I Plaster	White	-0.1	QM
35	005	1FL TR Room	A	Wall		U Lft		F Plaster	White	0.2	QM
36	005	1FL TR Room	A	Chair Rail		Lft		I Wood	White	0.2	QM
37	005	1FL TR Room	A	Base Mldg		Ctr		F Wood	Black	-0.1	QM
38	005	1FL TR Room	B	Door		Lft U Rgt		I Wood	White	0.0	QM
39	005	1FL TR Room	B	Door		Lft Rgt casing		I Wood	White	0.1	QM
40	005	1FL TR Room	B	Wall		L Lft		I Plaster	White	6.8	QM
41	005	1FL TR Room	C	Base Mldg		Ctr		F Metal	White	-0.1	QM
42	005	1FL TR Room	C	Base Mldg		Rgt		I Wood	Black	0.2	QM
43	005	1FL TR Room	D	Window		Lft Sash		I Metal	White	1.0	QM
44	005	1FL TR Room	D	Wall		L Lft		I Plaster	White	0.1	QM
45	006	Clerks Off	A	Wall		U Ctr		I Wood Panel	White	0.2	QM
46	006	Clerks Off	A	Door		Ctr Lft casing		I Wood	White	0.3	QM
47	006	Clerks Off	A	Base Mldg		Ctr		I Wood	White	0.0	QM

SEQUENTIAL REPORT OF LEAD PAINT INSPECTION FOR: City of Alexander City

Read No.	Rm No.	Room Name	Wall Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm ²)	Mode
48	006	Clerks Off	B	Window	Lft Sash	F	Metal	White	0.2	QM
49	006	Clerks Off	B	Wall	L Rgt	I	Wood Panel	White	0.2	QM
50	006	Clerks Off	C	Wall	U Rgt	I	Wood Panel	White	0.3	QM
51	007	G FL Stair	A	Wall	U Lft	I	Plaster	White	0.3	QM
52	007	G FL Stair	A	Door	Lft L Lft	I	Wood	White	0.2	QM
53	007	G FL Stair	A	Door	Rgt Rgt casing	I	Wood	White	0.0	QM
54	007	G FL Stair	B	Wall	L Lft	I	Plaster	White	0.0	QM
55	007	G FL Stair	B	Floor		F	Concrete	Grey	-0.1	QM
56	007	G FL Stair	B	Streammer	Ctr	I	Concrete	White	0.1	QM
57	007	G FL Stair	C	Wall	U Rgt	I	Plaster	White	0.0	QM
58	008	Womens Cell	A	Wall	U Lft	I	Conc Block	Peach	0.1	QM
59	008	Womens Cell	A	Floor		I	Concrete	Red	0.0	QM
60	008	Womens Cell	B	Door	Ctr Lft casing	I	Metal	Red	0.0	QM
61	008	Womens Cell	B	Door	Rgt U Lft	I	Metal	Peach	0.0	QM
62	008	Womens Cell	C	Wall	U Rgt	I	Concrete	Peach	-0.2	QM
63	008	Womens Cell	C	Ceiling		I	Concrete	Peach	0.1	QM
64	009	A Block	A	Wall	L Rgt	I	Metal	Peach	4.1	QM
65	009	A Block	A	Floor		I	Concrete	Red	-0.2	QM
66	009	A Block	A	Door	Ctr Lft casing	I	Metal	Peach	-0.1	QM
67	009	A Block	A	Wall	U Rgt	I	Concrete	Peach	0.1	QM
68	009	A Block	B	Column	Ctr U column	I	Concrete	Peach	0.0	QM
69	009	A Block	C	Wall	L Lft	I	Concrete	Peach	0.4	QM
70	010	Elev Lobby	A	Wall	U Lft	I	Conc Block	White	-0.1	QM
71	010	Elev Lobby	B	Wall	U Lft	I	Brick	White	-0.1	QM
72	010	Elev Lobby	C	Wall	U Lft	F	Conc Block	White	-0.1	QM
73		CALIBRATION							1.1	TC
74		CALIBRATION							1.0	TC
75		CALIBRATION							1.1	TC

---- End of Readings ----

APPENDIX C

BLACKBURN, DANIELS, O'BARR STRUCTURAL ENGINEERS



Observation Report



P.O. BOX 100
8805 CO. RD 40E
Lowndesboro, AL 36752
P: 334-265-0206 F: 334-265-0207
www.blackburneng.com

To: Hal Gandy
From: Jack Daniels
Date: 5-11-20
Subject: Alexander City Hall and Police Station Observation

Observation Date: 4-2-20
Site Conditions: Normal

Comments:

A site visit was made to the Alexander City Hall and Police Station on 4-2-20 to observe the structural condition of the two buildings. The purpose of the site visit was to walk through and observe the buildings and determine if there are any structural issues. The observation consisted of a walk around the exterior of the building, an interior walk through of the building, and a roof observation. No demolition was made during the observation so the only parts of the building observed were those exposed to view.

