



## LEAD-BASED PAINT INVESTIGATION REPORT

COMMERCIAL STRUCTURE  
TRACT #402 – 500 LAWAND DRIVE  
COLUMBIA, SOUTH CAROLINA 29210  
TMS # R07302-05-01

### PREPARED FOR:



HDR  
C/O Ms. Erin N. Slayton, PE. DBIA, ENV SP  
Project Manager  
1122 Lady Street, Suite 1100  
Columbia, SC, 29201

### PREPARED BY:

FME Consultants  
1825 Blanding Street  
Columbia, South Carolina 29201

November 17, 2020

☒ Yes, LBP was found.  
☐ No, LBP was not found.

FME Project No.: G5662.020

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Appendix B – General Building Plans

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Appendix D – EPA LBP Inspector Certification



## 1. EXECUTIVE SUMMARY

This executive summary is intended as an overview for the convenience of the reader. This report should be reviewed in its entirety prior to making any decisions regarding this project.

FME Consultants Inc. (FME) has completed a Lead-Based Paint (LBP) Investigation of the interior and exterior portions of the 2-story commercial building structure located at 500 Lawand Drive (Building), in Columbia, SC, at the request of HDR (Client). The purpose of the investigation was to locate, identify and test components of the Building that are painted or coated with LBP. It is FME's understanding that the Building is to be demolished as function of the Carolina Crossroads Project for the South Carolina Department of Transportation (SCDOT). Appendix A – Site Vicinity Map is provided to show the location of the Building. Appendix B – General Building Plans, is provided to show the lay-out of the building and a reference for locations of XRF scans.

Per an agreed upon scope of work, this LBP Investigation was conducted to identify accessible building components that have been painted or coated with lead-containing materials that have concentrations greater than or equal ( $\geq$ ) to the regulatory limit of 0.7 mg/cm<sup>2</sup>. This investigation includes both a visual evaluation of the physical condition of painted materials as well as quantitative testing of surfaces using an X-Ray Fluorescence (XRF) LBP analyzer. The XRF documents the concentration of lead, if any, in the overall paint or coating. Building components were scanned with a Heuresis XRF analyzer (Model # Pb200i, Serial #1888, Reference Date: 07/11/18) with a limit of detection (LOD) of 0.1 mg/cm<sup>2</sup>. This LBP investigation was carried out on October 23, 2020.

LBP is regulated by multiple government agencies, and each requires different response actions when the concentration of lead exceeds specified thresholds. The Occupational Safety and Health Administration (OSHA) regulates worker exposure to lead dust, and as a result considers materials with any lead content to be a potential hazard. Additionally, South Carolina Department of Health and Environmental Control (SCDHEC) requires some waste materials to be disposed of at specific disposal facilities that are able to manage this waste. Appendix C – XRF Data, is provided to present the XRF data in a user-friendly format. Items in red text contain lead in concentrations regulated by SCDHEC and these materials must be addressed upon disposal. Items in blue and red text contain lead in concentrations that must be considered a potential for worker exposure by OSHA.

The results from the XRF quantitative testing of the building components indicate that lead is present in paint and/or coatings in concentrations greater than or equal to ( $\geq$ ) 0.7 mg/cm<sup>2</sup> in the following building component:

- **Lead Shielding Under Roofing Membrane at Roof Drains (2 Drains)**



No other lead-containing or LBP coated building materials were identified during the investigation. See Appendix B – General Building Plans, for the lay-out of the Building.

We appreciate the opportunity to assist you in this project. If you have any questions or require additional information, please feel free to contact our office at (803) 254-4540.

Sincerely,  
FME CONSULTANTS



**Tim Ross**  
SC Lead Risk Assessor  
EPA Certification No. LBP-R-I198705-1 (Exp. 11/30/22)



**Glynn M. Ellen**  
Environmental Department Manager



## 2. LEAD-BASED PAINT BACKGROUND INFORMATION

Housing and Urban Development (HUD) defines “LBP” as any coating that has a lead concentration of 1.0 milligrams of lead per square centimeter ( $1.0 \text{ mg/cm}^2$ ) or greater, or if the lead concentration is greater than one half of a percent ( $> 0.5\%$ ) by weight. The Consumer Product Safety Commission (CPSC) currently considers paint to be lead-containing if the concentration of lead exceeds 90 ppm (0.009% by weight). In 1978, the CPSC banned the sale of LBP to consumers, and banned its application in areas where consumers have direct access to painted surfaces. Both the CPSC and HUD definitions of lead-containing paint are aimed at protecting the general population from exposure to lead in residential settings.

In contrast, the mission of OSHA with respect to lead-containing paint is to protect workers during construction activities that may generate elevated airborne lead concentrations. OSHA states that construction work (including renovation, maintenance, and demolition) carried-out on structures coated with paint having lead concentrations lower than the HUD or CPSC can still result in airborne lead concentrations in excess of regulatory limits. For this reason, OSHA has not defined lead-containing paint, but states that paint having any measurable level of lead may pose a substantial exposure hazard during construction work, depending upon the work performed. Therefore, in these situations, OSHA guidelines and safety procedures should be followed. By OSHA standards and regulations, the employer shall ensure that no employee is exposed to lead at concentrations greater than fifty micrograms per cubic meter of air ( $50 \text{ ug/m}^3$ ) averaged over an 8-hour period.

Additionally, SCDHEC requires the use of specific waste disposal sites if materials contain lead concentrations greater than or equal to ( $\geq$ )  $0.7 \text{ mg/cm}^2$ . Due to the anticipated demolition of the structure, the SCDHEC lead disposal requirements were used as a threshold.

## 3. INTRODUCTION

The Building is a steel and wood framed commercial structure (~6,900 SF) that was constructed in 1985, according to the Richland County Assessors office and is located at 500 Lawand Drive in Columbia, South Carolina. The Building is a 2-story steel and wood framed structure with exterior brick veneer, and a flat built-up roofing system under a white membrane. The interior finishes consist of drywall walls, multiple applications of suspended ceiling systems below a metal deck, concrete slab flooring with carpet overlay, an 18" x 18" floor tile and linoleum flooring. See Appendix A – Site Vicinity Map, for the location of the Building. See Appendix B –General Building Plans, for a layout of the Building.



*Photo 1 – 500 Lawand Drive, Columbia, SC*



## 4. INVESTIGATION PROCEDURES AND RESULTS

FME's LBP Investigation sampling protocol consisted of randomly selecting both interior and exterior building components and scanning them with a Heuresis X-Ray Fluorescence (XRF) Portable Analyzer (Model # Pb200i, Serial #1888). Components scanned with the XRF include the following: walls, ceilings, doors, door jambs and casings, window components, baseboards, columns, exterior HVAC ductwork, exterior roof components, etc. Substrates included mainly metal, wood, and drywall. The following building component tested positive for lead in concentrations greater than or equal to ( $\geq$ ) 0.7 mg/cm<sup>2</sup> cm<sup>2</sup> in the following building component:

- **Lead Shielding Under Roofing Membrane at Roof Drains (2 Drains)**

For more information regarding the specific descriptions and locations of the items that were scanned, refer to the Appendix C – Summary of XRF Data. On the XRF Data Table, items highlighted in Red are positive and contain lead in concentrations greater than or equal to ( $\geq$ ) 0.7 mg/cm<sup>2</sup>. Items in Blue and Red text contain lead in concentrations that must be considered a potential for worker exposure by OSHA. See Appendix E – Site Photos for locations and pictures of the materials with concentrations greater than or equal to ( $\geq$ ) 0.7 mg/cm<sup>2</sup>. Appendix D includes the inspector's EPA lead-based paint inspector certification.

