Rosemead School District

TECHNICAL SPECIFICATION

HAZARDOUS MATERIALS REMOVAL/IMPACT

CAMPUS WIDE EXTERIOR PAINTING PROJECT

SAVANNAH ELEMENTARY SCHOOL
3720 RIO HONDO AVENUE
ROSEMEAD, CALIFORNIA 91770

Volume 1 of 1

EE Project No. 20-Z0046-0135

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EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

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DIVISION 1

GENERAL REQUIREMENTS

SECTION 01010

SCOPE OF WORK

1.1 GENERAL:

The work to be performed by the contractor comprises:

PROJECT: HAZARDOUS MATERIAL REMOVAL/IMPACT IN CONJUNCTION WITH THE CAMPUS WIDE EXTERIOR PAINTING PROJECT

OWNER: ROSEMEAD SCHOOL DISTRICT

1.2 THE SITE:

The work will be performed at the following site within the Rosemead School District:

Site Location
Savannah Elementary School 3720 Rio Hondo Avenue Rosemead, California 91770

The exact scope and limits of work are the sole responsibility of the Abatement Contractor, he/she shall determine and verify all conditions, quantities, and situations adjoining his/her work and existing items. It is the responsibility of the Abatement Contractor and or prime trade to use trained personnel, proper personal protection and monitoring, wet methods, and compliant disposal of those materials that might be impacted during this project.

1.3 POTENTIAL ASBESTOS HAZARD

A. Abatement Contractor is warned that unprotected exposure to asbestos fibers has been determined to significantly increase risk of incurring the following diseases: asbestosis, lung cancer, mesothelioma, and certain gastrointestinal cancers. Care must be taken to avoid releasing or causing to be released, asbestos fibers into the atmosphere. Within Code of Federal Regulations, Title 29, Section 1926.1101 (abbreviated as 29 CFR 1926.1101), the Occupational Safety and Health Administration (OSHA) has set standards for permissible exposure to airborne concentrations of asbestos fibers, methods of compliance, personal protective equipment, and other methods which must be utilized when working with, or in proximity to asbestos. In executing the contract, the Abatement Contractor certifies that he shall comply with all parts of this regulation, as well as any more stringent requirements as specified in this specification.

B. Abatement Contractor shall presume that detectable levels of asbestos are present in all existing installed surfaces, except and unless objective information to the contrary is provided by the Owner, Owner's Representative, or Owner's Consultant. The Abatement Contractor shall be responsible for conformance with all applicable Cal/Occupational Safety and Health Administration (Cal/OSHA) Worker Protection and Cal/Environmental Protection Agency (EPA) Environmental Protection requirements pertaining to asbestos as applicable to the Abatement Contractor's work.

1.4 LEAD-BASED PAINT HAZARD

Lead has been used as a key ingredient in paint for many years. Cal/OSHA requires all employers of employees who work with materials that may be toxic, including lead-containing paint, to provide hazard communication and training to their employees. All contractors shall ensure that they are in compliance with all Cal/OSHA and applicable regulations. Additionally, the contractors shall observe the following work practices:

- Absolutely no dry sanding of painted surfaces.
- When surface cleaning is necessary for repainting, surfaces shall be wet-cleaned or HEPA vacuumed.
- Voids or ridges in painted surfaces shall be filled or "feathered" as necessary with compatible, non-lead containing products.
- Paint Film Stabilization is required where loose and flaky paint exists prior to component removal and/or demolition. A top coat sealer shall be applied to prevent further lead-based paint (LBP) flaking during removal.
- All cleanup of debris shall include wet methods or use of a high efficiency particulate air (HEPA) filtered vacuum.
- All paint debris and disposable equipment/materials from surface preparation, demolition or other paint disturbance, shall be contained and removed from the site.

1.5 SCOPE OF WORK:

Contractor will follow the applicable abatement procedures listed below for that material. Where conflict among requirements or with these specifications exists, the more stringent requirements shall apply.

Hazardous Materials Removal: This Contract covers the furnishings of all labor and materials and proper disposal required for impacting of hazardous materials from the following areas:

A. Asbestos-Containing Materials:

Asbestos-Containing Materials Building A (MPR)						
Item No.	**Material Description**	**Type of work**	**Location**	**Quantity**	**ACM content**	**Applicable Haz. Mat'l section**
1	No regulated asbestos-containing materials were identified as pertaining to the materials anticipated to be impacted by the Exterior Painting Project.					

Asbestos-Containing Materials Building B (Rooms 6 thru 9)						
Item No.	**Material Description**	**Type of work**	**Location**	**Quantity**	**ACM content**	**Applicable Haz. Mat'l section**
2	No regulated asbestos-containing materials were identified as pertaining to the materials anticipated to be impacted by the Exterior Painting Project.					

Asbestos-Containing Materials Building C (Classrooms 10 thru 14)						
Item No.	**Material Description**	**Type of work**	**Location**	**Quantity**	**ACM content**	**Applicable Haz. Mat'l section**
3	No regulated asbestos-containing materials were identified as pertaining to the materials anticipated to be impacted by the Exterior Painting Project.					

Asbestos-Containing Materials Building D (Classroom 2)						
Item No.	**Material Description**	**Type of work**	**Location**	**Quantity**	**ACM content**	**Applicable Haz. Mat'l section**
4	No regulated asbestos-containing materials were identified as pertaining to the materials anticipated to be impacted by the Exterior Painting Project.					

Asbestos-Containing Materials Building E (Classrooms 3 thru 5)						
Item No.	**Material Description**	**Type of work**	**Location**	**Quantity**	**ACM content**	**Applicable Haz. Mat'l section**
5	No regulated asbestos-containing materials were identified as pertaining to the materials anticipated to be impacted by the Exterior Painting Project.					

Asbestos-Containing Materials Building F (Administration/Library)						
Item No.	**Material Description**	**Type of work**	**Location**	**Quantity**	**ACM content**	**Applicable Haz. Mat'l section**
6	No regulated asbestos-containing materials were identified as pertaining to the materials anticipated to be impacted by the Exterior Painting Project.					

Asbestos-Containing Materials Portables						
Item No.	**Material Description**	**Type of work**	**Location**	**Quantity**	**ACM content**	**Applicable Haz. Mat'l section**
7	No suspect asbestos-containing materials were identified as pertaining to the materials anticipated to be impacted by the Exterior Painting Project for Building G (Portable 1), Building J (Portables 15 thru 19), Building K (Portables 20, 21 and Restroom), Building L (Portables 22 thru 29).					

Asbestos scope of work continues on the next page.

Asbestos scope of work continues on the next page.Asbestos-Containing Materials Campus						
Item No.	**Material Description**	**Type of work**	**Location**	**Quantity**	**ACM content**	**Applicable Haz. Mat'l section**
8	No asbestos-containing materials were identified as pertaining to the asphalt flooring material for the West Parking Lot, Northeast Parking Lot, Playground and Handball Court.					

END OF ASBESTOS SCOPE

B. Lead-Based Paint Procedures:

1. Remove and dispose of surfaces coated with lead-based paint/glaze from areas designated by the various prime trades and/or Construction Manager as required for construction of the Project. Some work may require only partial removal of the materials/components listed.
2. It is the responsibility of all contractors to use trained and certified personnel in accordance with California Department of Public Health (CDPH) and the Environmental Protection Agency's (EPA) Renovation, Repair, and Painting (RRP) regulations, and use proper personal protection and monitoring, wet methods, and proper disposal of materials that might be impacted during this project.
3. Paint film stabilization is required where loose and flaky paint exist prior to component removal or demolition. A top coat sealer shall be applied to prevent futher LBP flaking during removal.
4. For all surfaces scheduled for repainting, paint film stabilization or paint removal will be required. Loose and flaky paint should be scraped and a top-coat compatible primer should be applied. In addition, a top-coat compatible primer should be applied over intact areas for further surface preparation/painting by other trades.
5. Clearance sampling will be accomplished via lead wipe samples collected at random location throughout the work areas.
6. Contractor should work on no more than one (1) building at any one time. All work must be completed prior to starting an additional work area/building. If an area should fail clearance wipe sampling, contractor is to return to re-clean area at start of shift following receipt of sample results.
7. The contractor shall be responsible for all testing required for the proper disposal of all lead-based paint and lead-containing waste materials. This will require testing using waste stream analysis by the TTLC, STLC, and TCLP methods successively, if necessary, to determine non-regulatory limits for disposal. Contractor shall ensure that the attending consultant monitors and is aware (in writing) of each specific material sampling for waste stream analysis. **This information must be provided to the consultant prior to the material being removed from the site for testing.** Materials shall not be removed from the site until such testing and its results are provided to the consultant.

Lead-Based Paint Building A (MPR)						
Item No.	**Material Description**	**Type of work**	**Location**	**Quantity**	**Lead content Mg/cm^2**	**Applicable Haz. Mat'l section**
9	Wood double door frame	Surface preparation for repainting as indicated in plans	Storage closet, side D (at Breezeway)	1 Total	10.5	02093 HM
10	Metal double door frame trim	Surface preparation for repainting as indicated in plans		24 Linear Feet	9	02093 HM
11	Wood window header	Surface preparation for repainting as indicated in plans	Exterior, side A	18 Linear Feet	9.4	02093 HM
12	Wood eave	Surface preparation for repainting as indicated in plans		18 Square Feet	16.5	02093 HM
13	Wood window sill	Surface preparation for repainting as indicated in plans	Exterior, sides A, B, C	33 Linear Feet	2.8	02093 HM
14	Wood fascia	Surface preparation for repainting as indicated in plans	Exterior, sides A thru D	350 Linear Feet	1.1	02093 HM
15	Wood eave components	Surface preparation for repainting as indicated in plans	Upper roof, sides B & D East lower roof, side C	132 Square Feet	4.8-11.2	02093 HM
16	Metal parapet cap	Surface preparation for repainting as indicated in plans	Lower roof, north side of building	84 Linear Feet	1.3	02093 HM

Lead-Based Paint Building B (Classrooms 6 thru 9)						
Item No.	**Material Description**	**Type of work**	**Location**	**Quantity**	**Lead content Mg/cm^2**	**Applicable Haz. Mat'l section**
17	Wood window sill	Surface preparation for repainting as indicated in plans	Exterior, side B	100 Linear Feet	3.1	02093 HM
18	Wood window/door casing	Surface preparation for repainting as indicated in plans		240 Linear Feet	2.2	02093 HM
19	Wood fascia	Surface preparation for repainting as indicated in plans	Exterior, sides A-D	430 Linear Feet	1.8	02093 HM
20	Wood eave components	Surface preparation for repainting as indicated in plans	Exterior, sides B & D	720 Square Feet	0.8-2.1	02093 HM

Lead-based paint scope of work continues on the next page.

Lead-Based Paint Building C (Classrooms 10 thru 14)						
Item No.	**Material Description**	**Type of work**	**Location**	**Quantity**	**Lead content Mg/cm^2**	**Applicable Haz. Mat'l section**
21	Wood window/ door casing	Surface preparation for repainting as indicated in plans	Exterior, side B	180 Linear Feet	0.7	02093 HM

Lead-Based Paint Building D (Classroom 2)						
Item No.	**Material Description**	**Type of work**	**Location**	**Quantity**	**Lead content Mg/cm^2**	**Applicable Haz. Mat'l section**
22	Wood window casing	Surface preparation for repainting as indicated in plans	Exterior, sides B &D	68 Linear Feet	1.9	02093 HM
23	Wood overhang	Surface preparation for repainting as indicated in plans	Exterior, sides A, B &-D	310 Square Feet	0.8, 0.9	02093 HM
24	Wood overhang vent	Surface preparation for repainting as indicated in plans	Exterior, side A	6 Total	0.7	02093 HM
25	Metal overhang support pole	Surface preparation for repainting as indicated in plans		1 Total	1.4	02093 HM
26	Wood fascia	Surface preparation for repainting as indicated in plans	Exterior, sides A-D	180 Linear Feet	1.1	02093 HM
27	Metal flashing	Surface preparation for repainting as indicated in plans		180 Linear Feet	0.7	02093 HM
28	Metal wall cap	Surface preparation for repainting as indicated in plans	Exterior, sides A, B, C	28 Linear Feet	1.7	02093 HM
29	Round metal pole downspout	Surface preparation for repainting as indicated in plans	Exterior, side D	1 Total	1.1	02093 HM

Lead-based paint scope of work continues on the next page.

Lead-Based Paint Building E (Classrooms 3 thru 5)						
Item No.	**Material Description**	**Type of work**	**Location**	**Quantity**	**Lead content Mg/cm^2**	**Applicable Haz. Mat'l section**
30	Wood window corner post	Surface preparation for repainting as indicated in plans	Exterior, side D	10 Linear feet	11.5	02093 HM
31	Wood overhang column	Surface preparation for repainting as indicated in plans	Exterior, sides A & B	8 Columns	9.2	02093 HM
32	Wood eave components	Surface preparation for repainting as indicated in plans	Exterior, sides A-D	160 Square Feet	1.5, 1.8, 3.3	02093 HM
33	Wood transom frame	Surface preparation for repainting as indicated in plans	Enclosed breezeway, side C, at room 4	1 Total	4.2	02093 HM
34	Metal transom frame trim	Surface preparation for repainting as indicated in plans		9 Linear Feet	8.2	02093 HM

Lead-Based Paint Building F (Administration/Library)						
Item No.	**Material Description**	**Type of work**	**Location**	**Quantity**	**Lead content Mg/cm^2**	**Applicable Haz. Mat'l section**
35	Wood window sill	Surface preparation for repainting as indicated in plans	Exterior, side C	4 Linear Feet	9	02093 HM

Lead-Based Paint Breezeway between Buildings A and F)						
Item No.	**Material Description**	**Type of work**	**Location**	**Quantity**	**Lead content Mg/cm^2**	**Applicable Haz. Mat'l section**
36	No regulated lead-based paint was identified as pertaining to the surfaces or components anticipated to be impacted by the Exterior Painting Project.					

Lead-Based Paint Building G (Portable 1)						
Item No.	**Material Description**	**Type of work**	**Location**	**Quantity**	**Lead content Mg/cm^2**	**Applicable Haz. Mat'l section**
37	No regulated lead-based paint was identified as pertaining to the surfaces or components anticipated to be impacted by the Exterior Painting Project.					

Lead-based paint scope of work continues on the next page.

Lead-Based Paint Building J (Portables 15 thru 19)						
Item No.	**Material Description**	**Type of work**	**Location**	**Quantity**	**Lead content Mg/cm^2**	**Applicable Haz. Mat'l section**
38	No regulated lead-based paint was identified as pertaining to the surfaces or components anticipated to be impacted by the Exterior Painting Project.					

Lead-Based Paint Building K (Portables 20, 21 and Restroom)						
Item No.	**Material Description**	**Type of work**	**Location**	**Quantity**	**Lead content Mg/cm^2**	**Applicable Haz. Mat'l section**
39	No regulated lead-based paint was identified as pertaining to the surfaces or components anticipated to be impacted by the Exterior Painting Project.					

Lead-Based Paint Building L (Portables 22 thru 29)						
Item No.	**Material Description**	**Type of work**	**Location**	**Quantity**	**Lead content Mg/cm^2**	**Applicable Haz. Mat'l section**
40	No regulated lead-based paint was identified as pertaining to the surfaces or components anticipated to be impacted by the Exterior Painting Project.					

Lead-Based Paint Campus						
Item No.	**Material Description**	**Type of work**	**Location**	**Quantity**	**Lead content Mg/cm^2**	**Applicable Haz. Mat'l section**
41	No regulated lead-based paint was identified as pertaining to the surfaces or components anticipated to be impacted by the Exterior Painting Project components of the East Parking Lot, Southwest Parking Lot, Main Playground, Southwest Playground, Storage shed 1 thru 4, Free Standing Cabinet, Flag Pole and Perimeter Fence.					

Lead-based paint scope of work continues on the next page.

Lead-Based Paint Covered Walkways						
Item No.	**Material Description**	**Type of work**	**Location**	**Quantity**	**Lead content Mg/cm^2**	**Applicable Haz. Mat'l section**
42	Metal poles	Surface preparation for repainting as indicated in plans	Covered Walkway no.3	22 Poles	1.8	02093 HM
43	Wood ceiling beams	Surface preparation for repainting as indicated in plans		200 Linear Feet	4.1	02093 HM
44	No regulated lead-based paint was identified as pertaining to the surfaces or components anticipated to be impacted by the Exterior Painting Project for Covered Walkways no. 1, 2 and 4.					

END OF LBP SCOPE

END OF SCOPE OF WORK

1.6 WORK PLAN:

A preliminary work plan and proposed schedule shall be submitted with the bid form. Detailed work plan to be submitted within five (5) days of award of contract. At a minimum, the plan must include the following items:

A. **Project schedule:** Include the proposed shifts, time, and manpower (include number of men per shift).

B. **Detailed Work Plan:**

1. **Protective Equipment:** Specifying protective equipment (respiratory and body protection).
2. **Layout and Location on a drawing for each phase of work:**
   a. **Decontamination:** Decontamination areas.
   b. **Work Area:** Work area location, waste out area, location of equipment (staging area).
   c. **Waste Bin:** Location of waste bins.
3. **Document for each phase of work:**
   a. **Containment:** Containment construction and methods.
   b. **Disposal:** Disposal plan to include transporter and landfill name.
   c. **Removal Methods**: Removal methods to prohibit visible emissions. Specific techniques/procedures for each material to be abated.
   d. **Air monitoring firm/lab:** For conducting/analysis of personal samples.
   e. **Levels of respiratory protection:** Provide levels of respiratory protection for each type of removal (e.g., floor tile, drywall).

f. **Equipment:** Equipment assigned to the project.

C. **Removal Methods:** In compliance with local, state, and federal requirements for asbestos removal.

D. **Contacts:** Point of contact for questions.

E. **Security/Fire Watch Plan:** Names, qualifications, etc. (if applicable)

1.7 SITE ACCESS

Site access is available during the days and hours as specified in bid and pre-construction meetings.

END OF SECTION

SECTION 01011 HM

ADDITONAL CONDITIONS FOR HAZARDOUS MATERIALS WORK

1.1 GENERAL:

A. The work to be performed by the HAZARDOUS MATERIALS CONTRACTOR is defined in the methodologies of the Hazardous Materials Specifications as referenced, the General and Special Conditions, Division1/General Requirements, all special requirements, Section 01011 HM and specifically outlined in the Scope of Work.

B. As further clarification the following apply to this contract:

1. This Contract covers the furnishings of all labor and materials and compliant disposal of hazardous materials impacted as required by the scope of work. Some work may require only partial removal of the materials listed.
2. It is the responsibility of the Abatement Contractor and/or prime trade to use trained personnel, proper personal protection and monitoring, wet methods and compliant disposal of those materials which might be impacted during this project.
3. The District has made every attempt to identify all materials which will be impacted by this project. Except for those materials where objective information is provided to the contrary by the Owner, Owner's Representative, or Owner's Consultant the Abatement Contractor shall presume that detectable levels of asbestos are present in all remaining materials. If the Contractor is to impact materials, the contractor shall contact the Owner or Owner's representative prior to such impact.
4. The Abatement Contractor shall be responsible for conformance with all applicable Cal/OSHA Worker Protection and Cal/EPA Environmental Protection and South Coast Air Quality Management District requirements pertaining to asbestos and/or lead paint as applicable to the Abatement Contractor's work.
5. Hazardous Materials Contractor shall use California Department of Public Health (CDPH) and the Environmental Protection Agency's (EPA) Renovation, Repair, and Painting (RRP) trained and certified personnel for all lead-related work. In addition, Hazardous Material Contractor must also be certified as a firm in accordance with the EPA's RRP regulation.
6. Contractor should work on no more than one (1) building at any one time. All work must be completed prior to starting an additional work area/building. If an area should fail clearance wipe sampling, contractor is to return to re-clean area at start of shift following receipt of sample results.
7. ***Area clearance for lead:*** For lead, all clearance wipes shall be randomly performed for those areas impacted through refinishing/repainting where scraping of LBP has occurred.
8. Contractor will follow the applicable abatement procedures listed in this scope of work. Where conflict among requirements or within these specifications exists, the more stringent requirements shall apply.
9. Provide an English-speaking On-site Competent Person who is able to understand and carry out the work set forth in the contract documents.
10. Have fully staffed and capable crews working simultaneously on separate areas as necessary to maintain the project schedule. This is to include working multiple shifts, off-hours construction, and weekends at no additional cost to the owner.
11. Be responsible for cooperation and coordination with school programs, Contractors of other Bid Packages, Testing Lab, local regulatory agencies, and Utility Companies.

12. Provide to District's Project Consultant satisfactory proof that the appropriate regulatory notification(s) has/have been issued and validation of a signed copy of the Contract with the District.
13. Supply power cords, distribution boxes, adapters, etc., as necessary to complete the work of this Bid package within the prescribed time frame and as such allows the District's Environmental Consultant to have access to five (5) free outlets per containment at any one time. Power will be supplied to locations within 25 feet of each containment/regulated area at no cost to the Environmental Consultant.
14. Provide task lighting as required to facilitate the work of the Bid Package in a timely manner according to the construction schedule. Provide sufficient task lighting to facilitate work of good quality. Provide sufficient task lighting for the Consultant during visual inspections and during clearance testing.
15. Normal hours of construction are from 7:00 am to 5:00 pm on a daily basis or as directed by District. Actual construction hours may be revised as project constraints may vary.
16. Provide and maintain sufficient hazardous waste containers to accommodate the hazardous waste generated on a daily basis. Full waste bin must be removed within two (2) days after bin is full. Waste and waste containers must be removed within two days (2) after the scheduled or agreed upon ending of project.
17. Maintain a clean work area. Perform a thorough clean-up of the area on a daily basis. All hazardous waste MUST be removed from the work area and stored in a locked waste bin.
18. Where areas are accessible from the exterior and cannot be secured because of containment restrictions, Hazardous Materials Contractor shall provide either 24-hour security or construct such a secured barrier while allowing Work Area accessibility to Emergency personnel, the Environmental Consultant, and the District at all times.
19. Hazardous Materials Contractor shall submit a detailed work plan and proposed schedule within five (5) days of award of contract. At a minimum, the plan must include the following items:
    a. **Project schedule:** Include the proposed shifts, time, and manpower (include number of employees per shift).
    b. **Detailed Work Plan:**
        (1) Protective Equipment: Specifying protective equipment (respiratory and body protection)
        (2) Layout and Location on a drawing for each phase of work:
            (a) Decontamination: Decontamination areas
            (b) Work Area: work area location, waste out area, location of equipment (staging area), location of negative air machines.
            (c) Waste Bin: Location of waste bins
        (3) Document for each phase of work:
            (a) Containment: Containment construction and methods
            (b) Disposal: Disposal plan to include transporter and landfill name
            (c) Removal Methods: Removal methods to prohibit visible emissions. Specific techniques/procedures for each material to be removed.
            (d) Air monitoring firm/lab: For conducting analysis of personnel samples.

(e) Levels of Respiratory Protection: Provide levels of respiratory protection for each type of removal (e.g., floor tile, drywall, etc.).

(4) Equipment: Equipment assigned to the project.

(5) Negative Air Machines: Number of negative air machines, in use at any one time. Number of back-up negative air machines for this phase.

c. **Specific Removal Methods:** In compliance with local, state and federal requirements for the abatement procedures.

d. **Contacts:** Point of contact for questions.

e. **Security/Fire Watch Plan:** Names, qualifications, etc. (if applicable)

SECTION 02092 HM

LBP, LEAD CONTAINING MATERIALS REMOVAL
(Abrasive, Ceramic Tile)

PART 1 - GENERAL

1.1 SCOPE:

This Specification covers the abatement of materials containing lead-based paint as described in Section 01010 HM, Scope of Work.

1.2 DESCRIPTION OF WORK:

A. **General:** The Work specified herein shall be the removal of lead-containing materials and lead dust environments by persons knowledgeable, qualified, and trained in the removal, treatment, handling, and disposal of lead-based paint and lead containing materials, and the subsequent cleaning of the affected environment, and who comply with Federal, State, and Local regulations and guidelines which mandate work practices, and who are capable of performing the Work of this Contract.

B. **Contract Fulfillment:** The Contractor shall supply all labor, materials, equipment, services, insurance, and incidentals which are necessary or required to perform the Work in accordance with applicable governmental regulations and guidelines and these Specifications.

1.3 TERMINOLOGY:

The following terms used in these Specifications are defined as listed below:

A. **Abatement:** Any measure designed to permanently eliminate lead-based paint hazards in accordance with standard established by EPA Administrator pursuant to Title IV of the Toxic Substances Control Act (TSCA).

B. **Abatement Area:** The exterior of the building or an area isolated from the building interior by containment.

C. **Accessible Surface:** Any surface, which is below 5 feet in height from the floor or ground or is exposed in such a way that a child could come in contact with the surface.

D. **Access Doorway:** A device to allow ingress and egress from one room or area to another while permitting minimal air movement between the rooms, typically constructed by placing two or three overlapping sheets of plastic over an existing or temporarily framed doorway, securing each along the top of the doorway, securing the vertical edge of one sheet along one vertical side of the doorway, and securing the vertical edge of the other sheet along the opposite vertical side of the doorway; or by using a rigid gasketed door and HEPA filter vents.

E. **Action Level:** An exposure of airborne concentrations of lead dust particulates in excess of thirty micrograms per cubic meter (30 $\mu g/m^3$) of air calculated as an 8 hour time weighted average (TWA).

F. **Air Filtration Equipment:** A portable local filtration system equipped with HEPA filtration and capable of maintaining a constant, low velocity flow to filter and trap contamination out of the air within the work area and then circulate or exhaust the filtered air to uncontaminated areas. This equipment is also used to establish a reduced pressure within the work area.

G. **Air Monitoring:** The process of measuring the lead content of a specific volume of air in a stated period of time.

H. **Air Sampling Professional:** The professional contracted or employed to supervise air monitoring and analysis schemes. This individual is also responsible for recognition of technical deficiencies in Worker protection equipment and procedures during both planning and on-site phases of an abatement project. This individual shall be certified in the comprehensive practice of air sampling for lead by Department of Health Services (DHS) as a Lead Project Monitor or Lead Supervisor.

I. **Air Lock:** A system for permitting ingress and egress with minimum air movement between a contaminated area and an uncontaminated area, consisting of dual or triple curtained doorways or rigid gasketed doors separated by a dead air space of four feet.

J. **Authorized Person or Visitor:** The building owners, his or her authorized representative, or any representative of a regulatory or other agency having jurisdiction over the Project.

K. **Biological Monitoring:** The analysis of a person's blood to determine the level of lead contamination in the body. Biological monitoring for lead hazard reduction work includes blood sampling and analysis for lead and zinc protoporphyrin levels.

L. **Certified Industrial Hygienist:** A person certified by American Board of Industrial Hygienist and who has at least four years experience and a graduate degree or five years experience; and who has passed a two-day examination offered by the board (see also industrial hygienist).

M. **Clean Room:** An uncontaminated area or room which is a part of the Work decontamination facility with provisions for storage of worker's street clothes and protective equipment.

N. **Clearance Testing:** Post abatement procedure as required by DHS. A clearance inspection must be conducted after abatement is completed. Only a DHS certified lead inspector/assessor or a Project Monitor may conduct a clearance inspection.

O. **Code Enforcement Agency:** The State Lead Poisoning Prevention Program or its agent, or the local board of health or other agency responsible for enforcing the State Sanitary Code or Sections thereof.

P. **Commissioner:** The commissioner of Public Health.

Q. **Common Area**: A room or area that is accessible to more than one tenant in a building (e.g., common hallways, stairwells, laundry rooms).

R. **Containment:** A process for protecting other workers, residents, and the environment by isolating areas from exposures to lead dust and debris created during abatement in a work area.

S. **Curtained Doorway:** A device to allow ingress and egress from one room to another while permitting minimal air movement between the rooms, typically constructed by placing two overlapping sheets of plastic over an existing or temporarily framed doorway, securing each along the top of the doorway, securing the vertical edge of one sheet along one vertical side of the doorway, and securing the vertical edge of the other sheet along the opposite vertical side of the doorway (referred to as Z-fold design).

T. **Decontamination Facility:** A series of connected rooms, with curtained doorways between any two adjacent rooms for the decontamination of workers and of materials and equipment. A decontamination enclosure system always contains at least one airlock.

U. **Defective surface:** Peeling, flaking, chalking, scaling, or chipping paint; or, paint over crumbling, cracking, or falling plaster, or plaster with holes in it; paint over a defective or deteriorating substrate; paint that is separating from the substrate; and paint that is damaged in any manner such that a child could be exposed to the paint from the damaged area.

V. **Employee:** Any person employed or hired by an employer in any lawful employment.

W. **Employer:** Any person, firm, corporation, partnership, association, or other entity engaged in a business or providing services, including the State and any of its political subdivisions, or any person acting in the direct interest of any of the foregoing in relation to any employee or place of employment.

X. **Encapsulant (sealant):** A liquid material which can be applied to lead containing material and which controls the possible release of lead from the material either by creating a membrane over the surface (bridging encapsulant) or by penetrating into the material and binding its components together (penetrating encapsulant).

Y. **Encapsulation:** Procedures necessary to apply an encapsulant to lead containing building materials to control the possible release of lead dust particulates or entrained material into the ambient air.

Z. **Enclosure:** Procedures necessary to enclose completely lead containing material behind airtight, impermeable, permanent barriers.

AA. **Entity:** Any person, partnership, firm, association, corporation, sole proprietorship, or any other business concern, state or local government agency or political subdivision or authority thereof, or any religious, social, or union organization, whether operated for profit or otherwise.

BB. **Equipment Room:** A contaminated area or room, which is part of the Worker decontamination enclosure with provisions for storage of contaminated clothing and equipment.

CC. **Equipment Decontamination Facility:** That portion of a decontamination facility designed for controlled transfer of materials and equipment, typically consisting of a washroom and a holding area.

DD. **Equipment Room:** A contaminated area or room which is part of the worker decontamination facility with provisions for storage of contaminated clothing and equipment.

EE. **Fixed Object:** A unit of equipment or furniture in the Work area which cannot be removed from the Work area.

FF. **General Trades Contractor:** Shall refer to the contractor responsible for coordination of all filed sub-bids and general construction.

GG. **Hazardous Level of Lead for Waste Disposal:** 5.0 parts per million (ppm) as defined by RCRA Toxicity Characteristic Leachate Procedure (TLCP) or other requirements set by local or state authorities.

HH. **High Phosphate Detergent:** Detergent that contains at least five percent (5%) tri-sodium phosphate (TSP) or other equally effective cleaning agent.

II. **HEPA Filter:** A high efficiency particulate air (HEPA) filter capable of trapping and retaining 99.97 percent of particles greater than 0.3 micrometers in mass median aerodynamic equivalent diameter.

JJ. **HEPA Vacuum Equipment:** Vacuuming equipment with a HEPA filter system.

KK. **Holding Area:** A chamber in the equipment decontamination facility located between the washroom and an uncontaminated area. The holding area comprises an airlock.

LL. **Intact Surface:** A defect-free surface with no loose, peeling, chipping, or flaking paint. Painted surfaces must be free from crumbling, cracking, falling plaster, and must not have holes in them. Intact surfaces are not damaged in any way.

MM. **Log Book:** A notebook or other book containing essential project data and daily project information and a daily project diary. This book is kept on the Project site at all times.

NN. **Lead-based:** Refers to paints, glazes, and other surface coverings containing a toxic level of lead.

OO. **Lead-Containing:** Refers to Paints, glazes, and other surface covering containing a detectable level of lead.

PP. **Mini-Enclosure:** A method with limited applications for removing small amounts of lead-based paint material typical for small-scale, short duration type projects.

QQ. **Movable Object:** A unit of equipment or furniture in the Work area that can be removed from the Work area.

RR. **Negative Air Pressure Equipment:** A portable local exhaust system equipped with HEPA filtration and capable of maintaining a constant, low velocity air flow into contaminated areas from adjacent uncontaminated areas.

SS. **Paint Removal:** All herein specified procedures necessary to remove or strip lead-based paint from the surfaces of components and to dispose of these materials at an acceptable site. Removal may consist of off-site or on-site paint removal as specified.

TT. **Permissible Exposure Limit:** An airborne lead concentration of fifty micrograms per cubic meter of air (50 $\mu g/m^3$) or greater, averaged over an 8 hour period.

UU. **Personal Monitoring:** Sampling of lead fiber concentrations within the breathing zone of a lead Worker.

VV. **Plasticize:** To cover floor and walls with plastic sheeting as herein specified.

WW. **Qualified Abatement Subcontractor:** A sub-contractor capable of providing a properly trained and equipped work force for abatement work. All employees to perform abatement activities shall have successfully completed a minimum of 24 hours of training in the potential hazards of abating lead-based paint. Abatement contractors must possess the appropriate license or certification from the state or local government.

XX. **Removal:** A strategy of abatement, which entails the removal of components, such as windows, doors, and trim that contain toxic levels of lead such that new components that are lead free may be installed.

YY. **Replacement:** A method of abatement that involves removing components that have lead-based paint surfaces and installing new components free of lead-based paint.

ZZ. **Shower Room:** A room or area in the worker decontamination unit facility with hot and cold or warm running water and suitably arranged for complete showering during decontamination. An alternate site away from the decontamination facility may be used as approved by the Owner's consultant.

AAA. **Subcontractor:** Shall refer to the Abatement Contractor.

BBB. **Surfactant:** A chemical wetting agent added to water to improve penetration.

CCC. **Toxic Characteristic Leachate Procedure (TCLP):** EPA required sample preparation for determine the hazard characteristic of a waste generated at a lead abatement site.

DDD. **Toxic Level of Lead in Surface Coatings:** 1.0 milligrams or more per square centimeter (mg/cm^2) (0.7 mg/cm^2 in Los Angeles County) by XRF methods or 5,000 $\mu g/g$ (0.5%) by laboratory testing, as defined in HUD Regulation and Lead-Base Paint Poisoning Prevention Act.

EEE. **Washroom:** An area between the Work area and the holding area in the equipment decontamination area.

FFF. **Wet Cleaning:** The process of eliminating lead-based paint contamination from building surfaces and objects by using cloths, mops, or other cleaning tools that have been dampened with water, and by afterwards disposing of these cleaning tools as lead contaminated waste.

GGG. **Wet Wall:** Shall refer to walls which contain plumbing fixtures and/or pipes, including both supply and sanitary lines.

HHH. **Wipe Sampling:** The process of collecting and analyzing lead material from a specific surface area to determine residual lead levels.

III. **Work Area:** Designated rooms, spaces, or areas of the Project in which lead-based paint abatement actions are to be undertaken or which may become contaminated as a result of such abatement actions. A contained work area is a work area that has been sealed, plasticized, and equipped with a decontamination enclosure system. A non-contained work area is an isolated or controlled-access work area that has not been plasticized nor equipped with a decontamination enclosure system.

JJJ. **Worker Decontamination Facility:** That portion of a decontamination facility designed for controlled passage of workers, and other personnel and authorized visitors, typically consisting of a clean room, a shower room, and an equipment room.

1.4 APPLICABLE DOCUMENTS:

The current issue of each document shall govern. Where conflict among requirements or with these Specifications exists, the more stringent requirements shall apply.

A. **Regulations:** Comply with all codes, regulations, and references applicable to lead abatement work include but are not limited to the following:

1. All Federal, State, Local, and South Coast Air Quality Management District regulations.

2. American National Standards Institute (ANSI) publications;

Z9.2-79	Fundamentals Governing the Design and Operation of Local Exhaust Systems
Z87.1-79	Occupational and Educational Eye and Face Protection
Z88.2-80	Practices for Respiratory Protection
Z89.1-81	Requirements for Protective Headgear for Industrial Workers
Z41-83	Personal Protection - Protective Footwear

Z88.6-84 Respiratory Protection Respiratory use Physical Qualifications for Personnel

3. American Society for Testing and Materials (ASTM) publications;

   D1 331-56 Surface and Interfacial Tensions of Solutions of Surface Active Agents.

4. Code of Federal Regulations (CFR);

   29 CFR 1910 General Industry Standard

   29 CFR 1910.1025 Lead Standard for General Industry

   29 CFR 1910.134 Respiratory Protection

   29 CFR 1910.1200 Hazard Communication

   29 CFR 1910.245 Specifications for Accident Prevention (Signs and Tags)

   29 CFR 1926 Construction Industry Standards

   29 CFR 1926.62 Construction Industry Lead Standard

5. Code of Federal Regulations (CFR) (cont'd);

   40 CFR Part 261 United States Environmental Protection Agency Regulations

   40 CFR Part 745 Residential Property Renovation

   24 CFR Parts 35-37 HUD Lead-Based Paint Regulations.

6. Compressed Gas Association, Inc.

   G-7.1 Commodity Specification for Air

7. National Fire Protection Association (NFPA)

   No. 70. National Electrical Code

8. UL 586-77 (R1 982) Test Performance of High Efficiency Particulate Air Filter Units (June 10, 1977, 5th Ed.; Rev. March 12, 1982)

9. National Institute for Occupation Safety and Health (NIOSH)

   N31, 3rd. Ed., Vol. 1, Manual of Analytical Methods, Method 7082.

10. Environmental Protection Agency Documents:

EPA 530-SW-85-007	Lead Waste Management Guidance, May 1985
EPA 560/5-85-024	Guidance for Controlling Lead-Base Paint in Buildings, June 1985
EPA 600/4-85-049	Measuring Airborne Lead Following and Abatement Action, November 1985
EPA 560 OPTS-86.001	A Guide to Respiratory Protection for the Lead Abatement Industry, April 1986

11. California Administrative Code (CAQ):

    Title 8, Article 2.5, Sections 341.6 - 341.14, Registration Lead-Related work

    Title 8, Section 5216, General Industry Safety Orders, Lead Regulations

    Title 8, Section 1532.1, Cal/OSHA Construction Safety Orders, Lead

    Title 8, Section 3203, Cal/OSHA Injury and Illness Prevention Program

    Title 17, Division 1, Chapter 8, Accreditation, Certification, and Work Practices for Lead-Based Paint and Lead Hazards

12. California Administrative Code (CAQ) (cont'd):

    Title 22, Division 4, Minimum Standards for Management of

    Chapter 30 Hazardous and Extremely Hazardous Waste

13. South Coast Air Quality Management District Regulations

    Rule 1420, Emissions Standard for Lead

14. Los Angeles County Code

    Title 11, Health and Safety, Chapter 11.28, Lead Hazards

    Title 12, Environmental Protection

1.5 SUBMITTALS AND NOTICES:

Prior to commencement of work and/or within the time-frames specified below:

A. **General:** Requirements are as set forth in the General Conditions and Supplementary Conditions for items required to be submitted under this section.

B. **Product data:** Shall include manufacturer's product data, specifications, samples and application instructions and other pertinent information as necessary.

C. **Alternatives:** Product substitution submittal shall be in accordance with the General Conditions and Supplementary Conditions.

D. **Procedure Plans and Shop Drawings:** Submit to the Owner's consultant Procedure Plans and Shop Drawings and ensure that they are in compliance with this Specification and applicable regulations. Shop Drawings will include: construction of decontamination enclosure systems and/or facilities; isolation of the Work areas; placement of negative air machines and their exhaust, emergency exits, and placements of fire extinguishers and first aid kits.

1. Personnel monitoring procedures in accordance with T8 CCR 1532.1

2. Phasing of abatement work indicating daily roster of workers for each phase.

3. Security system warning signs locations in accordance with 29 CFR 1910.245, and T8 CCR 1532.1.

4. Detailed plans for decontamination facilities, toilets, and systems providing inter-room and work area to outside communication showing connections to existing building.

5. Standard procedures for protecting workers, visitors, and employees and protection of spaces outside work area from contamination.

6. Engineering systems exposure control indicating number, location, and capacity of supply and exhaust systems, the expected direction of flow, and the range of expected negative air pressure in each area.

E. **Qualifications:** Within 10 days from Notice to Proceed, submit the following documents:

1. **License:** Submit copy of current contractor license from the California Contractors State License Board.

2. **Personnel Training-Superintendent and Foreman:** Submit copy of certificates of completion from a training course in lead abatement project supervision offered by a California accredited educational institution, and a copy of certification from California Department of Public Health (CDPH) as a lead supervisor. Copies of these documents shall be maintained in the Project Logbook. Substitutions may be made by written notice to Owner's consultant.

3. **Personnel Training-Workers:** Submit copy of certificates of completion from a training course in lead abatement project supervision offered by a California accredited educational institution, and a copy of certification from California Department of Public Health (CDPH) as a lead worker. Copies of these documents shall be maintained in the Project Logbook. Substitutions may be made by written notice to Owner's consultant.

4. **Personal Protection and Exposure Understanding:** Submit documentation to the Owner's consultant indicating that each employee has had instruction on the

hazards of lead exposure, on use and fitting of respirator, on protective dress, on use of showers, on entry and exit from work areas, and on all aspects of work procedures and protective measures and understands this instruction.

5. **Respirators:** Submit a written standard operating procedure governing selection, fit-testing, and use of respirators in accordance with 29 CFR 1910, Subpart 1, 29 CFR 1926.1101, CGAI Standard G7.1, ANSI Z88.2, and Z88.6. Also submit manufacturer's certification that the respirators to be used in this project comply with these regulatory requirements.

6. **Medical Examination:** Submit proof that personnel who will be entering contaminated areas have had medical examinations, and furnish the results of said exam to Owner's consultant. Comply with 29 CFR 1910.20 for access to employee exposure and medical records.

    a. **Exam and History:** Before exposure to lead, provide each employee with a comprehensive medical exam meeting the general definition outlined in California Administration Code Title 8, CCR. No employee shall be allowed to enter the Work Area without having first provided a copy of his or her Medical History to the Owner's Representative.

    b. **Employee Roster:** Submit an employee roster to Owner's consultant for each Work shift and confirm in writing within 24 hours of commencement of shift. The roster will consist of a list of employees who have received training and medical examinations per paragraphs Part 1.5, E.2, E.3, E.5, and E.6 of this section. A copy of this list is to be maintained in the Project Logbook.

F. **Notifications, Permits, Communications and Postings.**

1. **Submit copies of notifications to all appropriate Government agencies, including the following:**

    a. CAL-OSHA (310) 949-7827 Notification shall be in accordance with the Section 341.9 of Title 8 of California Administrative Code.

    b. California Department of Public Health, Childhood Lead Poisoning Prevention Branch (if applicable - 5 days prior to work).

    c. Copies of Government agency correspondence shall be included in the submittals.

    d. Where local police and fire departments have jurisdiction, secure approval of the proposed security and safety plans for the work prior to submittal to Owner's Representative. Contact both departments for the requirements of the approval process.