At the time of the observation both the City Hall building and the Police Station were occupied and being used for business. The City Hall building was the first building observed. The structural system for this building was a mixture of several types of construction as it appears it has been added on to and or renovated in the past. The older portion appears to consist of wood framed floors and roof. The newer portion appears to consist of bar joist floor system with wood roof. At some point there was a concrete vault added to the older portion with columns that extend to the basement area. This building has many stairs accessing the different levels and areas of the building but the primary structure consists of a basement a main level and a mezzanine level. The many existing additions and levels will make it extremely difficult to make this building ADA compliant. At the time of the observation there appeared to be some minor cracks in some of the interior CMU walls. These may be seen in picture #2. My recommendation for the cracks would be to patch them and monitor for worsening conditions. If the cracks worsen over time then remedial repairs may need to be made. There were also

some areas in the older wood framed portion that appears to have sagging floors. These may be seen in picture #5. It is difficult to determine exactly why these floors are sagging but may be due to long term deflections, rot, or water damage. At the rear of the building the exterior finish has been removed from what I was told to be cracking. This may be seen in picture #8. One of the major structural concerns with this building is with the attachment of the precast panels at the front of the building. At the time of the observation near the top corners, the precast panels appear to be pulling away from the building. These may be seen in pictures # 9 thru #11. This is most likely due to a failing connection. I recommend removing the panels that appear to be displaced and try an determine a proper solution once the connections can be viewed.

The Police department building was the next building observed and was previously used as the City Hall originally built in the 1930's. This building is constructed with a concrete frame and has a basement, main level, upper level and a roof. All levels appear to be a concrete frame. There was an addition made in 1982 that appears to consist of a bar joist floor system with metal deck and slab. At the time of the observation there appears to be quite a bit of water intrusion near the junction of the old building and the 1982 addition. There is also a crack in the interior finish of a bathroom. These pictures may be seen in pictures #12 thru #14. On the exterior of the building there appears to be some stair stepping cracks in the brick near the top corners of the building. These may be seen in pictures #16 and #17. My recommendation for the cracks in the brick would be to patch them and monitor for worsening conditions. If the cracks worsen over time then remedial repairs may need to be made. Overall there were no major structural concerns with this building at the time of the observation

Whenever one assess whether or not it is advantageous to keep an existing building, and possibly make modifications to it, the applicable Building Codes need to be taken into consideration. Much of what the Owner may want to be done to the structure may not be feasible based on the requirements of the code. The International Building Code 2009 Chapter 34 on Existing Structures Section 3403 thru 3405 discusses additions, alterations or repairs to existing buildings. Our interpretation of the code is that if any alterations are required to the structure then the building will have to comply with the code requirements for a new structure. This stipulation in the code can and will greatly affect some of the decisions the Owner will make regarding what will need to stay and what will need to be altered.

It may be possible to make modifications to the existing structure, however the Owner will have to compare the cost of these repairs to the cost of demolition and replacing the space with a new structure. These costs will not only be structural in some areas of the buildings, but also aesthetics, mechanical, electrical and plumbing systems will have to be evaluated for suitability. It has been our experience that if the structure has to be modified then it will not be cost effective to renovate a building.

Please note that Blackburn Daniels O'Barr was not the structural engineer of record for this building and therefore assumes no responsibility for the design and construction of the existing building.

Thank you for the opportunity to provide our services, if any question arise from this observation report please contact our office.



