

Amendment #5
CAPITAL PLAZA AREA REDEVELOPMENT
REQUEST FOR PROPOSALS (RFP)

Attached please find “Limited Asbestos Containing Materials Inspection” report, dated July 17, 2017, and completed by Lee Engineering, LLC, for the Frankfort Convention Center.

END OF AMENDMENT #5

Limited Asbestos Containing Materials Inspection

Frankfort Convention Center
405 Mero Street
Frankfort, Kentucky 40601



Prepared for:

Kentucky Finance & Administration Cabinet
Division of Engineering & Contract Administration
403 Wapping Street
Frankfort, Kentucky 40601

Prepared by:

Lee Engineering, LLC
Environment & Infrastructure

P.O. Box 500
Lawrenceburg, KY 40342
(502) 600-0016
jlleeeng@bellsouth.net

July 17, 2017

Lee Engineering, LLC
Environment & Infrastructure

July 17, 2017

Maziar Torabi, P.E.
KY Finance and Administration Cabinet
Division of Engineering
403 Wapping Street
Frankfort, KY 40601

RE: Limited Asbestos Inspection
Frankfort Convention Center
405 Mero Street
Frankfort, Kentucky 40601

Dear Mr. Torabi:

Lee Engineering has completed the authorized limited asbestos inspection of the Frankfort Convention Center, 405 Mero Street, Frankfort Kentucky. We completed a reconnaissance of the structure on July 11, 2017 and returned for field sampling July 12, 2017. The objective of the inspection was to identify asbestos containing materials (ACM) in concentrations greater than 1% that would require removal prior to demolition.

The structure was built for use as an arena and convention center in the late 1960's seating about 5,000 people. The structural backbone is a poured concrete elliptical bowl with the interior slopes of the bowl fitted with seating. The structure has a square exterior foot print with the long axis of the bowl running roughly East to West with the front of the structure on the West end and the back of the structure on the East end. The structure is symmetrically-shaped along both the South to North and East to West axis. The structure is located as shown in the attached Figure 1.

The space under the arena bowl is used for storage of tables and chairs and related items. Two corridors run the length of the structure on the East and West sides. Here various administrative and custodial offices, locker rooms, mechanical rooms, restrooms, concessions, a kitchen, and ticket booths are located. The attached Figure 2 shows the floor plan of the ground floor along with the sampling locations numbered 1 through 36.

Our sampling strategy was to take advantage of the structure's symmetry to minimize the number of samples needed to characterize the ACM content. For example there are four mechanical rooms with a room located in each quadrant of the structure. Each mechanical room is equipped in much the same manner as the other three and appears to be constructed of the same materials. Therefore, only two of the mechanical rooms were sampled assuming that the other two mechanical rooms are equipped using the same characteristic materials. Similarly, floor tile, ceiling tile, base board mastic and so forth were sampled in areas constructed at the same time and from the same materials as in other locations not sampled.

A total of 36 locations were sampled and sent to an independent laboratory for analysis. Sampling was conducted in general accordance with *Guidance for Controlling Asbestos Containing Materials in Buildings*, EPA 560/5-85-024. Bulk samples were collected and analyzed with polarized light microscopy (PLM) with dispersion staining and/or point counted when required. The complete analytical results including the chain of custody are attached. Also attached are photographs taken during the inspection for each sample to help with identification.

P.O. Box 500
Lawrenceburg, Kentucky

Lee Engineering, LLC
Environment & Infrastructure

Based on the attached results there were no ACM greater than 1% discovered that require abatement prior to demolition activities.

However, this ACM Inspection is limited due to tight time constraints and because the building is still in daily use. The following limitations should be considered.

