DRAFT

ASBESTOS OPERATIONS AND MAINTENANCE PLAN

1530 West 17th Street
Santa Ana, California 92706

Prepared for:

Rancho Santiago Community College District
2323 North Broadway
Santa Ana, California 92706

Project No.: RSCC-17-6814
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1. INTRODUCTION

The Owner will implement an Operations, Maintenance, and Repair Program (O&M) to manage in place asbestos-containing materials (ACMs) including assumed ACMs friable and non-friable identified in the buildings located at 1530 West 17th Street, Santa Ana, California.

The O & M plan will be implemented as described below:

a) The main intent of the O & M plan is to provide procedures for monitoring (surveillance), notification to tenants and contractors, and response actions to manage in place identified ACMs in a condition that is safe to occupy and protects human health and the environment. It is understood that response actions implemented to enclose, remove or repair damaged ACMs or planned maintenance work exceeding three square feet of ACMs impacts are intended to be completed by licensed asbestos abatement contractor.
b) Maintenance and custodial staff such as but not limited to custodians, electricians, heating/air conditions engineers, plumbers, etc. who conduct maintenance and custodial related work impacting ACMs must meet the minimum requirements listed in Section 3 in this Plan. The total ACMs impacts should not exceed three square feet.

It should be noted that the information summarized below is based on data provided by Rancho Santiago Community College District.

Summary of Identified ACMs[1]

Building A

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
Building Constructed in 1997, No ACM Identified at this time[2]			

Building B

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
Building Constructed in 2001, No ACM Identified at this time[2]			

[1] Prior to disturbing any construction materials it is recommended that a review of existing documentation be completed, using this document, survey data and other relevant documentation to confirm that no ACMs or ACCMs will be disturbed. If a material has not been sampled it must either be sampled or assumed to contain asbestos.

[2] No asbestos has been identified to be present in these buildings based on assumptions relative to the phase-out of asbestos use. It is highly recommended that prior to construction activities which disturb suspect building materials that the impacted materials be sampled. It is possible that some materials may contain asbestos eventhough they were installed past the banned use date

Building C

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
Mastic associated with tan sheet flooring	C102, 104, 201, 204, 205, 206, 207, 208, 210, 212, and 215	No	Manage in place by continuous monitoring and remove when required
Roof penetration mastic	Roof	No	Manage in place by continuous monitoring and remove when required
Mastic associated with 12"x12" gray vinyl floor tile	C113	No	Manage in place by continuous monitoring and remove when required
Transite panel assumed positive	C106 center hood	No	Manage in place by continuous monitoring and remove when required
Mastic associated with gray sheet flooring (<1% ACCM)	C207, C208	No	Manage in place by continuous monitoring and remove when required
Drywall and joint compound (<1% ACCM)	Interior walls and ceiling throughout building attic	No	Manage in place by continuous monitoring and remove when required

Building D

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
Mastic associated with 12"x12" orange vinyl floor tile	D435-3, D435-3A	No	Manage in place by continuous monitoring and remove when required
Tan duct seam sealant	1st, 2nd, 3rd, & 4th floor-all classrooms in ceiling void at connections between fiberglass duct & metal air diffuser	No	Manage in place by continuous monitoring and remove when required
Drywall and joint compound (<1% ACCM)	1st floor except restrooms, rooms D201-214, D301-313, D315, D401-438	No	Manage in place by continuous monitoring and remove when required
Interior plaster (<1% ACCM)	4th floor M's and W's rooms	No	Manage in place by continuous monitoring and remove when required

Building E

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
No ACM			

Building F

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
No ACM			

Building G

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
Dash coat (ext. plaster)	Exterior walls	No	Manage in place by continuous monitoring and remove when required
9"x9" Tan vinyl floor tile and associated mastic	G108-2, G108-4	No	Manage in place by continuous monitoring and remove when required
TSI (thermal systems insulation) pipe wrap	G105-6, ceiling space	No	Manage in place by continuous monitoring and remove when required
Roof penetration mastic	G115 roof	No	Manage in place by continuous monitoring and remove when required
TSI pipe wrap	G115, wall between M's and W's room	No	Manage in place by continuous monitoring and remove when required

Building H

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
12"x12" gray vinyl floor tile and associated mastic	1st floor corridor, H103, H106, 2nd floor corridor, H202, H204, H205A	No	Manage in place by continuous monitoring and remove when required
9"x9" brown vinyl floor tile	H110 basement stairway, H205, H210-2	No	Manage in place by continuous monitoring and remove when required
TSI pipe insulation	Pipe access and wall cavities	No	Manage in place by continuous monitoring and remove when required
Drywall and joint compound (<1% ACCM)	1st and 2nd floor plenums, H103-1, H107B	No	Manage in place by continuous monitoring and remove when required

Building J

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
Tan floor sheeting	J109-3	No	Manage in place by continuous monitoring and remove when required
12"x12" tan floor tile and associated mastic	J101, J102, J109-1, J201, J201-1, J201-2, J203, J204	No	Manage in place by continuous monitoring and remove when required
Transite pipe assumed positive	Roof	No	Manage in place by continuous monitoring and remove when required
Drywall joint compound (<1% ACCM)	J109-1, J201-204 and hallway	No	Manage in place by continuous monitoring and remove when required

Building K

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
9"x9" green vinyl floor tiles	Classroom K201, K201-1, and K201-2	No	Manage in place by continuous monitoring and remove when required
Rolled-on roof core, roof mastic	Old Paint Booth K-112 and K-113	No	Manage in place by continuous monitoring and remove when required
Window Putty (<1% ACCM)	K-111	No	Manage in place by continuous monitoring and remove when required

Building L

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
Chalkboard mastic	Rooms L112-1 and L112-3, throughout 2nd floor	No	Manage in place by continuous monitoring and remove when required
Fireproofing material	Material is found above the ceiling on the original 1st floor portion of the library (east side). The asbestos containing material is above the drop ceiling in the old/original part of the library building and from the main reading room, it is found at the edge of the study rooms and includes everything east, including the media services area. The material was not identified in the west side of the building, the 2-story structure that includes the math lab and study center.	No	Manage in place by continuous monitoring and remove when required
TSI elbows	Throughout 2nd floor	No	Manage in place by continuous monitoring and remove when required

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
Vinyl sheet flooring	L222-6	No	Manage in place by continuous monitoring and remove when required
Roofing material	Roof	No	Manage in place by continuous monitoring and remove when required
Parapet wall material	Roof	No	Manage in place by continuous monitoring and remove when required
Parapet cap sealant	Roof	No	Manage in place by continuous monitoring and remove when required
Penetration mastic	Roof	No	Manage in place by continuous monitoring and remove when required
Smooth plaster (<1% ACCM)	Throughout 1st floor	No	Manage in place by continuous monitoring and remove when required
Drywall (<1% ACCM)	Throughout 1st floor	No	Manage in place by continuous monitoring and remove when required

Building M

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
9"x9" Beige floor tile and associated mastic	Rooms M115 and M116 (the rest of the building was abated on 4-2014)	No	Manage in place by continuous monitoring and remove when required
Silver top penetration mastic on rooftop #2, silver top HVAC ducts, and canopy rooftop.	Roof (abated 4-2014)	No	Manage in place by continuous monitoring and remove when required

Building N

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
9"x9" Beige floor tile and associated mastic	Corridors, choir room, theory instruction practice room N107-N112, tap master, computer room, music lab offices N113, band room offices N114, N115, N116	No	Manage in place by continuous monitoring and remove when required
TSI debris	Attic (except center hallway abated 12-2016)	No	Manage in place by continuous monitoring and remove when required
Penetration mastic	Roof	No	Manage in place by continuous monitoring and remove when required
Parapet cap mastic	Roof, parapet cap	No	Manage in place by continuous monitoring and remove when required
Drywall with joint compound (<1% ACCM)	Rooms N107 through N112, Hall N100S, Staff RRs, N104, N113	No	Manage in place by continuous monitoring and remove when required
Drywall with joint compound (<1% ACCM)	Attic space	No	Manage in place by continuous monitoring and remove when required

Building P

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
9"x9" green floor tile and associated mastic	Costume rooms P106-1, P106-3	No	Manage in place by continuous monitoring and remove when required
Mastic associated with 12"x12" gray floor tile	Theater lab/control booth east, P105-3, P202-1, P202-2, P202-3	No	Manage in place by continuous monitoring and remove when required
Mastic associated with 12"x12" green floor tile	P202-1, P202-2, P202-3	No	Manage in place by continuous monitoring and remove when required
Drywall and joint compound (<1% ACCM)	Throughout building	No	Manage in place by continuous monitoring and remove when required
Mastic associated with brown baseboard (<1% ACCM)	P106	No	Manage in place by continuous monitoring and remove when required
Mastic associated with 1'x1' black ceiling tile (<1% ACCM)	P202-1	No	Manage in place by continuous monitoring and remove when required

Building R

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
Black tile mastic	Rooms R-101, R101-1, R101-2, R103, R103-1, R105, R105-1, R105-2, R107, R107-1, R107-2, R109, R119-1, R119-2	No	Manage in place by continuous monitoring and remove when required
9"x9" dark green vinyl floor tile and associated mastic	Rooms R100, R109-1, and R111	No	Manage in place by continuous monitoring and remove when required
9"x9" white vinyl floor tile and associated mastic	Rooms R103-1, R109, R109-1, R111, R113, R114, R115, R117, R118, R120, R124, R126, and R128	No	Manage in place by continuous monitoring and remove when required
Sprayed on fireproofing	Throughout 1st floor ceiling	No	Manage in place by continuous monitoring and remove when required
9"x9" light green vinyl floor tile and associated mastic	Rooms R112, R112-1, R112-4	No	Manage in place by continuous monitoring and remove when required
Approximately 17 asbestos wall panels	Throughout 1st floor ceiling	No	Manage in place by continuous monitoring and remove when required
Sprayed on fireproofing	throughout 2nd floor ceiling	No	Manage in place by continuous monitoring and remove when required
12"x12" gray vinyl tile mastic, though tile tested negative	R207	No	Manage in place by continuous monitoring and remove when required
Lab exhaust hood panels	R207, R228-2	No	Manage in place by continuous monitoring and remove when required
9"x9" white vinyl floor tile and associated mastic	R201, R202, R203, R203-A, R203-1, R204, R205, R206, R209, R211, R215, R217, R218-5, R219, R224, R226, R228	No	Manage in place by continuous monitoring and

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
			remove when required
9"x9" light green vinyl floor tile and associated mastic	R202-1, R218, R218-A, R218-1, R218-5, R220, R222, R226-1, R226-2, R228-1W	No	Manage in place by continuous monitoring and remove when required
9"x9" dark green vinyl floor tile and associated mastic	R200	No	Manage in place by continuous monitoring and remove when required
Approximately 14 asbestos wall panels	throughout 2nd floor ceiling	No	Manage in place by continuous monitoring and remove when required
Sprayed on fireproofing	Throughout 3rd floor ceiling	No	Manage in place by continuous monitoring and remove when required
9"x9" white vinyl floor tile and associated mastic	R300, R301, R303, R303-1, R304, R307, R307-2, R309, R318, R320-1, R322, R324, R328	No	Manage in place by continuous monitoring and remove when required
9"x9" dark green vinyl floor tile and associated mastic	R300	No	Manage in place by continuous monitoring and remove when required
9"x9" light green vinyl floor tile and associated mastic	R302-1, R302-2, R302-3, R305, R314, R314-2, R328-2	No	Manage in place by continuous monitoring and remove when required
Approximately 10 asbestos wall panels	Throughout 3rd floor	No	Manage in place by continuous monitoring and remove when required
Vibration cloth and associated mastic	Penthouse/mechanical room	No	Manage in place by continuous monitoring and remove when required
Elbows (approx. 21)	Penthouse/mechanical room	No	Manage in place by continuous monitoring and

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
			remove when required
AC penetration mastic	Roof	No	Manage in place by continuous monitoring and remove when required
Elbows (approx. 4)	Roof	No	Manage in place by continuous monitoring and remove when required
Pipe insulation fittings (<1% ACCM)	Throughout 2nd floor ceiling	No	Manage in place by continuous monitoring and remove when required
12"x12" brown floor tile (<1% ACCM)	R218, R226	No	Manage in place by continuous monitoring and remove when required
Brown baseboard mastic (<1% ACCM)	R200, R209, R211, R218, R218-1, R218-2, R218-3, R218-A, R222	No	Manage in place by continuous monitoring and remove when required
Pipe insulation fittings (<1% ACCM)	Throughout 3rd floor ceiling	No	Manage in place by continuous monitoring and remove when required
Drywall and joint compound (<1% ACCM)	R301-1A, R303, R303-1, R303-1S	No	Manage in place by continuous monitoring and remove when required

Building S

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
There is some residual sprayed on fireproofing on the steel member. The area has been fully encased.	Structural steel member above the first and second floor ceiling running along the perimeter of the building	No	Manage in place by continuous monitoring and remove when required
Roof penetration sealant	Exterior and roof	No	Manage in place by continuous monitoring and remove when required
Drywall with taping mud (<1% ACCM)	Throughout 1st floor	No	Manage in place by continuous monitoring and remove when required
Drywall with taping mud (<1% ACCM)	Throughout 2nd floor	No	Manage in place by continuous monitoring and remove when required

Building T

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
9"x9" brown floor tile and associated mastic	T203, T203-1, and T206	No	Manage in place by continuous monitoring and remove when required
Green linoleum and associated mastic	T212 AND T213	No	Manage in place by continuous monitoring and remove when required
Tan linoleum and associated mastic	T201	No	Manage in place by continuous monitoring and remove when required
9"x9" brown floor tile and associated mastic	T103, T104, T105, T106	No	Manage in place by continuous monitoring and remove when required
Large asbestos-cement vent pipe from a former heat treat furnace	T-107	No	Manage in place by continuous monitoring and remove when required

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
Brown linoleum and associated mastic	T201	No	Manage in place by continuous monitoring and remove when required
TSI mudded elbows and T's	Throughout building, above the ceiling tile or at the ceiling	No	Manage in place by continuous monitoring and remove when required
Brown baseboard	Throughout 2nd floor	No	Manage in place by continuous monitoring and remove when required
Drywall and joint compound	Throughout 2nd floor	No	Manage in place by continuous monitoring and remove when required
Firewall	N/S center wall	No	Manage in place by continuous monitoring and remove when required
Drywall and joint compound	Throughout 1st floor	No	Manage in place by continuous monitoring and remove when required

Building U

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
12"x12" dark orange vinyl floor tile and mastic	Throughout 1st floor	No	Manage in place by continuous monitoring and remove when required
12"x12" white vinyl floor tile and mastic	Throughout 1st floor	No	Manage in place by continuous monitoring and remove when required
12"x12" blue vinyl floor tile and mastic	Throughout 1st floor	No	Manage in place by continuous monitoring and remove when required

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
12"x12" gray vinyl floor tile and mastic	Throughout 1st floor	No	Manage in place by continuous monitoring and remove when required
12"x12" red vinyl floor tile and mastic	Throughout 1st floor	No	Manage in place by continuous monitoring and remove when required
12"x12" brown floor tile and mastic	U208-5, U208-6, U208-7A, U210, U211	No	Manage in place by continuous monitoring and remove when required
12"x12" dark orange vinyl floor tile and mastic	Throughout 2nd floor	No	Manage in place by continuous monitoring and remove when required
12"x12" white vinyl floor tile and mastic	Throughout 2nd floor	No	Manage in place by continuous monitoring and remove when required
12"x12" blue vinyl floor tile and mastic	Throughout 2nd floor	No	Manage in place by continuous monitoring and remove when required
12"x12" gray vinyl floor tile and mastic	Throughout 2nd floor	No	Manage in place by continuous monitoring and remove when required
12"x12" red vinyl floor tile and mastic	Throughout 2nd floor	No	Manage in place by continuous monitoring and remove when required
Penetration mastic	Roof	No	Manage in place by continuous monitoring and remove when required
Roofing material presumed positive	Roof	No	Manage in place by continuous monitoring and remove when required

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
AC mastic presumed positive	Roof	No	Manage in place by continuous monitoring and remove when required
12”x12” tan floor tile and mastic	Bookstore U114-U125 & elevator	No	Manage in place by continuous monitoring and remove when required
9”x9” tan floor tile and mastic	U115 and U131	No	Manage in place by continuous monitoring and remove when required
TSI Elbows	Bookstore attic and above plenum	No	Manage in place by continuous monitoring and remove when required
Sprayed-on fireproofing material	Area above bookstore plenum	No	Manage in place by continuous monitoring and remove when required
Fire rated doors	U131, U113, U127	No	Manage in place by continuous monitoring and remove when required
9”x9” tan floor tile and mastic	Walkways adjacent to U221-1, U221-2, U221-3, U223	No	Manage in place by continuous monitoring and remove when required

Building W

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
12"x12" beige floor tile and associated mastic	W102-4 and n/s corridor near W102-6	No	Manage in place by continuous monitoring and remove when required
TSI mudded elbows and T's	W102-7 and W102-8 M's room and shower, W102-6 and W102-1 W's room and shower, gym, and custodial room	No	Manage in place by continuous monitoring and remove when required

Building Z

ACM MATERIAL	MATERIAL LOCATION	Friable/ Damaged	Response Action/Rating
9"x9" green floor tile and associated mastic	Z-102, Z104-1, Z104-2	No	Manage in place by continuous monitoring and remove when required
White linoleum flooring and associated mastic	Z106, AND Z108	No	Manage in place by continuous monitoring and remove when required

2. OPERATIONS AND MAINTENANCE PLAN

2.1.1 Asbestos Surveillance Program

The Owner will conduct a surveillance program to monitor changes in condition of identified ACMs. It is recommended that the surveillance be conducted every six months and should not exceed 12 months following the initial inspection. Persons performing the surveillance should receive adequate training to perform the duties assigned such as but not limited to: basic knowledgeable of health effects, detection, identification and assessment of ACMs, options for controlling ACMs, relevant federal and state and local regulatory information. The surveillance shall include:

a) Visual inspection of identified ACMs including Assumed ACMs

b) Physical contact with the material to determine if the condition has become damaged or friable

c) Record date, inspector's name, and any changes in the condition of the ACM or assumed ACM

d) Notify the Designated Person immediately if there are noted changes in condition

e) Submit the surveillance results to the Designated Person to be added to this O & M Plan

2.1.2 Changes in Condition (Damaged ACM)

The Owner will implement the procedures below any time changes in condition to ACM are observed:

a) Restrict access to the area to authorized personnel. Access shall be restricted by physically isolating the area or scheduling limited access, if this is required for equipment maintenance or other task.

b) Post warning signs to prevent entry

c) Shut-off or temporarily modify the air-handling system and restrict other sources of air movement

d) Contact the Designated Person for implementation of a response action.

2.1.3 Response Actions

Response actions implemented for a response to damaged ACMs will include things such as but not limited to: an enclosure, removal or repair, will be completed by a licensed asbestos contractor using AHERA 40 hour trained workers.

The Owner will implement a response action deemed necessary to make the building safe to occupy by non-protected personnel with the intent to protect human health and the environment. The response action selected will be the least burdensome method and will include the following:

a) At a minimum encapsulation, enclosure, removal or repair of the damaged material will be selected as deemed necessary to protect human health and the environment

b) Restrict entry to the area and post signs to prevent entry by non-authorized personnel

c) Shut off or temporarily modify the air-handling system to prevent the distribution of fibers to other areas in the building

d) Use of a containment, worker protection such as air purifying respirators and protective clothing and proper waste disposal. The use of negative pressure respirators requires medical clearance by a qualified physical and respiratory protection plan

e) Thoroughly saturate the impacted area or debris using wet methods

f) Clean the area using wet methods and HEPA-vacuums

g) Place all asbestos debris and other cleaning materials in a labeled, sealed, leak-tight container

h) Repair the area of damaged ACM with materials such as asbestos-free product

i) Disposal of the waste in accordance with local, State and Federal regulations

j) The Owner, at its own discretion, may conduct clearance air sampling following the response action to document that the impacted areas meet the EPA recommended clearance criteria following an asbestos response action in schools and may be released for occupancy by non-protected personnel. The recommended clearance level, by Phase Contrast or Transmission Electron Microscopy Methods are described below:

    i. Phase Contrast Microscopy:(PCM) The samples will be analyzed using Phase Contrast Microscopy (PCM) using the NIOSH 7400 method. Clearance will be issued when all samples results show that the airborne fiber concentrations inside the work area are equal to or less than 0.01f/cc or the background level, whichever is greater.

    ii. Transmission Electron Microscopy,: The samples will be analyzed using Transmission Electron Microscopy (TEM). Minimum of five samples from inside the work area will be collected. If the arithmetic mean of their asbestos structure concentrations per square millimeter is less than or equal to 70 structures per square millimeter.

2.2.4 Warning Labels

Labels shall be prominently displayed in readily visible locations and shall remain posted until the ACM is removed. Additionally, the labels shall read, in print which is readily visible of large size or bright color, as follows:

DANGER Asbestos Cancer and Lung Disease Hazard. Authorized Personnel Only

2.2.5 Recordkeeping

The O & M plan records are should be maintained in a centralized location at the Site's maintenance office. The plan should be maintained and updated to keep current with ongoing surveillance, operations and maintenance, inspections, re-inspections and response action activities.

Employee exposure records should be kept for 30 years subsequent to the date of the last employment of the individual. The employer shall keep an accurate record of all measurements taken to monitor employee exposure to asbestos.

The following information should be maintained on file:

- The name and social security number of the employee;
- A copy of the employee's medical examination results, including medical history questionnaire responses, results of any tests, and physician's recommendations;
- A physician's written opinion;
- Any employee medical complaints related to asbestos exposure; and

A copy of the information provided to the physician as required by 29 CFR 1926.1101 and CCR Title 8, Section 1529.

2.2.6 Designated Person

The Owner will select a Designated Person to have overall responsibility for the management of the asbestos, including compliance with all applicable regulations. This Designated Person provides a single source from which information may be obtained about asbestos-related activities in the Buildings. The Designated Person should ensure that:

1. Inspections, re-inspections, and surveillances are completed in accordance with this plan.
2. Ensure that the O & M plan is available for inspection and notification to contractors, and building occupants.
3. Building occupants, are informed at least once per year about inspections, re-inspections, response actions and post-response activities.
4. Ensure that members of the maintenance and custodial staff (custodians, electricians, heating/air conditioning engineers, plumbers, etc.) whom may work in the impacted buildings receive Two-Hour awareness training, whether or not they are required to work with ACM.

5. Ensure that maintenance and custodial staff who conduct any activities that will result in the disturbance of ACM receive Two-hour awareness training and an additional 14 hours training.
6. Labels are posted.
7. Maintain and update the O & M to keep it current with ongoing operations and maintenance, surveillance, inspections, re-inspections and response actions.

District Designated Person:

Interim Facilities Manager
Heller Sanchez
Santa Ana College
1530 West 17th Street
Santa Ana, California 92706-3398
(714) 564-6324 (sanchez_heller@sac.edu)

3. OPERATIONS AND MAINTENANCE WORK

Maintenance and custodial staff such as but not limited to custodians, electricians, heating/air conditions engineers, plumbers, etc. who conduct maintenance and custodial related work impacting less than three square feet of ACMs at a minimum meet the requirements listed below:

3.1.1 Training

The Owner will ensure, prior to the implementation of the O&M plan that all members of its maintenance and custodial staff (custodians, electricians, heating/air conditions engineers, plumbers, etc.) who may work in the impacted buildings receive at a minimum Two-hour awareness training regardless of whether they are required to work with ACM. The training shall include but is not limited to:

a) Information regarding asbestos and its various uses and forms
b) Information on health affects associate with asbestos exposure
c) Locations of ACM identified throughout each building in which they work
d) Recognition of damage, deterioration and delamination of ACM
e) Name and telephone number of the designated person

Maintenance and custodial staff who may conduct any activities that will result in the disturbance of ACM shall receive the Two-hour awareness training described above, and 14 hours of additional training. The additional training should include but is not limited to:

a) Information on uses of respiratory protection
b) Provisions of applicable regulations
c) Hands on training in the of personal protective equipment and good work practices

3.1.2 Worker Protection

Related work should be conducted using proper worker protection in accordance with Cal OSHA Title 8, Section 1529, OSHA 29 CFR 1926.1101 or EPA Worker Protection Rule 40 CFR 763.120 regulations.

3.1.3 Medical Surveillance

Employees required to wear a tight-fitting, negative-pressure respirator are required to participate in a medical surveillance program and a respiratory protection program.

