

Office of the Vice President and Chief Financial Officer Procurement Services https://procurement.ufl.edu/ 971 Elmore Drive PO Box 115250 Gainesville, FL 32611-5250 (352) 392-1331 Fax 352-392-8837

September 17, 2019

ADDENDUM NUMBER 3 ON INVITATION TO BID ITB20KO-117

TITLE: Chilled Water Pipe Replacement – Dental Science Building Floors 8, 9 and 10

Mandatory pre-bid meeting was held at the site on August 19, 2019 at 10:30 AM. **Bid opening** will be held September 24, 2019 at 3:00 PM in UF Procurement Services, 971 Elmore Drive, Gainesville, FL 32611.

This addendum shall be considered part of the Contract Documents for the above-mentioned project as though it had been issued at the same time and incorporated integrally therewith. Where provisions of the following supplementary data differ from those of the original Contract documents, this addendum shall govern and take precedence. Bidders are hereby notified that they shall acknowledge receipt of the addendum.

NOTES:

- 1. See attached seven (7) pages of Asbestos Abatement Work Plan dated September 16, 2019.
- 2. See attached 51 pages of Asbestos Abatement Survey Report dated September 16, 2019.

Cilitakes

Karen Olitsky Procurement Agent III

PLEASE ACKNOWLEDGE RECEIPT OF THIS ADDENDUM 3 AND RETURN WITH YOUR BID. FAILURE TO ACKNOWLEDGE THIS ADDENDUM COULD CONSTITUTE REJECTION OF YOUR BID.

VENDOR NAME

VENDOR ADDRESS

SIGNATURE

The Foundation for The Gator Nation An Equal Opportunity Institution



September 16, 2019

via e-mail: <u>rhatker@ufl.edu</u>

Mr. Robert Hatker Planning, Design and Construction University of Florida P.O. Box 115050 232 Stadium Road Gainesville, Florida 32611

RE: Asbestos Abatement Work Plan Dental Science Chilled Water Pipe Replacement – Floors 8-10 MP-04810 University of Florida Gainesville, Florida

GLE Project No.: 19140-01824

Dear Mr. Hatker:

GLE Associates, Inc. (GLE) has prepared the attached Work Plan for the removal of asbestoscontaining materials from within the Dental Science Building, Building 205, located at the University of Florida, in Gainesville, Florida.

GLE appreciates the opportunity to work with you on this project. Should you have questions regarding the Work Plan, please do not hesitate to contact our office.

Sincerely, GLE Associates, Inc. Asbestos Business License ZA0000034

Artiom Chacon Senior Project Manager

Ronth heave

Robert B. Greene PE, PG, CIH, LEED AP President Florida LAC# EA000009

AC/PSZ/RBG/lr

cc: Tom Ladun, Environmental Health and Safety

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GLE Associates, Inc.

ASBESTOS ABATEMENT WORK PLAN

Dental Science Chilled Water Pipe Replacement Floors 8-10 MP-04810 University of Florida Gainesville, Florida

GLE Project No.: 19140-01824

Prepared for:

Mr. Robert Hatker Planning, Design and Construction University of Florida P.O. Box 115050 232 Stadium Road Gainesville, Florida 32611

September 2019

Prepared by:



2228 NW 40th Terrace, Suite C Gainesville, Florida 32605 352-335-6648 • Fax 352-335-6187

<u>ASBESTOS ABATEMENT WORK PLAN</u> <u>DENTAL SCIENCE BUILDING, BUILDING 205</u> <u>CHILLED WATER PIPE REPLACEMENT, FLOORS 8-10</u> <u>GLE PROJECT NO.: 19140-01824</u>

September 16, 2019

1.0 INTRODUCTION

- A. This work plan is an abbreviated description of task requirements prepared for the removal of asbestos-containing black mastic associated with foamglass thermal systems insulation, coinciding with the renovations to the Dental Science Building, Building 205, located at the Gainesville Campus of the University of Florida.
- B. All work shall be performed in strict accordance with all federal, state and local regulations and ordinances, and in a manner which conforms to the intent of all health and safety laws.
- C. All work must comply with abatement procedures described in the Annual Contract for Asbestos Abatement and Re-insulation dated 2017, herein referred to the Master Specification developed for University of Florida, and to sections applicable to the scope of the work, which are to be used as primary requirements in conjunction with the Work Plan.

2.0 SCOPE OF THE WORK

A. This project involves the removal and disposal of asbestos-containing thermal systems insulation from Dental Science Building - Building 205, as shown in the attached drawings AA-1 through AA-2. The work may be conducted in multiple phases as determined by the Owner.

The CONTRACTOR shall be responsible for field verification of existing quantities and conditions.

B. For the purpose of this Work Plan, "start date" shall mean the "day CONTRACTOR arrives on-site", and "complete date" shall mean the "day CONTRACTOR leaves the project site", work area tear down, etc. The Owner shall determine the start and completion dates for this project.

Under no circumstances shall the CONTRACTOR disrupt the daily operations of the Owner.

3.0 GENERAL REQUIREMENTS

- A. Existing conditions are reflected correctly to the best of the OWNER REPRESENTATIVE'S knowledge. Refer to Section 01 11 00 - SUMMARY OF WORK of the Specifications for CONTRACTOR'S responsibility for verification of existing conditions.
- B. In the event that conditions are encountered in the field which were not identified in the Work Plan, the OWNER'S REPRESENTATIVE shall be notified immediately.
- C. Modifications of this Work Plan can be made in writing by the OWNER'S REPRESENTATIVE.
- D. If CONTRACTOR proceeds, without written notification from the OWNER'S REPRESENTATIVE, CONTRACTOR shall be solely and completely liable for those efforts.
- E. Power and water for this specific project will be provided by the OWNER. The cost of all utilities shall be paid by the Owner. Coordinate any utility outages as applicable with the appropriate university personnel.

F. PRE-JOB SUBMITTALS

- 1. Prior to commencement of the work, CONTRACTOR shall submit one copy of the required information, as per Section 01 32 19 of the Master Specification, to the OWNER'S REPRESENTATIVE. No work will be allowed to commence without required submittals.
- 2. In reference to section 01 32 19 of the Master Specification and in conjunction with pre-job submittals, Contractor shall furnish OWNER'S REPRESENTATIVE all MSDS information.

No <u>products</u> or equipment shall be utilized in the performance of abatement without prior approval by OWNER'S REPRESENTATIVE. Contractor shall provide documentation to the Owner that describes any necessary replacement materials.

4.0 **PROJECT COORDINATION**

A. GENERAL

- 1. The project will be coordinated with the OWNER'S PROJECT MANAGER in conjunction with the OWNER'S REPRESENTATIVE. **CONTRACTOR SHALL PERFORM NO WORK UNLESS APPROVAL BY THE OWNER OR OWNER'S REPRESENTATIVE HAS BEEN RECEIVED. UNDER NO CIRCUMSTANCES SHALL CONTRACTOR DISRUPT THE DAILY ACTIVITIES OF ANY FACILITY WITHOUT PRIOR APPROVAL BY THE OWNER**.
- 2. CONTRACTOR shall not perform any work in the absence of OWNER'S REPRESENTATIVE, who shall decide, in his absolute discretion, as to the meaning and applicability of any part of this Work Plan and/or the Master Specification.

5.0 ASBESTOS ABATEMENT REQUIREMENTS

A. PERSONNEL AND RESPIRATORY PROTECTION

- 1. During isolation and preparation of the Work Area, workers are not required to wear respiratory protection, as outlined in Section <u>01 57 19</u> of the Master Specifications.
- 2. During removal and final cleaning, workers shall wear half-face respiratory protection as a minimum, as outlined in Section <u>01 57 19</u> of the Master Specifications.
- 3. All personnel shall wear disposable coveralls during all abatement activities.