- Piping runs in the ceiling and walls were sampled at only at a few select locations where a removable panel or door allowed access. Most of the interior walls are thick poured concrete nearly impossible to penetrate with ordinary hand tools. However, piping that was observable appeared to be insulated with fiberglass and wrapped with a non-ACM material. Piping elbows and valves that we could access are insulated with a powdery white material that appeared to be ACM but were found not to be during analysis (see samples 5, 6, 18, 21).
- The roof was not sampled because a destructive coring technique would be required and because the roof was reported to have been replaced 10 years ago. It is unknown if the old roof was removed or left in place under the new roof.
- The utility tunnel that is accessible in the Southwest Mechanical Room was not entered because it is a confined space and we were not prepared to make entry with the tight time constraints. However, the piping that could be observed through the metal grating over the tunnel appeared to be covered with the same characteristic wrapping as piping that we could access for sampling outside the tunnel.
- No samples were collected from the exterior of the structure due to the time constraints of mobilizing a "cherry picker" with a reach of 50-feet or more. The exterior soffit in particular could possibly be constructed of ACM transite panels based on prior experience. Also, the windows located above the soffit could possibly be sealed with an ACM sealant that would be difficult to access without the use of specialized equipment.
- Unless otherwise determined it should be assumed that all fire-rated doors have friable asbestos cores. We did not sample the doors as that would have created dust in an occupied building.

Generally, during demolition close attention should be made to identify "hidden" ACM that was not readily discoverable during this limited asbestos inspection.

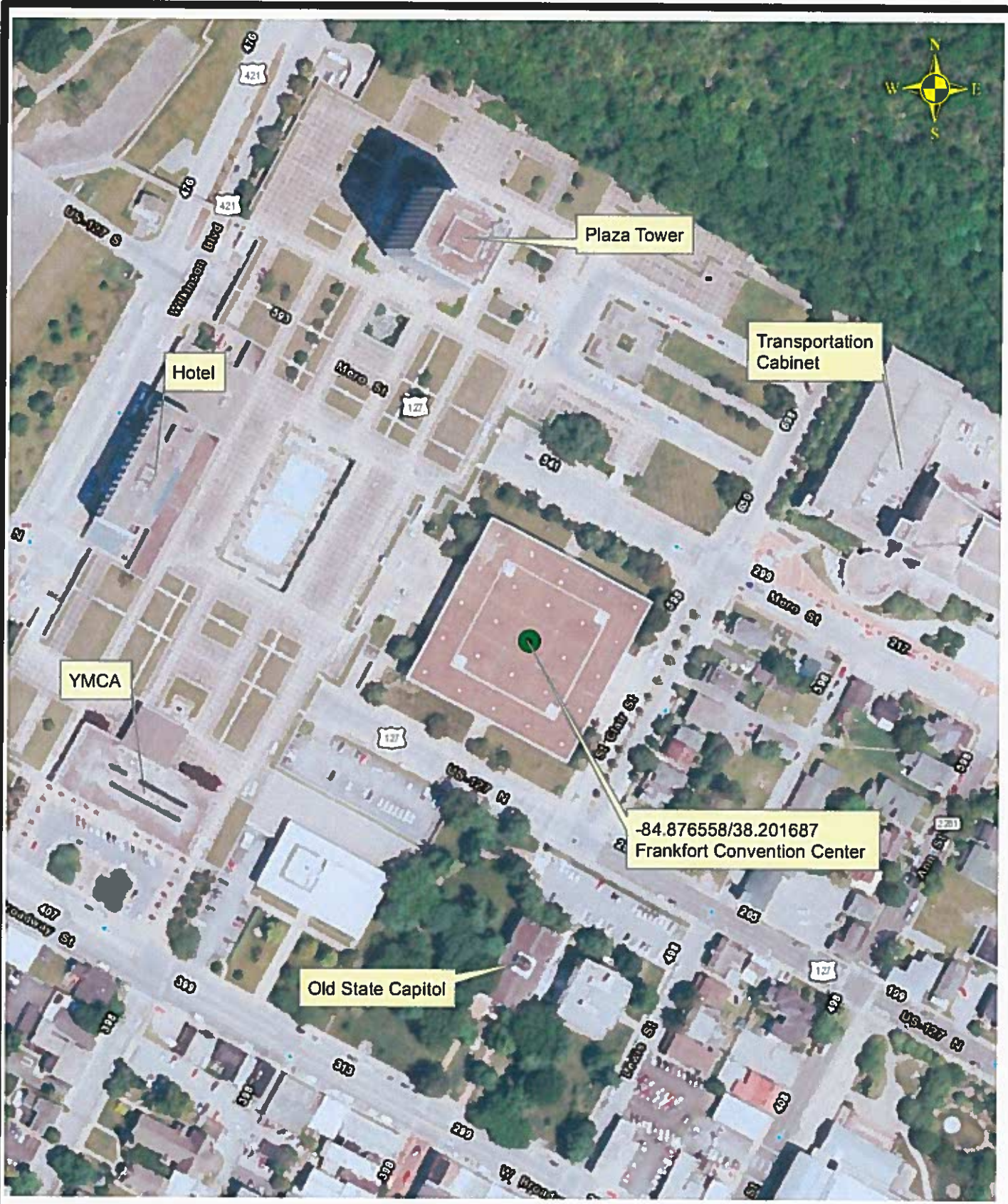
Please call me at (502) 600-0016 if you have any questions or comments.