Employees who wear a respirator as a routine part of their job must be medically evaluated prior to receiving the respirator and on an annual basis thereafter. This is to ensure that the employee is medically fit to use a respirator. In addition, the respirator must be fit tested to the employee to determine that the respirator chosen has the best fit and respiratory protection for the employee,

The following summarize the requirements for medical surveillance and respiratory protection as outlined by Cal/OSHA Title 8, Section 5144 and 1529, and Title 29 CFR 1910.134 and 29 CFR 1926.1101.

3.1.4 Pre-Placement Physical

Pre-placement medical examinations must be made available prior to assignment of the employee to an area where negative-pressure respirators are worn.

A comprehensive medical evaluation must be performed. This should include the following:

3.1.5 Physical Examination

1) A complete physical examination of all systems with an emphasis on the respiratory system, the cardiovascular system and digestive tract;

2) A chest x-ray to be administered at the discretion of the examining physician;

3) A pulmonary function test including forced vital capacity (FVC), (the maximum amount of air that can be expired from the lung after full inhalation) and forced expiratory volume after one second (FEV 1.0) (the amount of air forcibly expired in one second after full inhalation)

4) The FVC and FEV 1.0 are conducted through the use of a spirometer. If the FEV 1.0 is reduced, this may signify a possible obstruction or other problems with the employee's lungs. If the FVC or the ratio of FEV 1.0 to FVC is reduced, this may signify restrictive changes in the employee's lungs.

3.1.6 Pulmonary History

This part of the examination is a standardized questionnaire that is completed by the employee. Examples of questionnaires used for initial and periodic medical exams are at the end of this section. The questionnaire is used to identify the potential for respiratory diseases. Several questions relate to chronic lung diseases, while others address the employee's personal habits, such as smoking. There is often particular concern for the health of a person who smokes and is also exposed to asbestos. Smoking is known to have a synergistic effect with asbestos exposure. That is, it compounds or intensifies the effects.

Recent studies indicate that an asbestos worker who smokes is 50 to 90 times more likely to develop lung cancer than non-smokers who do not work with asbestos.

The OSHA medical questionnaire, part one, is to be filled out during the initial exam.

Any History of Respiratory Disease: Identifies workers with a history of asthma, emphysema, or chronic lung disease. These people may be at risk when wearing a respirator.

A Past Work History: Identifies workers who have been exposed to asbestos, silica, cotton dust, beryllium, radioisotopes, etc., within the past 10 years, or workers who have worked in occupations or industries where such exposure is probable. If past exposures are identified, medical tests can be obtained for comparison. These specific items of information shall be obtained: a) previous occupations, b) problems associated with breathing during normal work activities, and c) past problems with respirator use. Other medical information that might offer evidence of the worker's ability or inability to wear and use respirators should also be required such as: a) psychological problems or symptoms including claustrophobia, b) any known physical deformities or abnormalities, including those that may interfere with respirator use, and c) tolerance to increased heart rate, which can be produced by the extra weight, increased work load, and heat stress associated with wearing respirators and protective clothing.

3.1.7 Annual Exams

Medical exams shall be made available annually. If a new employee can document that they received the necessary exam within the last twelve months, they are not required to have a pre-placement exam. The physician has the option of scheduling exams more frequently, if necessary, and the employer must provide these exams at the specified frequency. Exams are required within 10 days following the 30th day of exposure at or above the permissible exposure level of 0.1 fibers per cubic centimeter (f/cc).

3.1.8 Justification for the Individual Tests

Chest X-Rays

1) Chest x-rays: (posterior and anterior 14 by 17 inches, and oblique projections from right and left side required only by CAL/OSHA). These are performed primarily to detect irregularities in the lungs or the heart, including any fibrosis or pleural plaques induced by exposure to asbestos. Chest x-rays may also be used as a baseline for comparing future x-rays.

2) Chest x-rays must be interpreted and classified in accordance with a professionally accepted classification system and recorded on a Roentgenographic Interpretation Form. Chest x-rays must be interpreted by either a certified B Reader, a board-eligible, certified radiologist, or an experienced physician with known expertise in pneumoconiosis (pulmonary function-related diseases).

3) A B Reader is a physician (often a radiologist or pulmonologist) who has received specialized training in the interpretation of chest x-rays specifically relating to occupational lung diseases. B readers are required to pass a proficiency test administered by the centers for disease control (NIOSH) in Morgantown, West Virginia.

Frequency of chest x-rays

YEARS SINCE	AGE OF EMPLOYEE	
FIRST		
EXPOSURE	LESS THAN 40	40 AND OLDER
0-10	EVERY 3 YEARS	ANNUALLY*
10+	ANNUALLY*	ANNUALLY*

*Oblique x-rays need only be performed every 3 years.

Pulmonary Function Tests

These tests are conducted to determine if a person's lungs are expanding normally and if there is adequate air movement in and out of the lungs.

3.1.9 Physical Examination, Termination of Employment

The employer shall make available, upon termination of employment, a medical examination for any employee who has been exposed to airborne concentrations of asbestos fibers. The medical examination shall be in accordance with the requirements of the periodic examinations and shall be given within 30 calendar days before or after the date of termination of employment.

No medical examination is required of any employee if adequate records show that the employee has been examined in accordance with the above requirements (i.e., annual examinations) within the past one-year period.

3.1.10 Required Regulatory Information

Regulatory requirements specifically oblige the employer to provide the examining physician with the following information:

1) A copy of the standard (29 CFR 1926.1101 and CCR Title 8 Section 1529), including the questionnaires and appendices requirements for chest x-ray interpretation and the non-mandatory medical surveillance guidelines;

2) A description of the employee's duties as they relate to the employee's exposure;

3) The employee's representative exposure levels or anticipated exposure level;

4) A description of any personal protective and respiratory equipment used or that is to be used; and

5) Information from previous medical examinations of the affected employee that is not otherwise available to the examining physician.

The results of the pre-placement examination will be used to establish the employee's baseline health status and also to determine if the employee is capable of wearing a respirator. A physician's written opinion (approved to wear a respirator, detected medical conditions that place the employee at increased risk of developing asbestos-related disease, and a statement that the employee has been informed by the

physician of the exam results and of any medical conditions that may result from asbestos exposure) will then be furnished to the employer, (Designated Person) for the files.

The Designated Person must provide a copy of the written opinion for the affected employee within thirty days of its receipt. Individual test results are normally kept by the physician or clinic to maintain confidentiality. The employer shall instruct the physician not to reveal any findings or diagnoses unrelated to the exposure to asbestos in the written opinion.

3.1.11 Cleaning

All areas of a building where damaged ACM has been identified, and before the initiation of any response action should be cleaned as follows:

a) HEPA-vacuum or steam clean all carpets

b) HEPA-vacuum or wet-clean all other floors and horizontal surfaces

c) Dispose of the waste including; debris, filters, mop heads, and cloth in sealed, leak-tight containers

d) Additional cleaning if deemed necessary by a management plan

4. REQUIRED REGULATORY NOTIFICATIONS

If removal is a response action that is chosen, required notifications to regulatory agencies must be made. If 100 square feet of ACM is to be removed, the South Coast Air Quality Management District must be notified. If less than 100 square feet of ACM is removed, no notification to this regulatory agency is required, however the removal must be conducted by a licensed asbestos abatement contractor.

Cal/OSHA requires a notification 24 hours prior to start of the removal activities.

4.1 South Coast Air Quality Management District

4.1.1 Demolition or Renovation Activities

The South Coast District shall be notified by typewritten notification postmarked or delivered no later than 10 working days before any demolition or renovation activities other than emergency demolition, emergency renovation, or planned renovations involving individual nonscheduled renovation operations begin.

4.1.2 Planned Renovation - Annual Notification

The District shall be notified by typewritten notification postmarked or delivered by December 17 of the year preceding the calendar year for which notice is being given for planned renovation activities which involve individual nonscheduled renovation operations.

4.1.3 Emergency Demolition or Renovation

The District shall be notified by telephone, as soon as possible, but prior to any emergency demolition or renovation activity. The telephone notification shall be confirmed with a follow-up typewritten notification to the District postmarked or delivered within 48 hours of the telephone notification or the following business day.

4.1.4 Cal/OSHA-Asbestos-Related Work

Send notices of temporary worksites to the nearest Cal/OSHA District Office 24 hours prior to the start of each job

5 RELEVANT REGULATIONS

All asbestos related work shall be performed in strict accordance with all applicable federal, state, and local regulations, standards, and codes governing asbestos related work.

The most recent editions of any relevant regulation, standard, document, or code shall be in effect. Where conflict among the requirements or with these specifications exists, the most stringent requirements shall apply.

In California, asbestos related work is subject to promulgated regulations such as but not limited to, those described below:

- Construction Safety Orders, California Code or Regulations, Title 8, Section1529 (www.dir.ca.gov/title8/1529)
- Respiratory protection, California Code or Regulations, Title 8, Section 5144 (www.dir.ca.gov/title8/5144)
- Asbestos Hazard Emergency Response Act (AHERA) (www.gpo.gov/fdsys/pkg/CFR-2011-title40-vol31/pdf/CFR-2011-title40-vol31-part763-subpartE.pdf)
- Minimum Standards for Management of Hazardous and Extremely Hazardous Waste, CCR, Title 22 (www.dtsc.ca.gov/lawsregpolicies/title22/index)
- South Coast Air Quality Management District (SCAQMD) Rule 1403, Asbestos Emissions from Demolition/Renovation activities (www.aqmd.gov/rules/reg14/r1403)

Other State and Federal relevant regulations

- Title 29 of the *Code of Federal Regulations,* Part 1926.1101, Asbestos Construction Standard (29 CFR 1926.1101)
- Asbestos General Industry Standard (29 CFR 1910.1001)
- Personal Protective Equipment (29 CFR 1926, Subpart E)
- Hazard Communication (29 CFR 1910.1200)

- National Emissions Standard for Hazardous Air Pollutants (NESHAP) Asbestos Regulation (40 CFR 61, Subparts A, B, and M)
- Access to Employee Exposure and Medical Records (8 CCR GISO 3204)

Construction Safety Orders (8 CCR Chapter 4, Subchapter 4)

6 DEFINITIONS

1. ***Accessible*** when referring to ACM means that the material is subject to disturbance by building occupants or custodial or maintenance personnel in the course of their normal activities.
2. ***Accredited* or *accreditation*** when referring to a person or laboratory means that such person or laboratory is accredited in accordance with section 206 of Title II of the Act.
3. ***Air erosion*** means the passage of air over friable ACM which may result in the release of asbestos fibers.
4. *Asbestos* means the asbestiform varieties of: Chrysotile (serpentine); crocidolite (riebeckite); amosite; anthophyllite; tremolite; and actinolite.
5. ***Asbestos-containing material (ACM)*** any material or product which contains more than 1 percent asbestos.
6. ***Asbestos-containing building*** *material* (*ACM)* means surfacing ACM, thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of a building.
7. ***Asbestos debris*** means pieces of ACM that can be identified by color, texture, or composition, or means dust, if the dust is determined by an accredited inspector to be ACM.
8. ***Damaged friable miscellaneous*** *ACM* means friable miscellaneous ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or, if applicable, which has delaminated such that its bond to the substrate (adhesion) is inadequate or which for any other reason lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substrate; flaking, blistering, or crumbling of the ACM surface; water damage; significant or repeated water stains, scrapes, gouges, mars or other signs of physical injury on the ACM. Asbestos debris originating from the ACM in question may also indicate damage.
9. ***Damaged friable surfacing*** *ACM* means friable surfacing ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or which has delaminated such that its bond to the substrate (adhesion) is inadequate, or which, for any other reason, lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substrate; flaking, blistering, or crumbling of the ACM surface; water damage; significant or repeated water stains, scrapes, gouges, mars or other signs of physical injury on the ACM. Asbestos debris originating from the ACM in question may also indicate damage.
10. ***Damaged or significantly damaged thermal system insulation ACM*** means thermal system insulation ACM on pipes, boilers, tanks, ducts, and other thermal system insulation equipment where the insulation has lost its structural integrity, or its covering, in whole or in part, is crushed, water stained, gouged, punctured, missing, or not intact such that it is not able to contain fibers. Damage may be further illustrated by occasional punctures, gouges or other signs of physical injury to ACM; occasional water damage on the protective coverings/jackets; or exposed ACM ends or joints. Asbestos debris originating from the ACM in question may also indicate damage.
11. ***Encapsulation*** means the treatment of ACM with a material that surrounds or embeds asbestos fibers in an adhesive matrix to prevent the release of fibers, as the encapsulant creates a membrane over the surface (bridging encapsulant) or penetrates the material and binds its components together (penetrating encapsulant).

12. ***Enclosure*** means an airtight, impermeable, permanent barrier around ACM to prevent the release of asbestos fibers into the air.
13. ***Fiber release episode*** means any uncontrolled or unintentional disturbance of ACM resulting in visible emission.
14. ***Friable*** means that the material, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure, and includes previously nonfriable material after such previously nonfriable material becomes damaged to the extent that when dry it may be crumbled, pulverized, or reduced to powder by hand pressure.
15. ***Functional space*** means a room, group of rooms, or homogeneous area (including crawl spaces or the space between a dropped ceiling and the floor or roof deck above), such as classroom(s), a cafeteria, gymnasium, hallway(s), designated by a person accredited to prepare management plans, design abatement projects, or conduct response actions.
16. ***High-efficiency particulate arrestance*** **(HEPA)** refers to a filtering system capable of trapping and retaining at least 99.97 percent of all monodispersed particles 0.3 □m in diameter or larger.
17. ***Homogeneous area*** means an area of surfacing material, thermal system insulation material, or miscellaneous material that is uniform in color and texture.
18. ***Miscellaneous ACM*** means miscellaneous material that is ACM in a building.
19. ***Miscellaneous material*** means interior building material on structural components, structural members or fixtures, such as floor and ceiling tiles, and does not include surfacing material or thermal system insulation.
20. ***Nonfriable*** means material in a building which when dry may not be crumbled, pulverized, or reduced to powder by hand pressure.
21. ***Operations and maintenance program*** means a program of work practices to maintain friable ACM in good condition, ensure clean-up of asbestos fibers previously released, and prevent further release by minimizing and controlling friable ACM disturbance or damage.
22. ***Potential damage*** means circumstances in which: (1) Friable ACM is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities. (2) There are indications that there is a reasonable likelihood that the material or its covering will become damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in operations and maintenance practices, changes in occupancy, or recurrent damage.
23. ***Potential significant damage*** means circumstances in which: (1) Friable ACM is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities. (2) There are indications that there is a reasonable likelihood that the material or its covering will become significantly damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in operations and maintenance practices, changes in occupancy, or recurrent damage. (3) The material is subject to major or continuing disturbance, due to factors including, but not limited to, accessibility or, under certain circumstances, vibration or air erosion.
24. ***Preventive measures*** means actions taken to reduce disturbance of ACM or otherwise eliminate the reasonable likelihood of the material's becoming damaged or significantly damaged.
25. ***Removal*** means the taking out or the stripping of substantially all ACM from a damaged area, a functional space, or a homogeneous area in a building.
26. ***Repair*** means returning damaged ACM to an undamaged condition or to an intact state so as to prevent fiber release.
27. ***Response action*** means a method, including removal, encapsulation, enclosure, repair, operations and maintenance, that protects human health and the environment from friable ACM.
28. ***Routine maintenance area*** means an area, such as a boiler room or mechanical room, that is not normally frequented by students and in which maintenance employees or contract workers regularly conduct maintenance activities.
29. ***Significantly damaged friable miscellaneous*** *ACM* means damaged friable miscellaneous ACM where the damage is extensive and severe.
30. ***Significantly damaged friable surfacing*** *ACM* means damaged friable surfacing ACM in a functional space where the damage is extensive and severe.

31. ***State*** means a State, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Northern Marianas, the Trust Territory of the Pacific Islands, and the Virgin Islands.
32. ***Surfacing ACM*** means surfacing material that is ACM.
33. ***Surfacing material*** means material that is sprayed-on, trowelled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.
34. ***Thermal system insulation*** means material in a building applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes.
35. ***Thermal system insulation ACM*** means thermal system insulation that is ACM.

Vibration means the periodic motion of friable ACM which may result in the release of asbestos fibers.

Appendix A

Asbestos Surveillance Plan

Periodic Surveillance Plan

Site: Santa Ana College

Building C

Material Class (1)	Material	Material Location	Results	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)
M	Mastic associated with tan sheet flooring	C102, 104, 201, 204, 205, 206, 207, 208, 210, 212, and 215							
M	Roof penetration mastic	Roof							
M	Mastic associated with 12"x12" gray vinyl floor tile	C113							
M	Transite panel assumed positive	C106 vent hood							
M	Mastic associated with gray sheet flooring	C207, C208	<1% ACCM						
M	Drywall and joint compound	Interior walls and ceiling throughout building attic	<1% ACCM						

(1) S: surfacing, TSI: thermal system insulation, M: miscellaneous
(2) ND: not damaged, D: damaged, SD: significantly damaged
(3) POS: previously identified as positive, NEG: previously identified as negative, ASSUMED 1 = new material, not sampled, assumed asbestos-ASSUMED 2 = not enough samples collected, material is assumed asbestos-containing
(4) For response actions 1–8 refer to "Response Action Ratings Sheet"

Periodic Surveillance Plan

Site: Santa Ana College

Building D

Material Class (1)	Material	Material Location	Results	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)
M	Mastic associated with 12"x12" orange vinyl floor tile	D435-3, D435-3A							
M	Tan duct seam sealant compound	1st, 2nd, 3rd, 4th floor-all classrooms in ceiling void space at connections between fiberglass duct and metal air diffuser							
M	Drywall and joint compound	1st floor except restrooms, rooms D201-214, D301-313, D315, D401-438	<1% ACCM						
M	Interior plaster	4th floor Men's and Women's rooms	<1% ACCM						

(1) S: surfacing, TSI: thermal system insulation, M: miscellaneous
(2) ND: not damaged, D: damaged, SD: significantly damaged
(3) POS: previously identified as positive, NEG: previously identified as negative, ASSUMED 1 = new material, not sampled, assumed asbestos-ASSUMED 2 = not enough samples collected, material is assumed asbestos-containing
(4) For response actions 1–8 refer to "Response Action Ratings Sheet"

Periodic Surveillance Plan

Site: Santa Ana College

Building G

Material Class (1)	Material	Material Location	Results	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)
M	Dash coat (ext. plaster)	Exterior walls							
M	9"x9" Tan vinyl floor tile and associated mastic	G108-2, G108-4							
M	TSI (thermal systems insulation) pipe wrap	G105-6, ceiling space							
M	Roof penetration mastic	G115 roof							
M	TSI pipe wrap	G115, wall between Mens and Womens room							

(1) S: surfacing, TSI: thermal system insulation, M: miscellaneous
(2) ND: not damaged, D: damaged, SD: significantly damaged
(3) POS: previously identified as positive, NEG: previously identified as negative, ASSUMED 1 = new material, not sampled, assumed asbestos-ASSUMED 2 = not enough samples collected, material is assumed asbestos-containing
(4) For response actions 1–8 refer to "Response Action Ratings Sheet"

Periodic Surveillance Plan

Site: Santa Ana College

Building H

Material Class (1)	Material	Material Location	Results	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)
M	12"x12" gray vinyl floor tile and associated mastic	1st floor corridor, H103, H106, 2nd floor corridor, H202, H204, H205A							
M	9"x9" brown vinyl floor tile	H110 basement stairway, H205, H210-2							
M	TSI pipe insulation	Pipe access and wall cavities							
M	Drywall and joint compound	1st and 2nd floor plenums, H103-1, H107B	<1% ACCM						

(1) S: surfacing, TSI: thermal system insulation, M: miscellaneous
(2) ND: not damaged, D: damaged, SD: significantly damaged
(3) POS: previously identified as positive, NEG: previously identified as negative, ASSUMED 1 = new material, not sampled, assumed asbestos-ASSUMED 2 = not enough samples collected, material is assumed asbestos-containing
(4) For response actions 1–8 refer to "Response Action Ratings Sheet"

Periodic Surveillance Plan

Site: Santa Ana College

Building J

Material Class (1)	Material	Material Location	Results	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)
M	Tan floor sheeting	J109-3							
M	12"x12" tan floor tile and associated mastic	J101, J102, J109-1, J201, J201-1, J201-2, J203, J204							
M	Transite pipe asssumed positive	Roof							
M	Drywall joint compound	J109-1, J201-204 and hallway	<1% ACCM						

(1) S: surfacing, TSI: thermal system insulation, M: miscellaneous
(2) ND: not damaged, D: damaged, SD: significantly damaged
(3) POS: previously identified as positive, NEG: previously identified as negative, ASSUMED 1 = new material, not sampled, assumed asbestos-ASSUMED 2 = not enough samples collected, material is assumed asbestos-containing
(4) For response actions 1–8 refer to "Response Action Ratings Sheet"

Periodic Surveillance Plan

Site: Santa Ana College

Building K

Material Class (1)	Material	Material Location	Results	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)
M	9"x9" green vinyl floor tiles	Classroom K201 and K201-2							
M	Rolled-on roof core, roof mastic	Old paint booth K-112 and K113							
M	Window putty	K-111	<1% ACCM						

(1) S: surfacing, TSI: thermal system insulation, M: miscellaneous

(2) ND: not damaged, D: damaged, SD: significantly damaged

(3) POS: previously identified as positive, NEG: previously identified as negative, ASSUMED 1 = new material, not sampled, assumed asbestos-ASSUMED 2 = not enough samples collected, material is assumed asbestos-containing

(4) For response actions 1–8 refer to "Response Action Ratings Sheet"

Site: Santa Ana College

Building L

Material Class (1)	Material	Material Location	Results	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)
M	Chalkboard mastic	Rooms L112-1 and L112-3, throughout 2nd floor							
S	Fireproofing material	The material is found above the ceiling on the original 1st floor portion of the Library (east side). The ACM is above the drop ceiling in the old/original part of the library bldg is found from the main reading room, from the edge of the study rooms and includes everything east, including the Media Services area. The material was not identifed on the west side of the building, a 2 story structure that includes the math lab and study center.							
TSI	TSI elbows	Throughout 2nd floor							
M	Vinyl sheet flooring	L222-6							
M	Blue linoleum	2nd floor hallway							
M	Roofing material	Roof							
M	Parapet wall material	Roof							
M	Parapet cap sealant	Roof							
M	Penetration mastic	Roof							

Periodic Surveillance Plan

Site: Santa Ana College

Building L

Material Class (1)	Material	Material Location	Results	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)
M	Smooth plaster	Throughout 1st floor	<1% ACCM						
M	Drywall	Throughout 1st floor	<1% ACCM						

(1) S: surfacing, TSI: thermal system insulation, M: miscellaneous
(2) ND: not damaged, D: damaged, SD: significantly damaged
(3) POS: previously identified as positive, NEG: previously identified as negative, ASSUMED 1 = new material, not sampled, assumed asbestos-ASSUMED 2 = not enough samples collected, material is assumed asbestos-containing
(4) For response actions 1–8 refer to "Response Action Ratings Sheet"

Periodic Surveillance Plan

Site: Santa Ana College

Building M

Material Class (1)	Material	Material Location	Results	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)
M	9"x9" Beige floor tile and associated mastic	Rooms M115 and M116 only (the rest of building abated on 4/2014)							

(1) S: surfacing, TSI: thermal system insulation, M: miscellaneous
(2) ND: not damaged, D: damaged, SD: significantly damaged
(3) POS: previously identified as positive, NEG: previously identified as negative, ASSUMED 1 = new material, not sampled, assumed asbestos-ASSUMED 2 = not enough samples collected, material is assumed asbestos-containing
(4) For response actions 1–8 refer to "Response Action Ratings Sheet"

Periodic Surveillance Plan

Site: Santa Ana College

Building N

Material Class (1)	Material	Material Location	Results	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)
M	9"x9" Beige floor tile and associated mastic	Choir room, Theory instruction, practice rooms N-107-N112; Tap master, computer room, music lab, Office N113, band room offices N114, N115 & N116.							
M	TSI debris	The material is located above classrooms, offices and practice rooms. except the center hallway (abated 12-2016)							
M	Penetration mastic	Roof							
M	Parapet cap	Roof, parapet cap							
M/S	Drywall with joint compound	Rooms N107-N112, hall N100S, staff RRs, N104, N113, attic space	<1% ACCM						

(1) S: surfacing, TSI: thermal system insulation, M: miscellaneous
(2) ND: not damaged, D: damaged, SD: significantly damaged
(3) POS: previously identified as positive, NEG: previously identified as negative, ASSUMED 1 = new material, not sampled, assumed asbestos-ASSUMED 2 = not enough samples collected, material is assumed asbestos-containing
(4) For response actions 1–8 refer to "Response Action Ratings Sheet"

