

ADDENDUM #3

Alfred Street One Way Pair
Project No. 2013-07
Bid No. 13-0038

This addendum is being issued to make the following changes, corrections, clarifications and additions to the bidding document. The information in this addendum modifies and changes the original bidding documents and takes precedence over the original documents. **Receipt of this addendum shall be acknowledged by the bidder by signing and dating the appropriate line on page W-4 of the bid proposal.** Failure to acknowledge this addendum may preclude consideration of the bid proposal for award.

Attached to this addendum is a copy of the NESHAP Asbestos Surveys for 303 Barrow Avenue, 307 Barrow Avenue, and 518 West Alfred Street. The demolitions shall be performed in accordance with applicable NESHAP surveys.

Questions and Answers:

Q1. SIDE STREETS- There are no typical sections for side streets; however, the typical section plan sheets #2 and #3 indicate "Side Street Milling" 1" Avg Depth. Side streets shown on the plan sheets 22 through 35 indicate milling and resurfacing on only some of the streets, Streets not indicating milling and resurfacing are West Ianthe, North Bartow, Texas, Joanna Ave, Rockingham Ave, Disston Ave (Sheet 28), New Hampshire, Rockingham Ave, Disston (South of East Caroline). Please clarify what construction method is to be used on these side streets.

A1. Contractor shall include in their bid a cost to mill and resurface those areas as indicated on the plans for smooth transitions. All other side streets shall be built per the typical located on Sheets 2 – 4 of the construction plans.

Q2. Side street typical notes indicate milling 1" average depth but a thickness and type of asphalt is not identified.

A2. Contractor shall include in their bid a cost to overlay the areas using 1" FC 9.5 (Rubber).

Q3. Alleyway Aprons: Plan sheet 5 provides design for Alleyway turnouts to be concrete pavers, however, plan sheets 22 through 35 do not indicate these areas to be brick, The plan sheets nor typical sections identify a particular construction type (Example: If you review the streetscpe plans areas of brick are clearly identified where it is wanted). How are Alleyways to be constructed for the base bid?

A3. Contractor shall include in their bid a cost to construct the turnouts for all the alleyways as shown in the "Alfred Street One Way Pair" construction plans. Each turnout may vary in

width and length due to the radii. Contractor should pay particular attention to sheet 5 of the construction plans and the details provided for the alleyway turnouts.

Q4. DRIVEWAYS/TURNOUTS: Plan sheet 5 provides a detail for "Driveway Turnout Design" Is this intended to be asphalt or concrete?

A4. Contractor shall include in their bid a cost to place 6" thick 3000 PSI concrete reinforced with 6" x 6" 10/10 WWF as shown on sheet 5 of the construction plans.

Q5. If asphalt what design depths for base/asphalt shall be used?

A5. Please refer to the response above, #A4.

Q6. Some driveways/turnouts shown on plan sheets 22 through 25 are clearly identified to be concrete, but most all are not identified one way or the other. Please clarify how and which driveways/turnouts are to be asphalt and which are to be concrete.

A6. Contractor shall include in their bid a cost to construct the driveways using the detail provided on sheet 5 of the construction plans. Use sheets 2 – 4 to construct turnouts for the side streets.

Q7. DRAINAGE: Cannot locate a structure type for S-43

A7. On sheet 53 of the construction plans part of the information pertaining to S-43 was cut off. The details should read "S-43 construct Type 6 Modified Inlet (P Bottom) Station 30 + 78.73 (13.25' Rt) TOP = 70.73, EOP = 69.99, INVERT IN = 64.45 (N) INVERT OUT = 64.45 (W)

Q8. ALLEY WAYS-TAVARES

Benny Kinsler :

Typical Section for Alleyways show 12" x18" Ribbons Curb

A8. Contractor shall include in their bid a cost to construct 13" x 18" ribbon curb not the 12" x 18" as shown on Sheet 5 of the construction plans labeled "Alfred Street One Way Pair."

Q9. Notes on Plan Sheet 5 indicate a 12" Ribbon Curb, which size is to be used?

A9. Please refer to the response above, #A8.

Q10. Flared Apron Detail says "all flared Aprons." Do the existing dirt drives received the concrete slab or do only existing concrete or paved drives get a concrete , bricked apron?

A10. The Flared Apron Detail on sheet 2 of the Alleyway Plan Set, states "ALL FLARED APRONS CONNECTING TO CITY STREETS..." This note is intended for those proposed alleyways that are connecting to other City streets outside of Alfred and Caroline Street, NOT the drives. Please refer to General Note 12, on sheet 2 of the Alleyway Plan Set, that gives the directions for drives. "WHERE PROPOSED ALLEY IMPROVEMENTS MEET EXISTING ASPHALT AREAS (PARKING, DRIVEWAYS, ETC.) SAW CUT EXISTING ASPHALT FOR SMOOTH TRANSITION." This note shall apply to concrete drives if encountered as well.

Q11. What are the limits of driveway construction on the alleyways?

A11. Please refer to the response above, #A10.

Q12. The Plan set for Irrigation Sleeves, plan sheet SL-2 and SL-3 are unreadable, even opened in a PDF and magnified.

A12. New Irrigation Sleeves plans can be obtained at the following link:
ftp://ftp.co.lake.fl.us/Public_Works/Engineering/Alfred%20Street/BID%20PACKAGE/5-31-13%20Alfred_Caroline%20Streets%20irr%20sleeving.pdf. These plans are clearer and easier to read.

Q13. Additionally the Legend on the plan sheets states "EXISTING IRRIGATION SLEEVING LEGEND". Are these sleeves existing?

A13. The Legend has been mislabeled and the sleeves are PROPOSED, NOT existing

Q14. Landscape plans are not to scale and no cadd provided for them.

A14. New Landscape Plans can be obtained at the following link:
ftp://ftp.co.lake.fl.us/Public_Works/Engineering/Alfred%20Street/BID%20PACKAGE/5-31-13%20Alfred%20Street%20Landscaping%20Plans.pdf. These plans are clearer and easier to read; however, please note that these plans are to be plotted on 24" x 36" paper, NOT 11" x 17". These pdf's are to scale when plotted on the proper paper size.



Terry Scott, Construction Inspector II



31 May 2013

Brenda Press
Permitting Technician II
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Subject: Report of Pre-Demolition NESHAP Asbestos Survey
303 Barrow Avenue (Single Family Home)
307 Barrow Avenue (Detached Garage Only)
Tavares, Florida 32778
Alternate Key #s 1277515 & 1497507
Parcel ID #s 29-19-26-010004700N00 & 29-19-26-010004700M00
AMEC Project 6380-12-0955.21

Dear Ms. Press,

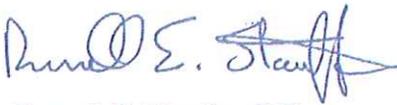
AMEC Environment & Infrastructure, Inc. (AMEC) has completed the Pre-Demolition NESHAP Asbestos Survey within the above referenced facility. The field survey was performed by Mr. Carver Gittens, an AHERA Accredited Inspector from AMEC, on 17 May 2013, in accordance with our Proposal 13PROP0010.0000.0146, dated 21 March 2013.

