Department of Administrative Services
Purchasing and Contracts

500 S Grand Central Pky 4th Fl • Box 551217 • Las Vegas NV 89155-1217
(702) 455-2897 • Fax (702) 386-4914

Sabra Smith Newby, Chief Administrative Officer
Adleen B. Stidhum, Purchasing Manager

CLARK COUNTY, NEVADA
BID NO. 604091-16
LEWIS PROFESSIONAL BUILDING: BOILER REHABILITATION AND MECHANICAL UPGRADES

June 7, 2016

ADDENDUM NO. 2

INVITATION TO BID

1. The bid opening date of June 23, 2016 at 2:15:00 p.m. **remains unchanged**.

SPECIFICATIONS

2. **Add** Asbestos Survey Report, Lewis Building 330 South 3rd Street, dated June 1, 2016, attached to this Addendum No. 2.

Except as modified herein all other bid specifications, terms and conditions and special conditions shall remain the same.

ISSUED BY:

SANDY MOODY-UPTON, CPPB
Purchasing Analyst II

Attachment(s): Asbestos Survey Report dated June 1, 2016

Cc: Brian Connolly, Real Property Management
Fernando Martinez, Real Property Management
Don Koch, DG Koch Associates

BOARD OF COUNTY COMMISSIONERS
STEVE SISOLAK, Chairman • LARRY BROWN, Vice Chairman
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DONALD G. BURNETTE, County Manager

Asbestos Survey Report

Lewis Building

330 South 3rd Street

Las Vegas, Nevada

June 1, 2016

Terracon Project No. 64157033A

Prepared for:

Clark County Department of Real Property Management
Design and Construction Management
Las Vegas, Nevada

Prepared by:

Terracon Consultants, Inc.
Las Vegas, Nevada

Offices Nationwide
Employee-Owned
Established in 1965
terracon.com
Terracon
Environmental • Facilities • Geotechnical • Materials

June 1, 2016

Clark County Department of Real Property Management
Design and Construction Division
500 South Grand Central Parkway
Las Vegas, Nevada

Attn: Mr. Fernando Martinez
P: 702-455-5844
E: Fernando.Martinez @clarkcountynv.gov

Re: Asbestos Survey Report
Lewis Building
330 South 3rd Street
Las Vegas, Nevada
Terracon Project No. 64157033A Task 4

Dear Mr. Martinez:

At your request, Terracon Consultants, Inc. (Terracon) conducted an asbestos survey at the above referenced site in accordance with Clark County SOQ Number 603073-13; Consulting, Assessment, and Abatement Monitoring Services for Asbestos, Mold, Lead Containing/Lead Based Paint and Indoor Air Quality, dated June 16, 2015.

This report contains the results of samples collected and analyzed from our asbestos survey performed on May 19, 2016, and indicates the locations of the samples collected. Terracon appreciates the opportunity to provide this service to Clark County Department of Real Property Management. Should you have any questions regarding this report, please contact the below signed at (702) 597-9393.

Sincerely,
Terracon Consultants, Inc.

Steven Garrahan
Staff Scientist
Nevada Asbestos License: I-1888

Adrianne Watkins
Environmental Department Manager
Nevada Asbestos License: IM-1307

for

Mitch Reiber, P.G., C.I.H.
Senior Technical Reviewer

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ASBESTOS SURVEY REPORT

LEWIS BUILDING
330 South 3rd Street
Las Vegas, Nevada

1.0 INTRODUCTION

Terracon Consultants, Inc. (Terracon) conducted an asbestos survey at the proposed site for Clark County Department of Real Property Management Design and Construction Management, located at 330 South 3rd Street in Las Vegas, Nevada. The survey was conducted on May 19, 2016, in general accordance with the Clark County SOQ Number 603073-13; Consulting, Assessment, and Abatement Monitoring Services for Asbestos, Mold, Lead Containing/Lead Based Paint and Indoor Air Quality, dated June 16, 2015. Sample collection of suspect asbestos-containing materials (ACM) included the interior only.

1.1 Project Objective

The first objective of this project was to conduct a desk top review of the Hazardous Building Materials Survey Report prepared by Ninyo and Moore, dated December 20, 2010, for the Lewis Building. The desk top review was conducted to identify the presence or absence of ACM not previously sampled in areas potentially impacted by the planned HVAC replacement. The second objective was to identify and sample materials not addressed in the 2010 survey. Survey activities were limited to the areas proposed for planned renovations, including the fire brick in the roof top boiler and the concrete floor of the fourth floor parking garage mechanical room.

EPA regulation 40 CFR 61, Subpart M, the National Emissions Standard for Hazardous Air Pollutants (NESHAP) prohibits the release of asbestos fibers to the atmosphere during renovation or demolition activities. The asbestos NESHAP requires that regulated ACM be identified, classified and quantified prior to planned disturbances or demolition activities.

1.2 Reliance

This report is for the exclusive use of Clark County Department of Real Property Management for the project being discussed. Reliance by any other party on this report is prohibited without written authorization of Terracon and Clark County Department of Real Property Management. Reliance on this report by Clark County Department of Real Property Management and all authorized parties will be subject to the terms, conditions, and limitations stated in the proposal, this report and the client's contract between Terracon and Clark County Department of Real Property Management, dated June 16, 2015.

2.0 BUILDING DESCRIPTION

The site is located at 330 South 3rd Street, in Las Vegas, Nevada. The building is currently occupied by Clark County and is built on a 0.24 acre lot. The building was constructed in 1983, and consist primarily of office space.

3.0 ASBESTOS SURVEY

3.1 Field Activities

The survey was conducted by Mr. Steven Garrahan, a State of Nevada licensed asbestos building inspector. Copies of pertinent licenses and training certifications are included in Appendix C. The survey was conducted in general accordance with the sample collection protocols established in USEPA 40 CFR Part 763 Subpart E 763.86, the Asbestos Hazard Emergency Response Act (AHERA). A summary of survey activities is provided below.