Periodic Surveillance Plan

Site: Santa Ana College

Building P

Material Class (1)	Material	Material Location	Results	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)
M	9"x9" green floor tile and associated mastic	Costume rooms P106-1, P106-3							
M	Mastic associated with 12"x12" gray floor tile	Theater lab/control booth east, P105-3, P202-1, P202-2, P202-3							
M/S	Drywall ceiling with joint compound	Above suspended ceiling tiles-P108, P108-1, P108-2, P108-4, P108-7, P-108-8, P108-10, P106-1, P106-3, P-106-5, P-106-6, P-106-7							
M	Mastic associated with 12"x12" green floor tile	P202-1, P202-2, P202-3							
M	Drywall and joint compound	Throughout building	<1% ACCM						
M	Mastic associated with brown baseboard	P106	<1% ACCM						
M	Mastic associated with 1'x1' black ceiling tile	P202-1	<1% ACCM						

(1) S: surfacing, TSI: thermal system insulation, M: miscellaneous
(2) ND: not damaged, D: damaged, SD: significantly damaged
(3) POS: previously identified as positive, NEG: previously identified as negative, ASSUMED 1 = new material, not sampled, assumed asbestos-ASSUMED 2 = not enough samples collected, material is assumed asbestos-containing
(4) For response actions 1–8 refer to "Response Action Ratings Sheet"

Site: Santa Ana College

Building R

Material Class (1)	Material	Material Location	Results	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)
M	Black tile mastic	Rooms R-101, R101-1, R101-2, R103, R103-1, R105, R105-1, R105-2, R107, R107-1, R107-2,R109, R199-1, R119-2							
M	9"x9" dark green vinyl floor tile and associated mastic	Rooms R100, R109-1, and R111							
M	9"x9" white vinyl floor tile and associated mastic	Rooms 103-1, R109, R109-1, R111, R113, R114, R115, R117, R118, R118B, R120, R124, R126 and R128							
S	Sprayed on fireproofing	Throughout 1st, 2nd, and 3rd floor ceiling							
M	9"x9" light green vinyl floor tile and associated mastic	Rooms R112, R112-1, R112-4							
M	Approximately 17 asbestos wall panels	Throughout 1st floor ceiling							
M	Mastic associated with 12"x12" gray vinyl tile mastic	R207							
M	Lab exhaust hood panels	R207, R228-2							
M	9"x9" white vinyl floor tile and associated mastic	R201, R202, R203, R203-A, R203-1, R204, R205, R206, R209, R211, R215, R217, R218-5, R219, R224, R226, R228							

Site: Santa Ana College

Building R

Material Class (1)	Material	Material Location	Results	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)
M	9"x9" light green vinyl floor tile and associated mastic	R202-1, R218, R218-A, R218-1, R218-5, R220, R222, R226-1, R226-2, R228-1W							
M	9"x9" dark green vinyl floor tile and associated mastic	R200							
M	Approximately 14 asbestos wall panels	throughout 2nd floor ceiling							
M	9"x9" white vinyl floor tile and associated mastic	R300, R301, R303, R303-1, R304, R307, R307-2, R309, R318, R320-1, R322, R324, R328							
M	9"x9" dark green vinyl floor tile and associated mastic	R300							
M	9"x9" light green vinyl floor tile and associated mastic	R302-1, R302-2, R302-3, R305, R314, R314-2, R328-2							
M	Approximately 10 asbestos wall panels	Throughout 3rd floor							
M	Vibration cloth and associated mastic	Penthouse/mechanical room							
TSI	Elbows (approx. 21)	Penthouse/mechanical room							
M	AC penetration mastic	Roof							
TSI	Elbows (approx. 4)	Roof							
M	Pipe insulation fittings	Throughout 2nd floor ceiling	<1% ACCM						
M	12"x12" brown floor tile	R218, R226	<1% ACCM						

Site: Santa Ana College

Building R

Material Class (1)	Material	Material Location	Results	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)
M	Brown baseboard mastic	R200, R209, R211, R218, R218-1, R218-2, R218-3, R218-A, R222	<1% ACCM						
M	Pipe insulation fittings	Throughout 3rd floor ceiling	<1% ACCM						
M	Drywall and joint compound	R301-1A, R303, R303-1, R303-1S	<1% ACCM						

(1) S: surfacing, TSI: thermal system insulation, M: miscellaneous
(2) ND: not damaged, D: damaged, SD: significantly damaged
(3) POS: previously identified as positive, NEG: previously identified as negative, ASSUMED 1 = new material, not sampled, assumed asbestos-ASSUMED 2 = not enough samples collected, material is assumed asbestos-containing
(4) For response actions 1–8 refer to "Response Action Ratings Sheet"

Site: Santa Ana College

Building S

Material Class (1)	Material	Material Location	Results	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)
M	There is some residual sprayed on fireproofing on the steel member. The area has been fully enclosed.	Structural steel member above the first and second floor ceiling along the perimeter of the building							
M	Roof penetration sealant	Exterior and roof							
M	Drywall with taping mud	Throughout 1st floor	<1% ACCM						
M	Drywall with taping mud	Throughout 2nd floor	<1% ACCM						

(1) S: surfacing, TSI: thermal system insulation, M: miscellaneous
(2) ND: not damaged, D: damaged, SD: significantly damaged
(3) POS: previously identified as positive, NEG: previously identified as negative, ASSUMED 1 = new material, not sampled, assumed asbestos-ASSUMED 2 = not enough samples collected, material is assumed asbestos-containing
(4) For response actions 1–8 refer to "Response Action Ratings Sheet"

Site: Santa Ana College

Building T

Material Class (1)	Material	Material Location	Results	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)
M	9"x9" brown floor tile and associated mastic	T203, T203-1, and T206							
M	Green linoleum and associated mastic	T212 AND T213							
M	Tan linoleum and associated mastic	T201							
M	9"x9" brown floor tile and associated mastic	T103, T104, T105, T106							
TSI	Large asbestos-cement vent pipe from a former heat treat furnace	T-107							
M	Brown linoleum and associated mastic	T201							
M	TSI mudded elbows and T's	Throughout building, at or above the ceiling tile							
M	Brown baseboard mastic	Throughout 2nd floor	<1% ACCM						
M	Drywall and joint compound	Throughout 2nd floor	<1% ACCM						
M	Firewall	N/S center wall	<1% ACCM						
M	Drywall and joint compound	Throughout 1st floor	<1% ACCM						

(1) S: surfacing, TSI: thermal system insulation, M: miscellaneous
(2) ND: not damaged, D: damaged, SD: significantly damaged
(3) POS: previously identified as positive, NEG: previously identified as negative, ASSUMED 1 = new material, not sampled, assumed asbestos-ASSUMED 2 = not enough samples collected, material is assumed asbestos-containing
(4) For response actions 1–8 refer to "Response Action Ratings Sheet"

Periodic Surveillance Plan

Date: **5/22/2017**

Building U

Material Class (1)	Material	Material Location	Results	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)
M	12"x12" dark orange vinyl floor tile and mastic	Throughout 1st and 2nd floor							
M	12"x12" white vinyl floor tile and mastic	Throughout 1st and 2nd floor							
M	12"x12" blue vinyl floor tile and mastic	Throughout 1st and 2nd floor							
M	12"x12" gray vinyl floor tile and mastic	Throughout 1st and 2nd floor							
M	12"x12" red vinyl floor tile and mastic	Throughout 1st and 2nd floor							
M	12"x12" brown floor tile and mastic	U208-5, U208-6, U208-7A, U210, U211							
M	Penetration mastic	Roof							
M	Roofing material assumed positive	Roof							
M	AC mastic assumed positive	Roof							
M	12"x12" tan floor tile and mastic	Bookstore U114-U125 & elevator							
M	9"x9" tan floor tile and mastic	U-115 and U-131							
M	TSI elbows	Bookstore attic and above plenum							

Periodic Surveillance Plan

Date: **5/22/2017**

Building U

Material Class (1)	Material	Material Location	Results	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)
M	Sprayed on fireproofing material	Area above bookstore plenum							
M	Fire rated doors	U131, U113, U127							
M	9"x9" tan floor tile and mastic	Walkways adjacenet to U221-1, U221-2, U221-3, U223							

(1) S: surfacing, TSI: thermal system insulation, M: miscellaneous

(2) ND: not damaged, D: damaged, SD: significantly damaged

(3) POS: previously identified as positive, NEG: previously identified as negative, ASSUMED 1 = new material, not sampled, assumed asbestos-ASSUMED 2 = not enough samples collected, material is assumed asbestos-containing

(4) For response actions 1–8 refer to "Response Action Ratings Sheet"

Periodic Surveillance Plan

Site: Santa Ana College

Building W

Material Class (1)	Material	Material Location	Results	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)
M	12"x12" beige floor tile and associated mastic	W102-4 and N/S corridor near W102-6							
TSI	TSI mudded elbows and T's	W102-7B and W102-8 Mens room and shower, W102-6 and W102-1 Womens room and shower, gym and custodial room							

(1) S: surfacing, TSI: thermal system insulation, M: miscellaneous
(2) ND: not damaged, D: damaged, SD: significantly damaged
(3) POS: previously identified as positive, NEG: previously identified as negative, ASSUMED 1 = new material, not sampled, assumed asbestos-ASSUMED 2 = not enough samples collected, material is assumed asbestos-containing
(4) For response actions 1–8 refer to "Response Action Ratings Sheet"

Periodic Surveillance Plan

Site: Santa Ana College

Building Z - Old Portion, now part of Building J

Material Class (1)	Material	Material Location	Results	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)	Inspector/ Date/ Condition (2)
No ACM (New building)									
M	9"x9" green floor tile and associated mastic	J121-3, J121-1, J121-2							
M	White linoleum flooring and assocaited mastic	J117, J118							

(1) S: surfacing, TSI: thermal system insulation, M: miscellaneous
(2) ND: not damaged, D: damaged, SD: significantly damaged
(3) POS: previously identified as positive, NEG: previously identified as negative, ASSUMED 1 = new material, not sampled, assumed asbestos-ASSUMED 2 = not enough samples collected, material is assumed asbestos-containing
(4) For response actions 1–8 refer to "Response Action Ratings Sheet"

Appendix B

Template Forms (Annual Notification, Notice of Abatement)

PLEASE POST ON BULLETIN BOARD

INTER-OFFICE CORRESPONDENCE

TO: **DATE:** _____

FROM: _____

_____

SUBJECT: **NOTIFICATION OF PLANNED ASBESTOS ABATEMENT WORK AT YOUR SITE**

An asbestos abatement response action is scheduled to be performed at your site. This work will be performed by certified asbestos abatement workers in a manner that ensures all environmental and safety regulations are observed. The work areas will be posted with asbestos danger signs, as well as be isolated from other areas of the building(s).

This abatement will be in: _____ building(s).

The work space(s) is: _____

The reason for the abatement is: _____

The building material to be abated is: _____

The abatement will involve the following: _____

The anticipated start date is: _____

The anticipated completion date is: _____

Please post this notice on your bulletin board for staff to read.

If additional information is required, please call

Interim Facilities Manager
Heller Sanchez
Santa Ana College
1530 West 17th Street
Santa Ana, California 92706-3398
(714) 564-6324 (sanchez_heller@sac.edu)

MAJOR ABATEMENT RECORD

1. Location of abatement activity:

   SITE NAME:___Santa Ana College_____

   ADDRESS:__1530 West 17th Street, Santa Ana, California 92706_____

   BUILDING NAME:_____

   ROOM OR SPACE:_____

2. Reason for abatement:_____

   _____

3. Detailed description of work:_____

   _____

   _____

   _____

4. Abatement method used:
   ___Wet Methods ___H.E.P.A. Vacuum
   ___Negative Air ___Isolation ___3-Stage Decontamination
   ___Mini-Enclosure ___Glove Bag ___Other:_____

5. Start Date:_____ Completion Date:_____

6. Approximate quantity of material abated: _____square/linear feet

7. Type of asbestos-containing material abated:_____

8. Name (s) of personnel involved in the abatement: _____

And, if work is performed by contactor, complete item 8a below.

8a Name of Contractor:_____

Address:_____

D.O.S.H. Registration Number:_____

9. Disposal Location:

Name:_____

Address:_____

10. Clearance Air Monitoring:

Sample Numbers

For each of the samples above, attaché a copy of the Chain of Custody which contains the name and signature of the sample, location of samples, and date of collection. Also, attach a copy of the Analysis Report which contains the name and address of the laboratory, date of analysis, results, method of analysis, name and signature of analyst, and a statement that the laboratory meets the requirements of 763.90 (I)(2)(ii).

FIBER RELEASE EPISODE REPORT FORM

Site Name: __Santa Ana College _____

Address:__1530 West 17th Street, Santa Ana, California 92706_____

Building Name:_____

Room or Space:_____

Date of fiber release:_____:_____

The release episode was reported by: (name)_____

On: (date)_____To: (supervisor)_____

Description of the fiber release episode:_____

_____

Description of actions taken:_____

_____

Location and disposal:

_____

_____

Names of response personnel:

_____ _____

_____ _____

Provide the information above for each fiber release episode and mail to:

Asbestos Programs Designated Person

DO NOT WRITE BELOW THIS LINE

_____

Date recorded in school central plan:_____

Date copy send to site for Management Plan:_____

Signed_____Title_____

Date_____

To: Building Occupants, Maintenance and Custodial Staff

Re: Notification of availability of asbestos Operations and Maintenance Plan for Review

The Owner will implement an Operations, Maintenance, and Repair Program (O&M) to manage in place asbestos-containing materials (ACMs) including assumed ACMs friable and non-friable identified in the buildings located at 1530 West 17th Street Santa Ana, California.

The plan is will be maintained at the Site's maintenance office. The plan is available for review, without cost or restriction, to workers or building occupants, before asbestos-related work begins in any area of the impacted buildings.

The Site Facilities Manager will be responsible for informing any outside contractor or service personnel who work at the site about the availability of the information contained in the Plan

Any questions or concerns you may have regarding this subject should be address to the Asbestos Designated Person.

Interim Facilities Manager
Heller Sanchez
Santa Ana College
1530 West 17th Street
Santa Ana, California 92706-3398
(714) 564-6324 (sanchez_heller@sac.edu)

Sincerely,

Appendix C

Asbestos Previous Survey Records
Other Survey Records are located
in Building Z maintenance Office

LIMITED HAZARDOUS MATERIALS STUDY

Central Plant Project, Buildings C, D, N and P
Santa Ana College
1530 West 17th Street
Santa Ana, California 92706

Prepared for:

Rancho Santiago Community College District
2323 North Broadway, Suite 112
Santa Ana, California 92706

Project No.: RSCC-15-5042
Date: April 10, 2015

Alta Environmental
3777 Long Beach Boulevard Annex Building
Long Beach CA 90807 United States of America
T 562 495 5777 F 562 495 5877
Toll-free (US only) 800 777-0605 altaenviron.com

EXECUTIVE SUMMARY

On March 20, 2015, Alta Environmental conducted a limited hazardous materials study for asbestos and lead-based paint in building C, D, N and P at Santa Ana College located at 1530 West 17th Street, Santa Ana, California 92706.

The limited study was to identify asbestos and lead-based paint in buildings materials which may be impacted by the upcoming renovation work. Alta understands the renovation work will include the installation or modification of roof mounted air conditioning units including the installation of structural roof supports to accommodate the new systems. The areas affected by the scope of work are described below:

1. Building C, walls, ceilings, ceiling void space in rooms 114, 211 and roof above 211,
2. Building D, first, second, third and fourth floor classroom areas, ceilings, ceiling void space, and concrete decks on all floors,
3. Building N, ceilings, ceiling space, in rooms N103, N104, N107, N108, N109, N110, N111, N112, N113 and N100S Hallway and roof immediately above.
4. Building P, ceilings, ceiling space, deck in rooms P108-2, P108-4, P108-5, P108-7, Theater Lab, Scenery prep and Main Auditorium and all roofs.

Our inspection was focused on the impacted areas listed above. Our Cal/OSHA Certified Site Surveillance Technician and California Department of Public Health (CDPH) Certified Lead Inspector/Assessor conducted the following activities to document the project:

- Review of existing asbestos survey records provided by the District,
- Initial investigation to locate suspect asbestos-containing materials (ACMs), lead-based paint;
- Physical assessment of suspect ACM, painted surfaces;
- Collection of bulk samples from suspect ACM;
- Laboratory analysis of ACM samples collected, and
- Testing for lead-based paint using our direct read x-ray fluorescence spectrum analyzer (XRF).

Refer to section 5 in this report for a summary of findings.

CONTENTS

REPORTED: April 10, 2015 **PROJECT NO.:** RSCC-15-5042

CLIENT: Rancho Santiago Community College District
2323 North Broadway, Suite 112
Santa Ana, California 92706

ATTENTION: Mr. Dave Gonzales

REF: Limited Hazardous Material Study
Central Plant Project, Buildings C, D, N and P
Santa Ana College
1530 West 17th Street
Santa Ana, California 92706

1 INTRODUCTION

On March 20, 2015, Alta Environmental conducted a limited hazardous materials study for asbestos and lead-based paint in building C, D, N and P at Santa Ana College located at 1530 West 17th Street, Santa Ana, California 92706.

2 PROJECT BACKGROUND

Rancho Santiago Community College District retained Alta Environmental for the limited study. The study was completed by Victor Sanchez and Cesar Ruvalcaba, both Cal/OSHA Certified Asbestos Consultants, and California Department of Public Health (CDPH) Certified Lead Inspector Assessors.

The limited study was to identify asbestos and lead-based paint in buildings materials which may be impacted by the upcoming renovation work. Alta understands the renovation work will include the installation or modification of roof mounted air conditioning units including the installation of structural roof supports to accommodate the new systems. The areas affected by the scope of work are described below:

1. Building C, walls, ceilings, ceiling void space in rooms 114, 211 and roof above 211,
2. Building D, first, second, third and fourth floor classroom areas, ceilings, ceiling void space, and concrete decks on all floors,
3. Building N, ceilings, ceiling space, in rooms N103, N104, N107, N108, N109, N110, N111, N112, N113 and N100S Hallway and roof immediately above.
4. Building P, ceilings, ceiling space, deck in rooms P108-2, P108-4, P108-5, P108-7, Theater Lab, Scenery prep and Main Auditorium and all roofs

A previous survey (study) was completed by Executive Environmental, March 2006. Refer to Appendix F for a copy of the report.

3 SCOPE OF WORK

Our inspection was focused on the impacted areas. Our inspection included the following:

- Review of existing asbestos survey records provided by the District,
- Initial investigation to locate suspect asbestos-containing materials (ACMs), lead-based paint;
- Physical assessment of suspect ACM, painted surfaces;
- Collection of bulk samples from suspect ACM;
- Laboratory analysis of ACM samples collected, and
- Testing for lead-based paint using our direct read x-ray fluorescence spectrum analyzer (XRF).

4 METHODOLOGY

4.1 Asbestos

Alta Environmental reviewed a previous asbestos survey report completed by Sigma Engineering to evaluate that impacted materials on site were properly sampled and documented. In cases where homogenous materials were not properly documented and/or sampled, we collected additional samples to achieve a survey that complies with current applicable regulations. Bulk asbestos analysis information gathered from the Sigma report has been incorporated in this report

A total of 27 additional samples were collected during our survey. The sampling was conducted using guidelines set forth in *Federal Register 40 CFR Part 763*. Alta Environmental conducted an initial walkthrough of the site to develop a listing and sampling scheme of suspect materials. Samples were placed in sealable sample containers and assigned a unique sample identification number.

Bulk samples collected from the subject site were subsequently analyzed by polarized light microscopy (PLM) for asbestos content in accordance with the United States Environmental Protection Agency's (USEPA) *Determination of Asbestos in Bulk Building Materials: EPA/600/R-93/116, July 1993*, at AmeriSci Laboratories located in Carson, California, a laboratory accredited by the National Voluntary Laboratory Accreditation Program.

Based on the requirements of the USEPA as set forth in *40 CFR 763*, a homogeneous material is defined as "an area of surfacing material, thermal system insulation material or miscellaneous material that is uniform in color and texture." Furthermore, the regulation requires that a minimum number of samples be collected from each identified homogeneous material. If one sample in a homogeneous material is found to contain asbestos, the entire homogeneous material is considered to be asbestos-containing.

Caution is advised in interpreting results provided herein.

4.2 Lead

A total of 62 readings were completed using a portable XRF spectrum analyzer of representative painted surfaces. The XRF used was the LPA-1, manufactured by Radiation Monitoring Devices (RMD) of Watertown, Massachusetts. XRF readings were taken by using the device "Quick" mode option. No time

setting is required with this option since the device automatically adjusts its reading time to the different paint substrates for precision. The duration of each test result was determined by the substrate density in combination with the age of the radioactive source of the device and the actual reading relative to the abatement level (threshold) chosen. The testing includes a unique combination of room equivalent, building component type, and substrate.

An XRF Performance Characteristic Sheet (PCS) developed jointly by the U.S. Department of Housing and Urban Development (HUD) and the USEPA for the RMD LPA-1 was used. The PCS provides information necessary to conduct an inspection of LBP using a specific XRF device. Based on the PCS, no inconclusive readings in the “Quick” mode were encountered for LBP on brick, concrete, drywall, metal, plaster or wood substrates.

Field calibration checks were performed prior, during and after each XRF lead inspection to determine that the device was functioning within acceptable limits (tolerance) determined by the manufacturer. Three readings of a red 1.04 mg/cm² Standard Reference Material (SRM) paint film, developed by the National Institute of Standard and Technology (NIST), were taken in the “Time Corrected” mode option during each calibration check. Each set of readings was averaged and compared to the PCS calibration check limit for the device. Please refer to Appendix H Field Notes, for documentation of the quality-control calibration checks.

5 RESULTS

5.1 Asbestos

ACMs are those materials found to contain greater than one percent asbestos by weight as determined by the PLM method of analysis. These materials are subject to regulation under USEPA *40 CFR 61, local South Coast Air Quality Management District (SCAQMD).* These materials are also subject to Cal/OSHA regulation (*Title 8 CCR Section 1529*) when disturbed for construction purposes.

Asbestos-containing construction materials (ACCM) are those materials reported to contain less than one percent (<1%) by PLM or greater than one tenth of one percent (>0.1%) using a 1,000 point count analysis. ACCMs are subject to Cal-OSHA regulation when disturbed for construction purposes

Summary of ACMs and ACCMs which may be impacted by this project:

Material	Sample No.	Material Location	Asbestos Content	Est. Qty.
Building C (Rooms 114, 211 and Roof)				

No ACM or ACCs were identified during this survey in the areas impacted by the scope

Building D (All classrooms First, Second, Third, and Fourth Floors)

Tan duct seam sealant compound (ACM)	BU-02, BU-03, BU-04	1st, 2nd, 3rd and 4th floors all classrooms, in ceiling void space at connections between fiberglass duct and metal air diffuser	2% chrysotile	400 sq.ft.
Drywall with joint compound (ACCM)	DWM-01, DWM-02, DWM-03	All interior walls in the building, all floors	<1% chrysotile	10,000 sq.ft.

Note: Based on information provided by Rancho Santiago CCD, the above component will not be impacted by this project. The component is listed in this report for information only.

Building N (N103, N104, N107, N108, N109, N110, N111, N112, N113 and N100S Hallway and roof immediately above)

Attic debris (TSI)	RB.N-19, RB.N-20 RB.N-21	Attic space above N103, N104, N107, N108, N109, N110, N111, N112, N113 and N100S Hallway	10% chrysotile	1,500 sq.ft.
Drywall with joint compound	RB.N-7 RB.N-8 RB.N-9	Attic space fire walls	<1% chrysotile	200 sq.ft.
Drywall with joint compound	RB.N-25 RB.N-26 RB.N.-27	Walls in all rooms	<1% chrysotile	2,500 sq.ft.

Note: Based on information provided by Rancho Santiago CCD, the above component will not be impacted by this project. The component is listed in this report for information only.

Building P (P108-2, P108-4, P108-5, P108-7, Theater Lab, Scenery prep and Main Auditorium and all roofs)

Drywall with joint compound (ceilings)	BP-01 thru BP-05	Above suspended ceiling tiles in rooms P108, P108-1, P108-2, P106-4, P108-7, P108-8, P108-10, P106-1, P106-3, P106-5, P106-5, P106-6P106-7, O106-5	3% chrysotile-drywall, 3% chrysotile-joint compound, 4% chrysotile-composite of drywall with joint compound	1,800 sq.ft.
Drywall walls with joint compound	PRB-16, PRB-17, PRB-18	All interior walls in 108, 106, 105	<1% chrysotile	24,000 sq.ft.

Note: Based on information provided by Rancho Santiago CCD, the above component will not be impacted by this project. The component is listed in this report for information only.

1'X1' black ceiling tile and mastic	PRB-59, PRB-60	Theatre lab room P202-1	<1% chrysotile	150 sq.ft.