B. REMOVAL OF ASBESTOS-CONTAINING MATERIALS

1. CONTRACTOR shall utilize Section <u>02 82 00</u> of the Master Specifications – <u>Conventional Removal</u>, or <u>Glove Bag Removal</u> in performance of black mastic associated with foamglass insulation removal and disposal. In addition to these requirements, Contractor shall maintain a minimum of 0.02 column inches of water pressure differential, relative to outside pressure, within the negative pressure enclosure (NPE) as evidenced by manometric measurements. All other applicable sections of the Master Specification shall additionally be utilized. 2. CONTRACTOR shall be responsible for securing the facility to original status prior to start of abatement procedures.

C. PROJECT MONITORING AND WORK AREA CLEARANCE CRITERIA

1. GLE will perform project monitoring during all abatement activities. Project Clearance shall be determined with respect to size and scope of the work area. Reference Section 01 74 23.1 of Master Specifications.

D. DISPOSAL OF ASBESTOS-CONTAINING WASTE MATERIALS

- 1. Disposal of asbestos-containing waste material shall be performed in strict compliance with Section <u>02 82 00</u> of the Master Specifications.
- 2. Transport bagged ACM waste from the work area to a storage container or transportation vehicle in a covered cart. All transport must occur between the hours of 7:00 pm and 7:00 am, or at the discretion of the Owner.
- E. POST-JOB SUBMITTALS
 - 1. After successful completion of the project, submit one copy of required documentation, as per Section <u>01 32 19</u> of the Master Specification, to the OWNER'S REPRESENTATIVE. Final payment to CONTRACTOR will not be made until required post-job submittals have been received and approved by OWNER'S REPRESENTATIVE. All submittals must be received by the Owner's Representative, GLE, within 10 calendar days of project completion. All submittals shall be unbound and complete or shall be returned to the Contractor for correction.

6.0 UNIVERSITY OF FLORIDA ASBESTOS CONTRACTOR GENERAL LIABILITY INSURANCE POLICY

A. ASBESTOS ABATEMENT WORK

All projects including asbestos abatement work are required to comply with the following University policy as it pertains to the asbestos abatement portion of the work:

For all asbestos projects with work beginning after June 30, 2011 the University of Florida require asbestos contractors doing work for the University to carry asbestos general liability insurance in addition to all other insurance coverage's (including but

not limited to automobile and workers compensation) required by the bid and contract documents. The asbestos related insurance policy must be procured through an underwriter with an A.M. Best rating of A, X or better lawfully authorized to do business in Florida as of the time of this bid (or, as of the time the asbestos abatement work is added to the contract). The insurance policy shall provide that the University of Florida is named as an additional insured. The University shall not be responsible for any sums of money associated with the policy, including any deductible. Coverage shall be on "occurrence" basis, rather than "claims made" and must protect Contractor from all claims arising out of the Contractor's asbestos abatement work for the University. The minimum limits of liability for the asbestos contractor general liability are:

Each Occurrence Limit	\$1,000,000
Personal Injury and Advertising Injury Limit	\$1,000,000
Fire Damage Limit (any one fire)	\$50,000
Medical Expense Limit (any one person)	\$5,000
Products and Completed Operations Aggregate Limit	\$1,000,000
Aggregate Limit (other than Products/Completed Operations)	\$1,000,000

The Contractor shall file with the University a certificate of insurance and a copy of the policy acceptable to the University prior to the commencement of the work. The policy shall remain in force without interruption from the date of the commencement of the work until the work is completed and the Contractor is off site. The certificate and policy shall indicate that coverage's afforded under the policy will not be canceled or allowed to expire until at least 30 days prior written notice has been given to the University.

END OF WORK PLAN

LIMITED PRE-RENOVATION ASBESTOS SURVEY REPORT

Dental Science Chilled Water Pipe Replacement – Floors 8-10 MP04810 University of Florida Gainesville, Florida

GLE Project No.: 19140-01824

Prepared for:

Mr. Robert Hatker Planning, Design and Construction University of Florida P.O. Box 115050 232 Stadium Road Gainesville, Florida 32611

September 2019

Prepared by:



2228 NW 40th Terrace, Suite C Gainesville, Florida 32605 352-335-6648 • Fax 352-335-6187



September 16, 2019

via e-mail: <u>rhatker@ufl.edu</u>

Mr. Robert Hatker Planning, Design and Construction University of Florida P.O. Box 115050 232 Stadium Road Gainesville, Florida 32611

RE: Limited Pre-Renovation Asbestos Survey Report Dental Science Chilled Water Pipe Replacement – Floors 8-10 MP-04810 University of Florida Gainesville, Florida

GLE Project No.: 19140-01824

Dear Mr. Hatker:

GLE Associates, Inc. (GLE) performed a limited pre-renovation survey for asbestos-containing materials (ACM) on August 25 and 26, 2019, at the Dental Science Building, located at the University of Florida in Gainesville, Florida. The survey was performed by Ms. Macy Van Cleave and Mr. Matt Guthrie with GLE. This report outlines the sampling and testing procedures, and presents the results along with our conclusions and recommendations.

GLE appreciates the opportunity to serve as your consultant on this project. If you should have any questions, or if we can be of further service, please do not hesitate to call.

Sincerely, GLE Associates, Inc.

Macy Van Cleave Junior Project Manager

MVC/AC/PSZ/RBG/lr

Robert B. Greene, PE, PG, CIH, LEED AP President Florida LAC# EA 0000009

G:\Work\Asbestos\'19\19140-UF\01824 UF PDC DSB Floors 8-10 Plenum Survey\Report\Survey\Survey\Survey\Report.doc GLE Associates, Inc.

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1.0 INTRODUCTION

1.1 INTRODUCTION

The purpose of this limited pre-renovation survey was to identify accessible asbestos-containing materials (ACMs) and their general locations within the Dental Science Building, located at the University of Florida in Gainesville, Florida. This survey was limited to the plenums of Floors 8, 9, and 10 of the Dental Science Building. The survey was conducted pursuant to National Emission Standards for Hazardous Air Pollutants (NESHAP, 40 CFR 61) requirements, associated with the scheduled renovation plans. The survey was performed on August 25 and 26, 2019, by Ms. Macy Van Cleave and Mr. Matt Guthrie, Environmental Protection Agency/Asbestos Hazard Emergency Response Act (EPA/AHERA) accredited inspectors. The scope of this survey did not include demolition of any building components, evaluation of architectural plans.

1.2 FACILITY DESCRIPTION

A summary of the facility investigated is outlined in the table below. A representative view of the facility is shown in Appendix C.

Facility Type:	Medical
Construction Date:	1975
Number of Floors:	3 in Scope
Interior	
Wall Substrate:	Drywall and Joint Compound, Plaster
Ceiling System:	Suspended Ceiling System
Ceiling Finishes:	Suspended Ceiling Tiles

2.0 RESULTS

2.1 ASBESTOS SURVEY PROCEDURES

The survey was performed by visually observing accessible areas within the scope of work. EPA/AHERA accredited inspectors performed the visual observations (refer to Appendix B *for* personnel qualifications).

After the overall visual survey was completed, representative sampling areas were determined. The surveyors delineated homogeneous areas of suspect materials and samples of each material were obtained, in general accordance with regulations as established by the Occupational Safety and Health Administration (OSHA) and NESHAP. The field surveyors determined sample locations based on previous experience. Both friable and non-friable materials were sampled. A friable material is one that can be crushed when dry by normal hand pressure. This survey did not include the demolition of building components to access suspect material.

After completion of the fieldwork, the samples were delivered to GLE's National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory for analysis. The samples were analyzed by Polarized Light Microscopy (PLM) coupled with dispersion staining, in general accordance with EPA-600/R-93/116. Utilizing this procedure, the various asbestos minerals (chrysotile, amosite, crocidolite, actinolite, tremolite, and anthophyllite) can be determined. The percentages of asbestos minerals in the samples were visually determined by the microscopist. Please note that the EPA designates all materials containing greater than one percent asbestos as an "asbestos-containing material" (ACM).

Regulated Asbestos-Containing Material (RACM) is defined as (a) Friable asbestos materials, (b) Category I non-friable ACM that has become friable, (c) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this subpart.