3.2 Visual Assessment

Survey activities were initiated with a desk top review of the Hazardous Building Materials Survey Report prepared by Ninyo and Moore, dated December 20, 2010, and visual observation of the potentially impacted areas to identify homogeneous areas of suspect ACM. A homogeneous area (HA) consists of building materials that appear similar throughout in terms of color and texture with consideration given to the date of application.

3.3 Physical Assessment

A physical assessment of each HA of suspect ACM was conducted to assess the friability and condition of the materials. A friable material is defined by the USEPA as a material which can be crumbled, pulverized or reduced to powder by hand pressure when dry. Friability was assessed by physically touching suspect materials.

3.4 Sample Collection

Based on results of the desk top review and visual observation, bulk samples of suspect ACM were limited to the fire brick in the roof top boiler and the concrete floor of the fourth floor parking garage mechanical room. Samples were collected in general accordance with USEPA AHERA sampling protocols. Samples of suspect materials were collected from randomly selected locations in each homogeneous area. Bulk samples were collected using wet methods as applicable to reduce the potential for fiber release. Samples were placed in sealable containers and labeled with unique sample numbers using an indelible marker.

The selection of sample locations and frequency of sampling were based on Terracon's observations and the assumption that like materials in the same area are homogeneous in content.

Terracon collected six bulk samples from two homogeneous areas of suspect ACM. A summary table of suspect ACM samples collected during the survey is included as Table 1 in Appendix A.

3.5 Sample Analysis

Bulk samples were submitted under chain of custody to International Asbestos Testing Laboratories of Mt. Laurel, NJ for analysis by polarized light microscopy with dispersion staining techniques per USEPA methodology 600/R-93/116. The percentage of asbestos, where applicable, was determined by microscopic visual estimation and subsequent point counting via Stratified Point Count Method New York State Department of Health Environmental Laboratory Approval Program (ELAP) Item 198.1. International Asbestos Testing Laboratories is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP) Accreditation No. 101165-0.

3.6 Regulatory Overview

The asbestos NESHAP regulates asbestos fiber emissions and asbestos waste disposal practices. The asbestos NESHAP regulation also requires the identification and classification of existing ACM according to friability prior to demolition or renovation activity. Friable ACM is a material containing more than 1% asbestos that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure. All friable ACM is considered regulated asbestos containing material (RACM).

The asbestos NESHAP regulation classifies ACM as either RACM, Category I non-friable ACM or Category II non-friable ACM. RACM includes all friable ACM, along with Category I and Category II non-friable ACM that has become friable, will be or has been subjected to sanding, grinding, cutting or abrading, or ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder in the course of renovation or demolition activity.

Category I non-friable ACM are exclusively asbestos-containing packings, gaskets, resilient floor coverings, resilient floor covering mastics and asphalt roofing products that contain more than 1% asbestos. Category II non-friable ACM are all other non-friable materials other than Category I non-friable ACM that contain more than 1% asbestos.

Asbestos is regulated in the State of Nevada by the Nevada Division of Industrial Relations (NDIR), Nevada Administrative Code (NAC) chapter 618.850 to 618.986, Nevada Revised Statutes (NRS) chapter 618.750 to 618.850; and Clark County Department of Air Quality (CCDAQ).

All RACM must be removed prior to renovation or demolition activities which will disturb the materials. The owner or operator must provide the CCDAQ with written notification of planned removal activities at least 10 working days prior to the commencement of asbestos abatement activities when the quantity of friable asbestos materials exceed 260 linear feet (on pipes) and 160 square feet or 35 cubic feet on other facility components.

The Occupational Safety and Health Administration (OSHA) Asbestos standard for construction (29 CFR 1926.1101) regulates workplace exposure to asbestos. The OSHA standard requires that employee exposure to airborne asbestos fibers be maintained below 0.1 asbestos fiber per cubic centimeter of air (0.1 f/cc) as an eight hour time weighted average. The OSHA standard classifies construction and maintenance activities which could disturb ACM, and specifies work practices and precautions which employers must follow when engaging in each class of regulated work.

3.7 Findings and Recommendations

Based on the results of laboratory analysis, **asbestos was not detected** in the samples collected during our site visit.

It should be emphasized that although reasonable efforts were made to survey accessible suspect materials, additional suspect but un-sampled materials could be located under existing building materials or equipment, inside walls or ceilings, in isolated areas or in other concealed areas. Therefore, if suspicious materials are encountered during installation/upgrade activities that do not appear to have been characterized as ACM or non-ACM, these materials must be assumed to be ACM until samples are collected and analyzed to prove otherwise.

A summary table of sample locations is presented in Appendix A. Laboratory analytical reports are included in Appendix B.

4.0 LIMITATIONS/GENERAL COMMENTS

Terracon did not perform sampling requiring demolition or destructive activities such as knocking holes in walls, dismantling of equipment or removal of protective coverings. Reasonable efforts to access suspect materials within known areas of restricted access (e.g., crawl spaces) were made; however, confined spaces or areas which may pose a health or safety risk to Terracon personnel were not sampled. Sampling did not include suspect materials which could not be safely reached with available ladders/man-lifts.

This survey was conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale. The results, findings, conclusions and recommendations expressed in this report are based on conditions observed during our survey of the building. The information contained in this report is relevant to the dates on which this survey was performed, and should not be relied upon to represent conditions at a later date. This report has been prepared on behalf of and exclusively for use by Clark County Department of Real Property Management for specific application to their project as discussed. This report is not a bidding document. Contractors or consultants reviewing this report must draw their own conclusions regarding further investigation or remediation deemed necessary. Terracon does not warrant the work of regulatory agencies, laboratories or other third parties supplying information which may have been used in the preparation of this report. No warranty, express or implied is made.