Note: Based on information provided by Rancho Santiago CCD, the above component will not be impacted by this project. The component is listed in this report for information only.

The results for all other materials sampled were reported as "none detected," based on the limitations of the analytical method. Please refer to Appendix A for a complete listing of materials sampled, locations, and material conditions.

5.2 Lead

Sides B, C and D are identified clockwise from side A, where side A corresponds to the north side of the building.

Lead-based paint (LBP), according to, the State of California, HUD and the USEPA is defined as paint or other surface coating with lead content equal to or greater than 1.0 mg/cm^2 of surface area by XRF testing.

Summary of LBP:

Sample #	Sampling method	Structure	Material Location	Paint Color & Condition	Substrate	Lead (mg/cm²/ PPM)
Building C Rooms 114, 211 and Roof)						
No lead-based paint was reported during this inspection						
Building D (All classrooms First, Second, Third, and Fourth Floors)						
No lead-based paint was reported during this inspection						
Building N (N103, N104, N107, N108, N109, N110, N111, N112, N113 and N100S Hallway and roof immediately above)						
040, 039	XRF	Wall and base	Men and women restrooms	White/intact	Ceramic	>9.9, 5.8
Note: Based on information provided by Rancho Santiago CCD, the above component will not be impacted by this project						
Building P (P108-2, P108-4, P108-5, P108-7, Theater Lab, Scenery prep and Main Auditorium and all roofs)						
044, 045, 054	XRF	Wall and base	Men and women restrooms	Beige/intact	Ceramic	>9.9
Note: Based on information provided by Rancho Santiago CCD, the above component will not be impacted by this project						

Lead-containing paints (LCP) according to Cal/OSHA *Title 8 CCR, Section 1532.1(d)* are defined as paints reported with any detectable levels of lead by paint chip analysis. When disturbed for construction purposes, these surfaces are subject to Cal/OSHA exposure assessment requirements. Amongst other things, this regulation requires initial employee exposure monitoring to evaluate work exposure during work that disturbs paint with any detectable level of lead. If airborne lead levels are above the established Cal/OSHA action limit or permissible exposure limit, additional monitoring and respiratory protection are required.

Summary of LCP:

- All painted components impacted by this project.

6 CONCLUSIONS AND RECOMMENDATIONS

The limited study conducted by Alta Environmental was to identify asbestos and lead-based paint in building materials and painted surfaces which may be impacted by the scope of work. The scope of work is described in Section 2 of this report. The study mainly focused on ceilings, ceiling spaces, and roofs in the affected buildings. No other areas or buildings were included in this scope of work.

A limited study was previously completed by Executive Environmental, March, 2006. Refer to Appendix I for a copy of the report. Both the Executive Environmental and Alta Environmental survey reports shall be used when completing the project as both report address separate areas.

A survey and testing below soil was outside of the scope of services. Based on experienced with similar sites, it is likely that additional suspect ACMs or lead associated with utility lines such as water, gas and power may be present and may be encounter during soil grading and excavation of the Site.

Alta Environmental recommends that during excavation or soil grading, if suspect ACMs or lead materials are discovered, that the materials be assumed to contain asbestos and lead. The suspect ACM and lead materials should be properly characterized by a Cal-OSHA certified professional prior to disturbance or removal.

6.1 Asbestos

ACMs have been identified at the Site. Refer to Section 5 in this report for a summary of ACMs.

The USEPA (locally enforced by South Coast Air Quality Management District (SCAQMD) requires that all asbestos materials be removed prior to any renovation or demolition activities that may impact the material. The USEPA recommends that a proactive, in-place management program be put in place whenever asbestos is discovered in a building. Asbestos materials that are not damaged may be managed in place with a good operations and maintenance (O&M) program.

Material quantities included in this report are provided as a best estimate for information only and shall not be used as a reliable quantity by any contractor for preparing removal bids. The contractor shall be solely responsible for assessing the type, extent, and quantity of material to be removed in each area of the project in preparing each project bid.

6.2 Lead

Lead-based paint has been identified. Refer to the Section 5 in this report for a summary of LBP.

Impacts to both LBP , when disturbed for construction purposes are subject to Cal/OSHA worker protection requirements such as but not limited to initial employee exposure monitoring, worker protection etc. Impacts to LBP may also be subject to California Department of Public Health requirements if results of worker exposure monitoring exceed the Cal/OSHA permissible exposure limit.

An O&M program is also recommended for the identified LBP in good condition. An O&M program or interim control is a set of measures designed to temporarily reduce human exposure or possible exposure to LBP hazards. Such measures may include specialized cleaning, repairs, maintenance, painting, temporary containment and management and resident education programs. Visual monitoring conducted by owners and/or reevaluations by risk assessors are integral elements of an interim control. An initial

evaluation of potential LBP hazard by a certified risk assessor is recommended for a successful implementation of the interim controls.

Abatement (e.g., stabilization) is recommended for damaged LBP, or if the condition of the materials noted as being in good condition should change. According to Federal regulations and guidelines, LBP abatement is the permanent (defined as designed to last at least 20 years or, in case of encapsulation, a 20-year product warranty) elimination of LBP hazards through replacement, enclosure, encapsulation, paint removal and cleaning to remove lead-contaminated dust.

Work activities impacting LBP pose a potential exposure risk for workers and/or building occupants. Workers trained in proper safety and respiratory techniques should perform renovation activities that may impact the LBP described in this report.

Lead-containing Paints

Workers who disturb surfaces with lead-containing paint are subject to regulation under *Title 8 CCR, Section 1532.1 (d)*. These requirements include awareness training, monitoring to determine worker exposure. This regulation requires initial and on-going (if necessary) employee exposure monitoring to evaluate lead work exposure that disturbs paint with any detectable level of lead. Alta Environmental suggests that engineering controls, respiratory protection and personal protective equipment be employed at the start of any project that disturbs painted surfaces.

Lead-waste disposal

Waste generated during removal or demolition of LBP and LCP components must be properly segregated into separate waste streams. Each waste stream should be randomly sampled and analyzed for lead by the California Waste Extraction Test for comparison to the Total Threshold Limit Concentration (TTLC), and Soluble Threshold Limit Concentration (STLC) and by Toxicity Characteristic Leaching Procedure (TCLP) as required, to determine the final disposition of the waste.

7 ASSUMPTIONS AND LIMITATIONS

This report was prepared exclusively for use by Rancho Santiago Community College District and may not be relied upon by any other person or entity without Alta Environmental's express written permission. The information, conclusions and recommendations described in this report apply to conditions existing at certain locations when services were performed and are intended only for the specific purposes, locations, time frames and project parameters indicated. Alta Environmental cannot be responsible for the impact of any changes in environmental standards, practices or regulations after performance of services.

In performing our professional services, we have applied present engineering and scientific judgment and used a level of effort consistent with the current standard of practice for similar types of studies.

As applicable, Alta Environmental has relied in good faith upon representations and information furnished by individuals with respect to operations and existing property conditions, to the extent that they have not been contradicted by data obtained from other sources. Accordingly, Alta Environmental accepts no responsibility for any deficiencies, omissions, misrepresentations, or fraudulent acts of persons interviewed.

Alta Environmental will not accept any liability for loss, injury claim, or damage arising directly or indirectly from any use or reliance on this report. Alta Environmental makes no warranty, expressed or implied.

This report is issued with the understanding that the client, the property owner, or its representative is responsible for ensuring that the information, conclusions, and recommendations contained herein are brought to the attention of the appropriate regulatory agencies, as required.

Material quantities are in some cases listed within this document. These quantities are not intended to be used for removal bidding purposes. Nor is this document intended as a contract manual. Work methods and sequence, coordination of participants, applicable codes, engineering controls, required submittals and notifications should in all cases be addressed in a separate and independent bidding and contract document.

If you have any questions, please do not hesitate to contact the undersigned at (562) 495-5777. We appreciate the opportunity to be of service to Rancho Santiago Community College District.

8 SIGNATORY

Respectfully submitted by:

Alta Environmental

Cesar Ruvalcaba
Certified Asbestos Consultant
Cal/OSHA Cert. #95-1799
Lead Inspector/Assessor, Project Monitor
CDPH Cert. #6855

CR:cr

Appendix A

Material Inventory: Asbestos

MATERIAL INVENTORY
ASBESTOS SAMPLES

CLIENT: Rancho Santiago CCD-Santa Ana College
PROJECT NO: RSCC-15-5042
PROJECT NAME: Central Plant Project, Buildings C, D, N and P

Material	Sample No.	Asbestos Content	Sample Location	Material Location	Approx. Qty.	Friable	Damage
Building C							
Sand plaster	BC-01	None Detected	Room C114, SW	Room C-114	400 sq.ft.	No	No
Sand plaster	BC-02	None Detected	Room C114, NW				
Sand plaster	BC-03	None Detected	Room C114, SE				
Drywall with joint compound	CWM-01 thru CWM-08	None Detected	Previously sampled by Executive Environmental	Room C114 and C211	400 sq.ft.	No	No
Smooth plaster	CWM-30 thru CWM-36	None Detected	Previously sampled by Executive Environmental	Room C114 and C211	400 sq.ft.	No	No
Roll roofing	CWM-40 thru CWM-42	None Detected	Previously sampled by Executive Environmental	All roof	150 sq.ft.	No	No
Fireproofing	CWM-46 thru CWM-50	None Detected	Previously sampled by Executive Environmental	Ceiling voild space (phenum) 1st and 2nd floors	150 sq.ft.	Yes	No

MATERIAL INVENTORY
ASBESTOS SAMPLES

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Material	Sample No.	Asbestos Content	Sample Location	Material Location	Approx. Qty.	Friable	Damage
Building D							
HVAC duct seam tape	BU-01	None Detected	3rd floor, room 306, center	1st, 2nd, 3rd and 4th floors all classrooms, in ceing void space at connections between fiberglass duct and metal air difusser (observed only in 306)	3 sq.ft.	No	No
Tan duct seam sealant compound	BU-02	2% chrysotile	3rd floor, 301, SW	1st, 2nd, 3rd and 4th floors all classrooms, in ceing void space at connections between fiberglass duct and metal air difusser	400 sq.ft.	No	No
Tan duct seam sealant compound	BU-03	2% chrysotile	4th floor, 419, center				
Tan duct seam sealant compound	BU-04	2% chrysotile	4th floor, 401, north center				
Fiberglass insulation	BU-05	None Detected	4th floor, in ceiling space, hallway to south offices areas	1st, 2nd, 3rd and 4th floors, in ceiling space above dividing walls (fire walls)	1,000 sq.ft.	No	No
Drywall with joint compound	DWM-01 thru DWM-03	<1% chrysotile	Previously sampled by Executive Environmental	All interior walls	10,000 sq.ft.	No	No
2x4 fissured ceiling panel	DWM-07 thru DWM-09	None Detected	Previously sampled by Executive Environmental	1st floor classrooms	300 sq.ft.	No	No
1'x1' ceiling tile (fissured, spline)	DWM-10 thru DWM-12	None Detected	Previously sampled by Executive Environmental	All classrooms	2,000 sq.ft.	No	No
2'x5' ceiling tile -fissured	DWM-16 thru DWM-18	None Detected	Previously sampled by Executive Environmental	All classrooms	8,000 sq.ft.	No	No
Roof core	DWM-111 thru DWM-113	None Detected	Previously sampled by Executive Environmental	Roof	15,000 sq.ft.	No	No

MATERIAL INVENTORY
ASBESTOS SAMPLES

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PROJECT NAME: Central Plant Project, Buildings C, D, N and P

Material	Sample No.	Asbestos Content	Sample Location	Material Location	Approx. Qty.	Friable	Damage
Builing N							
Drywall with joint compound	RBN-7 thru RBN-9	<1% chrysotile	Previously sampled by Executive Environmental	Room 107 thru N112, hallways, N100S (staff RR), N104, N113	3,000 sq.ft.	No	No
Drywall with joint compound	RBN-25 thru RBN-29	<1% chrysotile	Previously sampled by Executive Environmental	Attic space fire walls	900 sq.ft.	No	No
12" fissured ceiling tile and glue	RBN-10 thru RBN-12	None Detected	Previously sampled by Executive Environmental	Room 107 thru N112 (on walls and ceilings) hallways, N100S, N113	1,250 sq.ft.	Yes	No
Black mastic	BN-01	None Detected	West lower roof, east center	Roof on HVAC ducts (north of unit)	2 sq.ft.	No	No
Grey mastic	BN-02	None Detected	West lower roof, east center	Roof on HVAC ducts (north of unit)	1 sq.ft.	No	No
White duct seam compound	BN-03	None Detected	West lower roof, north duct, NE	Roof on HVAC ducts, north of unist, on seams	25 sq.ft.	No	No
White duct seam compound	BN-04	None Detected	West lower roof, north duct, north center				
White duct seam compound	BN-05	None Detected	West lower roof, north duct, west center				
Black flex collar	BN-06	None Detected	West lower roof, north center		1 collar	No	No
Black sealing compound	BN-07	None Detected	West lower roof, at center access door to A/C unit	Roof inside HVAC unit at condenser	1 sq.ft.	No	No
2'X4' drop ceiilng panels	RBN-16 thru RBN-18	None Detected	Previously sampled by Executive Environmental	Band room, choir, piano lab and theory instruction	2,450 sq.ft.	Yes	No

MATERIAL INVENTORY
ASBESTOS SAMPLES

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Material	Sample No.	Asbestos Content	Sample Location	Material Location	Approx. Qty.	Friable	Damage
Builing N							
Attic debris	RBN-19 thru RBN-21	10% chrysotile	Previously sampled by Executive Environmental	Attic space above N103, N104, N107, N108, N109, N110, N111, N112, N113 and N100S Hallway	1,500 sq.ft.	Yes	Yes
HVAC duct tape	RBN-22 thru RBN-24	None Detected	Previously sampled by Executive Environmental	Attic space	10 sq.ft.	No	No
Rolled asphalt roofing	RBN-31 thru RBN-33	None Detected	Previously sampled by Executive Environmental	Roof	7,000 sq.ft.	No	No

MATERIAL INVENTORY
ASBESTOS SAMPLES

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PROJECT NAME: Central Plant Project, Buildings C, D, N and P

Material	Sample No.	Asbestos Content	Sample Location	Material Location	Approx. Qty.	Friable	Damage
Building P							
Drywall ceiling	BP-01	3% chrysotile	P108, north center	Above suspended ceiling tiles in rooms P108, P108-1, P108-2, P106-4, P108-7, P108-8, P108-10, P106-1, P106-3, P106-5, P106-5, P106-6P106-7, O106-5	1,800 sq.ft.	No	No
Composite (drywall ceiling with joint compound)	BP- 02	4% chrysotile	P108, north center				
Joint compound	BP- 03	3% chrysotile	P108, north center				
Joint compound	BP- 04	3% chrysotile	108-1, SE				
Joint compound	BP- 05	3% chrysotile	108-1, SE				
Button board	BP- 06	None Detected	P201, East center	Under ceiling plaster in theater lab, scenery prep and auditorium and other areas noted in previous report	10,000 sq.ft.	No	No
Button board	BP- 07	None Detected	Mezzanine, transformer room, NE				
Button board	BP-08	None Detected	Electrical platroom, NE				
Drywall walls with joint compound	PRB-16, PRB-17, PRB-18	<1% chrysotile	Previously sampled by Executive Environmental	All interior walls in 108, 106, 105	24,000 sq.ft.	No	No
Sand plaster	BP-09	None Detected	P201, east, on ceiling	Walls and ceiings in theater lab., scenery pre and auditorium and all other areas noted on previous report. This samples are supplemental to PRB-13 thru PRB-15	10,000 sq.ft.	No	No
Sand plaster	BP-10	None Detected	Transformer oom, west cente ron wall				
Sand plaster	BP-11	None Detected	Eletrical room, platform on ceiling, SW				
Sand plaster	BP-12	None Detected	Stage attic, west center				
1x2 ceiling tile	PRB-61 thru PRB-63	None Detected	Previously sampled by Executive Environmental	108, corridors, 106, custome	900 sq.ft.	Yes	No

MATERIAL INVENTORY
ASBESTOS SAMPLES

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PROJECT NAME: Central Plant Project, Buildings C, D, N and P

Material	Sample No.	Asbestos Content	Sample Location	Material Location	Approx. Qty.	Friable	Damage
Building P							
1'X1' black ceiling tile and mastic	PRB-59, PRB-60	<1% chrysotile	Previously sampled by Executive Environmental	Theater lab and P202	150 sq.ft.	No	No
2'X2' ceiling tile	PRB-22 thru PRB-24	None Detected	Previously sampled by Executive Environmental	Predominant ceiling P108, P108-1, P108-2, P106-4, P108-7, P108-8, P108-10, P106-1, P106-3, P106-5, P106-5, P106-6P106-7, O106-5	1,800 sq.ft.	No	No
1'X1' ceiling tile and mastic -fissured	PRB-40 thru PRB-42	None Detected	Previously sampled by Executive Environmental	Auditorium area	340 sq.ft.	Yes	No
Drywall with joint compound	PRB-49 thru PRB-51	None Detected	Previously sampled by Executive Environmental	Control room	200 sq.ft.	No	No
Silver coasted reflective roof	PRB-67 thru PRB-69	None Detected	Previously sampled by Executive Environmental	Roof	200 sq.ft.	No	No

Appendix B

Laboratory Analytical Report: Asbestos

ENVIRONMENTAL LABORATORIES

1508 East 33rd Street
Signal Hill, CA 90755
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Alta Environmental
3777 Long Beach Blvd.
Long Beach CA 90807
Attn.: Eric Fleming

Report Number 1519950

Project Number
Project Name Santa Ana College
Location 1530 W. 17th St. Santa Ana, CA 92706
PO Number
WO Number

Date Received 03/23/2015
Date Analyzed 03/27/2015
Date Reported 03/27/2015

Date Sampled 03/20/2015
Sampled By Victor Sanchez
Total Samples 27

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
1519950-001	Bldg U					
BU-01	HVAC Duct Seam Tape, Cream, Homogeneous	LAYER 1 100%	Cellulose Fiber Binder/Filler	75% 25%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1519950-002	Bldg U					
BU-02	Duct Seam Sealing Compound, Tan, Non-homogeneous	LAYER 1 100%	 Binder/Filler	 98%	Chrysotile	2%
	Asbestos Present: Yes		Total % Non-Asbestos:	98.0%	**Total %Asbestos:**	**2.0%**
1519950-003	Bldg U					
BU-03	Duct Seam Sealing Compound, Tan, Non-homogeneous	LAYER 1 100%	 Binder/Filler	 98%	Chrysotile	2%
	Asbestos Present: Yes		Total % Non-Asbestos:	98.0%	**Total %Asbestos:**	**2.0%**
1519950-004	Bldg U					
BU-04	Duct Seam Sealing Compound, Tan, Non-homogeneous	LAYER 1 100%	 Binder/Filler	 98%	Chrysotile	2%
	Asbestos Present: Yes		Total % Non-Asbestos:	98.0%	**Total %Asbestos:**	**2.0%**
1519950-005	Bldg U					
BU-05	Fiber Glass (Insulation) (Fire Wall), Yellow/Brown/Silver, Non-homogeneous	LAYER 1 100%	Fibrous Glass Cellulose Fiber Metallic Foil	92% 6% 2%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1519950-006	Bldg C					
BC-01	Sand Plaster, White/Beige, Non-homogeneous	LAYER 1 100%	 Calcium Carbonate Quartz Gypsum Other Non-Fibrous Material	 15% 45% 30% 10%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

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Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
1519950-007	Bldg C					
BC-02	Sand Plaster, White/Beige, Non-homogeneous	LAYER 1 100%	Calcium Carbonate Gypsum Quartz Other Non-Fibrous Material	10% 35% 40% 15%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1519950-008	Bldg C					
BC-03	Sand Plaster, White/Beige, Non-homogeneous	LAYER 1 100%	Calcium Carbonate Gypsum Quartz Other Non-Fibrous Material	10% 35% 40% 15%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1519950-009	Bldg N					
BN-01	Mastic, Black, Homogeneous	LAYER 1 100%	Cellulose Fiber Bituminous Matrix	15% 85%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1519950-010	Bldg N					
BN-02	Mastic, Black, Homogeneous	LAYER 1 100%	Cellulose Fiber Bituminous Matrix/Filler	<1% 100%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1519950-011	Bldg N					
BN-03	HVAC Seam Compound, White/Beige, Non-homogeneous	LAYER 1 100%	Calcium Carbonate Vermiculite Binder/Filler	15% 35% 50%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

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Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
1519950-012	Bldg N					
BN-04	HVAC Seam Compound, White/Beige, Non-homogeneous	LAYER 1 100%	Calcium Carbonate Vermiculite Binder/Filler	15% 35% 50%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1519950-013	Bldg N					
BN-05	HVAC Seam Compound, White/Beige, Non-homogeneous	LAYER 1 100%	Calcium Carbonate Vermiculite Binder/Filler	15% 35% 50%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1519950-014	Bldg N					
BN-06	Flex Collar, Black, Non-homogeneous	LAYER 1 100%	Synthetic Fiber Binder/Filler	40% 60%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1519950-015	Bldg N					
BN-07	Sealing Compound, Black, Non-homogeneous	LAYER 1 100%	Bituminous Matrix/Filler	100%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1519950-016	Bldg P					
BP-01	Drywall, White/Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Fibrous Glass Gypsum Other Non-Fibrous Material	40% <1 50% 7%	Chrysotile	3%
	Asbestos Present: Yes		Total % Non-Asbestos:	97.0%	**Total %Asbestos:**	**3.0%**
1519950-017	Bldg P					
BP-02	Drywall Composite, White/Brown/Beige, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Fibrous Glass Gypsum Calcium Carbonate Other Non-Fibrous Material	30% <1 54% 8% 4%	Chrysotile	4%
	Asbestos Present: Yes		Total % Non-Asbestos:	96.0%	**Total %Asbestos:**	**4.0%**

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Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
1519950-018	Bldg P					
BP-03	Drywall Joint Compound, Beige, Non-homogeneous	LAYER 1 100%	Calcium Carbonate Mica Binder/Filler	67% 10% 20%	Chrysotile	3%
	Asbestos Present: Yes		Total % Non-Asbestos:	97.0%	**Total %Asbestos:**	**3.0%**
1519950-019	Bldg P					
BP-04	Drywall Joint Compound, Beige, Non-homogeneous	LAYER 1 100%	Calcium Carbonate Mica Binder/Filler	67% 10% 20%	Chrysotile	3%
	Asbestos Present: Yes		Total % Non-Asbestos:	97.0%	**Total %Asbestos:**	**3.0%**
1519950-020	Bldg P					
BP-05	Drywall Joint Compound, Beige, Non-homogeneous	LAYER 1 100%	Calcium Carbonate Mica Binder/Filler	67% 10% 20%	Chrysotile	3%
	Asbestos Present: Yes		Total % Non-Asbestos:	97.0%	**Total %Asbestos:**	**3.0%**
1519950-021	Bldg P					
BP-06	Button Board & Paper, White/Brown/Black, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Mineral Wool Gypsum	40% <1 50%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1519950-022	Bldg P					
BP-07	Button Board & Paper, Brown/White, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Mineral Wool Gypsum Other Non-Fibrous Material	20% <1 70% 10%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1519950-023	Bldg P					
BP-08	Button Board & Paper, Brown/White, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Mineral Wool Gypsum Other Non-Fibrous Material	20% <1 70% 10%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

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Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
1519950-024	Bldg P					
BP-09	Plaster, White/Brown, Non-homogeneous	LAYER 1 100%	Gypsum Quartz Other Non-Fibrous Material	40% 40% 20%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1519950-025	Bldg P					
BP-10	Plaster, White/Brown, Non-homogeneous	LAYER 1 100%	Gypsum Quartz Perlite Other Non-Fibrous Material	30% 35% 20% 15%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1519950-026	Bldg P					
BP-11	Plaster, White/Brown, Non-homogeneous	LAYER 1 100%	Gypsum Quartz Perlite Other Non-Fibrous Material	30% 35% 20% 15%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
1519950-027	Bldg P					
BP-12	Plaster, Beige, Homogeneous	LAYER 1 100%	Gypsum Quartz Other Non-Fibrous Material	40% 40% 20%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

Method Detection Limit: Less than one percent (<1%). Asbestos content has been determined using calibrated visual estimation (CVES). Samples tested were received in acceptable condition unless otherwise stated. Test report relates only to items tested. Due to PLM limitations, results on samples with None Detected or samples with low asbestos concentrations may not be reliable and further analysis such as TEM is recommended to confirm PLM results. This report shall not be reproduced except in full without the written approval of this laboratory. This report may not be used by the customer to claim product certification, endorsement, or approval by NIST/NVLAP or any agency of the government. Samples shall be disposed according to local, state and federal laws, 30 days after results are reported.