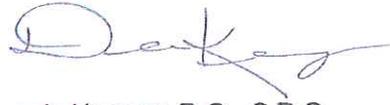
The attached report gives a brief background of the project, the procedures used in the field and in laboratory analysis. A summary of the laboratory analyses is included as an attachment.

AMEC appreciates the opportunity to have been of assistance to you on this project and is looking forward to working with you as your consultant in the future. If you have any questions concerning this report or if we can be of further service, please contact us.

Respectfully,
AMEC Environment & Infrastructure, Inc.
Asbestos Business License No. ZA-0000449


Ronald C. Trapane, CIEC
Senior Project Scientist


Russell E. Stauffer, P.E.
FL Asbestos Consultant
License No. EA0000016


Dennis Kenney, P.G., C.P.G.
Orlando Office Manager

P:\6380 IEQ\PROJECTS\2012Projects\0955 Lake Co. Gov.\0955.21 - 303 & 307 Barrow Ave. - NESHAP.doc

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1.0 PROJECT INFORMATION

Subject Buildings

Information concerning this project was obtained in an email (18 March 2013) from Ms. Brenda Press with Lake County Department of Public Works, Road Ops Division. Additional information was obtained from the Lake County Property Appraiser's (LCPA's) website.

According to information provided by Ms. Press, there are plans to demolish the subject structures at 303 Barrow Avenue in the near future. Additionally, according to Ms. Press, only the small detached garage at 307 Barrow Avenue (and no other structures) was to be included in this NESHAP survey.

According to LCPA information, there is a single family home, constructed in 1926, located at **303 Barrow Avenue**. The vacant single family home contains a total of 1,270 square feet (s.f.) of gross area, including a screened porch. According to property appraiser's records, other on-site structures include a detached garage (320 s.f.) and a utility building (91 s.f.) built in 1930, while a carport (289 s.f.) was constructed in 1970.

According to property appraiser's records, the small detached garage at **307 Barrow Avenue**, built in 1966, contains 357 square feet of gross area. The asbestos survey included bulk sampling of suspect interior and exterior building materials, including roofing products and concrete slabs.

The structures **303 Barrow Avenue** and the small detached garage at **307 Barrow Avenue** are scheduled for demolition.

Non-Subject Buildings

According to a telephone conversation with Ms. Press, the house and utility building at 307 Barrow Avenue was not part of the scope of work.

2.0 SURVEY PROCEDURES

2.1 General

The survey was performed by observing accessible exposed building materials and included bulk sampling of suspect interior and exterior building materials, prior to the planned demolition of the structures. We must emphasize that it is not possible to look within every location of a building. The visual survey documents only general locations of suspect materials but does not determine exact boundaries.

No attempt was made to disassemble equipment or demolish structural elements and finishes as this is beyond the scope of our authorized services. Visual observations were made at convenient locations (for example) for the presence of resilient floor coverings below existing floor finishes, etc. Due to these limitations, wall voids, building cavities and mechanical equipment, and other areas may contain unreported asbestos-containing materials.

2.2 Bulk Sampling

The bulk sampling procedures utilized for the collection of suspect materials first required the establishment of a homogeneous sampling area. A homogeneous sampling area is defined as an area of the same type and applied during the same general time period. The individual sampling areas were then examined and representative samples of the suspect materials were obtained. Bulk samples collected during the survey were delivered to EMSL Analytical, Inc., of Orlando, Florida, an NVLAP accredited laboratory (No. 10115-0). The bulk samples were analyzed by Polarized Light microscopy (PLM) coupled with dispersion staining in accordance with EPA Method 600/R-93/116.

Polarized Light Microscopy (PLM) is an analytical method for asbestos identification which depends on the unique optical properties of mineral forms in the samples, and specifically identifies the various asbestos types. This is the referenced method of analysis by EPA for asbestos identification in bulk samples. Materials found to contain greater than one percent asbestos by PLM are Asbestos-Containing Materials (ACM) as defined by EPA, OSHA and the State of Florida.

The EPA National Standard for Hazardous Air Pollutants (NESHAP) Final Rule (40 CFR 61, Subpart M) for asbestos includes an option for verification of friable materials, by point counting, if it is initially determined by PLM analysis that asbestos is present in amounts less than 10 percent. Point counts were not conducted as part of this survey.

The following suspect materials (thought to possibly contain asbestos) were sampled during the survey. Materials containing asbestos are in **bold**:

Detached Garage at 307 Barrow Avenue

1. Concrete slab

Detached Garage at 303 Barrow Avenue

1. **Window glazing**
2. Plaster walls (interior walls)
3. Stucco/skim coat walls (exterior walls)
4. Concrete slabs (garage and carport)

Residence at 303 Barrow Avenue

1. Concrete slabs (walkway and patio)
2. Window glazing
3. Compressed cellulose siding
4. Rolled roof (rear patio)
5. Roofing felt (under rolled roof of rear patio)
6. Drywall with knockdown texture (ceilings)
7. Plaster (interior walls and ceilings)
8. 12" x 12" off-white "Box & Rectangle" pattern vinyl floor tiles [VFT] with adhesive
9. 12" x 12" beige "Octagon" pattern VFT with adhesive, middle layer of VFT with adhesive, & bottom layer of felt
10. Brick, thin set, mortar, and grout (fireplace)
11. Two layers of roofing shingles and felt (residence)
12. Bottom layer of felt on roof deck (under roofing shingle/felt layers of residence)
13. White caulk (exterior seams of siding)
14. **Black mastic sink undercoat (kitchen)**

3.0 BULK SAMPLE RESULTS

Based upon our visual observations, bulk sampling of 19 suspect materials (45 samples, 71 layers) and subsequent PLM microscopic analysis, the following materials, limited to the Garage and Residence at 303 Barrow Avenue, were determined to contain asbestos:

Sample No.	Material Sampled	Sample Location	Percent/ Type Asbestos	Condition	Estimated Quantity
B-2A & B-2B	Window glazing	Garage windows (303 Barrow Ave.)	2% Chrysotile	Fair	60 L.F.
B-19A	Black mastic sink undercoat	Kitchen sink (303 Barrow Ave.)	4% Chrysotile –	Fair	6 S.F.

Prepared By: RCT Checked By:

It should be noted that asbestos-containing materials were not detected in the detached garage at 307 Barrow Avenue.