2. **Proof of Permits, Site Requirements, and Disposal of Waste:** Submit proof satisfactory to the Owner's consultant that all required testing, permits, site location, and arrangements for transport and disposal of lead-coated or contaminated materials, supplies, and the like have been obtained.

3. **Safety Compliance:** In addition to detailed requirements of this Specification, comply with laws, ordinances, rules, and regulations of federal, state, regional, local authorities, and of Owners regarding handling, storing, transporting, and disposing of lead waste materials. Comply with applicable requirements of the current issue of 29 CFR 1910. 29 CFR 1926.62, and 40 CFR 261, 40 CIFR. Parts 35, 36, 37, and CAC Section 5208. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting Work. Where requirements of this Specification and reference documents vary, the most stringent requirement shall apply.

4. **Availability of Regulatory References:** Contractor shall have at least one copy each of 29 CFR 1910; 29 CFR 1910.134; 29 CFR 1926; 40 CFR Part 261; and CAC, Title 8, Section 5208, at his or her office and also at the job site.

5. **Posting of Caution Signs:** Before the commencement of any Work at the site, post bilingual EPA and CAL-OSHA caution signs in and around the Work Area to comply with EPA and OSHA regulations.

6. **Submit Training and Certifications:** All lead workers assigned to this project must be accredited as a Lead Worker under the California Department of Public Health (CDPH). At least one employee on each shift shall be currently accredited as a Supervisor and shall have successfully completed in the last 12 months a course of instruction meeting the requirement for "Competent Person." At least one employee on each shift shall be currently accredited in accordance to the Environmental Protection Agency's (EPA) Renovation, Repair, and Painting (RRP) regulation. In addition, Hazardous Material Contractor must also be certified as a firm in accordance with the EPA's RRP regulation

7. **Project Logbook Submittals:** Submit front-end documents of Project Logbook. These documents will include copies of the Contractor's Respiratory Protection Program, HUD and OSHA documents, worker decontamination procedures, equipment decontamination procedures, authorized personnel list, format of daily report sheets, test reports on waste materials, and format of waste manifests. The completed daily reports and waste manifests shall be submitted along with pay requests for completed work. Copies of these front-end documents shall be maintained at the site during the lead removal phase of the Project.

    a. The Superintendent is required to keep the Project Logbook up to date, ensure that all work criteria is followed in the proper sequence, and to fill out the enclosed check list to document the progression of the job. A separate checklist will be required for each individually prepped work area.

8. **Property Condition Assessment:** Owner, Architect/Engineer or Owner's consultant, and Contractor must agree in writing on building and fixture condition prior to commencement of Work. The Contractor shall submit an inventory of all items removed from the Work area and an inventory of all items remaining in the Work area.

9. **Informing Other Trades:** The lead abatement contractor must inform other employers on site of the nature of the Contractor's work with lead-based paint and

the existence of and requirements pertaining to regulated areas. Such notification shall be coordinated with, and approved by, the Owner.

10. **Pressure Strip Recordings:** At the termination of the project, submit copies of all pressure strip chart recordings.

G. **Field Air Sampling:**

Personal monitoring and other monitoring which is required by law or considered necessary by the Contractor for Worker protection shall be the responsibility of the Contractor and performed by Contractor's Air Sampling Professional.

H. **Certifications:**

1. **Equipment Certification:** Submit manufacturer's certification that vacuums, negative air pressure equipment filters, and other local exhaust ventilation equipment conform to ANSI Z9.2, as well as all Federal, State, Local, and SCAQMD regulations (permit to construct).

2. **Rental Equipment:** When rental equipment is to be used in removal areas or to transport waste materials, a copy of the written notification provided to the rental company informing them of the nature of use of the rented equipment shall be submitted to the Owner's representative or Owner and signed by the rental company.

1.6 PERSONAL PROTECTION AND SAFETY:

A. **General:** The Contractor alone shall be responsible for the safety, efficiency, and adequacy of his or her plant, appliances, methods, and for any damages which may result from his or her operations, improper construction practices, or maintenance. He or she shall erect and properly maintain at all times as required by the conditions and progress of the Work, proper safeguards for the protection of workmen and the public and shall post warning signs around the job site.

B. **Personal Protective Equipment:**

1. Provide workers and authorized visitors with sufficient set of protective full body impervious protective clothing. Personal Protective Equipment shall comply with the requirements of 29 CFR 1910, Subpart I., and Title 8 CCR Section 1532.1.

2. Work clothes shall consist of fire retarding, disposable, full-body coveralls, head covers, boots, rubber gloves, and steeled-toe boots or equivalent in accordance with 29 CFR 1926.134, and ANSI Z41. Sleeves at wrists and cuffs at ankles shall be secure.

3. Provide eye protection and hardhats as required by applicable safety regulations and shall conform to ANSI 87.1 and 89.1.

C. **Respiratory Protection Requirements:**

1. Disposable (single use) respirators are not to be worn for protection against lead.

2. **Providing of Equipment:** Provide all workers, foremen, superintendents, authorized visitors, and inspectors personally issued and marked respiratory equipment approved by NIOSH. When respirators with disposable filters are employed, provide sufficient filters for replacement as recommended by manufacturers or this specification. Selection of respirators shall be made according to the guidance of 29 CFR 1910.134; Title 8 CCR Section 1532.1; ANSI Z88.2; CGAI G7.1; EPA 560 OPTS-86.001; and Table I of this section. The Contractor shall provide masks, new in the box, in all sizes produced by the respirator manufacturer (one each). These masks shall be provided for the exclusive use of the Owner's representatives and shall be available at all times.

3. **Approved Respirators:** Contractor will ensure that all respirators used shall be selected from those approved by National Institute of Occupational Safety and Health (NIOSH) for use in atmospheres containing lead, solvents, removers, and against other toxic materials which may be used during the project.

4. **Powered Air-Purifying Respirators (PAPR) usage:** Full containment work activities associated with the abatement of materials coated with lead-based paint where lead containing dust particulates are expected (i.e., sand blasting) shall be conducted while wearing, at a minimum, a full facepiece, powered air-purifying respirator equipped with HEPA filters during the following tasks or under the following conditions:

    a. During removal of lead-containing materials.

    b. During all cleanup and wipe-down of area.

    c. During final wipe down of work space.

    d. At any time that air monitoring levels indicate that lead concentrations are at least 500 $\mu g/m^3$ or greater.

    e. Any situation where gross contamination has occurred because of a tear or rupture in the containment and air sampling indicates airborne lead levels have exceeded 500 $\mu g/m^3$.

5. **1/2 Face Respirator Usage:** For the following tasks or conditions a 1/2 mask air-purifying respirators equipped with high efficiency filters may be used:

    a. Provided maximum airborne lead concentration outside the respirator is at or below 250 $\mu g/m^3$.

    b. During intact component removal, paint film stabilization (loose and flaky paint) work.

    c. Pre-construction sealing of openings and penetrations to the work areas with plastic sheeting.

    d. Decontamination of removable items.

e. Loading lead-containing drums on truck for transportation and unloading bags at approved landfill.

Rest of page intentionally blank, Table 1 follows on next page.

Table 1. Respiratory Protection for Lead Aerosols

Airborne concentration of lead or condition of use	Required Respirator
Not in excess of 500 μg/m³	*1/2 mask air purifying respirator with high efficiency filters. 2,3 *1/2 mask supplied air respirator operated in demand (negative pressure) mode.
Not in excess of 1,250 μg/m³	* Loose fitting hood or helmet powered air-purifying respirator with high efficiency filters. *Hood or helmet supplied air respirator operated in a continuous - flow mode - e.g., type CE abrasive blasting respirator operated in a continuous - flow mode.
Not in excess of 2,500 μg/m³	* Full facepiece air purifying respirator with high efficiency filters. *Tight fitting powered air-purifying respirator with high efficiency filters. *Full facepiece supplied air respirator operated in demand mode. *Full facepiece self-contained breathing apparatus (SCBA) operated in demand mode.
Not in excess of 50,000 μg/m³	*1/2 mask supplied air respirator operated in pressure demand or other positive - pressure mode
Not in excess of 100,000ug/m³	*Full facepiece supplied air respirator operated in pressure demand or other positive-pressure mode - e.g., type CE abrasive blasting respirators operated in a positive - pressure mode.
Greater than 100,000 μg/m³ unknown concentration, or fire fighting.	*Full facepiece SCBA operated in pressure demand or other positive - pressure mode.

***** Greater respiratory protection is always acceptable regardless of lead concentrations.

6. **Type "C" Respirator Usage:** When Type "C" respirators are not required according to 29 CFR 1926.134, Title 8 CCR, Section 1532.1, or this specification, (whichever is more stringent), provide sufficient quantity of filters jointly approved by NIOSH for use in **lead and other** environments so that workers can change filters as required by manufacturer during the workday. Filters shall not be used any longer than one workday. Respirator filters shall be stored at job site in clean room and shall be totally protected from exposure to lead and other hazardous materials prior to their use.

7. **Air Supply Compressors:** Compressors shall meet the requirements of 29 CFR 1910.134 and the following:

    a. Periodic inspection of the carbon monoxide monitor shall be evidenced.

    b. Documentation of adequacy of compressed air system/respiratory protection system shall be retained on site. Documentation shall include a list of compatible components with the maximum number and type of respirators that may be used with the system.

    c. The full facepiece, type "C" supplied-air respirator system shall be fully approved by appropriate regulatory agencies. The compressor shall be specifically for breathing air and have alarms to indicate compressor failure, and overheating. Compressor(s) shall have in-line air-purifying sorbent beds and filters to assure breathing air quality (Grade "D" or better for oil lubricated compressors; Grade "H" or better for electric compressors). The air supply system shall have safeguards to allow for sufficient capacity to allow workers to escape if the air system fails. If an oil-lubricated compressor is used, it shall have a high-temperature or carbon monoxide alarm, or both. If only a high-temperature alarm is used, a carbon monoxide converter shall be used.

    d. The compressor intake shall be designed so as to avoid entry of contaminated air into the system either from the compressor exhaust or other sources of potential contamination. Periodic testing of compressed air shall ensure that systems provide air of sufficient quality.

    e. A pressure-indicating gauge shall be placed at the point of connection (distribution point) where the respirator supply hose (which is a part of the approved facemask/hose system) is attached to the air filtration system or any supply manifold which is located between the mask/hose apparatus and the compressor/filter system. The pressure gauge shall be capable of measuring pressure levels that are consistent with those specified by the respirator operating specifications.

    f. The correct pressure level shall be verified at each distribution point each time the system is engaged. The air supply system will be operated only when operating specifications are maintained.

8. **Fit Testing:** Air respirators shall be fit-tested utilizing isoamyl acetate at the beginning of each project or a minimum of every 12 months as described in Appendix C, 29 CFR 1926.58. Either Isoamyl Acetate Protocol or other similar regulatory protocol may be used.

D. **Bilingual Worker protection procedures (Posted in both English and Spanish):** Adequate shower facilities shall be provided by the Contractor. An employee leaving the Work area shall follow all decontamination procedures necessary or as described herein.

1. **Posted Procedures:** Provide and post, in the Equipment Room and the Clean Room, the decontamination and work procedures to be followed by workers and authorized visitors as described in these Specifications.

2. **Entering the Work Area:** Each worker and authorized visitor shall, upon entering the job site: put on a respirator and clean protective clothing before entering the Equipment Room or the Work area. Clothing that is appropriate for weather and temperature conditions shall be worn under the protective clothing.

3. **Personnel Exiting the Work Area:**

a. Ensure that personnel do not leave work areas through the equipment decontamination enclosure.

b. All workers and authorized visitors shall, each time they leave the Work area; remove gross contamination from clothing before leaving the Work area using a HEPA vacuum; proceed to the Equipment Room and remove all clothing except respirators by carefully rolling down the garment to reduce exposure to dust; clean the outside of the respirator with soap and water while showering; remove the respirator; and thoroughly shampoo and wash themselves

c. Following showering and drying off, each Worker shall proceed directly to the clean change room and dress in clean clothes at the end of each day's Work, or before eating, smoking, or drinking. Before re-entering the Work Area from the clean-change room, each Worker and authorized visitor shall put on a clean respirator and shall dress in clean protective clothing.

d. Before re-entering the Work area from the Clean Change Room, each worker and authorized visitor shall put on a clean respirator and shall dress in clean protective clothing.

e. All workers and authorized visitors shall, at the end of the work day; place disposable clothing in the abatement waste; clean protective gear, including respirators, according to standard procedures; wash hands and face again; proceed to the shower facilities, being certain to wash hair.

f. Workers shall not eat, drink, smoke, or chew gum or tobacco while in the Work area.

g. Workers shall be fully protected with respirators and protective clothing from the time of first disturbance of lead-coated or contaminated materials prior to commencing actual lead abatement and until final cleanup is completed.

4. **Equipment removal procedures:** Clean surfaces of contaminated containers and equipment thoroughly by wet sponging or wiping before moving such items into the equipment decontamination enclosure system washroom or through the shower for final cleaning and removal to uncontaminated areas.

   a. Contaminated work footwear shall be stored in the Equipment Room when not in use in the Work area. Upon completion of lead abatement, dispose of footwear as contaminated waste.

   b. Workers removing waste containers from the equipment decontamination enclosure shall enter the holding area from outside wearing a respirator and be dressed in clean disposable coveralls. No worker shall use this system as a means to leave or enter the washroom or the Work area.

5. **Safety Issues:**

   a. During the removal operations the Contractor may be placing his workers in a potentially hazardous electrical environment. Care and special consideration should be exercised by the Contractor to avoid electrical shock to his or her employees. The requirements as set forth in the latest edition of the National Electrical Code shall be adhered to at all times. Particular emphasis shall be placed on the requirements listed in Article 210-BRANCH CIRCUITS, Article 225-OUTSIDE BRANCH CIRCUITS AND FEEDERS, Article 250-GROUNDING, Article 300-WIRING METHODS, and Article 305-TEMPORARY WIRING, whenever and wherever the existing electrical power service shall be de-energized and temporary electrical power utilized.

   b. During summer work activities the Work area environment may be very hot and humid. The Contractor shall take precautions to protect his or her workers from the hostile environment as well as the lead material. First-aid items such as stretchers, water, and cold packs should be kept adjacent to the Work area exits, thus allowing any personnel requiring emergency treatment egress from the Work area with minimum contamination to the clean environment. No worker shall be allowed to reach through the plastic or air lock door to get water or firstaid supplies during break periods inside the Work area. Breaks, lunch or worker rest periods should be held outside the Work area. All decontamination procedures shall be followed prior to exiting the Work area except in extreme emergencies.

   c. During cold weather periods the workers shall be provided with adequate protection from the environment to not cause harm to the workers.

   d. If evacuation of the Work area is required by contaminated personnel due to an emergency, all work efforts shall stop, and all forces shall be directed at minimizing the area contamination, cleanup operations and first-aid procedures. These activities shall be noted in the daily logbook.

e. During work activities requiring decontamination procedures, the Contractor shall provide a means of communication for the workers inside the Work area without requiring personnel to enter or leave the Work area. This method of communications shall be a two-way radio, localized wire-connected telephone, or similar system. This communication system shall remain intact until the final containment plastic is removed. Then all equipment shall be wiped down, HEPA vacuumed or disposed of as lead-contaminated material.

E. **Posting of Warning Signs:**

1. Post two safety warning signs which follow the "Sample Format Warning Sign" shown below:

Sample Format Warning Sign
Minimum Size - 24" x 36"
Material - Aluminum or Fiberglass
Script:

DANGER

LEAD WORK AREA

MAY DAMAGE FERTILITY OR THE UNBORN CHILD

CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM

DO NOT EAT, DRINK OR SMOKE IN THIS AREA

F. **Emergency Precautions and Procedures:**

1. Establish emergency and fire exits from the Work Area. Emergency exits shall be equipped with 2 full sets of protective clothing and respirators.

2. Local medical emergency personnel, both ambulance crews and hospital emergency room staff, shall be notified prior to commencement of abatement operations as to the possibility of having to handle contaminated or injured Workers, and shall be advised on safe decontamination.

3. Contractor shall be prepared to administer first aid to injured personnel after decontamination. Seriously injured personnel shall be treated immediately or evacuated without delay for decontamination. When an injury occurs, the Contractor shall stop Work and implement fiber reduction techniques (e.g., water spraying) until the injured person has been removed from the Work Area.

4. Before starting actual removal of lead material(s), local police and fire departments shall be notified as to the danger of entering the Work Area. The Contractor shall make every effort to help these agencies form plans of action should their personnel need to enter the contaminated area.

1.7 SUPERINTENDENT, FOREMAN, CRAFTSMAN:

The Contractor shall have a job superintendent present at all times while work on this Contract is in progress.

The Project Superintendent (Competent person) shall be thoroughly familiar and experienced with lead removal and related work and shall be familiar with and shall enforce the use of all safety procedures and equipment. He or she shall be knowledgeable of all HUD, EPA, OSHA (Federal and State), and NIOSH requirements and guidelines. He or she shall be trained and certified by CDPH in the proper use of all personal protection and safety equipment including, but not limited to, air purification and respiratory systems.

In addition to the Superintendent, the Contractor shall furnish one or more foremen who are familiar and experienced with lead removal and its related work, safety procedures, and equipment. The Forman shall be the Competent person when the Superintendent is not present.

A. It shall be a requirement of this Contract that the superintendent and/or one or more of the Contractor's foremen be in the Work area at all times while work is in progress.

B. It is the intent of these Specifications that all phases of the Work shall be executed by skilled craftsmen experienced or receiving training by experienced personnel in each respective trade.

C. All superintendents and foremen shall have been trained by attending an appropriate HUD approved Lead-Based Paint Supervisor training course and satisfactorily passing a California State Department of Public Health Services sanctioned examination for the above stated training program. Only formal training programs will be accepted.

D. Workers shall, at a minimum, receive the appropriate classroom training program covering the topics listed in the HUD guidelines and the OSHA standard and shall have an additional 8 hours of hands-on training prior to beginning abatement work. Training will be through an appropriate HUD approved Lead-Based Paint work training course.

E. The Competent person on-site must be able to clearly communicate in a manner so that the Owner’s Consultant and Owner can clearly understand.

PART 2 - MATERIAL AND EQUIPMENT

2.1 MATERIALS:

A. **Packaging:** Deliver all materials in the original packages, container, or bundles bearing the name of the manufacturer and the brand name.

B. **Storage:** Store all materials subject to damage off the ground, away from wet or damp surfaces, and under cover sufficient to prevent damage or contamination. Damaged or deteriorating materials shall not be used and shall be removed from the

premises. Material that becomes contaminated with lead shall be disposed of in accordance with the applicable regulations.

C. **Chemical removers:** Shall not contain methylene chloride. Chemical removers shall be compatible with and not harm the substrate they are applied to. Chemical removers used on masonry surfaces shall contain anti-stain formulation that inhibits the discoloration of stone, granite, brick, and other masonry construction. Chemical removers used on interior surfaces shall not raise or discolor the surface being abated.

D. **Chemical stripping agent neutralizers:** May be used on exterior surfaces only. Neutralizers shall be compatible with and not harm the substrate to which they are applied. Neutralizers shall be compatible with the stripping agent that has been applied to the surface substrate.

E. **Plastic:** (Fire retardant polyethylene) Sheet, of 6-mil thickness or greater as specified in sizes to minimize the frequency of joints.

F. **Tape:** Capable of sealing joints of adjacent sheets of polyethylene and for attachment of polyethylene sheet to finished or unfinished surfaces of dissimilar materials and capable of adhering under both dry and wet conditions. Use tape with tough backing that does not leave residue on the adhering surface.

G. **Phosphate Wash (TSP Wash):** Shall consist of a solution containing at least one ounce of 5 percent trisodium phosphate (TSP) to each gallon of water.

H. **Impermeable containers:** Suitable to receive and retain any lead-coated or contaminated materials until disposal at an approved site, labeled in accordance with OSHA Regulation 29 CFR 1910.1025 and DOT 49 CFR 171-177. Containers must be both air and watertight and must be resistant to damage and rupture. Plastic bags shall be a minimum of 6-mil thick.

I. **Warning labels and signs**: As required by 29 CFR 1926, 29 CFR 1910.245, and Title 8 CCR, Section 1532.1.

J. **For bridging encapsulant use:**

1. Encapsulant to be specified and approved by Owner's representative

K. **Encapsulants/primers:**

1. Encapsulant to be specified and approved by Owner's representative

L. **Surfactants:** Or wetting agent, for amending water will be 50 percent polyoxyethylene ether and 50 percent polyoxyethylene ester, or equivalent, at a concentration of one ounce per 5 gallons of water.

M. **Other materials:** Provide all other materials, such as lumber, nails, and hardware that may be required to construct and dismantle the decontamination area and the barriers that isolate the Work area.

2.2 TOOLS AND EQUIPMENT:

A. **Tools:** Provide suitable tools for lead-based paint removal.

B. **Air filtration equipment:** High efficiency particulate air (HEPA) filtration systems shall be equipped with filtration equipment in compliance with ANSI Z9.2-79, local exhaust ventilation or equal. No air movement system or air filtering equipment shall discharge unfiltered air outside the Work area. If volatile chemicals are used, use manufacturer's guidelines and provide appropriate filters for solvent vapor or other organic based material use.

PART 3 - EXECUTION

3.1 PREPARATION (Interior Areas):

A. **Separation of work areas from occupied areas as directed in the Scope of Work:**

1. **Reference:** Contractor will use the applicable procedures as outlined in Section 01010 HM or, if none, use those contained within. Where conflict among requirements (e.g., other concurrent work) or with these Specifications exists, the more stringent requirements shall apply.

2. **For areas requiring constructed barrier walls:** Separate parts of the building required to remain in use (as shown on Plans) from parts of the building that will undergo lead-containing or lead-based paint removal by means of airtight barriers, constructed as follows:

   a. Build suitable wood or metal framing and apply 3/8 inch minimum thickness sheathing on work side only, unless noted otherwise.

   b. Cover both sides of partition with double layer of plastic sheet with joints staggered and sealed with tape. Edges of partition at floor, walls, and ceiling shall be caulked airtight.

3. **Electrical Shut-down:** Shut down electric power which serves the Work area. Provide temporary power and lighting and ensure safe installation of temporary power sources and equipment per applicable electrical code requirements.

4. **HVAC Shut-down:** Shut down and isolate heating, cooling, and ventilating air systems to prevent contamination and fiber dispersal to other areas of the structure. Physically blank off, with light gage metal, all supply and return air ductwork which leads to and from an isolated work area when the air-handling unit serves areas other than within the isolated work area.

5. **Seal off openings:** Seal off all openings, including but not limited to windows, corridors, doorways, skylights, ducts, grills, diffusers, and any other penetrations of the Work areas, with plastic sheeting (minimum of 4-mils thick) sealed with tape.

B. **Preclean work area:**

1. **Moveable Objects:** Clean all moveable objects within the Work area using HEPA vacuum equipment and wet cleaning methods. Remove these objects from the Work area to a designated temporary storage location.

   Protection of and accounting for the stored materials is the sole responsibility of the Contractor.

2. **Fixed Objects:** Preclean fixed objects within the proposed work areas, using HEPA vacuum equipment and/or wet cleaning methods as appropriate, and enclose with minimum of 6-mil polyethylene sealed with tape.

3. **Vacuum and Wet Methods:** Preclean the proposed work areas using HEPA vacuum equipment or wet cleaning methods as appropriate. Do not use methods that raise dust, such as dry sweeping or vacuuming with equipment not equipped with HEPA filters.

C. **Prepare work area:**

1. **Reference:** Contractor will use the applicable procedures as outlined in Section 01010 HM or, if none, use those contained within. Where conflict among requirements (e.g. other concurrent work) or with these Specifications exists, the more stringent requirements shall apply.

2. **Non-Contaminated Objects:** Remove and clean objects, such as lights and other items not previously sealed off, that may interfere with lead removal. Use HEPA vacuum equipment and wet methods during fixture removal to reduce lead dispersal. Wrap in plastic and store for reinstallation upon completion of testing procedures.

3. **Protection of Fixed Objects:** Protect all fixtures, grills, lockers, and other non-removable equipment from water. Also, protect painted surfaces and flooring.

4. **Plasticization:** Cover non-impacted floor, walls and ceiling surfaces with plastic sheeting sealed with tape. Use a minimum of two layers of 6-mil plastic on floors and two layers of 4-mil plastic on walls and ceilings. Cover floors first so that plastic extends at least 12 inches up on walls, then cover walls with plastic sheeting to the floor level, thus overlapping the floor material by a minimum of 12 inches.

   a. All criticals (doors, vents, openings, wall penetrations, etc.) will be covered with 2 layers of 6-mil plastic and secured with duct tape to prevent leakage of air. If windows, doors, door frames, or other interior/exterior transitional items on which lead-based paint is to be removed, place 2 layers of 6-mil plastic just to the outside of the surface area to be removed. All exterior lead-based paint removal is to be performed according to Section 9912, Lead-Based Paint Removal (Exterior).

   b. The second layer of floor sheeting may be black or dark in color. If floor coverings are scheduled for removal, per Plans and/or Scope of Work, floor

plastic is not placed until after floor coverings are removed, which occurs during Lead Removal activities, paragraph 3.2.

c. All joints in the plastic sheeting shall have a minimum of 12 inches of overlap and shall be securely sealed with tape to prevent leakage of air and water.

5. **Emergency Exits:** Maintain emergency and fire exits from the Work areas, or establish alternative exits satisfactory to fire officials.

6. **Establish a reduced pressure in the Work area**

a. **Determine the Ventilation Requirements:**

(1) **General:** Provide fully operational negative pressure systems supplying a minimum of one air change every 15 minutes. Determine the volume in cubic feet of the work area by multiplying floor area by ceiling height. Determine total ventilation requirement in cubic feet per minute (cfm) for the work area by dividing this volume by the air change rate.

Ventilation Required (CFM) =Volume of work area (cu. ft.)/1 5 min.

(2) **Number of Units:** Determine number of units needed to achieve 15 minute change-rate by dividing the ventilation requirement (CFM) above by capacity of exhaust units(s) used. Capacity of a unit for purposes of this section is the capacity in cubic feet per minute with fully loaded filters (pressure differential which causes loaded filter warning light to come on) in the machines labeled operating characteristics.

$$\text{Number of Units Needed} = \frac{\text{Ventilation Requirement (CFM)}}{\text{Capacity of Unit with Loaded Filters (CFM)}}$$

Add one (1) additional unit as a backup in case of equipment failure or machine shutdown for filter changing.

(3) **Location of Exhaust Units:** Locate exhaust unit(s) so that makeup air enters work area primarily through decontamination facilities and traverses work area as much as possible. This may be accomplished by positioning the exhaust unit(s) at a maximum distance from the worker access opening or other makeup air sources.

Place end of unit, or its exhaust duct, through an opening in the plastic barrier or wall covering. The plastic around the unit or duct shall then be sealed with tape.

(4) **Venting or Exhaust:** Unless authorized in writing by the Project Coordinator, vent negative air exhaust to outside of building. Exhaust outlet shall be a minimum of ten feet above ground level.

(5) **Supplemental makeup air inlets:** Provide where required for proper air flow through the work space in location approved by the Project

Coordinator by making openings in the plastic sheeting that allow air from outside the building into the work area.

(6) **Makeup Air Inlets:** Locate auxiliary makeup air inlets as far as possible from the exhaust unit(s) (e.g., on an opposite wall), off the floor, and away from barriers that separate the work area from occupied clean areas. Cover with flaps to reseal automatically if the negative pressure system should shut down for any reason. Spray flap and around opening with spray adhesive so that flap seals if it closes.

b. **Use of the Negative Pressure System:**

(1) **General:** Each unit shall be serviced by a dedicated minimum 115V-20A circuit with overload device tied into an existing building electrical panel that has sufficient spare capacity to accommodate the load of all negative pressure units connected. Dedication of an existing circuit may be accomplished by shutting down existing loads on the circuit.

(2) **Testing the System:** Test negative pressure system before any lead-containing material is wetted or removed. After the work area has been prepared, the decontamination facility set up, and the exhaust unit(s) installed, start the unit(s) (one at a time). Demonstrate operation and testing of negative pressure system to Project Coordinator.

(3) **System Evaluation:** A demonstration of the negative pressure system to the Project Coordinator will include, but not be limited to, the following:

(a) Plastic barriers and sheeting move slightly in toward work area.

(b) Curtain of decontamination units move slightly in toward work area.

(c) There is a noticeable movement of air through the decontamination unit. Use smoke tube to demonstrate air movement from Clean Room to Shower Room, from Shower Room to Equipment Room, and from Equipment Room to Work Area.

(d) Use smoke tubes to determine a positive motion of air across all area in which work is to be performed.

(e) Use a differential pressure meter or manometer to demonstrate a pressure difference of at least 0.02 inches of water across every barrier separation the Work Area from the balance of the building or outside.

(f) Modify the negative pressure system as necessary to successfully demonstrate the above.

D. **Decontamination Facilities:**

1. **General:** Contractor will use the applicable procedures as outlined in Section 01010 HM or, if none, use those contained within. Where conflict among requirements (e.g., other concurrent work) or with these Specifications exists, the more stringent requirements shall apply.

2. **Construction Review:** Build suitable decontamination facilities described herein, as previously submitted for review, before start of construction.

3. **Air Locks and Access Doorways:** In all cases, access between contaminated and uncontaminated rooms or areas shall be through an air lock previously defined. Passage between any two rooms within the decontamination facility shall be through an access doorway.

4. **3-Stage Decontamination Enclosure:** Construct a worker decontamination enclosure system contiguous to the Work area consisting of three totally enclosed chambers to conform to standard Plans bound herein and as follows.

    a. A shower room with two access doorways, one to the equipment room and one to the clean room. Plastic, if used, on shower room and adjoining equipment and clean rooms shall be opaque.

    b. The shower room shall contain at least one shower with hot and cold or warm water. Careful attention shall be paid to the shower enclosure to ensure against leaking of any kind.

5. **Remote Decontamination Enclosures:** For remote decontamination systems (non-contiguous to the Work area) construction of the shower will conform to Section 02092 HM, Part 3.1, D1, above with the following modifications:

    a. The enclosure need not be attached to the Work area, but clean room and equipment rooms must be clearly marked at their respective entrances.

    b. A HEPA filtration machine must be attached to the equipment room and must be operational while the decontamination unit is in use.

6. **Equipment Decontamination Enclosures:** For an equipment decontamination enclosure facility, construct two totally enclosed chambers as follows:

    a. A washroom, constituting an air lock, with an access doorway to a designated area of the Work area and an access doorway to the holding area.

    b. A holding area, constituting an air lock, with an access doorway to the washroom and an access doorway to an uncontaminated area.

7. **Entry/Exit systems:** All decontamination systems or entry/exit system air locks will be constructed using Z-flap design incorporating 2 layers of 6-mil plastic with the flaps extending the full height and width of the entrance space.

E. **Maintenance of enclosure system:**

1. Ensure that barriers and plastic linings are effectively sealed and taped. Repair damaged barriers and remedy defects immediately upon discovery.

2. Visually inspect enclosures at the beginning of each work period.

3. Use smoke methods to test effectiveness of barriers when directed by Owner or representative of Owner.

F. **Lead removal work shall not commence until:**

1. Arrangements have been made for disposal of waste at an acceptable site.

2. Work areas and decontamination facility and parts of the building required to remain in use are effectively segregated.

3. Tools, equipment, and material waste receptors are on hand.

4. Arrangements have been made for building security.

5. All other preparatory steps have been taken and applicable notices posted and permits obtained.

6. Removal work will not begin until the Owner's consultant authorizes work to commence, in writing.

3.2 LEAD REMOVAL:

A. **General:** Prepare site per paragraph 3.1.

B. **References:** Contractor will use the applicable procedures as outlined in Section 01010 HM or, if none, use those contained within. Where conflict among requirements (e.g. other concurrent work) or with these Specifications exists, the more stringent requirements shall apply.

C. **Negative pressure system during abatement Operations:**

1. Start exhaust units before beginning work (before any lead-containing material is disturbed). After abatement work has begun, run units continuously to maintain a constant negative pressure until decontamination of the work area is complete. Do not turn off units at the end of the work shift or when abatement operations temporarily stop.

2. Start abatement work at a location farthest from the exhaust units and proceed toward them. If an electric power failure occurs, immediately stop all abatement work and do not resume until power is restored and exhaust units are in operation again.

3. At completion of abatement work, allow exhaust units to run, to remove airborne dust that may have been generated during abatement work and cleanup and to purge the work area with clean makeup air. The units may be required to run for a longer time after decontamination, if dry or only partially wetted lead material was encountered during any abatement work.

D. **Lead-Containing Materials Removal:**

1. Ensure that the material is thoroughly soaked with amended water prior to removal.

2. Ensure that the air is misted thoroughly during the removal process.

3. Remove materials intact as much as possible.

E. **Containerizing Waste:**

1. **Daily Containerizing**: During each day's work, the bulk lead material shall be bagged in 6-mil thick bags, before it dries. No lead material shall be allowed to lie on the floor overnight.

2. **Types of Containers:** Place the bagged material in sealed containers (hard sealable containers).

3. **Labels:** Place caution labels on containers in accordance with OSHA Regulation 29 CFR 1910.1025 and DOT 49 CFR 171-177 if not already preprinted on containers.

4. **Cleaning:** Clean external surfaces of containers thoroughly by wet sponging in the designated area. Move containers to washroom, wet clean each container thoroughly, and move to holding area pending removal to uncontaminated areas. If the holding area is outside containment it well be a locked and secured area with appropriate warning signage at entrance. If holding area is within containment ensure that area is secure and appropriate signage is maintained.

5. **Safety:** Ensure that containers are removed from the holding area by workers who have entered from uncontaminated areas dressed in clean coveralls.

F. **Post Removal Cleaning:** After completion of stripping work (chemical or abrasive), all surfaces from which lead-based paint or lead containing material has been removed shall be wet brushed and sponged or cleaned by an equivalent method to remove all visible material. During this work, the surfaces being cleaned shall be kept wet. At the Contractor's option, the layer of plastic exposed to the lead may be removed, leaving intact the final layer of plastic.

G. **Safety:** Ensure that workers do not enter from uncontaminated areas into the washroom or the Work area; ensure that contaminated workers do not exit the Work area through the equipment decontamination enclosure system.

3.3 CLEANUP AND CLEARANCE MONITORING:

Employ the following procedures in cleaning up the Work area:

A. **Wet Clean:** Wet-clean all surfaces and remove all visible accumulation of lead containing material from the Work area. Prepare the Work area for the initial visual inspection using a sequenced cleaning technique using HEPA vacuuming, a TSP washdown, and a second HEPA vacuuming.

B. **Initial Visual Inspection:** Once the Work area is clean of visible accumulations of lead material, the Owner's consultant will perform the visual inspection. The Contractor will continue the HEPA vacuuming and washdown process until the area is visible clean.

C. **Plastic Removal:** When the area is deemed clean by the Owner's consultant, remove plastic from all surfaces

D. **For surfaces to be stabilized perform the following:**

1. As directed by Owner's Representative, lead painted surfaces shall be sealed with a non-lead containing encapsulating primer after the surface is clean and dry. Apply encapsulant using airless spray equipment or suitable paint applicator where a uniform coat can be applied.

2. Prepare and apply encapsulating primer according to the manufacturer's specifications. Because application by spraying could cause dissemination of residual LBP, encapsulating primer must be applied with as much caution and at as low a nozzle pressure as possible.

3. Encapsulating primer shall be applied according to manufacturer's specifications. Encapsulating primer shall be allowed to dry between coats, per manufacturer's recommendations.

4. Upon completion of paint stabilization work, notify Owner's consultant in writing that stabilization surfaces are ready for review.

E. **Final Visual Inspection:** Owner's consultant will conduct a thorough visual inspection to determine the completeness of encapsulation and use a damp cloth for wiping abated surfaces prior to collecting the actual wipe samples.

F. **Clearance Wipe Testing:** Upon successful completion of the visual inspection and Owner's consultant's determination that all surfaces in the Work area are dry and free of contamination, the clearance wipe tests will be conducted. A certificate of Visual Inspection shall be issued by the Owner's Representative and shall be signed by both the contractor and the Owner's Representative.

1. The final wipe clearance test will consist of sampling and analysis in accordance with the HUD guidelines. The levels noted in the HUD Guidelines or Title 17, California Code Of Regulations, Division 1, Chapter 8 (whichever is more stringent at time of work) will be achieved prior to acceptance.

2. Contractor shall continue cleaning the Work site until the accepted lead level is achieved.

G. **Additional inspection/testing:** Additional inspection/testing required after the sequence detailed above will be the responsibility of the Contractor. In the event of additional testing, the Contractor may reimburse Owner, or reduce the Contract amount by change order. It is the Owner's intent to have, at no charge to the Contractor, one set of inspections/tests performed in each area. A test may consist of one sample or a series of samples performed at the same time.

H. **Dismantling the negative air system:** When a final inspection and the results of final wipe tests indicate that the area has been decontaminated, exhaust units may be removed from the work area. Before removal from the work area, remove and properly dispose of pre-filter, and seal intake to the machine with 6-mil polyethylene to prevent environmental contamination from the filters.

3.4 HANDLING AND DISPOSAL OF LEAD-COATED MATERIALS AND LEAD-CONTAMINATED WASTE:

Waste Characterization: Contractor shall submit to Owner's consultant, copies of waste characterization testing prior to transportation of all waste.

A. **Storage:** Store all waste material in a lockable container that is inaccessible to all persons other than employee's of the Contractor. Until TCLP testing proves a category to be non-hazardous, all waste shall be considered hazardous, and stored as such. Any material found to be hazardous by way of testing shall be labeled **"Hazardous Waste - Contains Lead"** and the date that the Contractor began to collect the waste in that container. All hazardous and non-hazardous waste shall be kept in totally and completely separate containers.

B. **Waste Segregation**

1. All categories of waste identified in this specification shall be kept separate from each other. The categories that have been identified include:

   a. Waste water from shower and cleaning operations
   b. Disposable suits and respirator cartridges
   c. Components that are painted with Lead-Based paint
   d. Components that are lead-laden (e.g., ceramic tile)
   e. Paint chips, debris and vacuum contents
   f. Plastic sheeting, duct tape
   g. Rags, sponges, mops and other items used to conduct clean up activities

C. **Representative Samples:** Representative material of each of the categories must be sampled and submitted for testing to determine if the material in the category are hazardous.

1. Representative samples of waste materials shall be collected by the Consultant.

D. **Waste Testing**

1. At no time shall waste be removed from the site without the following documentation submitted to the Owner or Owner's representative for approval.

   a. TCLP, STLC, and TTLC testing results as required by the specifications or according to local and state requirements.

b. Hazardous waste manifest for those materials identified as hazardous wastes.

2. Testing of those categories of materials shall be performed to minimize the storage of assumed hazardous materials. Contractor shall collect at least one composite sample from each of the categories listed above in section 3.4.B, "Waste Segregation." The analysis shall be conducted to determine if any of the waste categories are classified as a RCRA hazardous waste. The Contractor shall determine if testing for other compounds, such as pH, Flashpoint, etc., are required for disposal at a particular landfill.

3. If test results of the composite samples for any of the Waste Segregation categories indicate that the sampled materials are found to contain greater than the action levels indicated below, those materials represented by the composite sample shall be disposed of as Hazardous Waste.

   a. Greater than or equal to 1000 PPM of the total Lead as determined by the Total Threshold Limit Concentration Procedure (TTLC) by EPA 6010.

   b. Greater than or equal to five (5) PPM of soluble Lead as determined by the “California Wet Test” or Soluble Threshold Limit Concentration Procedure (STLC) by EPA 200.7.

   c. Greater than or equal to five (5) PPM of leached Lead as determined by the Toxicity Characteristic Leaching Procedure (TCLP) by EPA 200.7

4. All waste must be transported by a Certified Hazardous Waste Transporter.

5. If the test results for any of the waste segregation categories indicate that less than the action levels listed above were detected, those materials represented by the composite sample may be disposed of as construction debris provided they do not meet any other criteria that would designate them as a hazardous waste.

6. The Abatement Contractor will be required to comply with the Resource Conservation and Recovery Act (RCRA) and/or any other applicable state, county law, regulation and/or guidelines, whichever is the most stringent.

D. **Waste Transportation:** Submit the method of transport of hazardous waste including name, address, EPA I.D. number, and telephone number of transporter.

1. If the Abatement Contractor is not a RCRA/DOT/EPA certified Hazardous Waste Transporter, then a contract shall be entered into with a certified Transporter to move the waste. The Abatement Contractor shall require the certified hazardous waste transport firm to follow RCRA, DOT, EPA, and any/all other applicable regulations. Many transporters are also capable of supplying pertinent information and services applicable to necessary rules, regulations, and specifications. The certified Transporter/hauler shall submit to the Owner or Owner's representative for approval their qualifications to perform the work as specified herein. The Abatement Contractor shall be responsible for the actions of the waste hauler as pertaining to waste removal and disposal under this section and all EPA, DOT, and other applicable regulations.

E. **Hazardous Waste Site:** Submit for approval the name, class, address, EPA I.D. number, and telephone number of hazardous waste site(s) to be utilized for disposal.

1. The Abatement Contractor must supply documents that detail the site(s) to be used for ultimate waste disposal. Documents from these disposal sites must be supplied by the Abatement Contractor to the **Owner or Owner's representative** from the disposal facilities stating that hazardous and/or construction waste will be accepted by these facilities. In addition, the Abatement Contractor must submit documents from these sites proving that they are licensed/permitted to accept such waste and will accept the waste proposed by the Abatement Contractor for treatment or ultimate disposal.

D. **Containers:** Containers to be loaded for transportation from the Holding Area must be removed by Workers who have entered from uncontaminated areas, dressed in clean overalls. Workers must not enter from the Holding Area into the Washroom or the Work Area.

1. Waste Containers – The Abatement Contractor will comply with EPA and DOT regulations for waste containers. The Abatement Contractor shall contact the State and Local authorities to determine their criteria for containers. In the case of any conflict in regulations, the more stringent regulation shall apply.

   a. Paint Chips: The Abatement Contractor shall place lead-based paint fragments and debris produced as a result of any abatement activity, and lead dust in 6-mil polyethylene (plastic) bags that are air-tight and puncture-resistant.

   b. Cleaning Materials: The Abatement Contractor will place all disposable cleaning materials such as sponges, mop heads, filters, disposable clothing, and brooms in six-mil plastic bags or sealable drums. If after testing, those materials are determined to be hazardous, the bags or drums will be sealed, labeled, and considered hazardous waste.

   c. Contaminated Debris: In Particular, the Abatement Contractor shall separate, label, and containerize the following.

