



California Affordable
Housing Initiatives, Inc.

May 19, 2021

Gentlemen/Ladies:

SUBJECT: RFP No. 21-014 Demolition and Abatement of Structures at 2530 9th Avenue

California Affordable Housing Initiatives, Inc. ("CAHI") invites proposals for the Demolition and Abatement of two structures located at 2530 9th Avenue, Oakland, CA.

Proposals will be accepted online through the Housing Agency Marketplace until 10:00 a.m., (Pacific Time), on June 18, 2021. Bids received after 10:00 a.m. on June 18, 2021, will be rejected without consideration.

Questions of a procedural nature may be directed to Jeff Muegge at jmuegge@Oakha.org.

We look forward to receiving your proposal.

Sincerely,

DocuSigned by:

Patricia Wells

722CF180EE194A1...

Patricia Wells

Executive Director

Oakland Housing Authority

1619 Harrison Street, Oakland, CA 94612



California Affordable
Housing Initiatives, Inc.

1619 Harrison Street, Oakland, CA 94612

Request for Proposals RFP 21-014

Abatement and Demolition of Structures at 2530 9th Avenue

Introduction:

California Affordable Housing Initiatives, Inc. ("CAHI") was formed as an instrumentality of the Oakland Housing Authority to enhance, preserve, develop and administer housing for HUD-defined low and moderate income families and individuals in California.

The mission of CAHI is to administer project-based Section 8 Contracts on behalf of the U.S. Department of Housing & Urban Development in order to:

- Ensure that eligible families are provided affordable housing that is well managed and maintained;
- Contribute to building and preserving healthy neighborhoods and communities; and
- Operate with a high degree of integrity and public and fiscal accountability.

CAHI serves and embodies a diverse community. Therefore, it is crucial that contractors understand the effects of race, class, ethnicity, income, and other issues of difference in our society, and display a high level of cultural competency throughout their interactions with the non-profit.

California Affordable Housing Initiatives, Inc. ("CAHI"), is soliciting proposals from qualified vendors to perform the services described in the Scope of Work.

RFP Representative:	Jeff Muegge, jmuegge@oakha.org 341-356-0402
RFP Issued:	May 19, 2021
Site Walk-through:	May 27, 2021
Questions Due:	June 4, 2021
Addendum Issued:	June 10, 2021
Submission Deadline:	June 18, 2021

WALK-THROUGH: Walk-throughs are by **appointment only and will be staggered if requested** on the morning of: Thursday, May 27, 2021 starting at 10 a.m.

For an appointment, please email Jeff Muegge at jmuegge@oakha.org

Proposals must be submitted online via Economic Engine through the following link:

https://ha.internationaleprocurement.com/requests.html?company_id=71448

Proposers MUST register with Economic Engine in order to submit proposals. It may take time to upload proposals so please take that into consideration when deciding what time to start uploading your proposal. If you have any technical issues with the site, please contact Larry Hancock at 1-866-526-0160.

Scope of Work: See Attachment A

Property Description:

2530 9th Avenue is a vacant, 3-story, wood frame, 15-unit apartment complex consisting of two buildings that were constructed in 1969 on a steeply graded site with stepped retaining walls and foundations. There are 15 off-street parking spaces. All 15 units are 3 bedrooms and 1 bath with an average unit size of 939 square feet. The building has been vacant for over 15 years, has been vandalized, and is in poor condition. The parcel is 14,946 square feet. The property is located in the Bella Vista neighborhood of Oakland in a RM-3 Mixed Housing Type Residential Zone.

Proposal Contents:

CAHI is seeking proposals from contractors to undertake both the abatement and demolition scopes of work under a single contract. It is acceptable for the Respondent to subcontract any portion of the scope of work as long as the proposed subcontractor is identified in Item 3 below and a completed **Attachment H** is provided.

Include the following information in the same numbered format your proposal response.

1. A cover letter signed by a representative that is authorized to execute a contract;
2. An overview of your firm's expertise and experience performing residential lead/asbestos abatement and building demolition of apartment structures of seven (7) or more units in moderately and/or severely graded site conditions.
3. Complete the Project Experience table included in Attachment H listing contracts your firm has held in the past ten (10) years for pre-demolition abatement and/or structure demolition. If a subcontractor will be used for any portion of the work, provide an overview of the subcontractor's relevant experience and complete **Attachment H** for the proposed subcontractor;

4. A detailed description of your firm's approach to minimizing community nuisance impacts such as noise and dust as well as ensuring the safety of surrounding residents from falling debris and other hazards.
5. Given the scope of work described in Attachment A, please describe your approach to sequencing the work, the specific challenges you anticipate encountering on this project, and how you would mitigate those challenges.
6. Resumes of key personnel who will be assigned to this project and a description of their relevant experience with comparable work;
7. A proposed schedule including time to complete abatement and demolition;
8. Provide a comprehensive and itemized **Schedule of Values** for the project. If selected, this Schedule of Values shall become the basis for a Guaranteed Maximum Price contract between the awardee and CAHI.

The price proposal shall include an itemization of any applicable **General Conditions** costs based on the project duration identified in the proposed schedule. The price proposal shall also include the **Contractor's Fee** (overhead and profit) as a percentage of the cost of the work. The cost of insurance and bond premiums shall not be included in the cost of the work for the purposes of calculating the Contractor's Fee.

Identify any **Allowances** for unquantifiable but necessary work items included in your price proposal.

Attach price proposals from subcontractors for any work that will not be self-performed by your firm.

9. Insurance certificates or other evidence showing that your firm can meet the requirements for contractor's insurance coverage shown in Exhibit A of the A201-2017 contract attached as **Attachment F**.
10. Contact information (name, phone number, and email address) for at least three references familiar with your firm's work on similar projects.

Submission Guidelines & Requirements:

- Proposals must be submitted online via Economic Engine through the following link:
https://ha.internationaleprocurement.com/requests.html?company_id=71448

Proposers MUST register with Economic Engine in order to submit proposals.

It may take time to upload proposals so please take that into consideration when deciding what time to start uploading your proposal. If you have any technical issues with the site, please contact Larry Hancock at 1-866-526-0160.

- If you would like to receive updates or have questions about this RFP, notify the representative, in writing, before the deadline for questions.
- CAHI intends to use the form of contract attached as **Attachment F** for this project.

Minimum Qualifications:

Only qualified vendors with relevant and comparable experience will be considered. At a minimum, a vendor must meet the following qualifications:

- Be licensed to perform the scope of work in the City of Oakland and the State of California and submit proof of licenses with your proposal.
 - The General Contractor shall hold a CSLB General Building Contractor (B) license.
 - The General Contractor or the abatement subcontractor shall hold a CSLB Asbestos Abatement Contractor (C-22) license.
- Maintain adequate insurance coverage, as required in Exhibit A of the A201-2017 contract attached as **Attachment F**.
- Have at least seven (7) years of experience with hazardous materials abatement and demolition of multifamily structures.
- Have completed demolitions of at least five (5) buildings of at least 10,000 square feet in the past ten (10) years. At least two (2) of these demolitions shall have included abatement of lead and/or asbestos. If the proposal is from a general contractor who would subcontract the abatement and/or demolition work, the general contractor shall have experience as a general contractor for at least the specified number of demolition and abatement projects.

Site Walkthrough:

A site walkthrough will be held at the date and time specified above. Participants will be required to wear facemasks to reduce the risk of COVID-19 transmission.

General Contractors who intend to subcontract a portion of the Scope of Work are encouraged to review all relevant components of the RFP package with their subcontractors prior to the walkthrough. Submit any questions in writing, prior to the specified due date. All questions will be answered in an addendum prior to the submission due date.

All contractors are required to notify the CAHI representative listed above by 5:00 pm on Tuesday, May 25, 2021, if they plan to attend the site walkthrough. Depending on

the number of contractors who plan to attend, we will stagger the walkthroughs at additional times to avoid overcrowding.

Proposal Evaluation:

1. Capability: Firm's ability to successfully complete the abatement and demolition in a professional, thorough, methodical, safe, and timely manner. **30 points**
2. Firm Experience: Extent and quality of firm's comparable project experience and experience of firm's assigned staff. **30 points**
3. Proposed Fees: **40 points**

Reservation of Rights:

Representatives of CAHI can:

- Request clarification of responses submitted before the final selection of a vendor for this project;
- Reject any or all responses;
- Waive any informality in the selection process;
- Terminate this selection process at any time;
- Negotiate the fees proposed by bidders for this project;
- Negotiate with a qualified bidder and award a contract for a project with a similar scope of work as outlined in **Attachment A** within 24 months of the proposal deadline;
- Award a contract on a fixed fee or time and material basis; and/or
- Award a contract that provides the best value to CAHI as determined solely by CAHI in its absolute discretion.

Rejection of Proposals

CAHI reserves the right to reject any or all proposals in whole or in part, without incurring any cost or liability whatsoever. All proposals will be reviewed for completeness of the submission requirements. Any proposal may be rejected where it is determined to be noncompetitive, where the cost is not reasonable, or contain false or misleading statements.

CAHI may waive immaterial deviations that have minimal effect on the price, quantity, quality, delivery or contractual condition; however, the waiver will not excuse a bidder from full compliance with the bid requirements.

Attachments:

A – Project Description and Scope of Work

B – Asbestos, Lead, PCB Survey Report

C – Abatement Specifications:

- **Lead Removal Work Plan**
- **Asbestos Removal Work Plan**
- **Polychlorinated Biphenyls Removal Work Plan**
- **PCB Waste Characterization, Segregation, and Disposal Plan**

D – Demolition Site Plan

E – Original Building Plans (for reference)

- **Sheet A: Survey**
- **Sheet 1: Plan of Site and Typical Floor**
- **Sheet 2: Exterior Elevations**
- **Sheet 3: Exterior Elevations**
- **Sheet 4: Exterior Elevations**
- **Sheet 5: Plan of Apartment Types '01, '02 & '04**
- **Sheet 6: Plan of Apartment Types '03 & '05**

F – Small Project Design Review Conditions of Approval

G – Standard Form of Contract

H – Project Experience Tables

Attachment A

Project Description and Scope of Work

ABATEMENT

Remove asbestos, lead based materials and PCBs (Polychlorinated Biphenyls) and dispose of in accordance with the attached **Attachment C**. Follow all City, State and Federal guidelines for removal and disposal and recycling. All materials shall be disposed of at facilities that are licensed and permitted to receive the types of materials disposed. All related permits and disposal fees are the responsibility of the contractor. **Attachment C** pertains to all (2) buildings.

The General Contractor or the General Contractor's Subcontractor must be a **California State (B) Contractors Licensee with a minimum of seven (7) years asbestos, lead and PCB abatement experience** who shall furnish all labor, materials, equipment, transportation, permits, supervision and professional services required for the abatement and disposal of all units (unoccupied) located at 2530 9th Avenue, Oakland, California, in accordance with **Attachment C**. The purpose of the project is to remove the asbestos and lead containing building materials and PCBs necessary for the planned demolition, Part 2. All materials must be properly disposed of as set forth in the specifications of this document.

The Contractor must complete the work specified in **Attachment C** (ACM Work Plan, Lead Work Plan, PCB Work Plan, PCB Waste Plan and underlying documents). The following site conditions, scope and scheduling requirements need to be taken into consideration when preparing quotes. The Contractor will be required to pass air quality standards as set forth in this document. CAHI will retain the services of a third party consultant to monitor the processes.