4.0 ASBESTOS CONCLUSIONS

The following materials were found to contain asbestos:

4.1 Window Glazing

Window glazing (Samples B-2A and B-2B) was identified and found to contain **2% Chrysotile asbestos**. Approximately 60 linear feet of ACM exterior window glaze, generally observed to be in fair condition with a moderate potential for damage, was observed on the windows of the detached garage at 303 Barrow Avenue.

4.2 Black Mastic Sink Undercoat

Black mastic sink undercoat from the kitchen sink (Samples B-19A) was found to contain **4% Chrysotile asbestos**. Approximately six square feet of black mastic sink undercoat, generally observed to be in fair condition with a moderate potential for damage, was observed under the kitchen sink of the residence at 303 Barrow Avenue.

5.0 ASBESTOS RECOMMENDATIONS

5.1 General Recommendations

There are four recognized alternative courses of action to control asbestos-containing materials in buildings: (1) asbestos removal and disposal; (2) enclosure; (3) encapsulation; and, (4) special operations, maintenance and re-observation programs. The selection of a particular alternative should be based upon intended usage of the building, actual exposure rates and cost.

Regarding Item No. 1, the EPA has Federal regulations regarding asbestos. The National Emissions Standard for Hazardous Air Pollutants (NESHAP) Final Rule Revision (EPA 40 CFR Part 61) dated November 20, 1990 includes several requirements for building Owners and Contractors. The requirement that greatly affects abatement alternatives is the categorization of asbestos-containing materials (ACM). These are categorized as follows:

- **Friable** means any material that can be reduced to powder by hand pressure when dry.
- **Category I Non-Friable ACM** means packing, gaskets, resilient floor coverings and roofing products that contain more than one- percent asbestos.
- **Category II Non-Friable ACM** means any material, excluding Category I Non-Friable ACM that contains more than one- percent asbestos, and is not friable.
- **Regulated ACM (RACM)** includes all friable ACM; Category I Non-Friable ACM that will be or has been subject to sanding, grinding, cutting or abrading; Category I Non-Friable ACM that has become friable; and Category II Non-Friable ACM that has a high probability of becoming, or has become crumbled, pulverized, or reduced to a powder by forces expected to act on the material in the course of demolition or renovation operations.

5.2 Specific Asbestos Recommendations

5.2.1 ACM Window Glazing

ACM glazing on the windows of the detached garage at 303 Barrow Avenue was identified. The EPA NESHAP classifies window glazing, as Category I non-friable asbestos-containing materials (ACM).

The OSHA Construction Standard (29 CFR 1926.1101) classifies disturbance, removal, or demolition of structures with **ACM window glazing** as Class II asbestos work which requires specialized training, engineering controls, etc.

However, since the windows with the ACM glazing can be easily removed intact, it is recommended that the entire window components from the detached garage at 303 Barrow Avenue be properly disposed of by a Florida Licensed Asbestos Contractor.

5.2.2 ACM Black Mastic Sink Undercoat

The EPA NESHAP classifies this material as Category I, non-friable ACM. The OSHA Construction Standard (29 CFR 1926.1101) classifies disturbance, removal, or demolition of structures with **ACM mastics** as Class II asbestos work which requires specialized training, engineering controls, etc.

However, since the entire kitchen sink, containing ACM black mastic undercoat, can be easily removed intact, it is recommended that the kitchen sink from the Residence at 303 Barrow Avenue be properly disposed of by a Florida Licensed Asbestos Contractor.

5.3 State Of Florida Asbestos Regulations

Chapter 469 of the Florida Statutes generally requires that a state licensed asbestos abatement contractor perform the removal, repair, or encapsulation of the types of ACM and materials identified as containing asbestos in this report. Since the structures will be demolished, ten working day written notification is required prior to the start of demolition activities under the EPA NESHAP regulation (40 CFR 61, Subpart M) and Florida Department of Environmental Protection (FDEP) rules. Since the project is located in **Lake County**, the notification, using FDEP form 62-257.900(1), must be made to FDEP's Central District Office at 3319 Maguire Boulevard, Suite 232, Orlando, FL 32803-3767 (telephone 407-894-7555, Fax 407-897-2966).

5.4 Interim Measures

Regardless of the type of asbestos abatement action chosen, and the time frame involved, we strongly recommend that during the interim time period prior to abatement action, control measures be established for the employees and occupants working in the building to minimize their exposure to asbestos.

This program should include, at a minimum, proper safety precautions and cleaning methods by personnel when work must be performed in and around asbestos-containing materials. Also, periodic reassessment of the condition of the asbestos-containing materials should be undertaken and precautions and procedures should be in writing and be thoroughly documented.

5.5 Legal and Medical Considerations

Due to the health hazards and legal ramifications involved in asbestos exposure in public buildings, an interdisciplinary approach between the engineering, medical and legal communities should be involved when determining an asbestos control program. There is presently a tremendous amount of litigation in the courts concerning present and past asbestos exposure in public and private facilities, as well as in the workplace environment.

One basis for much of the litigation stems from the lack of adequate notification by the building owner to building occupants/employees following the identification of asbestos in buildings. As a minimum, building owners should notify building employees, occupants, vendors, and others as required in the OSHA Asbestos Standards (29 CFR 1910.1001 and 29 CFR 1926.1101), and for public facilities, the EPA Worker Protection Rule (40CFR 763, Subpart G). We recommend that you involve appropriate legal counsel in your asbestos control program to address these very important issues.

6.0 LIMITATIONS

AMEC has performed its services in accordance with generally accepted practices at the time of the field work. This report has been prepared on behalf of and exclusively for the use by **Lake County Department of Public Works**. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party without AMEC's prior written consent. The findings are relative to the date of our site visit and should not be relied upon for substantially later dates. All material quantities are estimated based on visual observation and should be relied on for contractor bidding or regulatory notification purposes.

Please note that these test results relate only to those homogeneous materials tested. If conditions, or materials, other than those addressed in this report are encountered during the planned maintenance, renovation, or demolition activities, AMEC should be contacted to assess the potential impact of these materials or conditions relative to the findings or recommendations included herein.

APPENDIX A
LABORATORY ANALYSIS

**EMSL Analytical, Inc.**

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EMSL Order: 341303989
 CustomerID: LAWE52H
 CustomerPO:
 ProjectID:

Attn: **Paul Santone**
AMEC E&I, Inc.
75 E. Amelia Street
Suite 200
Orlando, FL 32801
 Project: 6380-12-0955, 22 / 303 & 307 Barrow Ave

Phone: (407) 522-7570
 Fax:
 Received: 05/21/13 1:19 PM
 Analysis Date: 5/23/2013
 Collected: 5/24/13 (P.C.)