Category I and Category II non-friable ACM, as defined by the EPA:

- Category I non-friable ACM means asbestos-containing packings, gaskets, resilient floor covering, asphalt roofing products, and pliable sealants and mastics that are in good condition and not friable, containing more than one percent asbestos, as determined using the method specified in Appendix E, Subpart E, 40 CFR Part 763, Section 1, PLM.
- Category II non-friable ACM means any material, excluding Category I nonfriable ACM, containing more than one percent asbestos as determined using the methods specified in Appendix E, Subpart E, 40 CFR Part 763 Section 1, PLM that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

2.2 IDENTIFIED SUSPECT ASBESTOS-CONTAINING MATERIALS

A total of 81 samples of suspect building materials were collected from the facility during the survey, representing 27 different identified homogeneous areas. The results of the laboratory analyses are included in Appendix A, and photographs of the various materials sampled are included in Appendix C.

Due to accessibility issues, the following areas were not accessed at the time of the survey.

- 1. Rooms D8-58, D9-50, D9-51, D10-25, D10-52, and D10-53
- 2. Plenum in stairwells and Room D10-42

A summary of the homogenous sampling areas of suspect ACM determined to be present is outlined in the following table.

	TABLE 2.2-1: SUMMARY OF HOMOGENEOUS SAMPLING AREAS Dental Science Building – 10 th Floor Plenum University of Florida Gainesville, Florida								
HA #	HOMOGENEOUS MATERIAL DESCRIPTION	Homogeneous Material Location	Friability (F/NF)	% Asbestos*	# OF SAMPLES COLLECTED	Approximate Quantity	ACM Category		
CT-01	2' x 2' White Fissured Ceiling Tile	Throughout Except D10-33 Suite	F	ND	3	NIS	NA		
CT-02	2' x 2' White Recessed Ceiling Tile	D10-33 Suite	F	ND	3	NIS	NA		
FP-01	Tan Fireproofing	South Office Suite	F	ND	3	NIS	NA		
FP-02	Red Fireproofing	Throughout Except South Office Suite	F	ND	3	NIS	NA		
MAS-01	White Duct Mastic	Hallway in South Office Suite, NF ND 28A, D10-28B NF ND		3	NIS	NA			
MAS-02	Black Duct Mastic	Hallway in South Office Suite, Hallway by South Elevators, Main Hallway, D10-6A, D10-6B, D10-6C, D10-6D, D10-6F, D10-6G, D10-6H, D10-9, D10-10, D10-11, D10-13, D10-15, D10-15A, D10-16, D10-17, D10-18, D10-19, D10-19A, D10-20, D10-21, D10-22, D10-23, D10-25, D10-26, D10-27, D10-28, D10-28A, D10-28B, D10-33, D10-33A, D10- 33B, D10-33C, D10-37, D10-37A, D10-37B, D10-37C, D10-37D, D10- 38, D10-39, D10-40, D10-41, D10- 44, D10-46, D10-48, D10-48A, D10- 48B, 49	NF	10% C	3	1,125 LF	CAT I		
MAS-03	Gray Mastic on Metal Duct	D10-15, D10-17, D10-18	NF	ND	3	NIS	NA		
MAS-04	Gray Fume Hood Exhaust Mastic	D10-6D, D10-07, D10-07A, D10-09	NF	ND	3	NIS	NA		

ASBESTOS CONTENT	* = The facility owner has the option of point-counting by Polarized Light Microscopy (PLM) those RACM whose asbestos content is less than 10% in order to more accurately determine the asbestos content therein.							
Expressed as percent	PC = Results based on Point-Count analysis TEM NOB = Transmission Electron Microscopy of Non-Friable Organically Bound Material							
FRIABILITY	F = Friable Material	NF = Non-Friable Material						
ACM CATEGORY	RACM = Regulated ACM	CAT I = Catego	ry I non-fr	iable ACM	CAT II = Category II non-friable ACM			
ABBREVIATIONS:	NA = Not Applicable	ND = None Det	etected NIS = Not in		n Scope	C = Chrysotile		A = Amosite
	HA = Homogeneous Area	SF = Square Fee	et		LF = Linear Feet		CF = Cu	ıbic Feet

	TABLE 2.2-1: SUMMARY OF HOMOGENEOUS SAMPLING AREAS Dental Science Building – 10 th Floor Plenum University of Florida Gainesville, Florida									
HA #	Homogeneous Material Description	HOMOGENEOUS MATERIAL LOCATION FRIABILITY (F/NF) % ASBESTOS* # OF SAMPLES COLLECTED APPROXIMATE QUANTITY A								
TSI-01	White Mastic on Fiberglass TSI	Hallway in South Office Suite, D10-C01, D10-C03, D10-6B, D10- 6C, D10-6D, D10-6G, D10-16, D10- 19, D10-26, D10-27, D10-28, D10- 28A, D10-33A, D10-33B, D10-33D, D10-39, D10-40, D10-41, D10-44, D10-48, D10-48A	NF	ND	3	NIS	NA			
TSI-02	Tan Mastic on Fiberglass TSI	D10-9, D10-17 NF ND 3 NIS					NA			
TSI-03	White Mastic on Foamglass TSI	D10-C03	NF	ND	3	NIS	NA			

ASBESTOS CONTENT	* = The facility owner has the option of point-counting by Polarized Light Microscopy (PLM) those RACM whose asbestos content is less than 10% in order to more accurately determine the asbestos content therein.							
Expressed as percent	PC = Results based on Point-Count analysis		TEM NOB = Transmission Electron Microscopy of Non-Friable Organically Bound Material					
FRIABILITY	F = Friable Material	NF = Non-Friable Material						
ACM CATEGORY	RACM = Regulated ACM	CAT I = Catego	ry I non-fr	iable ACM	CAT II = Category II non-friable ACM			
ABBREVIATIONS:	NA = Not Applicable	ND = None Det	ND = None Detected NIS = Not in		n Scope	C = Chrysotile		A = Amosite
	HA = Homogeneous Area	SF = Square Feet		LF = Linear Feet		CF = Cubic Feet		

	TABLE 2.2-1: SUMMARY OF HOMOGENEOUS SAMPLING AREAS DENTAL SCIENCE BUILDING – 9 th Floor Plenum University of Florida Gainesville, Florida								
HA #	HOMOGENEOUS MATERIAL DESCRIPTION	Homogeneous Material Location	Homogeneous Material Location Friability (F/NF) % Asbestos* # of Sampli Collecter				ACM Category		
CT-03	2' x 2' White Fissured Ceiling Tile	Throughout	F	ND	3	NIS	NA		
FP-03	Red Fireproofing	Throughout	F	ND	3	NIS	NA		
MAS-05	Black Duct Mastic	Main Hallway; D9-C01, D9-C07, D9-C11, D9-5, D9-6, D9-6X, D9- 6A, D9-6B, D9-6C, D9-6D, D9-6F, D9-6G, D9-9, D9-10, D9-11, D9- 12, D9-15, D9-16, D9-16A, D9- 16B, D9-16C, D9-16D, D9-17, D9- 18, D9-19, D9-20, D9-21, D9-25, D9-26A, D9-26B, D9-28, D9-29, D9-29A, D9-29B, D9-29C, D9- 29D, D9-30, D9-31, D9-32, D9-33, D9-34, D9-35, D9-36, D9-37, D9- 38, D9-39, D9-39A, D9-39B, D9- 39C, D9-39D, D9-41, D9-42, D9- 43, D9-44,	NF	10% C	3	1,200 LF	CAT I		
MAS-06	White Duct Mastic	D9-7, D9-7A, D9-7B, D9-7C, D9- 7D, D9-9, D9-10, D9-15, D9-40, D9-46; Hallway by D9-40	NF	ND	3	NIS	NA		
MAS-07	Gray Mastic on Metal Duct	D9-09, D9-10, D9-15	NF	ND	3	NIS	NA		
TSI-04	White Mastic on Fiberglass TSI	Main Hallway; Hall by D9-37; D9-6X, D9-6B, D9-6C, D9-7, D9- C07, D9-16, D9-17, D9-20, D9-22, D9-29A, D9-30, D9-32, D9-35, D9- 37, D9-40, D9-46	NF	ND	3	NIS	NA		
TSI-05	White Mastic on Foamglass TSI	D9-40, D9-46	NF	ND	3	NIS	NA		
TSI-06	Black Mastic on Foamglass TSI	D9-C07	NF	10% C	3	225 LF	CAT I		