Sincerely,



Jeffrey L. Lee, P.E.

P.O. Box 500
Lawrenceburg, Kentucky



Kentucky F&A Cabinet, Division of Engineering
403 Wapping Street
Frankfort, KY 40601

Figure 1 (1:2,400)
Frankfort Convention Center
405 Mero Street
Frankfort, Kentucky 40601



Lee Engineering, LLC
 PO Box 500
 Lawrenceburg, KY 40342

July
 2017

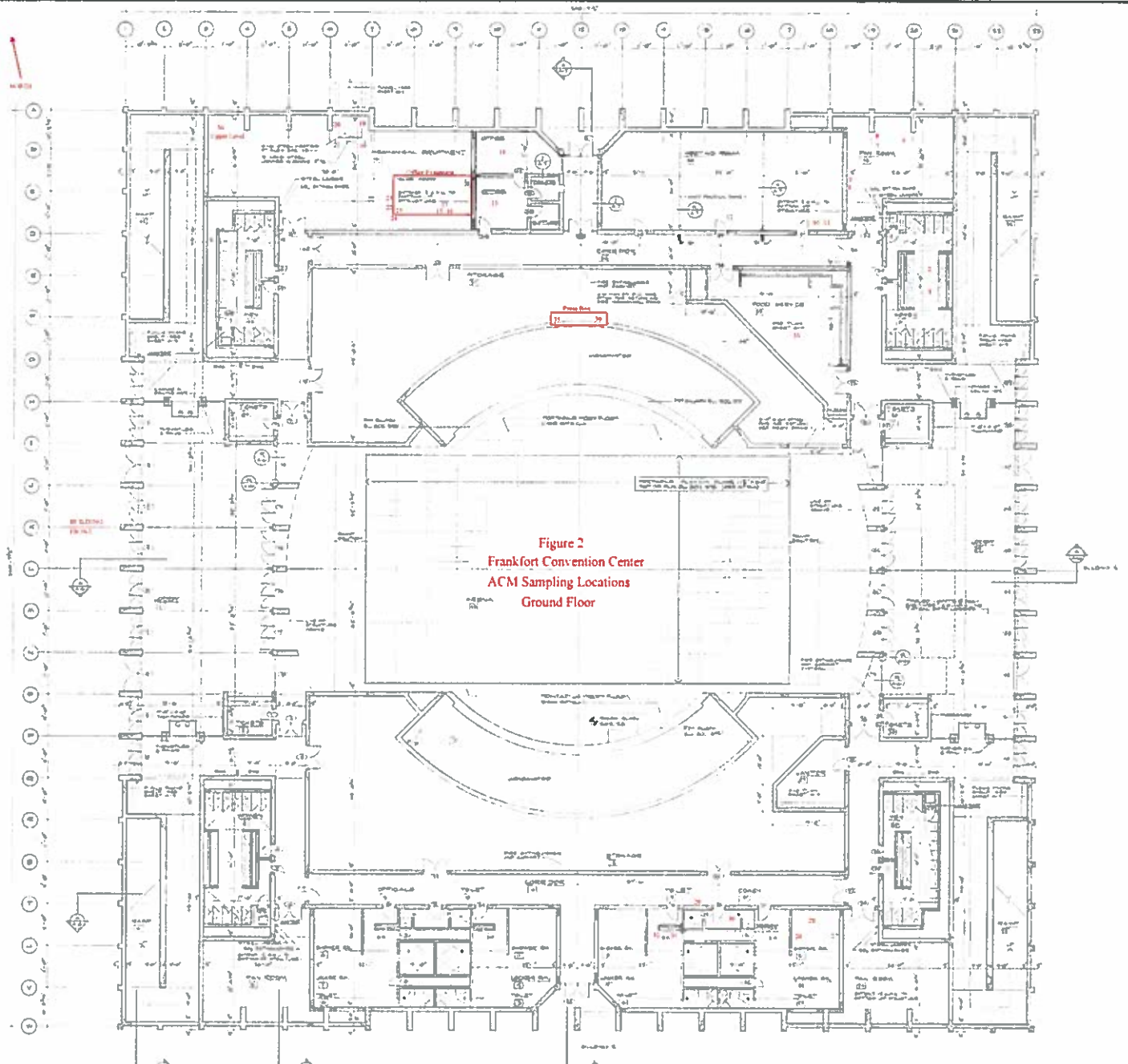




Photo 1 - Carpet Adhesive



Photo 2 - Pipe Wrap



Photo 3 - Drop Ceiling Tile



Photo 4 - Pipe Wrap



Photo 5 - Elbow Insulation Green



Photo 6 - Elbow Insulation Yellow



Photo 7 - Pipe Wrap Green



Photo 8 - Pipe Wrap Yellow



Photo 9 - Pipe Wrap Yellow



Photo 10 - Carpet Adhesive



Photo 11 - Drop Ceiling Tile



Photo 12 - Drop Ceiling Tile



Photo 13 - Drop Ceiling Tile



Photo 14 - Drop Ceiling Tile



Photo 15 - Adhesive for Ceiling Tile



Photo 16 - 1 x 1 Ceiling Tile



Photo 17 - Drywall Under Ceiling Tile



Photo 18 - Elbow Insulation Green