Analyst - Fred Chappelear

Approved Signatory Cristina E. Tabatt

NVLAP® Lab Code 500044-0

CHAIN OF CUSTODY

AQ ENVIRONMENTAL LABORATORIES
1508 E. 33rd Street
Signal Hill, CA 90755
562-206-2770 Tel
562-206-2773 Fax
services@AQenvlabs.com

(Lab) Order No. 1519950

CUSTOMER INFORMATION

Company	Alta Environmental
Address	3777 Long Beach Blvd., Annex
City/State/Zip	Long Beach, California, 90807
Contact	Cedar Ruvalcaba.
Office Phone	562-495-5777
Cell	
Fax	
Email	

Turnaround Time		Shipped By		Report Send Via:	
Same Day	☐	Fedex	☐	Web	☐
1 Day	☐	UPS	☐	Email	☑
2 Day	☐	USPS	☐	Fax	☐
3 Day	☐	Drop Off	☑	Verbal	☐
5 Day	☑	Drop Box	☐	Mail	☐
Weekend	☐	Other	☐	Pick up	☐

Special Instructions: normal TAT thanks

PROJECT INFORMATION

Project Name:	Santa Ana College.	PO Number:	
Project Number:		Work Order No.:	
Location:	1530 W. 17th St. Santa Ana CA, 92706	Sampled By:	Victor Sanchez

PLM		PCM		MOLD		LEAD (Pb)			
PLM EPA 600/R-93/116	☑	NIOSH 7400A	☐	Spore Trap	☐	Air	☐	TTLC	☐
PLM 400 Pt. Count (<0.25%)	☐	NIOSH 7400B	☐	Tape Lift	☐	Paint	☐	STLC	☐
PLM 1000 Pt. Count (<0.1%)	☐	w/ TWA	☐	Bulk Sample	☐	Wipe	☐	TCLP	☐
						Soil	☐		

SAMPLE ID	SAMPLE TYPE	LOCATION	Date Sampled	Start Time / Stop Time	Avg Flow Rate	Volume (L)
BU-01	HVAC DUCT seam Tape	BLDG U	3/20/15			
BU-02	TAN DUCT seam. sealing compound					
BU-03	"					
BU-04	"					
BU-05	Fiber glass (insulation) (Fire wall)					
~~BU-06~~ BC-01	sand Plaster	Bldg C				
~~BU-07~~ BC-02	"	"				
BC-03	"	"				

Relinquished By: [signature]
Date/Time: 3-20-15

Received By: C. Tibatt
Date/Time: 03/23/15, 8:00 am

Lab Forms
Ver. 082411

CHAIN OF CUSTODY

1508 E. 33rd Street
Signal Hill, CA 90755
562-206-2770 Tel
562-206-2773 Fax
services@AQenvlabs.com

AQ ENVIRONMENTAL LABORATORIES

Company:	ALTA Environmental
Project Number:	~~LAPW-14-4~~ v.s. 4301
Project Name:	~~MCJ~~ v.s. Santa Ana College.

(Lab) Order No. 1519950

SAMPLE ID	SAMPLE TYPE	LOCATION	Date Sampled	Start Time / Stop Time	Avg Flow Rate	Volume (L)
BN-01	black MASTIC	Bldg N	3/20/15			
BN-02	grey mastic					
BN-03	white HVAC seam compound					
BN-04	↓					
BN-05	↓					
BN-06	black flex collar					
BN-07	black sealing compound	↓				
BP-01	Drywall	Bldg. P				
BP-02	drywall composite					
BP-03	drywall joint compound					
BP-04	↓					
BP-05	↓					
BP-06	Button board & paper					
BP-07	↓					
BP-08	↓					
BP-09	Plaster					
BP-10	↓					
BP-11	↓					
BP-12	↓	↓	↓			

Relinquished By:	Received By: CyTabatt
Date/Time: 3-20-15	Date/Time: 03/23/15, 8:00 am

Lab Forms
Ver. 082411

ALTA ENVIRONMENTAL

Asbestos Field Bulk Sample List

Client: Santa Ana College
Project No.:
Project Name: Santa Ana College Bldg C.

Technician: V. Sanchez
Date: 3-20-2015
Page: 1 of 1

Homogenous #	Photo #	Material	Sample #	Sample Location	Material Location	Est. Qty.	F	D
	ND	Sandplaster (Sand)	BC-01	Rm C114 S/W	Rm C-114	400 sq. ft	N	N
	↓	↓	BC-02	N/W	↓	↓	↓	↓
	↓	↓	BC-03	S/E	↓	↓	↓	↓
	ND	Drywall w/ Jt. Compound	CWM-01 – CWM-08	Previously Sampled by execution		400 sq	N	N
NOTES: exterior walls consist of painted brick								
	1ST and second floor. hallways have				plaster and oversprayed.			
	Tested previously –							
	ND	Plaster (Smooth)	Tested prev.	/	C-211			
			CWM-30 – CWM-36	Previously Sampled by execution	Interior Walls (Modernization)	400 sq	N	N
	ND	Roll roofing	CWM-40 – CWM-42		Roof	150 sq	N	N
	ND	Fireproofing	CWM-46 – CWM-50	↓	Ceiling void space (Plenum)	150 sq	N	N

floors in inspected room is all concrete

ALTA ENVIRONMENTAL

Asbestos Field Bulk Sample List

Client: Santa Ana College **Technician:** V-Sanchez

Project No.: **Date:** 3-26-2013

Project Name: Santa Ana College Bldg D **Page:** 1 of 1

Homogenous #	Photo #	Material	Sample #	Sample Location	Material Location	Est. Qty.	F	D
	ND	HVAC DUCT seam Tape.	BU-01	3rd floor room 306 CTR	all floors above. suspended ceilings on round. HVAC ducting (Patch only)		N	N
	2%	Tan DUCT. seam. sealing compound	BU-02	3rd floor. Rm 301 S/W.	all floors above suspended ceilings (ceiling space) on round		N	N
	2%		BU-03	4th flr. Rms 429 center	ducting connecting to ceiling diffusers and square HVAC ducting			
	2%		BU-04	4th floor room 401 N-O-CTR.				
	ND	fiberglass insulation	BU-05	4th floor. on hallway to south office area	all floor random. fire walls. (used as fire wall).		N	N
NOTES:	observed	above ceilings	throughout.	following materials				
	concrete deck.,	gray wall fire walls,	fiber glass	with cloth fire walls.				
	fiberglass TSI	and elbows,	all perimeter	walls consist of	brick unpainted			
	most	HVAC DUCTING	consists	of flexible	round ducting (fiberglass with paper wrapping)			

ALTA ENVIRONMENTAL

Asbestos Field Bulk Sample List

Client:
Project No.:
Project Name: Bldg. D

Technician: V. Sanchez
Date: 3/20/15
Page: 2

Homogenous #	Photo #	Material	Sample #	Sample Location	Material Location	Est. Qty.	F	D
	<1%	Drywall w/ Jt. compound	DWM-01 – DWM-03	previous sample by executive	All interior walls in bldg.	no impacts		
	ND	2x4 ceiling tile fiss.	DWM-07 – DWM-09		1st floor classrooms	300 sq	Y	N
	ND	1x1 ceiling tile fissured (spline)	DWM-10 – DWM-12		All classrooms	2,000 sq	Y	N
	ND	2x5' ceiling tile - fissured	DWM-16 – DWM-18		All classrooms	8,000 sq	Y	N
	ND	Roof core	DWM-111 – DWM-113		Roof	15000 sq	N	N

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ALTA ENVIRONMENTAL

Asbestos Field Bulk Sample List

Client: Santa Ana College
Project No.: PSCC-15-5042
Project Name: Santa Ana College
Technician: Victor Sanchez
Date:
Page: 1 of 2

Bldg N

Homogenous #	Photo #	Material	Sample #	Sample Location	Material Location	Est. Qty.	F	D
	<1%	Drywall w/ Jt comp.	Sampled previously	Previous Samples RB-N-~~27~~ RB-N-~~27~~	RMS N107 thru N112 hall N100S. Staff RR's N104 N-113	~~500~~ 500 sq'	N	N
	<1%	Drywall w/ Jt. comp.	RB-N-25 RB-N-29	Previous Sample	Attic Space	~~500~~ 500 sq'	N	N
	ND	12" fissured ct and adhesive	sampled previously	~~RB-N-10~~ ~~RB-N-12~~	RM N107 - thru N112. walls and ceiling Hall N100S ceiling N-113	1,250 sq'	NF	NO
	ND	black mastic	BN-01	West lower roof EAST CTR	Roof on HVAC duct (North of unit)	2 sq. FT	N	N
		gray mastic	BN-02		Roof on HVAC duct (North of unit)	1 sq. FT	N	N
		white HVAC seam compound	BN-03	west lower roof north duct N/E	Roof on HVAC duct (North of unit) (on seams)	25 sq. FT	N	N
			BN-04	N/CTR				
			BN-05	N/CTR				
		black flex collar	BN-06	NO. CTR		(ea)	N	N
		black sealing compound	BN-07	AT center door to unit	Roof inside HVAC unit at condenser.	1 sq FT	N	N

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ALTA ENVIRONMENTAL

Asbestos Field Bulk Sample List

Client:

Project No.:

Project Name: Bldg. N

Technician: Victor Sanchez

Date: 3/24/15

Page: 2 of 2

Homogenous #	Photo #	Material	Sample #	Sample Location	Material Location	Est. Qty.	F	D
	ND	2'x4' drop ceiling panels	RB-N-16 RB-N-18	Previous Sample	Theory Instruction Band room, Choir, Piano Lab,	2450	Y	N
	10% NA	Attic debris	RB-N-19 – RB-N-21		Attic space / Ceiling space	1500 sq	Y	Y
	ND	HVAC duct tape	RB-N-22 RB-N-24		Attic space			
		Rolled asphalt roof	RB-N-31 – RB-N-33		Roof (note – at time of inspection all roof removed, new roof installation in process)			

ALTA ENVIRONMENTAL

Asbestos Field Bulk Sample List

Client: Santa Ana College
Project No.:
Project Name: Santa Ana College
Bldg P

Technician: V. Sanchez
Date: 3-20-2018
Page: 1 of 2

Homogenous #	Photo #	Material	Sample #	Sample Location	Material Location	Est. Qty.	F	D
	3%	Drywall	BP-01	P108 (green rm) NO-CTR	Above suspended ceilings associated with 1x2 splined	1800 sf	N	N
	4%	Drywall composite	BP-02	↓	ceiling tile men's women's dressing rm green room	↓	N	N
	3%	Drywall joint compound	BP-03	↓	↓	↓	N	N
	3%	↓	BP-04	108-B S/E men's dress rm	↓	↓	↓	↓
	3%	↓	BP-05	↓	↓	↓	↓	↓
	NP	Bottom board of paper	BP-06	P-201 E/CTR	under ceiling plaster. theater lab, scenery prep. and	10000 sf	N	N
	↓	↓	BP-07	Transformer rm ~~NE~~/E	auditorium and other areas prev. noted.	↓	↓	↓
	↓	↓	BP-08	elect. platform S/E	↓	↓	↓	↓
	<1%	Drywall w/ Joint compound	PRB-16 - PRB-18	Previous Sample	All interior walls in ~~rooms~~ ~~in bldg~~. 108, 106, 105	24000 sf	N	N

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ALTA ENVIRONMENTAL

Asbestos Field Bulk Sample List

Client: Santa Ana College.
Technician: V. Santos
Project No.:
Date: 3-20-2015
Project Name: Santa Ana College Bldg P
Page: 2 of 2

Homogenous #	Photo #	Material	Sample #	Sample Location	Material Location	Est. Qty.	F	D
	ND	Plaster (Sand)	BP-09	P201 EAST on ceilings	wall and ceilings theater lab Scenery prep and auditorium	10000'sf	N	N
			BP-10	transformer rm w/CTR on wall	and all other areas previously noted.			
			BP-11	electrical platform on ceiling s/w.	Supplemental samples to PRB-13, PRB-14, PRB-15			
			BP-12	stage assy w/CTR ~~auditorium stage scenery prep and theater lab.~~				
	ND	4" gray baseboard and mastic		Prev. sampled.				
		1X2 ceiling tile "	PRB-19 - PRB-21	prev. sampled.	108, corridors, 106, Custome	900'sf	Y	N
		12"X12" gray ~~floor~~ ceiling tile and mastic	PRB-61 - PRB-63	prev. sampled	theatre labs, 202-1, 202-2 202-3	150'sf	N	N
	<1% L - T-ND	1'X1' black c. tile + MASTIC	PRB-59 - PRB-60	prev. sampled	theatre lab P202-1	150'sf	N	N
		plaster		previously sampled				
	ND	2X2' ceiling tile	PRB-22 - PRB-24	prev. sampled	Predominant, throughout	1,000'sf	Y	N

ALTA ENVIRONMENTAL

Asbestos Field Bulk Sample List

Client: _____ **Technician:** Urchin S.

Project No.: _____ **Date:** 3-20-15

Project Name: _____ **Page:** 3 3

Bldg. P

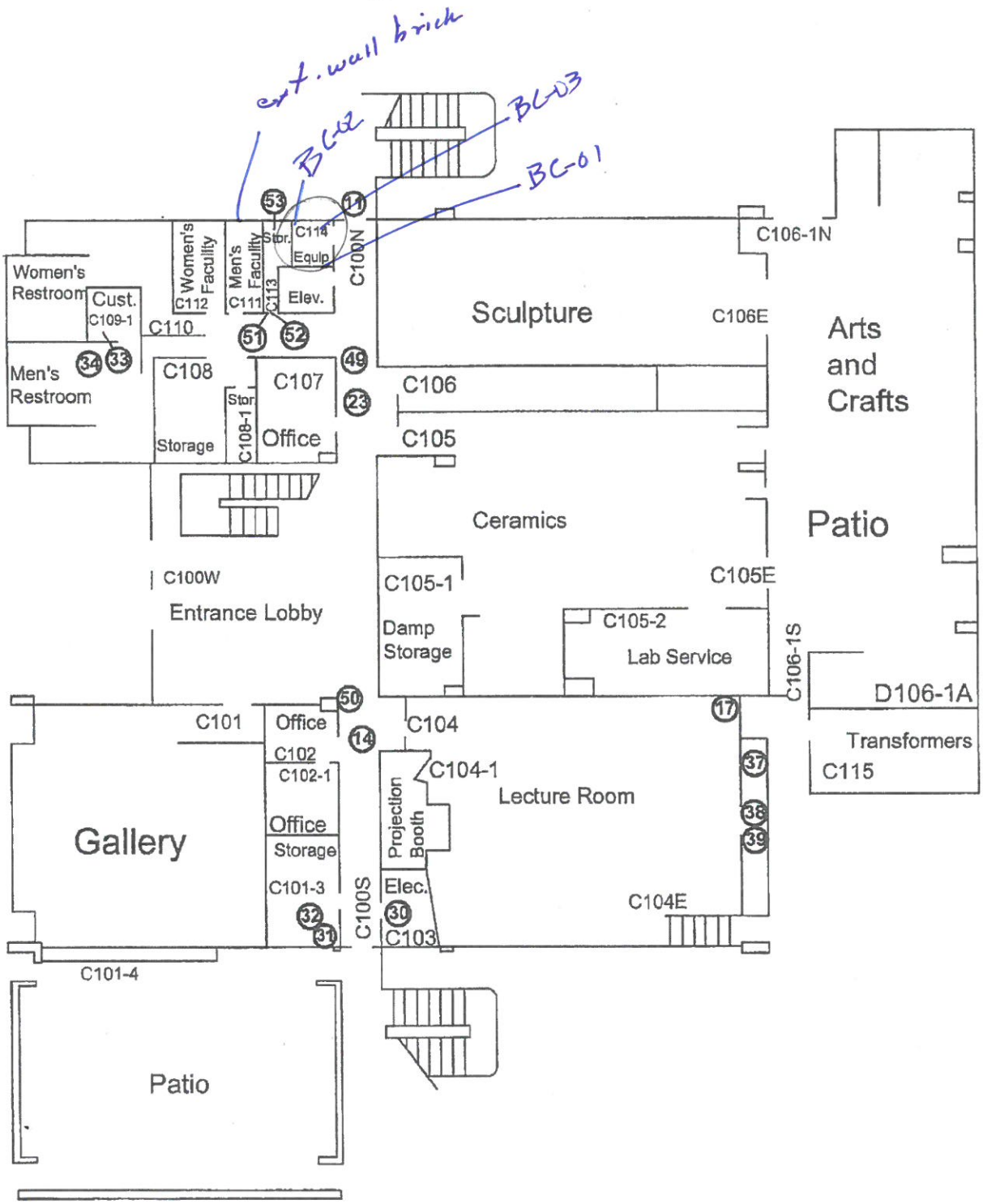
Homogenous #	Photo #	Material	Sample #	Sample Location	Material Location	Est. Qty.	F	D
	ND	1'x1' ceiling tile w/ fissured & Mottled	PRB-40 PRB-42	Previous sample	Auditorium	340'sq	N	N
	ND	Drywall w/ Compound	PRB-45 - PRB-57	"	Control Booth	200'sq	N	N
	ND	Silver coated reflective mylar	PRB-67 - PRB-69	"	Dog	200'sq	N	N

Appendix C

Sample Location Map: Asbestos

ASBESTOS SAMPLE LOCATION MAP, ALTA ENV. 3/20/15

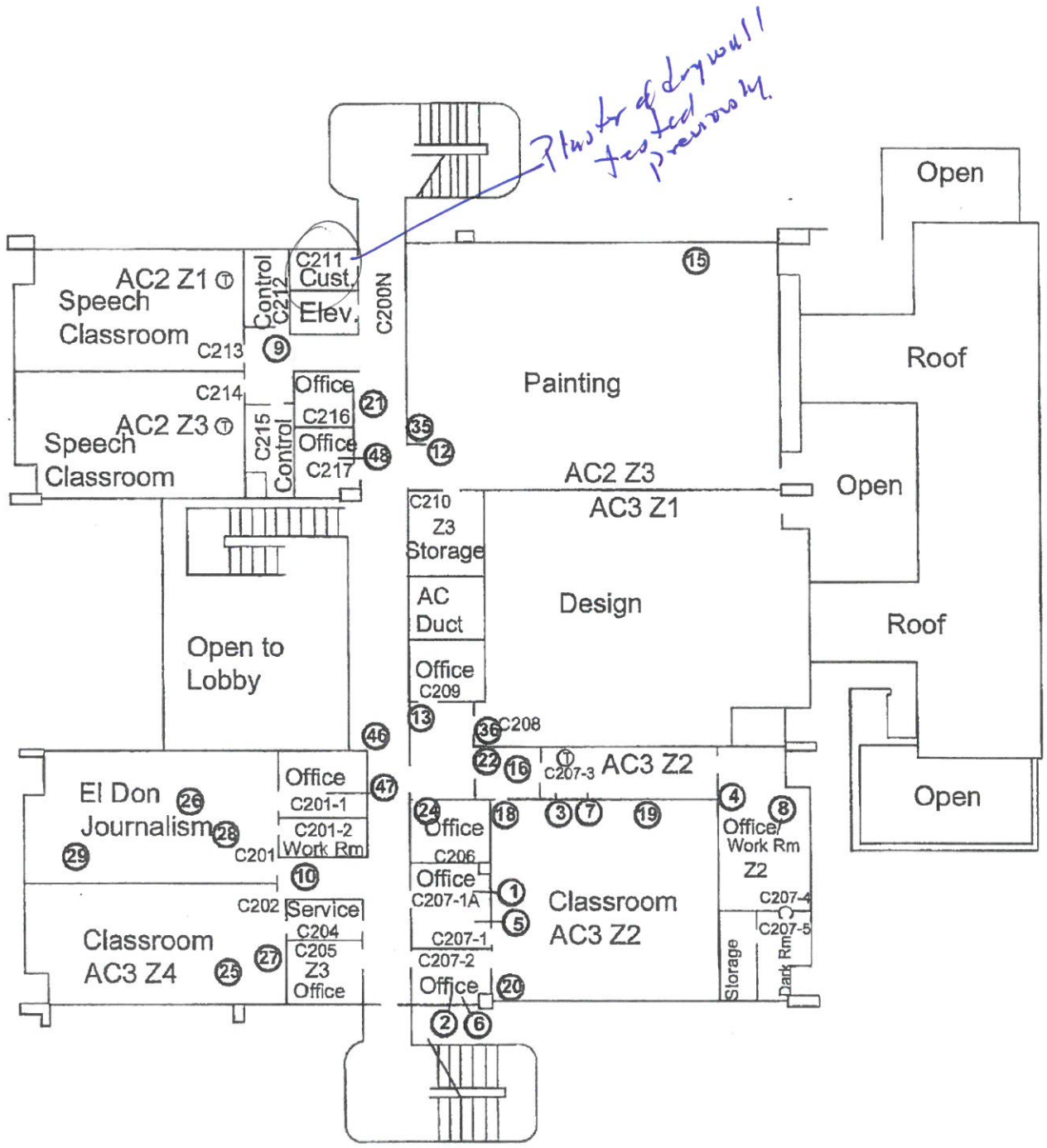
Building C - 1st Floor



Client:	Rancho Santiago Community College District	**Project#:** 06-Z0307-0050.C	**Info:** Suspect Asbestos Sample Locations - 1st Floor
Executive Environmental SERVICES CORPORATION QUALITY SERVICE WITH INTEGRITY		**Site:** Santa Ana College - Building C **Address:** 1530 West 17th Street Santa Ana, California 92706	

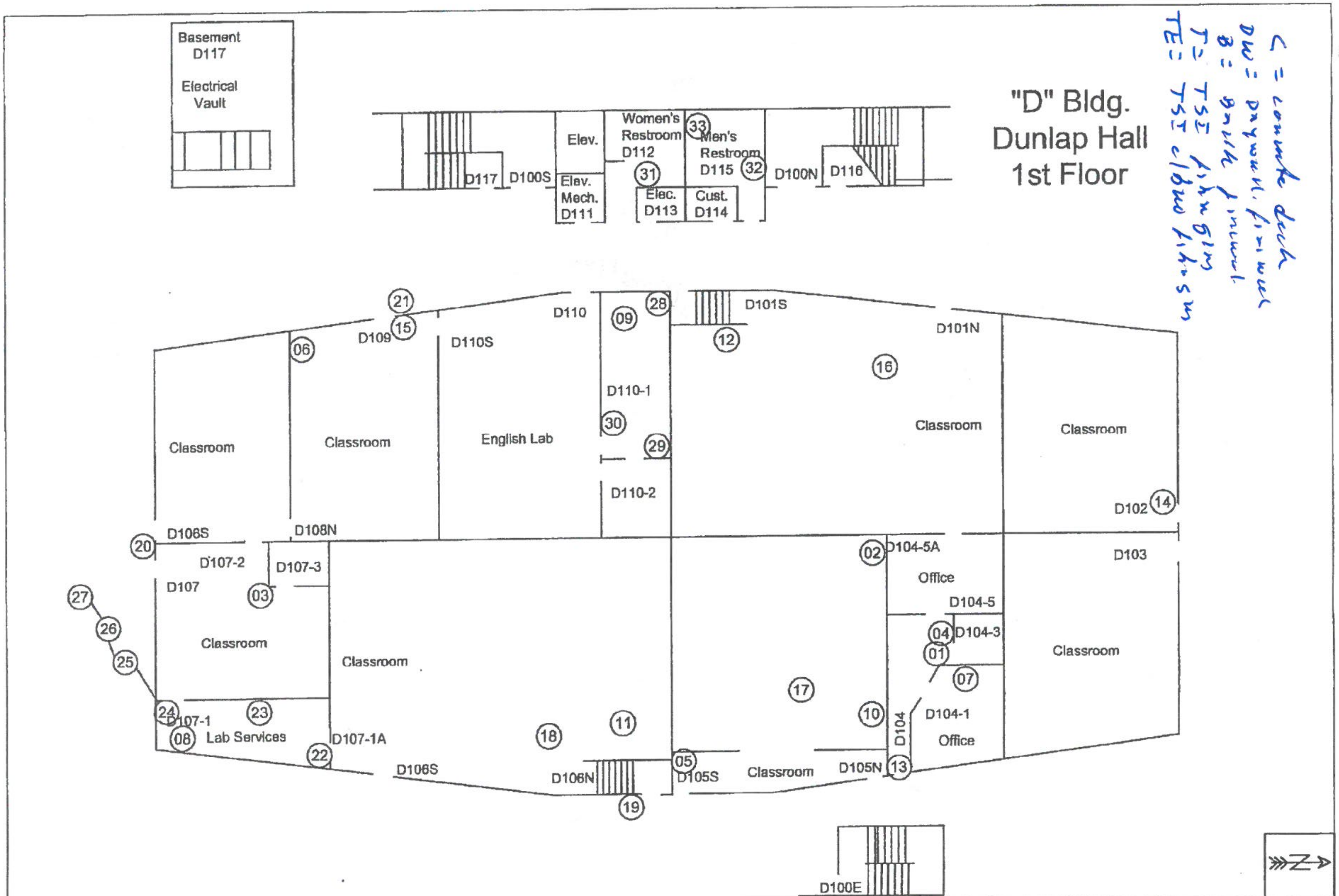
ASBESTOS SAMPLE LOCATION MAP, ALTA ENV. 3/20/15