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
B-1A 341303989-0001	Slab - Concrete	Gray Non-Fibrous Homogeneous		50% Quartz 20% Ca Carbonate 30% Non-fibrous (other)	None Detected
B-2A 341303989-0002	At Windows - Glazing	White Non-Fibrous Homogeneous		15% Ca Carbonate 83% Non-fibrous (other)	2% Chrysotile
B-2B 341303989-0003	At Windows - Glazing	White Non-Fibrous Heterogeneous		10% Ca Carbonate 88% Non-fibrous (other)	2% Chrysotile
B-3A 341303989-0004	Interior-Walls- East - Plaster	Gray Non-Fibrous Homogeneous		50% Quartz 20% Ca Carbonate 30% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					
B-3B 341303989-0005	Interior-Walls- East - Plaster	Gray Non-Fibrous Homogeneous		50% Quartz 15% Ca Carbonate 35% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					
B-3C 341303989-0006	Interior-Walls- East - Plaster	Gray Non-Fibrous Heterogeneous		50% Quartz 20% Ca Carbonate 30% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					
B-4A-Stucco 341303989-0007	Exterior Walls - East - Stucco	Gray Non-Fibrous Homogeneous		35% Quartz 15% Ca Carbonate 50% Non-fibrous (other)	None Detected

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problems matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Reporting limit is 1%
 Samples analyzed by EMSL Analytical, Inc. Orlando, FL NVLAP Lab Code 101151-0

Initial report from 05/23/2013 15:37:02

**EMSL Analytical, Inc.**

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EMSL Order: 341303989
 CustomerID: LAWE52H
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 ProjectID:

Attn: **Paul Santone**
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Phone: (407) 522-7570
 Fax:
 Received: 05/21/13 1:19 PM
 Analysis Date: 5/23/2013
 Collected:

Project: 6380-12-0955.22 / 303 & 307 Barrow Ave

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
B-4A-Skim Coat 341303989-0007A	Exterior Walls - East - Stucco	White Non-Fibrous Homogeneous		15% Quartz 10% Ca Carbonate 75% Non-fibrous (other)	None Detected
B-4B-Stucco 341303989-0008	Exterior Walls - East - Stucco	Gray Non-Fibrous Homogeneous		45% Quartz 15% Ca Carbonate 40% Non-fibrous (other)	None Detected
B-4B-Skim Coat 341303989-0008A	Exterior Walls - East - Stucco	White Non-Fibrous Homogeneous		50% Quartz 20% Ca Carbonate 30% Non-fibrous (other)	None Detected
B-4C-Stucco 341303989-0009	Exterior Walls - East - Stucco	Gray Non-Fibrous Heterogeneous		40% Quartz 20% Ca Carbonate 40% Non-fibrous (other)	None Detected
B-4C-Skim Coat 341303989-0009A	Exterior Walls - East - Stucco	White Non-Fibrous Heterogeneous		10% Quartz 25% Ca Carbonate 65% Non-fibrous (other)	None Detected
B-5A 341303989-0010	Garage Slab - Concrete	Gray Non-Fibrous Homogeneous		45% Quartz 15% Ca Carbonate 40% Non-fibrous (other)	None Detected
B-5B 341303989-0011	Garage Slab - Concrete	Gray Non-Fibrous Heterogeneous		50% Quartz 25% Ca Carbonate 25% Non-fibrous (other)	None Detected

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 Samples analyzed by EMSL Analytical, Inc. Orlando, FL NVLAP Lab Code 101151-0

Initial report from 05/23/2013 15:37:02



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Attn: **Paul Santone**
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Phone: (407) 522-7570
Fax:
Received: 05/21/13 1:19 PM
Analysis Date: 5/23/2013
Collected:

Project: 6380-12-0955.22 / 303 & 307 Barrow Ave

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
B-6A 341303989-0012	Front Entry - Walkway - Concrete	Gray Non-Fibrous Homogeneous		50% Quartz 20% Ca Carbonate 30% Non-fibrous (other)	None Detected
B-6B 341303989-0013	Back Patio / Deck - Concrete	Gray Non-Fibrous Heterogeneous		60% Quartz 15% Ca Carbonate 25% Non-fibrous (other)	None Detected
B-7A 341303989-0014	At Windows - Glazing	Gray Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (other)	None Detected
Further TEM analysis recommended.					
B-7B 341303989-0015	At Windows - Glazing	Gray Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (other)	None Detected
Further TEM analysis recommended.					
B-8A 341303989-0016	East Wall - Compressed Cellulose Siding	Tan Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					
B-8B 341303989-0017	South Wall - Compressed Cellulose Siding	Tan Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					
B-8C 341303989-0018	West Wall - Compressed Cellulose Siding	Fibrous Heterogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					
B-9A 341303989-0019	Back Patio - Rolled Roof	Black Non-Fibrous Homogeneous	10% Glass	15% Quartz 75% Non-fibrous (other)	None Detected

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Samples analyzed by EMSL Analytical, Inc. Orlando, FL NVLAP Lab Code 101151-0

Initial report from 05/23/2013 15:37:02



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EMSL Order:	341303989
CustomerID:	LAWE52H
CustomerPO:	
ProjectID:	

Attn: Paul Santone AMEC E&I, Inc. 75 E. Amelia Street Suite 200 Orlando, FL 32801	Phone: (407) 522-7570 Fax: Received: 05/21/13 1:19 PM Analysis Date: 5/23/2013 Collected:
Project: 6380-12-0955.22 / 303 & 307 Barrow Ave	

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
B-9B 341303989-0020	Back Patio - Rolled Roof	Gray/Black Non-Fibrous Heterogeneous	7% Glass	20% Quartz 73% Non-fibrous (other)	None Detected
B-10A 341303989-0021	Back Patio - Roofing Felt	Black Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (other)	None Detected
B-10B 341303989-0022	Back Patio - Roofing Felt	Black Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (other)	None Detected
B-11A-Drywall 341303989-0023	Sun/Family Room - Ceiling - Drywall & Joint Compound w/Knock Down Treatment	White Fibrous Homogeneous	10% Cellulose <1% Glass	75% Gypsum 15% Non-fibrous (other)	None Detected
No Joint Compound observed.					
B-11A-Texture 341303989-0023A	Sun/Family Room - Ceiling - Drywall & Joint Compound w/Knock Down Treatment	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					
B-11B-Drywall 341303989-0024	Sun/Family Room - Ceiling - Drywall & Joint Compound w/Knock Down Treatment	White Fibrous Homogeneous	15% Cellulose <1% Glass	75% Gypsum 10% Non-fibrous (other)	None Detected
No joint compound present in sample.					

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 Samples analyzed by EMSL Analytical, Inc. Orlando, FL NVLAP Lab Code 101151-0

Initial report from 05/23/2013 15:37:02



EMSL Analytical, Inc.