ASBESTOS CONTENT	* = The facility owner has the option of point-counting by Polarized Light Microscopy (PLM) those RACM whose asbestos content is less than 10% in order to more accurately determine the asbestos content therein.							
Expressed as percent	PC = Results based on Point-Count analysis		TEM NOB = Transmission Electron Microscopy of Non-Friable Organically Bound Material					
FRIABILITY	F = Friable Material	NF = Non-Friable Material						
ACM CATEGORY	RACM = Regulated ACM	CAT I = Catego	ry I non-fr	iable ACM	CAT II = Category II non-friable ACM			
ABBREVIATIONS:	NA = Not Applicable	ND = None Det	= None Detected NIS = Not in		NIS = Not in Scope			A = Amosite
	HA = Homogeneous Area	SF = Square Feet		LF = Linear Feet		CF = Cubic Feet		

	TABLE 2.2-1: SUMMARY OF HOMOGENEOUS SAMPLING AREAS Dental Science Building – 8 th Floor Plenum University of Florida Gainesville, Florida								
HA #	HOMOGENEOUS MATERIAL DESCRIPTION	HOMOGENEOUS MATERIAL LOCATION (F/NF) % ASBESTOS* # OF SAMP COLLECT			# OF SAMPLES COLLECTED	Approximate Quantity	ACM Category		
CT-04	2' x 2' White Fissured Ceiling Tile	Throughout Except D8-11, D8-46 NF ND		ND	3	NIS	NA		
CT-05	2' x 2' White Recessed Ceiling Tile	D8-11	NF	ND	3	NIS	NA		
CT-06	2' x 2' White Smooth Recessed Ceiling Tile	D8-46	NF	ND	3	NIS	NA		
FP-04	Tan Fireproofing	Throughout	NF	ND	3	NIS	NA		
MAS-08	Black Duct Mastic	D8-C03, D8-C07, D8-C13, D8-3, D8-5, D8-6, D8-6A, D8-6B, D8-6C, D8-6D, D8-7, D8-7A, D8-7B, D8-9, D8-10, D8-11, D8-12, D8-13, D8- 15, D8-17, D8-18, D8-18A, D8- 18B, D8-18C, D8-18D, D8-19, D8- 20, D8-21, D8-22, D8-23, D8-24, D8-25, D8-26, D8-28, D8-29, D8- 30, D8-31, D8-34, D8-35, D8-35A, D8-36, D8-37, D8-38, D8-39, D8- 40, D8-42, D8-43, D8-44, D8-44A, D8-44B, D8-46, D8-46A, D8-48, D8-49, D8-50, D8-51, D8-53	NF	10% C	3	1,175 LF	CAT I		
TSI-07	White Mastic on Fiberglass TSI	D8-C03, D8-C09, D8-5, D8-6, D8- 6B, D8-6D, D8-11, D8-12, D8-13, D8-17, D8-18, D8-19, D8-21, D8- 23, D8-25, D8-29, D8-30, D8-31, D8-36, D8-37, D8-39, D8-42, D8- 43, D8-44A, D8-48, D8-50	NF	ND	3	NIS	NA		
TSI-08	White Mastic on Foamglass TSI	D8-C07, D8-9	NF	ND	3	NIS	NA		
TSI-09	Black Mastic on Foamglass TSI	D8-C01, D8-53, D8-57	NF	10% C	3	30 LF	CAT I		

ASBESTOS CONTENT	* = The facility owner has the option of point-counting by Polarized Light Microscopy (PLM) those RACM whose asbestos content is less than							
	10% in order to more accurately	10% in order to more accurately determine the asbestos content therein.						
Expressed as percent	PC = Results based on Point-Count analysis		is TEM NOB = Transmission Electron Microscopy of Non-Friable Organically Bound Material					
FRIABILITY	F = Friable Material	NF = Non-Friable Material						
ACM CATEGORY	RACM = Regulated ACM	CAT I = Catego	ry I non-fr	iable ACM	CAT II = Catego	ry II non-friable A	СМ	
ABBREVIATIONS:	NA = Not Applicable	ND = None Det	Detected NIS = Not in		d NIS = Not in Scope			A = Amosite
	HA = Homogeneous Area	SF = Square Feet		LF = Linear Feet		CF = Cubic Feet		

3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 GENERAL

Asbestos-containing materials (ACMs) were identified in the scope of this survey. General and specific conclusions and recommendations are provided below.

The EPA, OSHA and the State of Florida have promulgated regulations dealing with asbestos. For commercial building owners, the EPA NESHAP (40 CFR 61) regulations require removal of RACM, prior to conducting activities which might disturb the material. They also deal with notification, handling and disposal of asbestos

The EPA recommends that an Operations and Maintenance (O&M) Program be developed for any facilities with ACM, and this Program should address all ACM (known and/or assumed) present. The O&M Program establishes notification and training requirements along with special procedures for working around the ACM. The O&M Program would remain in effect until all asbestos is removed.

Category I and Category II non-friable materials, as defined by the EPA, may remain within a facility during demolition with no potential cessation of work, provided they remain non-friable and the appropriate engineering controls (i.e., wet methods) are utilized, with the resulting waste disposed of as asbestos-containing waste. However, there is no guarantee that these materials will remain non-friable. If the materials become friable, then they are classified as RACM.

RACM, as defined by the EPA, must be removed prior to renovation or demolition activities that may disturb the materials.

The OSHA regulations deal with employee exposure to airborne asbestos fibers. The regulations restrict employee exposure, and require special monitoring, training and handling procedures when dealing with asbestos. Additionally, OSHA has regulations that may supersede the EPA regulations. In order to protect the worker, OSHA has established a permissible exposure limit (PEL), which limits employee exposure to airborne fiber concentrations. OSHA requires objective evidence that the PEL will not be exceeded, as justification that personal air monitoring and engineering controls will not be required. OSHA has also established rules requiring the containerization and labeling of asbestos waste.

The State regulations require that anyone involved in asbestos consulting activities be a licensed asbestos consultant and that anyone involved in asbestos abatement, with the exception of roofing materials, be a licensed asbestos abatement contractor.

3.2 SPECIFIC

8th Floor – Black Duct Mastic 8th Floor – Black Mastic on Foamglass TSI 9th Floor – Black Duct Mastic 9th Floor – Black Mastic on Foamglass TSI 10th Floor – Black Duct Mastic

These materials are defined by the EPA as a Category I non-friable materials. These materials do not appear to present a significant issue, as observed, at the time of the survey. We recommend that the identified ACM be maintained as part of an O&M Program and periodically monitored for any changes in condition. Additionally, we recommend that a licensed asbestos abatement contractor properly remove and dispose of the ACM prior to conducting renovation activities that might disturb the ACM.

Inaccessible Areas

Rooms D8-58, D9-50, D9-51, D10-25, D10-52, and D10-53, and the plenums in all stairwells and Room D10-42 were inaccessible at the time of the survey. Should planned renovation and/or demolition activities involve the disturbance materials in these areas, we recommend that the materials be sampled and analyzed for asbestos content, and if determined to be ACM, be properly removed and disposed by a licensed asbestos abatement contractor prior to conducting such activities.

3.3 ASBESTOS REMOVAL OPINION OF COST

The following opinion of cost can be used for determining approximate costs associated with the removal of ACM identified during the survey. Please note that the quantities outlined below reflect a combination of field verification of material locations, provided as-built documentation or previous survey experience of similar structures. Actual field verification was limited during the survey as a result of accessibility. The opinion of cost reflect typical industry standard removal rates, but can vary dependent upon the number of mobilizations required of the contractor, the timing of the project and accessibility restrictions to the material to be abated during the performance of these activities.