## 5. RECOMMENDATIONS

The results, conclusions and recommendations from this investigation are representative of the conditions observed at the site on the date of the field investigation. FME does not assume responsibility for any changes in conditions or circumstances that occur after the date of the field investigation. No other environmental issues were addressed as part of this report. The results from the XRF quantitative testing of the interior and exterior building components scanned indicate that lead is present in paint and/or coatings in concentrations greater than or equal to ( $\geq$ ) 0.7 mg/cm<sup>2</sup> cm<sup>2</sup> in the following building components:

- **Lead Shielding Under Roofing Membrane at Roof Drains (2 Drains)**

Therefore, OSHA regulations and procedures should be followed when impacting these components. If possible, they should be removed in whole and disposed of properly. Also, SCDHEC disposal requirements for lead containing materials should also be followed.

As stated previously, OSHA regulates any measurable level of lead, as it may pose a substantial exposure hazard to workers. Therefore, in these situations, OSHA regulations and safety procedures should be followed. These regulations also list the proper personal protective equipment to be used by the workers disturbing the LBP items and the requirements for personal air monitoring. OSHA's exposure action level (AL) for lead, regardless of respirator use, is an airborne



concentration of  $30\mu\text{g}/\text{cm}^3$ , averaged over an eight-hour period. The action level (AL) is the level at which an employer must begin specific compliance activities as outlined in OSHA's lead standards. By OSHA standards and regulations, the employer shall ensure that no employee is exposed to lead at concentrations greater than fifty micrograms per cubic meter of air ( $50\mu\text{g}/\text{m}^3$ ) averaged over an 8-hour period which is the permissible exposure level (PEL).

SCDHEC regulates the proper disposal of LBP and associated debris. SCDHEC defines two types of LBP debris. The first is LBP *waste*, which is defined as material such as wood, brick and metal that is painted with LBP. The other is LBP *residue* which is defined as residue that is generated from the removal (e.g., scraped, chipped, sandblasted, or chemical) of LBP from a structure. LBP *waste* that comes from a commercial or residential facility may be disposed of in either a class 2 or 3 landfill, while LBP *residue* from a commercial facility must have a toxicity characteristic leaching procedure (TCLP) analysis to determine the lead content. TCLP analysis is used to determine whether or not a waste is a characteristic hazardous waste due to leachability under the South Carolina Hazardous Waste Management Regulations. LBP *residue* with a TCLP analysis result greater than or equal to five milligrams per liter ( $\geq 5\text{ mg/l}$ ) lead must be disposed of in a Subtitle C landfill (Hazardous Waste). However, LBP *residue* from a commercial facility with a TCLP analysis result less than five milligrams per liter ( $< 5\text{ mg/l}$ ) lead is required to be disposed of in a Class 3 landfill.

We sincerely appreciate the opportunity to be of service to HDR on this project. If you have any questions regarding the information presented herein, please contact our office at (803) 254-4540.



## APPENDICES

Appendix A – Site Vicinity Map

Appendix B – General Building Plans

Appendix C – Summary of XRF Data Table

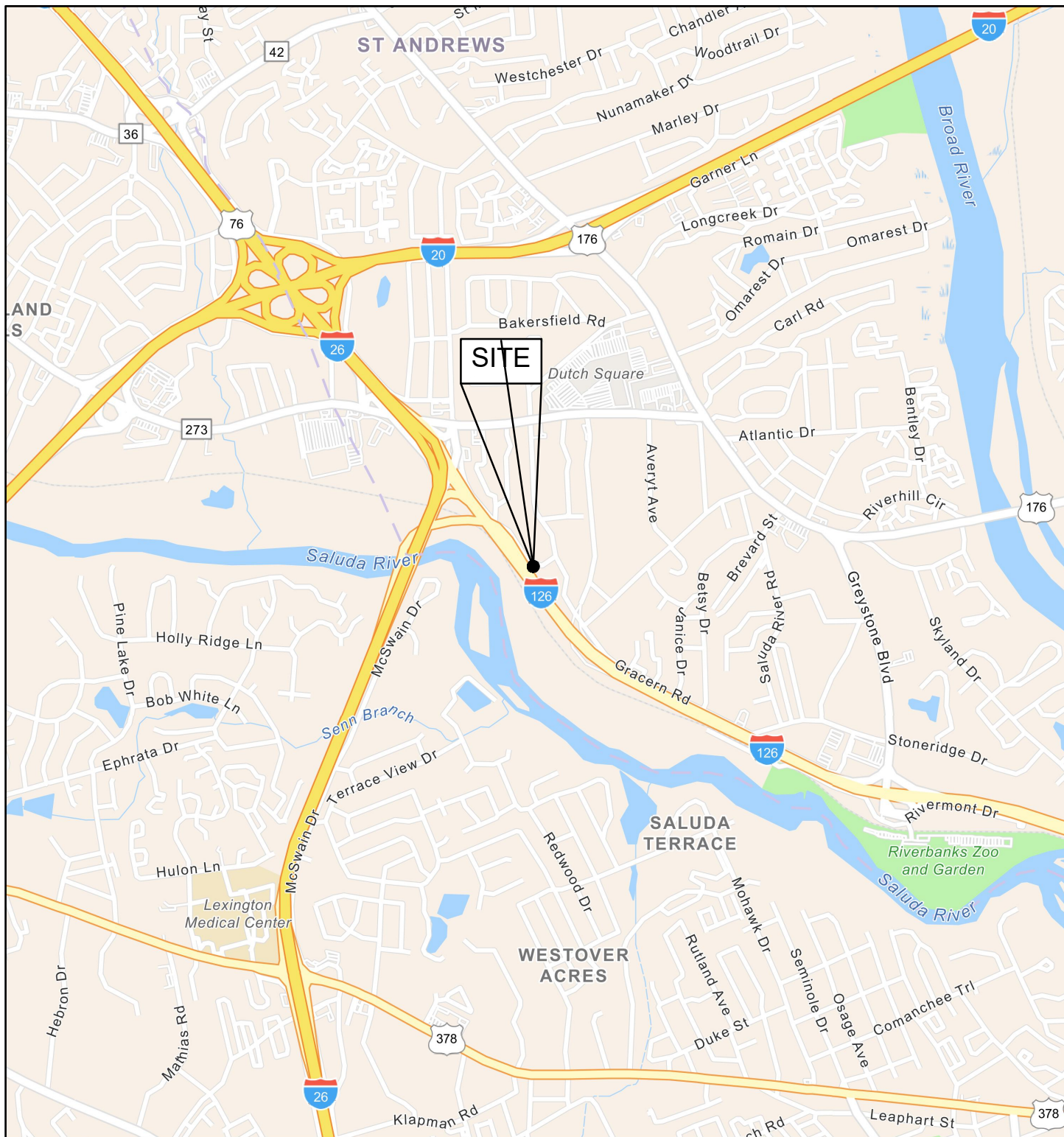
Appendix D – EPA LBP Inspector Certification





## Appendix A

### Site Vicinity Map



1:36,000

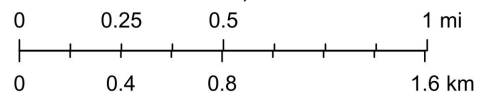


FIGURE  
NUMBER:

1

F&ME CONSULTANTS  
PROJECT NUMBER:

G5662.020

LEAD-BASED PAINT INVESTIGATION  
500 Lawand Drive  
Columbia, SC 29210  
SITE VICINITY MAP  
Prepared for:  
HDR  
1122 Lady Street, Suite 1100  
Columbia, SC 29201



1825 BLANDING STREET  
COLUMBIA, SC 29201

ORIGINAL:  
October 28, 2020

REVISIONS:

1  
2  
3

SCALE:  
N.T.S.