Photo 19 - Pipe Wrap Green



Photo 20 - Pipe Wrap Yellow



Photo 21 - Elbow Insulation Yellow



Photo 22 - Baseboard Adhesive



Photo 23 - Drywall

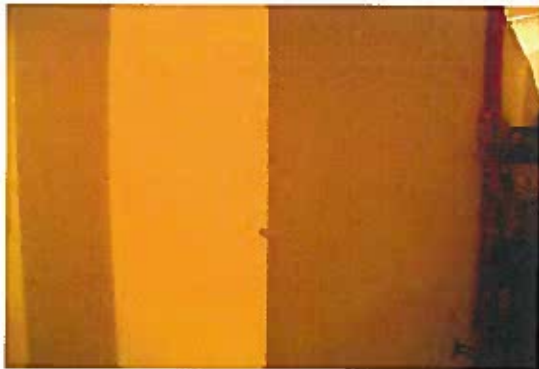


Photo 24 - Drywall Mud



Photo 25 - Baseboard Adhesive



Photo 26 - Floor Tile 12 x 12



Photo 27 - Floor Tile 12 x 12

Photo Not Available

Photo 28 - Drop Ceiling Tile



Photo 29 - Baseboard Mastic



Photo 30 - Floor Tile 12 x 12



Photo 31 - Pipe Wrap

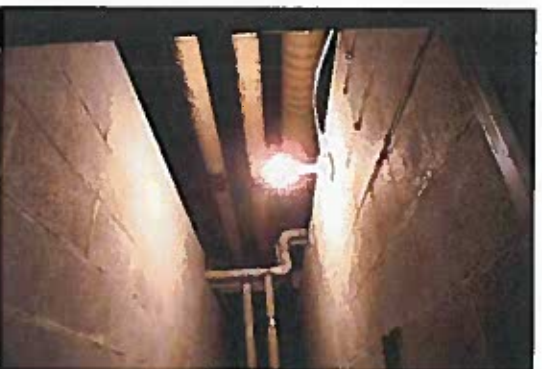


Photo 32 - Pipe Wrap



Photo 33 - Drop Ceiling Tile



Photo 34 - Access to Ceiling/Ductwork Coating



Photo 35 - Ceiling Coating



Photo 36 - Acoustical Board

Point Count 10% or less

Asbestos Inspection Form and Chain of Custody

Project: <u>Conv. Center</u>	<u>Lee Engineering, llc</u> P.O Box 500 Lawrenceburg, Kentucky 40341 Ph (502) 600-0016
Date: <u>7-12-2017</u>	
Address: _____	
Sampled By: <u>Jeff Lee</u>	