- A. Contractor is responsible for obtaining its own accurate measurements of the structures to be demolished, including height and square footage, and the structures' construction type, in order to: provide an accurate bid; determine the appropriate methods of demolition; procure appropriate tools, equipment and materials; and determine the way to best perform the work. Some original building plans from 1968 construction are provided as **Attachment E**.
- B. Timing of the abatement is critical path. Contractor will be given the entire building at the start of the project. Temporary power is the responsibility of the contractor. The property does not have active electric, gas or water service.
- C. Contractor will be responsible for keeping the property secure.
- D. Even though the buildings to be abated will be unoccupied, the remainder of the neighborhood is occupied. Some of these occupants are children. Contractor will need to keep the site around the buildings clean and without hazards. Units must remain securable to prevent children or other neighborhood occupants or

3. The location and existence of any underground Utility or substructure has not been obtained. The methods used and costs involved to locate existing elements, points of connection and all construction methods are the Contractor's sole responsibility. accuracy of information furnished, as to existing conditions, is not guaranteed by CAHI. The Contractor, at its sole expense, must make all investigations necessary to determine locations of existing elements, which may include contacting Underground Service Alert and other private underground locating firm(s), utilizing specialized locating equipment, hand trenching, or both. The Contractor shall be responsible for preserving the integrity of the existing underground utilities at the site.
4. The full intent of this project is to demolish all existing structures with-in the property line. Retaining walls, stairways leading from street to parking area, from parking area to courtyard, and courtyard to building to remain. Building foundations subgrade to remain. All debris should be removed from the site and disposed of at facilities that are licensed and permitted to receive the types of materials disposed. Trees excluded (and to be protected).
5. CAHI has applied for a Demolition permit and paid Demolition permit fees. Contractor shall pick up permit at City of Oakland Planning and Building Department and obtain requisite excavation permits to complete demolition activities. Contractor is responsible for all permits necessary to complete demolition. Contractor is responsible for the completion of the Construction and Demolition Waste Reduction and Recycling Plan (WRRP) (prior to permit issuance), plus any and all permits other than the demolition permit. Any and all BAAQMD fees and "J" numbers are the responsibility of the contractor.
6. All work shall require maintenance and control of traffic during (roadway/street) construction period including the loading or off-loading of any construction vehicles or activities. The Contractor shall provide a detailed Traffic Control Plan ("TCP") for all phases of construction for review and shall conform to the Standard Specifications, General Provisions, Special Provisions, the latest edition of the California Edition of the Manual on Uniform Traffic Control Devices ("MUTCD"), the latest edition of Caltrans Standard Specifications and the latest edition of Caltrans Standard Plans and must have approval by CAHI before construction. The TCP shall cover signing, flagging, detour geometric, delineation and channelization, barriers and barricades, separation of opposing traffic streams, and hours of flash
7. Traffic control shall be provided by a qualified traffic control company specializing with a C-31 license during the construction of the Project. Traffic control shall address parking changes as well. Before the commencement of any work or if there are changes to the proposed TCP and after approval by CAHI, the qualified traffic control company staff shall complete field checks of the installed traffic control by driving through the work area at least two (2) times to ensure the adequacy of traffic control. During any period when two (2) way traffic is not provided, the Contractor shall employ properly trained flaggers to control traffic through the construction zone.

8. Design safety procedures to assure minimal disruption to the neighboring community. Contractor is responsible for repair to adjacent properties impacted by their work. Dust control and erosion control to be in use during demolition.
9. The Contractor shall cover all openings, trenches and excavations at the end of each work day with steel plate covers.
10. Prior to all work, verify all site conditions, coordinate with the City, and all affected agencies to locate existing utility lines and locations. All lines should be capped at minimum, 2'0" below the surface. Follow the standard trades' procedures to identify and cap off all utility lines. Provide identification boxes at finished grades, if necessary. All Utilities encountered during the prosecution of the work that are determined to be abandoned shall be removed by the Contractor as required for the work, unless directed otherwise by CAHI. The remaining portion of the existing Utility which is left in place shall be accurately recorded, in elevation and plan submitted to CAHI are required prior to final payment request. If the Contractor damages or breaks the Utilities, it will be the Contractor's responsibility to repair the Utility at no cost to the Utility or the Owner.
11. Provide minimum storm water construction BMPs and prevent construction material or runoff from leaving construction site.
12. At water meter service entrance, terminate 2" water main 2' to 4' inside property line and install ball valve with a hose bib installed inside Christy Model V64 precast box with galvanized steel bolt-down cover or approved equal. Water meter to be left in Christy box. Install hose bib and backflow preventer in a locking cage.
13. Sewer laterals: Contractor shall obtain a sewer lateral (SL) permit from the Public Works Department prior to the issuance of the demolition permit. Turn up private sewer lateral inside property line, cap, and terminate inside a small Christy box or set in a 2'X2' concrete slab. Then terminate in the street at the main and patch the main. Contractor is responsible to verify exact location. Backfill and compact similar to existing compaction of adjacent soils and conditions.
14. Gas and electrical power have been disconnected to the site. Temporary power and termination of electrical service upon completion of demolition is the responsibility of the contractor.
15. Coordinate with Pacific Gas & Electric to remove gas meters. Terminate gas lines per Pacific Gas & Electric requirements.
16. Keep the site and adjacent areas clean at all time. Dust control in accordance with the Small Project Design Review Conditions of Approval (see Attachment F) is mandatory. Clean-up shall be done as work progresses at the end of each day and thoroughly before weekends. The Contractor shall not allow the Work site to become littered with trash and waste material, but shall maintain the same in a neat and orderly condition throughout the construction operation. If the job site is not cleaned to the satisfaction of the CAHI Project Manager, the cleaning will be done or contracted by the

owner and shall be back-charged to the Contractor and deducted from the Contract Price. The Contractor shall make arrangements for storing its equipment and materials. The Contractor shall make its own arrangements for any necessary off-site storage for the proper execution of the work. The Contractor's equipment and personal vehicles of the Contractor's employees shall not be parked on the roadway way or on any section where traffic is restricted at any time.

17. Delivery schedules shall be controlled to minimize long-term storage of products at the Project site and overcrowding of construction spaces. In particular, the Contractor shall provide delivery and installation coordination to ensure minimum holding or storage times for products recognized to be flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other sources of loss.
18. Site security is the responsibility of the contractor. The Contractor shall provide screening material (Beige Fence Privacy Screen Mesh Fabric with Grommets) on all accessible sides of the property for the safety of the public and to keep the property off limits to pedestrians and trespassers throughout the duration of the demolition work.
19. Upon completion of demolition, sufficient filling and grading shall be done to bring the area of demolition up to the same level as open excavation perimeter. The backfill will be of clay soil, compacted to a density of 90% unless otherwise specified. Site restoration shall consist of fine grading the site to ensure positive drainage and conform to the surrounding sites. The Contractor shall overlay the demolition site with suitable dirt and grass seed upon completion of the project. Seeding must be completed under suitable conditions as to encourage and maintain grass growth.
20. Submittal approval process for installed material, equipment, Project Schedule, and Erosion Control Plan and execution will be part of this contract. Submittals will be reviewed and approved in a timely fashion.
21. Contractor to provide schedule, with elemental timeline and milestones with bid response. Work shall be performed during normal business hours. Except with prior written approval by the CAHI Project Manager, no work shall be performed on weekends or outside of normal business hours.

CONDITIONS OF WORK

1. Prior to commencement of work, Contractor shall attend a pre-construction meeting to be scheduled by CAHI.
2. Contractor is responsible to establish electric service in the contractor's name prior to the start of construction. This is the contractor's monetary responsibility.
3. Contractor is responsible for the site security from the signing of the Notice to Proceed.

4. Work is to commence at the time set out in the Notice to Proceed. Otherwise, performance shall begin by the date of the Agreement, or any other date specified in the Agreement.
6. All work shall comply with the current building codes adopted by the City of Oakland. Contractor shall be responsible for obtaining and paying for all required permits.
7. The Contractor will be responsible for providing the Owner with an approved City of Oakland building permit. Owner has the right to review a building permit at any time. A Notice of Completion/Acceptance is required by the Owner prior to the Contractor's final payment.
8. Contractor is responsible to take all necessary safety precautions to safeguard the property at 2530 9th Avenue, Oakland, CA and surrounding property. The Contractor shall provide all required barricades, fences, dust barriers, or other structures to protect CAHI's property as well as surrounding property. Contractor shall take all necessary precautions for the public's and workers' safety when working on CAHI property.
9. The Contractor is responsible for the proper disposal of all construction-generated debris. All debris is to be removed immediately.
11. The Contractor shall furnish, install and maintain ample sanitary facilities for the workers. As the needs arise, a sufficient number of enclosed temporary toilets shall be conveniently placed as required by the sanitary codes for the State of California. Drinking water shall be provided from an approved source, so piped or transported as to keep it safe and fresh and served from single-service containers or satisfactory types of sanitary drinking stands or fountains. All such facilities and services shall be furnished in accordance with existing and governing health regulations.
12. Any additional work will require written authorization from CAHI. CAHI has the right to refuse payment for any unauthorized work.
13. For other terms and conditions, see CAHI's standard form of agreement for Construction attached as **Attachment G**. Contractor, by submitting a bid, agrees to enter into a contract with CAHI substantially in the form accompanying this Request for Proposals, including all payment / performance bonds and insurance requirements.
14. Contractor must comply with the Small Project Design Review Conditions of Approval attached as **Attachment F**. These conditions include, but are not limited to, (12) Dust Controls, (20) Erosion and Sedimentation Control Measures, (23) Construction Days/Hours, (24) Construction Noise, (26) Construction Activity in the Public Right-of-Way, and (27) Construction and Demolition Waste Reduction and Recycling.

Attachment B

Asbestos, Lead, PCB Survey Report



June 25, 2020

Asbestos, Lead, PCB Survey Report

**2530 9th Avenue
Oakland, California**

Prepared for:

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FACS Project # PJ46841



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Executive Summary

Forensic Analytical Consulting Services, Inc. performed an asbestos, lead, and polychlorinated biphenyl (PCB) survey for the property at 2530 9th Avenue, Oakland, California between May 14 and 19, 2020. The purpose of the survey was to identify, sample, and analyze suspect asbestos-, lead-, and PCB-containing materials on the subject property in support of the planned site demolition.

The survey was intended to meet the requirements of OSHA and the Air Quality Management District. The findings from the limited survey performed in 2017 were also incorporated in this survey.

Asbestos-, lead-, and PCB-containing materials were identified on the subject building in this survey. No hazards were identified from the surface soil sampling. Details are presented in the Findings section of this report.

Results of laboratory testing are summarized in the attached table (Appendix A). The summary table must not be used alone. Important explanations and limitations are contained in the full report text below.

Introduction

Forensic Analytical Consulting Services, Inc. (FACS) was retained by California Affordable Housing Initiatives (Client) to perform a hazardous material survey of the property at 2530 9th Avenue, Oakland, California.

The survey was performed by Gene Spector and Kris Maglunob of FACS between May 14 and 19, 2020. Mr. Spector is certified by the State of California as a Certified Asbestos Consultant and Lead Inspector; Mr. Maglunob is a California Certified Site Surveillance Technician and Lead Sampling Technician. Project Management was provided by Mr. Wilson Wong. Certifications of FACS personnel are presented in Appendix B.

This report contains the findings and recommendations from our inspection. The purpose of the survey was to identify asbestos-, lead-, and polychlorinated biphenyl (PCB)-containing materials that may be disturbed in the planned site demolition, within the limitations described below.

Site Characterization

The project site consisted of 2 apartment buildings: a larger building that contains 9 living units, and a smaller building that contains 6 living units. Both are 3-story buildings with stucco exterior and a flat roof. The remaining area on the lot are concrete paved courtyard and parking area, with minor vegetations on the north and west perimeter of the property.

Interior finishes included wallboard on walls and ceilings, ceramic tiles in one of the bathrooms, and vinyl sheet flooring on floors. Exterior are a combination of stucco and cinder blocks.

Scope of Work

The scope of this project was to identify the asbestos-, lead-, and PCB-containing materials that will be impacted by the site demolition. In addition, the findings of a limited survey performed at the property in 2017 by FACS will also be incorporated in this survey. The 2017 project included the survey for asbestos and lead in the kitchens, bathrooms, and flooring of the 15 living units, plus the roof of the larger building.

Our investigation consisted of the following:

- Visual inspection, and documentation of relevant conditions
- Review and incorporate findings from the 2017 survey
- Collection of samples of suspect asbestos-containing materials using the AHERA sampling protocol
- Collection of suspect lead paint/coating samples
- Collection of suspect PCB materials
- Collection of surface soil from the exposed soil on the property and analysis for asbestos, lead, and PCB
- Submit asbestos and lead samples to SGS Forensic Laboratories for analysis by Polarized Light Microscopy (PLM) in accordance with EPA Method 600/R-93-116 (for asbestos samples), and Atomic Absorption Spectrometry (Flame AA) in accordance with NIOSH Method 7420 (for lead samples)

- Submit PCB samples to Eurofins Calscience LLC for analysis by EPA Method 8082A with preparation in accordance with EPA Method 3540C (Soxhlet extraction)
- Presenting analytical results, conclusions, and recommendations in a report, which can be submitted to the Air Quality Management District

The types, numbers, and locations of samples were determined based on the provided scope, visual observations, regulatory requirements, and other project management considerations.