DRWN. BY: MSM  
CHKD. BY: TOR  
APPR. BY: GME

NOTES:

## Appendix B

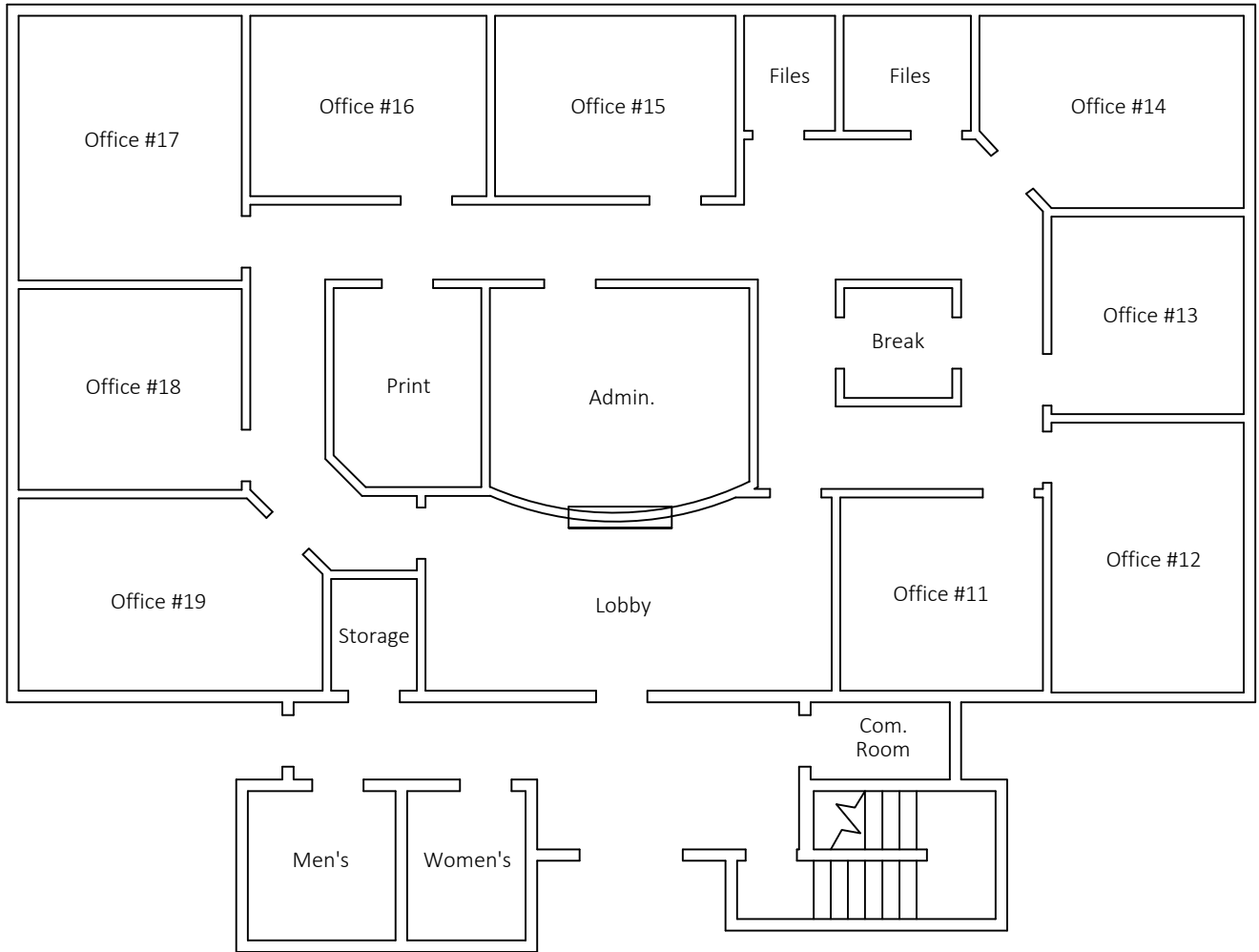
### General Building Plans



(C)

(B)

(D)



(A)

First Floor

FIGURE  
NUMBER:

2

F&ME CONSULTANTS  
PROJECT NUMBER:

G5662.020

LEAD-BASED PAINT INVESTIGATION  
500 Lawand Drive  
Columbia, SC 29210  
General Building Plan  
Prepared for:  
HDR  
1122 Lady Street, Suite 1100  
Columbia, SC 29210