Sample ID	Location	Matrix	Color	Size	Comments
1	North Main St	Carpet Glue	Brown		dark carpet on conc.
2	N.E. Womans Bathroom	pipe wrap	white		mult layer
3	N.E. Womans Bathroom	ceiling-dry	white		2 layer
4	N.E. Womans bathroom	pipe wrap	white		layer over fiber glass
5	NE Fan Room	elbow T.S.I.	green		
6	N.E. Fan Room	elbow T.S.I.	yellow		
7	N.E. Fan Room	pipe wrap	green		
8	N.E. Fan Room	pipe wrap	yellow		
9	NE Fan Room	pipe wrap	yellow		
10	green River Conf. Room	carpet glue	tan-yellow		Brown-Blue carpet
11	green River Conf. Room	drop ceiling tile	white		
12	Cambarland River Conf. Room	drop ceiling tile	white		
13	Office exec Director	drop ceiling tile	white		
14	Back office exec Director	drop ceiling tile	gray-white		
15	Client Service office	glued on Adhesive ceiling tile	white		
16	Client Services office	1 foot x 1 foot ceiling tile	glued on white		
17	Client serv office	dry wall	white		beneath glue on tile
18	N.W. Mech Room	elbow T.S.I.	green		
19	N.W. Mech Room	pipe wrap	green		
20	N.W. Mech Room	pipe wrap	yellow		
21	N.W. Mech Room	elbow T.S.I.	yellow		
22	Client Service vinyl	baseboard	gray		
23	Client Service	Dry wall	white		
24	N.W. Mech Room	Dry wall	white		

Relinquished By: Signature <u>Jeff Lee</u> 7/13/17	Received By: Signature	Date & time
-------------------------------------------------------	------------------------	-------------

8506 Laverne Dr. 40229

Point count 10% or less

Asbestos Inspection Form and Chain of Custody

Project: <u>Conven Center</u>	Lee Engineering, llc P.O Box 500 Lawrenceburg, Kentucky 40341 Ph (502) 600-0016
Date: <u>7-12-2017</u>	
Address: _____	
Sampled By: <u>Jeff Lee</u>	

Sample ID	Location	Matrix	Color	Size	Comments
25	N.W. Mech Room	Vinyl baseboard Adhesive	black		
	S.E. Mech Room				Similar to pipe wrap other mech room
26	Locker Room #4	floor tile + mastic	gray		12x12 tile
27	" " #4	light gray floor tile + mastic	gray		12x12 tile
28	Locker Room #4	drop ceiling tile	white		
29	Vinyl baseboard corridor	baseboard + mastic	black		In front of Locker Room 2
30	Locker Room #7	floor tile	gray		
31	Locker Room #1	pipe wrap	white		
32	Locker Room #1	pipe wrap	silver		
33	Kitchen	drop ceiling tile	white		
34	N.W. top concession stand ceiling	ceiling coating	black powder		concession stand in top N.W. corner
35	ceiling	ceiling coating	black		upper level NW
36	ceiling	Acoustic tile	black yellow		upper lower NW

Relinquished By: Signature <u>Jeffrey L. Lee 7/13/17</u>	Received By: Signature	Date & time
-------------------------------------------------------------	------------------------	-------------

MRS, INC.

MRS, Inc. Analytical Laboratory Division

332 West Broadway / Suite # 902
Louisville, Kentucky - 40202 - 2133(502) 495-1212
Fax: (502) 491-7111**BULK SAMPLE ASBESTOS ANALYSIS**

Analysis # # 07138 Address: Convention Center
 Client Name: State Of Kentucky Frankfort, KY
 Sampled By: Jeff Lee