Findings

A total of 45 asbestos bulk samples, 9 lead bulk samples, and 27 PCB bulk samples were collected in this project. Laboratory Reports are presented in Appendix A. The following tables present the hazardous materials identified in each category.

Asbestos was identified in the following materials:

Asbestos-Containing Material Description	Location(s) of Material	NESHAP ACM Category **
Wallboard & Joint compound	Both buildings - interior walls and ceilings in all units	n/a *
Wall texture	Both buildings - interior walls and ceilings in all units	RACM
Sheet flooring (various types) backing	Both buildings - interior flooring in all units	RACM
Roof flashing	Small building – on roof at base of skylights and stairwell	Category II Nonfriable ACM

* Composite wallboard & joint compound samples were analyzed by point count method and confirmed to be <1% asbestos

** See Discussion section below for the definition of the various NESHAP terms

Lead was identified in the following materials:

Lead-Containing Material Description	Location(s) of Material
Various paints	Large and small building - all painted components throughout the two buildings
White ceramic tile	Large building - unit 303, bathroom walls

PCB was identified in the following materials:

PCB-Containing Material Description	Location(s) of Material	EPA Category ****
Roof composite	Roof field (both buildings)	*** Excluded Product Waste
Roof penetration mastic	Roof at penetrations (both buildings)	*** Excluded Product Waste
Roof caulk	Roof (both buildings)	Excluded Product Waste
Stucco	Exterior walls (both buildings)	*** Excluded Product Waste
Walkway coating	Exterior walkways	*** Bulk Product Waste

*** Designated as a PCB waste due to high reporting limit

**** See Discussion section below for the definition of the various EPA terms

Discussions

Asbestos

The materials identified in the above asbestos table are Asbestos-Containing Material (ACM) and Asbestos-Containing Construction Material (>0.1% asbestos) in California. They are subjected to regulations of USEPA, BAAQMD, Cal/OSHA, and CSLB.

An asbestos-containing material for which sample analysis results by PLM are greater than one percent asbestos is classified as Asbestos-Containing Material (ACM) under regulations promulgated by: US EPA, AQMD, Cal-EPA, OSHA, and Cal/OSHA. US EPA and BAAQMD require that a material with a PLM analytical result less than 10% (including Trace results of less than one percent) be confirmed by the point count method, or else the material must be assumed to be ACM.

An asbestos-containing material for which sample analysis results by PLM are greater than 0.1 percent asbestos is classified as Asbestos-Containing Construction Material (ACCM) by Cal/OSHA and by the California Contractor State Licensing Board (CSLB).

Wallboard and joint compound samples were initially analyzed as separate layers and as a composite. No asbestos was detected in the wallboard and 2% of asbestos was found in the joint compound. As allowed by EPA, composite analysis indicated that it contained less than 1% asbestos by PLM analysis. These samples were subsequently analyzed by point count method and were confirmed to contain less than 1% asbestos.

EPA established National Emission Standards for Hazardous Air Pollutants (NESHAP) to protect the public from exposure to hazardous airborne contaminants. Under NESHAP, ACM are divided into three categories: Regulated ACM (RACM) are friable ACM or ACM that will be rendered friable during renovation or demolition activities; Category I Nonfriable ACM are packing, gaskets, resilient flooring, and asphalt roofing products with more than 1% asbestos; Category II Nonfriable ACM are other nonfriable ACM beside Category I Nonfriable ACM. These three categories of ACM should be identified prior to most renovation and demolition projects.

OSHA (Cal/OSHA) regulates all materials that contain any level of asbestos, including trace (<1%) levels. At a minimum, employee training, wet methods, HEPA vacuums, and prompt cleanup and disposal of debris in leak-proof containers are recommended or required for the disturbance of any material that contains asbestos.

Lead

Lead is primarily regulated in California by Cal/OSHA and the California Department of Public Health. The current Cal/OSHA Lead in Construction Safety Standard (8 CCR 1532.1) regulation applies to all construction work where an employee may be occupationally exposed to lead. Therefore, work performed on surfaces (including manual demolition, scraping, welding, etc.) containing any amount of lead must comply with the standard, including an exposure assessment (personal air monitoring) to determine if the airborne lead exposure levels are within acceptable limits.

Lead was detected in the paints and components identified above. As a result, 8 CCR 1532.1 applies to any work that will disturb these components. Other components represented by the positive lead samples in the Summary of Lead Testing Laboratory Results shall be considered to be lead-containing until proven otherwise.

EPA established the hazard level for lead in soil to be 400 parts per million (ppm) for children's play area and 1,200 ppm for other bare soil in the yard. Lead was also detected in the surface soil sampled throughout the subject property. However, all samples were below the lead hazard level of 400 ppm.

Polychlorinated Biphenyls (PCB)

California Department of Toxic Substances (DTSC) and the U.S. EPA regulate the use, handling, and disposal of polychlorinated biphenyls (PCBs). Materials containing PCB at equal to or greater than 50 mg/kg (50 ppm) are classified as PCB Bulk Product Waste under 40 CFR 761, which regulates their removal and disposal, as well as the substrates with which these PCB-containing materials are in contact. Additional testing of these substrates will be needed to determine if they are PCB Bulk Product Waste as well.

A material with a PCB concentration of ≥ 1 and < 50 mg/kg is considered to be an excluded PCB product when it meets the definition in 40 CFR 761.3. No additional assessment of adjacent materials is necessary for excluded PCB products. Excluded PCB product should be removed and disposed at a facility permitted to receive PCB-containing waste at concentrations ≥ 1 mg/kg and < 50 mg/kg.

Due to limitations of the analysis, the reporting level of some samples were above these regulatory concentrations. As a result, these materials are treated as if they have a PCB concentration of slightly below the report level.

For detailed regulatory requirements in specific situations, FACS should be consulted, or the applicable regulations should be examined.

Recommendations

1. The above-identified asbestos-, lead-, and PCB-containing materials should be handled and/or removed by a properly licensed contractor in accordance with all applicable regulatory requirements.
2. Consult with your waste disposal facility that waste from the above identified hazardous materials will be accepted.
3. A Certified Asbestos Consultant should be consulted to assist with project design and monitoring, including clearance inspection and air sampling after asbestos removal.
4. If lead paint becomes peeling or deteriorated, it should be removed from components prior to recycling or disposal. The paint chips may be classified as hazardous waste for lead, whereas the components with the remaining intact paint may possibly test as non-hazardous. Removing loose and flaky paint prior to removal/demolition of the components is intended to prevent loose paint chips from contaminating the rest of the waste stream, and also intended to prevent paint chips from dislodging and contaminating the ground at the site or along the waste/recycling transportation route.
5. Paint chips and other waste generated from the paint removal, as well as painted components destined for disposal, should be tested to determine its waste category. For reference, lead waste is considered a hazardous waste if the result of the Toxicity Characterization Leaching Procedure (TCLP) test exceeds 5 mg/liter, under the Resource Conservation and Recovery Act (RCRA), 40 CFR 261, Appendix II. In California, a waste is also considered hazardous if the result of soluble lead content by a Waste Extraction Test (WET) is greater than 5 mg/l, or if the total lead content exceeds 1,000 mg/kg in accordance with Title 22 of the CCR. When TTLC results are below 50 mg/kg, STLC/TCLP limits cannot be exceeded, so the waste would be classified as non-

hazardous for lead. Other hazardous metals historically utilized in paint manufacture should also be tested to determine hazardous waste classification.

6. For further assistance with regulatory requirements, FACS should be consulted, and the applicable regulations should be reviewed.

Limitations

This investigation is limited to the conditions and practices observed and information made available to FACS. The methods, conclusions and recommendations provided are based on FACS' judgment, expertise and the standard of practice for professional service. They are subject to the limitations and variability inherent in the methodology employed. As with all environmental investigations, this investigation is limited to the defined scope and does not purport to set forth all hazards, nor indicate that other hazards do not exist.

Please do not hesitate to contact our offices at 510-266-4600 with any questions or concerns. Thank you for the opportunity to assist California Affordable Housing Initiatives in promoting a more healthful environment.

Respectfully,
FORENSIC ANALYTICAL



Wilson Wong
Program Manager
CAC 92-0791
CDPH I/A No. LRC-00003660

Reviewed by:
FORENSIC ANALYTICAL



Esteve Thurairajah
Senior Project Manager
CAC 15-5566
CDPH I/A No. LRC-00004582

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Appendix A

Sampling Summary & Laboratory Reports



ASBESTOS SAMPLING SUMMARY

Sample Number	Material Description	Location(s) of Material	Asbestos Content (Percent)	Asbestos Regulatory Classification	Approximate Quantity
R-1-A01 R-1-A02	Roof composite	Small Building – roof, field	ND	Not applicable	Not applicable
R-2-A03 R-2-A04	Roof flashing	Small Building – roof, at base of skylights & stairwell	5%	Category II Nonfriable ACM	120 SF
R-3-A05 R-3-A06	Penetration mastic	Small Building – roof, at penetrations	ND	Not applicable	Not applicable
R-4-A07 R-4-A08	Roof tile	Small Building – roof, at skylight	ND	Not applicable	Not applicable
5-A09 5-A10	Concrete	Small Building – stairs	ND	Not applicable	Not applicable



Sample Number	Material Description	Location(s) of Material	Asbestos Content (Percent)	Asbestos Regulatory Classification	Approximate Quantity
6-A11 6-A12 6-A13	Concrete	Parking lot and courtyard pavement	ND	Not applicable	Not applicable
7-A14 7-A15 7-A16	Concrete	Foundation	ND	Not applicable	Not applicable
8-A17 8-A18 8-A19	Gray floor coating	Exterior walkways	ND	Not applicable	Not applicable
9-A20 9-A21 9-A22	Vapor barrier	Exterior walls, under stucco	ND	Not applicable	Not applicable
10-A23 10-A24 10-A25 10-A26 10-A27 10-A28 10-A29	Wall texture	Both buildings – interior walls & ceilings	2%	RACM	45,900 SF



Sample Number	Material Description	Location(s) of Material	Asbestos Content (Percent)	Asbestos Regulatory Classification	Approximate Quantity
11-A30 11-A31 11-A32 11-A33 11-A34 11-A35 11-A36	Wallboard & joint compound	Both buildings – interior walls & ceilings	WB ND JC 2% Composite <1%	Not applicable	45,900 SF
Previously Sampled	Sink undercoat	Both building - kitchens	ND	Not applicable	Not applicable
Previously Sampled	Sheet flooring (various types)	Both buildings – flooring in all units	SF ND Backing 70%	RACM	13,500 SF
Previously Sampled	Baseboard mastic	Both buildings - kitchens and bathrooms	ND	Not applicable	Not applicable
Previously Sampled	White square pattern vinyl sheet	Small building - kitchen cabinets	ND	Not applicable	Not applicable



Sample Number	Material Description	Location(s) of Material	Asbestos Content (Percent)	Asbestos Regulatory Classification	Approximate Quantity
Previously Sampled	Tile adhesive	Large building - Unit 303, bathroom, for ceramic tiles	ND	Not applicable	Not applicable
Previously Sampled	Tile grout	Large building - Unit 303, bathroom, for ceramic tiles	ND	Not applicable	Not applicable
Previously Sampled	Stucco	Both buildings - exterior	ND	Not applicable	Not applicable
Previously Sampled	Cinder block	Small building - exterior	ND	Not applicable	Not applicable
Previously Sampled	Wall texture (spray on)	Large building - Unit 104, kitchen	ND	Not applicable	Not applicable



Sample Number	Material Description	Location(s) of Material	Asbestos Content (Percent)	Asbestos Regulatory Classification	Approximate Quantity
Previously Sampled	Roof composite	Large building - roof	ND	Not applicable	Not applicable
Previously Sampled	Roof flashing	Large building - roof	ND	Not applicable	Not applicable
Previously Sampled	Roof shingle	Large building - roof	ND	Not applicable	Not applicable
Previously Sampled	Gray penetration mastic	Large building - roof, at penetrations	ND	Not applicable	Not applicable
Previously Sampled	Light gray caulk	Large building - roof, at seams	ND	Not applicable	Not applicable