Appendix A

Lewis Building
330 South 3rd Street
Las Vegas, Nevada

ASBESTOS SURVEY SAMPLE LOCATION SUMMARY

Appendix A

Lewis Building
330 South 3rd Street
Las Vegas, Nevada

ASBESTOS SURVEY SAMPLE LOCATION SUMMARY

HA No.	Material Description	Sample Number	Sample Location	Lab Results
01	Tan Insulation	01-CP5-01	Mechanical/Boiler Room Inside Of Boiler Plate	None Detected
01	Tan Insulation	01-CP5-02	Mechanical/Boiler Room Inside Of Boiler Plate	None Detected
01	Tan Insulation	01-CP5-03	Mechanical/Boiler Room Inside Of Boiler Plate	None Detected
02	Grey Cementitious	02-FC2-04	Fourth Floor Garage Mech Room Near Elevator Lobby	None Detected
02	Grey Cementitious	02-FC2-05	Fourth Floor Garage Mech Room Near Elevator Lobby	None Detected
02	Grey Cementitious	02-FC2-06	Fourth Floor Garage Mech Room Near Elevator Lobby	None Detected

APPENDIX B

Lewis Building
330 South 3rd Street
Las Vegas, Nevada

ASBESTOS LABORATORY ANALYTICAL DATA

9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: Terracon
750 Pilot Road, Suite F
Las Vegas NV 89119

Client: TER660

Report Date: 5/24/2016
Report No.: 510198 - PLM
Project: Lewis Building ACM
Project No.: 64157033A

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5934650
Client No.: 01-CP5-01
Description: Tan Insulation
Facility:
Location: Mechanical/Boiler Room Inside Of Boiler Plate

Percent Asbestos: *None Detected*
Percent Non-Asbestos Fibrous Material: None Detected
Percent Non-Fibrous Material: 100

Different Material analyzed than listed on the sample log.
This sample contains vermiculite mineral and may be a candidate for additional analytical procedures. Please see the sections following your report titled Recommendations for Vermiculite Analysis. (EPA 600/R-04/004)

Lab No.: 5934651
Client No.: 01-CP5-02
Description: Tan Insulation
Facility:
Location: Mechanical/Boiler Room Inside Of Boiler Plate

Percent Asbestos: *None Detected*
Percent Non-Asbestos Fibrous Material: None Detected
Percent Non-Fibrous Material: 100

Different Material analyzed than listed on the sample log.
This sample contains vermiculite mineral and may be a candidate for additional analytical procedures. Please see the sections following your report titled Recommendations for Vermiculite Analysis. (EPA 600/R-04/004)

Lab No.: 5934652
Client No.: 01-CP5-03
Description: Tan Insulation
Facility:
Location: Mechanical/Boiler Room Inside Of Boiler Plate

Percent Asbestos: *None Detected*
Percent Non-Asbestos Fibrous Material: None Detected
Percent Non-Fibrous Material: 100

Different Material analyzed than listed on the sample log.
This sample contains vermiculite mineral and may be a candidate for additional analytical procedures. Please see the sections following your report titled Recommendations for Vermiculite Analysis. (EPA 600/R-04/004)

Lab No.: 5934653
Client No.: 02-FC2-04
Description: Grey Cementitious
Facility:
Location: Fourth Floor Garage Mech Room Near Elevator Lobby

Percent Asbestos: *None Detected*
Percent Non-Asbestos Fibrous Material: None Detected
Percent Non-Fibrous Material: 100

Lab No.: 5934654
Client No.: 02-FC2-05
Description: Grey Cementitious
Facility:
Location: Fourth Floor Garage Mech Room Near Elevator Lobby

Percent Asbestos: *None Detected*
Percent Non-Asbestos Fibrous Material: None Detected
Percent Non-Fibrous Material: 100

Analytical Method -**US EPA 600, R93-116**. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 5/20/2016
Date Analyzed: 5/24/2016 1:56:28 PM
Signature:
Analyst: Tom Barkley

Approved By:
Frank E. Ehrenfeld, III
Laboratory Director

9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: Terracon
750 Pilot Road, Suite F
Las Vegas NV 89119

Client: TER660

Report Date: 5/24/2016
Report No.: 510198 - PLM
Project: Lewis Building ACM
Project No.: 64157033A

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5934655
Client No.: 02-FC2-06

Description: Grey Cementitious
Facility:

Location: Fourth Floor Garage Mech Room Near Elevator Lobby

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Analytical Method -**US EPA 600, R93-116**. Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 5/20/2016
Date Analyzed: 5/24/2016 1:56:28 PM
Signature:
Analyst: Tom Barkley

Approved By:
Frank E. Ehrenfeld, III
Laboratory Director

9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: Terracon
750 Pilot Road, Suite F
Las Vegas NV 89119

Client: TER660

Report Date: 5/24/2016
Report No.: 510198 - PLM
Project: Lewis Building ACM
Project No.: 64157033A

Appendix to Analytical Report

Customer Contact: Mike Nelson
Analysis: US EPA 600, R93-116

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

iATL Customer Service: customerservice@iatl.com
iATL Office Manager: cdavis@iatl.com
iATL Account Representative: Alyssa Peiffer
Sample Login Notes: See Batch Sheet Attached
Sample Matrix: Bulk Building Materials
Exceptions Noted: See Following Pages

General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at www.iATL.com and in our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

Information Pertinent to this Report:

Analysis by US EPA 600 93-116: Determination of Asbestos in Bulk Building Materials by Polarized Light Microscopy (PLM).

Certifications:

- NIST-NVLAP No. 101165-0
- NY-DOH No. 11021
- AIHA-LAP, LLC No. 100188

Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analytical Methodology Alternatives: Your initial request for analysis may not have accounted for recent advances in regulatory requirements or advances in technology that are routinely used in similar situations for other qualified projects. You may have the option to explore additional analysis for further information. Below are a few options, listed as the matrix followed by the appropriate methodology. Also included are links to more information on our website.