TABLE 3.3-1: OPINION OF COSTDENTAL SCIENCE BUILDING – FLOORS 8-10 PLENUM								
Н	omogeneous Area	Approximate	Unit Cost	Opinion of Cost				
Number	Description	Quantity		opinion of cost				
MAS-02	Black Duct Mastic	1,125LF	\$16/LF	\$18,000.00				
TSI-06	Black Mastic on Foamglass TSI	225 LF	\$30/LF	\$6,750.00				
MAS-05	Black Duct Mastic	1,200 LF	\$16/LF	\$19,200.00				
TSI-09	Black Mastic on Foamglass TSI	30 LF	\$40/LF	\$1,200.00				
MAS-08	Black Duct Mastic	1,175 LF	\$16/LF	\$18,800.00				
			TOTAL	\$63,950.00				

SF: square feet LF: linear feet CF: cubic feet

The opinion of cost provided assumes that much of the work will be performed in conjunction with any renovation activities, and that much of the demolition work required to gain access to the ACM is not part of the abatement contractor's work. In addition to the opinion of cost outlined above, typical consulting fees for project design, contract administration, project monitoring and laboratory fees add 20-40% to removal costs for projects of similar size and expected duration.

4.0 LIMITATIONS AND CONDITIONS

As a result of previous renovations, there may be hidden materials, such as floor tile, sheet vinyl flooring, insulation, etc. These materials may be found in various areas hidden under existing flooring materials or in wall cavities. Any materials found during construction activities, either not addressed in this survey report, or similar to the ACM identified in this survey report should be assumed to be ACM until sampling and analysis documents otherwise.

Because of the hidden nature of many building components (i.e. within mechanical chases), it may be impossible to determine if all of the suspect building materials have been located and subsequently tested. Destructive testing in some instances is not a viable option. We cannot, therefore, guarantee that all potential ACM has been located. For the same reasons, estimates of quantities and/or conditions are subject to readily apparent situations, and our findings reflect this condition. We do warrant, however, that the investigations and methodology reflect our best efforts based upon the prevailing standard of care in the environmental industry.

The information contained in this report was prepared based upon specific parameters and regulations in force at the time of this report. The information herein is only for the specific use of the client and GLE. GLE accepts no responsibility for the use, interpretation, or reliance by other parties on the information contained herein, unless prior written authorization has been obtained from GLE.

APPENDIX A Analytical Results and Chain of Custody

UF; DBS Floors 8-10 Plenum Survey (9F)

19140-01824

Sample	Sample Type		Fiber Type		
CT-03A	2' X 2' White Fissured Ceiling Tile	100%	Mineral Wool		
CT-03B	2' X 2' White Fissured Ceiling Tile	100%	Mineral Wool		
CT-03C-QC	2' X 2' White Fissured Ceiling Tile	100%	Mineral Wool		
FP-03A	Red Fireproofing	100%	Mineral Wool		
FP-03B	Red Fireproofing	100%	Mineral Wool		
FP-03C	Red Fireproofing	100%	Mineral Wool		
MAS-05A	Black Duct Mastic	10% 90%	Chrysotile Asbestos Bitumen		
	Brown Duct Insulation	100%	Cellulose/paper		
MAS-05B	Black Duct Mastic		Positive Stop/Sample not analyzed		
	Brown Duct Insulation	100%	Cellulose/paper		
MAS-05C	Black Duct Mastic		Positive Stop/Sample not analyzed		
	Brown Duct Insulation	100%	Cellulose/paper		
MAS-06A	White Duct Mastic	100%	Polymer, Quartz, Calcite, Clay, Mica		
MAS-06B	White Duct Mastic	100%	Polymer, Quartz, Calcite, Clay, Mica		
MAS-06C	White Duct Mastic	100%	Polymer, Quartz, Calcite, Clay, Mica		

Analyst / Approved Signatory:

Darryl Neldner

* Polarized Light Microscopy coupled with dispersion is the technique used for identification in accordance with EPA 600/M4-82-020, EPA 600/R-93/116, and NIOSH Method 9002.

** The percentage of each component is visually estimated. The result of this analysis relate only to the material tested.

Analysis performed by GLE Associates, Inc. NVLAP Code 102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

The report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

^{(&}gt;1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.

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UF; DBS Floors 8-10 Plenum Survey (9F)

19140-01824

Sample	Sample Type	Fiber Type		
MAS-07A-QC	Gray Mastic on Metal Duct	100%	Polymer, Quartz, Calcite, Clay, Mica	
MAS-07B	Gray Mastic on Metal Duct	100%	Polymer, Quartz, Calcite, Clay, Mica	
MAS-07C	Gray Mastic on Metal Duct	100%	Polymer, Quartz, Calcite, Clay, Mica	
TSI-04A	White Mastic on Fiberglass TSI	100%	Polymer, Quartz, Calcite, Clay, Mica	
TSI-04B	White Mastic on Fiberglass TSI	100%	Polymer, Quartz, Calcite, Clay, Mica	
TSI-04C	White Mastic on Fiberglass TSI	100%	Polymer, Quartz, Calcite, Clay, Mica	
TSI-05A	White Mastic on Foamglass TSI	100%	Polymer, Quartz, Calcite, Clay, Mica	
TSI-05B	White Mastic on Foamglass TSI	100%	Polymer, Quartz, Calcite, Clay, Mica	
TSI-05C	White Mastic on Foamglass TSI	100%	Polymer, Quartz, Calcite, Clay, Mica	
TSI-06A	Black Mastic on	10%	Chrysotile Asbestos	
	Foamglass TSI	90%	Bitumen	
	Foamglass Insulation	100%	Perlite, Quartz, Calcite	
TSI-06B-QC	Black Mastic on Foamglass TSI		Positive Stop/Sample not analyzed	
	Foamglass Insulation	100%	Perlite, Quartz, Calcite	

Analyst / Approved Signatory:

Darryl Neldner

Darryi Neidner

* Polarized Light Microscopy coupled with dispersion is the technique used for identification in accordance with EPA 600/M4-82-020, EPA 600/R-93/116, and NIOSH Method 9002.

** The percentage of each component is visually estimated. The result of this analysis relate only to the material tested.

- The report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. (>1% greater than one percent, <1% less than one percent) QC Sample reanalyzed for QA/QC.
- *** This report shall not be reproduced except in full, without the written approval of the laboratory. GLE Report # 24447
- Analysis performed by GLE Associates, Inc. NVLAP Code 102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

UF; DBS Floors 8-10 Plenum Survey (9F)

19140-01824

Sample	Sample Type Fiber Type		Sample Type Fiber Type		Sample Type Fiber Type		Fiber Type
TSI-06C	Black Mastic on Foamglass TSI	ck Mastic on Positive Stop/Sample not analyzed mglass TSI					
	Foamglass Insulation	100%	Perlite, Quartz, Calcite				

Analyst / Approved Signatory:

Darryl Neldner

* Polarized Light Microscopy coupled with dispersion is the technique used for identification in accordance with EPA 600/M4-82-020, EPA 600/R-93/116, and NIOSH Method 9002.

** The percentage of each component is visually estimated. The result of this analysis relate only to the material tested.

Analysis performed by GLE Associates, Inc. NVLAP Code 102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

Report Date: 8/28/2019

The report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. (>1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.