Sample Number	Material Description	Location(s) of Material	Asbestos Content (Percent)	Asbestos Regulatory Classification	Approximate Quantity
Previously Sampled	Black penetration mastic	Large building - roof	ND	Not applicable	Not applicable
Previously Sampled	Beige window putty	Large building - roof, at windows	ND	Not applicable	Not applicable



LEAD SAMPLING SUMMARY

Material Description / Location	Sample Number	Analytical Result
Unit 101, kitchen, white paint on wall	Previously Sampled	0.11%
Unit 201, bathroom, white paint on door trim	Previously Sampled	0.029%
Unit 201, kitchen, white paint on vent hood	Previously Sampled	0.11%
Unit 301, bathroom, white paint on door jamb	Previously Sampled	0.019%
Unit 303, bathroom, white ceramic tile on wall	Previously Sampled	0.12%
Unit 304, bathroom, white paint on wall	Previously Sampled	0.051%
Unit 305, kitchen, white paint on vent hood	Previously Sampled	0.099%
Unit 204, bathroom, white paint on door	Previously Sampled	0.015%
Unit 105, bathroom, white paint on door jamb	Previously Sampled	0.061%
Unit 104, kitchen, white paint on ceiling beam	Previously Sampled	<0.006%
Exterior, by mailboxes, gray paint on cinder block wall	Previously Sampled	0.032%
Exterior, southwest stairwell, 2nd level, beige paint on stucco wall	Previously Sampled	0.011%
Exterior, southwest stairwell, 2nd level, off-white paint on cantilever beam	Previously Sampled	0.023%

Material Description / Location	Sample Number	Analytical Result
Large building, 3rd floor exterior hallway, gray paint on metal handrail	Previously Sampled	0.011%
Exterior, southwest stairwell, 3rd level, brown paint on wood handrail	Previously Sampled	0.011%

PCB SAMPLING SUMMARY

Material Description / Location	Sample Number	Analytical Result (mg/kg)	Reporting Limit (mg/kg)
Small building - roof composite	PCB 1	ND *	1.9
Large building - roof composite	PCB 2	ND *	1.9
Large building - roof composite	PCB 3	ND *	1.9
Small building - roof penetration mastic	PCB 4	ND *	2.0
Large building - roof penetration mastic	PCB 5	ND *	1.9
Large building - roof penetration mastic	PCB 6	ND *	1.9
Small building - roof caulking at skylight	PCB 7	11	0.97
Large building - roof caulking at skylight	PCB 8	2.5	0.98
Large building - roof caulking at skylight	PCB 9	27	4.8
Large building – roof flashing	PCB 10	ND	0.97
Small building – roof flashing	PCB 11	ND	0.98
Large building – roof flashing	PCB 12	ND	0.96
Small building – exterior wall stucco	PCB 13	ND	0.97

Material Description / Location	Sample Number	Analytical Result (mg/kg)	Reporting Limit (mg/kg)
Small building – exterior wall stucco	PCB 14	ND *	1.9
Large building – exterior wall stucco	PCB 15	ND *	1.9
Small building – coating on exterior walkway, 3rd level	PCB 16	ND *	98
Small building – coating on exterior walkway, 2nd level	PCB 17	ND *	96
Large building – coating on exterior walkway, 2nd level	PCB 18	ND *	94

* Since the report limit is within the regulatory waste level, this “None Detect” sample is being treated as if it has a PCB concentration of slightly below the reporting limit

SOIL SAMPLING SUMMARY

Soil Sample Location	Asbestos Sample # & Result	Lead Sample # & Result	PCB Sample # & Result
Rear yard, NE corner	12-A37 / ND	S-PB1 / 330 mg/kg	PCB-19 / ND
Rear yard, near #104	12-A38 / ND	S-PB2 / 110 mg/kg	PCB-20 / ND
Rear yard, near #13	12-A39 / ND	S-PB3 / 18 mg/kg	PCB-21 / 0.033 mg/kg
Planter area by the Large Building, near stairwell	12-A40 / ND	S-PB4 / 77 mg/kg	PCB-22 / ND
Planter area by the Large Building, near #103	12-A41 / ND	S-PB5 / 27 mg/kg	PCB-23 / ND
Planter area by the Small Building, near courtyard	12-A42 / ND	S-PB6 / 58 mg/kg	PCB-24 / ND
Side yard by the Small Building, near #102	12-A43 / ND	S-PB7 / 29 mg/kg	PCB-25 / ND
Side yard by the Small Building, near #101	12-A44 / ND	S-PB8 / 76 mg/kg	PCB-26 / ND
Side yard by the Small Building, SW corner	12-A45 / ND	S-PB9 / 72 mg/kg	PCB-27 / ND

SAMPLING DATA FORM & CHAIN OF CUSTODY



CLIENT: HAY01 FACS San Francisco
California Affordable Housing Initiatives, Inc.

Site/Bldg.: California Affordable Housing Initiatives
2530 9th Avenue
Oakland CA

FACS Proj. No.: PJ46841

Sampled by: GS/KM

Turnaround Time: RUSH 24 hr 48 hr Extended (days) 5 DAYS

Analysis: PLM Standard _____ PLM with Point Count (_____ 400 pt. _____ 1,000 pt.)

Special Instructions E-mail results to E-mail results to wwong@forensicanalytical.com and marina.gonzalez-cortez@forensicanalytical.com
KNOWLEDGE @ forensic analytical.com

HA#	Homogeneous Material Description (incl. color, texture, phase of construction)	Quant. in SF (LF for small pipe only)	Friable/ Cat. I/ Cat. II	Condition (good, fair, poor)	Sample Number	Sample Location	Lab Result (when rcvd)
1	Roofing field ↓				R-1-A01	Roof west wing South	
					R-1-A02	Roof west wing North	
2	Flashing ↓				R-2-A03	Roof west wing NE	
					R-2-A04	Roof west wing SW	
3	Penetration mastic ↓				R-3-A05	Roof west wing Vent	
					R-3-A06	Roof west wing center Vent	
4	Roofing tile ↓				R-4-A07	Roof skylight west side	
					R-4-A08	Roof skylight west wing East side	
5	Concrete steps				5-A09	west wing 1st Floor stair	

Legend: DW = Drywall JC = Joint Compound WT = Wall Texture VFT = Vinyl Floor Tile VSF = Vinyl Sheet Flooring BB = Baseboard BBM = Baseboard Mastic CM = Carpet Mastic ACT = Acoustic Ceiling
 Tile ACS = Sprayed-on Acoustical Ceiling Material FP = Fireproofing PI = Pipe Insulation PFI = Pipe fitting insulation WP = Plaster CP = Ceiling Plaster ES = Exterior Stucco

Relinquished by: _____ **Date & Time:** _____

Received by: _____ **Date & Time:** _____

Relinquished by: _____ **Date & Time:** _____

Received by: _____ **Date & Time:** _____



SAMPLING DATA FORM & CHAIN OF CUSTODY



CLIENT: HAY01 FACS San Francisco
California Affordable Housing Initiatives, Inc.

Sampled by: GS/km

Sample Date: 5/15/20

Site/Bldg.: California Affordable Housing Initiatives
2530 9th Avenue
Oakland CA

Turnaround Time: RUSH 24 hr 48 hr Extended (days) 5 days

Analysis: PLM Standard _____ PLM with Point Count (_____ 400 pt. _____ 1,000 pt.)

FACS Proj. No.: PJ46841

Special Instructions E-mail results to E-mail results to wwong@forensicanalytical.com and marina.gonzalez-cortez@forensicanalytical.com

HA#	Homogeneous Material Description (incl. color, texture, phase of construction)	Quant. in SF (LF for small pipe only)	Friable/ Cat. I/ Cat. II	Condition (good, fair, poor)	Sample Number	Sample Location	Lab Result (when rcvd)
5	Concrete steps				5-A10	East wing 1 st Floor stair	
6	Concrete pavement				6-A11	West site parking lot	
					6-A12	West site parking courtyard.	
					6-A13	East site walkway	
7	Concrete foundation				7-A14	East wing North North site	
					7-A15	East wing South site	
					7-A16	West wing West site.	
					8-A17	East West wing 3 rd Floor	
8	Walkway cover				8-A18	East West wing 2 nd Floor	

DW = Drywall JC = Joint Compound WT = Wall Texture VFT = Vinyl Floor Tile VSF = Vinyl Sheet Flooring BB = Baseboard BBM = Baseboard Mastic CM = Carpet Mastic ACT = Acoustic Ceiling
 Tile ACS = Sprayed-on Acoustical Ceiling Material FP = Fireproofing PI = Pipe Insulation PFI = Pipe fitting insulation WP = Plaster CP = Ceiling Plaster ES = Exterior Stucco

Relinquished by: [Signature] Date & Time: 5/15/20 Relinquished by: _____ Date & Time: _____
 Received by: [Signature] Date & Time: MAY 19 2020 PM 12:34:56 Received by: CJGM FP Date & Time: _____

SAMPLING DATA FORM & CHAIN OF CUSTODY



CLIENT: HAY01 FACS San Francisco
California Affordable Housing Initiatives, Inc.

Site/Bldg.: California Affordable Housing Initiatives
2530 9th Avenue
Oakland CA

FACS Proj. No.: PJ46841

Sampled by: *GS/k*

Turnaround Time: RUSH 24 hr 48 hr Extended (days) 5 days

Analysis: PLM Standard _____ PLM with Point Count (_____ 400 pt. _____ 1,000 pt.)

Special Instructions E-mail results to E-mail results to wwong@forensicanalytical.com and marina.gonzalez-cortez@forensicanalytical.com

HA#	Homogeneous Material Description (incl. color, texture, phase of construction)	Quant. in SF (LF for small pipe only)	Friable/ Cat. I/ Cat. II	Condition (good, fair, poor)	Sample Number	Sample Location	Lab Result (when rcvd)
8	walk way cover				8-A19	west wing 1 st Floor	
9	Exterior water barrier				9-A20	East wing 1 st Floor	
					9-A21	west wing 1 st Floor East site	
					9-A22	East wing 3 rd Floor	
10	WT				10-A23	East wing 3 rd Floor Rm 305 west wall	
					10-A24	East wing 3 rd Floor Rm 303 master S. wall	
					10-A25	West wing 3 rd Fl - Rm 302 Bed 2 W. wall	
					10-A26	West wing 1 st Fl Rm 201 Master W. wall	
					10-A27	East wing 2 nd Fl Rm 204 Master S. wall	

DW = Drywall JC = Joint Compound WT = Wall Texture VFT = Vinyl Floor Tile VSF = Vinyl Sheet Flooring BB = Baseboard BBM = Baseboard Mastic CM = Carpet Mastic ACT = Acoustic Ceiling
Tile ACS = Sprayed-on Acoustical Ceiling Material FP = Fireproofing PI = Pipe Insulation PFI = Pipe fitting insulation WP = Plaster CP = Ceiling Plaster ES = Exterior Stucco

Relinquished by: _____ Date & Time: _____
Relinquished by: *GS/k* Date & Time: *5/19/20*
Received by: _____ Date & Time: _____
Received by: _____ Date & Time: _____



SAMPLING DATA FORM & CHAIN OF CUSTODY



CLIENT: HAY01 FACS San Francisco
California Affordable Housing Initiatives, Inc.
2530 9th Avenue
Oakland CA

Sampled by: GS/kw
Sample Date: 5/18/20
Turnaround Time: RUSH 24 hr 48 hr
Extended (days) 5 days
Analysis: **PLM Standard** _____ **PLM with Point Count** (_____ 400 pt. _____ 1,000 pt.)