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
B-11B-Texture 341303989-0024A	Sun/Family Room - Ceiling - Drywall & Joint Compound w/Knock Down Treatment	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					
B-11C-Drywall 341303989-0025	Sun/Family Room - Ceiling - Drywall & Joint Compound w/Knock Down Treatment	Brown/White Fibrous Heterogeneous	40% Cellulose <1% Glass	40% Gypsum 20% Non-fibrous (other)	None Detected
No joint compound present in sample.					
B-11C-Texture 341303989-0025A	Sun/Family Room - Ceiling - Drywall & Joint Compound w/Knock Down Treatment	White Non-Fibrous Heterogeneous		25% Ca Carbonate 75% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					
B-12A 341303989-0026	East Wall - Composite / Plaster Skim Coat	Tan Non-Fibrous Homogeneous		25% Quartz 15% Ca Carbonate 60% Non-fibrous (other)	None Detected
B-12B 341303989-0027	North Wall - Composite / Plaster Skim Coat	Tan Non-Fibrous Homogeneous		35% Quartz 15% Ca Carbonate 50% Non-fibrous (other)	None Detected
B-12C 341303989-0028	West Wall - Composite / Plaster Skim Coat	Tan Non-Fibrous Homogeneous		40% Quartz 15% Ca Carbonate 45% Non-fibrous (other)	None Detected

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
B-12D 341303989-0029	East Wall - Composite / Plaster Skim Coat	Gray Non-Fibrous Homogeneous		40% Quartz 15% Ca Carbonate 45% Non-fibrous (other)	None Detected
B-12E 341303989-0030	Ceiling - Composite / Plaster Skim Coat	Gray Non-Fibrous Heterogeneous		40% Quartz 20% Ca Carbonate 40% Non-fibrous (other)	None Detected
B-12F 341303989-0031	Ceiling - Composite / Plaster Skim Coat	Gray Non-Fibrous Heterogeneous		45% Quartz 25% Ca Carbonate 30% Non-fibrous (other)	None Detected
B-12G 341303989-0032	Ceiling - Composite / Plaster Skim Coat	Gray Non-Fibrous Heterogeneous		50% Quartz 15% Ca Carbonate 35% Non-fibrous (other)	None Detected
B-13A-Floor Tile 341303989-0033	Floor - 12"x12" off white "Box & Rectangle" Pattern V.F.T. w/Adhesive	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
B-13A-Adhesive 341303989-0033A	Floor - 12"x12" off white "Box & Rectangle" Pattern V.F.T. w/Adhesive	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
B-13B-Floor Tile 341303989-0034	Floor - 12"x12" off white "Box & Rectangle" Pattern V.F.T. w/Adhesive	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
B-13B-Adhesive 341303989-0034A	Floor - 12"x12" off white "Box & Rectangle" Pattern V.F.T. w/Adhesive	Brown/Yellow Non-Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (other)	None Detected
Inseparable wood layer included in analysis.					
B-14A-Floor Tile 341303989-0035	Floor - 12"x12" Beige "Octagon" Pattern V.F.T. w/Adhesive & Additional Floor Tiles Below/Composite	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
B-14A-Adhesive 341303989-0035A	Floor - 12"x12" Beige "Octagon" Pattern V.F.T. w/Adhesive & Additional Floor Tiles Below/Composite	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
B-14A-Floor Tile 341303989-0035B	Floor - 12"x12" Beige "Octagon" Pattern V.F.T. w/Adhesive & Additional Floor Tiles Below/Composite	Beige Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
B-14A-Adhesive 341303989-0035C	Floor - 12"x12" Beige "Octagon" Pattern V.F.T. w/Adhesive & Additional Floor Tiles Below/Composite	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
B-14A-Felt 341303989-0035D	Floor - 12"x12" Beige "Octagon" Pattern V.F.T. w/Adhesive & Additional Floor Tiles Below/Composite	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					
B-14B-Floor Tile 341303989-0036	Floor - 12"x12" Beige "Octagon" Pattern V.F.T. w/Adhesive & Additional Floor Tiles Below/Composite	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
B-14B-Adhesive 341303989-0036A	Floor - 12"x12" Beige "Octagon" Pattern V.F.T. w/Adhesive & Additional Floor Tiles Below/Composite	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
B-14B-Floor Tile 341303989-0036B	Floor - 12"x12" Beige "Octagon" Pattern V.F.T. w/Adhesive & Additional Floor Tiles Below/Composite	Beige Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
B-14B-Adhesive 341303989-0036C	Floor - 12"x12" Beige "Octagon" Pattern V.F.T. w/Adhesive & Additional Floor Tiles Below/Composite	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
B-14B-Felt 341303989-0036D	Floor - 12"x12" Beige "Octagon" Pattern V.F.T. w/Adhesive & Additional Floor Tiles Below/Composite	Black Fibrous Heterogeneous	35% Cellulose	65% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					
B-15A-Brick 341303989-0037	Fireplace - Brick, Thinset/Mortar & Grout	Red Non-Fibrous Homogeneous		50% Quartz 15% Ca Carbonate 35% Non-fibrous (other)	None Detected
B-15A-Thinset 341303989-0037A	Fireplace - Brick, Thinset/Mortar & Grout	White Non-Fibrous Homogeneous		15% Quartz 15% Ca Carbonate 70% Non-fibrous (other)	None Detected
B-15A-Mortar 341303989-0037B	Fireplace - Brick, Thinset/Mortar & Grout	Gray Non-Fibrous Homogeneous		30% Quartz 15% Ca Carbonate 55% Non-fibrous (other)	None Detected
B-15A-Grout 341303989-0037C	Fireplace - Brick, Thinset/Mortar & Grout	Gray Non-Fibrous Homogeneous		50% Quartz 20% Ca Carbonate 30% Non-fibrous (other)	None Detected
B-15B-Brick 341303989-0038	Fireplace - Brick, Thinset/Mortar & Grout	Red Non-Fibrous Heterogeneous		50% Quartz 20% Ca Carbonate 30% Non-fibrous (other)	None Detected
B-15B-Thinset 341303989-0038A	Fireplace - Brick, Thinset/Mortar & Grout	White Non-Fibrous Heterogeneous		25% Quartz 10% Ca Carbonate 65% Non-fibrous (other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
B-15B-Mortar 341303989-0038B	Fireplace - Brick, Thinset/Mortar & Grout	Gray Non-Fibrous Heterogeneous		50% Quartz 20% Ca Carbonate 30% Non-fibrous (other)	None Detected
B-15B-Grout 341303989-0038C	Fireplace - Brick, Thinset/Mortar & Grout	Gray Non-Fibrous Heterogeneous		60% Quartz 20% Ca Carbonate 20% Non-fibrous (other)	None Detected
B-16A-Shingle 1 341303989-0039	Roof - Roofing Shingle	Black/Green Non-Fibrous Homogeneous	12% Glass	20% Quartz 68% Non-fibrous (other)	None Detected
B-16A-Felt 341303989-0039A	Roof - Roofing Shingle	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (other)	None Detected
B-16A-Shingle 2 341303989-0039B	Roof - Roofing Shingle	Tan/Black Non-Fibrous Homogeneous	12% Glass	20% Quartz 68% Non-fibrous (other)	None Detected
B-16A-Felt 341303989-0039C	Roof - Roofing Shingle	Black Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (other)	None Detected
B-16B-Shingle 1 341303989-0040	Roof - Roofing Shingle	Black/Green Non-Fibrous Heterogeneous	10% Glass No felt present in sample.	25% Quartz 65% Non-fibrous (other)	None Detected
B-16B-Shingle 2 341303989-0040A	Roof - Roofing Shingle	Tan/Black Non-Fibrous Heterogeneous	12% Glass	20% Quartz 68% Non-fibrous (other)	None Detected
B-17A 341303989-0041	Roof - Roofing Felt	Black Non-Fibrous Homogeneous	45% Cellulose	55% Non-fibrous (other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
B-17B 341303989-0042	Roof - Roofing Felt	Black Fibrous Heterogeneous	50% Cellulose	50% Non-fibrous (other)	None Detected
B-18A 341303989-0043	Seams of Siding - White Caulk	Tan Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
B-18B 341303989-0044	Seams of Siding - White Caulk	Tan/White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
B-19A 341303989-0045	Sink Undercoat - Kitchen - Black Mastic	Black Non-Fibrous Homogeneous		96% Non-fibrous (other)	4% Chrysotile