      (1) All paint fragments removed by chemical strippers, surface preparation, or by any abatement methodology.

      (2) Grossly contaminated body suits.

      (3) HEPA vacuum contents, filters, and respirator cartridges: paint chips or other abatement debris on plastic should always be HEPA vacuumed prior to picking up the plastic.

      (4) Dust/Debris or contaminated materials.

      (5) All hazardous waste or materials should be kept totally separate from non-hazardous materials.

      (6) Polyethylene Sheeting: Prior to removing any six (6) mil polyethylene sheeting, the Abatement Contractor shall lightly mist the sheeting in order

to keep dust down and remove and containerize any debris by folding the polyethylene sheeting inward to contain debris and to form tight bundles to containerize for disposal. The Abatement Contractor shall place all plastic sheeting in six (6) mil thick polyethylene bags or sealable drums, and seal with duct tape.

(7) Liquid Waste: The Abatement Contractor shall contain and properly dispose of all liquid waste, including lead-contaminated wash water. The container for waste waters shall be lined 55 gallon metal drums.

(8) Solvents: The Abatement Contractor shall place solvent residues and residues from strippers in drums made out of materials that cannot be dissolved or corroded by chemicals. Solvents will be tested by the Abatement Contractor to determine if they are hazardous. Solvents, caustic, and acid waste must be segregated and not stored in the same containers.

2. The Abatement Contractor shall HEPA vacuum the exterior of all waste containers prior to removing the waste containers from the work area and shall wet wipe the containers to ensure that there is no residual contamination. Containers should then be moved out of the work area into the designated storage area.

F. **Disposal:** The sealed lead containers shall be delivered to Contractor's predesignated approved Hazardous Waste Site for burial; in accordance with Title 22, CAC, EPA guidelines and 40 CFR 61.156 and local Air Pollution Control District Regulations.

G. **Notification of Transport:** Notify the Owner's consultant **48 hours in advance** of the time when contaminated materials are to be removed from the site.

H. **Safety:** Contractor shall be responsible for safe handling and transportation of hazardous waste generated by this Contract to the designated Hazardous Waste Site.

I. **Hazardous Materials Spills:** Contractor shall hold the Owner and Owner's consultant harmless for claims, damages, losses, and expenses, including attorney's fees arising out of or resulting from, lead spills on the site or spills enroute to the disposal site.

3.5 REESTABLISHMENT OF OBJECTS AND SYSTEMS:

A. **Relocation of Moveable Objects:** Relocate objects moved to temporary locations in the course of the Work to their proper positions. Only clean objects are to be moved into the areas.

B. **Remounting Objects:** Remount objects removed in the course of the Work in their former positions. Repair any moveable or fixed objects damaged during the course of the Work.

C. **Systems reestablishment:** Reestablish HVAC, mechanical, and electrical systems in proper working order.

1. Install new HVAC filters and dispose of used filters as contaminated waste.

D. **Building repair/repaint:** Repair any damage to building, or building systems (electrical, mechanical, plumbing, etc.,) which was not noted in writing prior to work area preparation.

1. Repaint any areas damaged during the course of the Work unless this work is scheduled for repair by others. See paragraph 1.2 C, Related Work Specified Elsewhere, of this section. Quality of paint and workmanship shall be consistent with that found within the building prior to this Project, unless otherwise stated.

END OF SECTION

SECTION 02093 HM

INTERIM CONTROLS REGARDING LOOSE AND FLAKY PAINT
(Paint Film Stabilization)

PART 1 - GENERAL

1.1 SCOPE:

This Specification covers the implementation of interim controls regarding the removal of loose and flaky lead-based paint from substrates as described in Section 01010 HM, Scope of Work.

1.2 DESCRIPTION OF WORK:

A. The Work specified herein shall be the removal of loose and flaky lead-based paint by persons knowledgeable, qualified, and trained in interim controls for the removal, treatment, handling, and disposal of loose and flaky lead-based paint, and the subsequent cleaning of the affected environment, and who comply with Federal, State, and Local regulations and guidelines which mandate work practices, and who are capable of performing the Work of this Contract.

B. **Contract Fulfillment:** The Contractor shall supply all labor, materials, equipment, services, insurance, and incidentals which are necessary or required to perform the Work in accordance with applicable governmental regulations and guidelines and these Specifications.

1.3 TERMINOLOGY:

See Section 02092 HM, Part 1.3 for Terminology.

1.4 APPLICABLE DOCUMENTS:

Comply with Section 02092 HM, Part 1.4 for Applicable Documents.

1.5 SUBMITTALS AND NOTICES:

Comply with Section 02092 HM, Part 1.5 for Submittals and Notices.

1.6 **PERSONAL PROTECTION AND SAFETY:**

Comply with Section 02092 HM, Part 1.6. It shall be modified in the following particulars only.

A. **Respiratory Protection Requirements:**

1. Disposable (single use) respirators are not to be worn for protection against lead.

2. For the following tasks or conditions, a 1/2 mask air-purifying respirator, equipped with high efficiency filters may be used:

   a. Provided maximum airborne lead concentration outside the respirator at or below 500 $\mu g/m^3$:

   b. Pre-construction sealing of openings and penetrations to the work areas with plastic sheeting.

   c. Decontamination of removable items.

   d. During removal of lead-containing materials.

   e. During all cleanup and wipe down of area.

   f. During final wipe down of work space.

   g. Loading lead-containing drums on truck for transportation and unloading bags at approved landfill.

3. A full facepiece, powered air-purifying respirator equipped with HEPA filters will be required under the following conditions:

   a. At any time that air monitoring levels indicate that lead concentrations are at least 500 $\mu g/m^3$ or greater.

4. All employees and visitors will wear appropriate filters for the work at hand. During chemical use, follow manufacturer guidelines for appropriate personal and respiratory protection.

B. **Bilingual Worker Protection Procedures (Posted in both English and Spanish):**

1. Each worker and authorized visitor shall: put on a respirator and don one suit of protective clothing before entering the Equipment Room or the Work area. Clothing that is appropriate for weather and temperature conditions is worn under the protective clothing.

2. Each time before leaving the work area, all workers and authorized visitors shall remove gross contamination from the protective clothing using a HEPA vacuum, then remove protective clothing except respirators by carefully rolling down the garment to reduce exposure to dust and place within a labeled hazardous material

6-mil plastic bag which is within the work area. Personnel will then proceed through to the washroom and clean the outside of the respirator with a wet disposable towel; remove the respirator; and thoroughly wet wipe themselves

3. Following wet wiping and decontamination procedures, each Worker shall proceed directly to the outside area at the end of each day's Work, or before eating, smoking, or drinking.

4. Before re-entering the Work Area, each Worker and authorized visitor shall put on a clean respirator and shall dress in clean protective clothing as described above.

5. Contaminated work footwear shall be stored in the Equipment Room or Work area in a labeled 6-mil bag when not in use in the Work area until they are appropriately decontaminated. Upon completion of lead work, dispose of footwear as contaminated waste unless they can be appropriately decontaminated. All porous type footwear will be disposed of as contaminated waste.

6. Workers removing waste containers from the equipment decontamination enclosure shall enter the holding area from outside wearing a respirator and dressed in clean disposable coveralls. No worker shall use this system as a means to leave or enter the washroom or the Work area.

7. Workers shall not eat, drink, smoke, or chew gum or tobacco while in the Work area.

8. Workers shall be fully protected with respirators and protective clothing from the time of first disturbance of lead-coated or contaminated materials prior to commencing actual lead abatement and until final cleanup is completed.

1.7 **SUPERINTENDENT, FOREMAN, CRAFTSMAN:**

Comply with Section 02092 HM, Part 1.7, Superintendent, Foreman, Craftsman.

PART 2 - MATERIAL AND EQUIPMENT

Comply with Section 02092 HM, Part 2.

PART 3 - EXECUTION

3.1 PREPARATION:

A. For exterior work, the contractor shall prepare the area as follows:

1. Doors and Windows: Doors and windows on the side of the building upon which a dust-generating method is being used, and on the same floor and all floors below, must be covered with 6-mil thick polyethylene sheeting.

2. Plants and ground: The ground and any plants or shrubs in the area in which exterior abatement is occurring shall be covered with two layers of 6-mil plastic in a tarp-like fashion, sufficiently bonded together to form a single layer and weighted at all edges so as to prevent blowing. A single 10-mil plastic sheet may be substituted. Such covering shall cover from the side of the structure to a point at least eight feet away from the structure for every story in height (10'). The covering shall be taped or otherwise attached to the structure.

3. Ground covers shall always be placed in a manner that traps all debris and water. This is best accomplished by elevating the edges.

4. The plastic ground cover shall be properly disposed of and not re-used.

B. For exterior work where water blasting occurs, the contractor shall prepare the area as follows:

1. Critical Barriers shall be erected whereby all water and loose paint shall be contained within the Work Area.

2. Ground: The ground shall be covered with 10-mil or 6-mil reinforced polyethylene and shall extend 18 inches vertically at all perimeter walls.

3. Vertical Surfaces: A single layer of 6-mil polyethylene shall be constructed as a critical barrier on all vertical walls and shall overlap 12 inches on top of ground poly.

4. Contractor shall contain all water within the enclosure. Contractor shall construct containment as to prevent water leakage from containment or into buildings.

5. All containment plastic shall be properly disposed of and not re-used.

6. All water within the containment shall be filtered with a HEPA filtration device.

C. For all exterior work:

1. **Special Areas:** Any abatement project being performed on any structure other than a building shall be arranged, equipped, and operated in a manner that will eliminate the possibility of lead contaminates or lead contaminated materials escaping from the work area.

2. **Maintain Barriers:** The abatement subcontractor shall maintain polyethylene barriers and a clean area as long as needed for the safe and proper completion of the work. Any openings or tears in the work area barriers shall be corrected by the abatement subcontractor at the beginning of each work day and as necessary during the workday with such openings and barriers in place and acceptable to the owner's consultant.

3. **Prior to barrier removal:** Barriers shall not be removed until the work areas are thoroughly cleaned, and the area is approved by the consultant. All debris must be bagged and removed from work areas, and the lead surface wipe samples must

have passed final clearance test, in accordance with provisions detailed in the barrier removal.

4. **Use of mini-isolation chamber:** At the Owner's, and consultant approval, the Abatement Subcontractor may utilize a portable mini-isolation chamber to create an isolated work area around single components to be removed. This chamber shall still be equipped with an adjacent clean room, and become an isolated work area sealed at all seams to where it is attached to adjacent surfaces. It shall also satisfy all requirements for a work area and satisfy all clearance criteria, as identified in this section and local law.

5. **Signs:** Prior to the preparation of the dwelling for abatement, the abatement subcontractor shall place warning signs immediately outside all entrances and exits to the dwelling, warning that abatement work is being conducted in the vicinity. The signs shall be at least 20" x 14" and read

DANGER

LEAD WORK AREA

MAY DAMAGE FERTILITY OR THE UNBORN CHILD

CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM

DO NOT EAT, DRINK OR SMOKE IN THIS AREA

6. Signs shall be in bold lettering with lettering not smaller than two inches tall.

7. Construct and maintain suitable polyethylene barriers within the building to isolate the exterior work area from the interior of the building. Make every effort to maintain a distance of 25 feet from the barrier tape to the closet scheduled point of work within the Work area(s).

8. Maintain emergency and fire exits from Work Areas.

D. For interior work, the contractor shall prepare the area as follows:

1. **HVAC shut down:** Shut down or isolate heating, cooling, ventilation air systems within the control area to prevent contamination and dust dispersal to other areas of the structure. During the Work, vents within the immediate removal area (to a distance of ten feet from the affected surface) shall be sealed with tape and plastic sheeting and as shown on plans.

2. **Loose equipment:** Do not begin Work until immediate work area is free of loose equipment.

3. **Pre-clean:** Pre-clean fixed objects within the proposed Work Areas using HEPA filtered vacuum equipment and/or protect occupants' belongings by covering with one layer of six mil polyethylene and have joints taped. All debris gathered during this clean up shall be disposed of properly. In addition, any loose paint or paint bearing debris found in the buildings are to be assumed hazardous and packaged

and disposed of properly. The amount of the materials should be estimated during the pre-bid walk through.

4. **Use of a mini-containment:** At the Owner's and consultant's approval, the Abatement Subcontractor may utilize a portable mini-isolation chamber to create an isolated work area around single components to be removed. This chamber shall still be equipped with an adjacent clean room, and become an isolated work area sealed at all seams to where it is attached to adjacent surfaces. It shall also satisfy all requirements for a work area and satisfy all clearance criteria, as identified in this section and local law.

5. **Walls and floors:** Lay a single layer of six-mil thick polyethylene sheeting below the impacted area. Sheeting will extend to a distance of six feet beyond the affected area in all direction not bounded by walls or non-moveable partitions. Walls directly below the affected surface will be covered with six-mil thick polyethylene sheeting to extend 4 feet in either direction beyond the affected area.

6. **Surrounding barrier:** A barrier shall be erected at room entrances, which shall be sealed with a single layer of six-mil thick polyethylene sheeting, and a suitable two-stage decontamination unit shall be erected and attached to barrier sheeting.

7. **Maintaining barriers:** The abatement subcontractor shall maintain polyethylene barriers and a clean area as long as needed for the safe and proper completion of the work. Any openings or tears in the work area barriers shall be corrected by the abatement subcontractor at the beginning of each work day and as necessary during the workday with such openings and barriers in place and acceptable to the consultant.

8. **Removal of barriers:** Barriers shall not be removed until the work areas are thoroughly cleaned, and the area approved by the consultant. All debris must be bagged and removed from work areas, and the lead surface wipe samples must have passed final clearance test according to provisions detailed in the barrier removal.

9. **Signs:** Prior to the preparation of the dwelling for abatement, the abatement subcontractor shall place warning signs immediately outside all entrances and exits to the dwelling, warning that abatement work is being conducted in the vicinity. The signs shall be at least 20" x 14" and read:

DANGER

LEAD WORK AREA

MAY DAMAGE FERTILITY OR THE UNBORN CHILD

CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM

DO NOT EAT, DRINK OR SMOKE IN THIS AREA

10. Signs shall be in bold lettering with lettering not smaller than two inches tall.

11. Maintain emergency and fire exits from Work Areas.

12. Construct and maintain suitable polyethylene barriers within the building to isolate the exterior work area from the interior of the building. Make every effort to maintain a distance of 10 feet from the barrier tape to the closet scheduled point of work within the Work area.

13. Maintain emergency and fire exits from Work Areas.

E. **Decontamination Facilities:**

Build suitable decontamination facilities described herein, as previously submitted for review, before start of construction.

In all cases, access between contaminated and uncontaminated rooms or areas shall be through an air lock previously defined. Passage between any two rooms within the decontamination facility shall be through an access doorway.

1. Locate decontamination facility as close in proximity to the Work area as possible.

2. Construct a two-stage worker decontamination enclosure system consisting of two totally separate areas to conform to standard Plans found herein and as follows.

   a. A shower area with two access ways: one to the equipment room and one to the outside area. Plastic, if used, on shower room and adjoining equipment rooms shall be opaque.

   b. The shower area shall contain at least one room with water for wet wiping of hands and face. Careful attention shall be paid to the shower enclosure to ensure against leaking of any kind.

3. If needed, provide or construct an equipment decontamination area consisting of two totally separate areas as follows:

   a. A washroom, with access to a designated area of the Work area and access to the holding area.

   b. A holding area with access to the washroom and access to an uncontaminated area.

4. At entrances and exits and the decontamination facility name of both the shower and equipment decontamination room, a clearly identifiable label shall be affixed that is visible from a distance of 25 feet.

3.2 INTERIM CONTROL METHODS FOR LOOSE AND FLAKY LBP:

A. Prepare site per paragraph 3.1.

B. Remove and clean or clean and wrap objects, such as lights and other items not previously sealed off that may interfere with lead removal. Use HEPA vacuum equipment and wet methods during fixture removal to reduce lead dispersal. Wrap removed items in plastic and store for reinstallation upon completion of testing procedures.

C. **Protection:** Protect all fixtures, grills, lockers, and other non-removable equipment from water. Also, protect painted surfaces and flooring.

D. **Scrapping of loose and flaky paint:**

1. All surfaces shall be final scrapped following other flaky paint removal methods.

2. The Contractor shall scrape the material in such a manner as to prevent damage to the substrate.

3. The Contractor shall use wet methods during the scrapping process, unless the substrate will result in undo damage from the wetting. If wetting cannot be performed to this condition, scrapping shall be slow and deliberate so as to lessen the distance of travel. In all cases, occasional misting of the immediate area over the drop cloth shall be performed. After scrapping the impacted area, the area shall be thoroughly HEPA vacuumed.

4. Sufficient scrapping of loose and flaky paint for application of lead-bloc or other encapsulation method shall occur when a scrapping blade is drawn across the remaining painted surface with heaviness of hand and no additional paint dislodges from the substrate. Sufficient scrapping is at the discretion of the consultant and/or inspector.

E. **Paint Stabilization:** Perform paint stabilization process according to Section 2092, Part 3.3.D.

3.3 CLEANUP AND CLEARANCE MONITORING:

Comply with Section 02092 HM, Part 3.3, for Cleanup and Clearance Monitoring.

3.4 DISPOSAL OF LEAD-COATED MATERIALS AND LEAD-CONTAMINATED WASTE:

Comply with Section 02092 HM, Part 3.4, for Disposal of Lead-Coated Materials and Lead-Contaminated Waste.

3.5 REESTABLISHMENT OF OBJECTS AND SYSTEMS:

Comply with Section 02092 HM, Part 3.5 for Reestablishment of Objects and Systems.

END OF SECTION

APPENDIX A – LIMITED ASBESTOS INSPECTION REPORT DATED FEBRUARY 9, 2021

EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Industrial Hygiene • Air Quality • Lead & Asbestos • Training • Health & Safety

LIMITED ASBESTOS INSPECTION REPORT

Conducted at:

SAVANNAH ELEMENTARY SCHOOL
PAINTING PROJECT
3720 RIO HONDO AVENUE
ROSEMEAD, CALIFORNIA 91770

Prepared for:

MR. HAROLD SULLINS
ASSISTANT SUPERINTENDENT
ROSEMEAD SCHOOL DISTRICT
3907 ROSEMEAD BOULEVARD, SUITE 220
ROSEMEAD, CALIFORNIA 91770

Prepared by:

EXECUTIVE ENVIRONMENTAL
310 EAST FOOTHILL BOULEVARD, SUITE 200
ARCADIA, CALIFORNIA 91006

Project Number EE 20-Z0046-0135
February 9, 2021

Report assembled by:

Yesenia G. Galeana
Technical Report Writer
Executive Environmental

Report generated/reviewed by:

Tim Galeana, CLP # 3732
Senior Project Manager
Executive Environmental

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LIMITED ASBESTOS INSPECTION REPORT

Project Number:	EE 20-Z0046-0135
Client:	Rosemead School District 3907 Rosemead Boulevard, Suite 220 Rosemead, California 91770
Site Location:	Savannah Elementary School Painting Project 3720 Rio Hondo Avenue Rosemead, California 91770
Site Use:	School Property
Contact Person:	Mr. Harold Sullins Assistant Superintendent Phone: (626) 312-2900
Inspection Date:	December 22 and 29, 2020
Inspected By:	Mr. Rhys Kuzmic Certified Asbestos Consultant, # 09-4586
Report Assembled By:	Ms. Yesenia G. Galeana Technical Report Writer
Report Generated/Reviewed By:	Mr. Tim Galeana Certified Asbestos Consultant, # 98-2470

I. EXECUTIVE SUMMARY

Executive Environmental (EE) provided the services of a Certified Asbestos Consultant to conduct a limited asbestos inspection of the permanent buildings, portables and covered walkways at Savannah Elementary School located at 3720 Rio Hondo Avenue, Rosemead, California. The inspection was conducted as a precursor to the upcoming exterior painting project. Materials suspected of containing asbestos were sampled and analyzed for the presence of asbestos. No Asbestos-Containing Materials (ACM) were identified during this inspection. *This is considered to be a limited inspection. Inspection was limited to exterior materials anticipated to be impacted by the exterior painting project*.

II. SAMPLING METHODOLOGY

A visual inspection of the exterior of the permanent buildings, portables and covered walkways at Savannah Elementary School was conducted prior to the collection of any bulk samples. The visual inspection was conducted to identify and record the location and condition of the materials to be sampled. Following the visual inspection, bulk material samples of the identified suspect asbestos-containing building materials were

collected. The materials were categorized into homogeneous groupings, and each sample was assigned a unique sample number and placed into a sealed container.

Upon completion of the bulk sample collection, a chain of custody was prepared and the samples were delivered to the laboratory for analysis. AmeriSci of Carson, CA, analyzed the samples using Polarized Light Microscopy (PLM). AmeriSci is an accredited participant in the National Voluntary Laboratory Accreditation Program (NVLAP), No. 200346-0. The principles described in the current Environmental Protection Agency (EPA) 600 method were used in the preparation and analysis of the bulk samples.

Note: Inaccessible suspect asbestos materials may be located within sealed ceilings, walls, or floors; or within wall cavities, interstitials, shafts, etc. Suspect asbestos materials located in these areas must be sampled prior to any activities that might cause them to be disturbed.

III. SAMPLE ANALYSIS

Forty-four (44) samples were collected during this inspection. The laboratory analysis results are identified in the following table. Materials determined not to contain asbestos are listed as “No Asbestos Detected” (NAD).

Any material found to contain more than 1% of a known asbestos substance is considered to be an asbestos-containing material (ACM). Materials falling within this category are controlled and must be handled in accordance with the California Occupational Safety & Health Administration (Cal/OSHA), EPA, and South Coast Air Quality Management District (SCAQMD) regulations.

In addition, materials which are characterized as non-ACM by EPA or other local regulatory agencies may fall within the regulatory standards of Cal/OSHA, which further regulates any materials found to contain more than 1/10 of 1%, but 1% or less, of a known asbestos substance as asbestos-containing construction materials (ACCMs). Impacting or handling ACCMs requires special employer registration, documentation, training, and personal protective equipment. When a material is to be impacted, the National Emission Standards for Hazardous Air Pollutants (NESHAPs) regulations require further testing for materials that fall within this category.

The PLM analytical protocol requires each layer of the sample to be analyzed separately. The quantity of analyses will vary based on the number of layers in a sample and whether a "positive stop" is employed. When one sample of a homogeneous area is positive, the remainder of the samples need not be analyzed because the entire homogeneous area must be considered positive.

Sampling results begin on the next page.
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POLARIZED LIGHT MICROSCOPY (PLM) ANALYSIS DATA

Savannah Elementary School
3720 Rio Hondo Avenue
Rosemead, California 91770

Homogeneous Material #	Material Description	Material Location	Estimated Quantity	Condition[A]	Type[B]	Friable	Percent Damaged	Sample Number	Sample Location	Analytical Results
Building A (MPR)[C]										
1	Stucco	Throughout exterior walls, overhangs, south breezeway walls and ceilings connected to Building F	4,000 Square Feet	G	Surf.	No	<1	2012220135RK-01	West wall	NAD[D]
								2012220135RK-02	North wall	NAD
								2012220135RK-03	East wall	NAD
								2012220135RK-04	Breezeway, south wall	NAD
								2012220135RK-05	Breezeway, northwest ceiling	<1% chrysotile[E]
										1000-Pt. Ct.: <0.1% chrysotile
Building B (Rooms 6 thru 9)[F]										
2	Stucco	Throughout exterior walls	3,400 Square Feet	G	Surf.	No	<1	2012220135RK-06	West wall	NAD
								2012220135RK-07	South wall, west	NAD
								2012220135RK-08	South wall, east	NAD
								2012220135RK-09	East wall	NAD
								2012220135RK-10	North wall	NAD

Note: 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 materials and their locations only.

[A] G = Good; D = Damaged; SD = Severely Damaged
[B] Misc. = Miscellaneous; Surf. = Surfacing; TSI = Thermal System Insulation
[C] NOTE: 1) No window putty. 2) Cinderblock exterior select walls.
[D] NAD = No Asbestos Detected.
[E] Sample 5 had a result of less than 1% chrysotile via PLM analysis were further analyzed via the 1000-point count method. The analysis by 1000-point count analysis revealed that under Cal/OSHA regulations the stucco is a non-regulated material.
[F] NOTE: 1) No window putty.

POLARIZED LIGHT MICROSCOPY (PLM) ANALYSIS DATA

Savannah Elementary School
3720 Rio Hondo Avenue
Rosemead, California 91770

Homogeneous Material #	Material Description	Material Location	Estimated Quantity	Condition[G]	Type[H]	Friable	Percent Damaged	Sample Number	Sample Location	Analytical Results
Building C (Classrooms 10 thru 14)[I]										
3	Stucco	Throughout exterior walls	3,000 Square Feet	G	Surf.	No	<1	2012220135RK-11	West wall	NAD[J]
								2012220135RK-12	South wall, west	NAD
								2012220135RK-13	South wall, east	<1% chrysotile[K]
										1000-Pt. Ct.: <0.1% chrysotile
								2012220135RK-14	East wall	NAD
								2012220135RK-15	North wall	NAD
Building D (Classroom 2)[L]										
4	Stucco	Throughout exterior walls	1,500 Square Feet	G	Surf.	No	<1	2012220135RK-16	North wall, west	NAD
								2012220135RK-17	North wall, east	NAD
								2012220135RK-18	East wall	NAD
								2012220135RK-19	South wall	NAD
								2012220135RK-20	West wall	NAD

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[G] G = Good; D = Damaged; SD = Severely Damaged
[H] Misc. = Miscellaneous; Surf. = Surfacing; TSI = Thermal System Insulation
[I] NOTE: 1) No window putty.
[J] NAD = No Asbestos Detected.
[K] Sample 13 had a result of less than 1% chrysotile via PLM analysis were further analyzed via the 1000-point count method. The analysis by 1000-point count analysis revealed that under Cal/OSHA regulations the stucco is a non-regulated material.
[L] NOTE: 1) No window putty.

POLARIZED LIGHT MICROSCOPY (PLM) ANALYSIS DATA

Savannah Elementary School
3720 Rio Hondo Avenue
Rosemead, California 91770

Homogeneous Material #	Material Description	Material Location	Estimated Quantity	Condition[M]	Type[N]	Friable	Percent Damaged	Sample Number	Sample Location	Analytical Results
Building E (Classrooms 3 thru 5)[O]										
4	Stucco	Throughout exterior walls and Breezeway walls and ceilings	4,300 Square Feet	G	Surf.	No	<1	2012220135RK-21	North wall	NAD[P]
								2012220135RK-22	East wall	<1% chrysotile[Q]
										1000-Pt. Ct.: <0.1% chrysotile
								2012220135RK-23	South wall	NAD
								2012220135RK-24	West wall	NAD
								2012220135RK-25	Breezeway, ceiling south	<1% chrysotile
										1000-Pt. Ct.: <0.1% chrysotile

Note: 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 materials and their locations only.

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[M] G = Good; D = Damaged; SD = Severely Damaged
[N] Misc. = Miscellaneous; Surf. = Surfacing; TSI = Thermal System Insulation
[O] NOTE: 1) No window putty.
[P] NAD = No Asbestos Detected.
[Q] Samples 22 and 25 had a result of less than 1% chrysotile via PLM analysis were further analyzed via the 1000-point count method. The analysis by 1000-point count analysis revealed that under Cal/OSHA regulations the stucco is a non-regulated material.

POLARIZED LIGHT MICROSCOPY (PLM) ANALYSIS DATA

Savannah Elementary School
3720 Rio Hondo Avenue
Rosemead, California 91770

Homogeneous Material #	Material Description	Material Location	Estimated Quantity	Condition[R]	Type[S]	Friable	Percent Damaged	Sample Number	Sample Location	Analytical Results
Building F (Administration/Library)[T]										
5	Stucco	Throughout exterior walls, Breezeway wall and Overhangs	2,200 Square Feet	G	Surf.	No	<1	2012220135RK-26	South wall	<1% chrysotile[U]
										1000-Pt. Ct.: <0.1% chrysotile
								2012220135RK-27	East wall	NAD[V]
								2012220135RK-28	Overhang, ceiling northwest	<1% chrysotile
										1000-Pt. Ct.: <0.1% chrysotile
								2012220135RK-29	Breezeway, north wall	<1% chrysotile
										1000-Pt. Ct.: <0.1% chrysotile
								2012220135RK-30	Overhang, ceiling southwest	<1% chrysotile
										1000-Pt. Ct.: <0.1% chrysotile
Portables[W]										
No suspect asbestos-containing materials were identified on the exterior walls of Building G (Portable 1), Building J (Portables 15 thru 19), Building K (Portables 20, 21 and Restroom), Building L (Portables 22 thru 29)										

Note: 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 materials and their locations only.

[R] G = Good; D = Damaged; SD = Severely Damaged
[S] Misc. = Miscellaneous; Surf. = Surfacing; TSI = Thermal System Insulation
[T] NOTE: 1) No window putty. 2) Cinderblock exterior select walls
[U] Samples 26, 28 thru 30 had a result of less than 1% chrysotile via PLM analysis were further analyzed via the 1000-point count method. The analysis by 1000-point count analysis revealed that under Cal/OSHA regulations the stucco is a non-regulated material.
[V] NAD = No Asbestos Detected.
[W] NOTE: 1) All Portables have exterior wood walls and no window putty. 2) Building G (Portable 1) exterior wood panel was removed.

POLARIZED LIGHT MICROSCOPY (PLM) ANALYSIS DATA

Savannah Elementary School
3720 Rio Hondo Avenue
Rosemead, California 91770

Homogeneous Material #	Material Description	Material Location	Estimated Quantity	Condition[X]	Type[Y]	Friable	Percent Damaged	Sample Number	Sample Location	Analytical Results
Campus										
6	Asphalt paving	West Parking Lot	10,000 Square Feet	G	Misc.	No	<1	2012290135RK-31	North	NAD[Z]
								2012290135RK-32	Center	NAD
								2012290135RK-33	Southwest	NAD
7	Asphalt paving	Northeast Parking Lot	10,500 Square Feet	G	Misc.	No	<1	2012290135RK-34	North	NAD
								2012290135RK-35	East	NAD
								2012290135RK-36	South	NAD
8	Asphalt paving	Playground	36,000 Square Feet	G	Misc.	No	<1	2012290135RK-37	Northeast	NAD
								2012290135RK-38	East at Volleyball court	NAD
								2012290135RK-39	Center	NAD
								2012290135RK-40	West	NAD
								2012290135RK-41	South near Storage Shed	NAD
9	Asphalt paving	Handball Court	3,400 Square Feet	G	Misc.	No	<1	2012290135RK-42	North	NAD
								2012290135RK-43	Center	NAD
								2012290135RK-44	South	NAD

Note: 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 materials and their locations only .

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[X] G = Good; D = Damaged; SD = Severely Damaged
[Y] Misc. = Miscellaneous; Surf. = Surfacing; TSI = Thermal System Insulation
[Z] NAD = No Asbestos Detected.

IV. FINDINGS

EE conducted a limited asbestos inspection of the permanent buildings, portables and covered walkways at Savannah Elementary School located at 3720 Rio Hondo Avenue, Rosemead, California.

Nine (9) homogeneous material groups were identified during the visual property inspection. Forty-four (44) samples of suspect asbestos-containing materials were collected and delivered to AmeriSci of Carson, CA for analysis. The homogeneous area and sampling results are listed on the table in Section III.

The analytical data revealed that the sampled materials do not contain asbestos.

V. CONCLUSIONS/RECOMMENDATIONS

No asbestos-containing materials were identified during this inspection. Activities involving the inspected materials may proceed as normal construction actions. If suspect asbestos materials that were not sampled are to be disturbed, additional sampling will be required

If you have any questions, please call Mr. Tim Galeana at 626-441-7050. We are glad we could be of service to you.

VI. DISCLAIMER/REPORT LIMITATIONS

All reports and recommendations are based on conditions and practices observed and information made available to Executive Environmental (EE) by the client and the designated sites/facilities on the days sampling was conducted. This report does not purport to set forth all hazards, nor to indicate that other hazards do not exist. No responsibility is assumed by EE for the control or correction of conditions or practices existing at the facilities, or at any other premises surveyed by EE, for and on the behalf of the client. Services provided by EE shall be governed by the standard of practice for professional services measured at the time those services are rendered.

All information contained in this report is proprietary and limited to the scope of services, parameters of the analytical methods used and the conditions present at the time of this inspection. Any references to quantities are considered estimates and are not to be construed as actual.

APPENDIX A – LABORATORY ANALYSIS REPORT

Please Reply To:

AmeriSci Los Angeles
24416 S. Main Street, Ste 308
Carson, California 90745
TEL: (310) 834-4868 • FAX: (310) 834-4772

FACSIMILE TELECOPY TRANSMISSION

To:	Yesenia Galeana Executive Environmental Services Corporation	**From:**	Dennis Liu
		AmeriSci Job #:	920121642
Fax #:		**Subject:**	PLM 5 day Results
		Client Project:	20-Z0046-0135; Building A (MPR), Building B (Rooms 6-9), Building C (Rooms 10-1
Email:	info@execenv.com,ygaleana@execenv.com		

Date: Monday, January 4, 2021
Time: 13:14:53
Comments:

Number of Pages: 13 (including cover sheet)

AmeriSci Los Angeles
24416 S. Main Street, Ste 308
Carson, California 90745
TEL: (310) 834-4868 • FAX: (310) 834-4772

PLM Bulk Asbestos Report

Executive Environmental Services Corpo
Attn: Yesenia Galeana
310 East Foothill Blvd.
Suite 200
Arcadia, CA 91006

Date Received 12/28/20
Date Examined 01/04/21

AmeriSci Job # 920121642
P.O. #
Page 1 **of** 6

RE: 20-Z0046-0135; Building A (MPR), Building B (Rooms 6-9), Building C (Rooms 10-14), Buidling D (Room 2), Building E (Rooms 3-5), F Admin, Library (Media Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
2012220135RK-01	920121642-01	*No*	NAD (by CVES) by Dennis Liu on 01/04/21
Location: Exterior, West Wall / Stucco / T-O Exterior Walls, Overhangs And South Breezeway Walls & Ceiling Connected To Bldg F			
Analyst Description: Beige/Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
2012220135RK-02	920121642-02	*No*	NAD (by CVES) by Dennis Liu on 01/04/21
Location: Exterior, North Wall / Stucco			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
2012220135RK-03	920121642-03	*No*	NAD (by CVES) by Dennis Liu on 01/04/21
Location: Exterior, East Wall / Stucco			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
2012220135RK-04	920121642-04	*No*	NAD (by CVES) by Dennis Liu on 01/04/21
Location: Exterior, South Wall (In Breezeway) / Stucco			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
2012220135RK-05	920121642-05	*Yes*	Trace (<1 %) (by CVES) by Dennis Liu on 01/04/21
Location: Breezeway Ceiling, NW / Stucco			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types: Chrysotile <1. %			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

20-Z0046-0135; Building A (MPR), Building B (Rooms 6-9), Building C (Rooms 10-14), Buidling D (Room 2), Building E (Rooms 3-5), F Admin, Library (Media Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
2012220135RK-06	920121642-06	***No***	NAD
Location: Exterior, West Wall / Exterior Stucco / T-O Exterior Walls			(by CVES) by Dennis Liu on 01/04/21
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
2012220135RK-07	920121642-07	***No***	NAD
Location: Exterior, South Wall - West / Exterior Stucco			(by CVES) by Dennis Liu on 01/04/21
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
2012220135RK-08	920121642-08	***No***	NAD
Location: Exterior, South Wall - East / Exterior Stucco			(by CVES) by Dennis Liu on 01/04/21
Analyst Description: Beige/Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
2012220135RK-09	920121642-09	***No***	NAD
Location: Exterior, East Wall / Exterior Stucco			(by CVES) by Dennis Liu on 01/04/21
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
2012220135RK-10	920121642-10	***No***	NAD
Location: Exterior, North Wall / Exterior Stucco			(by CVES) by Dennis Liu on 01/04/21
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
2012220135RK-11	920121642-11	***No***	NAD
Location: Exterior, West Wall / Exterior Stucco / T-O Exterior Walls			(by CVES) by Dennis Liu on 01/04/21
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

20-Z0046-0135; Building A (MPR), Building B (Rooms 6-9), Building C (Rooms 10-14), Buidling D (Room 2), Building E (Rooms 3-5), F Admin, Library (Media Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
2012220135RK-12	920121642-12	***No***	NAD (by CVES) by Dennis Liu on 01/04/21
Location: Exterior, South Wall - West / Exterior Stucco			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
2012220135RK-13	920121642-13	***Yes***	Trace (<1 %) (by CVES) by Dennis Liu on 01/04/21
Location: Exterior, South Wall - East / Exterior Stucco			
Analyst Description: Grey/Tan, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types: Chrysotile <1. %			
Other Material: Non-fibrous 100 %			
2012220135RK-14	920121642-14	***No***	NAD (by CVES) by Dennis Liu on 01/04/21
Location: Exterior, East Wall / Exterior Stucco			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
2012220135RK-15	920121642-15	***No***	NAD (by CVES) by Dennis Liu on 01/04/21
Location: Exterior, North Wall / Exterior Stucco			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
2012220135RK-16	920121642-16	***No***	NAD (by CVES) by Dennis Liu on 01/04/21
Location: Exterior, North Wall - West / Exterior Stucco / T-O Exterior Walls			
Analyst Description: Beige/Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
2012220135RK-17	920121642-17	***No***	NAD (by CVES) by Dennis Liu on 01/04/21
Location: Exterior, North Wall - East / Exterior Stucco			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

20-Z0046-0135; Building A (MPR), Building B (Rooms 6-9), Building C (Rooms 10-14), Buidling D (Room 2), Building E (Rooms 3-5), F Admin, Library (Media Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
2012220135RK-18	920121642-18	***No***	NAD (by CVES) by Dennis Liu on 01/04/21
Location: Exterior, East Wall / Exterior Stucco			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
2012220135RK-19	920121642-19	***No***	NAD (by CVES) by Dennis Liu on 01/04/21
Location: Exterior, South Wall / Exterior Stucco			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
2012220135RK-20	920121642-20	***No***	NAD (by CVES) by Dennis Liu on 01/04/21
Location: Exterior, West Wall / Exterior Stucco			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
2012220135RK-21	920121642-21	***No***	NAD (by CVES) by Dennis Liu on 01/04/21
Location: Exterior, North Wall / Stucco / T-O Exterior Walls And Breezeway Walls And Ceiling			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
2012220135RK-22	920121642-22	***Yes***	Trace (<1 %) (by CVES) by Dennis Liu on 01/04/21
Location: Exterior, East Wall / Stucco			
Analyst Description: Beige/Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types: Chrysotile <1. %			
Other Material: Non-fibrous 100 %			
2012220135RK-23	920121642-23	***No***	NAD (by CVES) by Dennis Liu on 01/04/21
Location: Exterior, South Wall / Stucco			
Analyst Description: Beige/Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

20-Z0046-0135; Building A (MPR), Building B (Rooms 6-9), Building C (Rooms 10-14), Buidling D (Room 2), Building E (Rooms 3-5), F Admin, Library (Media Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
2012220135RK-24	920121642-24	***No***	NAD
Location: Exterior, West Wall / Stucco			(by CVES) by Dennis Liu on 01/04/21
Analyst Description: Beige/Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
2012220135RK-25	920121642-25	***Yes***	Trace (<1 %)
Location: Breezeway, South Ceiling / Stucco			(by CVES) by Dennis Liu on 01/04/21
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types: Chrysotile <1. %			
Other Material: Non-fibrous 100 %			
2012220135RK-26	920121642-26	***Yes***	Trace (<1 %)
Location: Exterior, North Wall / Stucco / T-O Exterior Walls, Breezeway Wall And Overhang			(by CVES) by Dennis Liu on 01/04/21
Analyst Description: Grey/Tan, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types: Chrysotile <1. %			
Other Material: Non-fibrous 100 %			
2012220135RK-27	920121642-27	***No***	NAD
Location: Exterior, East Wall / Stucco			(by CVES) by Dennis Liu on 01/04/21
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
2012220135RK-28	920121642-28	***Yes***	Trace (<1 %)
Location: Exterior Overhang, NW Ceiling / Stucco			(by CVES) by Dennis Liu on 01/04/21
Analyst Description: White, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types: Chrysotile <1. %			
Other Material: Non-fibrous 100 %			
2012220135RK-29	920121642-29	***Yes***	Trace (<1 %)
Location: Breezeway, North Wall / Stucco			(by CVES) by Dennis Liu on 01/04/21
Analyst Description: Grey/Pink, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types: Chrysotile <1. %			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

20-Z0046-0135; Building A (MPR), Building B (Rooms 6-9), Building C (Rooms 10-14), Buidling D (Room 2), Building E (Roo 3-5), F Admin, Library (Media Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
2012220135RK-24	920121642-24	***No***	NAD (by CVES) by Dennis Liu on 01/04/21
Location: Exterior, West Wall / Stucco			
Analyst Description: Beige/Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
2012220135RK-25	920121642-25	***Yes***	Trace (<1 %) (by CVES) by Dennis Liu on 01/04/21
Location: Breezeway, South Ceiling / Stucco			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types: Chrysotile <1. %			
Other Material: Non-fibrous 100 %			
2012220135RK-26	920121642-26	***Yes***	Trace (<1 %) (by CVES) by Dennis Liu on 01/04/21
Location: Exterior, South Wall / Stucco / T-O Exterior Walls, Breezeway Wall And Overhangs			
Analyst Description: Grey/Tan, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types: Chrysotile <1. %			
Other Material: Non-fibrous 100 %			
2012220135RK-27	920121642-27	***No***	NAD (by CVES) by Dennis Liu on 01/04/21
Location: Exterior, East Wall / Stucco			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
2012220135RK-28	920121642-28	***Yes***	Trace (<1 %) (by CVES) by Dennis Liu on 01/04/21
Location: Exterior Overhang, NW Ceiling / Stucco			
Analyst Description: White, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types: Chrysotile <1. %			
Other Material: Non-fibrous 100 %			
2012220135RK-29	920121642-29	***Yes***	Trace (<1 %) (by CVES) by Dennis Liu on 01/04/21
Location: Breezeway, North Wall / Stucco			
Analyst Description: Grey/Pink, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types: Chrysotile <1. %			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

20-Z0046-0135; Building A (MPR), Building B (Rooms 6-9), Building C (Rooms 10-14), Buidling D (Room 2), Building E (Rooms 3-5), F Admin, Library (Media Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
2012220135RK-30	920121642-30	***Yes***	Trace (<1 %) (by CVES) by Dennis Liu on 01/04/21

Location: Exterior Overhang, SW Ceiling / Stucco

Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco
Asbestos Types: Chrysotile <1. %
Other Material: Non-fibrous 100 %

Reporting Notes:
Analyzed By: Dennis Liu ____; Date Analyzed: 1/4/2021 1-4-21
*NAD = no asbestos detected; Detection Limit <1%; Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; NA = not analyzed; NA/PS = not analyzed / positive stop; NVA = No Visible Asbestos; PLM (polarized light microscopy) Bulk Asbestos Analysis by EPA 600/R-93/116, including requirements for EPA 600/M4-82-020 per 40 CFR 763 (NVLAP Lab #200346-0); Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full with the approval of the laboratory. This PLM report relates ONLY to the items tested.