Special Instructions E-mail results to E-mail results to wwong@forensicanalytical.com and marina.gonzalez-cortez@forensicanalytical.com

HA#	Homogeneous Material Description (incl. color, texture, phase of construction)	Quant. in SF (LF for small pipe only)	Friable/ Cat. I/ Cat. II	Condition (good, fair, poor)	Sample Number	Sample Location	Lab Result (when rcvd)
10	WT ↓				10-A28	East wing 1st Fl Rm 105 Bed 1 W. wall	
					10-A29	West wing 1st Fl Rm 102 Bed 2 W. wall	

Legend:
 DW = Drywall JC = Joint Compound WT = Wall Texture VFT = Vinyl Floor Tile VSF = Vinyl Sheet Flooring BB = Baseboard BBM = Baseboard Mastic CM = Carpet Mastic ACT = Acoustic Ceiling
 Tile ACS = Sprayed-on Acoustical Ceiling Material FP = Fireproofing PI = Pipe Insulation PFI = Pipe fitting insulation WP = Plaster CP = Ceiling Plaster ES = Exterior Stucco

Relinquished by: _____ **Date & Time:** _____
Received by: _____ **Date & Time:** _____





Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-0

Forensic Analytical Consulting Svcs
Wilson W Wong
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: B303955
Date Received: 05/19/20
Date Analyzed: 05/22/20
Date Printed: 05/26/20
First Reported: 05/26/20

Job ID/Site: PJ46841; California Affordable Housing Initiatives 2530 9th Avenue Oakland CA

SGSFL Job ID: HAY01
Total Samples Submitted: 29
Total Samples Analyzed: 29

Date(s) Collected: 05/15/2020

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
R-1-A01	12306910						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Beige Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (55 %) Fibrous Glass (10 %)							
Comment: Bulk complex sample.							
R-1-A02	12306911						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Beige Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (55 %) Fibrous Glass (10 %)							
Comment: Bulk complex sample.							
R-2-A03	12306912						
Layer: Stones			ND				
Layer: Black Semi-Fibrous Tar		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (5%)					
Cellulose (Trace)							
R-2-A04	12306913						
Layer: Stones			ND				
Layer: Black Semi-Fibrous Tar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Report Number: B303955

Client Name: Forensic Analytical Consulting Svcs

Date Printed: 05/26/20

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
R-3-A05	12306914						
Layer: Black Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
R-3-A06	12306915						
Layer: Black Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
R-4-A07	12306916						
Layer: Grey Roof Shingle			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (55 %) Fibrous Glass (10 %)							
R-4-A08	12306917						
Layer: Grey Roof Shingle			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (55 %) Fibrous Glass (10 %)							
5-A09	12306918						
Layer: Grey Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
5-A10	12306919						
Layer: Grey Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
6-A11	12306920						
Layer: Grey Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
6-A12	12306921						
Layer: Grey Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
6-A13	12306922						
Layer: Grey Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Report Number: B303955

Client Name: Forensic Analytical Consulting Svcs

Date Printed: 05/26/20

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
7-A14	12306923						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components: Cellulose (Trace)		Asbestos (ND)					
7-A15	12306924						
Layer: Grey Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components: Cellulose (Trace)		Asbestos (ND)					
7-A16	12306925						
Layer: Grey Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components: Cellulose (Trace)		Asbestos (ND)					
8-A17	12306926						
Layer: Grey Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components: Cellulose (Trace)		Asbestos (ND)					
8-A18	12306927						
Layer: Grey Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components: Cellulose (Trace)		Asbestos (ND)					
8-A19	12306928						
Layer: Grey Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components: Cellulose (Trace)		Asbestos (ND)					
9-A20	12306929						
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components: Cellulose (99 %)		Asbestos (ND)					
9-A21	12306930						
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components: Cellulose (99 %)		Asbestos (ND)					
9-A22	12306931						
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components: Cellulose (99 %)		Asbestos (ND)					

Report Number: B303955

Client Name: Forensic Analytical Consulting Svcs

Date Printed: 05/26/20

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
10-A23	12306932						
Layer: Off-White Texture			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
10-A24	12306933						
Layer: Off-White Texture			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
10-A25	12306934						
Layer: Off-White Texture		Chrysotile	2 %				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (2%)					
Cellulose (Trace)							
10-A26	12306935						
Layer: Off-White Texture		Chrysotile	2 %				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (2%)					
Cellulose (Trace)							
10-A27	12306936						
Layer: Off-White Texture		Chrysotile	2 %				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (2%)					
Cellulose (Trace)							
10-A28	12306937						
Layer: Off-White Texture		Chrysotile	2 %				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (2%)					
Cellulose (Trace)							
10-A29	12306938						
Layer: Off-White Texture		Chrysotile	2 %				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (2%)					
Cellulose (Trace)							



Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

Analytical results and reports are generated by SGS Forensic Laboratories (SGSFL) at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGSFL to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGSFL. The client is solely responsible for the use and interpretation of test results and reports requested from SGSFL. SGSFL is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. All samples were received in acceptable condition unless otherwise noted.

SAMPLING DATA FORM & CHAIN OF CUSTODY



CLIENT: HAY01 FACS San Francisco
California Affordable Housing Initiatives, Inc.
Initiatives
2530 9th Avenue
Oakland CA

Sampled by: *[Signature]* *GS/KM*
Sample Date: 5/18/20
Turnaround Time: RUSH 24 hr 48 hr Extended (5 days)
Analysis: PLM Standard PLM with Point Count (400 pt.) 1,000 pt.)

Special Instructions E-mail results to E-mail results to wwong@forensicanalytical.com and marina.gonzalez-cortez@forensicanalytical.com

HA#	Homogeneous Material Description (incl. color, texture, phase of construction)	Quant. in SF (LF for small pipe only)	Friable/ Cat. I/ Cat. II	Condition (good, fair, poor)	Sample Number	Sample Location	Lab Result (when rcvd)
11	WB & JC				11-A30	East wing Rm 305 Bed room NW corner	
					11-A31	East wing Rm 303 Master bed closet	
					11-A32	West wing Rm 302 Bed 2 SW corner	
					11-A33	West wing Rm 201 Master SW corner	
					11-A34	East wing Rm 204 Master NB corner	
					11-A35	East wing 1 st Fl rm 105 Bed 1 NW corner	
					11-A36	West wing 1 st Fl rm 104 Bed 2 SE corner	

Legend: DW = Drywall, JC = Joint Compound, WT = Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling, Tile, ACS = Sprayed-on Acoustical Ceiling Material, FP = Fireproofing, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: *[Signature]* Date & Time: *[Signature]*
 Relinquished by: *[Signature]* Date & Time: *[Signature]*
 Received by: *[Signature]* Date & Time: *[Signature]*





Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-0

Forensic Analytical Consulting Svcs
Wilson W Wong
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: B303963
Date Received: 05/19/20
Date Analyzed: 05/26/20
Date Printed: 05/27/20
First Reported: 05/27/20

Job ID/Site: PJ46841; California Affordable Housing Initiatives 2530 9th Avenue Oakland CA

SGSFL Job ID: HAY01

Date(s) Collected: 05/18/2020

Total Samples Submitted: 7

Total Samples Analyzed: 7

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
11-A30	12307005						
Layer: White Drywall			ND				
Layer: White Joint Compound		Chrysotile	2 %				
Layer: Beige Tape			ND				
Layer: White Joint Compound		Chrysotile	2 %				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (20 %)	Fibrous Glass (10 %)						
11-A31	12307006						
Layer: White Drywall			ND				
Layer: White Joint Compound		Chrysotile	2 %				
Layer: Beige Tape			ND				
Layer: White Joint Compound		Chrysotile	2 %				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (20 %)	Fibrous Glass (10 %)						
11-A32	12307007						
Layer: White Drywall			ND				
Layer: White Joint Compound		Chrysotile	2 %				
Layer: Beige Tape			ND				
Layer: White Joint Compound		Chrysotile	2 %				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (20 %)	Fibrous Glass (10 %)						
11-A33	12307008						
Layer: White Drywall			ND				
Layer: White Joint Compound		Chrysotile	2 %				
Layer: Beige Tape			ND				
Layer: White Joint Compound		Chrysotile	2 %				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (20 %)	Fibrous Glass (10 %)						

Report Number: B303963

Client Name: Forensic Analytical Consulting Svcs

Date Printed: 05/27/20

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
11-A34	12307009						
Layer: White Drywall			ND				
Layer: White Joint Compound		Chrysotile	2 %				
Layer: Beige Tape			ND				
Layer: White Joint Compound		Chrysotile	2 %				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (20 %)	Fibrous Glass (10 %)						
11-A35	12307010						
Layer: White Drywall			ND				
Layer: White Joint Compound		Chrysotile	2 %				
Layer: Beige Tape			ND				
Layer: White Joint Compound		Chrysotile	2 %				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (20 %)	Fibrous Glass (10 %)						
11-A36	12307011						
Layer: White Drywall			ND				
Layer: White Joint Compound		Chrysotile	2 %				
Layer: Beige Tape			ND				
Layer: White Joint Compound		Chrysotile	2 %				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (20 %)	Fibrous Glass (10 %)						



Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

Analytical results and reports are generated by SGS Forensic Laboratories (SGSFL) at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGSFL to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGSFL. The client is solely responsible for the use and interpretation of test results and reports requested from SGSFL. SGSFL is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. All samples were received in acceptable condition unless otherwise noted.

SAMPLING DATA FORM & CHAIN OF CUSTODY



CLIENT: HAY01 FACS San Francisco
California Affordable Housing Initiatives, Inc.
Initiatives
2530 9th Avenue
Oakland CA

Sampled by: *[Signature]* *GS/KM*
Sample Date: 5/18/20
Turnaround Time: RUSH 24 hr 48 hr Extended (5 days)
Analysis: PLM Standard PLM with Point Count (400 pt.) 1,000 pt.)

Special Instructions E-mail results to E-mail results to wwong@forensicanalytical.com and marina.gonzalez-cortez@forensicanalytical.com

HA#	Homogeneous Material Description (incl. color, texture, phase of construction)	Quant. in SF (LF for small pipe only)	Friable/ Cat. I/ Cat. II	Condition (good, fair, poor)	Sample Number	Sample Location	Lab Result (when rcvd)
11	WB & JC				11-A30	East wing Rm 305 Bed room NW corner	
					11-A31	East wing Rm 303 Master bed closet	
					11-A32	West wing Rm 302 Bed 2 SW corner	
					11-A33	West wing Rm 201 Master SW corner	
					11-A34	East wing Rm 204 Master NB corner	
					11-A35	East wing 1 st Fl rm 105 Bed 1 NW corner	
					11-A36	West wing 1 st Fl rm 107 Bed 2 SE corner	

Legend: DW = Drywall, JC = Joint Compound, WT = Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling, Tile, ACS = Sprayed-on Acoustical Ceiling Material, FP = Fireproofing, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: *[Signature]* Date & Time: *[Signature]*
 Relinquished by: *[Signature]* Date & Time: *[Signature]*
 Received by: *[Signature]* Date & Time: *[Signature]*

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Bulk Asbestos Point Count Analysis

(NESHAP Final Rule, 40 CFR, Part 61)

Forensic Analytical Consulting Svcs
Wilson W Wong
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: N013008
Date Received: 05/27/20
Date Analyzed: 05/27/20
Date Printed: 05/27/20

Job ID/Site: PJ46841; California Affordable Housing Initiatives 2530 9th Avenue Oakland
CA

PLM Report Number: B303963

SGSFL Job ID: HAY01
Total Samples Submitted: 7
Total Samples Analyzed: 7

Sample Preparation and Analysis:

The NESHAP Final Rule does not define the preparation method for multi-layered samples. In order to determine the composite quantity of asbestos, the volume percent of each layer is determined, the asbestos containing layers are analyzed by point counting and the composite quantity of asbestos is calculated. The NESHAP Final Rule can not be applied to matrices that dissolve in refractive index liquid. This includes tar, mastic or adhesive typically found on the back of floor tiles. According to the NESHAP Final Rule, point count data is only necessary when the visual estimate of asbestos is below 10%.

Sample ID	Lab Number	Layer Description
11-A30	12307005	Composite of ALL Layers White Drywall White Joint Compound Beige Tape White Joint Compound Paint

Point Count Results:

Number of asbestos points counted: 0
Number of non-empty points: 400
Layer percentage of entire sample: 100
Percent asbestos in layer: < 1

Asbestos type(s) detected: Chrysotile

Comment: Asbestos was detected but no points were counted due to counting criteria. Therefore quantitation deemed to be < 1%.

11-A31	12307006	Composite of ALL Layers White Drywall White Joint Compound Beige Tape White Joint Compound Paint
---------------	----------	--

Point Count Results:

Number of asbestos points counted: 0
Number of non-empty points: 400
Layer percentage of entire sample: 100
Percent asbestos in layer: < 1

Asbestos type(s) detected: Chrysotile

Comment: Asbestos was detected but no points were counted due to counting criteria. Therefore quantitation deemed to be < 1%.