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CHAIN OF CUSTODY/SAMPLE TRANSMITTAL FORM



GLE Associates, Inc. 2228 NW 40th Terrace, Suite C Gainesville, FL 32605 PHONE: (352) 335-6648 FAX: (352) 335-6187

CLIENT:	UF	CALAS
PROJECT #	: 19140-0182	4 LEXXX
PROJECT:	DSB Floors 8-	10 Plenum Survey (9F)
LABORATO	DRY SENT TO:	GLE Tampa

DATE:	8/27/19
DALE.	0121119

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	0/2//19	

TO: GLE	
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0/07/10	

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E.	0/27/10	

 0/07/10	

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DESCRIPTION	SAMPLE #	DESCRIPTION			
2' x 2' White Fissured Ceiling Tile					
Red Fireproofing					
Black Duct Mastic					
White Duct Mastic					
Gray Mastic on Metal Duct					
White Mastic on Fiberglass TSI					
White Mastic on Foamglass TSI					
Black Mastic on Foamglass TSI					
TOTAL NUMBER OF SAMPLES SU	JBMITTED	24			
POSITIVE STOP ANALYSIS		Yes			
E-MAIL RESULTS TO	P. Zak, M. Van Cleave, M. Guthrie				
NOTE:					
Turnaround time starts at receipt by lab and does not include weekend or holidays.					
und Time 6 Hour 24 Hour	48 Ho	ur 3 Day 4 Day			
	DESCRIPTION 2' x 2' White Fissured Ceiling Tile Red Fireproofing Black Duct Mastic White Duct Mastic Gray Mastic on Metal Duct White Mastic on Fiberglass TSI White Mastic on Foamglass TSI Black Mastic on Foamglass TSI Black Mastic on Foamglass TSI ENALL NUMBER OF SAMPLES SU FOSITIVE STOP ANALYSIS E E-MAIL RESULTS TO NO und time starts at receipt by lab a mund Time 6 Hour 24 Hour	DESCRIPTION SAMPLE # 2' x 2' White Fissured Ceiling Tile Image: Constraint of the starts at receipt by lab and does not Red Fireproofing Image: Constraint of the starts at receipt by lab and does not Black Duct Mastic Image: Constraint of the starts at receipt by lab and does not			

SAMPLE INFORMATION

REPORT RESULTS TO TH	IE ADDRESS ABOVE
CHAIN OF CUSTODY: GLE ASSOCIATES, INC.	CHAIN OF CUSTODY: LAURA TORY
PACKAGED BY: M. Guthrie	SAMPLES RECEIVED BY:
DATE PACKAGED: 8/27/19	DATE:
METHOD OF TRANSMITTAL: FedEx	TIME: OLD J
TRANSMITTED BY: FedEx	CONDITION OF PACKAGED MALES
CHAIN OF CUSTODY: RETURNED TO	GLE ASSOCIATES, INC.
RECEIVED BY:	DATE:
INVENTORIED BY:	DATE:
REPACKAGED AND SEALED BY:	DATE:
PAGE: 1 OF 1	

UF; DBS Floors 8-10 Plenum Survey (8F)

19140-01824

Sample	Sample Type		Fiber Type
CT-04A	2' X 2' White Fissured Ceiling Tile	100%	Mineral Wool
CT-04B	2' X 2' White Fissured Ceiling Tile	100%	Mineral Wool
CT-04C-QC	2' X 2' White Fissured Ceiling Tile	100%	Mineral Wool
CT-05A	2' X 2' White Recessed Ceiling Tile	100%	Mineral Wool
CT-05B	2' X 2' White Recessed Ceiling Tile	100%	Mineral Wool
CT-05C	2' X 2' White Recessed Ceiling Tile	100%	Mineral Wool
CT-06A	2' X 2' White Smooth Recessed Ceiling Tile	100%	Mineral Wool
CT-06B	2' X 2' White Smooth Recessed Ceiling Tile	100%	Mineral Wool
CT-06C	2' X 2' White Smooth Recessed Ceiling Tile	100%	Mineral Wool
FP-04A	Tan Fireproofing	20% 80%	Cellulose/paper Quartz, Calcite, Clay, Mica
FP-04B	Tan Fireproofing	20% 80%	Cellulose/paper Quartz, Calcite, Clay, Mica

Analyst / Approved Signatory:

Darryl Neldner

* Polarized Light Microscopy coupled with dispersion is the technique used for identification in accordance with EPA 600/M4-82-020, EPA 600/R-93/116, and NIOSH Method 9002.

** The percentage of each component is visually estimated. The result of this analysis relate only to the material tested.

Analysis performed by GLE Associates, Inc. NVLAP Code 102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

Report Date: 8/28/2019

The report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. (>1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.

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UF; DBS Floors 8-10 Plenum Survey (8F)

19140-01824

Sample	Sample Type	Fiber Type		
FP-04C	Tan Fireproofing	20%	Cellulose/paper	
		80%	Quartz, Calcite, Clay, Mica	
MAS-08A-QC	Black Duct Mastic	10%	Chrysotile Asbestos	
		90%	Bitumen	
	Brown Duct Insulation	100%	Cellulose/paper	
MAS-08B	Black Duct Mastic		Positive Stop/Sample not analyzed	
	Brown Duct Insulation	100%	Cellulose/paper	
MAS-08C	Black Duct Mastic		Positive Stop/Sample not analyzed	
	Brown Duct Insulation	100%	Cellulose/paper	
TSI-07A	White Mastic on Fiberglass TSI	100%	Polymer, Quartz, Calcite, Clay, Mica	
TSI-07B	White Mastic on Fiberglass TSI	100%	Polymer, Quartz, Calcite, Clay, Mica	
TSI-07C	White Mastic on Fiberglass TSI	100%	Polymer, Quartz, Calcite, Clay, Mica	
TSI-08A	White Mastic on Foamglass TSI	100%	Polymer, Quartz, Calcite, Clay, Mica	
TSI-08B	White Mastic on Foamglass TSI	100%	Polymer, Quartz, Calcite, Clay, Mica	
TSI-08C	White Mastic on Foamglass TSI	100%	Polymer, Quartz, Calcite, Clay, Mica	

Analyst / Approved Signatory:

Darryl Neldner

Barry Nordhor

* Polarized Light Microscopy coupled with dispersion is the technique used for identification in accordance with EPA 600/M4-82-020, EPA 600/R-93/116, and NIOSH Method 9002.

** The percentage of each component is visually estimated. The result of this analysis relate only to the material tested.

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Analysis performed by GLE Associates, Inc. NVLAP Code 102003-0, CO AL-17485, TX 30-0337

UF; DBS Floors 8-10 Plenum Survey (8F)

19140-01824

Sample	Sample Type		Fiber Type
TSI-09A	Black Mastic on Foamglass TSI	10% 90%	Chrysotile Asbestos Bitumen
	Foamglass TSI	100%	Perlite, Quartz, Calcite
TSI-09B-QC	Black Mastic on Foamglass TSI		Positive Stop/Sample not analyzed
	Foamglass TSI	100%	Perlite, Quartz, Calcite
TSI-09C	Black Mastic on Foamglass TSI		Positive Stop/Sample not analyzed
	Foamglass TSI	100%	Perlite, Quartz, Calcite

Analyst / Approved Signatory:

Darryl Neldner

* Polarized Light Microscopy coupled with dispersion is the technique used for identification in accordance with EPA 600/M4-82-020, EPA 600/R-93/116, and NIOSH Method 9002.

** The percentage of each component is visually estimated. The result of this analysis relate only to the material tested.

Analysis performed by GLE Associates, Inc. NVLAP Code 102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

Report Date: 8/28/2019

The report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. (>1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.