Building C - 2nd Floor



Client:	Rancho Santiago Community College District	**Project#:** 06-Z0307-0050.C	**Info:** Suspect Asbestos Sample Locations - 2nd Floor
Executive Environmental SERVICES CORPORATION QUALITY SERVICE WITH INTEGRITY			**Site:** Santa Ana College - Building C **Address:** 1530 West 17th Street Santa Ana, California 92706

ASBESTOS SAMPLE LOCATION MAP, ALTA ENV. 3/20/15



Client:	Rancho Santiago Community College District	Project#: 06-Z0307-0050.D	Info: Suspect Asbestos Sample Locations - 1st Floor

Executive Environmental SERVICES CORPORATION
QUALITY SERVICE WITH INTEGRITY
Los Angeles ◊ Oakland
Great Britain

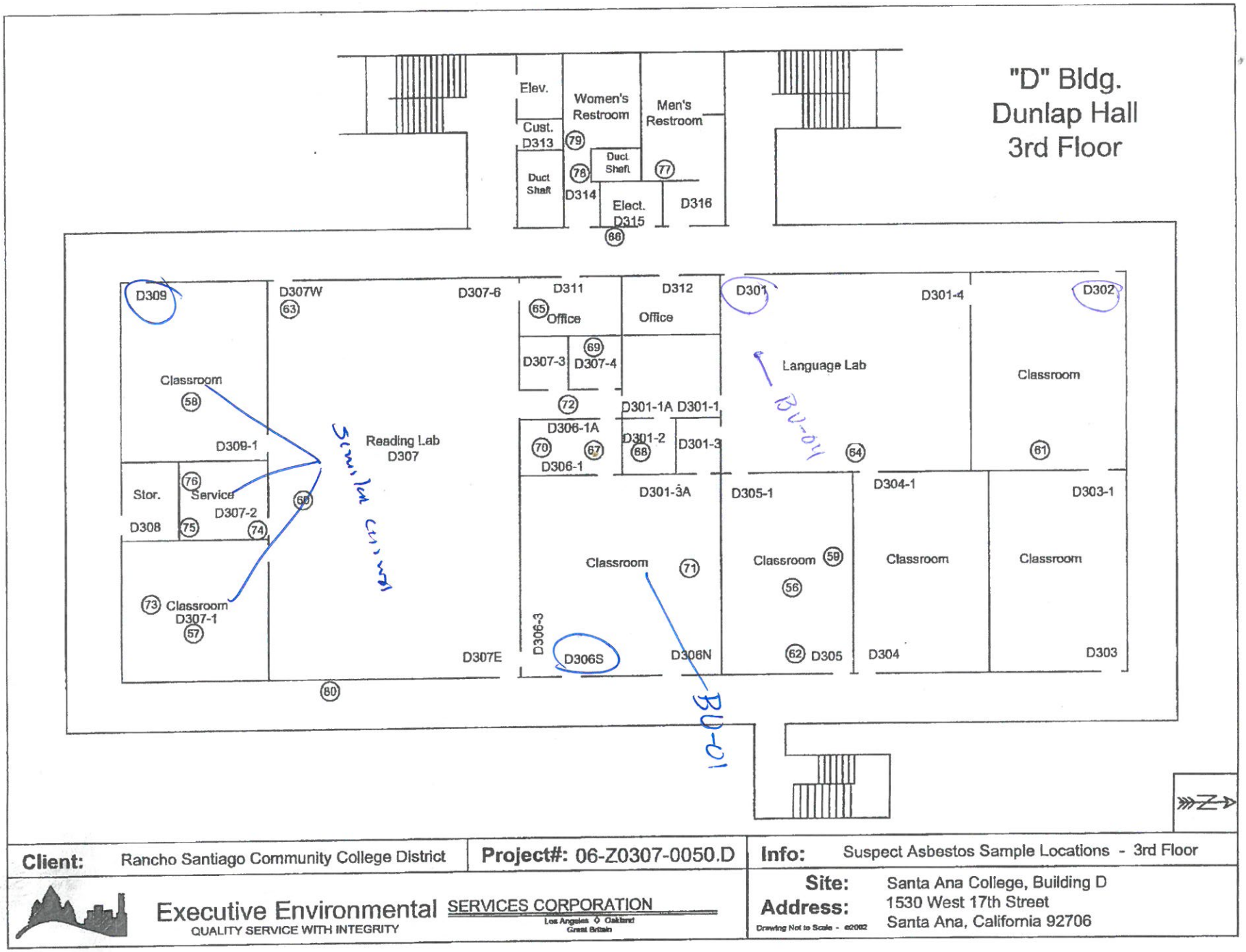
Site:	Santa Ana College, Building D
Address:	1530 West 17th Street Santa Ana, California 92706

Drawing Not to Scale - ©2002

ASBESTOS SAMPLE LOCATION MAP, ALTA ENV. 3/20/15

Client: Rancho Santiago Community College District	**Project#:** 06-Z0307-0050.D	**Info:** Suspect Asbestos Sample Locations - 2nd Floor	
Executive Environmental SERVICES CORPORATION QUALITY SERVICE WITH INTEGRITY Los Angeles ◊ Oakland Great Britain		**Site:** Santa Ana College, Building D **Address:** 1530 West 17th Street Santa Ana, California 92706	Drawing Not to Scale - ©2002

ASBESTOS SAMPLE LOCATION MAP, ALTA ENV. 3/20/15



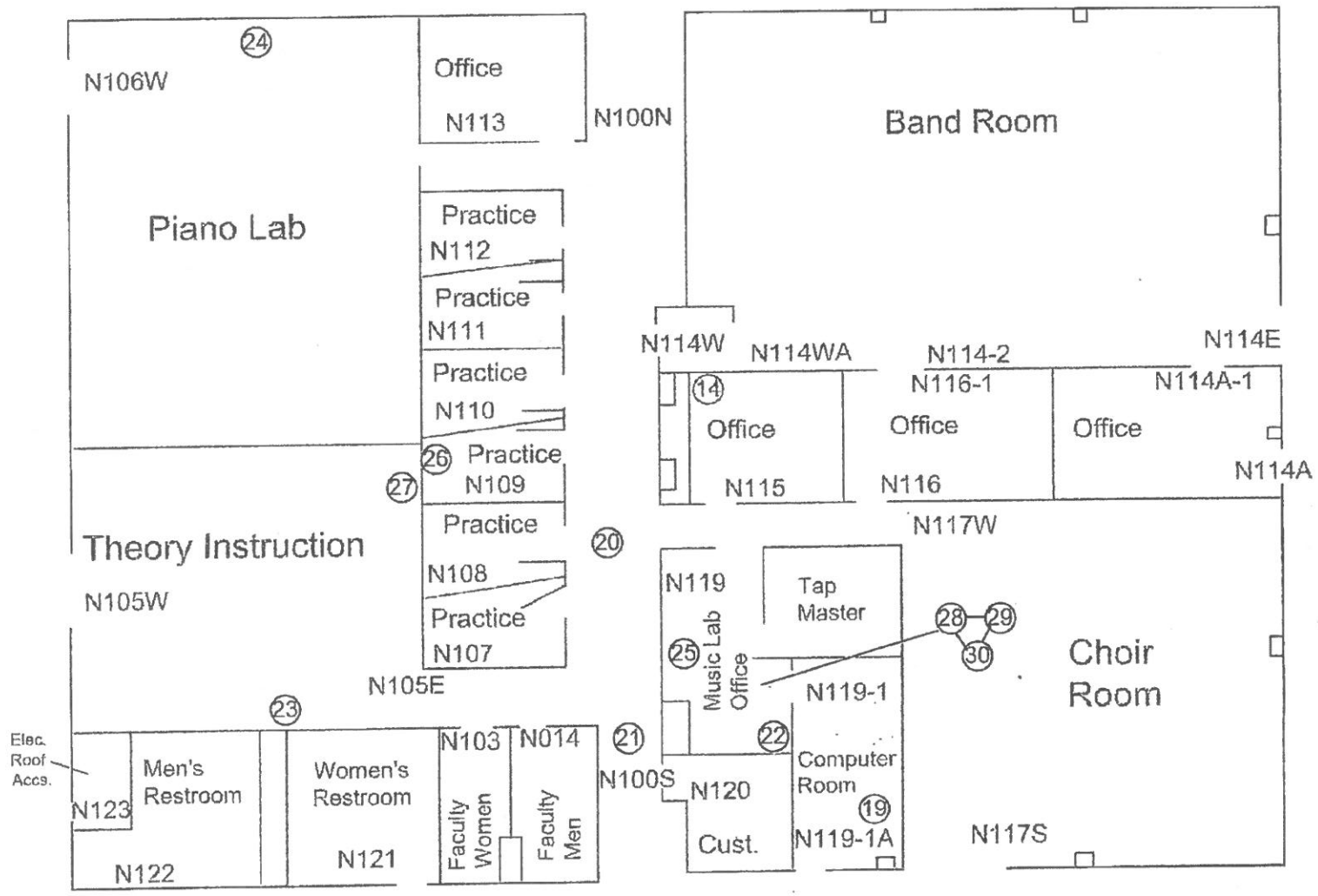
Client:	Rancho Santiago Community College District	**Project#:** 06-Z0307-0050.D	**Info:** Suspect Asbestos Sample Locations - 3rd Floor
Executive Environmental SERVICES CORPORATION QUALITY SERVICE WITH INTEGRITY Los Angeles ◇ Oakland Great Britain			**Site:** Santa Ana College, Building D **Address:** 1530 West 17th Street Santa Ana, California 92706 Drawing Not to Scale - ©2002

ASBESTOS SAMPLE LOCATION MAP, ALTA ENV. 3/20/15

Client: Rancho Santiago Community College District	**Project#:** 06-Z0307-0050.D	**Info:** Suspect Asbestos Sample Locations - 4th Floor
Executive Environmental SERVICES CORPORATION QUALITY SERVICE WITH INTEGRITY Los Angeles ◊ Oakland Great Britain		**Site:** Santa Ana College, Building D **Address:** 1530 West 17th Street Santa Ana, California 92706 Drawing Not to Scale - ©2002

ASBESTOS SAMPLE LOCATION MAP, ALTA ENV. 3/20/15

Building N - Attic Area



Client: Rancho Santiago Community College District	**Project#:** 06-Z0307-0050.N	**Info:** Suspect Asbestos Sample Locations - Attic Area
Executive Environmental SERVICES CORPORATION QUALITY SERVICE WITH INTEGRITY Los Angeles ◊ Oakland Great Britain		**Site:** Santa Ana College - Building N **Address:** 1530 West 17th Street Santa Ana, California 92706 Drawing Not to Scale - ©2002

ALTA ENVIRONMENTAL

Sheet 1 of 1

Project Name Santa Ana College.

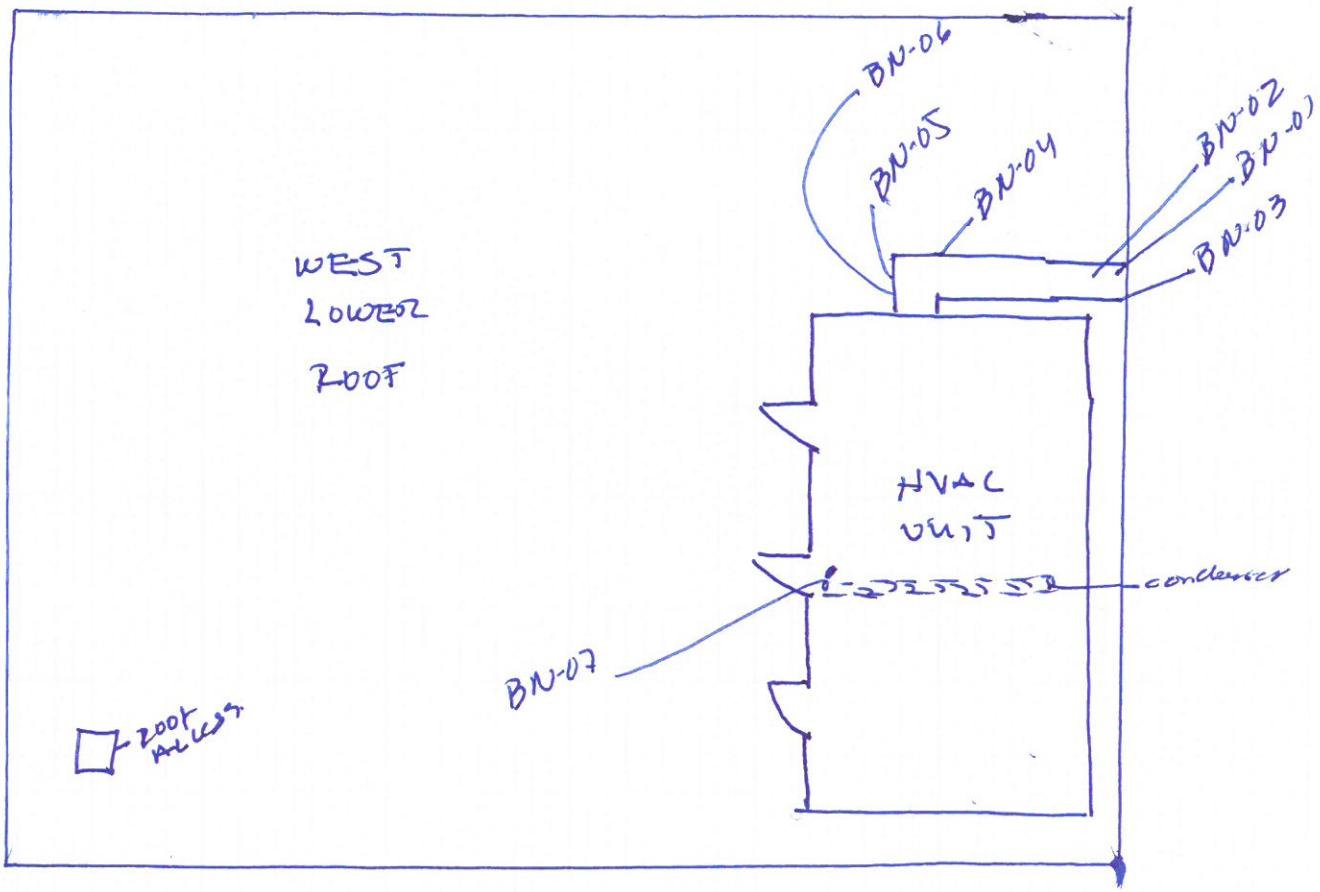
Project No./Task No. _____

Calculated by _____ Date _____

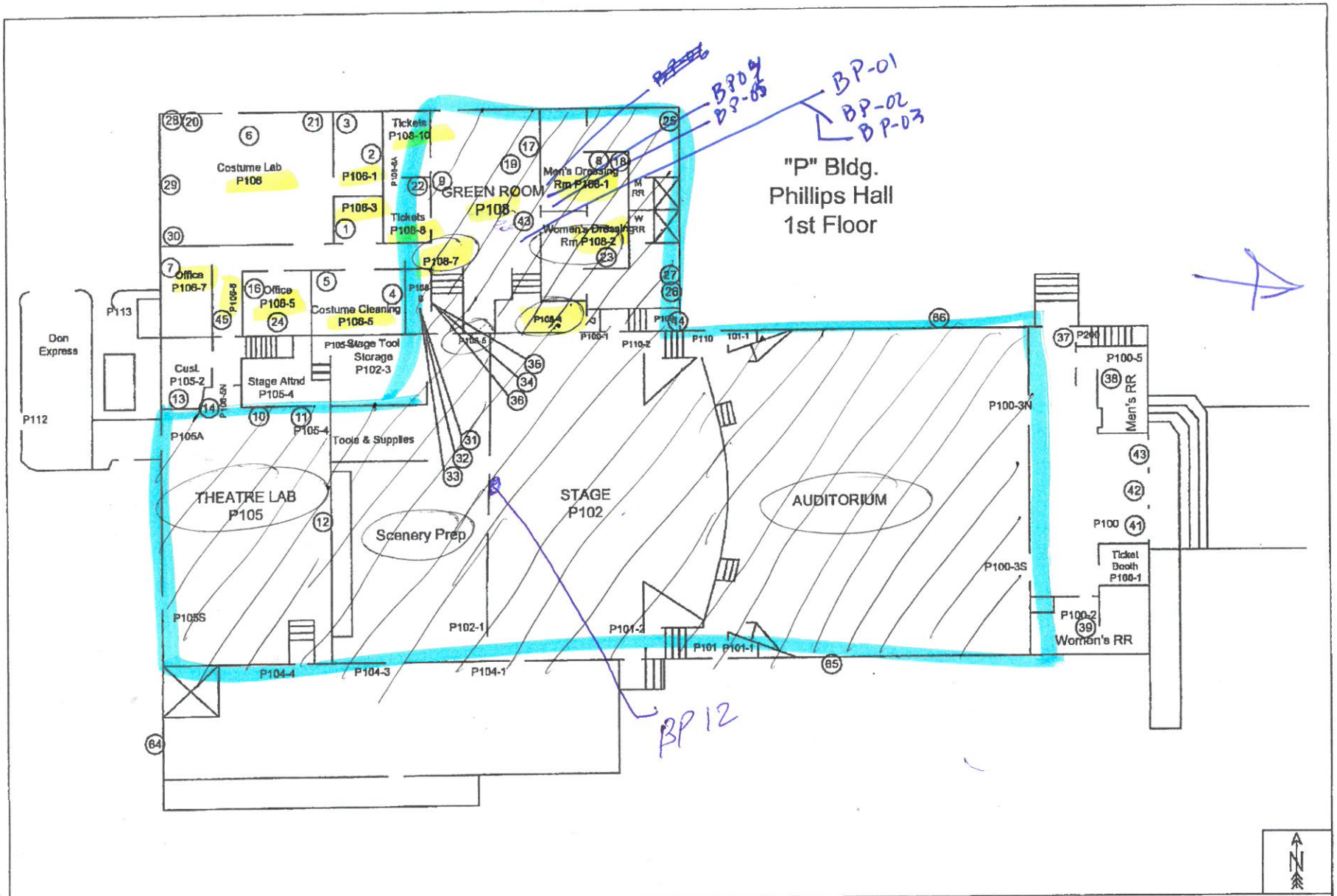
Scale Bldg N.

Checked by _____ Date 3-20-15

N

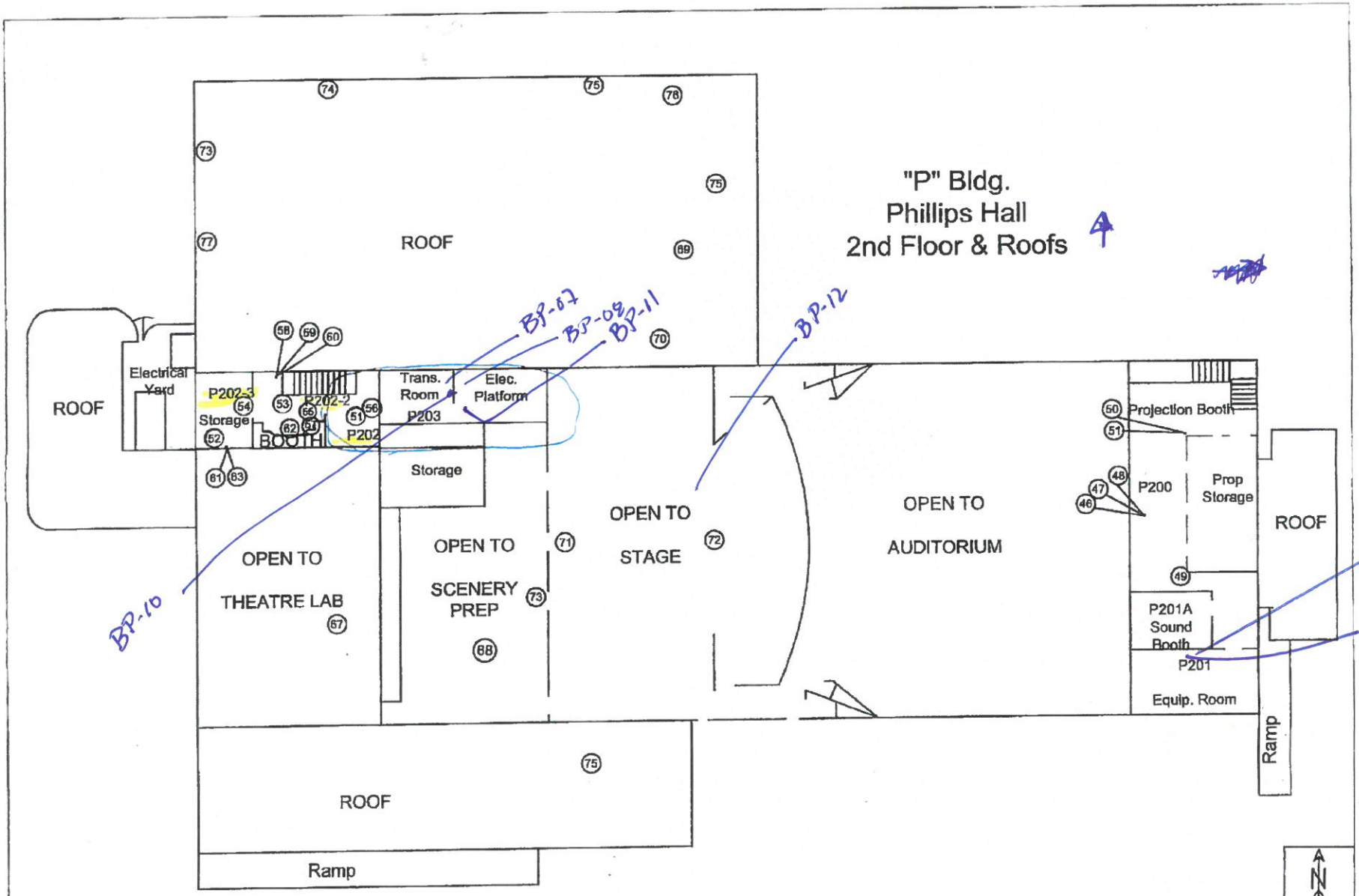


ASBESTOS SAMPLE LOCATION MAP, ALTA ENV. 3/20/15



Client:	Rancho Santiago Community College District	**Project#:** 06-Z0307-0050.P	**Info:** Suspect Asbestos Sample Locations - 1st Floor
Executive Environmental SERVICES CORPORATION QUALITY SERVICE WITH INTEGRITY Los Angeles ◊ Oakland Great Britain			**Site:** Santa Ana College, Building P **Address:** 1530 West 17th Street Santa Ana, California 92706 Drawing Not to Scale - ©2002

ASBESTOS SAMPLE LOCATION MAP, ALTA ENV. 3/20/15



Client:	Rancho Santiago Community College District	**Project#:** 06-Z0307-0050.P	**Info:** Suspect Asbestos Sample Locations - 2nd Floor & Roofs
Executive Environmental SERVICES CORPORATION QUALITY SERVICE WITH INTEGRITY Los Angeles ◊ Oakland Great Britain			**Site:** Santa Ana College, Building P **Address:** 1530 West 17th Street Santa Ana, California 92706 Drawing Not to Scale - ©2002

Appendix D

XRF Lead Inspection, Instrument Calibration, and DHS 8552

DETAILED REPORT OF LEAD PAINT INSPECTION FOR:

Location: Santa Ana College, Buildings C, D, N and P
Inspector: Cesar Ruvalcaba

Inspection Date: 03/20/15
Report Date: 4/1/2015
Abatement Level: 1.0
Report No. S#01184 - 03/20/15 15:20
Total Readings: 62
Job Started: 03/20/15 15:20
Job Finished: 03/20/15 19:07