Bulk Asbestos Point Count Analysis

(NESHAP Final Rule, 40 CFR, Part 61)

Forensic Analytical Consulting Svcs
Wilson W Wong
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: N013008
Date Received: 05/27/20
Date Analyzed: 05/27/20
Date Printed: 05/27/20

Job ID/Site: PJ46841; California Affordable Housing Initiatives 2530 9th Avenue Oakland
CA

PLM Report Number: B303963

SGSFL Job ID: HAY01
Total Samples Submitted: 7
Total Samples Analyzed: 7

Sample Preparation and Analysis:

The NESHAP Final Rule does not define the preparation method for multi-layered samples. In order to determine the composite quantity of asbestos, the volume percent of each layer is determined, the asbestos containing layers are analyzed by point counting and the composite quantity of asbestos is calculated. The NESHAP Final Rule can not be applied to matrices that dissolve in refractive index liquid. This includes tar, mastic or adhesive typically found on the back of floor tiles. According to the NESHAP Final Rule, point count data is only necessary when the visual estimate of asbestos is below 10%.

Sample ID	Lab Number	Layer Description
11-A32	12307007	Composite of ALL Layers White Drywall White Joint Compound Beige Tape White Joint Compound Paint

Point Count Results:

Number of asbestos points counted: 0
Number of non-empty points: 400
Layer percentage of entire sample: 100
Percent asbestos in layer: < 1

Asbestos type(s) detected: Chrysotile

Comment: Asbestos was detected but no points were counted due to counting criteria. Therefore quantitation deemed to be < 1%.

11-A33	12307008	Composite of ALL Layers White Drywall White Joint Compound Beige Tape White Joint Compound Paint
---------------	----------	--

Point Count Results:

Number of asbestos points counted: 0
Number of non-empty points: 400
Layer percentage of entire sample: 100
Percent asbestos in layer: < 1

Asbestos type(s) detected: Chrysotile

Comment: Asbestos was detected but no points were counted due to counting criteria. Therefore quantitation deemed to be < 1%.



Bulk Asbestos Point Count Analysis

(NESHAP Final Rule, 40 CFR, Part 61)

Forensic Analytical Consulting Svcs
Wilson W Wong
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: N013008
Date Received: 05/27/20
Date Analyzed: 05/27/20
Date Printed: 05/27/20

Job ID/Site: PJ46841; California Affordable Housing Initiatives 2530 9th Avenue Oakland
CA

PLM Report Number: B303963

SGSFL Job ID: HAY01
Total Samples Submitted: 7
Total Samples Analyzed: 7

Sample Preparation and Analysis:

The NESHAP Final Rule does not define the preparation method for multi-layered samples. In order to determine the composite quantity of asbestos, the volume percent of each layer is determined, the asbestos containing layers are analyzed by point counting and the composite quantity of asbestos is calculated. The NESHAP Final Rule can not be applied to matrices that dissolve in refractive index liquid. This includes tar, mastic or adhesive typically found on the back of floor tiles. According to the NESHAP Final Rule, point count data is only necessary when the visual estimate of asbestos is below 10%.

Sample ID	Lab Number	Layer Description
11-A34	12307009	Composite of ALL Layers White Drywall White Joint Compound Beige Tape White Joint Compound Paint

Point Count Results:

Number of asbestos points counted: 0
Number of non-empty points: 400
Layer percentage of entire sample: 100
Percent asbestos in layer: < 1

Asbestos type(s) detected: Chrysotile

Comment: Asbestos was detected but no points were counted due to counting criteria. Therefore quantitation deemed to be < 1%.

11-A35	12307010	Composite of ALL Layers White Drywall White Joint Compound Beige Tape White Joint Compound Paint
---------------	----------	--

Point Count Results:

Number of asbestos points counted: 0
Number of non-empty points: 400
Layer percentage of entire sample: 100
Percent asbestos in layer: < 1

Asbestos type(s) detected: Chrysotile

Comment: Asbestos was detected but no points were counted due to counting criteria. Therefore quantitation deemed to be < 1%.



Bulk Asbestos Point Count Analysis

(NESHAP Final Rule, 40 CFR, Part 61)

Forensic Analytical Consulting Svcs
Wilson W Wong
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: N013008
Date Received: 05/27/20
Date Analyzed: 05/27/20
Date Printed: 05/27/20

Job ID/Site: PJ46841; California Affordable Housing Initiatives 2530 9th Avenue Oakland
CA

PLM Report Number: B303963

SGSFL Job ID: HAY01
Total Samples Submitted: 7
Total Samples Analyzed: 7

Sample Preparation and Analysis:

The NESHAP Final Rule does not define the preparation method for multi-layered samples. In order to determine the composite quantity of asbestos, the volume percent of each layer is determined, the asbestos containing layers are analyzed by point counting and the composite quantity of asbestos is calculated. The NESHAP Final Rule can not be applied to matrices that dissolve in refractive index liquid. This includes tar, mastic or adhesive typically found on the back of floor tiles. According to the NESHAP Final Rule, point count data is only necessary when the visual estimate of asbestos is below 10%.

Sample ID	Lab Number	Layer Description
11-A36	12307011	Composite of ALL Layers White Drywall White Joint Compound Beige Tape White Joint Compound Paint

Point Count Results:

Number of asbestos points counted: 0
Number of non-empty points: 400
Layer percentage of entire sample: 100
Percent asbestos in layer: < 1

Asbestos type(s) detected: Chrysotile

Comment: Asbestos was detected but no points were counted due to counting criteria. Therefore quantitation deemed to be < 1%.

Note: Point count results are reported to the nearest percent per EPA method.

Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification (LOQ) = 1%. Trace denotes the presence of asbestos below the LOQ. ND = None Detected.

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SAMPLING DATA FORM & CHAIN OF CUSTODY

CLIENT: HAY01 FACS San Francisco California Affordable Housing Initiatives, Inc.		Sampled by: Kris Maglione		Sample Date: 5/18/20			
Site/Bldg.: California Affordable Housing Initiatives 2530 9th Avenue Oakland CA		Turnaround Time: RUSH 24 hr 48 hr Extended () days					
FACS Proj. No.: PJ46841		Analysis: <input checked="" type="checkbox"/> PLM Standard <input type="checkbox"/> PLM with Point Count (400 pt. 5 1,000 pt.)					
Special Instructions E-mail results to E-mail results to wwrong@forensicanalytical.com and marina.gonzalez-cortez@forensicanalytical.com							
HA#	Homogeneous Material Description (incl. color, texture, phase of construction)	Quant. in SF (LF for small pipe only)	Friable/ Cat. I/ Cat. II	Condition (good, fair, poor)	Sample Number	Sample Location	Lab Result (when rcvd)
12	Sheet Soil	-	F	G	12-A37	EAST WING, Rear yard, NE area.	
					12-A38	• adj. to unit #104 Rear	
					12-A39	, adj. to unit #103 Rear	
					12-A40	East wing, planter area, Adj. to Stairwell	
					12-A41	✓ , Adj. to unit #103 front	
					12-A42	West wing, planter area, adj. to courtyard	
					12-A43	West wing, Side yard area, Adj. to unit 102	
					12-A44	✓ , Adj. to unit 101	
					12-A45	✓ , SW corner	

DW = Drywall JC = Joint Compound WT = Wall Texture VFT = Vinyl Floor Tile VSF = Vinyl Sheet Flooring BB = Baseboard BBM = Baseboard Mastic CM = Carpet Mastic ACT = Acoustic Ceiling
 Tile ACS = Sprayed-on Acoustical Ceiling Material FP = Fireproofing PI = Pipe Insulation PFI = Pipe fitting insulation WP = Plaster CP = Ceiling Plaster ES = Exterior Stucco

Relinquished by: [Signature] 5/18/20
Date & Time:

Received by: [Signature] 5/19/20
Date & Time:

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Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-0

Forensic Analytical Consulting Svcs
Wilson W Wong
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: B303964
Date Received: 05/19/20
Date Analyzed: 05/27/20
Date Printed: 05/27/20
First Reported: 05/27/20

Job ID/Site: PJ46841; California Affordable Housing Initiatives 2530 9th Avenue Oakland CA

SGSFL Job ID: HAY01
Total Samples Submitted: 9
Total Samples Analyzed: 9

Date(s) Collected: 05/18/2020

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
12-A37	12307012						
Layer: Dark Brown Soil			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
12-A38	12307013						
Layer: Dark Brown Soil			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
12-A39	12307014						
Layer: Dark Brown Soil			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
12-A40	12307015						
Layer: Dark Brown Soil			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
12-A41	12307016						
Layer: Dark Brown Soil			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
12-A42	12307017						
Layer: Dark Brown Soil			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
12-A43	12307018						
Layer: Dark Brown Soil			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
12-A44	12307019						
Layer: Dark Brown Soil			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Report Number: B303964**Client Name:** Forensic Analytical Consulting Svcs**Date Printed:** 05/27/20

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
12-A45	12307020						
Layer: Dark Brown Soil			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							



Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

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Environment Testing
America

ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-28712-1
Client Project/Site: PJ46841

For:
Forensic Analytical Consulting Services
21228 Cabot Blvd
Hayward, California 94544

Attn: Mr. Wilson Wong

Authorized for release by:
5/27/2020 3:12:19 PM

Carla Hollowell, Project Manager I
(714)895-5494
carlahollowell@eurofinsus.com



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www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate recovery exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Job ID: 570-28712-1

Laboratory: Eurofins Calscience LLC

Narrative

Job Narrative 570-28712-1

Receipt

The samples were received on 5/20/2020 10:00 AM; the samples arrived in good condition, properly preserved, and where required, on ice. The temperature of the cooler at receipt time was 2.3°C.

Receipt Exceptions

No number of container listed on COC: PCB-1 (570-28712-1), PCB-2 (570-28712-2), PCB-3 (570-28712-3), PCB-4 (570-28712-4), PCB-5 (570-28712-5), PCB-6 (570-28712-6), PCB-7 (570-28712-7), PCB-8 (570-28712-8), PCB-9 (570-28712-9), PCB-10 (570-28712-10), PCB-11 (570-28712-11), PCB-12 (570-28712-12), PCB-13 (570-28712-13), PCB-14 (570-28712-14), PCB-15 (570-28712-15), PCB-16 (570-28712-16), PCB-17 (570-28712-17), PCB-18 (570-28712-18), PCB-19 (570-28712-19), PCB-20 (570-28712-20), PCB-21 (570-28712-21), PCB-22 (570-28712-22), PCB-23 (570-28712-23), PCB-24 (570-28712-24), PCB-25 (570-28712-25), PCB-26 (570-28712-26) and PCB-27 (570-28712-27).

PCBs

Method 8082: Due to the matrix, the following samples could not be concentrated to the final method required volume: PCB-1 (570-28712-1), PCB-2 (570-28712-2), PCB-3 (570-28712-3), PCB-4 (570-28712-4), PCB-5 (570-28712-5), PCB-6 (570-28712-6), PCB-14 (570-28712-14) and PCB-15 (570-28712-15). The reporting limits (RLs) are elevated proportionately. Final volume was changed from 10ml to 20ml due sample consistency.

Method 8082: The following samples were diluted due to the nature of the sample matrix: PCB-16 (570-28712-16), PCB-17 (570-28712-17) and PCB-18 (570-28712-18). Elevated reporting limits (RLs) are provided.