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The samples in this report were submitted to EMSL for analysis by Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy. The reference number for these samples is the EMSL Order ID above. Please use this reference number when calling about these samples.

Report Comments:

Sample Receipt Date:: 5/21/2013 Sample Receipt Time: 1:19 PM
Analysis Completed Date: 5/23/2013 Analysis Completed Time: 3:33 PM

Analyst(s):

Adelmarié Bones PLM (41)

Jerry Cherian PLM (30)

Samples reviewed and approved by:

Jonathan Teda, Asbestos Lab Manager
or other approved signatory

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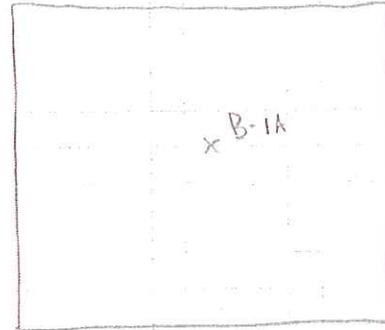
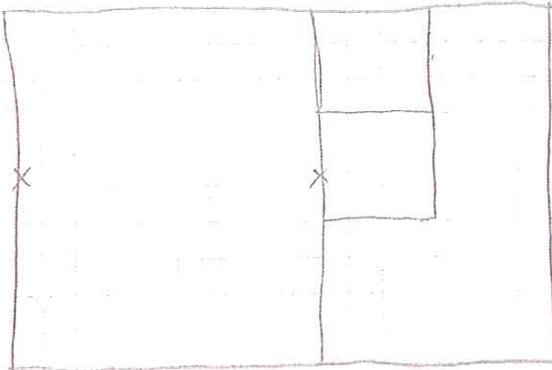
Job#: 6380-12-0955-22 21

Job Name: 303 & 307 BARLOW AVE

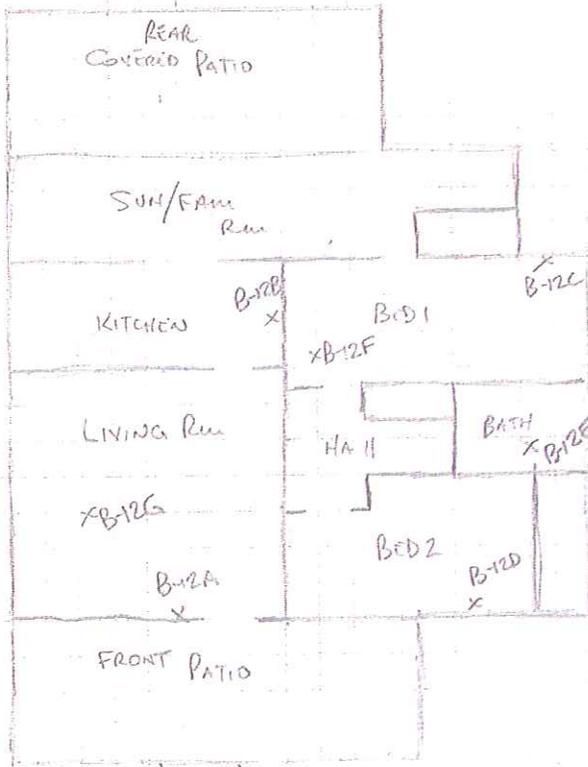
By: Carver Gittens

Date: 5/17/13

Ck: _____ Date: _____



#307





30 May 2013

Brenda Press
Permitting Technician II
Lake County DPW, Road Ops Division
437 Ardice Avenue
Eustis, Florida 32726

Phone: +1 (352) 483-9020
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Email: bpress@lakecountyfl.gov
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**Subject: Report of Pre-Demolition NESHAP Asbestos Survey
Two Structures at 518 West Alfred Street
Building #8 (Small Concrete Block Structure)
Building #99 (Portable Office Building)
Tavares, Florida 32778
Alternate Key # 1822807
Parcel ID #s 29-19-26-010004700000
AMEC Project 6380-12-0955.22**

Dear Ms. Press,

AMEC Environment & Infrastructure, Inc. (AMEC) has completed the Pre-Demolition NESHAP Asbestos Survey within the above referenced facility. The field survey was performed by Mr. Carver Gittens, an AHERA Accredited Inspector from AMEC, on 17 May 2013, in accordance with our Proposal 13PROP0010.0000.0151, Revision 2, dated 30 April 2013.

The attached report gives a brief background of the project, the procedures used in the field and in laboratory analysis. A summary of the laboratory analyses is included as an attachment.

AMEC appreciates the opportunity to have been of assistance to you on this project and is looking forward to working with you as your consultant in the future. If you have any questions concerning this report or if we can be of further service, please contact us.

Respectfully,

AMEC Environment & Infrastructure, Inc.
Asbestos Business License No. ZA-0000449

Ronald C. Trapane, CIEC
Senior Project Scientist

Russell E. Stauffer, P.E.
FL Asbestos Consultant
License No. EA0000016

Dennis Kenney, P.G., C.P.G.
Orlando Office Manager

P:\6380 IEQ\PROJECTS\2012Projects\0955 Lake Co. Gov.\0955.22 - 518 W. Alfred St NESHAP - NESHAP.doc

Correspondence:
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75 East Amelia Street, Suite 200
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1.0 PROJECT INFORMATION

Two Subject Buildings

Information concerning this project was obtained in emails (21, 22, & 28 March 2013) and telephone calls (29 April 2013) from Ms. Brenda Press with Lake County Department of Public Works, Road Ops Division. Additional information was obtained from the Lake County Property Appraiser's (LCPA's) website.