1825 BLANDING STREET  
COLUMBIA, SC 29201

ORIGINAL:  
October 28, 2020

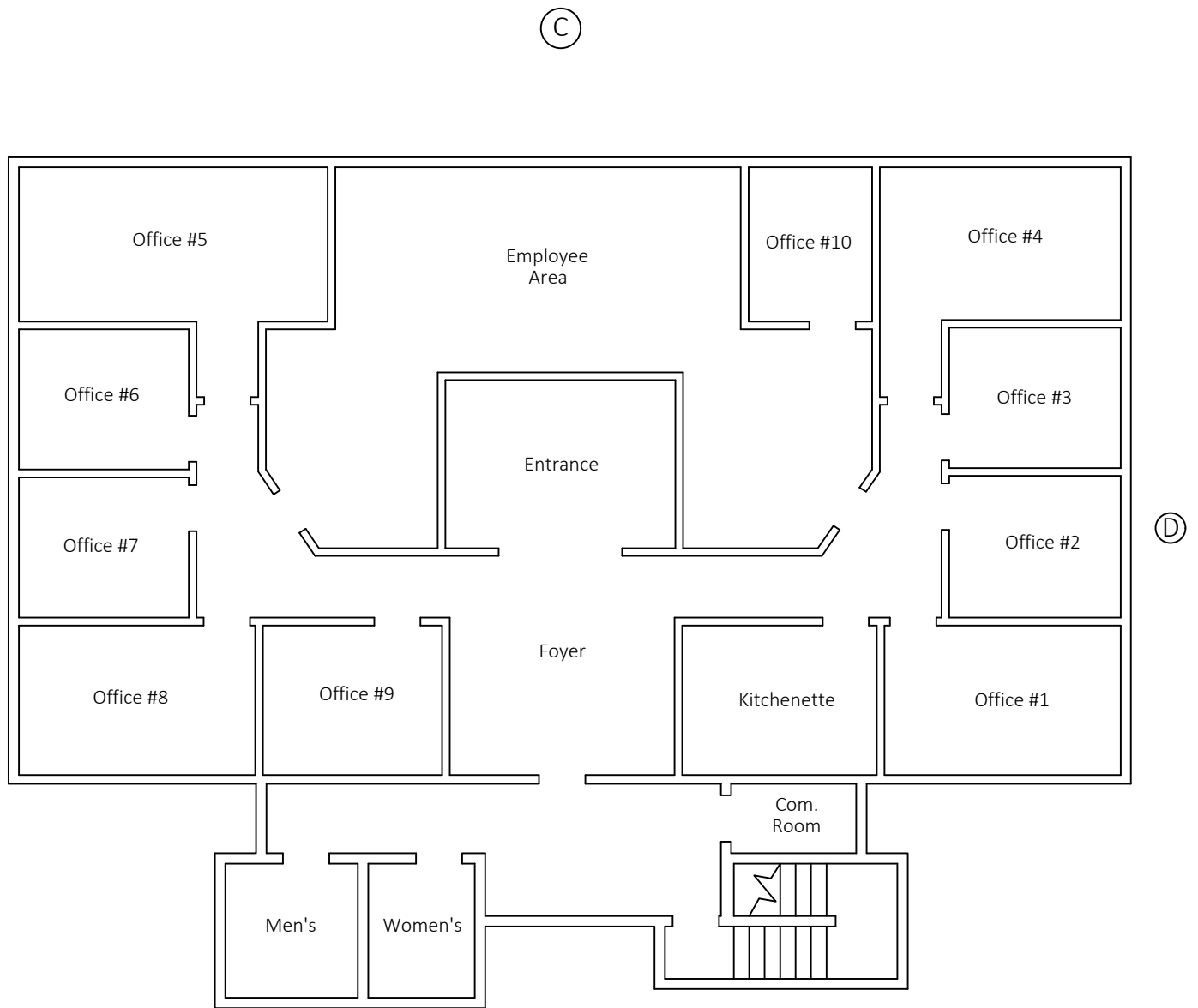
REVISIONS:

1 \_\_\_\_\_  
2 \_\_\_\_\_  
3 \_\_\_\_\_

SCALE:  
1" = 1'

DRWN. BY: MSM  
CHKD. BY: TOR  
APPR. BY: GME

NOTES:



Second Floor

FIGURE  
NUMBER:

3

F&ME CONSULTANTS  
PROJECT NUMBER:

G5662.020

LEAD-BASED PAINT INVESTIGATION  
500 Lawand Drive  
Columbia, SC 29210  
General Building Plan  
Prepared for:  
HDR  
1122 Lady Street, Suite 1100  
Columbia, SC 29210



1825 BLANDING STREET  
COLUMBIA, SC 29201

ORIGINAL:  
October 28, 2020

REVISIONS:

1  
2  
3

SCALE:

$\frac{3}{8}" = 1'$

DRWN. BY: MSM  
CHKD. BY: TOR  
APPR. BY: GME

NOTES:

Ⓒ

Ⓑ

Ⓓ

Ⓐ

Roof

FIGURE  
NUMBER:

4

F&ME CONSULTANTS  
PROJECT NUMBER:

G5662.020

LEAD-BASED PAINT INVESTIGATION

500 Lawand Drive  
Columbia, SC 29210  
General Building Plan  
Prepared for:  
HDR  
1122 Lady Street, Suite 1100  
Columbia, SC 29210



1825 BLANDING STREET  
COLUMBIA, SC 29201

ORIGINAL:  
October 28, 2020

REVISIONS:

1 \_\_\_\_\_  
2 \_\_\_\_\_  
3 \_\_\_\_\_

SCALE:  
 $\frac{3}{4}" = 1'$

DRWN. BY: MSM  
CHKD. BY: TOR  
APPR. BY: GME

NOTES:

## Appendix C

### Summary of XRF Data Table

XRF Data  
500 Lawand Drive  
Date Analyzed: 10/23/2020  
F&ME Project No.: G5662.02

Reading No.	Pb (mg/cm <sup>2</sup> )	Location	Component	Substrate	Side	Condition	Color
1	0.96	Calibrate					
2	0.91	Calibrate					
3	0.93	Calibrate					
4	LOD	Roof	Parapet Cap	Metal	A	Intact	Brown
5	LOD	Roof	Air Handler	Metal	A	Intact	Grey
6	LOD	Roof	Roof Drain Grate	Metal	A	Intact	Grey
7	1.64	Roof	Lead Shield at Roof Drain	Metal	A	Intact	White
8	LOD	Roof	Access Hatch	Metal	B	Intact	Red
9	1.82	Roof	Lead Shield at Roof Drain	Metal	B	Intact	White
10	LOD	Roof	Roof Drain Grate	Metal	B	Intact	Silver
11	0.17	Roof	Parapet Cap	Metal	B	Intact	Brown
12	0.15	Roof	Parapet Cap	Metal	C	Intact	Brown
13	LOD	Roof	Air Handler	Metal	C	Intact	Brown
14	0.14	Roof	Parapet Cap	Metal	D	Intact	Brown
15	LOD	Roof Access Closet	Access Ladder	Metal	B	Intact	Grey
16	LOD	Roof Access Closet	Wall	CMU	B	Intact	White
17	LOD	Roof Access Closet	Wall	Drywall	C	Intact	White
18	LOD	Roof Access Closet	Ceiling Grid	Metal	Ceiling	Intact	White
19	LOD	Roof Access Closet	Wall	CMU	D	Intact	White
20	LOD	Roof Access Closet	Wall	Drywall	A	Intact	White
21	LOD	Roof Access Closet	Door Frame	Metal	A	Intact	Yellow
22	LOD	Roof Access Closet	Door	Wood	A	Intact	Brown
23	LOD	Women's Room (2nd Floor)	Wall	CMU	B	Intact	White
24	LOD	Women's Room (2nd Floor)	Cove Base	Rubber	B	Intact	Tan
25	LOD	Women's Room (2nd Floor)	Wall Heater	Metal	B	Intact	Brown
26	LOD	Women's Room (2nd Floor)	Wall	CMU	C	Intact	White
27	LOD	Women's Room (2nd Floor)	Wall	Drywall	D	Intact	White
28	LOD	Women's Room (2nd Floor)	Wall	CMU	A	Intact	White
29	0.6	Women's Room (2nd Floor)	Door Jamb	Metal	A	Intact	Tan
30	0.49	Men's Room (2nd Floor)	Door Frame	Metal	A	Intact	Tan

Red ( $\geq 0.7$  mg/cm<sup>2</sup>)

LOD (Limit of Detection) = 0.1 mg/cm<sup>2</sup>

Side A = North, then go clockwise  
Blue ( $< 0.7$  mg/cm<sup>2</sup> for OSHA considerations)



XRF Data  
500 Lawand Drive  
Date Analyzed: 10/23/2020  
F&ME Project No.: G5662.02