A - C = Layers # 1 - 3

Sample ID	Color	Layered	Fibrous	% FIBROUS ASBESTOS				% NON-ASBESTOS FIBERS			
				Chrysotile	Amosite	crocidolite	Others	Cellulose	Fiberglass	Syn. Fiber	Other/Mat
# 1	Brown	Yes	No				None	3%			97%
# 2 A	White	Yes	Yes				None	65%			35%
# 2 B	Black	Yes	Yes				None	55%			45%
# 2 C	Yellow	Yes	Yes				None		99%		1%
# 3 A	White	Yes	Yes				None	55%	40%		5%
# 3 B	White	Yes	Yes				None	52%	43%		5%
# 4	White	Yes	Yes				None	97%			3%
# 5	Green	Yes	Yes				None	35%	30%		35%
# 6	Yellow	Yes	Yes				None		95%		5%
# 7	Green	Yes	Yes				None		97%		3%
# 8	Yellow	Yes	Yes				None		94%		6%
# 9	Yellow	Yes	Yes				None	85%			15%
# 10	Yellow	Yes	No				None	2%			98%
# 11	White	Yes	Yes				None	57%	40%		3%
# 12	White	Yes	Yes				None	2%	90%		8%
# 13	White	Yes	Yes				None	55%	40%		5%
# 14	Gray	Yes	Yes				None		93%		7%
# 15	Brown	Yes	No	2%	(To Be	Point Counted)		2%			96%
# 16	White	Yes	Yes				None	52%	40%		8%
# 17	White	Yes	Yes				None	35%			65%

Methodology : EPA Method 600/R-93-116

Page # 1

Date Analyzed : 13-Jul-17Analyst : Winterford MensahReviewed By: 
Signature

The test relates only to the items tested. This report does not represent endorsement by NVLAP or any agency of the U.S Government. Partial Reproduction of any part of this report is strictly prohibited. Samples shall be retained for (30) days.

AIHA # 102459

AJHA #1 02459

MRS, INC.*MRS, Inc. Analytical Laboratory Division*332 West Broadway / Suite # 902
Louisville, Kentucky - 40202 - 2133(502) 495-1212
Fax: (502) 491-7111**BULK SAMPLE ASBESTOS ANALYSIS**

Analysis N# # 07138 Address: Convention Center
 Client Name: State Of Kentucky Frankfort, KY
 Sampled By: Jeff Lee
 A - C = Layers # 1 - 3 T = Floor Tile / M = Mastic Under The Tile

Sample ID	Color	Layered	Fibrous	% FIBROUS ASBESTOS				% NON-ASBESTOS FIBERS			
				Chrysotile	Amosite	crocidolite	Others	Cellulose	Fiberglass	Syn. Fiber	Other/Mat.
# 18	Green	Yes	Yes				None	33%	30%		37%
# 19	Yellow	Yes	Yes				None	3%	95%		2%
# 20	Yellow	Yes	Yes				None		99%		1%
# 21	Yellow	Yes	Yes				None		97%		3%
# 22	Gray	Yes	No				None	8%			92%
# 23	White	Yes	Yes				None	33%			67%
# 24	White	Yes	Yes				None	35%			65%
# 25	Black	Yes	No				None	3%			97%
# 26 T	Gray	Yes	No				None	5%			95%
# 26 M	Tan	Yes	No				None	2%			98%
# 27 T	Gray	Yes	No				None	3%			97%
# 27 M	Tan	Yes	No				None	3%			97%
# 28	White	Yes	Yes				None	55%	40%		5%
# 29 A	Black	Yes	No				None	2%			98%
# 29 B	Yellow	Yes	No				None	3%			97%
# 30	Gray	Yes	No				None	5%			95%
# 31	White	Yes	Yes				None	3%	95%		2%
# 32	Silver	Yes	No				None	15%			85%
# 33	White	Yes	Yes				None	53%	40%		7%
# 34	Black	Yes	No	2%	(To Be	Point Counted)		2%			96%

Methodology : EPA Method 600/R-93-116

Page # 2

Date Analyzed : 13-Jul-17Analyst : Winterford Mensah

Reviewed By: _____

Winterford Mensah
Signature

The test relates only to the items tested. This report does not represent endorsement by NVLAP or any agency of the U.S Government. Partial Reproduction of any part of this report is strictly prohibited. Samples shall be retained for (30) days.