According to information provided by Ms. Press, there are plans to demolish **two** subject structures at 518 West Alfred Street in the near future. These buildings consist of the following:

- Building #8 - small concrete block, slab-on-grade structure, consisting of 275 square feet (s.f.), constructed circa 1985, which is attached by the roof to the main concrete block building)

Building #99 – portable office building, consisting of 768 s.f., no date of construction provided.

The objective of AMEC's survey was to identify accessible asbestos-containing materials which may be impacted by the planned demolition of the structures. No previous asbestos surveys have reportedly been conducted at the site.

The asbestos survey, limited to the two subject structures (Building #s 8 & 99), included bulk sampling of suspect interior and exterior building materials, including roofing products and concrete slabs.

Non-Subject Buildings

According to a telephone conversation with Ms. Press, there are plans to demolish a third subject structure (Building #9) at 518 West Alfred Street. However, this 1,500 s.f., metal industrial building, constructed in 1985, will reportedly be removed by the Sheriff's office and was **not** part of this work scope.

Additionally, according to information from emails, the main concrete building (2,841 s.f., constructed in 1951), as well as the remediation system shed/compound building (located behind the small concrete block structure) were also not part of this work scope.

2.0 SURVEY PROCEDURES

2.1 General

The survey was performed by observing accessible exposed building materials and included bulk sampling of suspect interior and exterior building materials, prior to the planned demolition of the structures. We must emphasize that it is not possible to look within every location of a building. The visual survey documents only general locations of suspect materials but does not determine exact boundaries.

No attempt was made to disassemble equipment or demolish structural elements and finishes as this is beyond the scope of our authorized services. Visual observations were made at convenient locations (for example) for the presence of resilient floor coverings below existing floor finishes, etc. Due to these limitations, wall voids, building cavities and mechanical equipment, and other areas may contain unreported asbestos-containing materials.

2.2 Bulk Sampling

The bulk sampling procedures utilized for the collection of suspect materials first required the establishment of a homogeneous sampling area. A homogeneous sampling area is defined as an area of the same type and applied during the same general time period. The individual sampling areas were then examined and representative samples of the suspect materials were obtained. Bulk samples collected during the survey were delivered to EMSL Analytical, Inc., of Orlando, Florida, an NVLAP accredited laboratory (No. 10115-0). The bulk samples were analyzed by Polarized Light microscopy (PLM) coupled with dispersion staining in accordance with EPA Method 600/R-93/116.

Polarized Light Microscopy (PLM) is an analytical method for asbestos identification which depends on the unique optical properties of mineral forms in the samples, and specifically identifies the various asbestos types. This is the referenced method of analysis by EPA for

asbestos identification in bulk samples. Materials found to contain greater than one percent asbestos by PLM are Asbestos-Containing Materials (ACM) as defined by EPA, OSHA and the State of Florida.

The EPA National Standard for Hazardous Air Pollutants (NESHAP) Final Rule (40 CFR 61, Subpart M) for asbestos includes an option for verification of friable materials, by point counting, if it is initially determined by PLM analysis that asbestos is present in amounts less than 10 percent. Point counts were not conducted as part of this survey.

The following suspect materials (thought to possibly contain asbestos) were sampled during the survey.

Building #8

1. Drywall/joint compound ceiling (north half of building)
2. Brown drywall/joint compound/skim coat ceilings (south half of building)
3. Concrete slab
4. White caulk (around A/C opening on north wall and doors)
5. Roofing shingles
6. Roofing felt (under shingles)
7. Felt (around A/C opening and concrete block)

Building #99 (Portable Office – no concrete slab)

1. White mastic on fiberglass insulated HVAC ducts
2. Brown mastic under blue/green carpet
3. Compressed cellulose ceiling panels
4. Insulation above ceiling
5. Roofing shingle
6. Roofing felt

3.0 BULK SAMPLE RESULTS

Based upon our visual observations, bulk sampling of 13 suspect materials (26 samples, **34 layers**) and subsequent PLM microscopic analysis, none of the previously identified suspect materials were determined to contain regulated amounts of asbestos.

4.0 ASBESTOS CONCLUSIONS

Since the structures will be demolished, a ten working day written notification is required prior to the start of demolition activities under the EPA NESHAP regulation (40 CFR 61, Subpart M) and Florida Department of Environmental Protection (FDEP) rules. The subject project is located in Lake County, so notification should be made to the Florida Department of Environmental Protection (FDEP) Central District Office at 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767, Phone (407) 894-7555, Fax (407) 897-2966, using FDEP form 62-0257.900(1).

5.0 LIMITATIONS

AMEC has performed its services in accordance with generally accepted practices at the time of the field work. This report has been prepared on behalf of and exclusively for the use by **Lake County Department of Public Works**. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party without AMEC's prior written consent. The findings are relative to the date of our site visit and should not be relied upon for substantially later dates. All material quantities are estimated based on visual observation and should be relied on for contractor bidding or regulatory notification purposes.

Please note that these test results relate only to those homogeneous materials tested. If conditions, or materials, other than those addressed in this report are encountered during the planned maintenance, renovation, or demolition activities, AMEC should be contacted to assess the potential impact of these materials or conditions relative to the findings or recommendations included herein.

APPENDIX A
LABORATORY ANALYSIS

**EMSL Analytical, Inc.**

5125 Adanson Street, Suite 900, Orlando, FL 32804
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<http://www.emsl.com> orlandolab@emsl.com

EMSL Order: 341304001
 CustomerID: LAWE52H
 CustomerPO:
 ProjectID:

Attn: **Paul Santone**
AMEC E&I, Inc.
75 E. Amelia Street
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Orlando, FL 32801
 Project: 6380-12-0955, 21 518 West Alfred St. *PCT*

Phone: (407) 522-7570
 Fax:
 Received: 05/21/13 4:31 PM
 Analysis Date: 5/23/2013
 Collected:

5/24/13
RLJ

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
B-1A-Drywall 341304001-0001	Ceiling - Joint Compound - Drywall & Joint Compound	White Fibrous Homogeneous	10% Cellulose 1% Glass	75% Gypsum 14% Non-fibrous (other)	None Detected
B-1A-Joint Compound 341304001-0001A	Ceiling - Joint Compound - Drywall & Joint Compound	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (other)	None Detected
B-1B-Drywall 341304001-0002	Ceiling - Joint Compound - Drywall & Joint Compound	White Fibrous Heterogeneous	15% Cellulose <1% Glass	60% Gypsum 25% Non-fibrous (other)	None Detected
B-1B-Joint Compound 341304001-0002A	Ceiling - Joint Compound - Drywall & Joint Compound	White Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (other)	None Detected
B-2A-Joint Compound 341304001-0003	Ceiling - South Half - (Brown) Drywall & Joint Compound w/Plaster	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (other)	None Detected
B-2A-Plaster 341304001-0003A	Ceiling - South Half - (Brown) Drywall & Joint Compound w/Plaster	Gray Non-Fibrous Homogeneous		30% Quartz 10% Gypsum 15% Ca Carbonate 45% Non-fibrous (other)	None Detected
Composite of Plaster, Skim Coat and Drywall. Unable to separate.					
B-2B-Plaster 341304001-0004	Ceiling - South Half - (Brown) Drywall & Joint Compound w/Plaster	Gray Non-Fibrous Heterogeneous		5% Mica 20% Ca Carbonate 75% Non-fibrous (other)	None Detected
No drywall or joint compound present in sample.					