Picture #1. Front lobby of City Hall



Picture #2. CMU cracks



Picture #3. Wood framed floor system



Picture #4. Water intrusion



Picture #5. Are where floor appeared to sag



Picture #6. Roof



Picture #7. Added steel most likely from an addition



Picture #8. Exterior finish has been removed



Picture #9. Precast attachment appear to be failing



Picture #10. Precast pulling away from building



Picture #11. Precast joints appear to be failing



Picture #12. Water intrusion at police department



Picture #13. Water damage



Picture #14. Crack in interior finish



Picture #15. Roof of police department



Picture #16. Crack in exterior brick

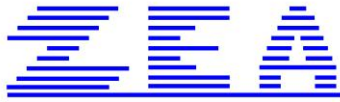


Picture #17. Crack in the exterior brick

APPENDIX D

ZGOUVAS, EIRING & ASSOCIATES





**ZGOUVAS, EIRING & ASSOCIATES
CONSULTING ENGINEERS, INC.**

May 1, 2020

Hal Gandy, Architect
PH&J Architects, Inc.
807 South McDonough Street
Montgomery Alabama

RE: Alexander City Municipal Buildings M & P Survey

Dear Sir:

We visited the site on April 29, 2020 to review existing HVAC and plumbing conditions. We have completed our evaluation of the subject facility and present the following information.

EXECUTIVE SUMMARY:

The police department building was constructed in 1939 with a 3000 SF addition in 1982 for total floor area of 19,200 SF. Window AC units heat and cool several offices located on exterior walls and split system AC units appear to have been added over the years to cool portions of the building. While operable, this system does not appear to work well in a few places and appears to fall short of code requirements for outdoor air and return air thru corridors. The building is unsprinklered and has plumbing issues at lower level in the old jail area.

Due to the age of the police department building it was not designed for air conditioning and providing code compliant air conditioning that meets modern standards for temperature and humidity control will be challenging. We estimate a cost of \$500,000 plus just for HVAC work, not including associated Architectural and electrical work. The plumbing systems should also be replaced due to age and materials used. This would also be costly since sanitary piping is below slab, we estimate \$200,000. Finally, a sprinkler system for this building will run about \$80,000 for work inside of the building plus the cost of getting a fire water service to the building.

The City Hall building was formerly a bank building and comprises roughly 24,000 SF. HVAC systems consist of two 20 year old plus packaged rooftop units, a mini split and a 10-15 year old 60 ton air cooled chiller with two air handlers that could be 30 plus years old. A fire sprinkler system appears to have been recently added to the building. Plumbing is typical for an older building – functional but has had some repairs.

The existing HVAC systems could be improved by replacing the two packaged rooftop units and repairing upper level AHU room walls/ceiling which would be relatively inexpensive. Providing outdoor air to the two air handlers becomes more involved since ducts and wall louvers are required. Finding a different return air path for the first floor AHU will also be challenging but is required to meet code. We recommend fully replacing all HVAC and plumbing systems and estimate replacement to cost \$900,000 plus Architectural and electrical work.

POLICE STATION:

The age of the 16,200 SF original facility is roughly 80 years with a 3000 SF 40 year old addition. The HVAC system consists of (9) split system AC units of varying ages/manufacturers and roughly 16 window AC units. All equipment appeared to *function* properly at the time of the visit. The systems were retrofitted in place except the unit serving the 1982 addition which means exposed duct and exposed AC units.

We noted two code issues associates with the split systems in general. 1) return air is transferred from the rooms served by the splits thru the corridors back to the AC units. This does not comply with current code since it could pull smoke into the corridors if there is a fire. 2) There are no outdoor air provisions on the split systems that have been added over the years. Outdoor air is required by the mechanical code to dilute contaminates in the 'breathing zone'.

While the units appeared to function properly, there were a couple of areas with issues. The 5-ton unit serving the call center does not keep up with AC requirements on hot days and the unit serving the jail area seems to have humidity issues. The data room associates with the call center stays too warm and would benefit greatly from a mini-split system.

The window units in general were not ideal and do not provide good temperature control as is typical with window units.

We recommend bringing the existing AC systems up to meet code as a minimum. If the City plans to occupy the building long term, we recommend upgrading the HVAC systems to something a little more permanent which will involve creating AC closets (the old jail area is unoccupied and could be converted into a mechanical room), furring for duct and adding return air duct to all spaces. Depending on the system type chosen this could run between \$350,000 for basic split systems to \$750,000 for a variable refrigerant volume system.

Plumbing systems at the police station show their age. Plumbing fixtures consist of wall hung water closets and lavatories which have been updated since the original building was completed in 1939. Piping appears to be copper water lines and cast-iron sanitary sewer. There is an issue with blockage below the building slab that causes sewage to back up and come out of drains at low points. The cast iron lines have reportedly rusted thru causing solids to catch on rough edges. There are also issues with the existing unused jail area regarding odors and sewer gas due to the lack of use.