AIHA # 102459

AIHA #1 02459

<i>MRS, INC.</i>	<i>MRS, Inc. Analytical Laboratory Division</i>
-------------------------	-------------------------------------------------

332 West Broadway / Suite # 902
 Louisville, Kentucky - 40202 - 2133

(502) 495-1212
 Fax: (502) 491-7111

BULK SAMPLE ASBESTOS ANALYSIS

Analysis N#	<u># 07138</u>	Address:	<u>Convention Center</u>
Client Name:	<u>State Of Kentucky</u>		<u>Frankfort, KY</u>
Sampled By:	<u>Jeff Lee</u>		
A - C = Layers # 1 - 3		T = Floor Tile / M = Mastic Under The Tile	

Sample ID	Color	Layered	Fibrous	% FIBROUS ASBESTOS				% NON-ASBESTOS FIBERS			
				Chrysotile	Amosite	crocidolite	Others	Cellulose	Fiberglass	Syn. Fiber	Other/Mat.
# 35	Black	Yes	No	2%	(To Be	Point Counted)		2%			96%
# 36 A	Black	Yes	No	2%	(To Be	Point Counted)		2%			96%
# 36 B	Yellow	Yes	Yes				None		98%		2%

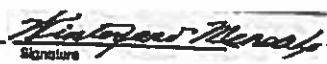
Methodology : EPA Method 600/R-93-116 Page # 3
 Date Analyzed : 13-Jul-17
 Analyst : Winterford Mensah Reviewed By: 

The test relates only to the items tested. This report does not represent endorsement by NVLAP or any agency of the U.S Government. Partial Reproduction of any part of this report is strictly prohibited. Samples shall be retained for (30) days.

MRS, INC.*MRS, Inc. Analytical Laboratory Division*332 West Broadway / Suite # 902
Louisville, Kentucky - 40202 - 2133Phone # : (502) 495-1212
E-Mail Address: CEOMRSInc@AOL.Com

Client:	<u>State Of Kentucky</u>	Project No:	<u># 07138</u>
Address:	<u>Division Of Engineering & Contract Administration 403 Wapping Street Frankfort, KY - 40601 Attention : Maziar Torabo</u>	Sample ID:	<u># 16</u>
		Sampled:	<u>13-Jul-17</u>
		Received:	<u>13-Jul-17</u>
		Analyzed:	<u>14-Jul-17 - Point Count -</u>

Bulk Sample Analysis

Sampled By	: <u>Jeff Lee - Lee Engineering, LLC</u>				
Facility/Location:	<u>Convention Center, Frankfort, KY</u>				
Field Description:	<u>Adhesive / Glue On Ceiling Tile - Client Service Office</u>				
Laboratory Description:	<u>Brown Material</u>				
Asbestos Materials:	<u>Chrysotile = 1/400 = 0.25 % (< 1 %) Sample Is Negative</u>				
Non-Asbestos Fibrous Materials :	<table border="0"> <tr> <td>Cellulose</td> <td>0.25 %</td> </tr> <tr> <td>Binders</td> <td>99.50 %</td> </tr> </table>	Cellulose	0.25 %	Binders	99.50 %
Cellulose	0.25 %				
Binders	99.50 %				
Remarks:	The sample was analyzed for asbestos content following the EPA Methodology (600/R-93/116). The test relates only to the items tested. This report does not represent endorsement by NVLAP or any agency of the U.S. Government.				
Analyst:	<u>Winterford Mensah</u>				
Reviewed By:	<u></u> <small>Signature</small>				

AIHA #102459

/

AIHA #102459

/

AIHA #102459

MRS, INC.*MRS, Inc. Analytical Laboratory Division*332 West Broadway / Suite # 902
Louisville, Kentucky - 40202 - 2133Phone # : (502) 495-1212
E-Mail Address: CEOMRSInc@AOL.Com

Client:	<u>State Of Kentucky</u>	Project No:	<u># 07138</u>
Address:	<u>Division Of Engineering & Contract Administration 403 Wapping Street Frankfort, KY - 40601 Attention : Maziar Torabo</u>	Sample ID:	<u># 34</u>
		Sampled:	<u>13-Jul-17</u>
		Received:	<u>13-Jul-17</u>
		Analyzed:	<u>14-Jul-17 - Point Count -</u>