Reviewed By:____

Please Reply To:

AmeriSci Los Angeles
24416 S. Main Street, Ste 308
Carson, California 90745
TEL: (310) 834-4868 • FAX: (310) 834-4772

FACSIMILE TELECOPY TRANSMISSION

To:	Yesenia Galeana Executive Environmental Services Corporation	**From:**	Dennis Liu
		AmeriSci Job #:	921011362
Fax #:		**Subject:**	PLM 1000 point count 48 hour Res
		Client Project:	20-Z0046-0135; Building A (MPR), Building B (Rooms 6-9), Building C (Rooms 10-1
Email:	info@execenv.com,ygaleana@execenv.com		

Date: Wednesday, January 20, 2021
Time: 14:17:24
Comments:

Number of Pages: 8 (including cover sheet)

AmeriSci Los Angeles
24416 S. Main Street, Ste 308
Carson, California 90745
TEL: (310) 834-4868 • FAX: (310) 834-4772

PLM Bulk Asbestos Report

Executive Environmental Services Corpo
Attn: Yesenia Galeana
310 East Foothill Blvd.
Suite 200
Arcadia, CA 91006

Date Received 01/18/21
Date Examined 01/04/21

AmeriSci Job # 921011362
P.O. #
Page 1 **of** 3

RE: 20-Z0046-0135; Building A (MPR), Building B (Rooms 6-9), Building C (Rooms 10-14), Buidling D (Room 2), Building E (Rooms 3-5), F Admin, Library (Media Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
2012220135RK-05	921011362-01	*Yes*	Trace (<0.1 % pc) [1] (by 1000 pt ct) by Dennis Liu on 01/04/21
Location: Breezeway Ceiling, NW / Stucco			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types: Chrysotile <0.1 % pc			
Other Material: Non-Asbestos/Inert 63.1 %			
Comment: Heat Sensitive (organic): 5.9%; Acid Soluble (inorganic): 31.0%; Inert (Non-asbestos): 63.1%			
2012220135RK-13	921011362-02	*Yes*	Trace (<0.1 % pc) [1] (by 1000 pt ct) by Dennis Liu on 01/04/21
Location: Exterior, South Wall - East / Exterior Stucco			
Analyst Description: Grey/Tan, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types: Chrysotile <0.1 % pc			
Other Material: Non-Asbestos/Inert 70.5 %			
Comment: Heat Sensitive (organic): 7.3%; Acid Soluble (inorganic): 22.2%; Inert (Non-asbestos): 70.5%			
2012220135RK-22 01	921011362-03	*Yes*	Trace (<0.1 % pc) [1] (by 1000 pt ct) by Dennis Liu on 01/04/21
Location: Exterior, East Wall / Stucco			
Analyst Description: Beige/Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types: Chrysotile <0.1 % pc			
Other Material: Non-Asbestos/Inert 75.2 %			
Comment: Heat Sensitive (organic): 4.0%; Acid Soluble (inorganic): 20.7%; Inert (Non-asbestos): 75.2%			
2012220135RK-25 01	921011362-04	*Yes*	Trace (<0.1 % pc) [1] (by 1000 pt ct) by Dennis Liu on 01/04/21
Location: Breezeway, South Ceiling / Stucco			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco			
Asbestos Types: Chrysotile <0.1 % pc			
Other Material: Non-Asbestos/Inert 79.9 %			
Comment: Heat Sensitive (organic): 3.0%; Acid Soluble (inorganic): 17.1%; Inert (Non-asbestos): 79.9%			

See Reporting notes on last page

PLM Bulk Asbestos Report

20-Z0046-0135; Building A (MPR), Building B (Rooms 6-9), Building C (Rooms 10-14), Buidling D (Room 2), Building E (Rooms 3-5), F Admin, Library (Media Center

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
2012220135RK-26	921011362-05	***Yes***	Trace (<0.1 % pc) [1]
02	**Location:** Exterior, South Wall / Stucco / T-O Exterior Walls, Breezeway Wall And Overhangs		(by 1000 pt ct) by Dennis Liu on 01/04/21

Analyst Description: Grey/Tan, Heterogeneous, Non-Fibrous, Cementitious, Stucco
Asbestos Types: Chrysotile <0.1 % pc
Other Material: Non-Asbestos/Inert 61.1 %
Comment: Heat Sensitive (organic): 9.6%; Acid Soluble (inorganic): 29.3%; Inert (Non-asbestos): 61.1%

2012220135RK-28	921011362-06	***Yes***	Trace (<0.1 % pc) [1]
02	**Location:** Exterior Overhang, NW Ceiling / Stucco		(by 1000 pt ct) by Dennis Liu on 01/04/21

Analyst Description: White, Heterogeneous, Non-Fibrous, Cementitious, Stucco
Asbestos Types: Chrysotile <0.1 % pc
Other Material: Non-Asbestos/Inert 65.9 %
Comment: Heat Sensitive (organic): 10.2%; Acid Soluble (inorganic): 24.0%; Inert (Non-asbestos): 65.9%

2012220135RK-29	921011362-07	***Yes***	Trace (<0.1 % pc) [1]
02	**Location:** Breezeway, North Wall / Stucco		(by 1000 pt ct) by Dennis Liu on 01/04/21

Analyst Description: Grey/Pink, Heterogeneous, Non-Fibrous, Cementitious, Stucco
Asbestos Types: Chrysotile <0.1 % pc
Other Material: Non-Asbestos/Inert 65.4 %
Comment: Heat Sensitive (organic): 10.2%; Acid Soluble (inorganic): 24.5%; Inert (Non-asbestos): 65.4%

2012220135RK-30	921011362-08	***Yes***	Trace (<0.1 % pc) [1]
02	**Location:** Exterior Overhang, SW Ceiling / Stucco		(by 1000 pt ct) by Dennis Liu on 01/04/21

Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Stucco
Asbestos Types: Chrysotile <0.1 % pc
Other Material: Non-Asbestos/Inert 70.7 %
Comment: Heat Sensitive (organic): 5.1%; Acid Soluble (inorganic): 24.2%; Inert (Non-asbestos): 70.7%

See Reporting notes on last page

PLM Bulk Asbestos Report

20-Z0046-0135; Building A (MPR), Building B (Rooms 6-9), Building C (Rooms 10-14), Buidling D (Room 2), Building E (Rooms 3-5), F Admin, Library (Media Center

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Reporting Notes:

(1) EPA 1000 Point Count Analysis performed on inert residue remaining after 480C heat and HCl acid treatments.

Analyzed By: Dennis Liu _____; Date Analyzed: 1/4/2021 1-20-21

*NAD = no asbestos detected; Detection Limit <1%; Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; NA = not analyzed; NA/PS = not analyzed / positive stop; NVA = No Visible Asbestos; PLM (polarized light microscopy) Bulk Asbestos Analysis by EPA 600/R-93/116, including requirements for EPA 600/M4-82-020 per 40 CFR 763 (NVLAP Lab #200346-0); Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full with the approval of the laboratory. This PLM report relates ONLY to the items tested.

Reviewed By: _____

EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Industrial Hygiene Laboratory Submittal
Asbestos -- PLM

Originating Office
☑ 310 E. Foothill Blvd., Suite 200
Arcadia, CA 91006
Phone: 626.441.7050
Fax: 626.441.0016

Lab Submitted to:
☑ AmeriSci
☐ EMLab (Glendale)
☐ LA Testing

☐ **Routine** (5 Working Days)

☑ **RUSH** (surcharges may apply) Circle One: 6 hours / ~~24 hours~~ / 48 hours / ~~3 to 5 days~~

Project #:	Sampled by:	Site Zip Code:	Sample Date:	
20-Z0046-0135	~~Tim Galeana~~/Rhys Kuzmic (RK)	91770	12/22/2020	Page 1 of 6

Building Name: Building A CMPRJ

The receiving Laboratory is required to complete the following:
1. All invoices are to be sent to: 310 E. Foothill Blvd., Suite 200, Arcadia, CA 91006 **with** a copy of the lab report.
2. Analyze all samples by PLM by EPA 600/R-93/116.
3. Stop analysis of homogeneous groups at first positive that is greater than or equal to 1.0%
4. All lab reports and invoices are to contain the Project Number from above.
5. Unsigned and reports marked draft are unacceptable.
6. Report to the attention of: Yesenia Galeana, Phone: (562) 889-1327

Optional Items to be completed by the laboratory (if check marked): ☑ Email Report to: ☑ Info@execenv.com ☑ Other: ygaleana@execenv.com; 920121642

☑ US Mail Report to: ☑ Originating office check marked above ☐ Other: ☐ Alternate billing address:

Prefix: 20122201355RK

Sample No.:	Sample Location – Include Room information where appropriate	Material Description	Homogeneous Location	No.	Quantity	Percent Damaged
-01	Exterior, West wall	Stucco	To exterior walls, overhangs and south breezeway walls & ceiling connected to Bldg F	1	4,000 SF	<1
-02	Exterior, north wall	↓	↓	↓	↓	↓
-03	Exterior, east wall	↓	↓	↓	↓	↓
-04	Exterior, south wall (in breezeway)	↓	↓	↓	↓	↓
-05	Breezeway ceiling, NW	↓	↓	↓	↓	↓

Notes:

Released By, Date, & Time:	Received By, Date, & Time:	Released By, Date, & Time:
Rhys Kuzmic 12/27/2020 3:00PM	12/28/2020 10:55 AM	RGJ 12/28/20 1110
12/28/2020 11:05 AM		

EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Industrial Hygiene Laboratory Submittal
Asbestos -- PLM

Originating Office
☑ 310 E. Foothill Blvd., Suite 200
Arcadia, CA 91006
Phone: 626.441.7050
Fax: 626.441.0016

Lab Submitted to:
☑ AmeriSci
☐ EMLab (Glendale)
☐ LA Testing

☐ **Routine** (5 Working Days)
☑ **RUSH** (surcharges may apply) Circle One: 6 hours ~~24 hours~~ ~~48 hours~~ ~~3 to 5 days~~

Project #:	Sampled by:	Site Zip Code:	Sample Date:	
20-Z0046-0135	~~Tim Galeana~~/Rhys Kuzmic (RK)	91770	12/22/2020	Page 2 of 6

Building Name: Building B (Rooms 6-9)

The receiving Laboratory is required to complete the following:
1. All invoices are to be sent to: 310 E. Foothill Blvd., Suite 200, Arcadia, CA 91006 **with** a copy of the lab report.
2. Analyze all samples by PLM by EPA 600/R-93/116.
3. Stop analysis of homogeneous groups at first positive that is greater than or equal to 1.0%
4. All lab reports and invoices are to contain the Project Number from above.
5. Unsigned and reports marked draft are unacceptable.
6. Report to the attention of: Yesenia Galeana, Phone: (562) 889-1327

Optional Items to be completed by the laboratory (if check marked): ☑ Email Report to: ☑ Info@execenv.com ☑ Other: ygaleana@execenv.com;
☑ US Mail Report to: ☑ Originating office check marked above ☐ Other: ☐ Alternate billing address: 92021642

Prefix: 20122201355RK

Sample No.:	Sample Location – Include Room information where appropriate	Material Description	Homogeneous Location	No.	Quantity	Percent Damaged
-06	Exterior, West Wall	Exterior Stucco	TO exterior Walls	2	3,400 SF	<1
-07	Exterior, South Wall - West	↓		↓	↓	↓
-08	Exterior, South Wall - East					
-09	Exterior, East Wall					
-10	Exterior, North Wall					

Notes:

Released By, Date, & Time:	Received By, Date, & Time:	Released By, Date, & Time:
Rhys Kuzmic 12/23/2020 3:00 PM	12/28/2020 1100 AM	12/28/20 1110
12/28/2020 1108 AM		

EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Industrial Hygiene Laboratory Submittal
Asbestos -- PLM

Originating Office
☑ 310 E. Foothill Blvd., Suite 200
Arcadia, CA 91006
Phone: 626.441.7050
Fax: 626.441.0016

Lab Submitted to:
☑ AmeriSci
☐ EMLab (Glendale)
☐ LA Testing

☐ Routine (5 Working Days)	☐ RUSH (surcharges may apply) Circle One: 6 hours / 24 hours / 48 hours / 3 to 5 days	Project #:	Sampled by:	Site Zip Code:	Sample Date:	
		20-Z0046-0135	~~Tim Galeana~~/Rhys Kuzmic (RK)	91770	12/22/2020	Page 3 of 6

Building Name: Building C (Rooms 10-14)

The receiving Laboratory is required to complete the following:
1. All invoices are to be sent to: 310 E. Foothill Blvd., Suite 200, Arcadia, CA 91006 **with** a copy of the lab report.
2. Analyze all samples by PLM by EPA 600/R-93/116.
3. Stop analysis of homogeneous groups at first positive that is greater than or equal to 1.0%
4. All lab reports and invoices are to contain the Project Number from above.
5. Unsigned and reports marked draft are unacceptable.
6. Report to the attention of: Yesenia Galeana, Phone: (562) 889-1327

Optional Items to be completed by the laboratory (if check marked): ☑ Email Report to: ☑ Info@execenv.com ☑ Other: ygaleana@execenv.com;
☑ US Mail Report to: ☑ Originating office check marked above ☐ Other: ☐ Alternate billing address: 92021642

Prefix: 20122201357RK

Sample No.:	Sample Location – Include Room information where appropriate	Material Description	Homogeneous Location	No.	Quantity	Percent Damaged
-11	Exterior, West Wall	Exterior stucco	T-O exterior walls	3	3,000SF	<1
-12	Exterior, south Wall - west	↓		↓	↓	↓
-13	Exterior, south Wall - east					
-14	Exterior, east Wall					
-15	Exterior, north Wall					

Notes:

Released By, Date, & Time:	Received By, Date, & Time:	Released By, Date, & Time:
RK 12/27/2020 3:00PM	12/28/2020 1500hr	PJ 12/28/20 1110
12/28/2020 1109hr		

EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Industrial Hygiene Laboratory Submittal
Asbestos -- PLM

Originating Office
☑ 310 E. Foothill Blvd., Suite 200
Arcadia, CA 91006
Phone: 626.441.7050
Fax: 626.441.0016

Lab Submitted to:
☑ AmeriSci
☐ EMLab (Glendale)
☐ LA Testing

☐ Routine (5 Working Days)	☑ RUSH (surcharges may apply) Circle One: 6 hours / 24 hours / 48 hours / 3 to 5 days	Project #:	Sampled by:	Site Zip Code:	Sample Date:	
		20-Z0046-0135	~~Tim Galeana~~/Rhys Kuzmic (RK)	91770	12/22/2020	Page 4 of 6

Building Name: Building D (Room 2)

The receiving Laboratory is required to complete the following:

1. All invoices are to be sent to: 310 E. Foothill Blvd., Suite 200, Arcadia, CA 91006 **with** a copy of the lab report.
2. Analyze all samples by PLM by EPA 600/R-93/116.
3. Stop analysis of homogeneous groups at first positive that is greater than or equal to 1.0%
4. All lab reports and invoices are to contain the Project Number from above.
5. Unsigned and reports marked draft are unacceptable.
6. Report to the attention of: Yesenia Galeana, Phone: (562) 889-1327

Optional Items to be completed by the laboratory (if check marked): ☑ Email Report to: ☑ Info@execenv.com ☑ Other: ygaleana@execenv.com;

☑ US Mail Report to: ☑ Originating office check marked above ☐ Other: ☐ Alternate billing address: 92821642

Prefix: 20122201355RK

Sample No.:	Sample Location – Include Room information where appropriate	Material Description	Homogeneous Location	No.	Quantity	Percent Damaged
-16	Exterior, North Wall - west	Exterior stucco	TO exterior walls	4	1,500 SF	<1
-17	Exterior, North Wall - east	↓	↓	↓	↓	↓
-18	Exterior, east Wall					
-19	Exterior, south Wall					
-20	Exterior, west Wall					

Notes:

Released By, Date, & Time:	Received By, Date, & Time:	Released By, Date, & Time:
RK 12/23/2020 3:00PM	12/28/2020 1000AM	RJ 12/28/20 1110
12/28/2020 1108 AM		

EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Industrial Hygiene Laboratory Submittal
Asbestos -- PLM

Originating Office
☑ 310 E. Foothill Blvd., Suite 200
Arcadia, CA 91006
Phone: 626.441.7050
Fax: 626.441.0016

Lab Submitted to:
☑ AmeriSci
☐ EMLab (Glendale)
☐ LA Testing

☐ Routine (5 Working Days)	☐ RUSH (surcharges may apply) Circle One: 6 hours / 24 hours / 48 hours / 3 to 5 days	Project #:	Sampled by:	Site Zip Code:	Sample Date:	
		20-Z0046-0135	~~Tim Galeana~~/Rhys Kuzmic (RK)	91770	12/22/2020	Page 5 of 6

Building Name: Building E (Rooms 3-5)

The receiving Laboratory is required to complete the following:
1. All invoices are to be sent to: 310 E. Foothill Blvd., Suite 200, Arcadia, CA 91006 **with** a copy of the lab report.
2. Analyze all samples by PLM by EPA 600/R-93/116.
3. Stop analysis of homogeneous groups at first positive that is greater than or equal to 1.0%
4. All lab reports and invoices are to contain the Project Number from above.
5. Unsigned and reports marked draft are unacceptable.
6. Report to the attention of: Yesenia Galeana, Phone: (562) 889-1327

Optional Items to be completed by the laboratory (if check marked): ☑ Email Report to: ☑ Info@execenv.com ☑ Other: ygaleana@execenv.com;
☑ US Mail Report to: ☑ Originating office check marked above ☐ Other: ☐ Alternate billing address: 9201216642

Prefix: 20122201351RK

Sample No.:	Sample Location – Include Room information where appropriate	Material Description	Homogeneous Location	No.	Quantity	Percent Damaged
-21	Exterior, north wall	Stucco	T-O exterior walls and breezeway walls and ceiling	5	4,300SF	<1
-22	Exterior, east wall	↓		↓	↓	↓
-23	Exterior, south wall					
-24	Exterior, West Wall					
-25	Breezeway, south ceiling					

Notes:

Released By, Date, & Time:	Received By, Date, & Time:	Released By, Date, & Time:
Rhys Kuz 12/27/2020 3:00PM	12/28/2020 1110	RJ 12/28/20 1110
12/28/2020 1105		

EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Industrial Hygiene Laboratory Submittal
Asbestos -- PLM

Originating Office
☑ 310 E. Foothill Blvd., Suite 200
Arcadia, CA 91006
Phone: 626.441.7050
Fax: 626.441.0016

Lab Submitted to:
☑ AmeriSci
☐ EMLab (Glendale)
☐ LA Testing

☐ Routine (5 Working Days)	☑ RUSH (surcharges may apply) Circle One: 6 hours, 24 hours, 48 hours, (3 to 5 days)	Project #: 20-Z0046-0135	Sampled by: ~~Tim Galeana~~/Rhys Kuzmic (RK)	Site Zip Code: 91770	Sample Date: 12/22/2020	Page 6 of 6

Building Name: F (Admin, Library/Media Center)

The receiving Laboratory is required to complete the following:

1. All invoices are to be sent to: 310 E. Foothill Blvd., Suite 200, Arcadia, CA 91006 **with** a copy of the lab report.
2. Analyze all samples by PLM by EPA 600/R-93/116.
3. Stop analysis of homogeneous groups at first positive that is greater than or equal to 1.0%
4. All lab reports and invoices are to contain the Project Number from above.
5. Unsigned and reports marked draft are unacceptable.
6. Report to the attention of: Yesenia Galeana, Phone: (562) 889-1327

Optional Items to be completed by the laboratory (if check marked): ☑ Email Report to: ☑ Info@execenv.com ☑ Other: ygaleana@execenv.com;

☑ US Mail Report to: ☑ Originating office check marked above ☐ Other: ☐ Alternate billing address:

012021642

Prefix: 2012220135RK

Sample No.:	Sample Location – Include Room information where appropriate	Material Description	Homogeneous Location	No.	Quantity	Percent Damaged
-26	Exterior, south wall	Stucco	T-O exterior walls, breezeway wall and overhangs	6	2,200 SF	<1
-27	Exterior, east wall	↓		↓	↓	↓
-28	Exterior overhang, NW ceiling	↓		↓	↓	↓
-29	Breezeway, north wall	↓		↓	↓	↓
-30	Exterior overhang, SW ceiling	↓		↓	↓	↓

Notes:

Released By, Date, & Time:	Received By, Date, & Time::	Released By, Date, & Time:
Rhys Kuzmic 12/27/2020 3:00PM [signature] 12/28/2020	[signature] 12/28/2020 11:00 AM	RJ 12/28/20 1110

Rev. 1/19

Form: AL-006PLM

Please Reply To:

AmeriSci Los Angeles
24416 S. Main Street, Ste 308
Carson, California 90745
TEL: (310) 834-4868 • FAX: (310) 834-4772

FACSIMILE TELECOPY TRANSMISSION

To: Yesenia Galeana
Executive Environmental Services Corporation
Fax #:

Email: info@execenv.com,ygaleana@execenv.com

From: Thu M. Nguyen
AmeriSci Job #: 920121674
Subject: PLM 5 day Results
Client Project: 20-Z0046-0135; Campus

Date: Monday, January 4, 2021
Time: 22:03:59
Comments:

Number of Pages: 1 (including cover sheet)

AmeriSci Los Angeles
24416 S. Main Street, Ste 308
Carson, California 90745
TEL: (310) 834-4868 • FAX: (310) 834-4772

PLM Bulk Asbestos Report

Executive Environmental Services Corpo
Attn: Yesenia Galeana
310 East Foothill Blvd.
Suite 200
Arcadia, CA 91006

Date Received 12/29/20
Date Examined 01/04/21

RE: 20-Z0046-0135; Campus

AmeriSci Job # 920121674
P.O. #

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
2012290135RK-31	920121674-01	*No*	NAD (by CVES) by Thu M. Nguyen on 01/04/21
Location: West Parking Lot, North / Asphalt Paving / West Parking Lot			
Analyst Description: Black, Heterogeneous, Non-Fibrous, Asphalt **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
2012290135RK-32	920121674-02	*No*	NAD (by CVES) by Thu M. Nguyen on 01/04/21
Location: West Parking Lot, Near Center / Asphalt Paving			
Analyst Description: Black, Heterogeneous, Non-Fibrous, Asphalt **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
2012290135RK-33	920121674-03	*No*	NAD (by CVES) by Thu M. Nguyen on 01/04/21
Location: West Parking Lot, SW / Asphalt Paving			
Analyst Description: Black, Heterogeneous, Non-Fibrous, Asphalt **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
2012290135RK-34	920121674-04	*No*	NAD (by CVES) by Thu M. Nguyen on 01/04/21
Location: Northeast Parking Lot, North / Asphalt Paving / Northeast Parking Lot			
Analyst Description: Black, Heterogeneous, Non-Fibrous, Asphalt **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
2012290135RK-35	920121674-05	*No*	NAD (by CVES) by Thu M. Nguyen on 01/04/21
Location: Northeast Parking Lot, East / Asphalt Paving			
Analyst Description: Black, Heterogeneous, Non-Fibrous, Asphalt **Asbestos Types:** **Other Material:** Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

20-Z0046-0135; Campus

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
2012290135RK-36	920121674-06	*No*	NAD (by CVES) by Thu M. Nguyen on 01/04/21
Location: Northeast Parking Lot, South / Asphalt Paving			
Analyst Description: Black, Heterogeneous, Non-Fibrous, Asphalt **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
2012290135RK-37	920121674-07	*No*	NAD (by CVES) by Thu M. Nguyen on 01/04/21
Location: Playground, NE / Asphalt Paving / Playground			
Analyst Description: Black, Heterogeneous, Non-Fibrous, Asphalt **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
2012290135RK-38	920121674-08	*No*	NAD (by CVES) by Thu M. Nguyen on 01/04/21
Location: Playground, East At Volleyball Court / Asphalt Paving			
Analyst Description: Black, Heterogeneous, Non-Fibrous, Asphalt **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
2012290135RK-39	920121674-09	*No*	NAD (by CVES) by Thu M. Nguyen on 01/04/21
Location: Playground, Near Center / Asphalt Paving			
Analyst Description: Black, Heterogeneous, Non-Fibrous, Asphalt **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
2012290135RK-40	920121674-10	*No*	NAD (by CVES) by Thu M. Nguyen on 01/04/21
Location: Playground, West / Asphalt Paving			
Analyst Description: Black, Heterogeneous, Non-Fibrous, Asphalt **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
2012290135RK-41	920121674-11	*No*	NAD (by CVES) by Thu M. Nguyen on 01/04/21
Location: Playground, South Near Storage Shed / Asphalt Paving			
Analyst Description: Black, Heterogeneous, Non-Fibrous, Asphalt **Asbestos Types:** **Other Material:** Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

20-Z0046-0135; Campus

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
2012290135RK-42	920121674-12	***No***	NAD (by CVES) by Thu M. Nguyen on 01/04/21
Location: Handball Court, North / Asphalt Paving / Handball Court			
Analyst Description: Black, Heterogeneous, Non-Fibrous, Asphalt **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
2012290135RK-43	920121674-13	***No***	NAD (by CVES) by Thu M. Nguyen on 01/04/21
Location: Handball Court, Near Center / Asphalt Paving			
Analyst Description: Black, Heterogeneous, Non-Fibrous, Asphalt **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
2012290135RK-44	920121674-14	***No***	NAD (by CVES) by Thu M. Nguyen on 01/04/21
Location: Handball Court, South / Asphalt Paving			
Analyst Description: Black, Heterogeneous, Non-Fibrous, Asphalt **Asbestos Types:** **Other Material:** Non-fibrous 100 %			

Reporting Notes:

Analyzed By: Thu M. Nguyen Thumnguyen; Date Analyzed: 1/4/2021 1/4/21

*NAD = no asbestos detected; Detection Limit <1%; Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; NA = not analyzed; NA/PS = not analyzed / positive stop; NVA = No Visible Asbestos; PLM (polarized light microscopy) Bulk Asbestos Analysis by EPA 600/R-93/116, including requirements for EPA 600/M4-82-020 per 40 CFR 763 (NVLAP Lab #200346-0); Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full with the approval of the laboratory. This PLM report relates ONLY to the items tested.

Reviewed By: _____

a20121674

Industrial Hygiene Laboratory Submittal
Asbestos -- PLM

EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Originating Office
☑ 310 E. Foothill Blvd., Suite 200
Arcadia, CA 91006
Phone: 626.441.7050
Fax: 626.441.0016

Lab Submitted to:
☑ AmeriSci
☐ EMLab (Glendale)
☐ LA Testing

☑ Routine (5 Working Days)	☐ RUSH (surcharges may apply) Circle One: 6 hours / 24 hours / 48 hours / 3 to 5 days	Project #:	Sampled by:	Site Zip Code:	Sample Date:	
		20-Z0046-0135	~~Tim Galeana~~/Rhys Kuzmic	91770	12/29/2020	Page 7 of 9

The receiving Laboratory is required to complete the following:

1. All invoices are to be sent to: 310 E. Foothill Blvd., Suite 200, Arcadia, CA 91006 **with** a copy of the lab report.
2. Analyze all samples by PLM by EPA 600/R-93/116.
3. Stop analysis of homogeneous groups at first positive that is greater than or equal to 1.0%
4. All lab reports and invoices are to contain the Project Number from above.
5. Unsigned and reports marked draft are unacceptable.
6. Report to the attention of: Yesenia Galeana, Phone: (562) 889-1327

Building Name: Campus

Optional Items to be completed by the laboratory (if check marked): ☑ Email Report to: ☑ Info@execenv.com ☑ Other: ygaleana@execenv.com;

☑ US Mail Report to: ☑ Originating office check marked above ☐ Other: ☐ Alternate billing address:

Prefix: 20122901351RK

Sample No.:	Sample Location – Include Room information where appropriate	Material Description	Homogeneous Location	No.	Quantity	Percent Damaged
-31	West Parking Lot, north	Asphalt paving	West Parking Lot	7	10,000 SF	<1
-32	West Parking Lot, near center	↓	↓	↓	↓	↓
-33	West Parking Lot, SW	↓	↓	↓	↓	↓
-34	Northeast Parking Lot, north	Asphalt paving	Northeast Parking Lot	8	10,500 SF	<1
-35	Northeast Parking Lot, east	↓	↓	↓	↓	↓
-36	Northeast Parking Lot, south	↓	↓	↓	↓	↓

Notes:

Released By, Date, & Time:	Received By, Date, & Time:	Released By, Date, & Time:
Rhys K 12/29/2020 1:30PM	12/29/20 1B:30	

9201216674

EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Industrial Hygiene Laboratory Submittal
Asbestos -- PLM

Originating Office
☑ 310 E. Foothill Blvd., Suite 200
Arcadia, CA 91006
Phone: 626.441.7050
Fax: 626.441.0016

Lab Submitted to:
☑ AmeriSci
☐ EMLab (Glendale)
☐ LA Testing

☑ Routine (5 Working Days)	☐ RUSH (surcharges may apply) Circle One: 6 hours / 24 hours / 48 hours / 3 to 5 days	Project #:	Sampled by:	Site Zip Code:	Sample Date:	Page 8 of 9
		20-Z0046-0135	~~Tim Galeana~~/Rhys Kuzmic	91770	12/29/2020	

Building Name: Campus

The receiving Laboratory is required to complete the following:

1. All invoices are to be sent to: 310 E. Foothill Blvd., Suite 200, Arcadia, CA 91006 **with** a copy of the lab report.
2. Analyze all samples by PLM by EPA 600/R-93/116.
3. Stop analysis of homogeneous groups at first positive that is greater than or equal to 1.0%
4. All lab reports and invoices are to contain the Project Number from above.
5. Unsigned and reports marked draft are unacceptable.
6. Report to the attention of: Yesenia Galeana, Phone: (562) 889-1327

Optional Items to be completed by the laboratory (if check marked): ☑ Email Report to: ☑ Info@execenv.com ☑ Other: ygaleana@execenv.com;

☑ US Mail Report to: ☑ Originating office check marked above ☐ Other: ☐ Alternate billing address:

Prefix: 201229 0135 RK

Sample No.:	Sample Location – Include Room information where appropriate	Material Description	Homogeneous Location	No.	Quantity	Percent Damaged
-37	Playground, NE	Asphalt paving	Playground	9	36,000SF	<1
-38	Playground, east of volleyball court	↓	↓	↓	↓	↓
-39	Playground, near center	↓	↓	↓	↓	↓
-40	Playground, west	↓	↓	↓	↓	↓
-41	Playground, south near storage shed	↓	↓	↓	↓	↓

Notes:

Released By, Date, & Time:	Received By, Date, & Time:	Released By, Date, & Time:
RK 12/29/2020 1:30PM	12/29/20 @ 13:30	

920121674

EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Industrial Hygiene Laboratory Submittal
Asbestos -- PLM

Originating Office
☑ 310 E. Foothill Blvd., Suite 200
Arcadia, CA 91006
Phone: 626.441.7050
Fax: 626.441.0016

Lab Submitted to:
☑ AmeriSci
☐ EMLab (Glendale)
☐ LA Testing

☑ Routine (5 Working Days)	☐ RUSH (surcharges may apply) Circle One: 6 hours / 24 hours / 48 hours / 3 to 5 days	Project #:	Sampled by:	Site Zip Code:	Sample Date:	
		20-Z0046-0135	~~Tim Galeana~~/Rhys Kuzmic (RK)	91770	12/29/2020	Page 1 of 1

Building Name: Campus

The receiving Laboratory is required to complete the following:

1. All invoices are to be sent to: 310 E. Foothill Blvd., Suite 200, Arcadia, CA 91006 **with** a copy of the lab report.
2. Analyze all samples by PLM by EPA 600/R-93/116.
3. Stop analysis of homogeneous groups at first positive that is greater than or equal to 1.0%
4. All lab reports and invoices are to contain the Project Number from above.
5. Unsigned and reports marked draft are unacceptable.
6. Report to the attention of: Yesenia Galeana, Phone: (562) 889-1327

Optional Items to be completed by the laboratory (if check marked): ☑ Email Report to: ☑ Info@execenv.com ☑ Other: ygaleana@execenv.com;

☑ US Mail Report to: ☑ Originating office check marked above ☐ Other: ☐ Alternate billing address:

Prefix: 20122901 3SRK

Sample No.:	Sample Location – Include Room information where appropriate	Material Description	Homogeneous Location	No.	Quantity	Percent Damaged
-12	Handball Court, north	Asphalt paving	Handball Court	10	3,400SF	<1
-13	Handball Court, near center	↓	↓	↓	↓	↓
-14	Handball Court, south					

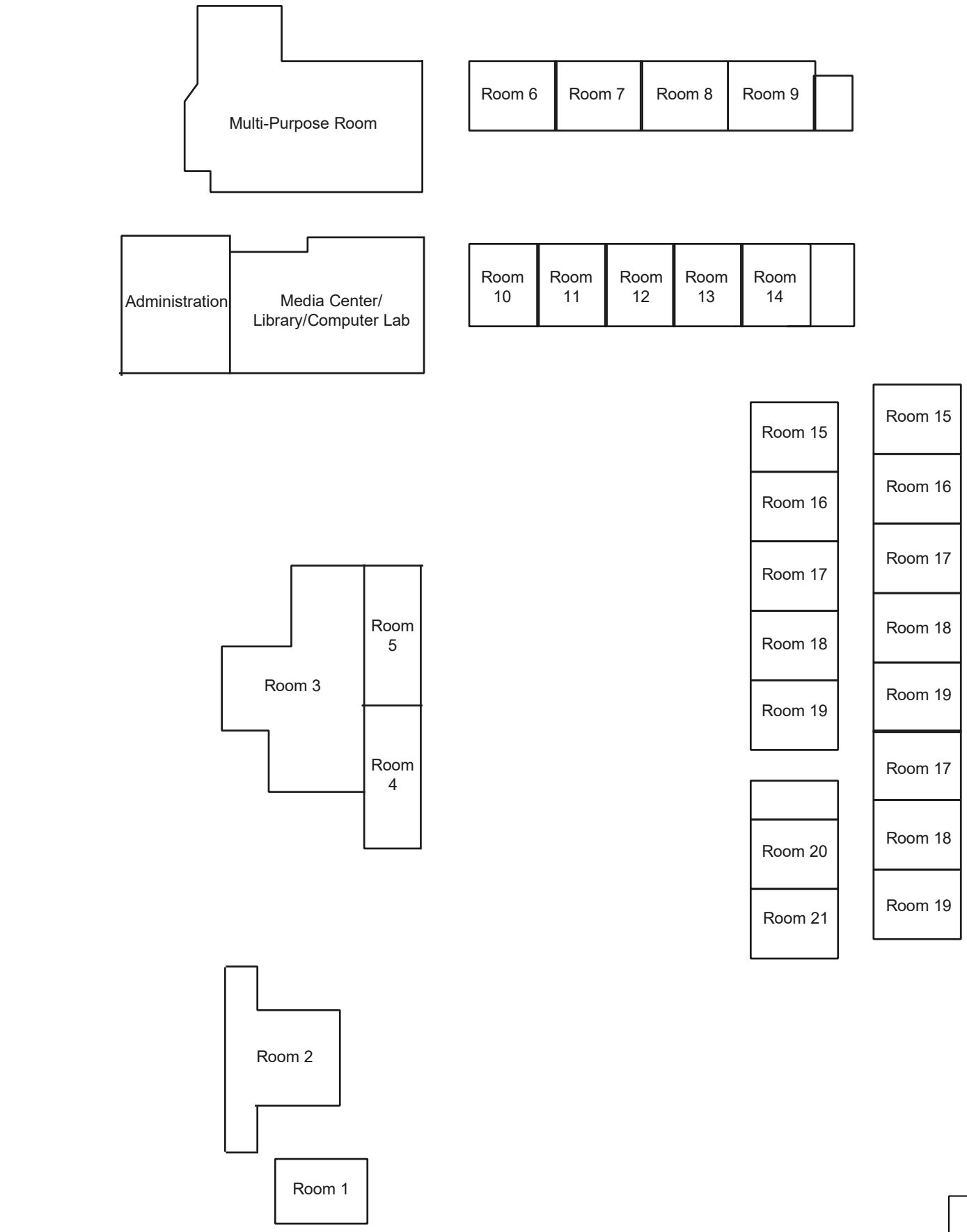
Notes:

Released By, Date, & Time:	Received By, Date, & Time:	Released By, Date, & Time:
RK 12/29/2020 1:30PM	12/29/2020 3:30	

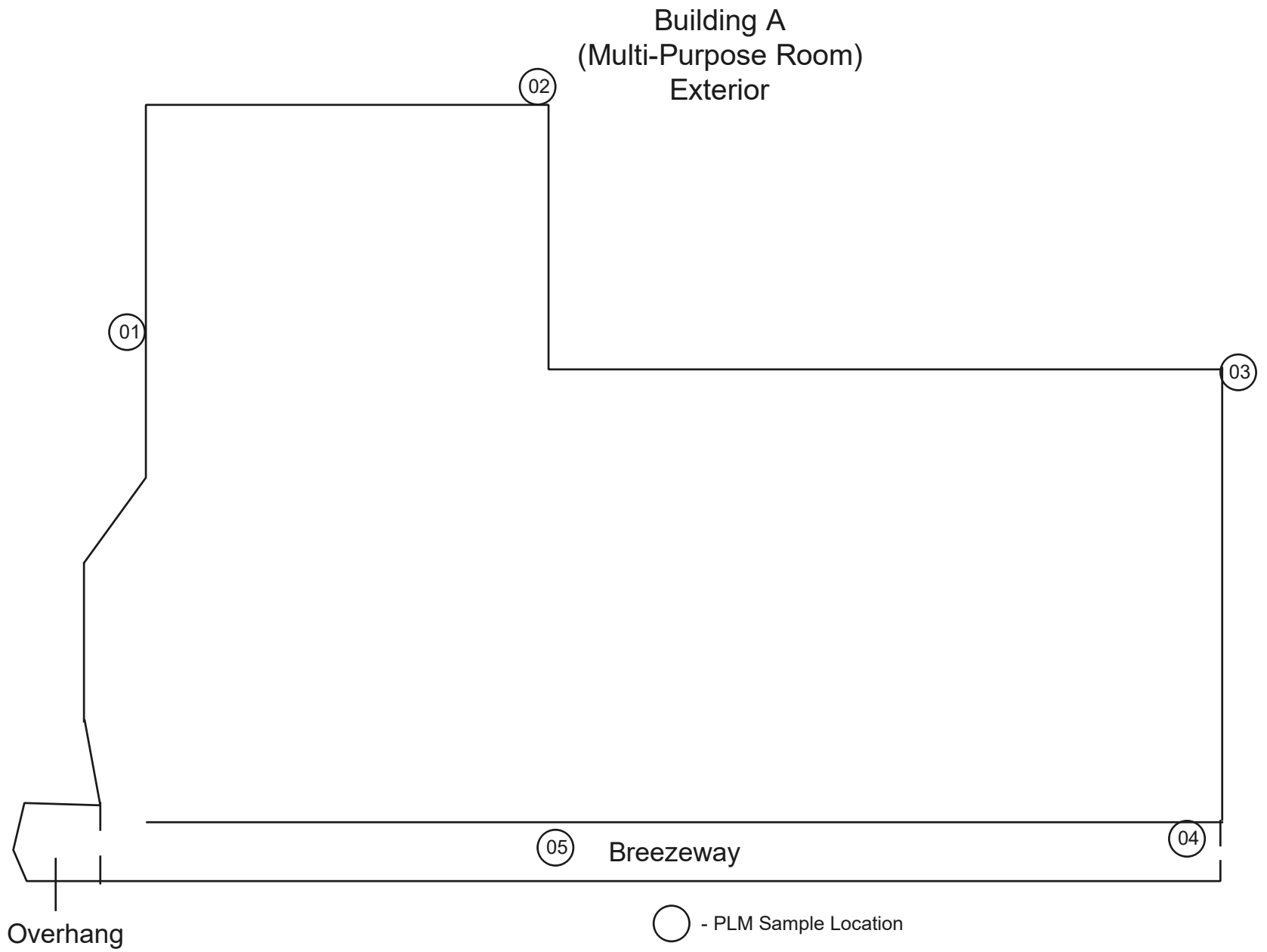
Rev. 1/19

Form: AL-006PLM

APPENDIX B – SAMPLE LOCATIONS DRAWINGS



Client: Rosemead SD	**Project#:** 20-Z0046-0135	**Info:**	Site Map
EXECUTIVE ENVIRONMENTAL **HEALTH & SAFETY SIMPLIFIED**		**Site:** **Address:**	Rosemead ES 3720 Rio Honda Avenue Rosemead, CA 91770
		Drawing Not to Scale - © 2012	



Client: Rosemead SD	**Project #:** 20-Z0046-0135	**Info:** PLM Sample Location
EXECUTIVE ENVIRONMENTAL **HEALTH & SAFETY SIMPLIFIED**		**Site:** Savannah ES **Address:** 3720 Rio Honda Avenue Rosemead, CA 91770