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 Samples analyzed by EMSL Analytical, Inc. Orlando, FL NVLAP Lab Code 101151-0

Initial report from 05/23/2013 16:20:43

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Project: 6380-12-09585.21 518 West Alfred St.

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
B-2B-Skim Coat 341304001-0004A	Ceiling - South Half - (Brown) Drywall & Joint Compound w/Plaster	White Non-Fibrous Heterogeneous		25% Ca Carbonate 75% Non-fibrous (other)	None Detected
B-3A 341304001-0005	Slab - Concrete	Gray Non-Fibrous Homogeneous		40% Quartz 20% Ca Carbonate 40% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					
B-4A 341304001-0006	Around A/C Opening - North Wall - White Caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
B-4B 341304001-0007	Around A/C Opening - North Wall - White Caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
B-5A 341304001-0008	Roof - North Sect - Roofing Shingle	Tan/Black Non-Fibrous Homogeneous	10% Glass	25% Quartz 65% Non-fibrous (other)	None Detected
B-5B 341304001-0009	Roof - South Sect - Roofing Shingle	Tan/Black Non-Fibrous Heterogeneous	10% Glass	20% Quartz 70% Non-fibrous (other)	None Detected
B-6A 341304001-0010	Roof - North Sect - Roofing Felt	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (other)	None Detected
B-6B 341304001-0011	Roof - South Sect - Roofing Felt	Black Fibrous Heterogeneous	50% Cellulose	50% Non-fibrous (other)	None Detected
B-7A 341304001-0012	A.C. Opening - Felt	Black Non-Fibrous Homogeneous	55% Cellulose	45% Non-fibrous (other)	None Detected

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Project: 6380-12-09585.21 518 West Alfred St.

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
B-7B 341304001-0013	A.C. Opening - Felt	Black Fibrous Heterogeneous	60% Cellulose	40% Non-fibrous (other)	None Detected
B-8A-Mastic 341304001-0014	Fiberglass Air Ducts-@ Unit - White Mastic	White Non-Fibrous Homogeneous	10% Glass	90% Non-fibrous (other)	None Detected
B-8A-Insulation 341304001-0014A	Fiberglass Air Ducts-@ Unit - White Mastic	Yellow Fibrous Homogeneous	100% Glass	0% Non-fibrous (other)	None Detected
B-8B-Mastic 341304001-0015	Fiberglass Air Ducts-@ Unit - White Mastic	White Non-Fibrous Heterogeneous	10% Glass	90% Non-fibrous (other)	None Detected
B-8B-Insulation 341304001-0015A	Fiberglass Air Ducts-@ Unit - White Mastic	Yellow Fibrous Homogeneous	100% Glass	0% Non-fibrous (other)	None Detected
B-9A-Mastic 341304001-0016	Under Blue/Green Carpet - Brown Mastic	Yellow Non-Fibrous Homogeneous	2% Synthetic	98% Non-fibrous (other)	None Detected
B-9A-Carpet 341304001-0016A	Under Blue/Green Carpet - Brown Mastic	Green Fibrous Homogeneous	95% Synthetic	5% Non-fibrous (other)	None Detected
B-9B-Mastic 341304001-0017	Under Blue/Green Carpet - Brown Mastic	Yellow Non-Fibrous Heterogeneous	3% Synthetic	97% Non-fibrous (other)	None Detected
B-9B-Carpet 341304001-0017A	Under Blue/Green Carpet - Brown Mastic	Green Fibrous Heterogeneous	95% Synthetic	5% Non-fibrous (other)	None Detected

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
B-10A 341304001-0018	Ceiling - Compressed Cellulose Panels	Tan Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					
B-10B 341304001-0019	Ceiling - Compressed Cellulose Panels	Tan/White Fibrous Heterogeneous	95% Cellulose	5% Non-fibrous (other)	None Detected
B-11A 341304001-0020	Above Ceiling - Insulation	Gray Fibrous Homogeneous	60% Cellulose	30% Mica 10% Non-fibrous (other)	None Detected
B-11B 341304001-0021	Above Ceiling - Insulation	Gray Fibrous Homogeneous	60% Cellulose	20% Mica 20% Non-fibrous (other)	None Detected
B-11C 341304001-0022	Above Ceiling - Insulation	Gray Fibrous Heterogeneous	55% Cellulose	20% Mica 25% Non-fibrous (other)	None Detected
B-12A 341304001-0023	Roof - Roof Shingle	Black Non-Fibrous Homogeneous	15% Glass	25% Quartz 60% Non-fibrous (other)	None Detected
B-12B 341304001-0024	Roof - Roof Shingle	Black Non-Fibrous Heterogeneous	12% Glass	20% Quartz 68% Non-fibrous (other)	None Detected
B-13A 341304001-0025	Roof - Roofing Felt	Black Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (other)	None Detected
B-13B 341304001-0026	Roof - Roofing Felt	Black Fibrous Heterogeneous	45% Cellulose	55% Non-fibrous (other)	None Detected

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The samples in this report were submitted to EMSL for analysis by Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy. The reference number for these samples is the EMSL Order ID above. Please use this reference number when calling about these samples.

Report Comments:

Sample Receipt Date:: 5/21/2013 Sample Receipt Time: 4:31 PM
Analysis Completed Date: 5/23/2013 Analysis Completed Time: 4:06 PM

Analyst(s):

Adelmarié Bones PLM (18)

Jerry Cherian PLM (16)

Samples reviewed and approved by:

Jonathan Teda, Asbestos Lab Manager
or other approved signatory

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Orlando, Florida 32801
Office 407-522-7570/Fax 407-522-7576



2757A #8
7682B #99

Job#: 6380-12-0955, 21
Job Name: 518 W. ALFRED ST. BLDGS #8 & #99.
By: Carver Gittens

Date: 5-17-13