Reading No.	Pb (mg/cm <sup>2</sup> )	Location	Component	Substrate	Side	Condition	Color
31	LOD	Men's Room (2nd Floor)	Wall	CMU	A	Intact	White
32	LOD	Men's Room (2nd Floor)	Wall	Drywall	B	Intact	White
33	LOD	Men's Room (2nd Floor)	Cabinet Door	Wood	B	Intact	Brown
34	LOD	Men's Room (2nd Floor)	Wall	CMU	C	Peeling	Yellow
35	LOD	Men's Room (2nd Floor)	Wall	CMU	C	Intact	White
36	LOD	Men's Room (2nd Floor)	Wall	CMU	D	Peeling	Yellow
37	LOD	Men's Room (2nd Floor)	Wall	CMU	D	Intact	White
38	LOD	Men's Room (2nd Floor)	Wall Heater	Metal	D	Intact	Brown
39	LOD	Foyer (2nd Floor)	Wall	Drywall	D	Intact	Tan
40	LOD	Foyer (2nd Floor)	Wall	Drywall	A	Intact	Tan
41	LOD	Foyer (2nd Floor)	Column Surround	Drywall	A	Intact	Tan
42	LOD	Foyer (2nd Floor)	Wall	Drywall	D	Intact	Tan
43	LOD	Foyer (2nd Floor)	Wall	Drywall	A	Intact	Tan
44	LOD	Foyer (2nd Floor)	Entrance Casing	Wood	A	Intact	White
45	LOD	Foyer (2nd Floor)	Wall	Drywall	B	Intact	Tan
46	LOD	Entrance (2nd Floor)	Wall	Drywall	A	Intact	Green
47	LOD	Entrance (2nd Floor)	Wall	Drywall	A	Intact	White
48	LOD	Entrance (2nd Floor)	Baseboard	Wood	A	Intact	White
49	LOD	Entrance (2nd Floor)	Chairrail	Wood	B	Intact	White
50	LOD	Entrance (2nd Floor)	Wall	Drywall	B	Intact	Green
51	LOD	Entrance (2nd Floor)	Crown Molding	Wood	C	Intact	White
52	LOD	Entrance (2nd Floor)	Entrance Casing	Wood	C	Intact	White
53	LOD	Entrance (2nd Floor)	Wall	Drywall	C	Intact	White
54	LOD	Entrance (2nd Floor)	Wall	Drywall	D	Intact	Green
55	LOD	Entrance (2nd Floor)	Chairrail	Wood	D	Intact	White
56	LOD	Kitchenette	Door Frame	Metal	A	Intact	Tan
57	LOD	Kitchenette	Door	Wood	A	Intact	Brown
58	LOD	Kitchenette	Wall	Drywall	B	Intact	Tan
59	LOD	Kitchenette	Upper Cabinet	Wood	B	Intact	White
60	LOD	Kitchenette	Lower Cabinet	Wood	B	Intact	White

Red ( $\geq 0.7$  mg/cm<sup>2</sup>)

LOD (Limit of Detection) = 0.1 mg/cm<sup>2</sup>

Side A = North, then go clockwise

Blue ( $< 0.7$  mg/cm<sup>2</sup> for OSHA considerations)

XRF Data  
500 Lawand Drive  
Date Analyzed: 10/23/2020  
F&ME Project No.: G5662.02

Reading No.	Pb (mg/cm <sup>2</sup> )	Location	Component	Substrate	Side	Condition	Color
61	LOD	Kitchenette	Electrical Panel Box	Metal	C	Intact	Tan
62	LOD	Kitchenette	Door Jamb	Metal	C	Intact	Tan
63	LOD	Kitchenette	Column Surround	Drywall	C	Intact	Tan
64	LOD	Kitchenette	Wall	Drywall	D	Intact	Tan
65	LOD	Kitchenette	Cove Base	Drywall	D	Intact	Tan
66	LOD	Comm. Room (2nd Floor)	Door Casing	Metal	A	Intact	Tan
67	LOD	Comm. Room (2nd Floor)	Wall	Drywall	A	Intact	White
68	LOD	Comm. Room (2nd Floor)	Wall	Drywall	B	Intact	White
69	LOD	Comm. Room (2nd Floor)	Wall	CMU	C	Intact	White
70	LOD	Comm. Room (2nd Floor)	Wall	Wood	D	Intact	White
71	LOD	Office 1	Wall	Drywall	A	Intact	White
72	LOD	Office 1	Door Frame	Metal	A	Intact	Grey
73	LOD	Office 1	Wall	Drywall	B	Intact	White
74	0.18	Office 1	Column	Metal	C	Intact	Black
75	LOD	Office 1	Mini Blinds	Metal	C	Intact	Black
76	LOD	Office 1	Wall	Drywall	C	Peeling	White
77	LOD	Office 1	Wall	Drywall	D	Intact	White
78	LOD	Office 1	Door	Wood	A	Intact	Brown
79	LOD	Office 2	Wall	Drywall	A	Intact	Tan
80	LOD	Office 2	Cove Base	Rubber	A	Intact	Tan
81	LOD	Office 2	Wall	Drywall	B	Intact	Tan
82	LOD	Office 2	Window Sill	Metal	B	Intact	Silver
83	LOD	Office 2	Wall	Drywall	C	Intact	Tan
84	LOD	Office 2	Wall	Drywall	D	Intact	Tan
85	LOD	Office 2	Door Frame	Metal	D	Intact	Brown
86	LOD	Office 3	Wall	Drywall	A	Intact	Tan
87	LOD	Office 3	Wall	Drywall	B	Intact	Tan
88	LOD	Office 3	Window Frame	Metal	B	Intact	Silver
89	LOD	Office 3	Wall	Drywall	C	Intact	Tan
90	LOD	Office 3	Wall	Drywall	D	Intact	Tan

Red ( $\geq 0.7$  mg/cm<sup>2</sup>)

LOD (Limit of Detection) = 0.1 mg/cm<sup>2</sup>

Side A = North, then go clockwise

Blue ( $< 0.7$  mg/cm<sup>2</sup> for OSHA considerations)

XRF Data  
500 Lawand Drive  
Date Analyzed: 10/23/2020  
F&ME Project No.: G5662.02

Reading No.	Pb (mg/cm <sup>2</sup> )	Location	Component	Substrate	Side	Condition	Color
91	LOD	Office 3	Door Frame	Metal	D	Intact	Brown
92	LOD	Office 4	Window Sill	Metal	A	Intact	Silver
93	LOD	Office 4	Wall	Drywall	A	Intact	Tan
94	0.26	Office 4	Column	Metal	A	Intact	Black
95	LOD	Office 4	Wall	Drywall	B	Intact	Tan
96	LOD	Office 4	Cove Base	Rubber	B	Intact	Tan
97	LOD	Office 4	Wall	Drywall	C	Intact	Tan
98	LOD	Office 4	Door Frame	Metal	C	Intact	Brown
99	LOD	Office 4	Door	Wood	C	Intact	Brown
100	LOD	Office 4	Wall	Drywall	D	Intact	Tan
101	0.11	Office 10	Column	Metal	A	Intact	Black
102	LOD	Office 10	Window Sill	Metal	A	Intact	Silver
103	LOD	Office 10	Wall	Drywall	B	Intact	Tan
104	LOD	Office 10	Door Frame	Metal	C	Intact	Brown
105	LOD	Office 10	Wall	Drywall	C	Intact	Tan
106	LOD	Office 10	Wall	Drywall	D	Intact	Tan
107	0.14	Employee Area	Window Frame	Metal	A	Intact	Silver
108	LOD	Employee Area	Wall	Drywall	A	Intact	Tan
109	LOD	Employee Area	Wall	Drywall	B	Intact	Tan
110	LOD	Employee Area	Wall	Drywall	B	Intact	Tan
111	LOD	Employee Area	Wall	Drywall	B-C Angle	Intact	Tan
112	LOD	Employee Area	Wall	Drywall	C	Intact	Tan
113	LOD	Employee Area	Wall	Drywall	D	Intact	Tan
114	LOD	Employee Area	Wall	Drywall	C	Intact	Tan
115	LOD	Employee Area	Wall	Drywall	B	Intact	Tan
116	LOD	Employee Area	Wall	Drywall	C	Intact	Tan
117	LOD	Employee Area	Wall	Drywall	C-D Angle	Intact	Tan
118	LOD	Employee Area	Wall	Drywall	D	Intact	Tan
119	LOD	Office 5	Wall	Drywall	A	Intact	Tan
120	LOD	Office 5	Window Sill	Metal	A	Intact	Silver