Given that both cast iron and copper have finite life spans we recommend replacing the existing plumbing piping if the building is to be remodeled and used long term. Cost of this type work is difficult to estimate but should run less than \$10 per SF, not including any patching of finishes.

CITY HALL:

The City Hall occupies roughly 24,000 SF of heated and cooled space. The bulk of the building is served by a 60 ton chiller and two air handlers. One air handler is located in a basement mechanical room and the other is located over the vault on the main level. The unit over the vault does not meet code for access requirements. The air handlers appear to be 30 plus years old (we were unable to find anything indicating an age) and are in fair condition. The air handlers are constant volume and utilize duct heat for heating/zone control. Code issues include no outdoor air on the HVAC systems and return air is transferred thru corridors back to the lower level mechanical room. The upper level AHU appears to use ducts to transfer air to the

air handler room located over the vault. We expect they would last another 10 years if properly maintained. The rooftop mounted chiller appears to be newer; we estimate 10-15 years old. Packaged air cooled chillers have a life expectancy of 20 years so the chiller has a few years of service left. The existing AHUs are constant volume. We recommend the replacements be variable volume to conserve energy. This is important for systems that utilize electric resistance heat for reheat since it will minimize the amount of heat utilized.

Pumps: The pumps appeared to function properly but are nearing the end of their 20 year life expectancy. We feel the pumps should be serviceable as long as the other components in the HVAC system, around 10 years.

Ductwork: Duct appear to be original to the building and is insulated with internal duct liner. While the sheet metal doesn't generally wear out, the insulation and duct sealant will fail over time. Additionally, dirt will collect within the duct over the years that is impossible to clean if the ducts are lined. We recommend replacing all ductwork within the building if the building is to be remodeled.

Piping: The chilled water piping is insulated but assumed to be carbon steel pipe. The pipe is most likely original to the building therefore should be replaced during the next major renovation of the building. Due to age all of the valves more than likely do not operate properly and will be replaced if the piping is replaced.

Duct Electric Coils: We were unable do directly view the electric duct heat. Typically, electric resistance heat fails after some years due to cycling on/off.

Controls: We recommend providing a simple DDC controls system for the HVAC units to allow monitoring, troubleshooting and remote control of AC systems. DDC controls will be required to optimize fan speed/discharge air temperature/electric heat utilization if the AHU's are replaced.

Rooftop Units: Two groups of offices are served by two rooftop units(3 ton and 2.5 ton). The rooftop units were not equipped with outdoor air and therefore do not meet code. The rooftop units appear to be 20 plus years old. Both of these issues can be solved by replacing the units. This should be relatively inexpensive.

Mini Split: There is a 1 ton mini split serving a data room that is operational. This unit appears to be less than 10 years old and is easily replaceable if the need arises.

Replacement of the HVAC systems including duct and piping would cost roughly \$800,000 plus Architectural modifications required to install the new systems. When the systems are replaced consideration should be given to relocating the air handler from over the vault to a mechanical room or providing better access to the air handler.

Fire Sprinkler System:

The fire sprinkler system appears to be only a couple of years old and provides coverage for the entire building/crawl space. We would expect this system to meet code.

Plumbing Systems:

Plumbing systems were operational during the time of site visit. Water supply pipe is copper, sanitary drainage is cast iron except where it has been replaced with PVC. Water closets are wall hung/floor mounted.

Water Piping: Copper water piping age is undetermined. Copper pipe has a good life expectancy as long as there are no water quality or dielectric issues. While the water pipe may be good for years, we recommend replacing the pipe during the next building renovation as a matter of precaution.

Waste Piping: Sanitary sewer piping is cast iron original to the building which has shown sign of age and a portion of the waste pipe appear to have been replaced with PVC piping. We recommend replacing waste piping during the next renovation.

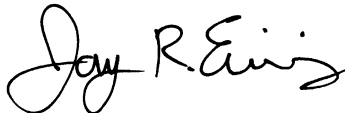
CONCLUSION:

Police Station: The HVAC and plumbing systems are functional and have been maintained with the exception plumbing waste piping below the slab. Due to the fact that air condition was an afterthought for this building we recommend totally replacing the AC systems with something more effective that meets code and integrates better with the building. HVAC and plumbing costs for a full renovation could easily exceed \$700,000 and approach \$1,000,000 if a fire sprinkler system is required.

City Hall: The HVAC and plumbing systems are functional and we estimate they have around 10 years life remaining. If the building is to undergo a renovation we recommend bringing ventilation, return air and energy use up to current codes. Replacing all of the HVAC and plumbing systems due to age. We expect a full HVAC and plumbing replacement to cost roughly \$900,000.