Method 8082: Surrogate recovery for the following sample was outside control limits: PCB-17 (570-28712-17). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8082: The following sample appears to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the sample do not closely match any of the laboratory's Aroclor standards used for instrument calibration: PCB-9 (570-28712-9). The sample(s) has been quantified and reported as Aroclor 1262. Due to the poor match with the Aroclor standard(s), there is increased qualitative and quantitative uncertainty associated with this result.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: PCB-1
Date Collected: 05/15/20 07:56
Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 17:39	1
Aroclor-1221	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 17:39	1
Aroclor-1232	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 17:39	1
Aroclor-1242	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 17:39	1
Aroclor-1248	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 17:39	1
Aroclor-1254	ND		1.9	0.59	mg/Kg		05/20/20 18:36	05/22/20 17:39	1
Aroclor-1260	ND		1.9	0.59	mg/Kg		05/20/20 18:36	05/22/20 17:39	1
Aroclor-1262	ND		1.9	0.59	mg/Kg		05/20/20 18:36	05/22/20 17:39	1
Aroclor-1268	ND		1.9	0.59	mg/Kg		05/20/20 18:36	05/22/20 17:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	83		20 - 155				05/20/20 18:36	05/22/20 17:39	1
Tetrachloro-m-xylene (Surr)	74		25 - 126				05/20/20 18:36	05/22/20 17:39	1

Client Sample ID: PCB-2
Date Collected: 05/15/20 08:17
Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 17:57	1
Aroclor-1221	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 17:57	1
Aroclor-1232	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 17:57	1
Aroclor-1242	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 17:57	1
Aroclor-1248	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 17:57	1
Aroclor-1254	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 17:57	1
Aroclor-1260	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 17:57	1
Aroclor-1262	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 17:57	1
Aroclor-1268	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 17:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	67		20 - 155				05/20/20 18:36	05/22/20 17:57	1
Tetrachloro-m-xylene (Surr)	63		25 - 126				05/20/20 18:36	05/22/20 17:57	1

Client Sample ID: PCB-3
Date Collected: 05/15/20 08:23
Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-3
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		1.9	0.51	mg/Kg		05/20/20 18:36	05/22/20 18:15	1
Aroclor-1221	ND		1.9	0.51	mg/Kg		05/20/20 18:36	05/22/20 18:15	1
Aroclor-1232	ND		1.9	0.51	mg/Kg		05/20/20 18:36	05/22/20 18:15	1
Aroclor-1242	ND		1.9	0.51	mg/Kg		05/20/20 18:36	05/22/20 18:15	1
Aroclor-1248	ND		1.9	0.51	mg/Kg		05/20/20 18:36	05/22/20 18:15	1
Aroclor-1254	ND		1.9	0.57	mg/Kg		05/20/20 18:36	05/22/20 18:15	1
Aroclor-1260	ND		1.9	0.57	mg/Kg		05/20/20 18:36	05/22/20 18:15	1
Aroclor-1262	ND		1.9	0.57	mg/Kg		05/20/20 18:36	05/22/20 18:15	1
Aroclor-1268	ND		1.9	0.57	mg/Kg		05/20/20 18:36	05/22/20 18:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	84		20 - 155				05/20/20 18:36	05/22/20 18:15	1
Tetrachloro-m-xylene (Surr)	83		25 - 126				05/20/20 18:36	05/22/20 18:15	1

Client Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: PCB-4
Date Collected: 05/15/20 07:51
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-4
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		2.0	0.53	mg/Kg		05/20/20 18:36	05/22/20 18:33	1
Aroclor-1221	ND		2.0	0.53	mg/Kg		05/20/20 18:36	05/22/20 18:33	1
Aroclor-1232	ND		2.0	0.53	mg/Kg		05/20/20 18:36	05/22/20 18:33	1
Aroclor-1242	ND		2.0	0.53	mg/Kg		05/20/20 18:36	05/22/20 18:33	1
Aroclor-1248	ND		2.0	0.53	mg/Kg		05/20/20 18:36	05/22/20 18:33	1
Aroclor-1254	ND		2.0	0.59	mg/Kg		05/20/20 18:36	05/22/20 18:33	1
Aroclor-1260	ND		2.0	0.59	mg/Kg		05/20/20 18:36	05/22/20 18:33	1
Aroclor-1262	ND		2.0	0.59	mg/Kg		05/20/20 18:36	05/22/20 18:33	1
Aroclor-1268	ND		2.0	0.59	mg/Kg		05/20/20 18:36	05/22/20 18:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	84		20 - 155				05/20/20 18:36	05/22/20 18:33	1
Tetrachloro-m-xylene (Surr)	83		25 - 126				05/20/20 18:36	05/22/20 18:33	1

Client Sample ID: PCB-5
Date Collected: 05/15/20 08:20
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		1.9	0.51	mg/Kg		05/20/20 18:36	05/22/20 18:51	1
Aroclor-1221	ND		1.9	0.51	mg/Kg		05/20/20 18:36	05/22/20 18:51	1
Aroclor-1232	ND		1.9	0.51	mg/Kg		05/20/20 18:36	05/22/20 18:51	1
Aroclor-1242	ND		1.9	0.51	mg/Kg		05/20/20 18:36	05/22/20 18:51	1
Aroclor-1248	ND		1.9	0.51	mg/Kg		05/20/20 18:36	05/22/20 18:51	1
Aroclor-1254	ND		1.9	0.57	mg/Kg		05/20/20 18:36	05/22/20 18:51	1
Aroclor-1260	ND		1.9	0.57	mg/Kg		05/20/20 18:36	05/22/20 18:51	1
Aroclor-1262	ND		1.9	0.57	mg/Kg		05/20/20 18:36	05/22/20 18:51	1
Aroclor-1268	ND		1.9	0.57	mg/Kg		05/20/20 18:36	05/22/20 18:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	85		20 - 155				05/20/20 18:36	05/22/20 18:51	1
Tetrachloro-m-xylene (Surr)	92		25 - 126				05/20/20 18:36	05/22/20 18:51	1

Client Sample ID: PCB-6
Date Collected: 05/15/20 08:22
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-6
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 19:09	1
Aroclor-1221	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 19:09	1
Aroclor-1232	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 19:09	1
Aroclor-1242	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 19:09	1
Aroclor-1248	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 19:09	1
Aroclor-1254	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 19:09	1
Aroclor-1260	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 19:09	1
Aroclor-1262	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 19:09	1
Aroclor-1268	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 19:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	79		20 - 155				05/20/20 18:36	05/22/20 19:09	1
Tetrachloro-m-xylene (Surr)	88		25 - 126				05/20/20 18:36	05/22/20 19:09	1

Client Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: PCB-7
Date Collected: 05/15/20 07:39
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-7
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:14	1
Aroclor-1221	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:14	1
Aroclor-1232	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:14	1
Aroclor-1242	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:14	1
Aroclor-1248	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:14	1
Aroclor-1254	ND		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 13:14	1
Aroclor-1260	ND		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 13:14	1
Aroclor-1262	11		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 13:14	1
Aroclor-1268	ND		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 13:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	135		20 - 155				05/20/20 18:36	05/22/20 13:14	1
Tetrachloro-m-xylene (Surr)	100		25 - 126				05/20/20 18:36	05/22/20 13:14	1

Client Sample ID: PCB-8
Date Collected: 05/15/20 08:45
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-8
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.98	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:33	1
Aroclor-1221	ND		0.98	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:33	1
Aroclor-1232	ND		0.98	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:33	1
Aroclor-1242	ND		0.98	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:33	1
Aroclor-1248	ND		0.98	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:33	1
Aroclor-1254	ND		0.98	0.30	mg/Kg		05/20/20 18:36	05/22/20 13:33	1
Aroclor-1260	ND		0.98	0.30	mg/Kg		05/20/20 18:36	05/22/20 13:33	1
Aroclor-1262	2.5		0.98	0.30	mg/Kg		05/20/20 18:36	05/22/20 13:33	1
Aroclor-1268	ND		0.98	0.30	mg/Kg		05/20/20 18:36	05/22/20 13:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	96		20 - 155				05/20/20 18:36	05/22/20 13:33	1
Tetrachloro-m-xylene (Surr)	93		25 - 126				05/20/20 18:36	05/22/20 13:33	1

Client Sample ID: PCB-9
Date Collected: 05/15/20 08:42
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-9
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.96	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:52	1
Aroclor-1221	ND		0.96	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:52	1
Aroclor-1232	ND		0.96	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:52	1
Aroclor-1242	ND		0.96	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:52	1
Aroclor-1248	ND		0.96	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:52	1
Aroclor-1254	ND		0.96	0.29	mg/Kg		05/20/20 18:36	05/22/20 13:52	1
Aroclor-1260	ND		0.96	0.29	mg/Kg		05/20/20 18:36	05/22/20 13:52	1
Aroclor-1262	27		4.8	1.5	mg/Kg		05/20/20 18:36	05/26/20 10:20	5
Aroclor-1268	ND		0.96	0.29	mg/Kg		05/20/20 18:36	05/22/20 13:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	144		20 - 155				05/20/20 18:36	05/22/20 13:52	1
DCB Decachlorobiphenyl (Surr)	135		20 - 155				05/20/20 18:36	05/26/20 10:20	5
Tetrachloro-m-xylene (Surr)	98		25 - 126				05/20/20 18:36	05/22/20 13:52	1
Tetrachloro-m-xylene (Surr)	108		25 - 126				05/20/20 18:36	05/26/20 10:20	5

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Client Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: PCB-10
Date Collected: 05/15/20 08:15
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-10
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:11	1
Aroclor-1221	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:11	1
Aroclor-1232	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:11	1
Aroclor-1242	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:11	1
Aroclor-1248	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:11	1
Aroclor-1254	ND		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 14:11	1
Aroclor-1260	ND		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 14:11	1
Aroclor-1262	ND		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 14:11	1
Aroclor-1268	ND		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 14:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	149		20 - 155				05/20/20 18:36	05/22/20 14:11	1
Tetrachloro-m-xylene (Surr)	97		25 - 126				05/20/20 18:36	05/22/20 14:11	1

Client Sample ID: PCB-11
Date Collected: 05/15/20 08:20
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-11
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.98	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:30	1
Aroclor-1221	ND		0.98	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:30	1
Aroclor-1232	ND		0.98	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:30	1
Aroclor-1242	ND		0.98	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:30	1
Aroclor-1248	ND		0.98	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:30	1
Aroclor-1254	ND		0.98	0.30	mg/Kg		05/20/20 18:36	05/22/20 14:30	1
Aroclor-1260	ND		0.98	0.30	mg/Kg		05/20/20 18:36	05/22/20 14:30	1
Aroclor-1262	ND		0.98	0.30	mg/Kg		05/20/20 18:36	05/22/20 14:30	1
Aroclor-1268	ND		0.98	0.30	mg/Kg		05/20/20 18:36	05/22/20 14:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	126		20 - 155				05/20/20 18:36	05/22/20 14:30	1
Tetrachloro-m-xylene (Surr)	108		25 - 126				05/20/20 18:36	05/22/20 14:30	1

Client Sample ID: PCB-12
Date Collected: 05/15/20 09:10
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-12
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.96	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:49	1
Aroclor-1221	ND		0.96	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:49	1
Aroclor-1232	ND		0.96	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:49	1
Aroclor-1242	ND		0.96	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:49	1
Aroclor-1248	ND		0.96	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:49	1
Aroclor-1254	ND		0.96	0.29	mg/Kg		05/20/20 18:36	05/22/20 14:49	1
Aroclor-1260	ND		0.96	0.29	mg/Kg		05/20/20 18:36	05/22/20 14:49	1
Aroclor-1262	ND		0.96	0.29	mg/Kg		05/20/20 18:36	05/22/20 14:49	1
Aroclor-1268	ND		0.96	0.29	mg/Kg		05/20/20 18:36	05/22/20 14:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	128		20 - 155				05/20/20 18:36	05/22/20 14:49	1
Tetrachloro-m-xylene (Surr)	102		25 - 126				05/20/20 18:36	05/22/20 14:49	1

Client Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: PCB-13
Date Collected: 05/15/20 11:40
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-13
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 19:27	1
Aroclor-1221	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 19:27	1
Aroclor-1232	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 19:27	1
Aroclor-1242	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 19:27	1
Aroclor-1248	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 19:27	1
Aroclor-1254	ND		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 19:27	1
Aroclor-1260	ND		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 19:27	1
Aroclor-1262	ND		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 19:27	1
Aroclor-1268	ND		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 19:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	69		20 - 155				05/20/20 18:36	05/22/20 19:27	1
Tetrachloro-m-xylene (Surr)	87		25 - 126				05/20/20 18:36	05/22/20 19:27	1

Client Sample ID: PCB-14
Date Collected: 05/15/20 11:23
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-14
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 19:45	1
Aroclor-1221	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 19:45	1
Aroclor-1232	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 19:45	1
Aroclor-1242	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 19:45	1
Aroclor-1248	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 19:45	1
Aroclor-1254	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 19:45	1
Aroclor-1260	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 19:45	1
Aroclor-1262	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 19:45	1
Aroclor-1268	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 19:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	71		20 - 155				05/20/20 18:36	05/22/20 19:45	1
Tetrachloro-m-xylene (Surr)	87		25 - 126				05/20/20 18:36	05/22/20 19:45	1