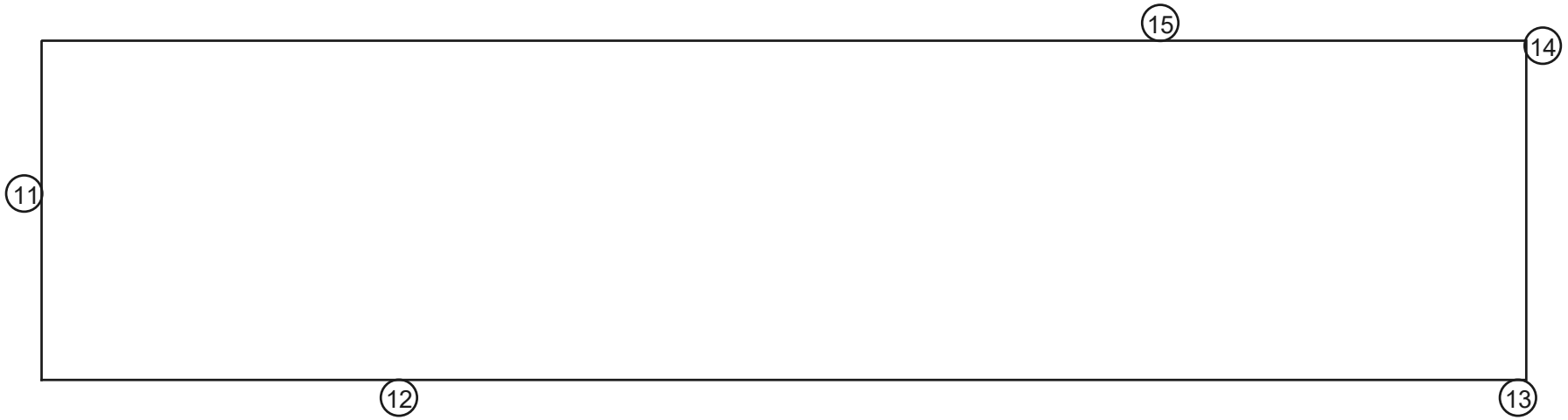
Building B
(Classrooms 6 thru 9)
Exterior

◯ - PLM Sample Location

N

Client: Rosemead SD	**Project #:** 20-Z0046-0135	**Info:** PLM Sample Location
EXECUTIVE ENVIRONMENTAL **HEALTH & SAFETY SIMPLIFIED**		**Site:** Savannah ES **Address:** 3720 Rio Honda Avenue Rosemead, CA 91770

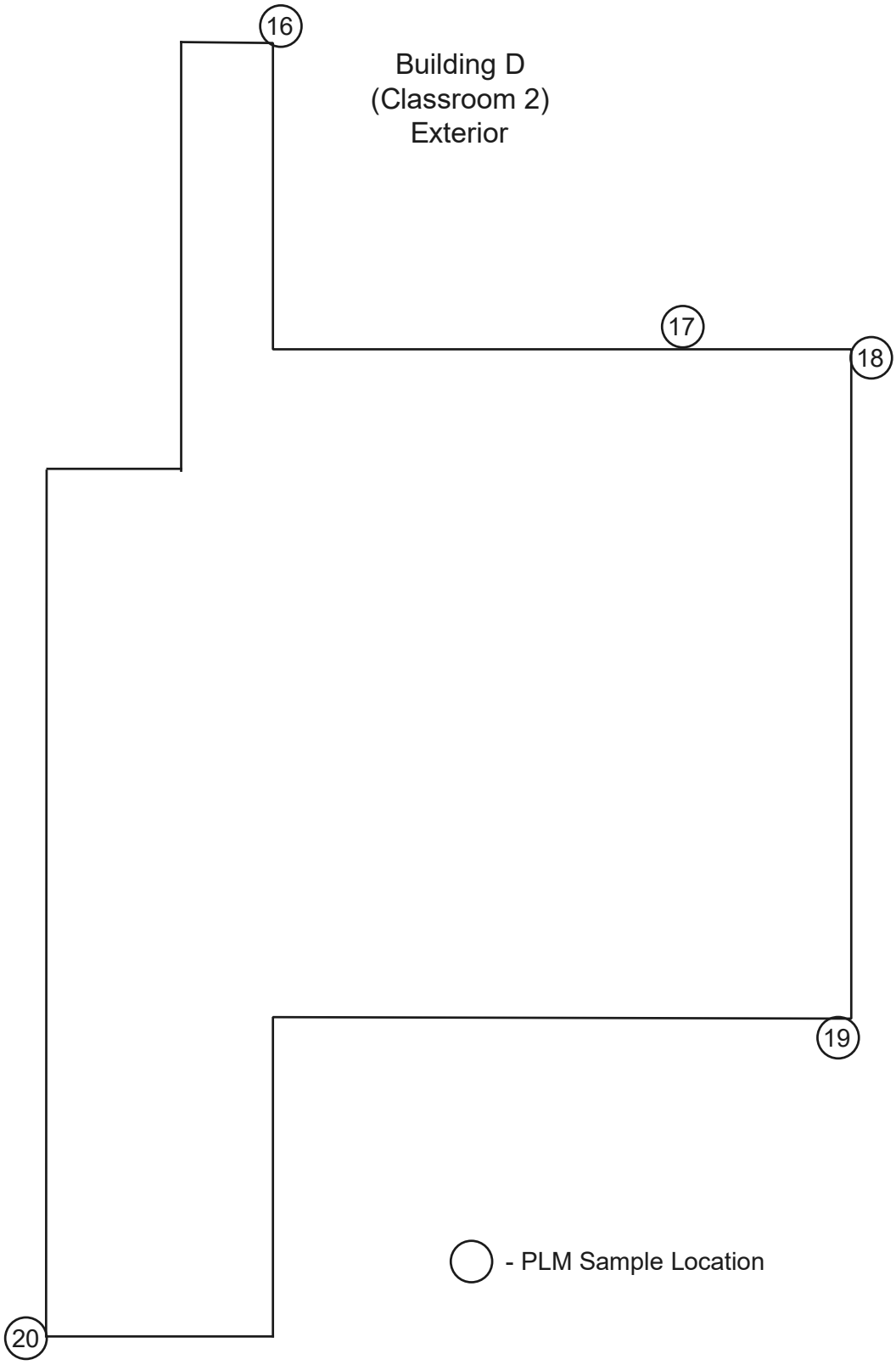
Building C
(Classroom Rooms 10 thru 14)
Exterior



◯ - PLM Sample Location

N

Client: Rosemead SD	**Project #:** 20-Z0046-0135	**Info:** PLM Sample Location
EXECUTIVE ENVIRONMENTAL **HEALTH & SAFETY SIMPLIFIED**		**Site:** Savannah ES **Address:** 3720 Rio Honda Avenue Rosemead, CA 91770



Client: Rosemead SD	**Project#:** 20-Z0046-0135	**Info:** PLM Sample Location
EXECUTIVE ENVIRONMENTAL **HEALTH & SAFETY SIMPLIFIED**		**Site:** Savannah ES **Address:** 3720 Rio Honda Avenue Rosemead, CA 91770

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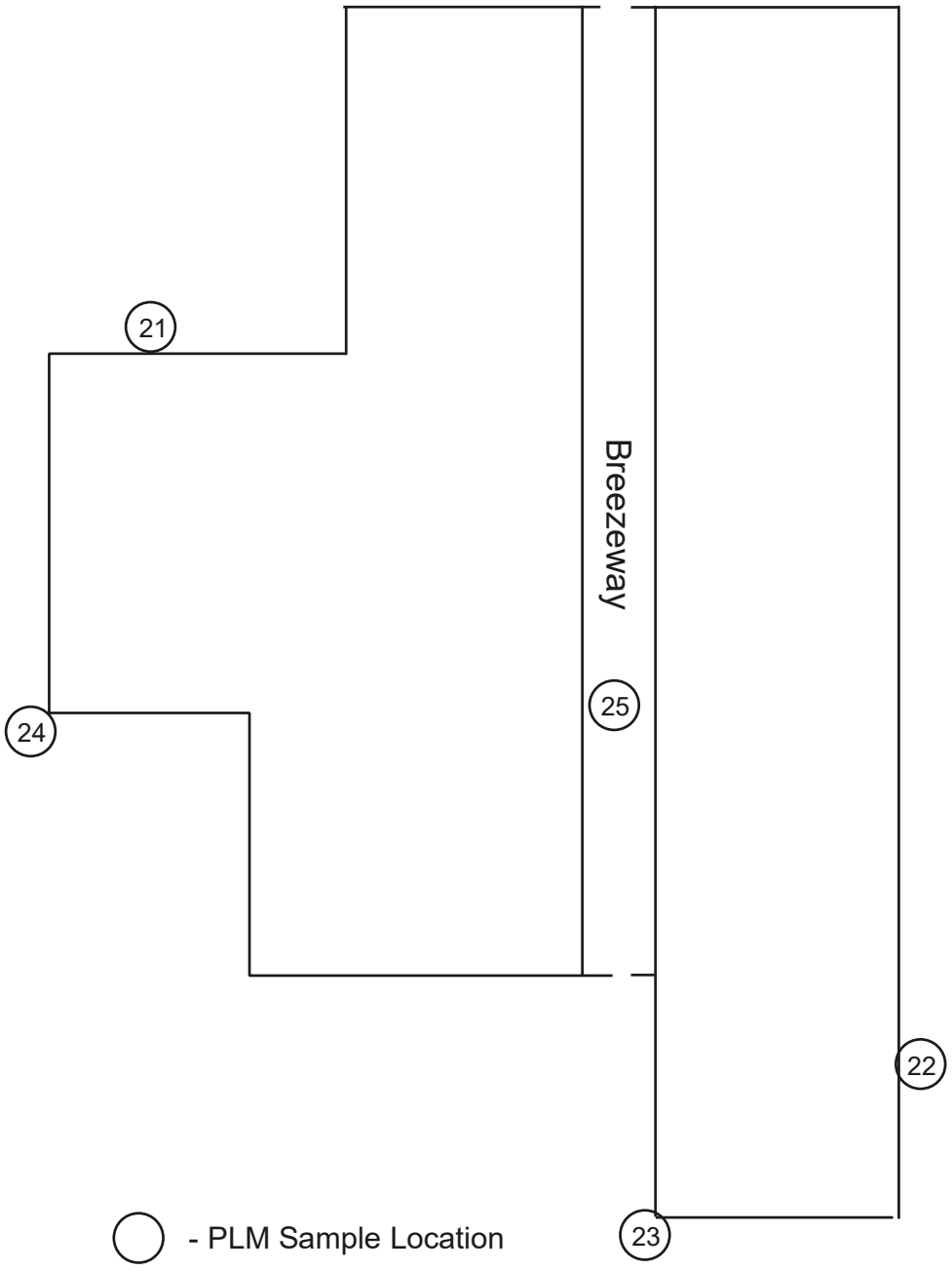
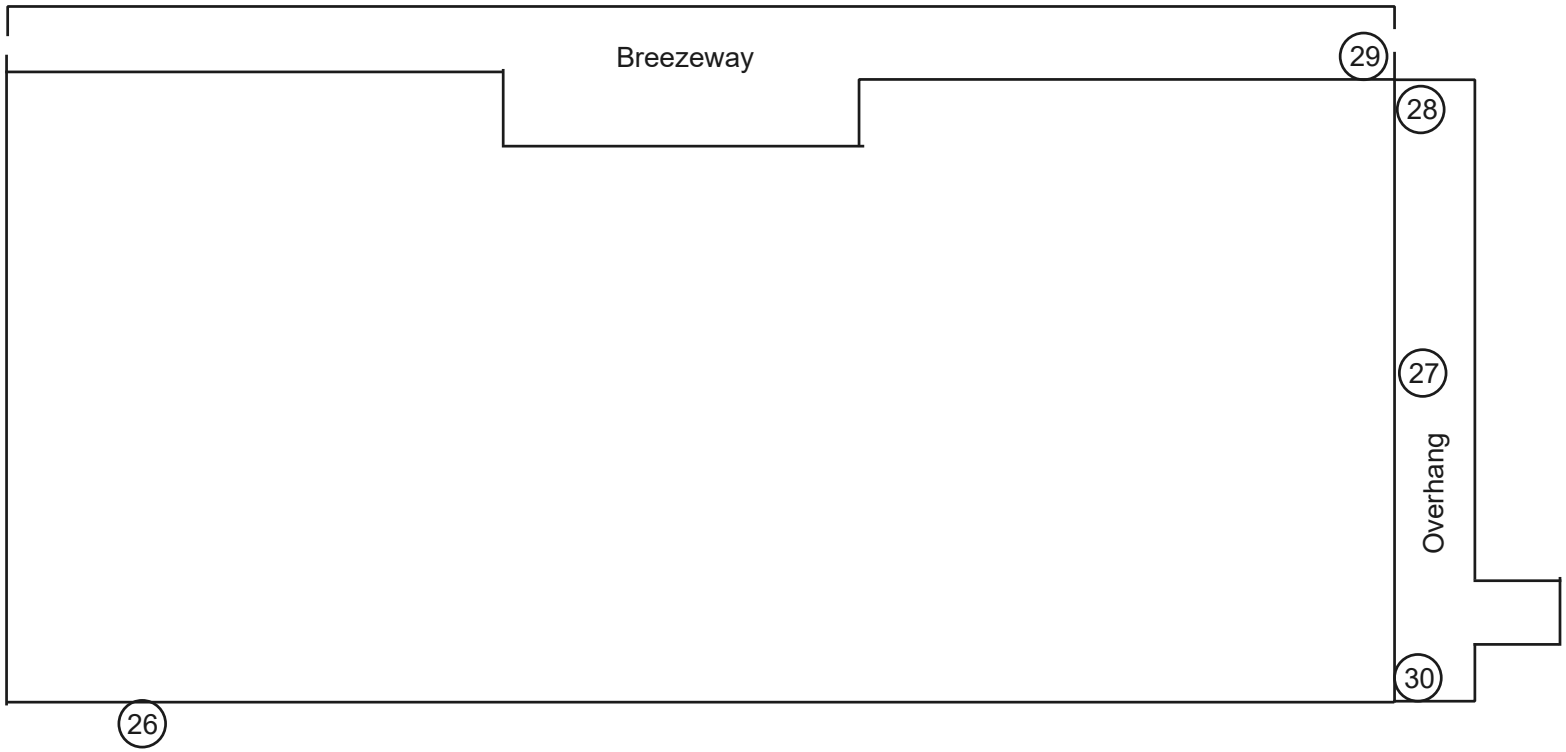
Building E
(Classrooms 3 thru 5)
Exterior



Client: Rosemead SD	**Project#:** 20-Z0046-0135	**Info:**	PLM Sample Locations
EXECUTIVE ENVIRONMENTAL **HEALTH & SAFETY SIMPLIFIED**		**Site:** **Address:**	Savannah ES 3720 Rio Honda Avenue Rosemead, CA 91770
		Drawing Not to Scale - © 2012	

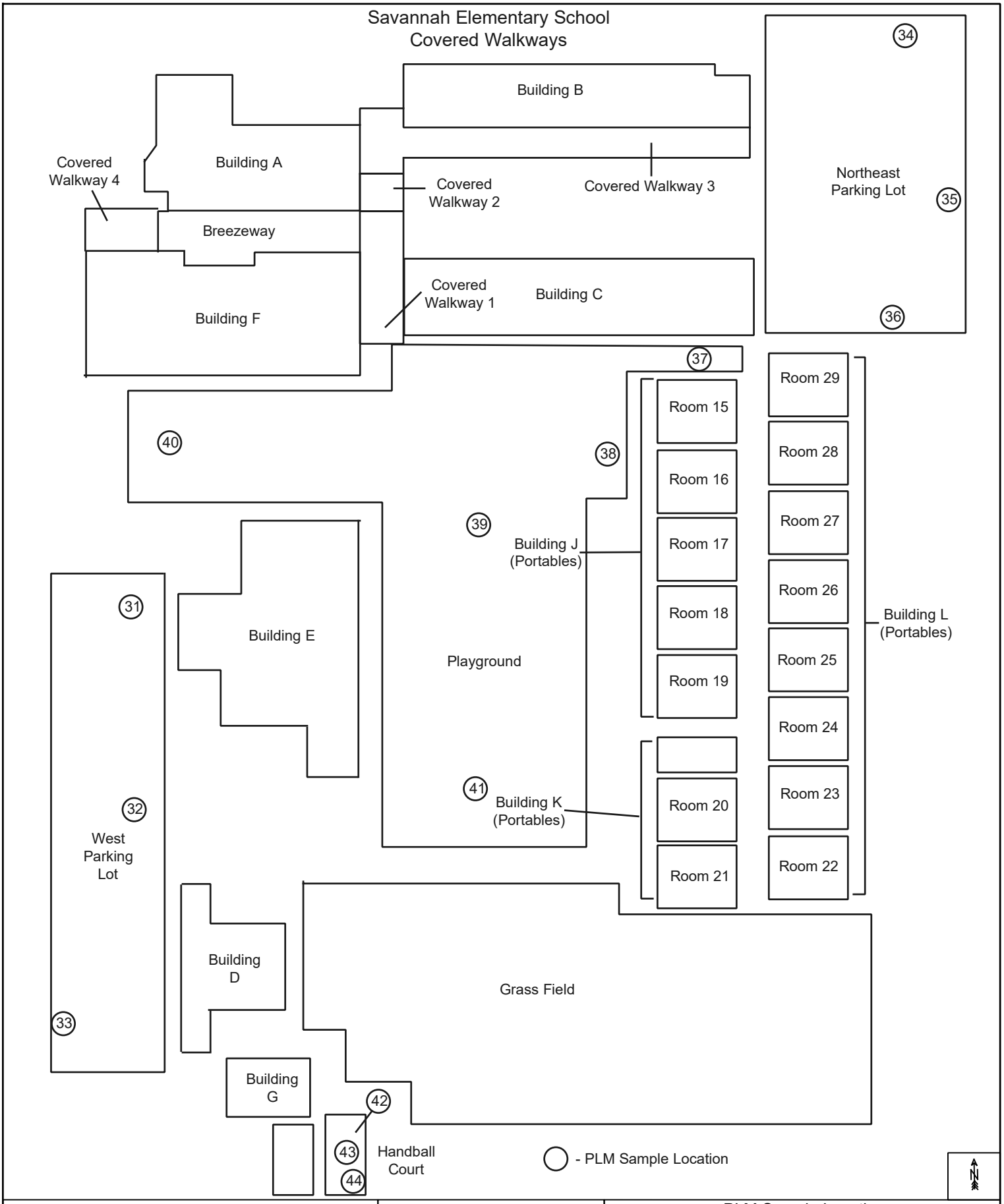
Building F (Administration/Library/Media Center)
Exterior



○ - PLM Sample Location

N

Client: Rosemead SD	**Project #:** 20-Z0046-0135	**Info:** PLM Sample Location
EXECUTIVE ENVIRONMENTAL **HEALTH & SAFETY SIMPLIFIED**		**Site:** Savannah ES **Address:** 3720 Rio Honda Avenue Rosemead, CA 91770



Client: Rosemead SD	**Project#:** 20-Z0046-0135	**Info:** PLM Sample Location
EXECUTIVE ENVIRONMENTAL **HEALTH & SAFETY SIMPLIFIED**		**Site:** Savannah ES **Address:** 3720 Rio Honda Avenue Rosemead, CA 91770

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APPENDIX C – STAFF CERTIFICATION

State of California
Division of Occupational Safety and Health
Certified Asbestos Consultant

Rhys D Kuzmic
Name

Certification No. **09-4586**

Expires on **01/20/21**

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.

APPENDIX B – LIMITED LEAD-BASED PAINT INSPECTION REPORT DATED FEBRUARY 9, 2021

EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Industrial Hygiene • Air Quality • Lead & Asbestos • Training • Health & Safety

LIMITED LEAD-BASED PAINT/CERAMIC TILE INSPECTION REPORT

Conducted at:

SAVANNAH ELEMENTARY SCHOOL
PAINTING PROJECT
3720 RIO HONDO AVENUE
ROSEMEAD, CALIFORNIA 91770

Prepared for:

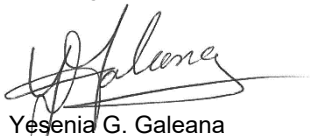
MR. HAROLD SULLINS
ASSISTANT SUPERINTENDENT
ROSEMEAD SCHOOL DISTRICT
3907 ROSEMEAD BOULEVARD, SUITE 220
ROSEMEAD, CALIFORNIA 91770

Prepared by:

EXECUTIVE ENVIRONMENTAL
310 EAST FOOTHILL BOULEVARD, SUITE 200
ARCADIA, CALIFORNIA 91006

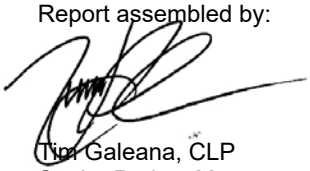
Project Number EE 20-Z0046-0135
February 9, 2021

Report generated/reviewed by:



Yesenia G. Galeana
Technical Report Writer
Executive Environmental

Report assembled by:



Tim Galeana, CLP
Senior Project Manager
Executive Environmental

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LIMITED LEAD-BASED PAINT INSPECTION

Project Number:	EE 20-Z0046-0135
Client:	Rosemead School District 3907 Rosemead Boulevard, Suite 220 Rosemead, California 91770
Site Location:	Savannah Elementary School Painting Project 3720 Rio Hondo Avenue Rosemead, California 91770
Site Use:	School Property
Contact Person:	Mr. Harold Sullins Assistant Superintendent Phone: (626) 312-2900
Inspection Date Between:	December 1 thru 10, 2020
Inspected By:	Mr. Tim Galeana Certified Lead Professional, CDPH #0395
Report Assembled By:	Ms. Yesenia G. Galeana Technical Report Writer
Report Generated/Reviewed By:	Mr. Tim Galeana Certified Lead Professional, CDPH #0395

I. EXECUTIVE SUMMARY

Executive Environmental (EE) provided the services of a Certified Lead Professional (CLP) to conduct a limited lead-based paint inspection of the permanent buildings, portables and covered walkways at Savannah Elementary School located at 3720 Rio Hondo Avenue, Rosemead, California. The inspection was conducted as a precursor to the upcoming exterior painting project. EE provided a California Department of Public Health Certified Lead Inspector to conduct the inspection. Regulated lead-based paint was detected during this inspection. EE's Certified Lead Professional conducted these services between December 1 thru 10, 2020.

II. SAMPLING PROTOCOL

According to the United States Department of Housing and Urban Development's (HUD) guideline document, Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, and Section 1017 of Title X, Residential Lead-Based Paint Hazard Reduction Act of 1992, Public Law 102-550, paint found to have a lead concentration of

at least 1.0 mg/cm^2 (milligrams per centimeter squared) by X-Ray Fluorescence (XRF), or 0.5 percent (5000 parts per million) by weight, is regulated as lead-based paint.

Los Angeles County Childhood Lead Poisoning Prevention Program, established in 1991, further regulates that paint found to have a lead concentration greater than 0.7 mg/cm^2 via XRF readings, or 0.06 weight-to-weight percent by Atomic Absorption Spectrometry (AAS) analysis, is considered to be lead-based paint. The Los Angeles County 0.7 mg/cm^2 action level was used for determining the lead content in this inspection because it is more stringent than the HUD Guidelines.

Any material containing any detectable level of lead is subject to the Occupational Safety and Health Administration's (OSHA) Lead Exposure in Construction Rule 29 Code of Federal Regulation (CFR) 1926.62 and California Code of Regulations Title 8, Section 1532.1 Lead (8CCR1532.1) and Title 8, Section 5198, Lead (8CCR5198). All work that disturbs this type of material must be performed in accordance with this and any other applicable standards.

All facilities built prior to 1979 for residential buildings and prior to 1993 for schools are suspect for lead-containing materials. Federal and state regulations recognize only the following methods of identification: analysis by an XRF instrument, paint bulk sample collection and analysis, or a combination of both. This inspection was conducted via XRF instrumentation. The parameters used to interpret the XRF results are outlined in the HUD guidelines and the XRF Performance Characteristics Sheets (PCS).

III. SAMPLING METHODOLOGY

A visual inspection of the exterior of the permanent buildings, portables and covered walkways at Savannah Elementary School was conducted by EE's CLP to identify major site features and surfaces and/or components suspected of being coated with lead-based paint. After identifying the materials suspected of being coated with lead-based paint, EE grouped the components, substrates, and room equivalents into testing combinations. A testing combination is defined as the room equivalent, component, and substrate. A room equivalent is an identifiable part of a building (e.g. classrooms, restrooms, mechanical rooms, exterior). Color does not accurately indicate painting history, and is not included when assigning testing combinations. If there was any reason to suspect that materials may have been installed or painted at different times, even though they appear uniform, they were assigned to separate testing combinations.

Following the visual inspection, screening for the presence of lead-based paint or ceramic glaze was performed on-site using a portable XRF instrument. The XRF has the ability to measure lead content in paint and ceramic glaze within the range of 0 to 50 milligrams per centimeter squared (mg/cm^2). The on-site inspection capability of the XRF instrument typically reduces the number of paint-chip samples that may need to be collected and sent for laboratory analysis. The portable XRF instrument used in this inspection was manufactured by Heuresis.

The following specifications apply to the Viken Detection XRF (formerly Heuresis):

- Ability to report Positive and Negative determination at 1.0mg lead/cm^2 with 2-sigma confidence with measurement time of 1-3 nominal seconds on mast lead paint samples.

- Detects lead at 0.1 mg/cm^2 with 2-sigma confidence with a measurement time of 1 second on most samples.
- Equipped with a ^{57}Co sealed source, 5mCi (185 MBq), radioactive source. Substrate effects are automatically corrected through a complex algorithm and calibration.

IV. SAMPLE ANALYSIS

According to local, state and federal standards, the following surfaces and/or components that were analyzed with the Viken Detection XRF instrument during this inspection are considered to be coated with a regulated lead-based paint.

XRF SAMPLE ANALYSIS DATA
Savannah Elementary School
3720 Rio Hondo Avenue
Rosemead, California 91770

Location	Component	Substrate	Estimate Quantity	XRF Result Mg/cm^2
Building A (MPR)[1]				
Storage closet, side D (at Breezeway)	Double door frame	Wood	1 Total	10.5
	Double door frame trim	Metal	24 Linear Feet	9
Exterior, side A	Window header	Wood	18 Linear Feet	9.4
	Eave	Wood	18 Square Feet	16.5
Exterior, sides A, B & C	Window sill	Wood	35 Linear Feet	2.8
Exterior, sides A thru D	Fascia	Wood	350 Linear Feet	1.1
Upper roof, sides B & D East lower roof, side C	Eave components	Wood	132 Square Feet	4.8-11.2
Lower roof, north side of building	Parapet cap	Metal	84 Linear Feet	1.3

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

XRF results continues on the next page.

[1] NOTE: 1) Metal window components, not coated.

XRF SAMPLE ANALYSIS DATA

Savannah Elementary School
3720 Rio Hondo Avenue
Rosemead, California 91770

Location	Component	Substrate	Estimate Quantity	XRF Result Mg/cm^2
Building B (Classrooms 6 thru 9)[2]				
Exterior, side B	Window sill	Wood	100 Linear Feet	3.1
	Window/door casing	Wood	240 Linear Feet	2.2
Exterior, sides A-D	Fascia	Wood	430 Linear Feet	1.8
Exterior, sides B & D	Eave components	Wood	720 Square Feet	0.8-2.1
Building C (Classrooms 10 thru 14)[3]				
Exterior, side B	Window casing	Wood	180 Linear Feet	0.7
Building D (Classroom 2)[4]				
Exterior, sides B & D	Window casing	Wood	68 Linear Feet	1.9
Exterior, sides A, B & D	Overhang	Wood	310 Square Feet	0.8, 0.9
Exterior, side A	Overhang vent	Wood	6 Square Feet	0.7
	Overhang support pole	Metal	1 Total	1.4
Exterior, sides A-D	Fascia	Wood	180 Linear Feet	1.1
	Flashing	Metal	180 Linear Feet	0.7
Exterior, sides A, B, C	Wall cap	Metal	28 Linear Feet	1.7
Exterior, side D	Downspout	Round metal pole	1 Total	1.1

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

XRF results continues on the next page.

[2] NOTE: 1) Metal window components, not coated.
[3] NOTE: 1) Metal window components, not coated.
[4] NOTE: 1) Metal window components, not coated

XRF SAMPLE ANALYSIS DATA

Savannah Elementary School
3720 Rio Hondo Avenue
Rosemead, California 91770

Location	Component	Substrate	Estimate Quantity	XRF Result Mg/cm^2
Building E (Classrooms 3 thru 5)[5]				
Exterior, side D	Window corner post	Wood	10 Linear feet	11.5
Exterior, sides A & B	Overhang column	Wood	8 Columns	9.2
Exterior, sides A-D	Eave components	Wood	160 Square Feet	1.5-3.3
Enclosed breezeway, side C, at room 4	Transom frame	Wood	1 Total	4.2
	Transom frame trim	Metal	9 Linear Feet	8.2
Building F (Administration/Library)				
Exterior, side C	Window sill	Wood	4 Linear Feet	9
Breezeway between Buildings A and F				
No regulated lead-based paint was identified on exterior surfaces and/or components.				
Building G (Portable 1)				
No regulated lead-based paint was identified on exterior surfaces and/or components.				
Building J (Portables 15 thru 19)[6]				
No regulated lead-based paint was identified on exterior surfaces and/or components.				
Building K (Portables 20, 21 and Restroom)[7]				
No regulated lead-based paint was identified on exterior surfaces and/or components.				
Building L (Portables 22 thru 29)[8]				
No regulated lead-based paint was identified on exterior surfaces and/or components.				
Campus				
No regulated lead-based paint was identified on surfaces and/or components of the East Parking Lot, Southwest Parking Lot, Main Playground, Southwest Playground, Storage shed 1 thru 4, Free Standing Cabinet, Flag Pole, Perimeter Fence anticipated to be impacted by the Exterior Painting Project.				

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

[5] NOTE: 1) Metal window components, not coated.
[6] NOTE: 1) Metal window components, not coated.
[7] NOTE: 1) Metal window components, not coated.
[8] NOTE: 1) Metal window components, not coated.

XRF SAMPLE ANALYSIS DATA Savannah Elementary School 3720 Rio Hondo Avenue Rosemead, California 91770				
Location	**Component**	**Substrate**	**Estimate Quantity**	**XRF Result Mg/cm^2**
Covered Walkways				
Covered Walkway no. 3	Poles	Metal	22 Poles	1.8
	Ceiling beams	Wood	200 Linear Feet	4.1
No regulated lead-based paint was identified on surfaces and/or components of Covered Walkways no. 1, 2 and 4.				

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

V. CONCLUSIONS/RECOMMENDATIONS

EE conducted a limited lead-based paint inspection of the permanent buildings, portables and covered walkways at Savannah Elementary School located at 3720 Rio Hondo Avenue, Rosemead, California. The inspection was conducted as a precursor for the upcoming Exterior Painting Project. The following conclusions and/or recommendations apply:

Limited Lead-Based Paint Inspection

- Exterior coated surfaces and components of the permanent buildings, portables and covered walkways at Savannah Elementary School were tested via the Viken Detection XRF for the presence of lead.
- The items listed in the previous tables were identified as being coated with a regulated lead-based paint.
- The surfaces/components were observed to be in good to fair condition during this inspection.
- A fully representative number of XRF readings were taken at the project site. The results of these assays are presented in the XRF Summary Results spreadsheets.

It is recommended that all renovation, remodelling, construction, or demolition actions that might potentially disturb surfaces covered with lead-based paint and/or ceramic glaze be performed by properly trained and qualified personnel.

VI. DISCLAIMER/REPORT LIMITATIONS

All reports and recommendations are based on conditions and practices observed and information made available to Executive Environmental (EE) by the client and the designated sites/facilities on the days sampling was conducted. This report does not purport to set forth all hazards, nor to indicate that other hazards do not exist. No responsibility is assumed by EE for the control or correction of conditions or practices existing at the facilities, or at any other premises surveyed by EE, for and on the behalf of the client. Services provided by EE shall be governed by the standard of practice for professional services measured at the time those services are rendered.

All information contained in this report is proprietary and limited to the scope of services, parameters of the analytical methods used and the conditions present at the time of this inspection. Any references to quantities are considered estimates and are not to be construed as actual.

APPENDIX A – XRF SUMMARY RESULTS

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
1	12/1/2020			Calibrate				Positive	0.9
2	12/1/2020			Calibrate				Positive	1
3	12/1/2020			Calibrate				Positive	1
4	12/1/2020	Building A: Multi-Purpose Room	Exterior	Wall	Stucco	A	Intact	Negative	-0.2
5	12/1/2020	Building A: Multi-Purpose Room	Exterior	Wall	Stucco	B	Intact	Negative	0.5
6	12/1/2020	Building A: Multi-Purpose Room	Exterior	Wall	Stucco	C	Intact	Negative	0
7	12/1/2020	Building A: Multi-Purpose Room	Exterior	Wall	Stucco	D	Intact	Negative	0.1
8	12/1/2020	Building A: Multi-Purpose Room	Exterior	Double door frame	Metal	D	Intact	Negative	0.1
9	12/1/2020	Building A: Multi-Purpose Room	Exterior	Double door	Metal	D	Intact	Negative	0.1
10	12/1/2020	Building A: Multi-Purpose Room	Exterior	Door frame	Metal	D	Intact	Negative	-0.1
11	12/1/2020	Building A: Multi-Purpose Room	Exterior	Door	Metal	D	Intact	Negative	0.1
12	**12/1/2020**	**Building A: Multi-Purpose Room**	**Breezeway at Storage Closet**	**Double door frame**	**Wood**	**D**	**Intact**	**Positive**	**10.5**
13	12/1/2020	Building A: Multi-Purpose Room	Breezeway at Storage Closet	Double door	Wood	D	Intact	Negative	-0.1
14	**12/1/2020**	**Building A: Multi-Purpose Room**	**Breezeway at Storage Closet**	**Double door trim**	**Metal**	**D**	**Intact**	**Positive**	**9**
15	12/1/2020	Building A: Multi-Purpose Room	Breezeway	Waste vent pipe	Metal	D	Intact	Negative	0.2
16	12/1/2020	Building A: Multi-Purpose Room	Breezeway	Ceiling support brace	Metal	D	Intact	Negative	0.4
17	12/1/2020	Building A: Multi-Purpose Room	Breezeway	Column	Cinderblock	D	Intact	Negative	0.2
18	12/1/2020	Building A: Multi-Purpose Room	Breezeway	Column brace	Metal	D	Intact	Negative	0.3

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
19	**12/1/2020**	**Building A: Multi-Purpose Room**	**Exterior**	**Window header**	**Wood**	**A**	**Intact**	**Positive**	**9.4**
20	**12/1/2020**	**Building A: Multi-Purpose Room**	**Exterior**	**Eave**	**Wood**	**A**	**Intact**	**Positive**	**16.5**
21	12/1/2020	Building A: Multi-Purpose Room	Exterior	Fascia	Wood	A	Intact	Negative	-0.1
22	12/1/2020	Building A: Multi-Purpose Room	Exterior	Flashing	Metal	A	Intact	Negative	0.2
23	12/1/2020	Building A: Multi-Purpose Room	Exterior	Bell	Metal	A	Intact	Negative	-0.1
24	12/1/2020	Building A: Multi-Purpose Room	Exterior	Conduit	Metal	A	Intact	Negative	0.1
25	**12/1/2020**	**Building A: Multi-Purpose Room**	**Exterior**	**Window sill**	**Wood**	**A**	**Intact**	**Positive**	**2.8**
26	12/1/2020	Building A: Multi-Purpose Room	Exterior	Wall vent	Metal	A	Intact	Negative	0.3
27	12/1/2020	Building A: Multi-Purpose Room	Exterior	Window security screen	Metal	A	Intact	Negative	0.1
28	12/1/2020	Building A: Multi-Purpose Room	Exterior	Conduit	Metal	B	Intact	Negative	0.3
29	12/1/2020	Building A: Multi-Purpose Room	Exterior	Downspout	Metal	B	Intact	Negative	0.4
30	12/1/2020	Building A: Multi-Purpose Room	Exterior	Primary scupper	Metal	B	Intact	Negative	0.5
31	12/1/2020	Building A: Multi-Purpose Room	Exterior	Secondary scuoper	Metal	B	Intact	Negative	0
32	12/1/2020	Building A: Multi-Purpose Room	Exterior	Window security screen	Metal	C	Intact	Negative	0.2
33	12/1/2020	Building A: Multi-Purpose Room	Exterior	Door frame	Metal	C	Intact	Negative	0
34	12/1/2020	Building A: Multi-Purpose Room	Exterior	Door	Metal	C	Intact	Negative	0.1

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
35	12/1/2020	Building A: Multi-Purpose Room	Exterior	Awning	Metal	C	Intact	Negative	0.2
36	12/1/2020	Building A: Multi-Purpose Room	Exterior	Awning frame	Metal	C	Intact	Negative	0
37	12/1/2020	Building A: Multi-Purpose Room	Exterior	Water line	Metal	C	Intact	Negative	0
38	12/1/2020	Building A: Multi-Purpose Room	Exterior	Condensation line	Metal	C	Intact	Negative	0.1
39	12/1/2020	Building A: Multi-Purpose Room	Exterior	Gas line	Metal	C	Intact	Negative	0.1
40	12/1/2020	Building A: Multi-Purpose Room	Exterior	Gas line bracket	Metal	B	Intact	Negative	0.1
41	12/1/2020	Building A: Multi-Purpose Room	Exterior at Gas Main Enclosure	Wall	Cinderblock	B	Intact	Negative	0.3
42	12/1/2020	Building A: Multi-Purpose Room	Exterior at Gas Main Enclosure	Fence	Metal	B	Intact	Negative	0.2
43	12/1/2020	Building A: Multi-Purpose Room	Exterior	Wall vent frame	Wood	C	Intact	Negative	-0.1
44	**12/1/2020**	**Building A: Multi-Purpose Room**	**Exterior**	**Fascia**	**Wood**	**C**	**Intact**	**Positive**	**1.1**
45	12/1/2020	Building A: Multi-Purpose Room	Exterior	Flashing	Metal	C	Intact	Negative	0.3
46	12/1/2020	Building A: Multi-Purpose Room	Exterior	Gutter	Metal	D	Intact	Negative	0.1
47	12/1/2020	Building A: Multi-Purpose Room	Exterior	Downspout	Metal	D	Intact	Negative	-0.1
48	**12/1/2020**	**Building A: Multi-Purpose Room**	**Exterior**	**Eave**	**Wood**	**D**	**Intact**	**Positive**	**4.8**
49	**12/1/2020**	**Building A: Multi-Purpose Room**	**Exterior**	**Eave joist**	**Wood**	**D**	**Intact**	**Positive**	**11.2**
50	**12/1/2020**	**Building A: Multi-Purpose Room**	**Exterior**	**Eave joist spacer**	**Wood**	**D**	**Intact**	**Positive**	**6.8**

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
51	**12/1/2020**	**Building A: Multi-Purpose Room**	**Exterior**	**Parapet cap**	**Metal**	**A**	**Peeling**	**Positive**	**1.3**
52	12/1/2020	Building A: Multi-Purpose Room	Roof	Wall flashing	Metal	D	Intact	Negative	0.2
53	12/1/2020			Calibrate				Positive	1.1
54	12/1/2020			Calibrate				Positive	1
55	12/1/2020			Calibrate				Positive	1.1
56	12/1/2020	Building A: Multi-Purpose Room	Exterior at Door Swing	Floor stripe	Concrete	D	Intact	Negative	0.4
57	12/1/2020	Building B (Rooms 6 through 9)	Exterior	Wall	Stucco	A	Intact	Negative	0.1
58	12/1/2020	Building B (Rooms 6 through 9)	Exterior	Wall	Stucco	B	Intact	Negative	0
59	12/1/2020	Building B (Rooms 6 through 9)	Exterior	Wall	Stucco	C	Intact	Negative	-0.2
60	12/1/2020	Building B (Rooms 6 through 9)	Exterior	Wall	Stucco	D	Intact	Negative	0
61	12/1/2020	Building B (Rooms 6 through 9)	Exterior at Drinking Fountain	Wall tile	Ceramic	D	Intact	Negative	-0.1
62	12/1/2020	Building B (Rooms 6 through 9)	Exterior at Drinking Fountain	Drinking fountain	Porcelain	D	Intact	Negative	0.1
63	12/1/2020	Building B (Rooms 6 through 9)	Exterior	Wall panel	Metal	D	Intact	Negative	0.1
64	12/1/2020	Building B (Rooms 6 through 9)	Exterior	Conduit	Metal	D	Intact	Negative	0.2
65	12/1/2020	Building B (Rooms 6 through 9)	Exterior	Bell	Metal	D	Intact	Negative	0.1
66	12/1/2020	Building B (Rooms 6 through 9)	Exterior	Door frame	Metal	D	Intact	Negative	0.1
67	12/1/2020	Building B (Rooms 6 through 9)	Exterior	Door	Metal	D	Intact	Negative	0.1
68	12/1/2020	Building B (Rooms 6 through 9)	Exterior at Restroom	Door frame	Metal	D	Intact	Negative	0.1

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
69	12/1/2020	Building B (Rooms 6 through 9)	Exterior at Restroom	Door	Metal	D	Intact	Negative	0
70	12/1/2020	Building B (Rooms 6 through 9)	Exterior at Restroom	Door vent	Metal	D	Intact	Negative	0.1
71	12/1/2020	Building B (Rooms 6 through 9)	Exterior	Hand rail	Metal	C	Intact	Negative	0.1
72	**12/1/2020**	**Building B (Rooms 6 through 9)**	**Exterior**	**Window sill**	**Wood**	**B**	**Intact**	**Positive**	**3.1**
73	**12/1/2020**	**Building B (Rooms 6 through 9)**	**Exterior**	**Window/door casing**	**Wood**	**B**	**Intact**	**Positive**	**2.2**
74	12/1/2020	Building B (Rooms 6 through 9)	Exterior	Door frame	Metal	B	Intact	Negative	0.1
75	12/1/2020	Building B (Rooms 6 through 9)	Exterior	Door	Metal	B	Intact	Negative	0.1
76	12/1/2020	Building B (Rooms 6 through 9)	Exterior	Transom frame	Wood	B	Intact	Negative	0.2
77	**12/1/2020**	**Building B (Rooms 6 through 9)**	**Exterior**	**Fascia**	**Wood**	**C**	**Intact**	**Positive**	**1.8**
78	12/1/2020	Building B (Rooms 6 through 9)	Exterior	Flashing	Metal	C	Intact	Negative	0.3
79	**12/1/2020**	**Building B (Rooms 6 through 9)**	**Exterior**	**Eave**	**Wood**	**D**	**Intact**	**Positive**	**0.8**
80	**12/1/2020**	**Building B (Rooms 6 through 9)**	**Exterior**	**Eave joist**	**Wood**	**D**	**Intact**	**Positive**	**1.7**
81	**12/1/2020**	**Building B (Rooms 6 through 9)**	**Exterior**	**Eave joist spacer**	**Wood**	**D**	**Intact**	**Positive**	**2.1**
82	12/1/2020	Building B (Rooms 6 through 9)	Exterior	Conduit	Metal	D	Intact	Negative	0.2
83	12/1/2020	Building B (Rooms 6 through 9)	Exterior Above Covered Walkway	Wall flashing	Metal	D	Intact	Negative	0.2
84	12/1/2020	Building B (Rooms 6 through 9)	Exterior at Door Swing	Floor stripe	Concrete	D	Intact	Negative	0.3
85	12/1/2020			Calibrate				Positive	1