Red ( $\geq 0.7$  mg/cm<sup>2</sup>)

LOD (Limit of Detection) = 0.1 mg/cm<sup>2</sup>

Side A = North, then go clockwise  
Blue ( $< 0.7$  mg/cm<sup>2</sup> for OSHA considerations)

XRF Data  
500 Lawand Drive  
Date Analyzed: 10/23/2020  
F&ME Project No.: G5662.02

Reading No.	Pb (mg/cm <sup>2</sup> )	Location	Component	Substrate	Side	Condition	Color
121	LOD	Office 5	Wall	Drywall	B	Intact	Tan
122	LOD	Office 5	Wall	Drywall	C	Intact	Tan
123	LOD	Office 5	Door Jamb	Metal	C	Intact	Brown
124	LOD	Office 5	Wall	Drywall	D	Intact	Tan
125	LOD	Office 6	Wall	Drywall	A	Intact	Tan
126	LOD	Office 6	Wall	Drywall	B	Intact	Tan
127	LOD	Office 6	Door Frame	Metal	B	Intact	Brown
128	LOD	Office 6	Door	Wood	B	Intact	Brown
129	LOD	Office 6	Wall	Drywall	C	Peeling	Tan
130	LOD	Office 6	Wall	Drywall	D	Intact	Tan
131	LOD	Office 6	Window Sill	Metal	D	Intact	Silver
132	LOD	Office 7	Wall	Drywall	A	Intact	Tan
133	LOD	Office 7	Wall	Drywall	A	Intact	Tan
134	LOD	Office 7	Wall	Drywall	B	Intact	Tan
135	LOD	Office 7	Door Frame	Metal	B	Intact	Brown
136	LOD	Office 7	Wall	Drywall	C	Intact	Tan
137	LOD	Office 7	Wall	Drywall	D	Intact	Tan
138	LOD	Office 8	Wall	Drywall	A	Intact	Tan
139	LOD	Office 8	Door Jamb	Metal	A	Intact	Brown
140	LOD	Office 8	Wall	Drywall	B	Intact	Tan
141	LOD	Office 8	Wall	Drywall	C	Intact	Tan
142	LOD	Office 8	Window Frame	Metal	C	Intact	Silver
143	LOD	Office 8	Window Sill	Metal	D	Intact	Silver
144	LOD	Office 8	Wall	Drywall	D	Intact	Tan
145	LOD	Office 9	Wall	Drywall	A	Intact	Brown
146	LOD	Office 9	Door Frame	Metal	A	Intact	Brown
147	LOD	Office 9	Door	Wood	A	Intact	Brown
148	LOD	Office 9	Wall	Drywall	B	Intact	Brown
149	LOD	Office 9	Wall	Drywall	C	Intact	Brown
150	LOD	Office 9	Column Surround	Drywall	C	Intact	Brown

Red ( $\geq 0.7$  mg/cm<sup>2</sup>)

LOD (Limit of Detection) = 0.1 mg/cm<sup>2</sup>

Side A = North, then go clockwise

Blue ( $< 0.7$  mg/cm<sup>2</sup> for OSHA considerations)

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Reading No.	Pb (mg/cm <sup>2</sup> )	Location	Component	Substrate	Side	Condition	Color
151	LOD	Office 9	Electrical Panel Box	Metal	C	Intact	Brown
152	LOD	Office 9	Wall	Drywall	D	Intact	Brown
153	0.1	Above Ceiling	Truss	Metal	Ceiling	Intact	Red
154	LOD	Above Ceiling	Beam	Metal	Ceiling	Intact	Red
155	LOD	Above Ceiling	Deck	Metal	Ceiling	Intact	Silver
156	LOD	Stairway	Stringer	Metal	A	Intact	Grey
157	LOD	Stairway	Handrail	Metal	A	Intact	Grey
158	0.13	Stairway	Door Frame	Metal	A	Intact	Brown
159	LOD	Stairway	Wall	CMU	A	Intact	Tan
160	LOD	Stairway	Wall	CMU	B	Intact	Tan
161	0.1	Stairway	Cove Base	Metal	B	Intact	Grey
162	LOD	Stairway	Handrail	Metal	C	Intact	Grey
163	LOD	Stairway	Wall	CMU	C	Intact	Tan
164	LOD	Stairway	Stringer	Metal	C	Intact	Grey
165	LOD	Stairway	Wall	CMU	D	Intact	Tan
166	LOD	Office 11	Wall	Drywall	A	Intact	Lt. Grey
167	LOD	Office 11	Door Frame	Metal	A	Intact	Dk. Grey
168	LOD	Office 11	Wall	Drywall	B	Intact	Lt. Grey
169	LOD	Office 11	Window Sill	Wood	C	Intact	Dk. Grey
170	LOD	Office 11	Wall	Drywall	C	Intact	Lt. Grey
171	LOD	Office 11	Cabinet	Wood	C	Intact	W
172	LOD	Office 11	Wall	Drywall	D	Intact	Lt. Grey
173	LOD	Office 11	Cabinet	Wood	D	Intact	W
174	LOD	Office 12	Wall	Drywall	A	Intact	Lt. Grey
175	LOD	Office 12	Cove Base	Rubber	A	Intact	Dk. Grey
176	LOD	Office 12	Wall	Drywall	B	Intact	Lt. Grey
177	LOD	Office 12	Window Sill	Wood	B	Intact	Dk. Grey
178	0.13	Office 12	Column	Metal	C	Intact	Black
179	LOD	Office 12	Window Sill	Wood	C	Intact	Black
180	LOD	Office 12	Column	Metal	C	Intact	Grey

Red ( $\geq 0.7$  mg/cm<sup>2</sup>)

LOD (Limit of Detection) = 0.1 mg/cm<sup>2</sup>

Side A = North, then go clockwise

Blue ( $< 0.7$  mg/cm<sup>2</sup> for OSHA considerations)

XRF Data  
500 Lawand Drive  
Date Analyzed: 10/23/2020  
F&ME Project No.: G5662.02