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CHAIN OF CUSTODY/SAMPLE TRANSMITTAL FORM



GLE Associates, Inc. 2228 NW 40th Terrace, Suite C Gainesville, FL 32605 PHONE: (352) 335-6648 FAX: (352) 335-6187

CLIENT:	UF		710	10
PROJECT #	:	19140-01824		40
PROJECT:		DSB Floors 8-10	Plenum S	urvey (8F)

LABORATORY SENT TO: GLE Tampa

0/27/10

DATE

IE:	8/2//19

JAIL:	0/2//19	
		-

	SAMPLE IN	FORMATION	
SAMPLE #	DESCRIPTION	SAMPLE #	DESCRIPTION
СТ-04 А-С	2' x 2' White Fissured Ceiling Tile		
СТ-05 А-С	2' x 2' White Recessed Ceiling Tile		
СТ-06 А-С	2' x 2' White Smooth Recessed Ceiling Tile		
FP-04 A-C	Tan Fireproofing		
MAS-08 A-C	Black Duct Mastic		
TSI-07 A-C	White Mastic on Fiberglass TSI		
TSI-08 A-C	White Mastic on Foamglass TSI		
TSI-09 A-C	Black Mastic on Foamglass TSI		
IMPORTAN	: TOTAL NUMBER OF SAMPLES S	UBMITTED	24
IMPORTANT	: POSITIVE STOP ANALYSIS		Yes
IMPORTANT	: E-MAIL RESULTS TO		P. Zak, M. Van Cleave, M. Guthrie
	NO	DTE:	
Turnar	ound time starts at receipt by lab	and does not	t include weekend or holidays.
Select Turnar	ound Time		
3 hour	6 Hour 24 Hour	48 H	our 3 Day 4 Day
	REPORT RESULTS TO	O THE ADDR	ESS ABOVE
CHAIN C	DF CUSTODY: GLE ASSOCIATES, INC.		CHAIN OF CUSTODY: LAB
PACKAGED B	Y: M. Guthrie	PLES RECEIVED BY:	
DATE PACKA	GED: 8/27/19		
TRANSMITTE	D BY: FedEx	CON	DITION OF PACKAGED SAMPLES
	CHAIN OF CUSTODY RETURNE	ED TO GLE ASS	OCIATES, INC.
RECEIVED BY			TE:
INVENTORIE	DBY:	DA	TE:
REPACKAGE	O AND SEALED BY:	DA	TE:
PAGE: 1	OF 1		

UF; DSB Floors 8-10 Plenum Survey (10F)

19140-01824

Sample	Sample Type	Fiber Type		
CT-01A	2' X 2' White Fissured Ceiling Tile	100%	Mineral Wool	
CT-01B	2' X 2' White Fissured Ceiling Tile	100% Mineral Wool		
CT-01C-QC	2' X 2' White Fissured Ceiling Tile	100%	Mineral Wool	
CT-02A	2' X 2' White Recessed Ceiling Tile	100% Mineral Wool		
CT-02B	2' X 2' White Recessed Ceiling Tile	100%	Mineral Wool	
CT-02C	2' X 2' White Recessed Ceiling Tile	100% Mineral Wool		
FP-01A	Tan Fireproofing	100%	Mineral Wool	
FP-01B	Tan Fireproofing	100%	Mineral Wool	
FP-01C	Tan Fireproofing	100%	Mineral Wool	
FP-02A	Red Fireproofing	100%	Mineral Wool	
FP-02B	Red Fireproofing	100%	Mineral Wool	
FP-02C	Red Fireproofing	100% Mineral Wool		
MAS-01A-QC	White Duct Mastic	100%	Polymer, Quartz, Calcite, Clay, Mica	
MAS-01B	White Duct Mastic	100%	Polymer, Quartz, Calcite, Clay, Mica	
	\sim			

Analyst / Approved Signatory:



* Polarized Light Microscopy coupled with dispersion is the technique used for identification in accordance with EPA 600/M4-82-020, EPA 600/R-93/116,

and NIOSH Method 9002.

** The percentage of each component is visually estimated. The result of this analysis relate only to the material tested.

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Analysis performed by GLE Associates, Inc. NVLAP Code 102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

^{(&}gt;1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.

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UF; DSB Floors 8-10 Plenum Survey (10F)

19140-01824

Sample	Sample Type		Fiber Type
MAS-01C	White Duct Mastic	100%	Polymer, Quartz, Calcite, Clay, Mica
MAS-02A	Black Duct Mastic	10%	Chrysotile Asbestos
	Brown Duct Insulation	90% 100%	Cellulose/paper
MAS-02B	Black Duct Mastic		Positive Stop/Sample not analyzed
	Brown Duct Insulation	100%	Cellulose/paper
MAS-02C	Black Duct Mastic		Positive Stop/Sample not analyzed
	Brown Duct Insulation	100%	Cellulose/paper
MAS-03A	Gray Mastic on Metal Duct	100%	Polymer, Quartz, Calcite, Clay, Mica
MAS-03B	Gray Mastic on Metal Duct	100%	Polymer, Quartz, Calcite, Clay, Mica
MAS-03C	Gray Mastic on Metal Duct	100%	Polymer, Quartz, Calcite, Clay, Mica
MAS-04A	Gray Fume Hood Exhaust Mastic	100%	Polymer, Quartz, Calcite, Clay, Mica
MAS-04B-QC	Gray Fume Hood Exhaust Mastic	100%	Polymer, Quartz, Calcite, Clay, Mica
MAS-04C	Gray Fume Hood Exhaust Mastic	100%	Polymer, Quartz, Calcite, Clay, Mica
TSI-01A	White Mastic on Fiberglass TSI	100%	Polymer, Quartz, Calcite, Clay, Mica

Analyst / Approved Signatory:

Darryl Neldner

* Polarized Light Microscopy coupled with dispersion is the technique used for identification in accordance with EPA 600/M4-82-020, EPA 600/R-93/116, and NIOSH Method 9002.

** The percentage of each component is visually estimated. The result of this analysis relate only to the material tested.

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

Report Date: 8/29/2019

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Analysis performed by GLE Associates, Inc. NVLAP Code 102003-0, CO AL-17485, TX 30-0337

UF; DSB Floors 8-10 Plenum Survey (10F)

19140-01824

Sample	Sample Type		Sample Type Fiber Type		Fiber Type
TSI-01B	White Mastic on Fiberglass TSI	100%	Polymer, Quartz, Calcite, Clay, Mica		
TSI-01C	White Mastic on Fiberglass TSI	100%	Polymer, Quartz, Calcite, Clay, Mica		
TSI-02A	Tan Mastic on Fiberglass TSI	100%	Polymer, Quartz, Calcite, Clay, Mica		
TSI-02B	Tan Mastic on Fiberglass TSI	100%	Polymer, Quartz, Calcite, Clay, Mica		
TSI-02C	Tan Mastic on Fiberglass TSI	100%	Polymer, Quartz, Calcite, Clay, Mica		
TSI-03A	White Mastic on Foamglass TSI	100%	Polymer, Quartz, Calcite, Clay, Mica		
TSI-03B	White Mastic on Foamglass TSI	100%	Polymer, Quartz, Calcite, Clay, Mica		
TSI-03C-QC	White Mastic on Foamglass TSI	100%	Polymer, Quartz, Calcite, Clay, Mica		

Analyst / Approved Signatory:

Darryl Neldner

* Polarized Light Microscopy coupled with dispersion is the technique used for identification in accordance with EPA 600/M4-82-020, EPA 600/R-93/116, and NIOSH Method 9002.

** The percentage of each component is visually estimated. The result of this analysis relate only to the material tested.

Analysis performed by GLE Associates, Inc. NVLAP Code 102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

The report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. (>1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.

^{***} This report shall not be reproduced except in full, without the written approval of the laboratory. GLE Report # 24449

CHAIN OF CUSTODY/SAMPLE TRANSMITTAL FORM



GLE Associates, Inc. 2228 NW 40th Terrace, Suite C Gainesville, FL 32605 PHONE: (352) 335-6648 FAX: (352) 335-6187

CLIENT:	Uŀ	2	DAMA
PROJECT #	:	19140-01824	LEXXX)
PROJECT:		DSB Floors 8-10	Plenum Survey (10F)
LABORATC	RY	SENT TO:	GLE Tampa

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DA

| GLE Tampa **):**

TT.	0/27/10
	N / 2 / 9

	SAMDI E IN	IEODMATION	
	SAMPLEIN	FURMATION	
SAMPLE #	DESCRIPTION	SAMPLE #	DESCRIPTION
СТ-01 А-С	2' x 2' White Fissured Ceiling Tile		
СТ-02 А-С	2' x 2' White Recessed Ceiling Tile		
FP-01 A-C	Tan Fireproofing		
FP-02 A-C	Red Fireproofing		
MAS-01 A-C	White Duct Mastic		
MAS-02 A-C	Black Duct Mastic		
MAS-03 A-C	Gray Mastic on Metal Duct		
MAS-04 A-C	Gray Fume Hood Exhaust Mastic		
TSI-01 A-C	White Mastic on Fiberglass TSI		
TSI-02 A-C	Tan Mastic on Fiberglass TSI		
TSI-03 A-C	White Mastic on Foamglass TSI		
IMPORTANT	: TOTAL NUMBER OF SAMPLES S	UBMITTED	33
IMPORTANT	: POSITIVE STOP ANALYSIS		Yes
IMPORTANT: E-MAIL RESULTS TO		P. Zak, M. Van Cleave, M. Guthrie	
	NC	DTE:	

Turnaround time starts at receipt by lab and does not include weekend or holidays.