Bulk Sample Analysis

Sampled By	: Jeff Lee - Lee Engineering, LLC
Facility/Location:	Convention Center, Frankfort, KY
Field Description:	Concession Stand - Black Powder On Ceiling - NW Corner
Laboratory Description:	Black Material
Asbestos Materials:	Chrysotile = 1/400 = 0.25 % (< 1 %) Sample Is Negative
Non-Asbestos Fibrous Materials :	Cellulose 0.25 % Binders 99.50 %
Remarks:	The sample was analyzed for asbestos content following the EPA Methodology (600/R-93/116). The test relates only to the items tested. This report does not represent endorsement by NVLAP or any agency of the U.S. Government.
Analyst:	<u>Winterford Mensah</u>
Reviewed By:	<u><i>Winterford Mensah</i></u> Signature

AIHA #102459

/

AIHA #102459

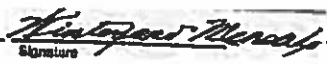
/

AIHA #102459

MRS, INC.*MRS, Inc. Analytical Laboratory Division*332 West Broadway / Suite # 902
Louisville, Kentucky - 40202 - 2133Phone # : (502) 495-1212
E-Mail Address: CEOMRSInc@AOL.Com

Client:	<u>State Of Kentucky</u>	Project No:	<u># 07138</u>
Address:	<u>Division Of Engineering &</u>	Sample ID:	<u># 35</u>
	<u>Contract Administration</u>	Sampled:	<u>13-Jul-17</u>
	<u>403 Wapping Street</u>	Received:	<u>13-Jul-17</u>
	<u>Frankfort, KY - 40601</u>	Analyzed:	<u>14-Jul-17 - Point Count -</u>
	<u>Attention : Maziar Torabo</u>		

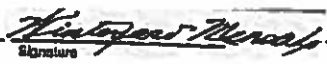
Bulk Sample Analysis

Sampled By	: <u>Jeff Lee - Lee Engineering, LLC</u>
Facility/Location:	<u>Convention Center, Frankfort, KY</u>
Field Description:	<u>Ceiling Coating - Black - Upper Level -NW</u>
Laboratory Description:	<u>Black Powdery Material</u>
Asbestos Materials:	<u>Chrysotile = 1/400 = 0.25 % (< 1 %) Sample Is Negative</u>
Non-Asbestos Fibrous Materials :	
	<u>Cellulose 0.25 %</u>
	<u>Binders 99.50 %</u>
Remarks:	<u>The sample was analyzed for asbestos content following the EPA Methodology (600/R-93/116). The test relates only to the items tested. This report does not represent endorsement by NVLAP or any agency of the U.S. Government.</u>
Analyst:	<u>Winterford Mensah</u>
Reviewed By:	<u></u> <small>Signature</small>

MRS, INC.*MRS, Inc. Analytical Laboratory Division*332 West Broadway / Suite # 902
Louisville, Kentucky - 40202 - 2133Phone # : (502) 495-1212
E-Mail Address: CEOMRSInc@AOL.Com

Client:	<u>State Of Kentucky</u>	Project No:	<u># 07138</u>
Address:	<u>Division Of Engineering &</u>	Sample ID:	<u># 36 A</u>
	<u>Contract Administration</u>	Sampled:	<u>13-Jul-17</u>
	<u>403 Wapping Street</u>	Received:	<u>13-Jul-17</u>
	<u>Frankfort, KY - 40601</u>	Analyzed:	<u>14-Jul-17 - Point Count -</u>
	<u>Attention : Maziar Torabo</u>		

Bulk Sample Analysis

Sampled By	: Jeff Lee - Lee Engineering, LLC
Facility/Location:	Convention Center, Frankfort, KY
Field Description:	Upper Level - NW - Black Layer On Ceiling Tile
Laboratory Description:	Black Powdery Material
Asbestos Materials:	Chrysotile = 1/400 = 0.25 % (< 1 %) Sample Is Negative
Non-Asbestos Fibrous Materials :	
	Cellulose 0.25 %
	Binders 99.50 %
Remarks:	The sample was analyzed for asbestos content following the EPA Methodology (600/R-93/116). The test relates only to the items tested. This report does not represent endorsement by NVLAP or any agency of the U.S. Government.
Analyst:	<u>Winterford Mensah</u>
Reviewed By:	<u></u> Signature

AIHA #102459

/

AIHA #102459

/

AIHA #102459