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
86	12/1/2020			Calibrate				Positive	1
87	12/1/2020			Calibrate				Positive	0.9
88	12/2/2020			Calibrate				Positive	1
89	12/2/2020			Calibrate				Positive	1
90	12/2/2020			Calibrate				Positive	1
91	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Wall	Stucco	A	Intact	Negative	0.3
92	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Wall	Stucco	B	Intact	Negative	-0.2
93	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Wall	Stucco	C	Intact	Negative	0.5
94	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Wall	Stucco	D	Intact	Negative	0.4
95	12/2/2020	Building C (Rooms 10 through 14)	Exterior at Drinking Fountain	Wall tile	Ceramic	D	Intact	Negative	0.1
96	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Door frame	Metal	D	Intact	Negative	0
97	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Door	Metal	D	Intact	Negative	0.1
98	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Electrical panel box	Metal	D	Intact	Negative	0
99	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Fire hose cabinet	Wood	D	Intact	Negative	0.5
100	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Conduit	Metal	D	Intact	Negative	0
101	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Electrical box	Metal	D	Intact	Negative	0
102	12/2/2020	Building C (Rooms 10 through 14)	Exterior at Restroom	Door frame	Metal	D	Intact	Negative	0.1
103	12/2/2020	Building C (Rooms 10 through 14)	Exterior at Restroom	Door	Metal	D	Intact	Negative	0
104	12/2/2020	Building C (Rooms 10 through 14)	Exterior at Restroom	Door vent	Metal	D	Intact	Negative	-0.1

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
105	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Conduit	Metal	C	Intact	Negative	0.2
106	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Conduit bracket	Metal	C	Intact	Negative	0.1
107	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Electrical box	Metal	C	Intact	Negative	0.2
108	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Door frame	Metal	C	Intact	Negative	0.3
109	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Door	Metal	C	Intact	Negative	0.1
110	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Window sill	Wood	B	Fair	Negative	0.2
111	**12/2/2020**	**Building C (Rooms 10 through 14)**	**Exterior**	**Window casing**	**Wood**	**B**	**Intact**	**Positive**	**0.7**
112	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Door frame	Metal	B	Intact	Negative	0
113	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Door	Metal	B	Intact	Negative	0.2
114	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Door frame trim	Wood	B	Intact	Negative	0.1
115	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Transom frame	Wood	B	Intact	Negative	-0.1
116	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Water line	Metal	B	Intact	Negative	0.1
117	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Fascia	Wood	C	Intact	Negative	0.3
118	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Flashing	Wood	C	Intact	Negative	0.1
119	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Flashing	Metal	C	Intact	Negative	0.2
120	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Overhang	Wood	D	Intact	Negative	0.1

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
121	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Overhang beam	Wood	D	Intact	Negative	0.2
122	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Overhang joist	Wood	D	Intact	Negative	0.4
123	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Overhang joist spacer	Wood	D	Intact	Negative	0.2
124	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Overhang support pole	Metal	D	Intact	Negative	0.2
125	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Gutter	Metal	D	Intact	Negative	0
126	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Downspout	Metal	D	Intact	Negative	0.2
127	12/2/2020	Building C (Rooms 10 through 14)	Exterior at Door Swing	Floor stripe	Concrete	D	Intact	Negative	0.3
128	12/2/2020	Building C (Rooms 10 through 14)	Exterior	Floor stripe	Concrete	D	Intact	Negative	0.3
129	12/2/2020	Building D (Room 2)	Exterior	Wall	Stucco	A	Intact	Negative	-0.2
130	12/2/2020	Building D (Room 2)	Exterior	Wall	Stucco	B	Intact	Negative	-0.1
131	12/2/2020	Building D (Room 2)	Exterior	Wall	Stucco	C	Intact	Negative	-0.2
132	12/2/2020	Building D (Room 2)	Exterior	Wall	Stucco	D	Intact	Negative	-0.2
133	12/2/2020	Building D (Room 2)	Exterior	Door frame	Metal	B	Intact	Negative	0.2
134	12/2/2020	Building D (Room 2)	Exterior	Door	Metal	B	Intact	Negative	0
135	12/2/2020	Building D (Room 2)	Exterior	Double door frame	Metal	C	Intact	Negative	0.1
136	12/2/2020	Building D (Room 2)	Exterior	Double door	Metal	C	Intact	Negative	0.2
137	12/2/2020	Building D (Room 2)	Exterior	Window sill	Wood	B	Intact	Negative	0.1
138	**12/2/2020**	**Building D (Room 2)**	**Exterior**	**Window casing**	**Wood**	**B**	**Intact**	**Positive**	**1.9**
139	12/2/2020	Building D (Room 2)	Exterior	Window sill	Wood	D	Intact	Negative	0.4
140	12/2/2020	Building D (Room 2)	Exterior	Conduit	Metal	C	Intact	Negative	0
141	12/2/2020	Building D (Room 2)	Exterior	Conduit bracket	Metal	C	Intact	Negative	-0.3
142	12/2/2020	Building D (Room 2)	Exterior	Electrical box	Metal	C	Intact	Negative	0.1

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
143	12/2/2020	Building D (Room 2)	Exterior	Electrical panel box	Metal	C	Intact	Negative	0.1
144	12/2/2020	Building D (Room 2)	Exterior	Door frame	Metal	A	Intact	Negative	0.3
145	12/2/2020	Building D (Room 2)	Exterior	Door	Metal	A	Intact	Negative	0
146	**12/2/2020**	**Building D (Room 2)**	**Exterior**	**Overhang**	**Wood**	**A**	**Intact**	**Positive**	**0.9**
147	**12/2/2020**	**Building D (Room 2)**	**Exterior**	**Overhang vent**	**Wood**	**A**	**Intact**	**Positive**	**0.7**
148	**12/2/2020**	**Building D (Room 2)**	**Exterior**	**Overhang support pole**	**Metal**	**A**	**Intact**	**Positive**	**1.4**
149	**12/2/2020**	**Building D (Room 2)**	**Exterior**	**Overhang**	**Wood**	**B**	**Intact**	**Positive**	**0.8**
150	**12/2/2020**	**Building D (Room 2)**	**Exterior**	**Fascia**	**Wood**	**B**	**Intact**	**Positive**	**1.1**
151	**12/2/2020**	**Building D (Room 2)**	**Exterior**	**Flashing**	**Metal**	**B**	**Intact**	**Positive**	**0.7**
152	12/2/2020	Building D (Room 2)	Exterior	Gutter	Metal	B	Intact	Negative	0.1
153	**12/2/2020**	**Building D (Room 2)**	**Exterior**	**Wall cap**	**Metal**	**C**	**Fair**	**Positive**	**1.7**
154	12/2/2020	Building D (Room 2)	Exterior	Downspout	Metal	D	Intact	Negative	-0.1
155	**12/2/2020**	**Building D (Room 2)**	**Exterior: Round Pipe**	**Downspout**	**Metal**	**D**	**Intact**	**Positive**	**1.1**
156	12/2/2020			Calibrate				Positive	1
157	12/2/2020			Calibrate				Positive	1
158	12/2/2020			Calibrate				Positive	1
159	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Wall	Stucco	A	Intact	Negative	-0.2
160	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Wall	Stucco	B	Intact	Negative	0
161	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Wall	Stucco	C	Intact	Negative	0.4
162	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Wall	Stucco	D	Intact	Negative	0.4
163	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Door/transom frame	Metal	C	Intact	Negative	0
164	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Door	Metal	C	Intact	Negative	0.1
165	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Transom	Metal	C	Intact	Negative	0.1

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
166	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Window sill	Wood	C	Intact	Negative	0.1
167	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Conduit	Metal	C	Intact	Negative	0.1
168	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Conduit bracket	Metal	C	Intact	Negative	-0.1
169	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Electrical box	Metal	C	Intact	Negative	0.1
170	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Window sill	Wood	A	Intact	Negative	0.1
171	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Window casing	Wood	A	Intact	Negative	0.1
172	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Window riser	Wood	A	Intact	Negative	0.2
173	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Wall siding	Wood	A	Intact	Negative	-0.1
174	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Wall vent	Metal	A	Intact	Negative	0.1
175	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Wall vent frame	Wood	A	Intact	Negative	0
176	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Fascia	Wood	A	Intact	Negative	0.1
177	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Flashing	Metal	A	Intact	Negative	0.5
178	12/2/2020	Building E (Rooms 3 through 5)	Exterior at Breezeway Entry	Door frame	Metal	B	Intact	Negative	0
179	12/2/2020	Building E (Rooms 3 through 5)	Exterior at Breezeway Entry	Door	Metal	B	Intact	Negative	0.1
180	12/2/2020	Building E (Rooms 3 through 5)	Exterior at Restroom	Door frame	Metal	B	Intact	Negative	0.5
181	12/2/2020	Building E (Rooms 3 through 5)	Exterior at Restroom	Door	Metal	B	Intact	Negative	0.1

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
182	12/2/2020	Building E (Rooms 3 through 5)	Exterior at Restroom	Door vent	Metal	B	Intact	Negative	0.1
183	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Wall base	Concrete	B	Intact	Negative	0.3
184	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Window sill	Wood	D	Intact	Negative	0
185	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Window casing	Wood	D	Intact	Negative	0.1
186	**12/2/2020**	**Building E (Rooms 3 through 5)**	**Exterior**	**Window corner post**	**Wood**	**D**	**Poor**	**Positive**	**11.5**
187	**12/2/2020**	**Building E (Rooms 3 through 5)**	**Exterior**	**Eave**	**Wood**	**B**	**Intact**	**Positive**	**3.3**
188	**12/2/2020**	**Building E (Rooms 3 through 5)**	**Exterior**	**Eave joist**	**Wood**	**B**	**Intact**	**Positive**	**1.8**
189	**12/2/2020**	**Building E (Rooms 3 through 5)**	**Exterior**	**Eave joist spacer**	**Wood**	**B**	**Intact**	**Positive**	**1.5**
190	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Overhang	Wood	A	Intact	Negative	0
191	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Overhang beam	Wood	A	Intact	Negative	0.1
192	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Overhang joist	Wood	A	Intact	Negative	0.1
193	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Overhang joist spacer	Wood	A	Intact	Negative	-0.1
194	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Gutter	Metal	B	Intact	Negative	0
195	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Downspout	Metal	B	Intact	Negative	0
196	**12/2/2020**	**Building E (Rooms 3 through 5)**	**Exterior**	**Overhang column**	**Wood**	**A**	**Intact**	**Positive**	**9.2**
197	12/2/2020	Building E (Rooms 3 through 5)	Exterior on Wall	Hand rail	Metal	A	Intact	Negative	0.1

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
198	12/2/2020	Building E (Rooms 3 through 5)	Exterior at Ramp	Hand rail	Metal	B	Intact	Negative	0.1
199	12/2/2020	Building E (Rooms 3 through 5)	Exterior at Door Swing	Floor stripe	Concrete	B	Intact	Negative	0.3
200	12/2/2020	Building E (Rooms 3 through 5)	Exterior at Stairs	Floor stripe	Concrete	B	Intact	Negative	0.3
201	12/2/2020	Building E (Rooms 3 through 5)	Enclosed Breezeway	Wall	Stucco	A	Intact	Negative	0.4
202	12/2/2020	Building E (Rooms 3 through 5)	Enclosed Breezeway	Wall	Stucco	B	Intact	Negative	0.4
203	12/2/2020	Building E (Rooms 3 through 5)	Enclosed Breezeway	Wall	Stucco	C	Intact	Negative	0.4
204	12/2/2020	Building E (Rooms 3 through 5)	Enclosed Breezeway	Wall	Stucco	D	Intact	Negative	0.4
205	12/2/2020	Building E (Rooms 3 through 5)	Enclosed Breezeway	Ceiling	Stucco	Upper	Intact	Negative	0.4
206	12/2/2020	Building E (Rooms 3 through 5)	Enclosed Breezeway	Conduit	Metal	Upper	Intact	Negative	0.3
207	12/2/2020	Building E (Rooms 3 through 5)	Enclosed Breezeway	Door frame	Metal	B	Intact	Negative	0
208	12/2/2020	Building E (Rooms 3 through 5)	Enclosed Breezeway	Door	Metal	B	Intact	Negative	0.1
209	12/2/2020	Building E (Rooms 3 through 5)	Enclosed Breezeway at Restroom	Door frame	Metal	A	Intact	Negative	0.4
210	12/2/2020	Building E (Rooms 3 through 5)	Enclosed Breezeway at Restroom	Door	Metal	A	Intact	Negative	0.1
211	12/2/2020	Building E (Rooms 3 through 5)	Enclosed Breezeway at Restroom	Door vent	Metal	A	Intact	Negative	0.4
212	12/2/2020	Building E (Rooms 3 through 5)	Enclosed Breezeway	Wall base	Concrete	A	Intact	Negative	0.2
213	12/2/2020	Building E (Rooms 3 through 5)	Enclosed Breezeway	Hand rail	Metal	A	Intact	Negative	0.2

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
214	12/2/2020	Building E (Rooms 3 through 5)	Enclosed Breezeway	Door frame	Metal	C	Intact	Negative	0.3
215	12/2/2020	Building E (Rooms 3 through 5)	Enclosed Breezeway	Door	Metal	C	Intact	Negative	0.1
216	12/2/2020	Building E (Rooms 3 through 5)	Enclosed Breezeway at Room 4	Transom	Wood	C	Intact	Negative	0.5
217	**12/2/2020**	**Building E (Rooms 3 through 5)**	**Enclosed Breezeway at Room 4**	**Transom frame**	**Wood**	**C**	**Intact**	**Positive**	**4.2**
218	**12/2/2020**	**Building E (Rooms 3 through 5)**	**Enclosed Breezeway at Room 4**	**Transom frame trim**	**Metal**	**C**	**Intact**	**Positive**	**8.2**
219	12/2/2020	Building E (Rooms 3 through 5)	Enclosed Breezeway at Door Swing	Floor stripe	Concrete	C	Intact	Negative	0.3
220	12/2/2020	Building E (Rooms 3 through 5)	Exterior	Wall vent	Metal	B	Intact	Negative	0.2
221	12/2/2020			Calibrate				Positive	1.1
222	12/2/2020			Calibrate				Positive	1
223	12/2/2020			Calibrate				Positive	1.1
224	12/3/2020			Calibrate				Negative	-0.6
225	12/3/2020			Calibrate				Negative	-0.6
226	12/3/2020			Calibrate				Negative	-0.6
227	12/3/2020			Calibrate				Negative	-0.6
228	12/3/2020			Calibrate				Positive	0.9
229	12/3/2020			Calibrate				Positive	1
230	12/3/2020			Calibrate				Positive	1
231	12/3/2020	Building F (Administration/Library)	Exterior	Wall	Cinderblock	A	Intact	Negative	0.2
232	12/3/2020	Building F (Administration/Library)	Exterior	Wall	Concrete	A	Intact	Negative	0.4
233	12/3/2020	Building F (Administration/Library)	Exterior	Wall	Cinderblock	B	Intact	Negative	0.5
234	12/3/2020	Building F (Administration/Library)	Breezeway	Wall	Stucco	B	Intact	Negative	0.4

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
235	12/3/2020	Building F (Administration/Library)	Exterior	Wall	Stucco	C	Intact	Negative	0.5
236	12/3/2020	Building F (Administration/Library)	Exterior	Wall	Cinderblock	C	Intact	Negative	0.4
237	12/3/2020	Building F (Administration/Library)	Exterior	Wall	Stucco	D	Intact	Negative	0.4
238	12/3/2020	Building F (Administration/Library)	Exterior	Wall	Cinderblock	D	Intact	Negative	0.1
239	12/3/2020	Building F (Administration/Library)	Exterior	Wall	Cinderblock	D	Intact	Negative	0.4
240	12/3/2020	Building F (Administration/Library)	Exterior	Wall	Concrete	D	Intact	Negative	0.5
241	12/3/2020	Building F (Administration/Library)	Exterior	Window frame	Metal	A	Intact	Negative	0.5
242	12/3/2020	Building F (Administration/Library)	Exterior	Window panel	Transite	A	Intact	Negative	0.2
243	12/3/2020	Building F (Administration/Library)	Exterior	Door frame	Metal	D	Intact	Negative	0.1
244	12/3/2020	Building F (Administration/Library)	Exterior	Door	Metal	D	Intact	Negative	0.1
245	12/3/2020	Building F (Administration/Library)	Exterior	Wall strip	Metal	D	Intact	Negative	0.1
246	12/3/2020	Building F (Administration/Library)	Exterior	Pipe	Metal	D	Intact	Negative	0.1
247	12/3/2020	Building F (Administration/Library)	Exterior	Conduit	Metal	D	Intact	Negative	0.1
248	12/3/2020	Building F (Administration/Library)	Exterior	Conduit bracket	Metal	D	Intact	Negative	0.1
249	12/3/2020	Building F (Administration/Library)	Exterior	Electrical box	Metal	D	Intact	Negative	0.1
250	12/3/2020	Building F (Administration/Library)	Exterior	Column	Cinderblock	C	Intact	Negative	-0.2

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
251	**12/3/2020**	**Building F (Administration/Library)**	**Exterior**	**Window sill**	**Wood**	**C**	**Intact**	**Positive**	**9**
252	12/3/2020	Building F (Administration/Library)	Exterior	Window casing	Wood	C	Intact	Negative	0.4
253	12/3/2020	Building F (Administration/Library)	Exterior	Window security screen	Metal	C	Intact	Negative	0.1
254	12/3/2020	Building F (Administration/Library)	Exterior	Door frame	Metal	C	Intact	Negative	-0.1
255	12/3/2020	Building F (Administration/Library)	Exterior	Door	Metal	C	Intact	Negative	0.1
256	12/3/2020	Building F (Administration/Library)	Breezeway at Restroom	Door frame	Metal	B	Intact	Negative	0.2
257	12/3/2020	Building F (Administration/Library)	Breezeway at Restroom	Door	Metal	B	Intact	Negative	0.1
258	12/3/2020	Building F (Administration/Library)	Breezeway	Column	Cinderblock	B	Intact	Negative	-0.2
259	12/3/2020	Building F (Administration/Library)	Breezeway	Door/window frame	Metal	B	Intact	Negative	0.1
260	12/3/2020	Building F (Administration/Library)	Breezeway	Door	Metal	B	Intact	Negative	-0.1
261	12/3/2020	Building F (Administration/Library)	Breezeway	Window panel	Transite	B	Intact	Negative	-0.2
262	12/3/2020	Building F (Administration/Library)	Breezeway	Wall	Concrete	B	Intact	Negative	-0.1
263	12/3/2020	Building F (Administration/Library)	Breezeway at Door Swing	Floor stripe	Concrete	B	Intact	Negative	0.3
264	12/3/2020	Building F (Administration/Library)	Breezeway	Door frame	Metal	B	Intact	Negative	0.5
265	12/3/2020	Building F (Administration/Library)	Breezeway	Door	Metal	B	Intact	Negative	0
266	12/3/2020	Building F (Administration/Library)	Breezeway at Office	Door frame	Metal	B	Intact	Negative	0.4

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
267	12/3/2020	Building F (Administration/Library)	Breezeway at Office	Door	Metal	B	Intact	Negative	-0.1
268	12/3/2020	Building F (Administration/Library)	Breezeway at Drinking Fountain	Hand rail	Metal	B	Intact	Negative	0.2
269	12/3/2020	Building F (Administration/Library)	Breezeway	Parapet cap	Porcelain	B	Intact	Negative	0.2
270	12/3/2020	Building F (Administration/Library)	Exterior	Drinking fountain	Metal	A	Intact	Negative	0.3
271	12/3/2020	Building F (Administration/Library)	Roof at Parapet Wall	Wall flashing	Metal	A	Intact	Negative	0.5
272	12/3/2020	Building F (Administration/Library)	Exterior	Flashing	Metal	C	Intact	Negative	0.2
273	12/3/2020	Breezeway Between Buildings A and F	Roof	Wall	Stucco	C	Intact	Negative	0.4
274	12/3/2020	Breezeway Between Buildings A and F	Roof	Flashing	Metal	C	Intact	Negative	0.2
275	12/3/2020	Breezeway Between Buildings A and F	Roof	Drip edge	Metal	C	Intact	Negative	0.2
276	12/3/2020	Breezeway Between Buildings A and F	Roof	Wall flashing	Metal	C	Intact	Negative	0.2
277	12/3/2020	Breezeway Between Buildings A and F	Roof	Conduit	Metal	C	Intact	Negative	0
278	12/3/2020	Breezeway Between Buildings A and F	Roof	Conduit bracket	Metal	C	Intact	Negative	0.1
279	12/3/2020	Breezeway Between Buildings A and F	Roof	Wall	Stucco	A	Intact	Negative	0.4
280	12/3/2020	Breezeway Between Buildings A and F	Exterior	Wall	Stucco	C	Intact	Negative	0.4
281	12/3/2020	Breezeway Between Buildings A and F	Exterior	Wall	Stucco	A	Intact	Negative	0.5
282	12/3/2020	Breezeway Between Buildings A and F	Exterior	Double door frame	Metal	A	Intact	Negative	0

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
283	12/3/2020	Breezeway Between Buildings A and F	Exterior	Double door	Metal	A	Intact	Negative	0
284	12/3/2020	Breezeway Between Buildings A and F	Breezeway	Wall	Stucco	A	Intact	Negative	0.4
285	12/3/2020	Breezeway Between Buildings A and F	Breezeway	Wall	Stucco	C	Intact	Negative	0.4
286	12/3/2020	Breezeway Between Buildings A and F	Breezeway	Ceiling	Stucco	Upper	Intact	Negative	0.4
287	12/3/2020	Breezeway Between Buildings A and F	Breezeway	Conduit	Metal	Upper	Intact	Negative	0.1
288	12/3/2020	Breezeway Between Buildings A and F	Breezeway	Attic access hatch	Wood	Upper	Intact	Negative	-0.1
289	12/3/2020	Breezeway Between Buildings A and F	Breezeway	Attic access hatch frame	Wood	Upper	Intact	Negative	-0.1
290	12/3/2020	Breezeway Between Buildings A and F	Breezeway	Wire mold	Plastic	Upper	Intact	Negative	0.2
291	12/3/2020	Building F (Administration/Library)	Breezeway	Wire mold	Plastic	B	Intact	Negative	0.3
292	12/3/2020			Calibrate				Positive	1
293	12/3/2020			Calibrate				Positive	1.1
294	12/3/2020			Calibrate				Positive	1.1
295	12/3/2020	Building G (Portable 1)	Exterior	Wall	Wood	A	Intact	Negative	0.1
296	12/3/2020	Building G (Portable 1)	Exterior	Wall	Wood	B	Intact	Negative	0.2
297	12/3/2020	Building G (Portable 1)	Exterior	Wall	Wood	C	Intact	Negative	0
298	12/3/2020	Building G (Portable 1)	Exterior	Wall	Wood	D	Intact	Negative	0.1
299	12/3/2020	Building G (Portable 1)	Exterior	Downspout	Metal	D	Intact	Negative	-0.1
300	12/3/2020	Building G (Portable 1)	Exterior	Wall base	Metal	C	Intact	Negative	0.2
301	12/3/2020	Building G (Portable 1)	Exterior	Door frame	Metal	B	Intact	Negative	0.1
302	12/3/2020	Building G (Portable 1)	Exterior	Door	Metal	B	Intact	Negative	0
303	12/3/2020	Building G (Portable 1)	Exterior	Awning	Metal	B	Intact	Negative	-0.1
304	12/3/2020	Building G (Portable 1)	Exterior	Awning frame.	Metal	B	Intact	Negative	0
305	12/3/2020	Building G (Portable 1)	Exterior	Conduit	Metal	B	Intact	Negative	0.1

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
306	12/3/2020	Building G (Portable 1)	Exterior	Conduit bracket	Metal	B	Intact	Negative	0.1
307	12/3/2020	Building G (Portable 1)	Exterior	Electrical box	Metal	B	Intact	Negative	-0.1
308	12/3/2020	Building G (Portable 1)	Exterior	Gutter	Metal	B	Intact	Negative	0.1
309	12/3/2020	Building G (Portable 1)	Exterior	Window trim	Wood	A	Intact	Negative	0.1
310	12/3/2020	Building G (Portable 1)	Exterior	Door frame trim	Wood	A	Intact	Negative	0
311	12/3/2020	Building G (Portable 1)	Exterior	Wall trim	Wood	A	Intact	Negative	0.1
312	12/3/2020	Building G (Portable 1)	Exterior	Wall panel	Wood	A	Intact	Negative	0.1
313	12/3/2020	Building G (Portable 1)	Exterior	Overhang	Wood	A	Intact	Negative	-0.1
314	12/3/2020	Building G (Portable 1)	Exterior	Fascia	Wood	A	Intact	Negative	-0.1
315	12/3/2020	Building G (Portable 1)	Exterior	Drip edge	Metal	A	Intact	Negative	0.1
316	12/3/2020	Building G (Portable 1)	Exterior	Flashing	Metal	D	Intact	Negative	0.1
317	12/3/2020	Building G (Portable 1)	Exterior	Wall trim	Metal	A	Intact	Negative	0.3
318	12/3/2020	Building J (Portable 15)	Exterior	Wall	Wood	A	Intact	Negative	0.1
319	12/3/2020	Building J (Portable 15)	Exterior	Wall	Wood	B	Intact	Negative	0
320	12/3/2020	Building J (Portable 15)	Exterior	Wall	Wood	C	Intact	Negative	0
321	12/3/2020	Building J (Portable 15)	Exterior	Riser	Metal	A	Intact	Negative	-0.1
322	12/3/2020	Building J (Portable 15)	Exterior	Wall base	Metal	A	Intact	Negative	0.2
323	12/3/2020	Building J (Portable 15)	Exterior	Conduit	Metal	A	Intact	Negative	0.3
324	12/3/2020	Building J (Portable 15)	Exterior	Conduit bracket	Metal	A	Intact	Negative	0.1
325	12/3/2020	Building J (Portable 15)	Exterior	Electrical box	Metal	A	Intact	Negative	0
326	12/3/2020	Building J (Portable 15)	Exterior: Between Portables	Screen	Metal	A	Intact	Negative	-0.3
327	12/3/2020	Building J (Portable 15)	Exterior	Door frame	Metal	C	Intact	Negative	0.1
328	12/3/2020	Building J (Portable 15)	Exterior	Door	Metal	C	Intact	Negative	0.1
329	12/3/2020	Building J (Portable 15)	Exterior	Door frame trim	Wood	C	Intact	Negative	0.1
330	12/3/2020	Building J (Portable 15)	Exterior	Overhang	Wood	C	Intact	Negative	0.1
331	12/3/2020	Building J (Portable 15)	Exterior	Overhang frame	Metal	C	Intact	Negative	0.1
332	12/3/2020	Building J (Portable 15)	Exterior	Gutter	Metal	C	Intact	Negative	0

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
333	12/3/2020	Building J (Portable 15)	Exterior	Downspout	Metal	C	Intact	Negative	0
334	12/3/2020	Building J (Portable 15)	Exterior	Drain pipe	Metal	C	Intact	Negative	-0.1
335	12/3/2020	Building J (Portable 15)	Exterior	Wall header	Metal	B	Intact	Negative	0.1
336	12/3/2020	Building J (Portable 15)	Exterior	Flashing	Metal	B	Intact	Negative	0.2
337	12/3/2020	Building J (Portable 15)	Exterior	Wall strip	Metal	B	Intact	Negative	0.2
338	12/3/2020	Building J (Portable 15)	Exterior at Door Swing	Floor stripe	Concrete	C	Intact	Negative	0.3
339	12/3/2020	Building G (Portable 1)	Exterior at Door Swing	Floor stripe	Concrete	B	Intact	Negative	0.3
340	12/3/2020	Building J (Portable 16)	Exterior	Wall	Wood	A	Intact	Negative	0.1
341	12/3/2020	Building J (Portable 16)	Exterior	Riser	Metal	A	Intact	Negative	0
342	12/3/2020	Building J (Portable 16)	Exterior	Wall base	Metal	A	Intact	Negative	0.2
343	12/3/2020	Building J (Portable 16)	Exterior	Conduit	Metal	A	Intact	Negative	-0.1
344	12/3/2020	Building J (Portable 16)	Exterior	Conduit bracket	Metal	A	Intact	Negative	0.1
345	12/3/2020	Building J (Portable 16)	Exterior	Electrical box	Metal	A	Intact	Negative	0.1
346	12/3/2020	Building J (Portable 16)	Exterior: Between Portables	Screen	Metal	A	Intact	Negative	-0.2
347	12/3/2020	Building J (Portable 16)	Exterior	Wall	Wood	C	Intact	Negative	0
348	12/3/2020	Building J (Portable 16)	Exterior	Door frame trim	Wood	C	Intact	Negative	0.1
349	12/3/2020	Building J (Portable 16)	Exterior	Door frame	Metal	C	Intact	Negative	0
350	12/3/2020	Building J (Portable 16)	Exterior	Door	Metal	C	Intact	Negative	0.1
351	12/3/2020	Building J (Portable 16)	Exterior	Overhang	Wood	C	Intact	Negative	0
352	12/3/2020	Building J (Portable 16)	Exterior	Overhang frame	Metal	C	Intact	Negative	0.1
353	12/3/2020	Building J (Portable 16)	Exterior	Wall header	Metal	C	Intact	Negative	0
354	12/3/2020	Building J (Portable 16)	Exterior	Flashing	Metal	C	Intact	Negative	0.2
355	12/3/2020	Building J (Portable 16)	Exterior	Gutter	Metal	C	Intact	Negative	0
356	12/3/2020	Building J (Portable 16)	Exterior	Downspout	Metal	C	Intact	Negative	0
357	12/3/2020	Building J (Portable 16)	Exterior	Drain pipe	Metal	C	Intact	Negative	0.1
358	12/3/2020	Building J (Portable 16)	Exterior at Door Swing	Floor stripe	Concrete	C	Intact	Negative	0.3
359	12/3/2020	Building J (Portable 17)	Exterior	Wall	Wood	A	Intact	Negative	0.1
360	12/3/2020	Building J (Portable 17)	Exterior	Riser	Metal	A	Intact	Negative	-0.1
361	12/3/2020	Building J (Portable 17)	Exterior	Wall base	Metal	A	Intact	Negative	0

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
362	12/3/2020	Building J (Portable 17)	Exterior	Conduit	Metal	A	Intact	Negative	0.2
363	12/3/2020	Building J (Portable 17)	Exterior	Conduit bracket	Metal	A	Intact	Negative	-0.1
364	12/3/2020	Building J (Portable 17)	Exterior	Electrical box	Metal	A	Intact	Negative	0
365	12/3/2020	Building J (Portable 17)	Exterior	Screen	Metal	A	Intact	Negative	-0.1
366	12/3/2020	Building J (Portable 17)	Exterior	Wall	Wood	C	Intact	Negative	0.1
367	12/3/2020	Building J (Portable 17)	Exterior	Door frame trim	Wood	C	Intact	Negative	-0.1
368	12/3/2020	Building J (Portable 17)	Exterior	Door frame	Metal	C	Intact	Negative	0.1
369	12/3/2020	Building J (Portable 17)	Exterior	Door	Metal	C	Intact	Negative	0.1
370	12/3/2020	Building J (Portable 17)	Exterior	Overhang	Wood	C	Intact	Negative	0.1
371	12/3/2020	Building J (Portable 17)	Exterior	Overhang frame	Metal	C	Intact	Negative	0
372	12/3/2020	Building J (Portable 17)	Exterior	Wall header	Metal	C	Intact	Negative	0.1
373	12/3/2020	Building J (Portable 17)	Exterior	Flashing	Metal	C	Intact	Negative	0.2
374	12/3/2020	Building J (Portable 17)	Exterior	Gutter	Metal	C	Intact	Negative	0.1
375	12/3/2020	Building J (Portable 17)	Exterior	Downspout	Metal	C	Intact	Negative	0
376	12/3/2020	Building J (Portable 17)	Exterior	Drain pipe	Metal	C	Intact	Negative	0
377	12/3/2020	Building J (Portable 17)	Exterior at Door Swing	Floor stripe	Concrete	C	Intact	Negative	0.3
378	12/3/2020			Calibrate				Positive	1
379	12/3/2020			Calibrate				Positive	1
380	12/3/2020			Calibrate				Positive	1
381	12/7/2020			Calibrate				Negative	-0.6
382	12/7/2020			Calibrate				Negative	-0.6
383	12/7/2020			Calibrate				Negative	-0.6
384	12/7/2020			Calibrate				Negative	-0.6
385	12/7/2020			Calibrate				Positive	0.9
386	12/7/2020			Calibrate				Positive	1
387	12/7/2020			Calibrate				Positive	1
388	12/7/2020	Building J (Portable 18)	Exterior	Wall	Wood	A	Intact	Negative	0
389	12/7/2020	Building J (Portable 18)	Exterior	Riser	Metal	A	Intact	Negative	-0.1
390	12/7/2020	Building J (Portable 18)	Exterior	Wall base	Metal	A	Intact	Negative	0.3
391	12/7/2020	Building J (Portable 18)	Exterior	Conduit	Metal	A	Intact	Negative	0.2

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
392	12/7/2020	Building J (Portable 18)	Exterior	Conduit bracket	Metal	A	Intact	Negative	0.1
393	12/7/2020	Building J (Portable 18)	Exterior	Electrical box	Metal	A	Intact	Negative	0.1
394	12/7/2020	Building J (Portable 18)	Exterior: Between Portables	Screen	Metal	A	Intact	Negative	-0.2
395	12/7/2020	Building J (Portable 18)	Exterior	Wall	Wood	C	Intact	Negative	0.1
396	12/7/2020	Building J (Portable 18)	Exterior	Door frame trim	Wood	C	Intact	Negative	-0.1
397	12/7/2020	Building J (Portable 18)	Exterior	Door frame	Metal	C	Intact	Negative	0
398	12/7/2020	Building J (Portable 18)	Exterior	Door	Metal	C	Intact	Negative	0.1
399	12/7/2020	Building J (Portable 18)	Exterior	Overhang	Wood	C	Intact	Negative	0.1
400	12/7/2020	Building J (Portable 18)	Exterior	Overhang frame	Metal	C	Intact	Negative	0.1
401	12/7/2020	Building J (Portable 18)	Exterior	Wall header	Metal	C	Intact	Negative	0.1
402	12/7/2020	Building J (Portable 18)	Exterior	Flashing	Metal	C	Intact	Negative	0.1
403	12/7/2020	Building J (Portable 18)	Exterior	Gutter	Metal	C	Fair	Negative	0.1
404	12/7/2020	Building J (Portable 18)	Exterior	Downspout	Metal	C	Intact	Negative	0
405	12/7/2020	Building J (Portable 18)	Exterior	Drain pipe	Metal	C	Intact	Negative	0
406	12/7/2020	Building J (Portable 18)	Exterior at Door Swing	Floor stripe	Concrete	C	Intact	Negative	0.3
407	12/7/2020	Building J (Portable 19)	Exterior	Wall	Wood	A	Intact	Negative	0
408	12/7/2020	Building J (Portable 19)	Exterior	Riser	Metal	A	Intact	Negative	-0.1
409	12/7/2020	Building J (Portable 19)	Exterior	Wall base	Metal	A	Intact	Negative	0.2
410	12/7/2020	Building J (Portable 19)	Exterior	Conduit	Metal	A	Intact	Negative	0.3
411	12/7/2020	Building J (Portable 19)	Exterior	Conduit bracket	Metal	A	Intact	Negative	0.1
412	12/7/2020	Building J (Portable 19)	Exterior	Electrical box	Metal	A	Intact	Negative	0
413	12/7/2020	Building J (Portable 19)	Exterior	Wall	Wood	D	Intact	Negative	0
414	12/7/2020	Building J (Portable 19)	Exterior	Wall	Wood	C	Intact	Negative	0.1
415	12/7/2020	Building J (Portable 19)	Exterior	Door frame trim	Wood	C	Intact	Negative	-0.1
416	12/7/2020	Building J (Portable 19)	Exterior	Door frame	Metal	C	Intact	Negative	0.1
417	12/7/2020	Building J (Portable 19)	Exterior	Door	Metal	C	Intact	Negative	0.1
418	12/7/2020	Building J (Portable 19)	Exterior	Overhang	Wood	C	Intact	Negative	0

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
419	12/7/2020	Building J (Portable 19)	Exterior	Overhang frame	Metal	C	Intact	Negative	0
420	12/7/2020	Building J (Portable 19)	Exterior	Wall header	Metal	C	Intact	Negative	0.1
421	12/7/2020	Building J (Portable 19)	Exterior	Flashing	Metal	C	Intact	Negative	0.1
422	12/7/2020	Building J (Portable 19)	Exterior	Gutter	Metal	C	Intact	Negative	0.1
423	12/7/2020	Building J (Portable 19)	Exterior	Downspout	Metal	C	Intact	Negative	0
424	12/7/2020	Building J (Portable 19)	Exterior	Drain pipe	Metal	C	Intact	Negative	0
425	12/7/2020	Building J (Portable 19)	Exterior at Door Swing	Floor stripe	Concrete	C	Intact	Negative	0.3
426	12/7/2020	Building J	Exterior at Walkway	Floor stripe	Concrete	C	Intact	Negative	0.3
427	12/7/2020	Building J	Exterior at Ramp	Hand rail	Metal	A	Peeling	Negative	0.1
428	12/7/2020	Building K (Restroom Portable)	Exterior	Wall	Wood	A	Intact	Negative	0.1
429	12/7/2020	Building K (Restroom Portable)	Exterior	Wall	Wood	B	Intact	Negative	0.1
430	12/7/2020	Building K (Restroom Portable)	Exterior	Wall	Wood	C	Intact	Negative	0.1
431	12/7/2020	Building K (Restroom Portable)	Exterior	Riser	Metal	A	Intact	Negative	0
432	12/7/2020	Building K (Restroom Portable)	Exterior	Wall base	Metal	A	Intact	Negative	0.2
433	12/7/2020	Building K (Restroom Portable)	Exterior	Downspout	Metal	A	Intact	Negative	-0.1
434	12/7/2020	Building K (Restroom Portable)	Exterior	Drain pipe	Metal	A	Intact	Negative	0
435	12/7/2020	Building K (Restroom Portable)	Exterior	Wall	Wood	D	Intact	Negative	0.1
436	12/7/2020	Building K (Restroom Portable)	Exterior: Between Portables	Foundation	Concrete	A	Intact	Negative	0.2
437	12/7/2020	Building K (Restroom Portable)	Exterior: Between Portables	Panel	Wood	C	Intact	Negative	0.1
438	12/7/2020	Building K (Restroom Portable)	Exterior	Door frame trim	Wood	B	Intact	Negative	0.2

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
439	12/7/2020	Building K (Restroom Portable)	Exterior	Door frame	Metal	B	Intact	Negative	0
440	12/7/2020	Building K (Restroom Portable)	Exterior	Door	Metal	B	Intact	Negative	0.1
441	12/7/2020	Building K (Restroom Portable)	Exterior	Door vent	Metal	B	Intact	Negative	0.1
442	12/7/2020	Building K (Restroom Portable)	Exterior Above Door	Drip edge	Metal	B	Intact	Negative	0
443	12/7/2020	Building K (Restroom Portable)	Exterior	Conduit	Metal	B	Intact	Negative	0.1
444	12/7/2020	Building K (Restroom Portable)	Exterior	Conduit bracket	Metal	B	Intact	Negative	0.1
445	12/7/2020	Building K (Restroom Portable)	Exterior	Overhang	Wood	C	Intact	Negative	0.1
446	12/7/2020	Building K (Restroom Portable)	Exterior	Overhang frame	Metal	C	Intact	Negative	-0.2
447	12/7/2020	Building K (Restroom Portable)	Exterior	Overhang vent	Metal	C	Intact	Negative	0.1
448	12/7/2020	Building K (Restroom Portable)	Exterior	Wall header	Metal	C	Intact	Negative	0.1
449	12/7/2020	Building K (Restroom Portable)	Exterior	Gutter	Metal	C	Intact	Negative	-0.1
450	12/7/2020	Building K (Restroom Portable)	Exterior	Flashing	Metal	B	Intact	Negative	0
451	12/7/2020	Building K (Restroom Portable)	Exterior at Door Swing	Floor stripe	Concrete	B	Intact	Negative	0.4
452	12/7/2020	Builkding K (Portable 20)	Exterior	Wall	Wood	A	Intact	Negative	0
453	12/7/2020	Builkding K (Portable 20)	Exterior	Wall	Wood	B	Intact	Negative	-0.1
454	12/7/2020	Builkding K (Portable 20)	Exterior	Riser	Metal	A	Intact	Negative	0
455	12/7/2020	Builkding K (Portable 20)	Exterior	Wall base	Metal	A	Intact	Negative	0.2
456	12/7/2020	Builkding K (Portable 20)	Exterior	Downspout	Metal	A	Intact	Negative	-0.1
457	12/7/2020	Builkding K (Portable 20)	Exterior	Drain pipe	Metal	A	Intact	Negative	-0.1
458	12/7/2020	Builkding K (Portable 20)	Exterior	Wall	Wood	C	Intact	Negative	0