Select Turnaround Time	
3 hour 6 Hour 24 Hour	48 Hour 3 Day 4 Day
REPORT RESULTS TO TH	E ADDRESS ABOVE
CHAIN OF CUSTODY: GLE ASSOCIATES, INC.	CHAIN OF CUSTODY: LABOR NRY
PACKAGED BY: M. Guthrie	SAMPLES RECEIVED BY:
DATE PACKAGED: 8/27/19	DATE:
METHOD OF TRANSMITTAL: FedEx	TIME:
TRANSMITTED BY: FedEx	CONDITION OF PACKAGED SAMPLES:
CHAIN OF CUSTODY: RETURNED TO	GLE ASSOCIATES, INC.
RECEIVED BY:	DATE:
INVENTORIED BY:	DATE:
REPACKAGED AND SEALED BY:	DATE:
PAGE: 1 OF 1	

APPENDIX B Personnel and Laboratory Certifications **RICK SCOTT, GOVERNOR**

JONATHAN ZACHEM, SECRETARY



STATE OF FLORIDA DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

ASBESTOS LICENSING UNIT

THE ASBESTOS BUSINESS ORGANIZATION HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 469, FLORIDA STATUTES



LICENSE NUMBER: ZA0000034

EXPIRATION DATE: NOVEMBER 30, 2019

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RICK SCOTT, GOVERNOR

JONATHAN ZACHEM, SECRETARY





STATE OF FLORIDA DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

ASBESTOS LICENSING UNIT

THE ASBESTOS CONSULTANT - ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 469, FLORIDA STATUTES

GREENE, ROBERT BLAIR

GLE ASSOCIATES INC 5405 CYPRESS CENTER DR SUITE 110 TAMPA FL 33609

LICENSE NUMBER: EA0000009

EXPIRATION DATE: NOVEMBER 30, 2020

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Vern Roberts Environmental Training, Inc. 13987 94th Avenue N Seminole, FL 33776 727-593-3067

Asbestos Survey & Mechanical (Inspector) Initial Training

This is to Certify that

Matthew Guthrie

Training was in accordance with Title II of TSCA, 40 CFR Part 763. Appendix C to Subpart E as revised Date of Examination 6/27/2019

> Date of Course: 6/25/2019-6/27/2019 Expiration Date 6/27/2020 Certificate # 06271902 Course # FL490006318 Pyovider # FL490003810

DATEM

Instructor

UF TREEO Center UNIVERSITY of FLORIDA

Center for Training, Research and Education for Environmental Occupations

certifies

Macy Van Cleave

GLE Associates, Inc., 5405 Cypress Center Dr., Ste. 110 Ste. 110 Tampa, FL 33609

has successfully met certificate requirements for the

Asbestos: Inspector

Approval: FBPR Asbestos Licensing Unit: Provider #0000995; Course #FL49-0002859 (3 Days; 21 Contact Hours) (Accreditation for Inspector Under TSCA Title II/AHERA)

Conducted

10/01/2018 to 10/03/2018

Certificate #: 190051-7367 CEUs: 2.1 EPA accreditation expires: 10/03/2019 Principal Instructor: Russell E. Stauffer, PE, LAC FBPE CEHs: 0009087/Educational Institutions: 21.0

Carol Hinton, Associate Director

University of Florida TREEO Center • 3900 SW 63 Boulevard • Gainesville, FL 32608-3800 • 352-392-9570 • www.treeo.ufl.edu

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 102003-0

GLE Associates, Inc.

Tampa, FL

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2019-04-01 through 2020-03-31

Effective Dates



For the National Voluntary Laboratory Accreditation Program

NVLAP National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

GLE Associates, Inc. 5405 Cypress Center Drive Suite 110 Tampa, FL 33609 Mr. Darryl S. Neldner Phone: 813-241-8350 x247 Fax: 813-241-8737 Email: dneldner@gleassociates.com http://www.gleassociates.com

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 102003-0

Bulk Asbestos Analysis

Code	Description
18/A01	EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

APPENDIX C Photographs



Upper Photo: DSB Floor 10 Hallway North

Lower Photo: DSB Floor 10 Hallway South

Photograph Date: September 4, 2019

Prepared By: GLE Associates, Inc.





Upper Photo: CT-01-2' x 2' White Fissured Ceiling Tile

Lower Photo: CT-02-2' x 2' White Recessed Ceiling Tile Photograph Date: September 4, 2019

Prepared By: GLE Associates, Inc.





Upper Photo: FP-01-Tan Fireproofing

Lower Photo: FP-02-Red Fireproofing

Photograph Date: September 4, 2019 Prepared By: GLE Associates, Inc.





Upper Photo: MAS-01-White Duct Mastic Lower Photo: MAS-02-Black Duct Mastic

Prepared By: GLE Associates, Inc.





Upper Photo: MAS-03-Gray Mastic on Metal Duct Photograph Date: September 4, 2019

Lower Photo: MAS-04-Gray Fume Hood Prepared By: Exhaust Mastic GLE Associates, Inc.





Upper Photo: TSI-01-White Mastic on Fiberglass TSI

Lower Photo: TSI-02-Tan Mastic on Fiberglass TSI

Photograph Date: September 4, 2019

Prepared By: GLE Associates, Inc.





Upper Photo: TSI-03-White Mastic on Foamglass TSI

Lower Photo: DSB Floor 9 Hallway

Photograph Date: September 4, 2019

Prepared By: GLE Associates, Inc.





Upper Photo: CT-03-2' x 2' White Fissured Ceiling Tile

Lower Photo: FP-03-Red Fireproofing

Photograph Date: September 4, 2019 Prepared By: GLE Associates, Inc.





Upper Photo: MAS-05-Black Duct Mastic

Lower Photo: MAS-06-White Duct Mastic

Photograph Date: September 4, 2019

Prepared By: GLE Associates, Inc.





Upper Photo: MAS-07-Gray Mastic on Metal Duct Photograph Date: September 4, 2019

Prepared By: GLE Associates, Inc.



UF DSB 8-10 Plenum Job No. 19140-01824 Figure 10

Lower Photo: TSI-04-White Mastic on Fiberglass TSI



Upper Photo: TSI-05-White Mastic on Foamglass TSI

Lower Photo: TSI-06-Black Mastic on Foamglass TSI Photograph Date: September 4, 2019

Prepared By: GLE Associates, Inc.



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UF DSB 8-10 Plenum	
Job No. 19140-01824	
Figure 11	
	_



Upper Photo: DSB Floor 8 Hallway North

Lower Photo: DSB Floor 8 Hallway South

Photograph Date: September 4, 2019

Prepared By: GLE Associates, Inc.





Upper Photo: CT-04-2' x 2' White Fissured Ceiling Tile

Lower Photo: CT-05-2' x 2' White Recessed Ceiling Tile Photograph Date: September 4, 2019

Prepared By: GLE Associates, Inc.





Upper Photo: CT-06- 2' x 2' White Smooth Recessed Ceiling Tile

Lower Photo: FP-04-Tan Fireproofing

Photograph Date: September 4, 2019

Prepared By: GLE Associates, Inc.





Upper Photo: MAS-08-Black Duct Mastic Photograph Date: September 4, 2019

Lower Photo: TSI-07-White Mastic on Fiberglass TSI

Prepared By: GLE Associates, Inc.





Upper Photo: TSI-08-White Mastic on Foamglass TSI

Lower Photo: TSI-09-Black Mastic on Foamglass TSI Photograph Date: September 4, 2019

Prepared By: GLE Associates, Inc.