Please do not hesitate to contact our office if you have any questions or need additional information.

Sincerely,

A handwritten signature in black ink that reads "Jay R. Eiring". The signature is written in a cursive, flowing style.

Jay R. Eiring, PE

APPENDIX E

GUNN & ASSOCIATES, P.C.





May 12, 2020

PH&J Architects, Inc.
804 South McDonough Street
Montgomery, AL 36104

Attention: Mr. Hal Gandy

RE: Alexander City - City Hall Assessment
G&A Project No. 20-090

Hal:

I visited the Alex City - City Hall for the purpose of evaluating the existing electrical systems. Below is a summary of our investigation along with recommendations for repairs and a cost estimate for the repairs.

City Hall:

Power:

The existing facility is fed by a pad-mounted transformer. The pad-mounted transformer serves a 1200-amp GE 6-main switchboard. This switchboard is the primary source of power for the building and appears to be manufactured in 1972. The main switchboard is past end of life. New parts will be hard to be obtained for this switchboard. A limited supply of re-furbished aftermarket overcurrent protective devices might be available (not guaranteed) to service this switchboard in the event of a failure of one or more of its components. Caution should be exercised when operating these circuit breakers as they could break or permanently disengage due to their age and render themselves permanently inoperable. There is also not much clearance in front of the switchboard

There are numerous panelboards throughout the facility that are the same age. These panelboards are also past their end-of-life and parts for these panels may be unavailable. A few newer panelboards was installed along-side the original panelboards in various areas. The newer panels are in good shape.

The facility appears to have a decent coverage of receptacles.

It appears there is a standby generator that backs up the whole facility.

The original conductors in the building are old. The insulation has become brittle in some locations and working with these conductors could pose a hazard to maintenance personnel.

Lighting:

The existing lighting system is made up of incandescent and fluorescent fixtures with either T8 or T12 lamps making it difficult or almost impossible to comply with current energy code requirements. There is no lighting control installed in any areas of the building. Some method of lighting control is required by current energy codes. Emergency wall packs and exit signs are placed through out the facility and the ones we checked function correctly.

Exterior lighting is square incandescent lights with screw in fluorescent lamps. These fixtures are on a photocell-timeclock arrangement. No energy code compliant lighting control system has been installed. No exterior emergency lighting.

Communications:

The existing communications system is made up of a system of racks, patch facilities, CAT 5 and CAT 6 communications cabling and fiber optic cabling and appears to be in good condition. This communications system serves the current occupants needs adequately.

Fire Alarm:

The existing fire alarm system is an old hardwired system and manufactured by Notifier and is in need of replacement. The system appeared to be functioning but we were not able to test. The fire alarm coverage would not meet today's NFPA codes. We would recommend upgrading the system to an addressable system to meet current NFPA guidelines.

Paging System:

A central paging system is installed throughout the building and was told that it functions.

Security Camera System:

The building currently has a security camera system. The system is operable and appears to be in good condition.

Recommendations:

Power:

The building's electrical infrastructure should be replaced. The electrical infrastructure is well past its life expectancy. Electrical equipment that is old typically will not operate properly (mechanically) when called upon. Depending on the insulation type conductors can have a life span of anywhere from 20 to 50 years. We would recommend that the service lateral into the building from the pad-mounted transformer should be carefully inspected and replaced if required. All panel feeders and major equipment feeders should be inspected and replaced if required.

The existing branch circuit panelboards should be replaced and branch circuitry should be evaluated for replacement .

Lighting:

The entire buildings lighting system (interior and exterior) will need to be replaced to comply with the new energy code. Replacement of these fixtures will be required as a part of any renovation project that takes place in the buildings. We would recommend center basket volumetric type (architectural) LED fixtures be installed in all offices, corridors restrooms and other finished areas. In utilitarian areas either flat panel LED fixtures will need to be installed or strip type LED fixtures. Installing LED fixtures along with occupancy sensors will bring the building into compliance with the latest state energy codes and standards.

Exterior fixtures will be replaced with energy-efficient LED area lighting fixtures and controlled by a separate lighting control system panel independent of the interior lighting control system. Pedestrian lighting may be accomplished in the same manner as the existing fixtures with the exception that all pedestrian lighting will be LED type.

Communications System:

AS mentioned earlier the communication system is adequate and serves the needs of the existing tenant. However, depending on the tenant's programming needs the existing communications system may be inadequate.