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB)

Loose Fill Vermiculite Insulation, Attic Insulation, Zonolite (copyright), etc.: US EPA 600 R-4/004 (multi-tiered analytical process)
Sprayed On Insulation/Fireproofing with Vermiculite (SOF-V): ELAP 198.8 (PLM-SOF-V)>

Soil, sludge, sediment, aggregate, and like materials analyzed for asbestos or other elongated mineral particles (ex. erionite, etc.): ASTM D7521, CARB 435, and other options available

9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client:	Terracon	**Report Date:**	5/24/2016
	750 Pilot Road, Suite F	**Report No.:**	510198 - PLM
	Las Vegas NV 89119	**Project:**	Lewis Building ACM
		Project No.:	64157033A
Client:	TER660		

Asbestos in Surface Dust according to one of ASTM's Methods (very dependent on sampling collection technique – by TEM): ASTM D 5755, D5756, or D6480

Various other asbestos matrices (air, water, etc.) and analytical methods are available.

Disclaimers / Qualifiers:

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a list with highlighted disclaimers that may be pertinent to this project. For a full explanation of these and other disclaimers, please inquire at **customerservice@iatl.com**.

1) Note: No mastic provided for analysis.
2) Note: Insufficient mastic provided for analysis.
3) Note: Insufficient material provided for analysis.
4) Note: Insufficient sample provided for QC reanalysis.
5) Note: Different material than indicated on Sample Log / Description.
6) Note: Sample not submitted.
7) Note: Attached to asbestos containing material.
8) Note: Received wet.
9) Note: Possible surface contamination.
10) Note: Not building material. 1% threshold may not apply.
11) Note: Recommend TEM-NOB analysis as per EPA recommendations.
12) Note: Asbestos detected but not quantifiable.
13) Note: Multiple identical samples submitted, only one analyzed.
14) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.080%.
15) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.125%.

Recommendations for Vermiculite Analysis:

Several analytical protocols exist for the analysis of asbestos in vermiculite. These analytical approaches vary depending upon the nature of the vermiculite mineral being tested (e.g. un-processed gange, homogeneous exfoliated books of mica, or mixed mineral composites).Please contact your client representative for pricing and turnaround time options available.

iATL recommends initial testing using the EPA 600/R-93/116 method. This method is specifically designed for the analysis of asbestos in bulk building materials. It provides an acceptable starting point for primary screening of vermiculite for possible asbestos.

Results from this testing may be inconclusive. EPA suggests proceeding to a multi-tiered analysis involving wet separation techniques in conjunction with PLM and TEM gravimetric analysis (EPA 600/R-04/004).

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional.

The following is a summary of the analytical process outlines in the EPA 600/R-04/004 Method:

1)**Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% LOQ for most samples.

2)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Sinks" only.

3)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Floats" only.

4)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Sinks" only.

5)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Suspension" only.

LOQ, Limit of Quantitation estimates for mass and volume analyses.
*With advance notice and confirmation by the laboratory.
**Approximately 1 Liter of sample in double-bagged container (~9x6 inch bag of sample).

iATL INTERNATIONAL
ASBESTOS TESTING LABORATORIES

9000 Commerce Parkway, Suite B • Mount Laurel, NJ 08054
Phone: 877-428-4285/856-231-9449 • Fax: 856-231-9818

Chain of Custody

–Bulk Asbestos –

Contact Information

Client:	Terracon Consultants, Inc.	**Date:**	05/19/2016
Project Name:	Lewis Building ACM	**Project Number:**	64157033A
Office Phone:	702-979-7972	**Primary Contact:**	Adrianne Watkins
Cell Phone:		**Facility Location:**	Las Vegas
Email Address:	Adrianne.Watkins@terracon.com	**Fax Number:**	702-597-9009

PLM Instructions:

- [x] PLM: Bulk Asbestos Building Materials EPA 600 / R 93-116
- [ ] PLM: Point Counting
  - [ ] PC: via ELAP 198.1
  - [ ] PC: 400 Points
  - [ ] PC: 800 Points *
  - [ ] PC: 1600 Points *
- [ ] PLM: Analyze Until Positive (Positive Stop)
- [ ] AUP: by Homogenous Area as Noted
- [ ] AUP: by Material Type as Noted
- [ ] PLM: Non-Building Material*, ** (Dust, Wipe, Tape, Soil)
  - [ ] Soil or Vermiculite Analysis*, **
- [ ] PLM: Gravimetric Reduction
  - [ ] PLM: NOB via 198.1
  - [ ] PLM: Friable via EPA 600 2.3
  - [ ] If <1% by PLM, to TEM via 198.4 *
  - [ ] If <1% by PLM, Hold for Instructions
- [ ] PLM: Instructions for Multi-Layered Samples
  - [ ] Analyze and Report All Separable Layers per EPA 600
  - [ ] Report Composite for Drywall Systems per NESHAP
  - [ ] Report All Layers and Composite Where Applicable
  - [ ] Only Analyze and Report Specifically Noted Layer

Special Instructions: SEE ATTACHED SAMPLE LOG SHEETS - PLEASE E-MAIL FINAL REPORT TO Adrianne.Watkins@terracon.com
PLEASE PROVIDE EXCEL SPREADSHEET OF SAMPLE RESULTS, INVOICE AND CHAIN OF CUSTODY FOR PROMPT REMITTANCE

** Additional charge and turnaround may be required* *** Alternative Method (ex: EPA 600/R-04/004) may be recommended by Laboratory*

Turnaround Time

Preliminary Results Requested Date: _____ Specific date / time

- [ ] Verbal
- [x] Email
- [ ] Fax

- [ ] 10 Day
- [ ] 5 Day
- [x] 3 Day
- [ ] 2 Day
- [ ] 1 Day*
- [ ] 12 Hour**
- [ ] 6 Hour**
- [ ] RUSH**