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
459	12/7/2020	Builkding K (Portable 20)	Exterior	Door frame trim	Wood	C	Intact	Negative	0.2
460	12/7/2020	Builkding K (Portable 20)	Exterior	Door frame	Metal	C	Intact	Negative	0
461	12/7/2020	Builkding K (Portable 20)	Exterior	Door	Metal	C	Intact	Negative	0.1
462	12/7/2020	Builkding K (Portable 20)	Exterior: Between Portables	Panel	Metal	C	Intact	Negative	-0.1
463	12/7/2020	Builkding K (Portable 20)	Exterior	Overhang	Wood	C	Intact	Negative	0.1
464	12/7/2020	Builkding K (Portable 20)	Exterior	Overhang frame	Metal	C	Intact	Negative	0.1
465	12/7/2020	Builkding K (Portable 20)	Exterior	Wall header	Metal	C	Intact	Negative	0.1
466	12/7/2020	Builkding K (Portable 20)	Exterior	Gutter	Metal	C	Intact	Negative	0
467	12/7/2020	Builkding K (Portable 20)	Exterior	Flashing	Metal	A	Intact	Negative	0.1
468	12/7/2020	Builkding K (Portable 20)	Exterior at Door Swing	Floor stripe	Concrete	B	Intact	Negative	0.3
469	12/7/2020	Builkding K (Portable 20)	Exterior	Overhang vent	Metal	B	Intact	Negative	0.1
470	12/7/2020	Building K (Portable 21)	Exterior	Wall	Wood	A	Intact	Negative	0.1
471	12/7/2020	Building K (Portable 21)	Exterior	Riser	Metal	A	Intact	Negative	-0.1
472	12/7/2020	Building K (Portable 21)	Exterior	Wall base	Metal	A	Intact	Negative	0.2
473	12/7/2020	Building K (Portable 21)	Exterior	Downspout	Metal	A	Intact	Negative	-0.1
474	12/7/2020	Building K (Portable 21)	Exterior	Drain pipe	Metal	A	Intact	Negative	-0.1
475	12/7/2020	Building K (Portable 21)	Exterior	Wall	Wood	D	Intact	Negative	0.1
476	12/7/2020	Building K (Portable 21)	Exterior	Conduit	Metal	D	Intact	Negative	-0.1
477	12/7/2020	Building K (Portable 21)	Exterior	Wall	Wood	C	Intact	Negative	0
478	12/7/2020	Building K (Portable 21)	Exterior	Door frame trim	Wood	C	Intact	Negative	0.2
479	12/7/2020	Building K (Portable 21)	Exterior	Door frame	Metal	C	Intact	Negative	0
480	12/7/2020	Building K (Portable 21)	Exterior	Door	Metal	C	Intact	Negative	0.1
481	12/7/2020	Building K (Portable 21)	Exterior	Overhang	Wood	C	Intact	Negative	0
482	12/7/2020	Building K (Portable 21)	Exterior	Overhang frame	Metal	C	Intact	Negative	0.2
483	12/7/2020	Building K (Portable 21)	Exterior	Overhang vent	Metal	C	Intact	Negative	0.1
484	12/7/2020	Building K (Portable 21)	Exterior	Wall header	Metal	C	Intact	Negative	0.1

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
485	12/7/2020	Building K (Portable 21)	Exterior	Gutter	Metal	C	Intact	Negative	0
486	12/7/2020	Building K (Portable 21)	Exterior	Flashing	Metal	D	Intact	Negative	0
487	12/7/2020	Building K (Portable 21)	Exterior at Door Swing	Floor stripe	Concrete	C	Intact	Negative	0.3
488	12/7/2020	Building K	Exterior at Walkway	Floor stripe	Concrete	C	Intact	Negative	0.2
489	12/7/2020	Building K	Exterior at Walkway	Hand rail	Metal	D	Intact	Negative	0.2
490	12/7/2020			Calibrate				Positive	1
491	12/7/2020			Calibrate				Positive	1
492	12/7/2020			Calibrate				Positive	1
493	12/7/2020	Building L (Portable 22)	Exterior	Wall	Wood	A	Intact	Negative	0.1
494	12/7/2020	Building L (Portable 22)	Exterior	Wall	Wood	C	Intact	Negative	0.1
495	12/7/2020	Building L (Portable 22)	Exterior	Wall	Wood	D	Intact	Negative	0.1
496	12/7/2020	Building L (Portable 22)	Exterior	Riser	Metal	C	Intact	Negative	-0.1
497	12/7/2020	Building L (Portable 22)	Exterior	Wall base	Metal	C	Intact	Negative	0.1
498	12/7/2020	Building L (Portable 22)	Exterior	Foundation	Concrete	C	Intact	Negative	0.2
499	12/7/2020	Building L (Portable 22)	Exterior	Conduit	Metal	C	Intact	Negative	0.2
500	12/7/2020	Building L (Portable 22)	Exterior	Conduit bracket	Metal	C	Intact	Negative	0.2
501	12/7/2020	Building L (Portable 22)	Exterior	Electrical box	Metal	C	Intact	Negative	0.1
502	12/7/2020	Building L (Portable 22)	Exterior	Downspout	Metal	C	Intact	Negative	-0.1
503	12/7/2020	Building L (Portable 22)	Exterior	Drain pipe	Metal	C	Intact	Negative	0.1
504	12/7/2020	Building L (Portable 22)	Exterior: Between Portables	Panel	Metal	C	Intact	Negative	-0.1
505	12/7/2020	Building L (Portable 22)	Exterior	Door frame trim	Wood	A	Intact	Negative	0.1
506	12/7/2020	Building L (Portable 22)	Exterior	Door frame	Metal	A	Intact	Negative	0
507	12/7/2020	Building L (Portable 22)	Exterior	Door	Metal	A	Intact	Negative	0.1
508	12/7/2020	Building L (Portable 22)	Exterior	Overhang	Wood	A	Intact	Negative	0.1
509	12/7/2020	Building L (Portable 22)	Exterior	Overhang frame	Metal	A	Intact	Negative	0.1
510	12/7/2020	Building L (Portable 22)	Exterior	Overhang vent	Metal	A	Intact	Negative	0.1
511	12/7/2020	Building L (Portable 22)	Exterior	Wall header	Metal	A	Intact	Negative	0.1
512	12/7/2020	Building L (Portable 22)	Exterior	Gutter	Metal	A	Intact	Negative	0

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
513	12/7/2020	Building L (Portable 22)	Exterior	Flashing	Metal	D	Intact	Negative	0
514	12/7/2020	Building L (Portable 22)	Exterior at Door Swing	Floor stripe	Concrete	A	Intact	Negative	0.3
515	12/7/2020	Building L	Exterior at Walkway	Floor stripe	Concrete	A	Intact	Negative	0.3
516	12/7/2020	Building L	Exterior at Walkway	Hand rail	Metal	D	Intact	Negative	0.2
517	12/7/2020			Calibrate				Positive	1
518	12/7/2020			Calibrate				Positive	1
519	12/7/2020			Calibrate				Positive	1
520	12/7/2020	Building L (Portable 23)	Exterior	Wall	Wood	A	Intact	Negative	0
521	12/7/2020	Building L (Portable 23)	Exterior	Wall	Wood	C	Intact	Negative	-0.1
522	12/7/2020	Building L (Portable 23)	Exterior	Riser	Metal	C	Intact	Negative	-0.1
523	12/7/2020	Building L (Portable 23)	Exterior	Wall base	Metal	C	Intact	Negative	0.3
524	12/7/2020	Building L (Portable 23)	Exterior	Foundation	Concrete	C	Intact	Negative	0.4
525	12/7/2020	Building L (Portable 23)	Exterior	Conduit	Metal	C	Intact	Negative	0.2
526	12/7/2020	Building L (Portable 23)	Exterior	Conduit bracket	Metal	C	Intact	Negative	0.1
527	12/7/2020	Building L (Portable 23)	Exterior	Electrical box	Metal	C	Intact	Negative	0
528	12/7/2020	Building L (Portable 23)	Exterior	Downspout	Metal	C	Intact	Negative	-0.1
529	12/7/2020	Building L (Portable 23)	Exterior	Drain pipe	Metal	C	Intact	Negative	0
530	12/7/2020	Building L (Portable 23)	Exterior	Door frame trim	Wood	A	Intact	Negative	0.1
531	12/7/2020	Building L (Portable 23)	Exterior	Door frame	Metal	A	Intact	Negative	0
532	12/7/2020	Building L (Portable 23)	Exterior	Door	Metal	A	Intact	Negative	0.1
533	12/7/2020	Building L (Portable 23)	Exterior	Overhang	Wood	A	Intact	Negative	0.1
534	12/7/2020	Building L (Portable 23)	Exterior	Overhang frame	Metal	A	Intact	Negative	0.1
535	12/7/2020	Building L (Portable 23)	Exterior	Overhang vent	Metal	A	Intact	Negative	0.1
536	12/7/2020	Building L (Portable 23)	Exterior	Wall header	Metal	A	Intact	Negative	0.1
537	12/7/2020	Building L (Portable 23)	Exterior	Gutter	Metal	A	Intact	Negative	0
538	12/7/2020	Building L (Portable 23)	Exterior	Flashing	Metal	A	Intact	Negative	0
539	12/7/2020	Building L (Portable 23)	Exterior: Between Portables	Panel	Metal	A	Intact	Negative	-0.1
540	12/7/2020	Building L (Portable 23)	Exterior at Door Swing	Floor stripe	Concrete	A	Intact	Negative	0.3

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
541	12/7/2020	Building L (Portable 24)	Exterior	Wall	Wood	A	Intact	Negative	0.2
542	12/7/2020	Building L (Portable 24)	Exterior	Wall	Wood	C	Intact	Negative	0
543	12/7/2020	Building L (Portable 24)	Exterior	Riser	Metal	C	Intact	Negative	-0.1
544	12/7/2020	Building L (Portable 24)	Exterior	Wall base	Metal	C	Intact	Negative	0
545	12/7/2020	Building L (Portable 24)	Exterior	Foundation	Concrete	C	Intact	Negative	0.3
546	12/7/2020	Building L (Portable 24)	Exterior	Conduit	Metal	C	Intact	Negative	0.1
547	12/7/2020	Building L (Portable 24)	Exterior	Conduit bracket	Metal	C	Intact	Negative	0.1
548	12/7/2020	Building L (Portable 24)	Exterior	Electrical box	Metal	C	Intact	Negative	0
549	12/7/2020	Building L (Portable 24)	Exterior	Downspout	Metal	C	Intact	Negative	-0.1
550	12/7/2020	Building L (Portable 24)	Exterior	Drain pipe	Metal	C	Intact	Negative	0
551	12/7/2020	Building L (Portable 24)	Exterior: Between Portables	Panel	Metal	C	Intact	Negative	0.1
552	12/7/2020	Building L (Portable 24)	Exterior	Door frame trim	Wood	A	Intact	Negative	0.2
553	12/7/2020	Building L (Portable 24)	Exterior	Door frame	Metal	A	Intact	Negative	0
554	12/7/2020	Building L (Portable 24)	Exterior	Door	Metal	A	Intact	Negative	0.1
555	12/7/2020	Building L (Portable 24)	Exterior	Overhang	Wood	A	Intact	Negative	0.1
556	12/7/2020	Building L (Portable 24)	Exterior	Overhang frame	Metal	A	Intact	Negative	-0.2
557	12/7/2020	Building L (Portable 24)	Exterior	Overhang vent	Metal	A	Intact	Negative	0.1
558	12/7/2020	Building L (Portable 24)	Exterior	Wall header	Metal	A	Intact	Negative	0
559	12/7/2020	Building L (Portable 24)	Exterior	Gutter	Metal	A	Intact	Negative	0
560	12/7/2020	Building L (Portable 24)	Exterior	Flashing	Metal	A	Intact	Negative	-0.1
561	12/7/2020	Building L (Portable 24)	Exterior at Door Swing	Floor stripe	Concrete	A	Intact	Negative	0.3
562	12/7/2020	Building L (Portable 25)	Exterior	Wall	Wood	A	Intact	Negative	0.1
563	12/7/2020	Building L (Portable 25)	Exterior	Wall	Wood	C	Intact	Negative	0
564	12/7/2020	Building L (Portable 25)	Exterior	Riser	Metal	C	Intact	Negative	0
565	12/7/2020	Building L (Portable 25)	Exterior	Wall base	Metal	C	Intact	Negative	-0.2
566	12/7/2020	Building L (Portable 25)	Exterior	Foundation	Concrete	C	Intact	Negative	0.1
567	12/7/2020	Building L (Portable 25)	Exterior	Conduit	Metal	C	Intact	Negative	0.1

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
568	12/7/2020	Building L (Portable 25)	Exterior	Conduit bracket	Metal	C	Intact	Negative	0.1
569	12/7/2020	Building L (Portable 25)	Exterior	Electrical box	Metal	C	Intact	Negative	-0.1
570	12/7/2020	Building L (Portable 25)	Exterior	Downspout	Metal	C	Intact	Negative	-0.1
571	12/7/2020	Building L (Portable 25)	Exterior	Drain pipe	Metal	C	Intact	Negative	0
572	12/7/2020	Building L (Portable 25)	Exterior: Between Portables	Panel	Metal	C	Intact	Negative	0.1
573	12/7/2020	Building L (Portable 25)	Exterior	Door frame trim	Wood	A	Intact	Negative	0.1
574	12/7/2020	Building L (Portable 25)	Exterior	Door frame	Metal	A	Intact	Negative	0
575	12/7/2020	Building L (Portable 25)	Exterior	Door	Metal	A	Intact	Negative	0.1
576	12/7/2020	Building L (Portable 25)	Exterior	Overhang	Wood	A	Intact	Negative	0
577	12/7/2020	Building L (Portable 25)	Exterior	Overhang frame	Metal	A	Intact	Negative	-0.1
578	12/7/2020	Building L (Portable 25)	Exterior	Overhang vent	Metal	A	Intact	Negative	0
579	12/7/2020	Building L (Portable 25)	Exterior	Wall header	Metal	A	Intact	Negative	-0.1
580	12/7/2020	Building L (Portable 25)	Exterior	Gutter	Metal	A	Intact	Negative	-0.1
581	12/7/2020	Building L (Portable 25)	Exterior	Flashing	Metal	A	Intact	Negative	0.2
582	12/7/2020	Building L (Portable 25)	Exterior at Door Swing	Floor stripe	Concrete	A	Intact	Negative	0.2
583	12/7/2020			Calibrate				Positive	1
584	12/7/2020			Calibrate				Positive	1
585	12/7/2020			Calibrate				Positive	1.1
586	12/8/2020			Calibrate				Positive	0.6
587	12/8/2020			Calibrate				Positive	0.9
588	12/8/2020			Calibrate				Positive	0.9
589	12/8/2020			Calibrate				Positive	1
590	12/8/2020	Building L (Portable 26)	Exterior	Wall	Wood	A	Intact	Negative	0
591	12/8/2020	Building L (Portable 26)	Exterior	Wall	Wood	C	Intact	Negative	-0.1
592	12/8/2020	Building L (Portable 26)	Exterior	Riser	Metal	C	Intact	Negative	0
593	12/8/2020	Building L (Portable 26)	Exterior	Wall base	Metal	C	Intact	Negative	-0.1
594	12/8/2020	Building L (Portable 26)	Exterior	Foundation	Concrete	C	Intact	Negative	0.3
595	12/8/2020	Building L (Portable 26)	Exterior	Conduit	Metal	C	Intact	Negative	0

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
596	12/8/2020	Building L (Portable 26)	Exterior	Conduit bracket	Metal	C	Intact	Negative	0.1
597	12/8/2020	Building L (Portable 26)	Exterior	Electrical box	Metal	C	Intact	Negative	0
598	12/8/2020	Building L (Portable 26)	Exterior	Downspout	Metal	C	Intact	Negative	0.1
599	12/8/2020	Building L (Portable 26)	Exterior	Drain pipe	Metal	C	Intact	Negative	0.1
600	12/8/2020	Building L (Portable 26)	Exterior: Between Portables	Panel	Metal	C	Intact	Negative	0.2
601	12/8/2020	Building L (Portable 26)	Exterior	Door frame trim	Wood	A	Intact	Negative	0.1
602	12/8/2020	Building L (Portable 26)	Exterior	Door frame	Metal	A	Intact	Negative	0
603	12/8/2020	Building L (Portable 26)	Exterior	Door	Metal	A	Intact	Negative	0.1
604	12/8/2020	Building L (Portable 26)	Exterior	Overhang	Metal	A	Intact	Negative	-0.1
605	12/8/2020	Building L (Portable 26)	Exterior	Overhang frame	Metal	A	Intact	Negative	0.1
606	12/8/2020	Building L (Portable 26)	Exterior	Wall header	Metal	A	Intact	Negative	0.1
607	12/8/2020	Building L (Portable 26)	Exterior	Gutter	Metal	A	Intact	Negative	0
608	12/8/2020	Building L (Portable 26)	Exterior	Flashing	Metal	B	Intact	Negative	0
609	12/8/2020	Building L (Portable 26)	Exterior at Door Swing	Floor stripe	Concrete	A	Intact	Negative	0.3
610	12/8/2020	Building L (Portable 27)	Exterior	Wall	Wood	A	Intact	Negative	0.1
611	12/8/2020	Building L (Portable 27)	Exterior	Wall	Wood	C	Intact	Negative	0
612	12/8/2020	Building L (Portable 27)	Exterior	Riser	Metal	C	Intact	Negative	0
613	12/8/2020	Building L (Portable 27)	Exterior	Wall base	Metal	C	Intact	Negative	0
614	12/8/2020	Building L (Portable 27)	Exterior	Foundation	Concrete	C	Intact	Negative	0.3
615	12/8/2020	Building L (Portable 27)	Exterior	Conduit	Metal	C	Intact	Negative	0.1
616	12/8/2020	Building L (Portable 27)	Exterior	Conduit bracket	Metal	C	Intact	Negative	0
617	12/8/2020	Building L (Portable 27)	Exterior	Electrical box	Metal	C	Intact	Negative	0.1
618	12/8/2020	Building L (Portable 27)	Exterior	Downspout	Metal	C	Intact	Negative	0
619	12/8/2020	Building L (Portable 27)	Exterior	Drain pipe	Metal	C	Intact	Negative	0.1
620	12/8/2020	Building L (Portable 27)	Exterior: Between Portables	Panel	Metal	C	Intact	Negative	0
621	12/8/2020	Building L (Portable 27)	Exterior	Door frame trim	Wood	A	Intact	Negative	0.1

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
622	12/8/2020	Building L (Portable 27)	Exterior	Door frame	Metal	A	Intact	Negative	0.1
623	12/8/2020	Building L (Portable 27)	Exterior	Door	Metal	A	Intact	Negative	0.1
624	12/8/2020	Building L (Portable 27)	Exterior	Overhang	Metal	A	Intact	Negative	-0.1
625	12/8/2020	Building L (Portable 27)	Exterior	Overhang frame	Metal	A	Intact	Negative	0
626	12/8/2020	Building L (Portable 27)	Exterior	Wall header	Metal	A	Intact	Negative	0.1
627	12/8/2020	Building L (Portable 27)	Exterior	Gutter	Metal	A	Intact	Negative	0
628	12/8/2020	Building L (Portable 27)	Exterior	Flashing	Metal	B	Intact	Negative	0
629	12/8/2020	Building L (Portable 27)	Exterior at Door Swing	Floor stripe	Concrete	A	Intact	Negative	0.3
630	12/8/2020	Building L (Portable 28)	Exterior	Wall	Wood	A	Intact	Negative	0.1
631	12/8/2020	Building L (Portable 28)	Exterior	Wall	Wood	C	Intact	Negative	0.1
632	12/8/2020	Building L (Portable 28)	Exterior	Riser	Metal	C	Intact	Negative	0
633	12/8/2020	Building L (Portable 28)	Exterior	Wall base	Metal	C	Intact	Negative	-0.1
634	12/8/2020	Building L (Portable 28)	Exterior	Foundation	Concrete	C	Intact	Negative	0.2
635	12/8/2020	Building L (Portable 28)	Exterior	Conduit	Metal	C	Intact	Negative	0.2
636	12/8/2020	Building L (Portable 28)	Exterior	Conduit bracket	Metal	C	Intact	Negative	0.1
637	12/8/2020	Building L (Portable 28)	Exterior	Electrical box	Metal	C	Intact	Negative	0.1
638	12/8/2020	Building L (Portable 28)	Exterior	Downspout	Metal	C	Intact	Negative	0.1
639	12/8/2020	Building L (Portable 28)	Exterior	Drain pipe	Metal	C	Intact	Negative	0
640	12/8/2020	Building L (Portable 28)	Exterior: Between Portables	Panel	Metal	C	Intact	Negative	-0.1
641	12/8/2020	Building L (Portable 28)	Exterior	Door frame trim	Wood	A	Intact	Negative	0.1
642	12/8/2020	Building L (Portable 28)	Exterior	Door frame	Metal	A	Intact	Negative	0
643	12/8/2020	Building L (Portable 28)	Exterior	Door	Metal	A	Intact	Negative	0
644	12/8/2020	Building L (Portable 28)	Exterior	Overhang	Metal	A	Intact	Negative	-0.1
645	12/8/2020	Building L (Portable 28)	Exterior	Overhang frame	Metal	A	Intact	Negative	0
646	12/8/2020	Building L (Portable 28)	Exterior	Wall header	Metal	A	Intact	Negative	0.1
647	12/8/2020	Building L (Portable 28)	Exterior	Gutter	Metal	A	Intact	Negative	0
648	12/8/2020	Building L (Portable 28)	Exterior	Flashing	Metal	D	Intact	Negative	0.1
649	12/8/2020	Building L (Portable 28)	Exterior at Door Swing	Floor stripe	Concrete	A	Intact	Negative	0.3

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
650	12/8/2020	Building L (Portable 29)	Exterior	Wall	Wood	A	Intact	Negative	0.1
651	12/8/2020	Building L (Portable 29)	Exterior	Wall	Wood	B	Intact	Negative	0
652	12/8/2020	Building L (Portable 29)	Exterior	Wall	Wood	C	Intact	Negative	0.1
653	12/8/2020	Building L (Portable 29)	Exterior	Riser	Metal	C	Intact	Negative	0.1
654	12/8/2020	Building L (Portable 29)	Exterior	Wall base	Metal	C	Intact	Negative	0.2
655	12/8/2020	Building L (Portable 29)	Exterior	Foundation	Concrete	C	Intact	Negative	0.2
656	12/8/2020	Building L (Portable 29)	Exterior	Conduit	Metal	C	Intact	Negative	0.1
657	12/8/2020	Building L (Portable 29)	Exterior	Conduit brscket	Metal	C	Intact	Negative	0.1
658	12/8/2020	Building L (Portable 29)	Exterior	Electrical box	Metal	C	Intact	Negative	0.1
659	12/8/2020	Building L (Portable 29)	Exterior	Downspout	Metal	C	Intact	Negative	0
660	12/8/2020	Building L (Portable 29)	Exterior	Drain pipe	Metal	C	Intact	Negative	0
661	12/8/2020	Building L (Portable 29)	Exterior	Door frame trim	Wood	A	Intact	Negative	0.1
662	12/8/2020	Building L (Portable 29)	Exterior	Door frame	Metal	A	Intact	Negative	0
663	12/8/2020	Building L (Portable 29)	Exterior	Door	Metal	A	Intact	Negative	0.1
664	12/8/2020	Building L (Portable 29)	Exterior	Overhang	Metal	A	Intact	Negative	-0.1
665	12/8/2020	Building L (Portable 29)	Exterior	Overhang frame	Metal	A	Intact	Negative	0.1
666	12/8/2020	Building L (Portable 29)	Exterior	Wall header	Metal	A	Intact	Negative	0.1
667	12/8/2020	Building L (Portable 29)	Exterior	Gutter	Metal	A	Intact	Negative	0
668	12/8/2020	Building L (Portable 29)	Exterior	Flashing	Metal	B	Intact	Negative	0
669	12/8/2020	Building L (Portable 29)	Exterior at Door Swing	Floor stripe	Concrete	A	Intact	Negative	0.3
670	12/8/2020	Building L	Exterior	Free standing electrical cabinet	Metal	C	Intact	Negative	0.2
671	12/8/2020			Calibrate				Positive	1
672	12/8/2020			Calibrate				Positive	1
673	12/8/2020			Calibrate				Positive	1.1
674	12/10/2020			Calibrate				Positive	1
675	12/10/2020			Calibrate				Positive	1
676	12/10/2020			Calibrate				Positive	1
677	12/10/2020	Covered Walkway 1	Exterior	Ceiling	Stucco	Upper	Intact	Negative	0.5

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
678	12/10/2020	Covered Walkway 1	Exterior	Light fixture	Metal	Upper	Intact	Negative	0
679	12/10/2020	Covered Walkway 1	Exterior	Column	Cinderblock	C	Intact	Negative	0.1
680	12/10/2020	Covered Walkway 1	Exterior	Conduit	Metal	C	Intact	Negative	0.2
681	12/10/2020	Covered Walkway 1	Exterior	Conduit bracket	Metal	C	Intact	Negative	0.1
682	12/10/2020	Covered Walkway 1	Exterior	Electrical box	Metal	C	Intact	Negative	0.1
683	12/10/2020	Covered Walkway 1	Exterior	Fascia	Wood	D	Intact	Negative	0.2
684	12/10/2020	Covered Walkway 1	Exterior	Flashing	Metal	D	Intact	Negative	0.3
685	12/10/2020	Covered Walkway 1	Exterior	Column cap	Metal	D	Intact	Negative	0.3
686	12/10/2020	Covered Walkway 1	Exterior	Wall flashing	Metal	Roof	Intact	Negative	0.3
687	12/10/2020	Covered Walkway 1	Exterior	Floor stripe	Concrete	Lower	Intact	Negative	0.3
688	12/10/2020	Covered Walkway 2	Exterior	Floor stripe	Concrete	Lower	Intact	Negative	0.3
689	12/10/2020	Covered Walkway 2	Exterior	Ceiling	Wood	Upper	Intact	Negative	0
690	12/10/2020	Covered Walkway 2	Exterior	Joist	Wood	Upper	Intact	Negative	-0.1
691	12/10/2020	Covered Walkway 2	Exterior	Ceiling beam	Wood	C	Intact	Negative	0.2
692	12/10/2020	Covered Walkway 2	Exterior	Wall	Wood	B	Intact	Negative	0.1
693	12/10/2020	Covered Walkway 2	Exterior	Wall frame	Metal	B	Intact	Negative	-0.3
694	12/10/2020	Covered Walkway 2	Exterior	Pole	Metal	C	Intact	Negative	-0.2
695	12/10/2020	Covered Walkway 2	Exterior	Fascia	Wood	C	Intact	Negative	0
696	12/10/2020	Covered Walkway 2	Exterior	Flashing	Metal	C	Intact	Negative	0.1
697	12/10/2020	Covered Walkway 3	Exterior	Ceiling	Wood	Upper	Intact	Negative	0.3
698	**12/10/2020**	**Covered Walkway 3**	**Exterior**	**Ceiling beam**	**Wood**	**Upper**	**Intact**	**Positive**	**1.8**
699	12/10/2020	Covered Walkway 3	Exterior	Wall frame	Wood	Upper	Intact	Negative	-0.1
700	12/10/2020	Covered Walkway 3	Exterior	Joist spacer	Wood	B	Intact	Negative	0.3
701	12/10/2020	Covered Walkway 3	Exterior	Wall	Wood	A	Intact	Negative	0
702	**12/10/2020**	**Covered Walkway 3**	**Exterior**	**Pole**	**Metal**	**D**	**Intact**	**Positive**	**4.1**
703	12/10/2020			Calibrate				Positive	1
704	12/10/2020			Calibrate				Positive	1
705	12/10/2020			Calibrate				Positive	1.1
706	12/10/2020	Covered Walkway 3	Exterior	Conduit	Metal	Upper	Intact	Negative	0
707	12/10/2020	Covered Walkway 3	Exterior	Ceiling	Wood	Upper	Intact	Negative	0.2
708	12/10/2020	Covered Walkway 3	Exterior	Fascia	Wood	D	Intact	Negative	0
709	12/10/2020	Covered Walkway 3	Exterior	Flashing	Metal	D	Intact	Negative	0.2

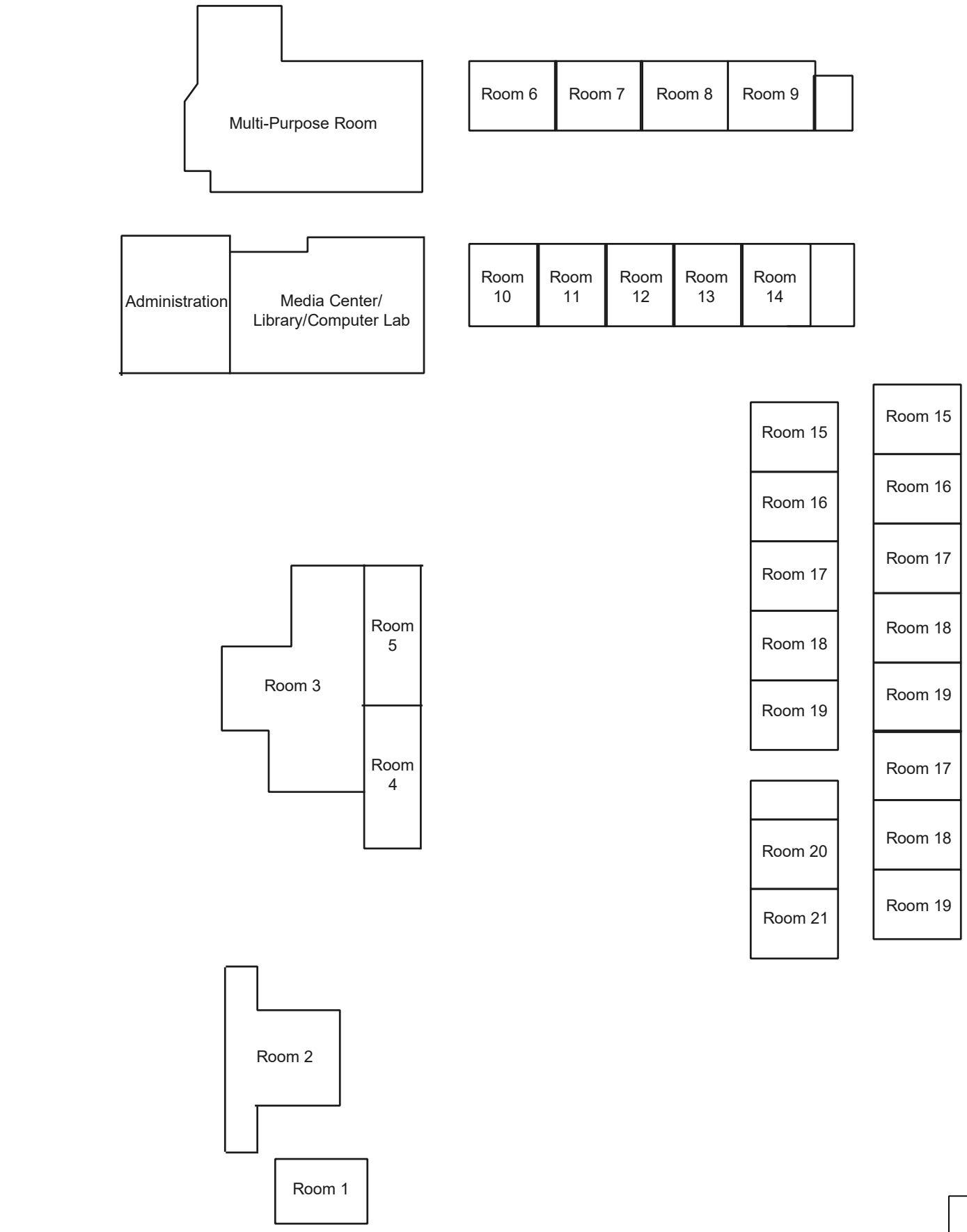
Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
710	12/10/2020	Covered Walkway 3	Exterior	Floor stripe	Concrete	Lower	Intact	Negative	0
711	12/10/2020	Covered Walkway 4	Exterior	Ceiling	Stucco	Upper	Intact	Negative	0.4
712	12/10/2020	Covered Walkway 4	Exterior	Light fixture	Metal	Upper	Intact	Negative	0.5
713	12/10/2020	Covered Walkway 4	Exterior	Fascia	Wood	A	Intact	Negative	-0.1
714	12/10/2020	Covered Walkway 4	Exterior	Flashing	Metal	A	Intact	Negative	0.2
715	12/10/2020	Covered Walkway 4	Exterior	Column cap	Metal	A	Intact	Negative	0.2
716	12/10/2020	Covered Walkway 4	Exterior	Gutter	Metal	B	Intact	Negative	0.1
717	12/10/2020	Covered Walkway 4	Exterior	Downspout	Metal	B	Intact	Negative	0
718	12/10/2020	Campus	East parking lot	Floor stripe	Asphalt	Lower	Intact	Negative	0.3
719	12/10/2020	Campus	East parking lot	Handicap parking	Asphalt	Lower	Intact	Negative	0.4
720	12/10/2020	Campus	East parking lot	Parking curb	Concrete	A	Intact	Negative	0
721	12/10/2020	Campus	East parking lot	Parking sign pole	Metal	A	Intact	Negative	0
722	12/10/2020	Campus	East parking lot	Bollard post	Metal	C	Intact	Negative	0
723	12/10/2020	Campus	North of portable 15	Bollard post	Metal	C	Intact	Negative	0
724	12/10/2020	Campus	Main Playground at Basketball Court	Floor stripe	Asphalt	Lower	Intact	Negative	0.3
725	12/10/2020	Campus	Main Playground at Volleyball Court	Floor stripe	Asphalt	Lower	Intact	Negative	0.3
726	12/10/2020	Campus	Main Playground at Foursquare	Floor stripe	Asphalt	Lower	Intact	Negative	0.4
727	12/10/2020	Campus	Main Playground at Foursquare	Floor stripe	Asphalt	Lower	Intact	Negative	0.3
728	12/10/2020	Campus	Main Playground: Playgroud Equipment	Pole	Metal		Intact	Negative	0.1
729	12/10/2020	Campus	Main Playground: Playgroud Equipment	Hand rail	Metal		Intact	Negative	0
730	12/10/2020	Campus	South of Building F	Hand rail	Metal		Intact	Negative	0.1
731	12/10/2020	Campus	South of Building F	Curb	Concrete	Lower	Intact	Negative	0.3
732	12/10/2020	Campus	Southwest Playground	Floor stripe	Asphalt	Lower	Intact	Negative	0.3
733	12/10/2020	Campus	Southwest Playground	Floor stripe	Asphalt	Lower	Intact	Negative	0.3

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
734	12/10/2020	Campus	Southwest Playground: Playground Equipment	Pole	Metal		Intact	Negative	0.1
735	12/10/2020	Campus	Southwest Playground: Playground Equipment	Hand rail	Metal		Intact	Negative	0
736	12/10/2020	Campus	Southwest Playground: Playground Equipment	Giant spider	Metal		Intact	Negative	0
737	12/10/2020	Campus	Southwest Playground: Playground Equipment	Swing set	Metal		Intact	Negative	0.2
738	12/10/2020	Campus	Storage Shed 1	Wall	Wood	A	Intact	Negative	0.1
739	12/10/2020	Campus	Storage Shed 1	Wall	Wood	B	Intact	Negative	0.1
740	12/10/2020	Campus	Storage Shed 1	Wall	Wood	C	Intact	Negative	0
741	12/10/2020	Campus	Storage Shed 1	Wall	Wood	D	Intact	Negative	0
742	12/10/2020	Campus	Storage Shed 1	Wall trim	Wood	C	Intact	Negative	0.1
743	12/10/2020	Campus	Storage Shed 1	Door	Wood	B	Intact	Negative	0.1
744	12/10/2020	Campus	Storage Shed 1	Drip edge	Metal	A	Intact	Negative	0
745	12/10/2020	Campus	Storage Shed 2	Wall	Wood	A	Intact	Negative	0
746	12/10/2020	Campus	Storage Shed 2	Wall	Wood	B	Intact	Negative	0.1
747	12/10/2020	Campus	Storage Shed 2	Wall	Wood	C	Intact	Negative	0
748	12/10/2020	Campus	Storage Shed 2	Wall	Wood	D	Intact	Negative	0.1
749	12/10/2020	Campus	Storage Shed 2	Wall trim	Wood	D	Intact	Negative	-0.2
750	12/10/2020	Campus	Storage Shed 2	Door	Wood	A	Intact	Negative	0.1
751	12/10/2020	Campus	Storage Shed 2	Drip edge	Metal	A	Intact	Negative	0.1
752	12/10/2020	Campus	Storage Shed 3	Wall	Wood	A	Intact	Negative	0.1
753	12/10/2020	Campus	Storage Shed 3	Wall	Wood	B	Intact	Negative	0
754	12/10/2020	Campus	Storage Shed 3	Wall	Wood	C	Intact	Negative	-0.1

Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
755	12/10/2020	Campus	Storage Shed 3	Wall	Wood	D	Intact	Negative	0.1
756	12/10/2020	Campus	Storage Shed 3	Door	Wood	D	Intact	Negative	0
757	12/10/2020	Campus	Storage Shed 3	Wall trim	Wood	D	Intact	Negative	0.2
758	12/10/2020	Campus	Storage Shed 3	Drip edge	Metal	D	Intact	Negative	0.2
759	12/10/2020	Campus	Storage Shed 3	Wall base	Metal	D	Intact	Negative	0.1
760	12/10/2020	Campus	Free Standing Cabinet: Next to Storage Shed 3	Wall	Metal	A	Intact	Negative	0
761	12/10/2020	Campus	Free Standing Cabinet: Next to Storage Shed 3	Wall	Metal	B	Intact	Negative	0.1
762	12/10/2020	Campus	Free Standing Cabinet: Next to Storage Shed 3	Wall	Metal	C	Intact	Negative	0
763	12/10/2020	Campus	Free Standing Cabinet: Next to Storage Shed 3	Wall	Metal	D	Intact	Negative	0.1
764	12/10/2020	Campus	Free Standing Cabinet: Next to Storage Shed 3	Door	Metal	D	Intact	Negative	0.1
765	12/10/2020	Campus	Free Standing Cabinet: Next to Storage Shed 3	Roof	Metal	Roof	Intact	Negative	0.1
766	12/10/2020	Campus	Storage Shed 4	Wall	Wood	A	Intact	Negative	0
767	12/10/2020	Campus	Storage Shed 4	Wall	Wood	B	Intact	Negative	0.1
768	12/10/2020	Campus	Storage Shed 4	Wall	Wood	C	Intact	Negative	0.1
769	12/10/2020	Campus	Storage Shed 4	Wall	Wood	D	Intact	Negative	0.1
770	12/10/2020	Campus	Storage Shed 4	Wall trim	Wood	D	Intact	Negative	0.1
771	12/10/2020	Campus	Storage Shed 4	Door	Wood	D	Intact	Negative	0.1
772	12/10/2020	Campus	Storage Shed 4	Drip edge	Metal	D	Intact	Negative	0.1
773	12/10/2020	Campus	Southwest Parking Lot	Floor stripe	Asphalt	Lower	Intact	Negative	0.3
774	12/10/2020	Campus	Southwest Parking Lot	Handicap parking	Asphalt	Lower	Intact	Negative	0.3
775	12/10/2020	Campus	Southwest Parking Lot	Parking sign pole	Metal		Intact	Negative	-0.1
776	12/10/2020	Campus	Southwest Parking Lot	Parking curb	Concrete	C	Intact	Negative	0.3
777	12/10/2020	Campus	Southwest Parking Lot	Parking curb	Concrete	B	Intact	Negative	0.4
778	12/10/2020	Campus	Southwest Parking Lot	Directional arrow	Asphalt	Lower	Intact	Negative	0.3

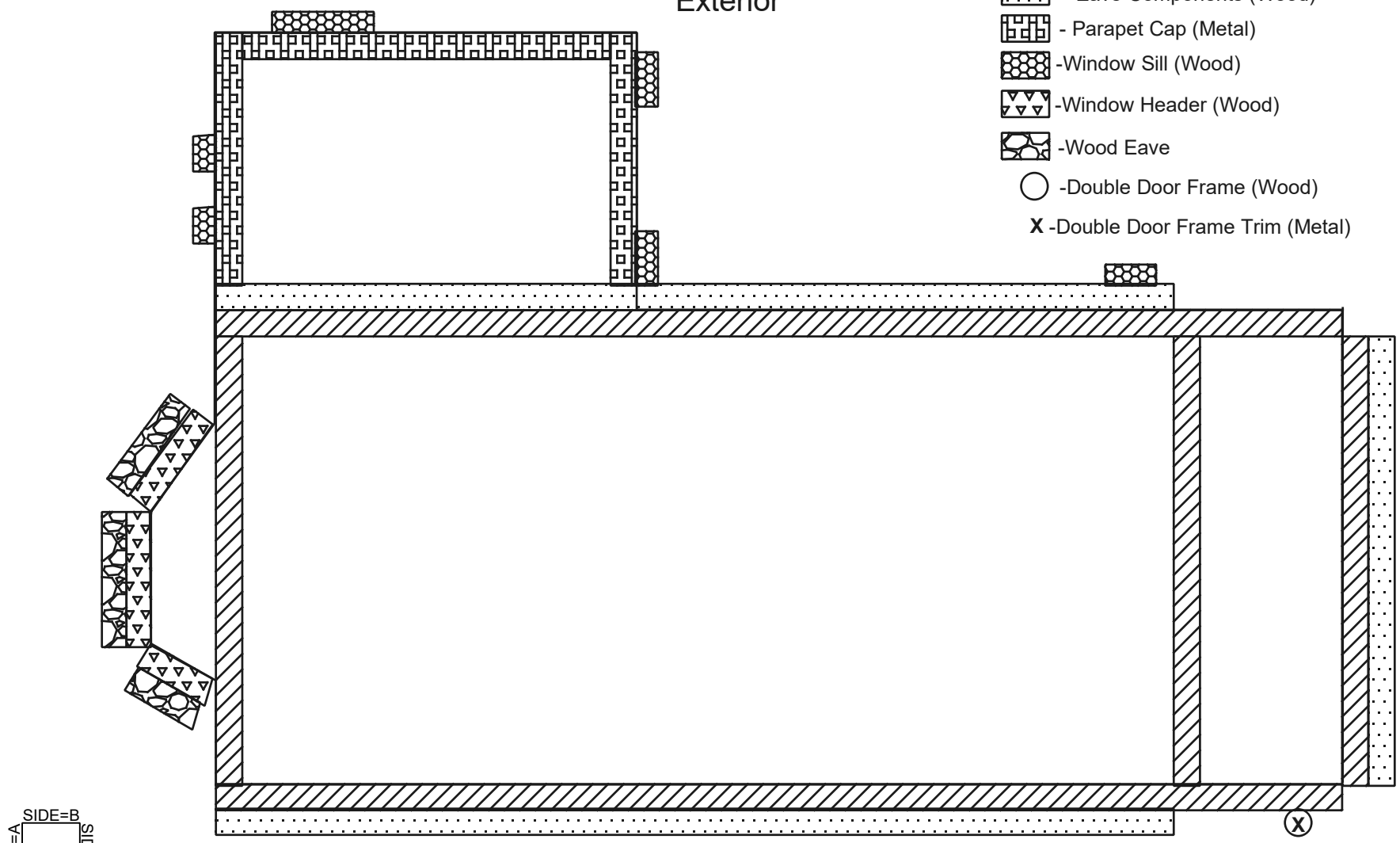
Reading #	Date	Building	Location	Component	Substrate	Side	Condition	Result	Concentration
779	12/10/2020	Campus	Southwest Parking Lot	Bollard post	Metal	A	Intact	Negative	0.2
780	12/10/2020	Campus	Main Entry	Flag pole	Metal		Intact	Negative	0
781	12/10/2020	Campus	Main Entry	Perimeter fence	Metal		Intact	Negative	0.1
782	12/10/2020			Calibrate				Positive	1.1
783	12/10/2020			Calibrate				Positive	1
784	12/10/2020			Calibrate				Positive	1