Fire Alarm:

Provide new addressable fire alarm system to meet current NFPA guidelines.

COST:

Upgrade Electrical Infrastructure:	\$165,000.00
Interior Lighting Replacement:	\$99,000.00
Exterior Lighting Replacement:	30,000.00
New Fire Alarm System:	\$57,750.00
Total Electrical Cost of Renovation	\$351,750.00

If you have any questions about this letter please call me.

Sincerely,



Kenny Gunn, P.E.



May 12, 2020

PH&J Architects, Inc.
804 South McDonough Street
Montgomery, AL 36104

Attention: Mr. Hal Gandy

RE: Alexander City - Police Station Assessment
G&A Project No. 20-090

Hal:

I visited the Alex City - Police Station for the purpose of evaluating the existing electrical systems. Below is a summary of our investigation along with recommendations for repairs and a cost estimate for the repairs.

Police Station:

Power:

The existing facility is fed by a pad-mounted transformer. The pad-mounted transformer serves a 6-main panel. This panelboard is the primary source of power for the building and is very old. The main panelboard is past end of life. New parts will be very hard to be obtained for this panelboard. A limited supply of re-furbished aftermarket overcurrent protective devices might be available (not guaranteed) to service this panelboard in the event of a failure of one or more of its components. Caution should be exercised when operating these circuit breakers as they could break or permanently disengage due to their age and render themselves permanently inoperable. The main electrical room has spliced cables hanging out a gutter above panels that is a dangerous situation. These cables need to be placed back in the gutter and enclosed. I could not verify if there was multiple service to this facility or not, but it appeared to have multiple electrical services.

There are various age panelboards throughout the facility. These panelboards are also past their end-of-life and parts for these panels may be unavailable. A network of newer panelboards was installed alongside the original panelboards in various areas. The newer panels are in good shape.

The facility does not have adequate coverage of receptacles.

There are a lot of plug strips in facility that would be considered a fire hazard.

It appears there is a standby generator that backs up the whole facility.

The original conductors in the building are old. The insulation has become brittle in some locations and working with these conductors could pose a hazard to maintenance personnel.

Lighting:

The existing lighting system is made up of incandescent and fluorescent fixtures with either T8 or T12 lamps making it difficult or almost impossible to comply with current energy code requirements. There is no lighting control installed in any areas of the building. Some method of lighting control is required by current energy codes. Emergency wall packs and exit signs are placed throughout the facility and the ones we checked function correctly.

Exterior lighting is flood HID lights with retrofit LED bulbs. There are also incandescent exterior lights. No energy code compliant lighting control system has been installed. No exterior emergency lighting.

Communications:

The existing communications system is made up of a system of racks, patch facilities, CAT 5 and CAT 6 communications cabling and fiber optic cabling and appears to be in good condition. This communications system serves the current occupants needs adequately.

Fire Alarm:

There is no fire alarm system.

Security Camera System:

The building currently has a security camera system. The system is operable and appears to be in good condition.

Recommendations:

Power:

The building's electrical infrastructure should be totally replaced. The electrical infrastructure is well past its life expectancy.

Lighting:

The entire buildings lighting system (interior and exterior) will need to be replaced to comply with the new energy code. Replacement of these fixtures will be required as a part of any renovation project that takes place in the buildings. We would recommend center basket volumetric type (architectural) LED fixtures be installed in all offices, corridors restrooms and other finished areas. In utilitarian areas either flat panel LED fixtures will need to be installed or strip type LED fixtures. Installing LED fixtures along with occupancy sensors will bring the building into compliance with the latest state energy codes and standards.

Exterior fixtures will be replaced with energy-efficient LED area lighting fixtures and controlled by a separate lighting control system panel independent of the interior lighting control system. Pedestrian lighting may be accomplished in the same manner as the existing fixtures with the exception that all pedestrian lighting will be LED type.

Communications System:

As mentioned earlier the communication system is adequate and serves the needs of the existing tenant.

Fire Alarm:

Provide new addressable fire alarm system to meet current NFPA guidelines.

COST:

Upgrade Electrical Infrastructure:	\$195,000.00
Interior Lighting Replacement:	\$115,200.00
Exterior Lighting Replacement:	\$30,000.00
New Fire Alarm System:	\$68,250.00
Total Electrical Cost of Renovation	\$408,450.00

If you have any questions about this letter please call me.

Sincerely,



Kenny Gunn, P.E.



**ALEXANDER
CITY**
ALABAMA



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