Read No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Paint Color	Lead (mg/cm²)	Mode
Exterior Room 016 N-Roof									
046	A	AC Unit	Ctr		I	Metal	White	0.0	QM
047	A	AC Duct	Ctr		I	Metal	White	0.3	QM
048	B	AC Unit	Ctr		I	Metal	White	0.0	QM
Interior Room 001 D-101									
005	C	Wall	L Ctr		I	Drywall	White	-0.1	QM
004	D	Wall	L Ctr		I	Brick	White	0.0	QM
Interior Room 002 D-110-1									
006	A	Wall	L Ctr		I	Brick	White	-0.3	QM
007	C	Wall	L Ctr		I	Drywall	White	0.0	QM
Interior Room 003 D-122									
008	D	Wall	L Ctr		I	Brick	White	-0.1	QM
Interior Room 004 D-108									
010	A	Wall	L Ctr		I	Brick	White	-0.2	QM
009	D	Wall	L Ctr		I	Brick	White	-0.1	QM
Interior Room 005 D-207									
012	A	Wall	L Ctr		I	Drywall	White	-0.3	QM
011	B	Wall	L Ctr		I	Brick	White	-0.1	QM
Interior Room 006 D-211									
014	B	Wall	L Ctr		I	Brick	White	-0.2	QM
013	C	Wall	L Ctr		I	Brick	White	0.0	QM
Interior Room 007 D-201									
015	A	Wall	L Ctr		I	Drywall	White	-0.1	QM
016	D	Wall	U Ctr		I	Brick	White	-0.2	QM
Interior Room 008 D-203-1									
017	A	Wall	L Ctr		I	Drywall	White	-0.1	QM
018	D	Wall	U Ctr		I	Brick	White	-0.2	QM
Interior Room 009 D-306									
019	A	Wall	L Ctr		I	Brick	White	-0.2	QM
020	B	Wall	L Ctr		I	Drywall	White	-0.2	QM
Interior Room 010 D-301									
022	C	Wall	L Ctr		I	Drywall	White	0.0	QM
021	D	Wall	L Ctr		I	Brick	White	-0.2	QM

Interior Room 011 D-304									
024	B	Wall	L	Ctr	I	Brick	White	-0.3	QM
023	C	Wall	L	Ctr	I	Drywall	White	-0.1	QM
Interior Room 012 D-419									
025	A	Wall	L	Ctr	I	Drywall	White	-0.2	QM
026	B	Wall	L	Ctr	I	Brick	White	-0.3	QM
Interior Room 013 D-401S									
028	C	Wall	L	Ctr	I	Drywall	White	0.2	QM
027	D	Wall	L	Ctr	I	Brick	White	0.0	QM
Interior Room 014 C-114									
029	A	Wall	L	Ctr	I	Drywall	White	0.0	QM
030	B	Wall	L	Ctr	I	Plaster	White	0.0	QM
031	C	Wall	L	Ctr	I	Plaster	White	0.3	QM
Interior Room 015 C-211									
032	A	Wall	L	Ctr	I	Brick	White	0.0	QM
033	C	Wall	L	Ctr	I	Plaster	White	-0.1	QM
Interior Room 016 N-Hall									
034	A	Wall	L	Ctr	I	Drywall	White	0.1	QM
035	C	Wall	L	Ctr	I	Drywall	White	0.0	QM
Interior Room 017 N-MRR									
036	B	Wall	L	Ctr	I	Brick	White	-0.2	QM
040	B	Wall	L	Ctr	I	Ceramic	White	>9.9	QM
037	D	Wall	U	Ctr	I	Drywall	White	-0.1	QM
039	D	Baseboard		Ctr	I	Ceramic	White	5.8	QM
038	D	Stall		Ctr	I	Metal	Blue	-0.3	QM
Interior Room 018 N-110									
042	B	Wall	L	Ctr	I	Drywall	White	-0.1	QM
041	C	Wall	L	Ctr	I	Drywall	White	-0.3	QM
Interior Room 019 P-108									
049	A	Wall	L	Ctr	I	Drywall	White	-0.2	QM
043	B	Wall	L	Ctr	I	Drywall	White	-0.2	QM
044	B	Wall	L	Ctr	I	Ceramic	Beige	>9.9	QM
050	B	Wall	L	Rgt	I	Drywall	White	-0.1	QM
045	B	Baseboard		Ctr	I	Ceramic	Beige	>9.9	QM
051	C	Wall	L	Ctr	I	Drywall	White	0.2	QM
Interior Room 020 P-108-1									
052	A	Wall	L	Ctr	I	Drywall	White	0.1	QM
053	B	Wall	L	Ctr	I	Drywall	White	0.0	QM
Interior Room 021 P-108-1 MRR									
054	B	Wall	L	Ctr	I	Ceramic	Beige	>9.9	QM
Interior Room 022 P106-4									
055	A	Wall	L	Ctr	I	Drywall	White	-0.1	QM
056	C	Wall	L	Ctr	I	Drywall	White	-0.1	QM
Interior Room 023 P-106-2									
057	A	Wall	L	Ctr	I	Drywall	White	-0.4	QM
059	A	Ceiling			I	Plaster	Beige	0.1	QM
058	B	Wall	L	Ctr	I	Drywall	White	-0.1	QM

Calibration Readings

001	1.1	TC
002	1.1	TC
003	1.1	TC
060	1.2	TC
061	1.0	TC
062	1.0	TC

---- End of Readings ----

Calibration Check Test Results

Address/Unit No. Buidligns C, D, N and P, Santa Ana College

Device LPA-1
Date 3/20/2015 XRF Serial No. 1184
Contractor Alta Environmental
Inspector Name Cesar Ruvalcaba Signature

NIST SRM Used 1.04 mg/cm2
Calibration Check Tolerance Used 0.3 mg/cm2

First Calibration Check

NIST SRM			First Average	Difference Between first Average and NIST SRM*
First Reading	Second reading	Third reading		
1.1	1.1	1.1	1.10	0.06

Second Calibration Check

NIST SRM			First Average	Difference Between first Average and NIST SRM*
First Reading	Second reading	Third reading		
1.2	1	1	1.07	0.02

Third Calibration Check (if required)

NIST SRM			First Average	Difference Between first Average and NIST SRM*
First Reading	Second reading	Third reading		

Fourth Calibration Check ***(not required)***

NIST SRM			First Average	Difference Between first Average and NIST SRM*
First Reading	Second reading	Third reading		

* if the difference of the Calibration Check Average from the NIST SRM film value is greater than the specified Calibration Check Tolerance for this device, consult the manufacturer's recommendations to bring the instrument back into control. Retest all testing combinations tested since the last successful Calibration Check test.

LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead Hazard Evaluation 3/20/15

Section 2 — Type of Lead Hazard Evaluation (Check one box only)

☑ Lead Inspection ☐ Risk assessment ☐ Clearance Inspection ☐ Other (specify) _____

Section 3 — Structure Where Lead Hazard Evaluation Was Conducted

Address [number, street, apartment (if applicable)]	City	County	Zip Code
1530 West 17th Street, Buildigns C, D, N, P	Santa Ana	Orange	92706

Construction date (year) of structure	Type of structure	Children living in structure?
	☐ Multi-unit building ☐ School or daycare ☐ Single family dwelling ☑ Other Community College	☐ Yes ☑ No ☐ Don't Know

Section 4 — Owner of Structure (if business/agency, list contact person)

Name	Telephone number
Rancho Santiago Community College District	714-555-1234

Address [number, street, apartment (if applicable)]	City	State	Zip Code
2323 North Broadway, #102	Santa Ana	California	92706

Section 5 — Results of Lead Hazard Evaluation (check all that apply)

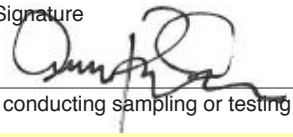
☐ No lead-based paint detected ☑ Intact lead-based paint detected ☐ Deteriorated lead-based paint detected

☐ No lead hazards detected ☐ Lead-contaminated dust found ☐ Lead-contaminated soil found ☐ Other _____

Section 6 — Individual Conducting Lead Hazard Evaluation

Name	Telephone number
Cesar Ruvalcaba	562-495-5777

Address [number, street, apartment (if applicable)]	City	State	Zip Code
3777 Long Beach Blvd., Annex	Long Beach	CA	90807

CDPH certification number	Signature	Date
I6855		3/20/15

Name and CDPH certification number of any other individuals conducting sampling or testing (if applicable)

Section 7 — Attachments

A. A foundation diagram or sketch of the structure indicating the specifc locations of each lead hazard or presence of lead-based paint;
B. Each testing method, device, and sampling procedure used;
C. All data collected, including quality control data, laboratory results, including laboratory name, address, and phone number.

First copy and attachments retained by inspector

Second copy and attachments retained by owner

Third copy only (no attachments) mailed or faxed to:

California Department of Public Health
Childhood Lead Poisoning Prevention Branch Reports
850 Marina Bay Parkway, Building P, Third Floor
Richmond, CA 94804-6403
Fax: (510) 620-5656

Appendix E

Alta Environmental Employee Certifications

State of California
Division of Occupational Safety and Health

Certified Asbestos Consultant

Victor M Sanchez

Name

Certification No. 08-4470

Expires on 01/15/15

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.

State of California Department of Public Health

Lead-Related Construction Certificate

Certificate Type	Expiration Date
Inspector/Assessor	11/09/2014
Supervisor	11/09/2014
Project Monitor	11/09/2014

12808

Victor M. Sanchez

ID #: 10148

STATE OF CALIFORNIA
Edmund G. Brown, Jr. *Governor*

DEPARTMENT OF INDUSTRIAL RELATIONS
Division of Occupational Safety and Health
Asbestos Unit
2424 Arden Way, Suite 495
Sacramento, CA 95825-2417
(916) 574-2993 Office (916) 483-0572 Fax
http://www.dir.ca.gov/dirdatabases.html actu@dir.ca.gov

508111799C 113 115

September 19, 2014

Alta Environmental
Cesar Ruvalcaba
3777 Long Beach Blvd., Annex
Long Beach ' CA 90807

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. **To maintain your certification, you must abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address, fax number or email; of any changes in your contact/mailing information within 15 days of the change.

Sincerely,

Jeff Ferrell
Senior Safety Engineer

Attachment: Certification Card

cc: File

Renewal – Card Attached (Revised 10/24/2012)

State of California Department of Public Health

Lead-Related Construction Certificate

Certificate Type	Expiration Date
Inspector/Assessor	01/16/2016
Project Monitor	01/16/2016

29153

Cesar A. Ruvalcaba

ID #: 6855

Appendix F

Summaries of Asbestos Reports by Executive Environmental

SAMPLE ANALYSIS DATA

Santa Ana College, Building C[1]
1530 West 17th Street
Santa Ana, California 92706
February 15, 2006

Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
HMN-01	Drywall	2nd floor: Rooms 201, 202, 207, 207-1A, 207-2, 207-3, 207-4, and 207-5	3,000 SF	0602150050CWM-01	2nd floor, Room 207-1A	NAD
				0602150050CWM-02	2nd floor, Room 207-2	NAD
				0602150050CWM-03	2nd floor, Room 207-3	NAD
				0602150050CWM-04	2nd floor, Room 207-4	NAD
HMN-02	Drywall joint compound	2nd floor: Rooms 201, 202, 207, 207-1A, 207-2, 207-3, 207-4, and 207-5	3,000 SF	0602150050CWM-05	2nd floor, Room 207-1A	NAD
				0602150050CWM-06	2nd floor, Room 207-2	NAD
				0602150050CWM-07	2nd floor, Room 207-3	NAD
				0602150050CWM-08	2nd floor, Room 207-4	NAD
HMN-03	12"x12" tan vinyl floor tile and associated mastic	1st floor: Corridor and Room 107; 2nd floor: Hallway	1,200 SF	0602150050CWM-09	2nd floor, hallway (north)	Tile = <1% Chrysotile
						Mastic = 10 % Chrysotile
				0602150050CWM-10	2nd floor, hallway (south)	Tile = <1% Chrysotile
						Mastic = 10 % Chrysotile
				0602150050CWM-11	1st floor, corridor	Tile = <1% Chrysotile
						Mastic = 10 % Chrysotile

Note1: This table must be used in conjunction with the entire report.

[1] 1) No window putty located in building. 2) No carpet mastic located in carpeted areas (self-stick). 3) No crawlspace or attic located in building. 4) Terrace flooring located in foyer and exterior entryway. 5) TSI fiberglass duct wrap roll located throughout 1st and 2nd floor plenums. 6) Ceramic flooring located in restrooms (4). 7) Bare water pipes located on roof, above water heater room. 8) TSI visible fiberglass pipe wrap elbows located throughout 1st floor plenums and ceiling space. 9) Water pipes on the 2nd floor plenums or concealed ceiling space could not be located.

SAMPLE ANALYSIS DATA
Santa Ana College, Building C
1530 West 17th Street
Santa Ana, California 92706
February 15, 2006

Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
HMN-04	6" brown baseboard and associated mastic	Throughout 2nd floor; and throughout 1st floor offices	2,000 SF	0602150050CWM-12	2nd floor, Room 210	BB & Mastic = NAD
				0602150050CWM-13	2nd floor, hallway	BB & Mastic = NAD
				0602150050CWM-14	1st floor, corridor	BB & Mastic = NAD
HMN-05	Tan sheet flooring and associated mastic	2nd floor: Hallway, Rooms 201, 201-2, 204, 205, 206, 207, 207-1, 207-2, 207-3, 207-4, 207-5, 208, 210, 212, and 215; 1st floor: Rooms 102, 102-1, and 104	3,500 SF	0602150050CWM-15	2nd floor, Room 210	SF & Mastic = NAD
				0602150050CWM-16	2nd floor, hallway	SF & Mastic = NAD
				0602150050CWM-17	1st floor, Room 104, northeast	Sheet flooring = NAD
						Mastic = 5% Chrysotile
HMN-06	Gray sheet flooring and associated mastic	2nd floor: Rooms 207 and 208	600 SF	0602150050CWM-18	2nd floor, Room 207	SF & Mastic = NAD
				0602150050CWM-19	2nd floor, Room 207	SF & Mastic = NAD
				0602150050CWM-20	2nd floor, Room 207	Sheet flooring = NAD
						Mastic = <1% Chrysotile
HMN-07	2'x2' ceiling panel, acoustic	2nd floor: Corridor, Hallway, Rooms 209, 212, 215, 216, and 217; 1st floor: Corridor, Rooms 102, 102-1, 104, and 107	3,000 SF	0602150050CWM-21	2nd floor, corridor	NAD
				0602150050CWM-22	2nd floor, hallway	NAD
				0602150050CWM-23	1st floor, corridor	NAD

Note1: This table must be used in conjunction with the entire report.

SAMPLE ANALYSIS DATA

Santa Ana College, Building C
1530 West 17th Street
Santa Ana, California 92706
February 15, 2006

Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
HMN-08	2'x2' ceiling panel, fissure	2nd floor: 201, 201-1, 202, and 206	500 SF	0602150050CWM-24	2nd floor, Room 206	NAD
				0602150050CWM-25	2nd floor, Room 202	NAD
				0602150050CWM-26	2nd floor, Room 201	NAD
HMN-09	2'x4' ceiling panel, fissure	2nd floor: 201, 202, 207-4, 213, and 214	1,000 SF	0602150050CWM-27	2nd floor, Room 202	NAD
				0602150050CWM-28	2nd floor, Room 201	NAD
				0602150050CWM-29	2nd floor, Room 201	NAD
HMN-10	Plaster (interior)	1st floor: Throughout; 2nd floor: Throughout	12,000 SF	0602150050CWM-30	1st floor, Room 103	NAD
				0602150050CWM-31	1st floor, Room 101-3	NAD
				0602150050CWM-32	1st floor, Room 101-3	NAD
				0602150050CWM-33	1st floor, Room 109-1	NAD
				0602150050CWM-34	1st floor, Room 109	NAD
				0602150050CWM-35	2nd floor, Room 210	NAD
				0602150050CWM-36	2nd floor, Room 208	NAD
HMN-11	Brown wall mastic	1st floor: Room 104 Storage Closet	100 SF	0602150050CWM-37	1st floor, Room 104 Storage Closet	NAD
				0602150050CWM-38	1st floor, Room 104 Storage Closet	NAD
				0602150050CWM-39	1st floor, Room 104 Storage Closet	NAD

Note1: This table must be used in conjunction with the entire report.

SAMPLE ANALYSIS DATA

Santa Ana College, Building C
1530 West 17th Street
Santa Ana, California 92706
February 15, 2006

Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
HMN-12	Roll roofing core	Roof	12,000 SF	0602150050CWM-40	Roof	NAD
				0602150050CWM-41	Roof	NAD
				0602150050CWM-42	Roof	NAD
HMN-13	Roof penetration mastic	Roof	125 SF	0602150050CWM-43	Roof	5% Chrysotile
				0602150050CWM-44	Roof	5% Chrysotile
				0602150050CWM-45	Roof	NAD
HMN-14	Fireproofing (overspray)	1st floor: Throughout plenum; 2nd floor: Throughout plenum	2,000 SF	0602150050CWM-46	2nd floor, corridor (plenum)	NAD
				0602150050CWM-47	2nd floor, Room 201-1 (plenum)	NAD
				0602150050CWM-48	2nd floor, Room 217 (plenum)	NAD
				0602150050CWM-49	1st floor, corridor (plenum)	NAD
				0602150050CWM-50	1st floor, corridor (plenum)	NAD

Note1: This table must be used in conjunction with the entire report.

SAMPLE ANALYSIS DATA
Santa Ana College, Building C
1530 West 17th Street
Santa Ana, California 92706
February 15, 2006

Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
HMN-15	12"x12" gray vinyl floor tile and associated mastic	1st floor: Room 113 (storage)	200 SF	0602150050CWM-51	1st floor, Room 113 (storage)	Tile = NAD Mastic = <1% Chrysotile
				0602150050CWM-52	1st floor, Room 113 (storage)	Tile = NAD Mastic = 2% Chrysotile
				0602150050CWM-53	1st floor, Room 113 (storage)	Tile = NAD Mastic = 2% Chrysotile
HMN-16	Transite panels	1st floor: Room 106, vent hood	150 SF	Not sampled	Not sampled	Assumed positive

Note1: This table must be used in conjunction with the entire report.

This document is not to be used for contract bidding and is intended to be used to identify asbestos containing material and their locations only.

SAMPLE ANALYSIS DATA

Santa Ana College, Building D
1530 West 17th Street
Santa Ana, California 92706
February 19, 20, 21, and 22, 2006

Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
1st Floor[1]						
HMN-01	Drywall/drywall taping mud	Throughout 1st floor, except in Restrooms	10,000 SF	060219.0050D.WM-01	Room 104, north side, off wall	<1% Chrysotile
				060219.0050D.WM-02	Room 105, north wall, west side	<1% Chrysotile
				060219.0050D.WM-03	Room 107, north wall	<1% Chrysotile
HMN-02	4" vinyl baseboard and associated mastic	Throughout, except in Restrooms	1,000 LF	060219.0050D.WM-04	Room 104, north wall	BB & Mastic = NAD
				060219.0050D.WM-05	Room 105, south wall	BB & Mastic = NAD
				060219.0050D.WM-06	Room 109, south wall	BB & Mastic = NAD
HMN-03	2'x4' ceiling tile, fissure	Rooms 104, 104-1, 104-3, 104-5, 107-1, 107-2, 109, and 110-1	2,000 SF	060219.0050D.WM-07	Room 104-1, southwest side of ceiling	NAD
				060219.0050D.WM-08	Room 107-1, south	NAD
				060219.0050D.WM-09	Room 110-1, east	NAD

Note: This table must be used in conjunction with the entire report.

[1] 1) Fiberglass duct wrap/fiberglass roll located in 1st floor plenums. 2) TSI fiberglass pipe wrap (elbows have been abated) is located in 1st floor plenums. 3) Interior/exterior concrete walls and ceilings are located throughout the perimeter walls, and ceilings above plenums. 4) No window putty located on the 1st floor windows. 5) No crawlspace, building slab. 6) All ceiling tile and ceiling panels do not contain mastic.

SAMPLE ANALYSIS DATA

Santa Ana College, Building D
1530 West 17th Street
Santa Ana, California 92706
February 19, 20, 21, and 22, 2006

Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
1st Floor (continued)						
HMN-04	1'x1' ceiling tile, fissure (spline)	Throughout classrooms	2,000 SF	060219.0050D.WM-10	Room 105, north	NAD
				060219.0050D.WM-11	Room 106, north	NAD
				060219.0050D.WM-12	Room 101, south	NAD
HMN-05	Carpet mastic	Throughout classrooms	8,500 SF	060219.0050D.WM-13	Room 104, east side	NAD
				060219.0050D.WM-14	Room 102, north	NAD
				060219.0050D.WM-15	Room 109, west	NAD
HMN-06	2'x5' ceiling tile, fissure	Throughout classrooms	8,000 SF	060219.0050D.WM-16	Room 101, north	NAD
				060219.0050D.WM-17	Room 105, center	NAD
				060219.0050D.WM-18	Room 106, north	NAD
HMN-07	Exterior stucco	At exterior doors	1,000 SF	060219.0050D.WM-19	East side, exterior	NAD
				060219.0050D.WM-20	South side, exterior	NAD
				060219.0050D.WM-21	West side, exterior	NAD
HMN-08	12"x12" gray vinyl tile and associated mastic	Room 107-1	300 SF	060219.0050D.WM-22	Room 107-1, north	FT & Mastic = NAD
				060219.0050D.WM-23	Room 107-1, west	FT & Mastic = NAD
				060219.0050D.WM-24	Room 107-1, south	FT & Mastic = NAD
HMN-09	TSI pipe wrap (8" diameter)	Room 107-1	50 LF	060219.0050D.WM-25	Room 107-1, south side	NAD
				060219.0050D.WM-26	Room 107-1, south side	NAD
				060219.0050D.WM-27	Room 107-1, south side	NAD

Note: This table must be used in conjunction with the entire report.

SAMPLE ANALYSIS DATA

Santa Ana College, Building D
1530 West 17th Street
Santa Ana, California 92706
February 19, 20, 21, and 22, 2006

Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
1st Floor (continued)						
HMN-10	12"x12" orange vinyl tile and associated mastic	Room 110-1	300 SF	060219.0050D.WM-28	Room 110-1, north	FT & Mastic = NAD
				060219.0050D.WM-29	Room 110-1, east	FT & Mastic = NAD
				060219.0050D.WM-30	Room 110-1, southeast	FT & Mastic = NAD
HMN-11	Plaster wall/ceilings	Rooms 112, 115, and 116	1,000 SF	060219.0050D.WM-31	Room 112, east, at socket	NAD
				060219.0050D.WM-32	Room 115, east, at socket	NAD
				060219.0050D.WM-33	Room 115, east, ceiling	NAD
2nd Floor[2]						
HMN-12	2'x5' ceiling panel, fissure (suspended)	Rooms 201 through 214	6,000 SF	060220.0050D.WM-34	Room 208, center	NAD
				060220.0050D.WM-35	Room 213, center	NAD
				060220.0050D.WM-36	Room 202, center	NAD
HMN-13	1'x1' ceiling tile, fissure (suspended)	Rooms 201 through 214	2,500 SF	060220.0050D.WM-37	Room 208, south	NAD
				060220.0050D.WM-38	Room 212, north	NAD
				060220.0050D.WM-39	Room 214, north	NAD
HMN-14	4" brown baseboard and associated mastic	Rooms 201 through 214	2,500 LF	060220.0050D.WM-40	Room 208, northwest	BB & Mastic = NAD
				060220.0050D.WM-41	Room 212, southwest	BB & Mastic = NAD
				060220.0050D.WM-42	Room 202, south	BB & Mastic = NAD

Note: This table must be used in conjunction with the entire report.

[2] 1) No carpet mastic located on 2nd floor carpeted areas (self-stick carpets). 2) Interior/exterior perimeter walls/ceilings and plenums are concrete. 3) TSI fiberglass duct wrap located throughout plenums. 4) Men's and Women's Restrooms consist of ceramic flooring, baseboard, and wall tile. 5) TSI fiberglass roll located throughout drywall cavities in Classrooms 201 to 214. 6) No window putty located on window frames. 7) All ceiling tile and ceiling panels do not contain mastic.