APPENDIX B – SITE DRAWING



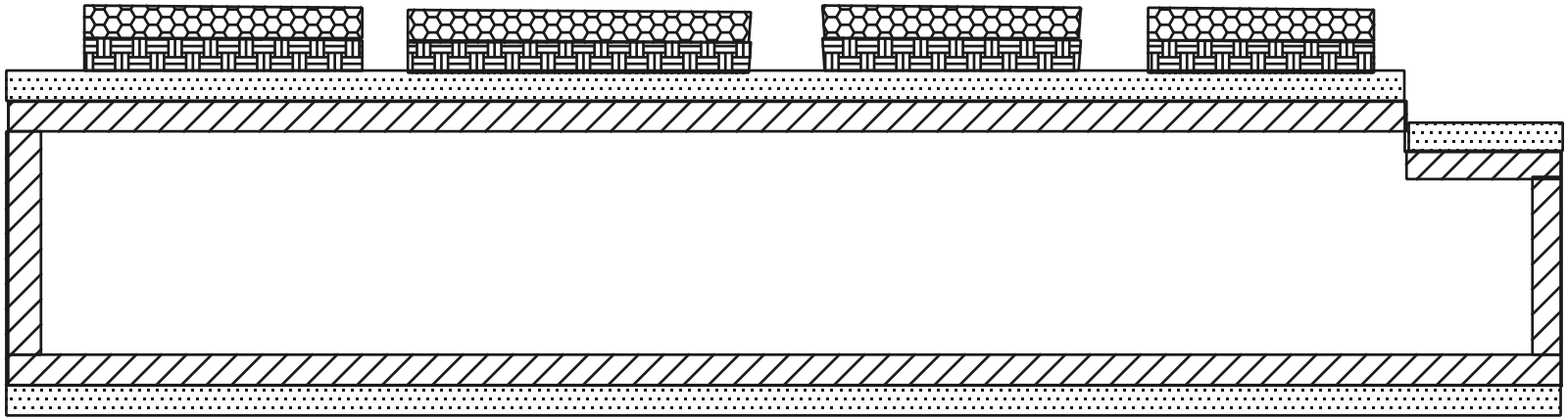
Client: Rosemead SD	**Project#:** 20-Z0046-0135	**Info:**	Site Map
EXECUTIVE ENVIRONMENTAL **HEALTH & SAFETY SIMPLIFIED**		**Site:** **Address:**	Rosemead ES 3720 Rio Honda Avenue Rosemead, CA 91770
		Drawing Not to Scale - © 2012	

Building A
(Multi-Purpose Room)
Exterior

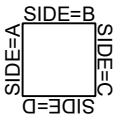


Client: Rosemead SD	**Project #:** 20-Z0046-0135	**Info:** Lead-Based Paint Identified
EXECUTIVE ENVIRONMENTAL **HEALTH & SAFETY SIMPLIFIED**		**Site:** Savannah ES **Address:** 3720 Rio Honda Avenue Rosemead, CA 91770

Building B
(Classrooms 6 thru 9)
Exterior



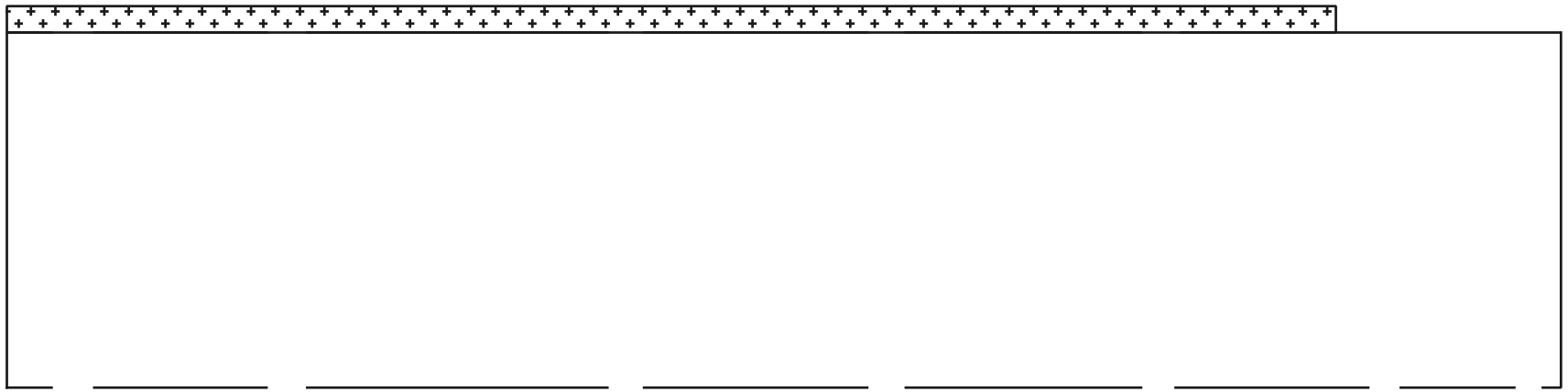
-Fascia (Wood)
-Eave Component (Wood)
-Window/Door Casing
-Window Sill (Wood)



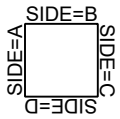
N

Client: Rosemead SD	**Project #:** 20-Z0046-0135	**Info:** Lead-Based Paint Identified
EXECUTIVE ENVIRONMENTAL **HEALTH & SAFETY SIMPLIFIED**		**Site:** Savannah ES **Address:** 3720 Rio Honda Avenue Rosemead, CA 91770

Building C
(Classroom 10 thru 14)
Exterior



- Window Casing (Wood)



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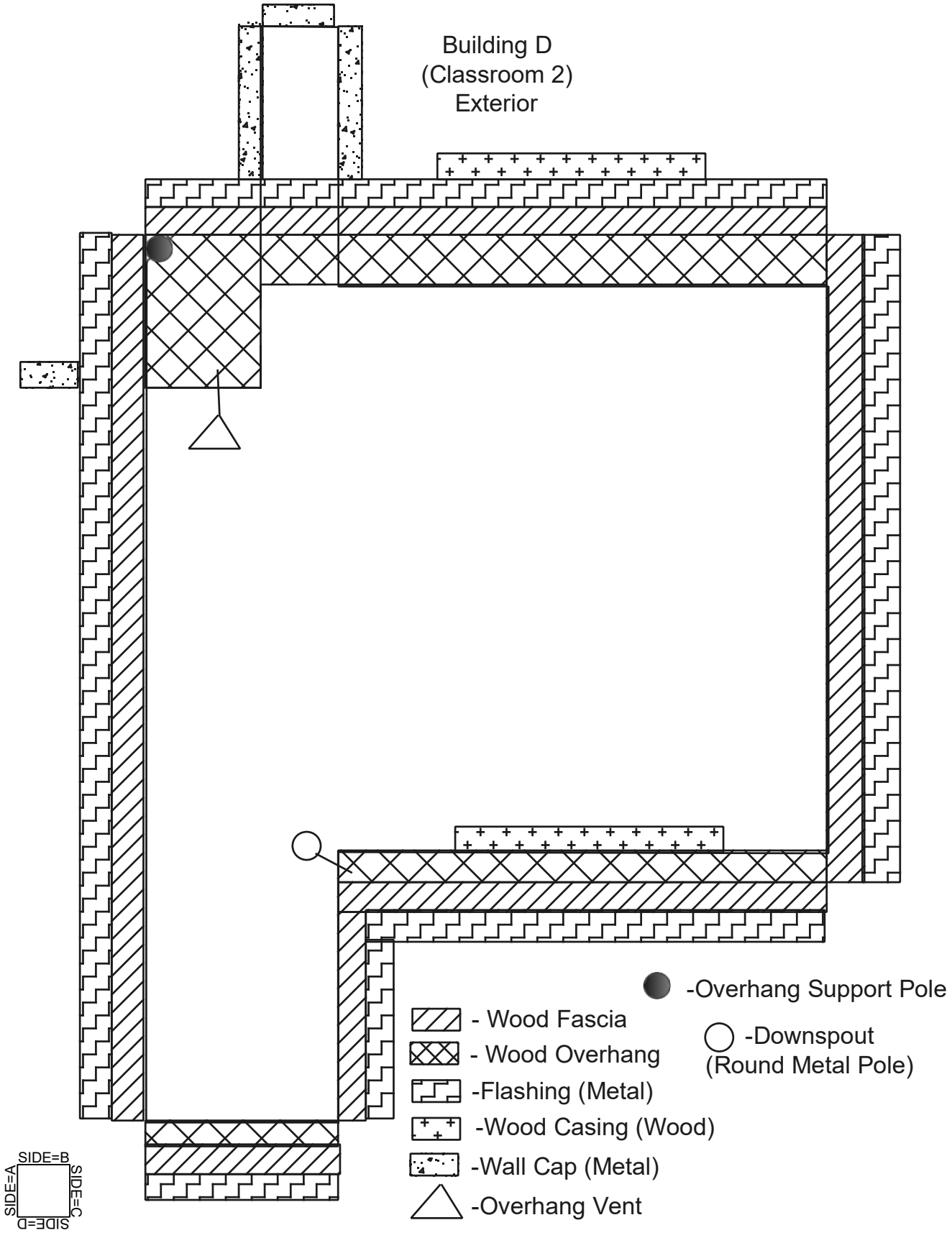
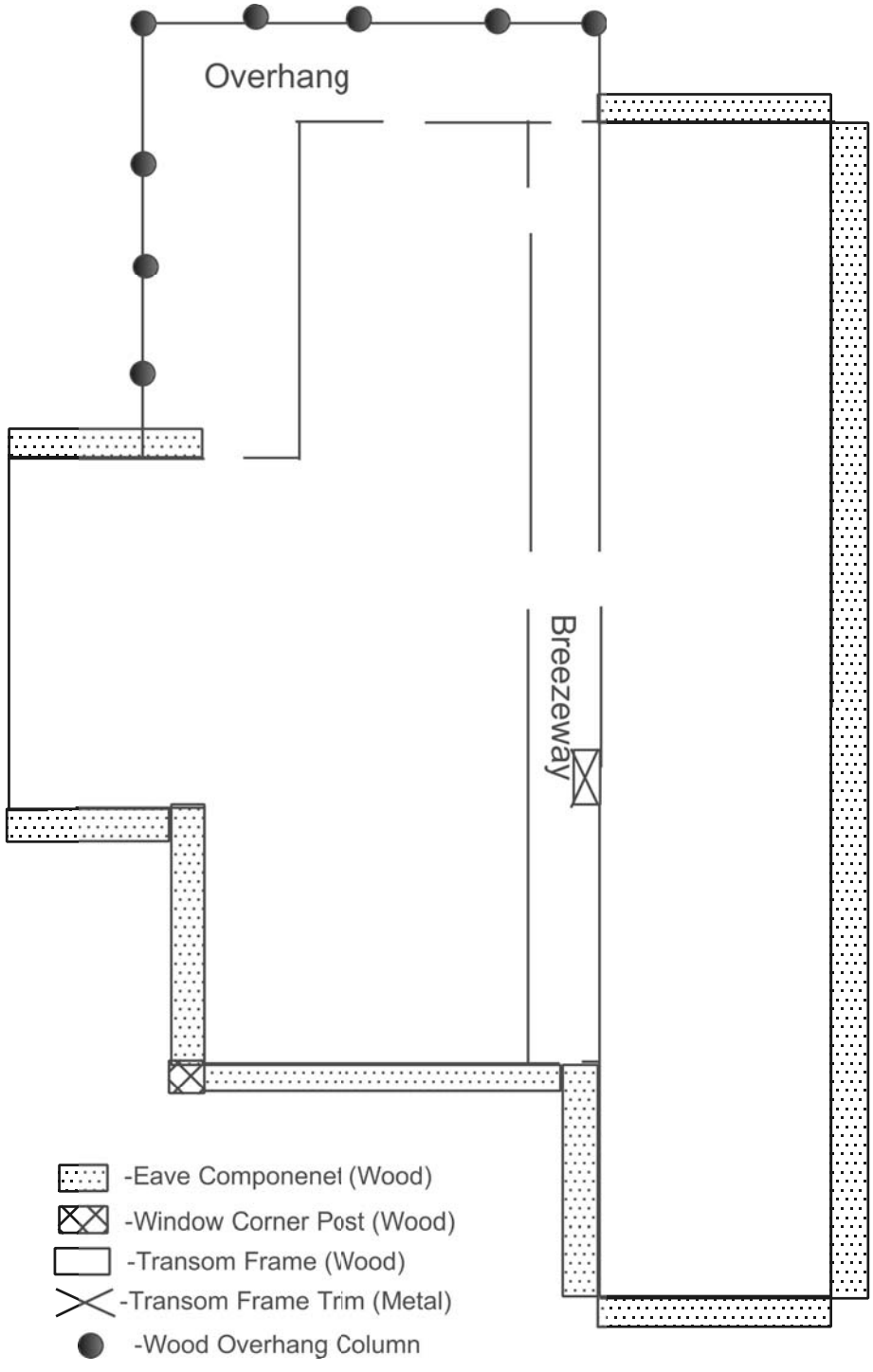
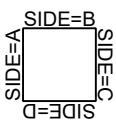
Client: Rosemead SD	**Project #:** 20-Z0046-0135	**Info:** Lead-Based Paint Identified
EXECUTIVE ENVIRONMENTAL **HEALTH & SAFETY SIMPLIFIED**		**Site:** Savannah ES **Address:** 3720 Rio Honda Avenue Rosemead, CA 91770



Client: Rosemead SD	**Project#:** 20-Z0046-0135	**Info:** Lead-Based Paint Inspection
EXECUTIVE ENVIRONMENTAL HEALTH & SAFETY SIMPLIFIED		**Site:** Savannah ES **Address:** 3720 Rio Honda Avenue Drawing Not to Scale - © 20 Rosemead, CA 91770

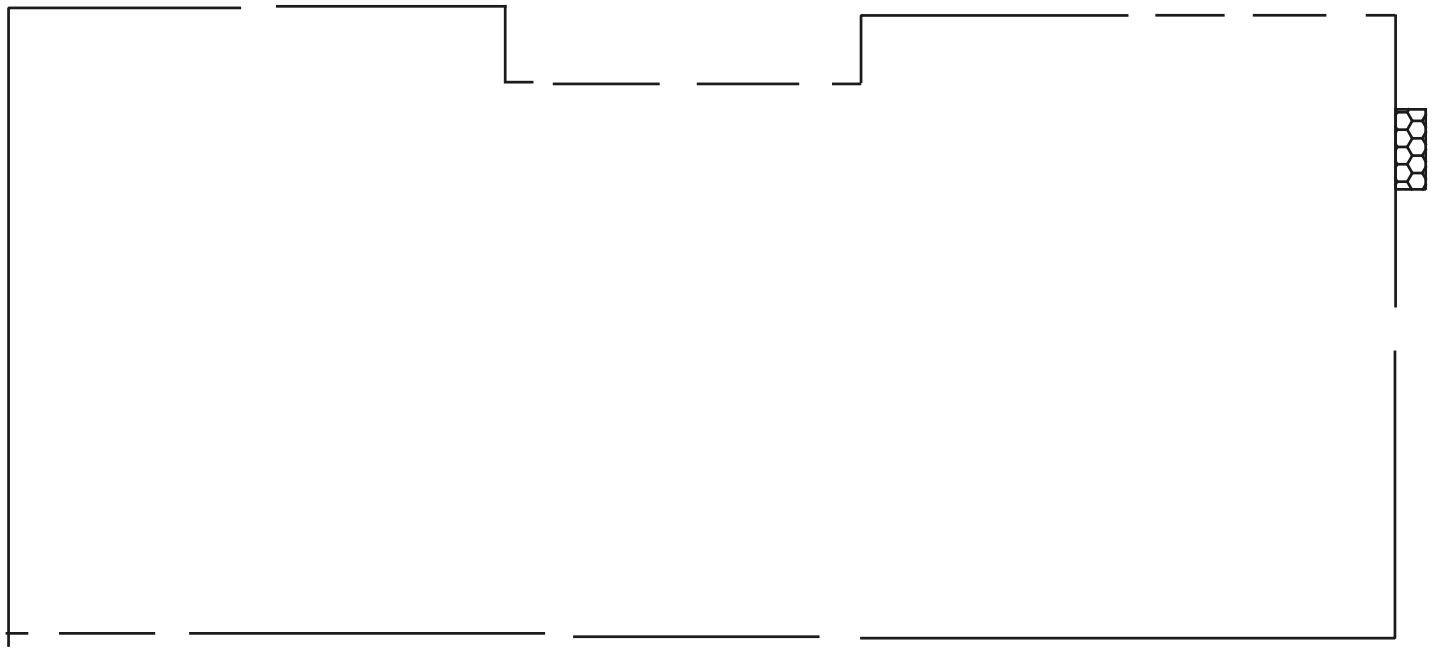
Building E
(Classroom 3 thru 5)
Exterior





Client: Rosemead SD	**Project#:** 20-Z0046-0135	**Info:** Lead-Based Paint Identified
EXECUTIVE ENVIRONMENTAL HEALTH & SAFETY SIMPLIFIED		**Site:** Savannah ES **Address:** 3720 Rio Honda Avenue Drawing Not to Scale - © 2012 Rosemead, CA 91770

Building F
(Administration/Library)
Exterior



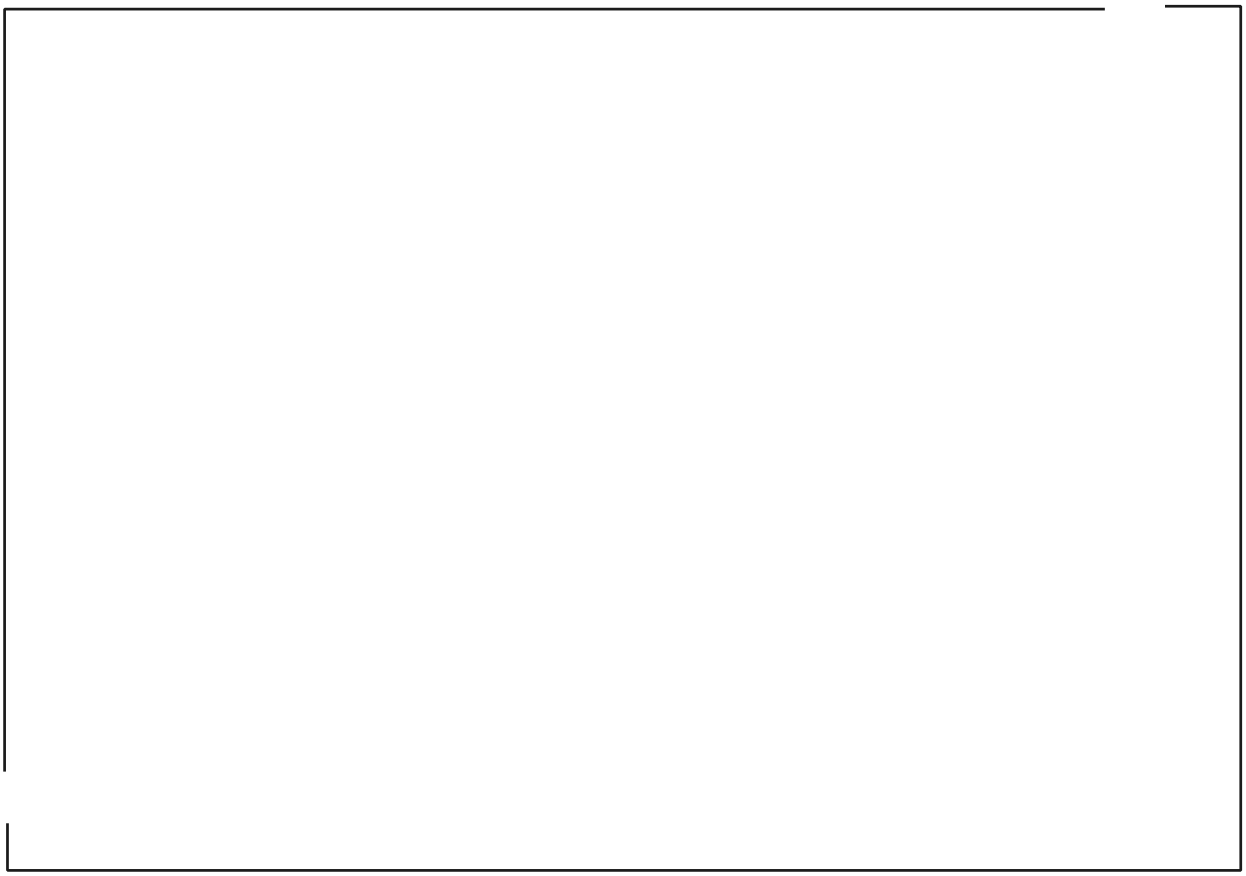
SIDE=A SIDE=B SIDE=C SIDE=D

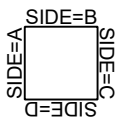
- Window Sill (Wood)

N

Client: Rosemead SD	**Project #:** 20-Z0046-0135	**Info:** Lead-Based Paint Identified
EXECUTIVE ENVIRONMENTAL **HEALTH & SAFETY SIMPLIFIED**		**Site:** Savannah ES **Address:** 3720 Rio Honda Avenue Rosemead, CA 91770

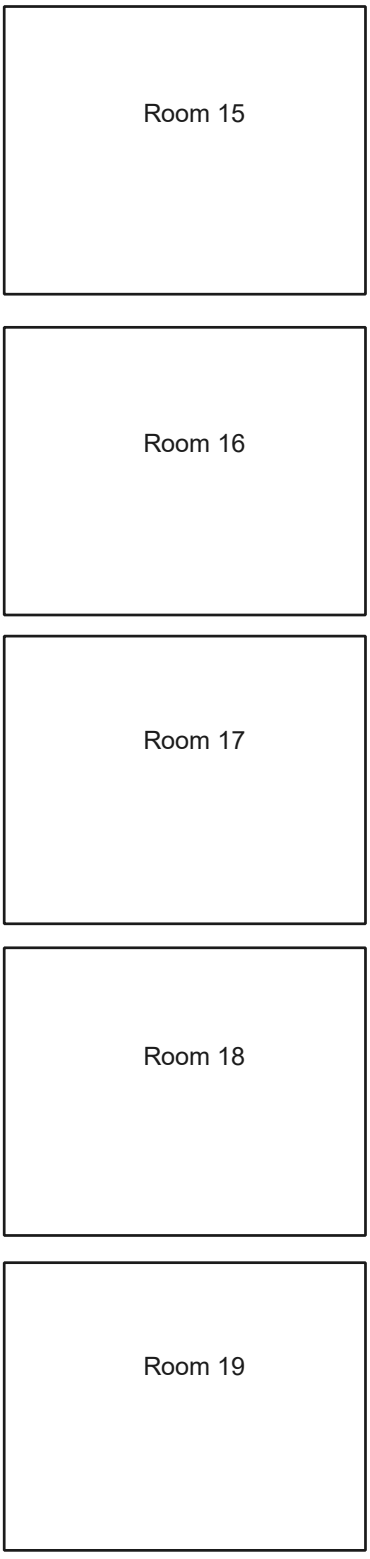
Building G
(Portable 1)
Exterior

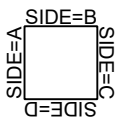




Client: Rosemead SD	**Project#:** 20-Z0046-0135	**Info:** No Lead-Based Paint Identified
EXECUTIVE ENVIRONMENTAL **HEALTH & SAFETY SIMPLIFIED**		**Site:** Savannah ES **Address:** 3720 Rio Honda Avenue Drawing Not to Scale - © 2012 Rosemead, CA 91770

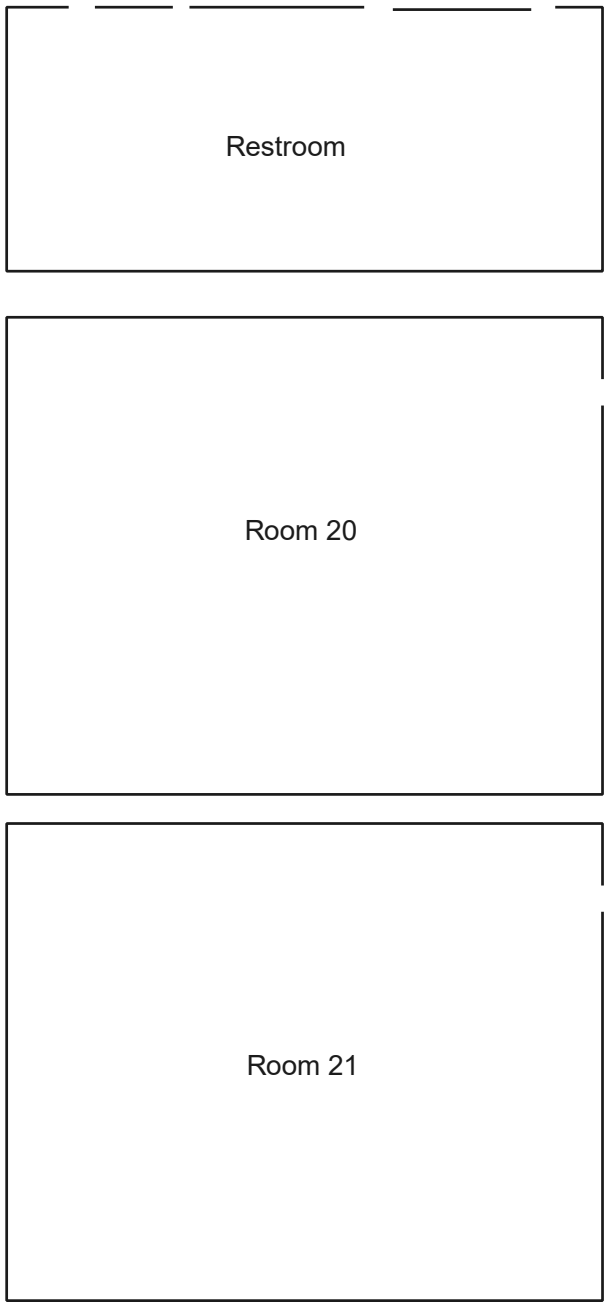
Building J
(Portables)
Exterior

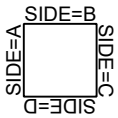




Client: Rosemead SD	**Project#:** 20-Z0046-0135	**Info:** No Lead-Based Paint Identified
EXECUTIVE ENVIRONMENTAL HEALTH & SAFETY SIMPLIFIED		**Site:** Savannah ES **Address:** 3720 Rio Honda Avenue Drawing Not to Scale - © 2012 Rosemead, CA 91770

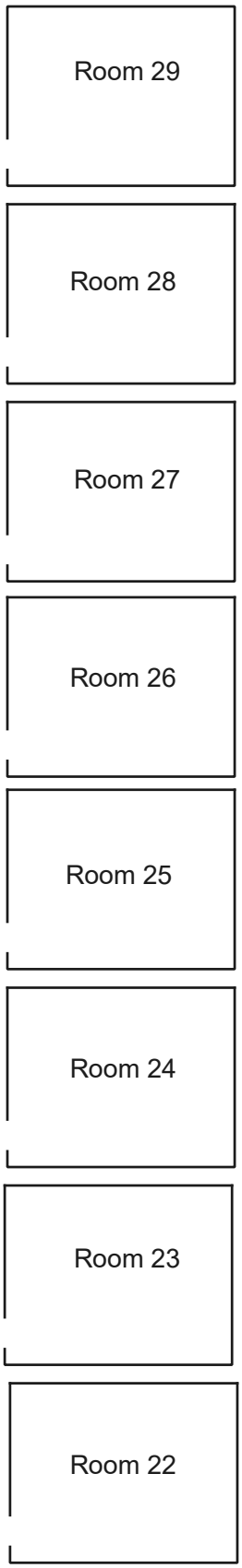
Building K
(Portables)
Exterior



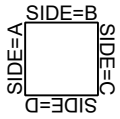


N

Client: Rosemead SD	**Project#:** 20-Z0046-0135	**Info:** No Lead-Based Paint Identified
EXECUTIVE ENVIRONMENTAL HEALTH & SAFETY SIMPLIFIED		**Site:** Savannah ES **Address:** 3720 Rio Honda Avenue Drawing Not to Scale - © 2012 Rosemead, CA 91770



Building L
(Portables)
Exterior



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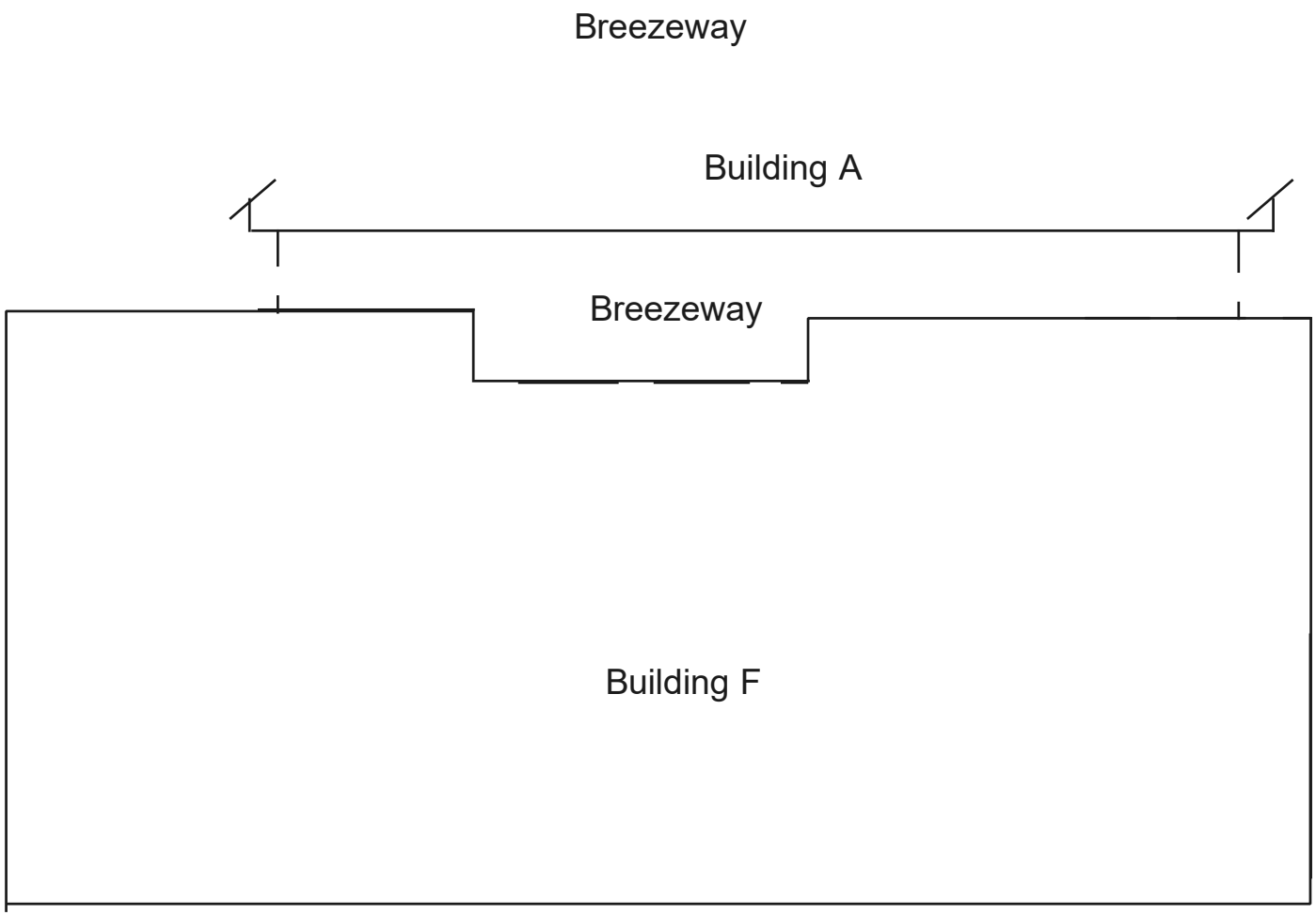
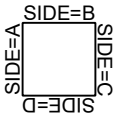
Client: Rosemead SD	**Project#:** 20-Z0046-0135	**Info:** No Lead-Based Paint Identified
EXECUTIVE ENVIRONMENTAL HEALTH & SAFETY SIMPLIFIED		**Site:** Savannah ES **Address:** 3720 Rio Honda Avenue Drawing Not to Scale - © 2012 Rosemead, CA 91770





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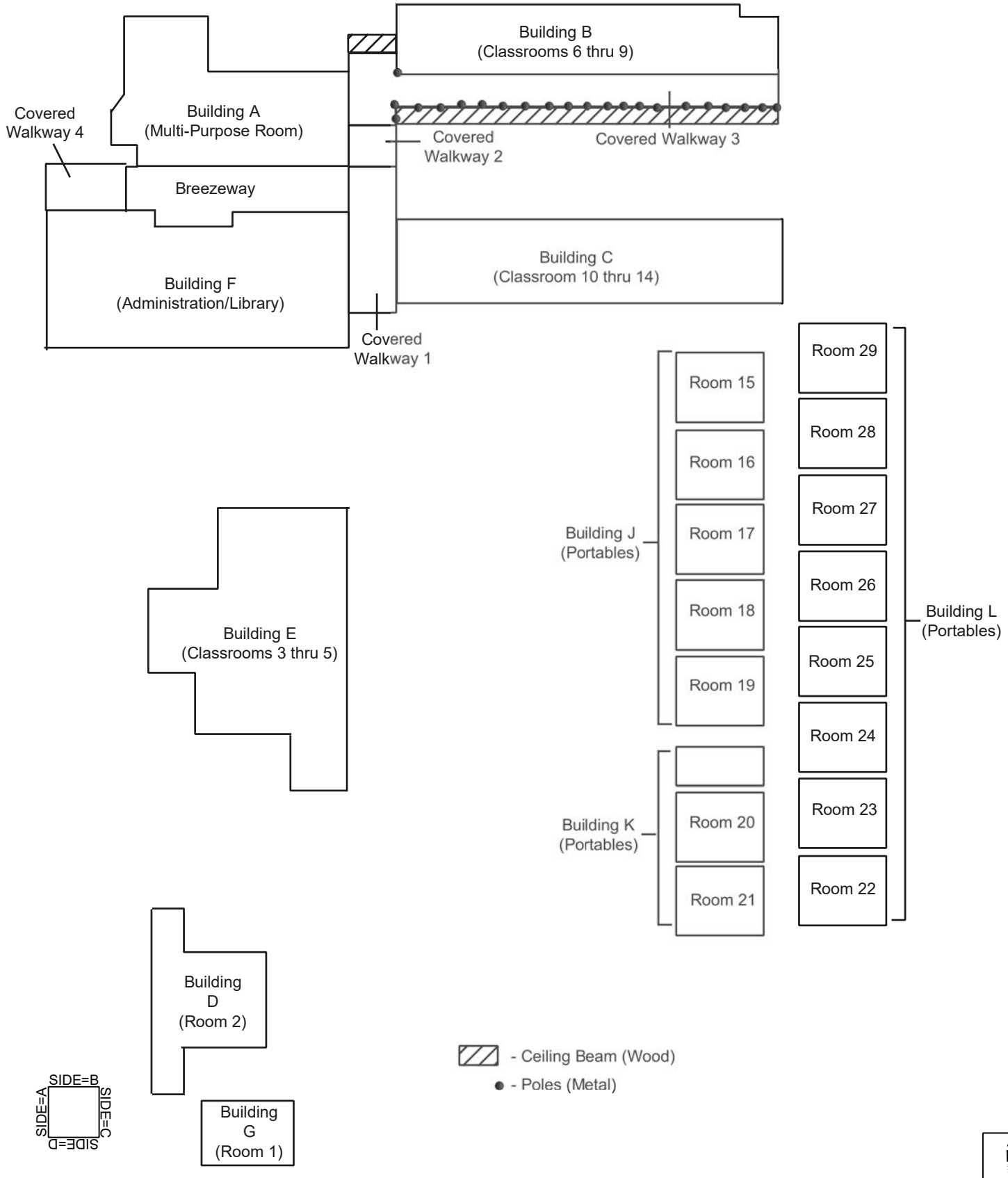
Client: Rosemead SD	**Project #:** 20-Z0046-0135	**Info:** No Lead-Based Paint Identified
EXECUTIVE ENVIRONMENTAL **HEALTH & SAFETY SIMPLIFIED**		**Site:** Savannah ES **Address:** 3720 Rio Honda Avenue Rosemead, CA 91770

Savannah Elementary School
Covered Walkways



Client: Rosemead SD	**Project#:** 20-Z0046-0135	**Info:** Lead-Based Paint Identified
EXECUTIVE ENVIRONMENTAL **HEALTH & SAFETY SIMPLIFIED**		**Site:** Savannah ES **Address:** 3720 Rio Honda Avenue Drawing Not to Scale - © 2012 Rosemead, CA 91770

APPENDIX C – LEAD HAZARD EVALUATION REPORT

LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead Hazard Evaluation 12-1-2020 thru 12-10-2020

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
3720 Rio Hondo Avenue	Rosemead	Los Angeles	91770

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

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

Name	Telephone number
Rosemead SD	626-312-2900

Address [number, street, apartment (if applicable)]	City	State	Zip Code
3907 Rosemead Blvd. Ste 220	Rosemead	CA	91770

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
Timothy D Galeana	626-441-7050

Address [number, street, apartment (if applicable)]	City	State	Zip Code
310 E Foothoill Blvd Ste 200	Arcadia	CA	91006

CDPH certification number	Signature	Date
0394/0395		12-10-2020

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 D – XRF PERFORMANCE CHARACTERISTICS SHEET

Performance Characteristic Sheet

EFFECTIVE DATE: **December 1, 2015**

MANUFACTURER AND MODEL:

Make: ***Heuresis***
Models: ***Model Pb200i***
Source: ***^{57}Co, 5 mCi (nominal – new source)***

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Action Level mode

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm^2 (inclusive)

SUBSTRATE CORRECTION:

Not applicable

INCONCLUSIVE RANGE OR THRESHOLD:

ACTION LEVEL MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm^2)
Results not corrected for substrate bias on any substrate	Brick Concrete Drywall Metal Plaster Wood	1.0 1.0 1.0 1.0 1.0 1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated using test results on building components in the HUD archive. Testing was conducted on 146 test samples in November 2015, with two separate instruments running software version 2.1-2 in Action Level test mode. The actual source strength of each instrument on the day of testing was approximately 2.0 mCi; source ages were approximately one year.

OPERATING PARAMETERS

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

XRF CALIBRATION CHECK:

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm^2 in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm^2 film).

If the average (rounded to 1 decimal place) of three readings is outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instrument into control before XRF testing proceeds.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Chapter 7 of the HUD Guidelines provides guidance on correcting XRF results for substrate bias. Supplemental guidance for using the paint film nearest 1.0 mg/cm^2 for substrate correction is provided:

XRF results are corrected for substrate bias by subtracting from each XRF result a correction value determined separately in each house for single-family housing or in each development for multifamily housing, for each substrate. The correction value is an average of XRF readings taken over the NIST SRM paint film nearest to 1.0 mg/cm^2 at test locations that have been scraped bare of their paint covering. Compute the correction values as follows:

> Using the same XRF instrument, take three readings on a bare substrate area covered with the NIST SRM paint film nearest 1 mg/cm^2. Repeat this procedure by taking three more readings on a second bare substrate area of the same substrate covered with the NIST SRM.
>
> Compute the correction value for each substrate type where XRF readings indicate substrate correction is needed by computing the average of all six readings as shown below.
>
> <u>For each substrate type</u> (the 1.02 mg/cm^2 NIST SRM is shown in this example; use the actual lead loading of the NIST SRM used for substrate correction):
>
> Correction value = (1st + 2nd + 3rd + 4th + 5th + 6th *Reading*)/6 - 1.02 mg/cm^2
>
> Repeat this procedure for each substrate requiring substrate correction in the house or housing development.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing.

Conduct XRF re-testing at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below. Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family and multi-family housing, a result is defined as a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and the retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF readings.

Compute the average of all ten re-test XRF readings.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

In the Action Level paint test mode, the instrument takes the longest time to complete readings close to the Federal standard of 1.0 mg/cm^2. The table below shows the mean and standard deviation of actual reading times by reading level for paint samples during the November 2015 archive testing. The tested instruments reported readings to one decimal place. No significant differences in reading times by substrate were observed. These times apply only to instruments with the same source strength as those tested (2.0 mCi). Instruments with stronger sources will have shorter reading times and those with weaker sources, longer reading times, than those in the table.

Mean and Standard Deviation of Reading Times in Action Level Mode by Reading Level		
Reading (mg/cm^2)	**Mean Reading Time (seconds)**	**Standard Deviation (seconds)**
< 0.7	3.48	0.47
0.7	7.29	1.92
0.8	13.95	1.78
0.9 – 1.2	15.25	0.66
1.3 – 1.4	6.08	2.50
$\geq$ 1.5	3.32	0.05

CLASSIFICATION OF RESULTS:

XRF results are classified as **positive** if they are **greater than or equal** to the stated threshold for the instrument (1.0 mg/cm^2), and *negative* if they are *less than* the threshold.

DOCUMENTATION:

A report titled *Methodology for XRF Performance Characteristic Sheets* (EPA 747-R-95-008) provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. The report may be downloaded at http://www2.epa.gov/lead/methodology-xrf-performance-characteristic-sheets-epa-747-r-95-008-september-1997.

This XRF Performance Characteristic Sheet (PCS) was developed by QuanTech, Inc., under a contract with the XRF manufacturer.