Reading No.	Pb (mg/cm <sup>2</sup> )	Location	Component	Substrate	Side	Condition	Color
181	LOD	Office 12	Wall	Drywall	D	Intact	Lt. Grey
182	LOD	Office 13	Door Frame	Metal	D	Intact	Dk. Grey
183	LOD	Office 13	Wall	Drywall	A	Intact	Lt. Grey
184	LOD	Office 13	Wall	Drywall	B	Intact	Lt. Grey
185	LOD	Office 13	Window Frame	Metal	B	Intact	Silver
186	LOD	Office 13	Wall	Drywall	C	Intact	Lt. Grey
187	LOD	Office 13	Wall	Drywall	D	Intact	Lt. Grey
188	LOD	Office 13	Door Frame	Metal	D	Intact	Dk. Grey
189	LOD	Break Area	Cabinet Door	Wood	A	Intact	Brown
190	LOD	Break Area	Wall	Drywall	A	Intact	Lt. Grey
191	LOD	Break Area	Wall	Drywall	B	Intact	Lt. Grey
192	LOD	Break Area	Cabinet	Wood	C	Intact	Brown
193	LOD	Break Area	Wall	Drywall	C	Intact	Lt. Grey
194	LOD	Break Area	Wall	Drywall	D	Intact	Lt. Grey
195	LOD	Office 14	Window Sill	Wood	A	Intact	Dk. Grey
196	LOD	Office 14	Column	Metal	A	Intact	Dk. Grey
197	LOD	Office 14	Wall	Drywall	B	Intact	Lt. Grey
198	LOD	Office 14	Window Frame	Metal	B	Intact	Silver
199	LOD	Office 14	Wall	Drywall	C	Intact	Lt. Grey
200	LOD	Office 14	Door Frame	Metal	C-D Angle	Intact	Dk. Grey
201	LOD	File 1	Window Sill	Wood	A	Intact	Dk. Grey
202	LOD	File 1	Wall	Drywall	A	Intact	Lt. Grey
203	LOD	File 1	Wall	Drywall	B	Intact	Lt. Grey
204	LOD	File 1	Wall	Drywall	C	Intact	Lt. Grey
205	LOD	File 1	Wall	Drywall	D	Intact	Lt. Grey
206	LOD	Closet	Door Frame	Metal	A	Intact	Dk. Grey
207	LOD	Closet	Door	Wood	A	Intact	Brown
208	LOD	Closet	Wall	Drywall	B	Intact	Lt. Grey
209	LOD	Closet	Wall	Drywall	C	Intact	Lt. Grey
210	LOD	Closet	Wall	Drywall	D	Intact	Lt. Grey

Red ( $\geq 0.7$  mg/cm<sup>2</sup>)

LOD (Limit of Detection) = 0.1 mg/cm<sup>2</sup>

Side A = North, then go clockwise

Blue ( $< 0.7$  mg/cm<sup>2</sup> for OSHA considerations)

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Reading No.	Pb (mg/cm <sup>2</sup> )	Location	Component	Substrate	Side	Condition	Color
211	LOD	File 2	Window Sill	Wood	A	Intact	Black
212	0.11	File 2	Window Frame	Metal	A	Intact	Silver
213	LOD	File 2	Column	Metal	B	Intact	W
214	LOD	File 2	Wall	Drywall	B	Intact	Lt. Grey
215	LOD	File 2	Wall	Drywall	C	Intact	Lt. Grey
216	LOD	File 2	Wall	Drywall	D	Intact	Lt. Grey
217	LOD	Admin Area	Wall Cap	Formica	A	Intact	Black
218	LOD	Admin Area	Wall	Drywall	A	Intact	Lt. Grey
219	LOD	Admin Area	Wall	Drywall	B	Intact	Lt. Grey
220	LOD	Admin Area	Cabinet Door	Wood	C	Intact	Brown
221	LOD	Admin Area	Wall	Drywall	C	Intact	Lt. Grey
222	LOD	Admin Area	Wall	Drywall	D	Intact	Lt. Grey
223	LOD	Office 15	Window Sill	Wood	A	Intact	Black
224	LOD	Office 15	Wall	Drywall	A	Intact	Lt. Grey
225	LOD	Office 15	Wall	Drywall	B	Intact	Lt. Grey
226	LOD	Office 15	Wall	Drywall	C	Intact	Lt. Grey
227	LOD	Office 15	Door Frame	Metal	C	Intact	Dk. Grey
228	LOD	Office 15	Wall	Drywall	D	Intact	Lt. Grey
229	LOD	Office 16	Wall	Drywall	B	Intact	Orange
230	LOD	Office 16	Wall	Drywall	C	Intact	Lt. Grey
231	LOD	Office 16	Door Jamb	Metal	C	Intact	Dk. Grey
232	LOD	Office 16	Wall	Drywall	C	Intact	Lt. Grey
233	LOD	Office 16	Wall	Drywall	C	Intact	Lt. Grey
234	LOD	Office 16	Ceiling Grid	Metal	Ceiling	Intact	Grey
235	LOD	Office 16	Wall	Drywall	D	Intact	Lt. Grey
236	LOD	Print Room	Wall	Drywall	A	Intact	Lt. Grey
237	LOD	Print Room	Wall	Drywall	B	Intact	W
238	LOD	Print Room	Cabinet	Wood	B	Intact	W
239	LOD	Print Room	Wall	Drywall	C	Intact	W
240	LOD	Print Room	Air Handler Door	Metal	Ceiling	Intact	Brown

Red ( $\geq 0.7$  mg/cm<sup>2</sup>)

LOD (Limit of Detection) = 0.1 mg/cm<sup>2</sup>

Side A = North, then go clockwise

Blue ( $< 0.7$  mg/cm<sup>2</sup> for OSHA considerations)

XRF Data  
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Reading No.	Pb (mg/cm <sup>2</sup> )	Location	Component	Substrate	Side	Condition	Color
241	LOD	Print Room	Wall	Drywall	D	Intact	Lt. Grey
242	LOD	Print Room	Cabinet	Wood	D	Intact	W
243	LOD	Print Room	Communications Panel	Wood	D	Intact	Lt. Grey
244	LOD	Office 17	Column	Metal	A	Intact	Dk. Grey
245	LOD	Office 17	Window Sill	Wood	A	Intact	Dk. Grey
246	LOD	Office 17	Wall	Drywall	B	Intact	Lt. Grey
247	LOD	Office 17	Door Frame	Metal	B	Intact	Dk. Grey
248	LOD	Office 17	Wall	Drywall	C	Intact	Lt. Grey
249	0.1	Office 17	Window Frame	Metal	D	Intact	Dk. Grey
250	LOD	Office 17	Wall	Drywall	D	Intact	Lt. Grey
251	LOD	Office 18	Wall	Drywall	A	Intact	Lt. Grey
252	LOD	Office 18	Wall	Drywall	B	Intact	Lt. Grey
253	LOD	Office 18	Door Frame	Metal	B	Intact	Dk. Grey
254	LOD	Office 18	Wall	Drywall	C	Intact	Lt. Grey
255	LOD	Office 18	Window Sill	Wood	D	Intact	Dk. Grey
256	LOD	Office 18	Wall	Drywall	D	Intact	Lt. Grey
257	LOD	Conference Room	Wall	Drywall	A	Intact	Lt. Grey
258	LOD	Conference Room	Wall	Drywall	B	Intact	Orange
259	LOD	Conference Room	Door Frame	Metal	B	Intact	Dk. Grey
260	LOD	Conference Room	Wall	Drywall	C	Intact	Lt. Grey
261	LOD	Conference Room	Window Sill	Wood	C	Intact	Dk. Grey
262	0.16	Conference Room	Window Frame	Metal	D	Intact	Silver
263	LOD	Lobby	Wall	Drywall	A	Intact	Lt. Grey
264	LOD	Lobby	Wall	Drywall	A	Intact	Lt. Grey
265	LOD	Lobby	Wall	Drywall	B	Intact	Dk. Grey
266	LOD	Lobby	Wall	Drywall	C	Intact	Lt. Grey
267	LOD	Lobby	Window Frame	Metal	C	Intact	Silver
268	LOD	Lobby	Wall	Drywall	D	Intact	Lt. Grey
269	LOD	Lobby	Door Frame	Metal	D	Intact	Dk. Grey
270	LOD	Front Door Foyer (1st Floor)	Wall	Drywall	A	Intact	Wallpaper