Note: Viable/Culturable samples may require several days in order to establish countable colony forming units (CFU) of fungi.
* End of next business day unless otherwise specified. ** Matrix Dependent. ***Please notify the lab before shipping***

Chain of Custody

Relinquished (Name/Organization):	Steve Garrahan	Date: 05/19/2016	Time: 1645
Received (Name / IATL):		Date:	Time:
Sample Login (Name / IATL):		Date: 5/23/16	Time:
Analysis(Name(s) / IATL):		Date: 5/24/16	Time:
QA/QC Review (Name / IATL):		Date: 5-24-16	Time:
Archived / Released:	QA/QC InterLAB Use:	Date:	Time:

RECEIVED
MAY 20 2016
iATL - By
E-MAILED

iATL INTERNATIONAL
ASBESTOS TESTING LABORATORIES

9000 Commerce Parkway, Suite B • Mount Laurel, NJ 08054
Phone: 877-428-4285/856-231-9449 • Fax: 856-231-9818

Sample Log

–Bulk Asbestos –

Client: Terracon Project: 64157033A

Sampling Date: 05/19/2016

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes
See	Attached	Sample Log	Sheets

iATL celebrates twenty-five years

Terracon PN 64157033 A **Asbestos Sample Location Log** Page 1 of 1

Client Name: Clark County Dept. of Real Property management
Building Name: Lewis Building
Inspector: Steven Garrahan

Sample No: (HA, BS Code, Sample No.)	Written location where bulk sample is collected.	Collection Date
01 - CP5 - 01	Tan fire brick Roof mechanical / boiler room. Inside of boiler plate.	05/19/16 5934650
01 - CP5 - 02	Tan fire brick Roof mechanical / boiler room. Inside of boiler plate	05/19/16 5934651
01 - CP5 - 03	Tan fire brick Roof mechanical / boiler room. Inside of boiler plate.	05/19/16 5934652
02 - FC2 - 04	Grey poured cement Fourth floor garage, mech room near elevator lobby	05/19/16 5934653
02 - FC2 - 05	Grey poured cement Fourth floor garage, mech room near elevator lobby.	05/19/16 5934654
02 - FC2 - 06	Grey poured cement Fourth floor garage, mech room near elevator lobby.	05/19/16 5934655
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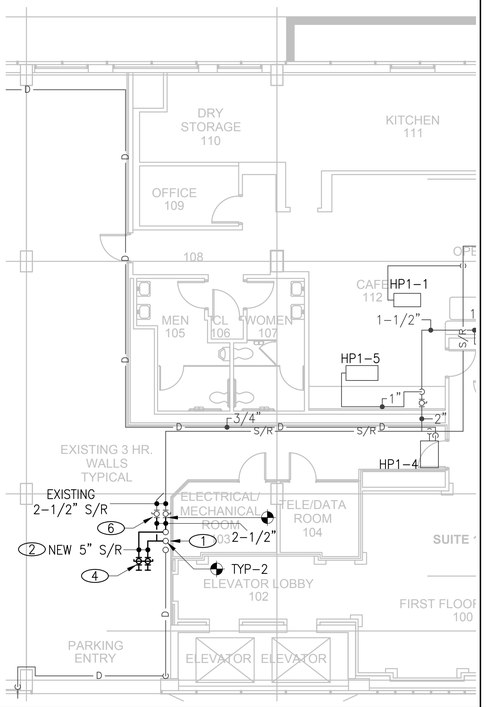
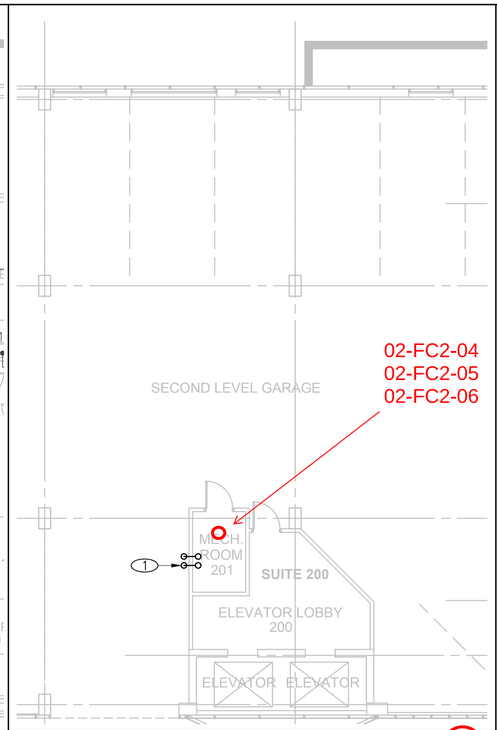
APPENDIX C