SAMPLE ANALYSIS DATA
Santa Ana College, Building D
1530 West 17th Street
Santa Ana, California 92706
February 19, 20, 21, and 22, 2006

Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
2nd Floor (continued)						
HMN-15	Drywall/drywall joint compound	Rooms 201 through 214	8,000 SF	060220.0050D.WM-43	Room 208, north	<1% Chrysotile
				060220.0050D.WM-44	Room 205, south	<1% Chrysotile
				060220.0050D.WM-45	Room 201, north	<1% Chrysotile
HMN-16	2'x2' ceiling panel, fissure (suspended)	Rooms 204 and 211	300 SF	060220.0050D.WM-46	Room 211, north	NAD
				060220.0050D.WM-47	Room 204, southeast	NAD
				060220.0050D.WM-48	Room 204, southwest	NAD
HMN-17	12"x12" orange vinyl tile and associated mastic	Room 203	300 SF	060220.0050D.WM-49	Room 203, west	FT & Mastic = NAD
				060220.0050D.WM-50	Room 203, center	FT & Mastic = NAD
				060220.0050D.WM-51	Room 203, east	FT & Mastic = NAD
HMN-18	Exterior stucco	Exterior, wall sections	1,000 SF	060220.0050D.WM-52	Exterior, west	NAD
HMN-19	Plaster, interior	Men's Restroom and Women's Restroom	1,000 SF	060220.0050D.WM-53	Women's Restroom, center	NAD
				060220.0050D.WM-54	Women's Restroom, east	NAD
				060220.0050D.WM-55	Men's Restroom, east	NAD

Note: This table must be used in conjunction with the entire report.

SAMPLE ANALYSIS DATA
Santa Ana College, Building D
1530 West 17th Street
Santa Ana, California 92706
February 19, 20, 21, and 22, 2006

Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
3rd Floor[3]						
HMN-20	2'x5' ceiling panel, fissure (suspended)	Rooms 301 through 307, and Room 309	7,000 SF	060221.0050DWM-56	Room 305, center	NAD
				060221.0050DWM-57	Room 307-1, center	NAD
				060221.0050DWM-58	Room 309-1, center	NAD
HMN-21	1'x1' ceiling tile, fissure (suspended)	Rooms 301, 302, 303, 304, 305, 306, 307, and 309	2,000 SF	060221.0050DWM-59	Room 305, north	NAD
				060221.0050DWM-60	Room 307, south	NAD
				060221.0050DWM-61	Room 302, east	NAD
HMN-22	4" brown baseboard and associated mastic	Rooms 301 through 312, and 315	1,000 LF	060221.0050DWM-62	Room 308, northeast	BB & Mastic = NAD
				060221.0050DWM-63	Room 307, southwest	BB & Mastic = NAD
				060221.0050DWM-64	Room 301, east	BB & Mastic = NAD
HMN-23	Drywall/drywall joint compound	Rooms 301 through 313, and 315	10,000 SF	060221.0050DWM-65	Room 311, south	<1% Chrysotile
				060221.0050DWM-66	Room 315, southeast	<1% Chrysotile
				060221.0050DWM-67	Room 306-1, northwest	<1% Chrysotile
HMN-24	2'x2' ceiling panel, fissure (suspended)	Rooms 301-1, 301-2, 301-3, 307-3, 307-4, 306-1, 311, and 312	1,200 SF	060221.0050DWM-68	Room 301-2, southeast	NAD
				060221.0050DWM-69	Room 307-4, west	NAD
				060221.0050DWM-70	Room 306-1, south	NAD
HMN-25	2'x4' ceiling panel, fissure (suspended)	Rooms 306, 307-1, and 307 Hallway	2,000 SF	060221.0050DWM-71	Room 306, north	NAD
				060221.0050DWM-72	Room 307 Hallway, center	NAD
				060221.0050DWM-73	Room 307-1, south	NAD

Note: This table must be used in conjunction with the entire report.

[3] 1) No window putty located throughout windows. 2) Interior/exterior perimeter walls/ceilings are concrete. 3) No carpet mastic located throughout the carpet areas (self-stick carpeting). 4) TSI fiberglass pipe wrap/elbows located in plenums. 5) Men's and Women's Restrooms consist of ceramic flooring, baseboard, and wall tile. 6) All ceiling tile and ceiling panels do not contain mastic.

SAMPLE ANALYSIS DATA
Santa Ana College, Building D
1530 West 17th Street
Santa Ana, California 92706
February 19, 20, 21, and 22, 2006

Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
3rd Floor (continued)						
HMN-26	Tan sheet flooring	Room 307-2	300 SF	060221.0050DWM-74	Room 307-2, northeast	NAD
				060221.0050DWM-75	Room 307-2, southeast	NAD
				060221.0050DWM-76	Room 307-2, southwest	NAD
HMN-27	Plaster walls/ceilings	Men's Restroom and Women's Restroom	1,000 SF	060221.0050DWM-77	Men's Restroom, southeast	NAD
				060221.0050DWM-78	Women's Restroom, northeast	NAD
				060221.0050DWM-79	Women's Restroom, south	NAD
HMN-28	Exterior stucco	Small sections of exterior	1,000 SF	060221.0050DWM-80	Exterior, southeast	NAD
4th Floor[4]						
HMN-29	2'x2' ceiling panel, fissure (suspended)	Rooms 417, 418, and 435 through 435-5	3,000 SF	060222.0050DWM-81	Room 418, south	NAD
				060222.0050DWM-82	Room 435, west	NAD
				060222.0050DWM-83	Room 435-3, west	NAD
HMN-30	4" brown baseboard and associated mastic	Rooms 401 through 435-5	1,000 LF	060222.0050DWM-84	Room 418, northeast	BB & Mastic = NAD
				060222.0050DWM-85	Room 435, northwest	BB & Mastic = NAD
				060222.0050DWM-86	Room 434, southwest	BB & Mastic = NAD

Note: This table must be used in conjunction with the entire report.

[4] 1) Most of perimeter walls/ceilings, above plenums, are concrete. 2) No window putty located throughout window frames. 3) TSI fiberglass duct wrap/pipe wrap located in plenums. 4) TSI fiberglass roll is located between drywall wall cavities. 5) Men's and Women's Restrooms consist of ceramic flooring, baseboard, and wall tiles. 6) Exterior Stucco (approximately 1,000 SF) is located in small sections on exterior; exterior stucco was sampled on all other floors. 7) All ceiling tile and ceiling panels do not contain mastic.

SAMPLE ANALYSIS DATA

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Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
4th Floor (continued)						
HMN-31	2'x4' ceiling panel, fissure (suspended)	Rooms 403 through 414, and Rooms 419 through 433, Room 435-3, and Room 416	5,000 SF	060222.0050DWM-87	Room 435-3, northeast	NAD
				060222.0050DWM-88	Room 416, north	NAD
				060222.0050DWM-89	Room 404, west	NAD
HMN-32	1'x1' ceiling tile, fissure (suspended)	Rooms 401 and 434	1,000 SF	060222.0050DWM-90	Room 401, south	NAD
				060222.0050DWM-91	Room 401, north	NAD
				060222.0050DWM-92	Room 434, east	NAD
HMN-33	2'x5' ceiling panel, fissure (suspended)	Rooms 401 and 434	3,000 SF	060222.0050DWM-93	Room 401, west	NAD
				060222.0050DWM-94	Room 401, east	NAD
				060222.0050DWM-95	Room 434, west	NAD
HMN-34	Brown sheet flooring	Room 401, Room 434-1, North Hallway (to 403-410), and South Hallway (to 422-429)	3,000 SF	060222.0050DWM-96	Room 401, east	NAD
				060222.0050DWM-97	Room 434, east	NAD
				060222.0050DWM-98	Room 434-1, southeast	NAD
HMN-35	Tan sheet flooring	Rooms 401 and 434	2,000 SF	060222.0050DWM-99	Room 401, northeast	NAD
				060222.0050DWM-100	Room 401, southeast	NAD
				060222.0050DWM-101	Room 434, southeast	NAD

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SAMPLE ANALYSIS DATA
Santa Ana College, Building D
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Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
4th Floor (continued)						
HMN-36	12"x12" orange vinyl tile and associated mastic	Rooms 435-3, and 435-3A	300 SF	060222.0050DWM-102	Room 435-3, southwest	Tile = NAD Mastic = 5% Chrysotile
				060222.0050DWM-103	Room 435-3A, northeast	Tile = NAD Mastic = 5% Chrysotile
				060222.0050DWM-104	Room 435-3A, southwest	Tile = NAD Mastic = 5% Chrysotile
HMN-37	Plaster interior	Men's Restroom and Women's Restroom	1,000 SF	060222.0050DWM-105	Men's Restroom, north	<1% Chrysotile
				060222.0050DWM-106	Men's Restroom, west	<1% Chrysotile
				060222.0050DWM-107	Women's Restroom, north	<1% Chrysotile
HMN-38	TSI pipe wrap	Ceiling space in Men's and Women's Restrooms	100 LF	060222.0050DWM-108	Men's Restroom, north	NAD
				060222.0050DWM-109	Men's Restroom, south	NAD
				060222.0050DWM-110	Women's Restroom, north	NAD
HMN-39	Drywall/drywall joint compound	Rooms 401 to 435-5, 436, 437-1, and 438	15,000 SF	060222.0050DWM-118	Room 406, south	<1% Chrysotile
				060222.0050DWM-119	Room 435-5, north	<1% Chrysotile
				060222.0050DWM-120	Room 425, south	<1% Chrysotile

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Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
Roof and Penthouse						
HMN-40	Roll roof core	Throughout roof	15,000 SF	060222.0050DWM-111	Roof, west	NAD
				060222.0050DWM-112	Roof, center	NAD
				060222.0050DWM-113	Roof, east	NAD
HMN-41	Exterior stucco	Roof Penthouse	2,000 SF	060222.0050DWM-114	Roof Penthouse, west	NAD
HMN-42	Roof penetration mastic	Roof	400 SF	060222.0050DWM-115	Roof, west	NAD
				060222.0050DWM-116	Roof, north	NAD
				060222.0050DWM-117	Roof, center	NAD

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Santa Ana College, Building N[1]
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Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
HMN-01	9"x9" beige floor tile and associated mastic[2]	Corridors; Choir Room; Theory Instruction, Practice Rooms N107, N108, N109, N110, N111, and N112; Tap Master; Computer Room; Music Lab Office; Office N113; and Band Room Offices N114, N115, and N116	2,970 SF	0602150050RB-N-1	Choir Room, west entry	Tile = <1% Chrysotile Mastic = 10% Chrysotile
				0602150050RB-N-2	Office N113	Tile = <1% Chrysotile Mastic = 10% Chrysotile
				0602150050RB-N-3	Theory Instruction, east entry	Tile = <1% Chrysotile Mastic = 10% Chrysotile
HMN-02	Carpet mastic	Band Room, Piano Lab, Theory Instruction, Choir Room, Music Lab Office, Office N113, and Band Room Offices N114, N115, and N116	4,720 SF	0602150050RB-N-4	Band Room	NAD
				0602150050RB-N-5	Piano Lab	NAD
				0602150050RB-N-6	Theory Instruction	NAD
HMN-03	Drywall/drywall joint compound	Throughout interior walls and ceilings	N/A	0602150050RB-N-7	Faculty Women's Restroom	<1% Chrysotile
				0602150050RB-N-8	Practice Lab N108	<1% Chrysotile
				0602150050RB-N-9	Piano Lab	<1% Chrysotile

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[1] 1) Ceramic floors are located in Men's RR, Women's RR, and Staff Men's RR, and Staff Women's RR. 2) Concrete floors are located in the Custodian Room (N120). 3) Exterior walls are mostly comprised of concrete brick. 4) No exterior window putty located on the building. 5) TSI fiberglass located in the Custodian Room and above attic hatch; no noted TSI debris; TSI fiberglass in the attic was intact. 6) No noted fireproofing in the attic. 7) The attic is comprised of wood ceilings.
[2] Some of HMN-01 (9"x9" beige floor tile) is located below carpet.

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Santa Ana College, Building N
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Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
HMN-04	1'x1' fissure ceiling tile and associated mastic (some is located on walls)	Practice Room (walls); Band Room (walls); Choir Room (walls); Throughout ceilings, except in Band Room, Choir Room, Piano, Lab, Theory Instruction, Tap Master, Restrooms, Custodian Room;	4,400 SF	0602150050RB-N-10	Practice Room N108	Tile & Mastic = NAD
				0602150050RB-N-11	Choir Room	Tile & Mastic = NAD
				0602150050RB-N-12	Corridor	Tile & Mastic = NAD
HMN-05	4" gray baseboard and associated mastic	Throughout interior walls	2,000 LF	0602150050RB-N-13	Practice Room N111	NAD
				0602150050RB-N-14	Office N115	NAD
				0602150050RB-N-15	Tap Master	NAD
HMN-06	2'x4' drop ceiling panels	Band Room, Choir Room, Piano Lab, and Theory Instruction	2,450 SF	0602150050RB-N-16	Piano Lab	NAD
				0602150050RB-N-17	Theory Instruction	NAD
				0602150050RB-N-18	Choir Room	NAD
HMN-07	Attic debris (TSI debris)	Throughout attic	3,500 SF	0602150050RB-N-19	Attic (east side), southeast	10% Chrysotile
				0602150050RB-N-20	Attic (east side), northwest	10% Chrysotile
				0602150050RB-N-21	Attic (east side), southwest	NAD
HMN-08	HVAC duct tape	Throughout attic	1,000 LF	0602150050RB-N-22	Attic, southeast	NAD
				0602150050RB-N-23	Attic, southwest	NAD
				0602150050RB-N-24	Attic, northwest	NAD

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Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
HMN-09	Drywall/joint compound[3]	Attic	900 SF	0602150050RB-N-25	Attic, southeast	<1% Chrysotile
				0602150050RB-N-26	Attic, northwest	<1% Chrysotile
				0602150050RB-N-27	Attic, northwest	<1% Chrysotile
HMN-10	Pipe wrap (cloth)	Southeast side of the attic	35 SF	0602150050RB-N-28	Attic (southeast side), 10' north of hatch	NAD
				0602150050RB-N-29	Attic (southeast side), 5' north of hatch	NAD
				0602150050RB-N-30	Attic (southeast side), 3' east of hatch	NAD
HMN-11	Rolled asphalt over rolled roof	Roof	7,000 SF	0602150050RB-N-31	Roof, lower roof	NAD
				0602150050RB-N-32	Roof, lower roof	NAD
				0602150050RB-N-33	Roof, upper roof	NAD
HMN-12	Penetration mastic	Roof	50 SF	0602150050RB-N-34	Roof, lower roof	5% Chrysotile
				0602150050RB-N-35	Roof, lower roof	NAD
				0602150050RB-N-36	Roof, upper roof	5% Chrysotile
HMN-13	HVAC duct tape	Roof	50 SF	0602150050RB-N-37	Roof, lower roof	NAD
				0602150050RB-N-38	Roof, lower roof	NAD
				0602150050RB-N-39	Roof, lower roof	NAD
HMN-14	Parapet	Roof perimeters	600 SF	0602150050RB-N-40	Roof, lower roof	NAD
				0602150050RB-N-41	Roof, lower roof	NAD
				0602150050RB-N-42	Roof, upper roof	NAD

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[3] Drywall/joint compound material is in poor condition.

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Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
HMN-15	Parapet cap mastic	Roof perimeters	100 SF	0602150050RB-N-43	Roof, lower roof	5% Chrysotile
				0602150050RB-N-44	Roof, lower roof	5% Chrysotile
				0602150050RB-N-45	Roof, upper roof	5% Chrysotile
HMN-16	Exterior stucco	East side of lower roof	380 SF	0602150050RB-N-46	East side of lower roof	NAD
				0602150050RB-N-47	East side of lower roof	NAD
				0602150050RB-N-48	East side of lower roof	NAD

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SAMPLE ANALYSIS DATA

Santa Ana College, Building P[1]
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Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
HMN-01	9"x9" green floor tile and associated mastic	Costume Storage P106-1 and Costume Storage P106-3	200 SF	0602200050PRB-1	Costume Storage P106-3	Tile = 3 % Chrysotile Mastic = 5% Chrysotile
				0602200050PRB-2	Costume Storage P106-1	Tile = 3 % Chrysotile Mastic = 5% Chrysotile
				0602200050PRB-3	Costume Storage P106-1	Tile = 3 % Chrysotile Mastic = 5% Chrysotile
HMN-02	Ivory linoleum and associated mastic	Costume Lab P106 and Costume Cleaning P106-4	475 SF	0602200050PRB-4	Costume Cleaning P106-4	Linoleum & Mastic = NAD
				0602200050PRB-5	Costume Cleaning P106-4	Linoleum & Mastic = NAD
				0602200050PRB-6	Costume Lab P106	Linoleum & Mastic = NAD
HMN-03	4" gray baseboard and associated mastic	Throughout 1st floor, except in P106	1,200 LF	0602200050PRB-7	Office P106-7	BB & Mastic = NAD
				0602200050PRB-8	Men's Dressing Room P108-1	BB & Mastic = NAD
				0602200050PRB-9	Green Room P108	BB & Mastic = NAD

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[1] 1) Attic spaces are located above the stairwell (next to P202-3), Ticket Booth P-100-1, and above tools and supplies. 2) Fiberglass insulation, bare pipes, and fiberglass TSI were located above the drop ceiling panels. 3) No visible suspect TSI above drop ceilings. 4) The Theatre Lab and Stage consist of wood floors and walls. 5) All Mechanical and Electrical Rooms consist of concrete floors. 6) Concrete floors are located below carpets and floor tile. 7) Drywall is located behind the wood walls in the Theatre Lab and P100-3. 8) Hot water heaters consist of copper pipes, bare pipes (no TSI), and synthetic blanket wraps. 9) TSI fiberglass or bare metal is located throughout building.

SAMPLE ANALYSIS DATA

Santa Ana College, Building P
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Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
HMN-04	1'x1' black wall tile and associated mastic	Theatre Lab P105 and Custodian P105-2	1,100 SF	0602200050PRB-10	Theatre Lab P105	Tile & Mastic = NAD
				0602200050PRB-11	Theatre Lab P105	Tile & Mastic = NAD
				0602200050PRB-12	Theatre Lab P105	Tile & Mastic = NAD
HMN-05	Plaster wall	Custodian Room P105-2, stairwells; and P105N, 1 entryway, and Restrooms (P100-2/100-5)	3,550 SF	0602200050PRB-13	Custodian Room P105-2	NAD
				0602200050PRB-14	Entryway, P105N	NAD
				0602200050PRB-15	Green Room P108 stairwell	NAD
HMN-06	Drywall/drywall joint compound	Throughout building	24,000 SF	0602200050PRB-16	Office P106-5, wall	<1% Chrysotile
				0602200050PRB-17	Green Room P108, ceiling	<1% Chrysotile
				0602200050PRB-18	Men's Dressing Room P108-1, wall	<1% Chrysotile
HMN-07	1'x2' acoustic ceiling tile	Green Room P108, Corridors, and Costume Lab P106	850 SF	0602200050PRB-19	Green Room P108	NAD
				0602200050PRB-20	Costume Lab P106	NAD
				0602200050PRB-21	Costume Lab P106	NAD
HMN-08	2'x2' acoustic ceiling tile	Office P106-8, Men's Dressing Room P108-1, Women's Dressing Room P108-2, southeast side of Green Room, Office P108-8, Office P108-10, Office P106-5, and Office P106-7	1,000 SF	0602200050PRB-22	Office P108-8	NAD
				0602200050PRB-23	Women's Dressing Room P108-2	NAD
				0602200050PRB-24	Office P106-5	NAD

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SAMPLE ANALYSIS DATA

Santa Ana College, Building P
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Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
HMN-09	1'x1' white ceiling, random hole (nailed-on)	Men's Dressing Room P108-1 and Women's Dressing Room P108-2	700 SF	0602200050PRB-25	Men's Dressing Room P108-1	NAD
				0602200050PRB-26	Women's Dressing Room P108-2	NAD
				0602200050PRB-27	Women's Dressing Room P108-2	NAD
HMN-10	4" brown baseboard and associated mastic	Costume Lab 106	160 LF	0602200050PRB-28	Costume Lab 106	Mastic = <1% Chrysotile
				0602200050PRB-29	Costume Lab 106	Mastic = <1% Chrysotile
				0602200050PRB-30	Costume Lab 106	Mastic = <1% Chrysotile
HMN-11	Gray linoleum and associated mastic	Custodial P108-6	60 SF	0602210050PRB-31	Custodial P108-6	Tile & Mastic = NAD
				0602210050PRB-32	Custodial P108-6	Tile & Mastic = NAD
				0602210050PRB-33	Custodial P108-6	Tile & Mastic = NAD
HMN-12	Black baseboard mastic	Custodial P108-6	35 SF	0602210050PRB-34	Custodial P108-6	NAD
				0602210050PRB-35	Custodial P108-6	NAD
				0602210050PRB-36	Custodial P108-6	NAD
HMN-13	Smooth plaster walls and ceilings	Lobby East, ceiling; Lobby Men's Restroom, and Lobby Women's Restroom	2,250 SF	0602210050PRB-37	Lobby East, ceiling	NAD
				0602210050PRB-38	Men's Restroom, wall	NAD
				0602210050PRB-39	Women's Restroom, wall	NAD

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Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
HMN-14	1'x1' ceiling tile (fissure) and associated mastic	Auditorium Lobby	340 SF	0602210050PRB-40	Lobby East, ceiling	Tile & Mastic = NAD
				0602210050PRB-41	Lobby East, ceiling	Tile & Mastic = NAD
				0602210050PRB-42	Lobby East, ceiling	Tile & Mastic = NAD
HMN-15	Carpet mastic	Throughout building (except were there is floor tile and concrete floors)	13,000 SF	0602210050PRB-43	Green Room	NAD
				0602210050PRB-44	Auditorium, north Stage exit	NAD
				0602210050PRB-45	Hallway P106-6	NAD
HMN-16	Pipe duct tape	Control Booth P200	10 LF	0602210050PRB-46	Control Booth P200	NAD
				0602210050PRB-47	Control Booth P200	NAD
				0602210050PRB-48	Control Booth P200	NAD
HMN-17	Drywall/drywall joint compound	Control Booth P200	200 SF	0602210050PRB-49	Control Booth P200	NAD
				0602210050PRB-50	Control Booth P200	NAD
				0602210050PRB-51	Control Booth P200	NAD
HMN-18	12"x12" gray floor tile and associated mastic	Theatre Lab Control Booth East, Rooms P105-3, P202-1, P202-2, and P202-3	300 SF	0602210050PRB-52	P202-3	Tile = NAD Mastic = 5% Chrysotile
				0602210050PRB-53	P202-1	Tile = NAD Mastic = 5% Chrysotile
				0602210050PRB-54	P202-2	Tile = NAD Mastic = 5% Chrysotile

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Santa Ana College, Building P
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Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
HMN-19	12"x12" green floor tile and associated mastic	Theatre Lab P202-1, P202-2, and P202-3	150 SF	0602210050PRB-55	P202-3	Tile = NAD Mastic = 5% Chrysotile
				0602210050PRB-56	P202-1	Tile = NAD Mastic = 5% Chrysotile
				0602210050PRB-57	P202-2	Tile = NAD Mastic = 5% Chrysotile
HMN-20	1'x1' black ceiling tile and associated mastic	Theatre Lab P202-1	150 SF	0602210050PRB-58	Theatre Lab P202-1	Ceiling Tile = NAD Mastic = <1% Chrysotile
				0602210050PRB-59	Theatre Lab P202-1	Ceiling Tile = NAD Mastic = <1% Chrysotile
				0602210050PRB-60	Theatre Lab P202-1	Ceiling Tile = NAD Mastic = <1% Chrysotile
HMN-21	1'x1' green ceiling tile and associated mastic	Theatre Lab Rooms 202-1, 202-2, and 202-3	150 SF	0602210050PRB-61	Theatre Lab P202-3	Tile & Mastic = NAD
				0602210050PRB-62	Theatre Lab P202-2	Tile & Mastic = NAD
				0602210050PRB-63	Theatre Lab P202-3	Tile & Mastic = NAD

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SAMPLE ANALYSIS DATA

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Homo Material #	Material Description	Material Location	Approx. Qty	Sample Number	Sample Location	Analytical Results
HMN-22	Exterior stucco	Exterior columns, exterior upper perimeter, and exterior walls	940 SF	0602210050PRB-64	Exterior column, southwest	NAD
				0602210050PRB-65	Exterior column, south	NAD
				0602210050PRB-66	Exterior column, north	NAD
HMN-23	Silver-coated reflective roof	All roofs	17,000 SF	0602210050PRB-67	Roof	NAD
				0602210050PRB-68	Roof	NAD
				0602210050PRB-69	Roof	NAD
HMN-24	Roof penetration mastic	All roofs	150 SF	0602210050PRB-70	Roof, northwest lower roof	NAD
				0602210050PRB-71	Roof, mid roof	NAD
				0602210050PRB-72	Roof, mid roof	NAD
HMN-25	Parapet	Lower northwest roof	1,600 SF	0602210050PRB-73	Lower northwest roof	NAD
				0602210050PRB-74	Lower northwest roof	NAD
				0602210050PRB-75	Lower northwest roof	NAD
HMN-26	Parapet cap mastic	Lower northwest roof	600 SF	0602210050PRB-76	Lower northwest roof	NAD
				0602210050PRB-77	Lower northwest roof	NAD
				0602210050PRB-78	Lower northwest roof	NAD

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