Red ( $\geq 0.7$  mg/cm<sup>2</sup>)

LOD (Limit of Detection) = 0.1 mg/cm<sup>2</sup>

Side A = North, then go clockwise

Blue ( $< 0.7$  mg/cm<sup>2</sup> for OSHA considerations)



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Reading No.	Pb (mg/cm <sup>2</sup> )	Location	Component	Substrate	Side	Condition	Color
271	LOD	Front Door Foyer (1st Floor)	Communications Room II Door	Metal	A	Intact	Tan
272	LOD	Front Door Foyer (1st Floor)	Closet Door Frame	Metal	B	Intact	Tan
273	LOD	Front Door Foyer (1st Floor)	Wall	Drywall	B	Intact	Wallpaper
274	0.25	Front Door Foyer (1st Floor)	Stairway Door Frame	Metal	C	Intact	Tan
275	LOD	Front Door Foyer (1st Floor)	Front Door Frame	Metal	C	Intact	Silver
276	LOD	Front Door Foyer (1st Floor)	Women's Room Door Frame	Metal	C	Intact	Tan
277	0.46	Front Door Foyer (1st Floor)	Exit Door	Metal	D	Intact	Tan
278	LOD	Front Door Foyer (1st Floor)	Exit Door Frame	Metal	D	Intact	Tan
279	LOD	Men's Room (1st Floor)	Wall	Drywall	A	Intact	Grey
280	0.15	Men's Room (1st Floor)	Door Frame	Metal	A	Intact	Dk. Grey
281	0.45	Men's Room (1st Floor)	Door Jamb	Metal	A	Intact	Dk. Grey
282	LOD	Men's Room (1st Floor)	Wall	Drywall	B	Intact	Grey
283	LOD	Men's Room (1st Floor)	Cabinet	Wood	B	Intact	Brown
284	0.22	Men's Room (1st Floor)	Wall	Drywall	C	Intact	Grey
285	0.22	Men's Room (1st Floor)	Wall	Drywall	D	Intact	Grey
286	LOD	Men's Room (1st Floor)	Floor Tile	Ceramic	Floor	Intact	Dk. Grey
287	LOD	Men's Room (1st Floor)	Baseboard	Ceramic	D	Intact	Dk. Grey
288	0.23	Women's Room (1st Floor)	Wall	Drywall	A	Intact	Grey
289	0.44	Women's Room (1st Floor)	Door Frame	Metal	A	Intact	Dk. Grey
290	LOD	Women's Room (1st Floor)	Door	Wood	A	Intact	Brown
291	0.18	Women's Room (1st Floor)	Wall	Drywall	B	Intact	Grey
292	LOD	Women's Room (1st Floor)	Wall Heater	Metal	B	Intact	Brown
293	0.17	Women's Room (1st Floor)	Wall	Drywall	C	Intact	Grey
294	LOD	Women's Room (1st Floor)	Wall	Drywall	D	Intact	Grey
295	LOD	Comm. Room (1st Floor)	Wall	Drywall	A	Intact	Tan
296	LOD	Comm. Room (1st Floor)	Wall	Drywall	B	Intact	Tan
297	LOD	Comm. Room (1st Floor)	Wall	CMU	C	Intact	Tan
298	LOD	Comm. Room (1st Floor)	Wall	Wood	C	Intact	Tan
299	LOD	Comm. Room (1st Floor)	Door Frame	Metal	D	Intact	Tan
300	LOD	Comm. Room (1st Floor)	Wall	Drywall	D	Intact	Tan

Red ( $\geq 0.7$  mg/cm<sup>2</sup>)

LOD (Limit of Detection) = 0.1 mg/cm<sup>2</sup>

Side A = North, then go clockwise

Blue ( $< 0.7$  mg/cm<sup>2</sup> for OSHA considerations)

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Reading No.	Pb (mg/cm <sup>2</sup> )	Location	Component	Substrate	Side	Condition	Color
301	LOD	Closet (Front Foyer)	Wall	CMU	A	Intact	Tan
302	LOD	Closet (Front Foyer)	Wall	Drywall	B	Intact	Tan
303	LOD	Closet (Front Foyer)	Wall	CMU	C	Intact	Tan
304	LOD	Closet (Front Foyer)	Wall	CMU	D	Intact	Tan
305	0.49	Closet (Front Foyer)	Door Frame	Metal	D	Intact	Tan
306	LOD	Exterior	Wall	Stucco	C	Intact	Tan
307	LOD	Exterior	Door	Metal	C	Intact	Silver
308	LOD	Exterior	Door	Metal	D	Intact	Tan
309	LOD	Exterior	Door Frame	Metal	D	Intact	Tan
310	LOD	Exterior	Wall	Stucco	D	Intact	Tan
311	LOD	Exterior	Wall	Stucco	A	Intact	Tan
312	0.95	Calibrate					
313	1.01	Calibrate					
314	0.98	Calibrate					

Red ( $\geq 0.7$  mg/cm<sup>2</sup>)

LOD (Limit of Detection) = 0.1 mg/cm<sup>2</sup>

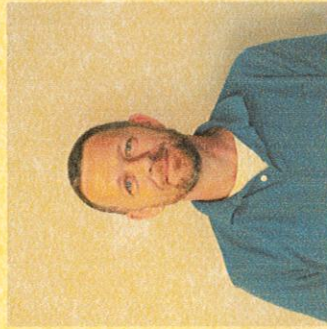
## Appendix D

### EPA LBP Inspector Certification



# United States Environmental Protection Agency

This is to certify that



Timothy O Ross

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226 as:

Risk Assessor

In the Jurisdiction of:

All EPA Administered Lead-based Paint Activities Program States, Tribes and Territories

This certification is valid from the date of issuance and expires November 30, 2022

LBP-R-1198705-1

Certification #

November 16, 2019

Issued On



A handwritten signature in black ink, appearing to read "Adrienne Priselac".

Adrienne Priselac, Manager, Toxics Office

Land Division



## Appendix E

### Site Photo's

## APPENDIX E – SITE PHOTO'S



**Photo 1.** Lead Shielding Under Roofing Membrane at Roof Drains