Lewis Building
330 South 3rd Street
Las Vegas, Nevada

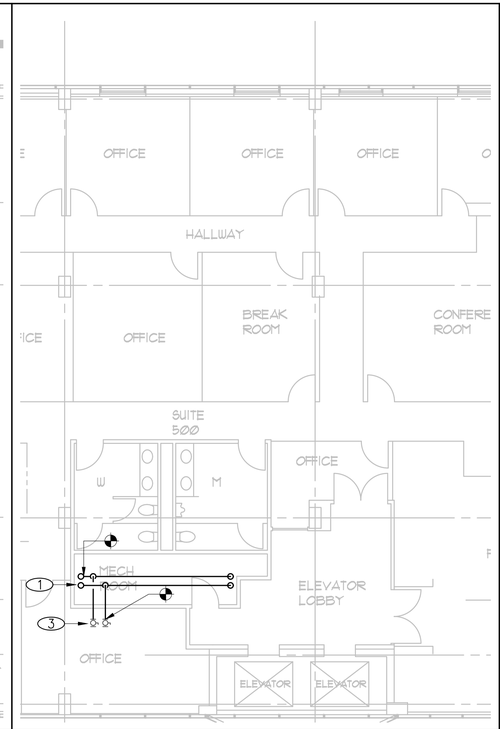
BULK SAMPLE LOCATION MAP



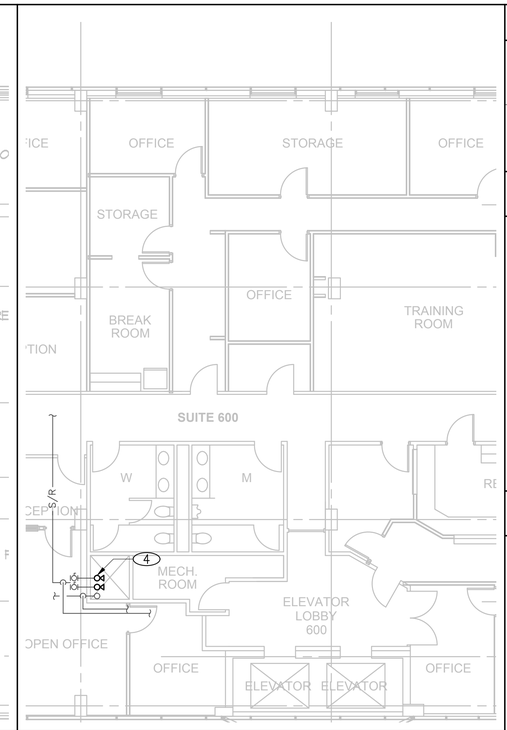
A PARTIAL FIRST FLOOR PLAN
1/8" = 1'-0"



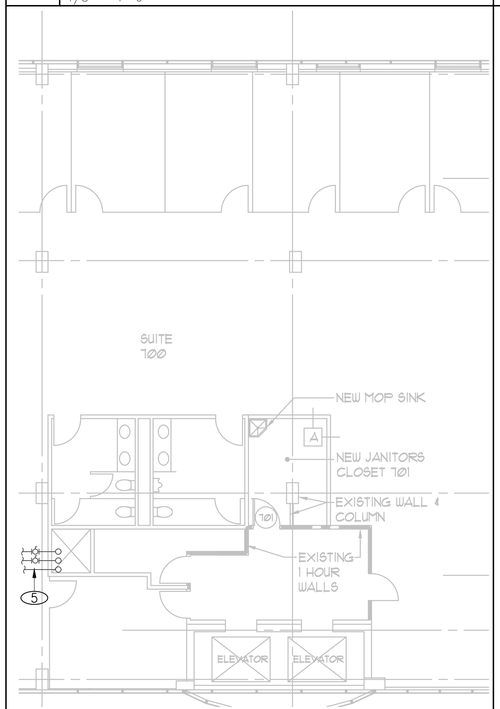
B PARTIAL PLAN - LEVELS 2, 3 & 4
1/8" = 1'-0"



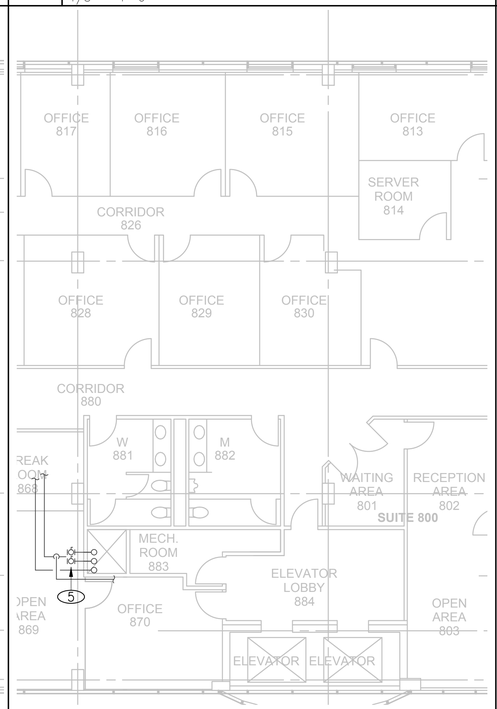
C PARTIAL FIFTH FLOOR PLAN
1/8" = 1'-0"



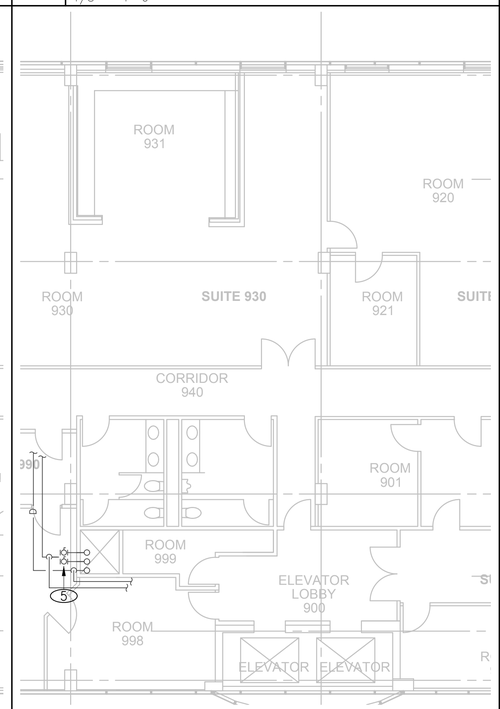
D PARTIAL SIXTH FLOOR PLAN
1/8" = 1'-0"



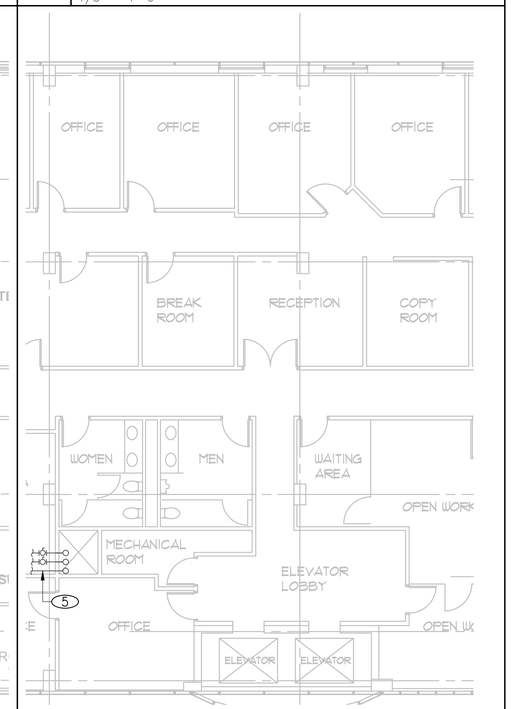
E PARTIAL SEVENTH FLOOR PLAN
1/8" = 1'-0"



F PARTIAL EIGHTH FLOOR PLAN
1/8" = 1'-0"



G PARTIAL NINTH FLOOR PLAN
1/8" = 1'-0"



H PARTIAL TENTH FLOOR PLAN
1/8" = 1'-0"

NOTICE

POINT OF CONNECTION TO EXISTING. VERIFY EXACT SIZE AND LOCATION IF FIELD PRIOR TO START OF WORK.

EXSITING WORK TO REMAIN SHOWN LIGHT. EXISTING WORK TO BE REMOVED SHOWN DARK AND DASHED. NEW WORK SHOWN DARK.

TEMPORARY COOLING

WHEN HVAC SYSTEM HYDRONIC FLOW IS SHUT DOWN FOR CONSTRUCTION. CONTRACTOR SHALL PROVIDE "SPOT COOLERS" OR EQUAL OFFICE PRO 18, 24 OR 36 COOLERS, SIZED TO MATCH THE EXISTING HEAT PUMP SERVING THE SPACE, FOR THE FOLLOWING ROOMS:

1. ROOF ELEVATOR MACHINERY ROOM
2. LEVEL 10 IT ROOM
3. LEVEL 9 IT ROOM
4. LEVEL 8 IT ROOM
5. LEVEL 6 IT ROOM
6. LEVEL 5 IT ROOM
7. LEVEL 1 IT ROOM
8. LEVEL 1 FIRE CONTROL ROOM

KEY NOTES

1. REMOVE EXISTING 2-1/2" S/R PIPING UP & DOWN. IN CHASE, REPLACE WITH 5" S/R PIPING UP & DOWN. (ADD ALTERNATE #1)
2. EXTEND NEW 5" S/R FROM RISERS UP TO LOCATION SHOWN. PROVIDE BUTTERFLY VALVES WITH BLIND FLANGES FOR FUTURE EMERGENCY COOLING CONNECTION. (ADD ALTERNATE #1)
3. CONNECT EXISTING PIPING SERVING THE FLOOR TO NEW 5" S/R PIPING.(ADD ALTERNATE #1)
4. CONNECT 5" S/R PIPING TO EXISTING 6" S/R PIPING IN CHASE. PROVIDE NEW 6" BUTTERFLY VALVES IN VERTICAL RISERS TO ISOLATE PIPING BELOW. (ADD ALTERNATE #1)
5. EXISTING ISOLATION VALVES TO FLOOR UNITS. CLOSE VALVES PRIOR TO DRAINING MAINS. MARK EXISTING BALANCE LOCATIONS.
6. EXISTING LEVEL 1 ZONE ISOLATION VALVES.

NORTH

8 6 4 2 0 4 8 12 16
GRAPHIC SCALE : 1/8"=1'-0"

REVISIONS ISSUE	BY	DATE
		08-11-15

DG KOCH ASSOCIATES
2000 S. JONES #110
LAS VEGAS, NV 89146
(702) 221-5160
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15020

CLARK COUNTY
DEPARTMENT OF REAL PROPERTY MANAGEMENT
ACQUISITION, DESIGN, & CONSTRUCTION DIVISION
500 S. GRAND CENTRAL PARKWAY
Las Vegas, Nevada
(702) 455-6731

THE LEWIS PROFESSIONAL BLDG.
330 S. 3RD STREET, LAS VEGAS, NV 89101
DATE: NOVEMBER 19, 2015
MECHANICAL UPGRADE

M2-0

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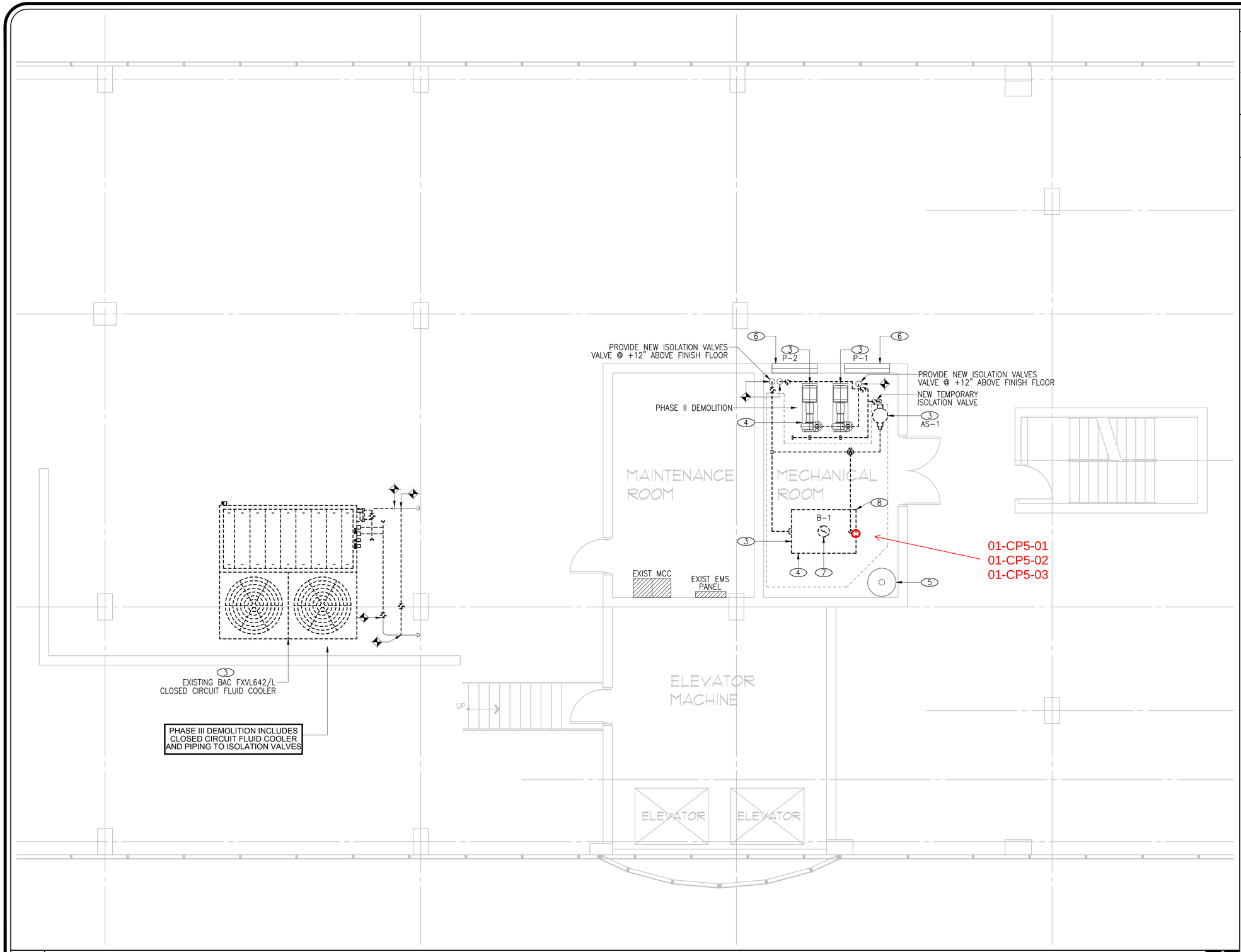

NOTICE

POINT OF DISCONNECTION TO EXISTING. VERIFY EXACT SIZE AND LOCATION IF FIELD PRIOR TO START OF WORK.

EXSITING WORK TO REMAIN SHOWN LIGHT. EXISTING WORK TO BE REMOVED SHOWN DARK AND DASHED. NEW WORK SHOWN DARK.

GENERAL DEMOLITION REQUIREMENTS

1. PHASE I. SHUT SYSTEM DOWN. CLOSE ISOLATION VALVES TO EACH FLOOR. DRAIN MAINS FROM BOILER ROOM TO LEVEL 1. PROVIDE NEW BUTTERFLY VALVES WHERE 6" S & R ENTER & LEAVE BOILER ROOM. ISOLATION BUTTERFLY VALVES TO PERMIT REMOVAL OF BOILER & PHASE I PIPING. INSTALL ISOLATION VALVES ON RISER - REFER TO PARTIAL SIXTH FLOOR PLAN REFILL SYSTEM. REMOVE AIR, OPEN ISOLATION VALVES.
2. PHASE II. DEMOLITION PIPING REMOVE EXIST. BOILER FLUE UP TO ROOF. EXIST PIPE THRU ROOF TO REMAIN.
3. REMOVE EXISTING EQUIPMENT AND ASSOCIATED PIPING.
4. REWORK EXISTING HOUSEKEEPING PADS AS REQUIRED FOR NEW EQUIPMENT. PROVIDE SHOP DRAWING OF NEW PAD LAYOUTS, TO INCLUDE REINFORCEMENTS AND PROPOSED ATTACHMENT METHOD TO EXISTING CONCRETE SLAB FOR REVIEW.
5. EXISTING WATER HEATER, FLUE, HOT WATER CIRCULATING PUMP & FIRE SPRINKLERS SHALL REMAIN.
6. EXISTING COMBUSTION AIR LOOVERS SHALL REMAIN.
7. REMOVE EXISTING FLUE UP & FLUE PIPING FROM 12" ABOVE THE ROOF UP.
8. EXISTING ATMOSPHERIC DRAFT 2000 MBH INPUT BOILER.

4 3 2 1 0 2 4 6 8
GRAPHIC SCALE : 1/4"=1'-0"

A DEMO ROOF FLOOR PLAN - HVAC

1/4" = 1'-0"

REVISIONS ISSUE	BY	DATE
		08-11-15

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THE LEWIS PROFESSIONAL BLDG.
330 S. 3RD STREET, LAS VEGAS, NV 89101
DATE: NOVEMBER 19, 2015
MECHANICAL UPGRADE

M2-1

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APPENDIX D

Lewis Building
330 South 3rd Street
Las Vegas, Nevada

LICENSES AND CERTIFICATIONS

STATE OF NEVADA
DEPARTMENT OF BUSINESS AND INDUSTRY
DIVISION OF INDUSTRIAL RELATIONS
Occupational Safety and Health Administration
Asbestos Control Program

Certifies That Steven Garrahan

is Licensed As Asbestos Abatement Consultant

License No. I-1888 Expiration Date 07/29/2016
Trainee

Signature Of Licensee

STATE OF NEVADA
DEPARTMENT OF BUSINESS AND INDUSTRY
DIVISION OF INDUSTRIAL RELATIONS
Occupational Safety and Health Administration
Asbestos Control Program

Certifies That Adrianne Watkins
Terracon Consultants Inc.
is Licensed As Asbestos Abatement Consultant

License No. IM-1307 Expiration Date 04/18/2017

Signature Of Licensee Adrianne Q. Watkins