Client Sample ID: PCB-15
Date Collected: 05/15/20 12:06
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-15
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 20:03	1
Aroclor-1221	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 20:03	1
Aroclor-1232	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 20:03	1
Aroclor-1242	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 20:03	1
Aroclor-1248	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 20:03	1
Aroclor-1254	ND		1.9	0.59	mg/Kg		05/20/20 18:36	05/22/20 20:03	1
Aroclor-1260	ND		1.9	0.59	mg/Kg		05/20/20 18:36	05/22/20 20:03	1
Aroclor-1262	ND		1.9	0.59	mg/Kg		05/20/20 18:36	05/22/20 20:03	1
Aroclor-1268	ND		1.9	0.59	mg/Kg		05/20/20 18:36	05/22/20 20:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	86		20 - 155				05/20/20 18:36	05/22/20 20:03	1
Tetrachloro-m-xylene (Surr)	105		25 - 126				05/20/20 18:36	05/22/20 20:03	1

Client Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: PCB-16
Date Collected: 05/15/20 10:50
Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-16
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		98	26	mg/Kg		05/20/20 18:51	05/26/20 10:37	100
Aroclor-1221	ND		98	26	mg/Kg		05/20/20 18:51	05/26/20 10:37	100
Aroclor-1232	ND		98	26	mg/Kg		05/20/20 18:51	05/26/20 10:37	100
Aroclor-1242	ND		98	26	mg/Kg		05/20/20 18:51	05/26/20 10:37	100
Aroclor-1248	ND		98	26	mg/Kg		05/20/20 18:51	05/26/20 10:37	100
Aroclor-1254	ND		98	30	mg/Kg		05/20/20 18:51	05/26/20 10:37	100
Aroclor-1260	ND		98	30	mg/Kg		05/20/20 18:51	05/26/20 10:37	100
Aroclor-1262	ND		98	30	mg/Kg		05/20/20 18:51	05/26/20 10:37	100
Aroclor-1268	ND		98	30	mg/Kg		05/20/20 18:51	05/26/20 10:37	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	47		20 - 155				05/20/20 18:51	05/26/20 10:37	100
Tetrachloro-m-xylene (Surr)	125		25 - 126				05/20/20 18:51	05/26/20 10:37	100

Client Sample ID: PCB-17
Date Collected: 05/15/20 11:38
Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-17
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		96	26	mg/Kg		05/20/20 18:51	05/26/20 10:56	100
Aroclor-1221	ND		96	26	mg/Kg		05/20/20 18:51	05/26/20 10:56	100
Aroclor-1232	ND		96	26	mg/Kg		05/20/20 18:51	05/26/20 10:56	100
Aroclor-1242	ND		96	26	mg/Kg		05/20/20 18:51	05/26/20 10:56	100
Aroclor-1248	ND		96	26	mg/Kg		05/20/20 18:51	05/26/20 10:56	100
Aroclor-1254	ND		96	29	mg/Kg		05/20/20 18:51	05/26/20 10:56	100
Aroclor-1260	ND		96	29	mg/Kg		05/20/20 18:51	05/26/20 10:56	100
Aroclor-1262	ND		96	29	mg/Kg		05/20/20 18:51	05/26/20 10:56	100
Aroclor-1268	ND		96	29	mg/Kg		05/20/20 18:51	05/26/20 10:56	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	134		20 - 155				05/20/20 18:51	05/26/20 10:56	100
Tetrachloro-m-xylene (Surr)	146	X	25 - 126				05/20/20 18:51	05/26/20 10:56	100

Client Sample ID: PCB-18
Date Collected: 05/15/20 11:48
Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-18
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		94	25	mg/Kg		05/20/20 18:51	05/26/20 11:13	100
Aroclor-1221	ND		94	25	mg/Kg		05/20/20 18:51	05/26/20 11:13	100
Aroclor-1232	ND		94	25	mg/Kg		05/20/20 18:51	05/26/20 11:13	100
Aroclor-1242	ND		94	25	mg/Kg		05/20/20 18:51	05/26/20 11:13	100
Aroclor-1248	ND		94	25	mg/Kg		05/20/20 18:51	05/26/20 11:13	100
Aroclor-1254	ND		94	29	mg/Kg		05/20/20 18:51	05/26/20 11:13	100
Aroclor-1260	ND		94	29	mg/Kg		05/20/20 18:51	05/26/20 11:13	100
Aroclor-1262	ND		94	29	mg/Kg		05/20/20 18:51	05/26/20 11:13	100
Aroclor-1268	ND		94	29	mg/Kg		05/20/20 18:51	05/26/20 11:13	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	48		20 - 155				05/20/20 18:51	05/26/20 11:13	100
Tetrachloro-m-xylene (Surr)	115		25 - 126				05/20/20 18:51	05/26/20 11:13	100

Client Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: PCB-19
Date Collected: 05/18/20 07:30
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-19
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.049	0.013	mg/Kg		05/20/20 18:51	05/22/20 20:21	1
Aroclor-1221	ND		0.049	0.013	mg/Kg		05/20/20 18:51	05/22/20 20:21	1
Aroclor-1232	ND		0.049	0.013	mg/Kg		05/20/20 18:51	05/22/20 20:21	1
Aroclor-1242	ND		0.049	0.013	mg/Kg		05/20/20 18:51	05/22/20 20:21	1
Aroclor-1248	ND		0.049	0.013	mg/Kg		05/20/20 18:51	05/22/20 20:21	1
Aroclor-1254	ND		0.049	0.015	mg/Kg		05/20/20 18:51	05/22/20 20:21	1
Aroclor-1260	ND		0.049	0.015	mg/Kg		05/20/20 18:51	05/22/20 20:21	1
Aroclor-1262	ND		0.049	0.015	mg/Kg		05/20/20 18:51	05/22/20 20:21	1
Aroclor-1268	ND		0.049	0.015	mg/Kg		05/20/20 18:51	05/22/20 20:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	74		20 - 155				05/20/20 18:51	05/22/20 20:21	1
Tetrachloro-m-xylene (Surr)	89		25 - 126				05/20/20 18:51	05/22/20 20:21	1

Client Sample ID: PCB-20
Date Collected: 05/18/20 08:11
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-20
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:23	1
Aroclor-1221	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:23	1
Aroclor-1232	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:23	1
Aroclor-1242	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:23	1
Aroclor-1248	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:23	1
Aroclor-1254	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:23	1
Aroclor-1260	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:23	1
Aroclor-1262	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:23	1
Aroclor-1268	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	88		20 - 155				05/20/20 18:52	05/22/20 12:23	1
Tetrachloro-m-xylene (Surr)	91		25 - 126				05/20/20 18:52	05/22/20 12:23	1

Client Sample ID: PCB-21
Date Collected: 05/18/20 08:19
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-21
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND	F1	0.050	0.013	mg/Kg		05/20/20 18:51	05/22/20 17:22	1
Aroclor-1221	ND		0.050	0.013	mg/Kg		05/20/20 18:51	05/22/20 17:22	1
Aroclor-1232	ND		0.050	0.013	mg/Kg		05/20/20 18:51	05/22/20 17:22	1
Aroclor-1242	ND		0.050	0.013	mg/Kg		05/20/20 18:51	05/22/20 17:22	1
Aroclor-1248	ND		0.050	0.013	mg/Kg		05/20/20 18:51	05/22/20 17:22	1
Aroclor-1254	ND		0.050	0.015	mg/Kg		05/20/20 18:51	05/22/20 17:22	1
Aroclor-1260	0.033	J	0.050	0.015	mg/Kg		05/20/20 18:51	05/22/20 17:22	1
Aroclor-1262	ND		0.050	0.015	mg/Kg		05/20/20 18:51	05/22/20 17:22	1
Aroclor-1268	ND		0.050	0.015	mg/Kg		05/20/20 18:51	05/22/20 17:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	99		20 - 155				05/20/20 18:51	05/22/20 17:22	1
Tetrachloro-m-xylene (Surr)	96		25 - 126				05/20/20 18:51	05/22/20 17:22	1

Client Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: PCB-22
Date Collected: 05/18/20 08:43
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-22
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:40	1
Aroclor-1221	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:40	1
Aroclor-1232	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:40	1
Aroclor-1242	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:40	1
Aroclor-1248	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:40	1
Aroclor-1254	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:40	1
Aroclor-1260	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:40	1
Aroclor-1262	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:40	1
Aroclor-1268	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	82		20 - 155				05/20/20 18:52	05/22/20 12:40	1
Tetrachloro-m-xylene (Surr)	87		25 - 126				05/20/20 18:52	05/22/20 12:40	1

Client Sample ID: PCB-23
Date Collected: 05/18/20 08:44
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-23
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:58	1
Aroclor-1221	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:58	1
Aroclor-1232	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:58	1
Aroclor-1242	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:58	1
Aroclor-1248	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:58	1
Aroclor-1254	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:58	1
Aroclor-1260	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:58	1
Aroclor-1262	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:58	1
Aroclor-1268	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	83		20 - 155				05/20/20 18:52	05/22/20 12:58	1
Tetrachloro-m-xylene (Surr)	94		25 - 126				05/20/20 18:52	05/22/20 12:58	1

Client Sample ID: PCB-24
Date Collected: 05/18/20 08:51
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-24
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:16	1
Aroclor-1221	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:16	1
Aroclor-1232	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:16	1
Aroclor-1242	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:16	1
Aroclor-1248	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:16	1
Aroclor-1254	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:16	1
Aroclor-1260	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:16	1
Aroclor-1262	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:16	1
Aroclor-1268	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	85		20 - 155				05/20/20 18:52	05/22/20 13:16	1
Tetrachloro-m-xylene (Surr)	95		25 - 126				05/20/20 18:52	05/22/20 13:16	1

Client Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: PCB-25
Date Collected: 05/18/20 09:06
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-25
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:34	1
Aroclor-1221	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:34	1
Aroclor-1232	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:34	1
Aroclor-1242	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:34	1
Aroclor-1248	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:34	1
Aroclor-1254	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:34	1
Aroclor-1260	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:34	1
Aroclor-1262	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:34	1
Aroclor-1268	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	84		20 - 155				05/20/20 18:52	05/22/20 13:34	1
Tetrachloro-m-xylene (Surr)	91		25 - 126				05/20/20 18:52	05/22/20 13:34	1

Client Sample ID: PCB-26
Date Collected: 05/18/20 09:09
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-26
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:52	1
Aroclor-1221	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:52	1
Aroclor-1232	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:52	1
Aroclor-1242	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:52	1
Aroclor-1248	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:52	1
Aroclor-1254	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:52	1
Aroclor-1260	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:52	1
Aroclor-1262	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:52	1
Aroclor-1268	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	87		20 - 155				05/20/20 18:52	05/22/20 13:52	1
Tetrachloro-m-xylene (Surr)	94		25 - 126				05/20/20 18:52	05/22/20 13:52	1

Client Sample ID: PCB-27
Date Collected: 05/18/20 09:15
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-27
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 14:10	1
Aroclor-1221	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 14:10	1
Aroclor-1232	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 14:10	1
Aroclor-1242	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 14:10	1
Aroclor-1248	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 14:10	1
Aroclor-1254	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 14:10	1
Aroclor-1260	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 14:10	1
Aroclor-1262	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 14:10	1
Aroclor-1268	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 14:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	82		20 - 155				05/20/20 18:52	05/22/20 14:10	1
Tetrachloro-m-xylene (Surr)	93		25 - 126				05/20/20 18:52	05/22/20 14:10	1

Surrogate Summary

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCB1 (20-155)	TCX1 (25-126)
570-28712-1	PCB-1	83	74
570-28712-2	PCB-2	67	63
570-28712-3	PCB-3	84	83
570-28712-4	PCB-4	84	83
570-28712-5	PCB-5	85	92
570-28712-6	PCB-6	79	88
570-28712-7	PCB-7	135	100
570-28712-8	PCB-8	96	93
570-28712-9	PCB-9	144	98
570-28712-9	PCB-9	135	108
570-28712-10	PCB-10	149	97
570-28712-11	PCB-11	126	108
570-28712-12	PCB-12	128	102
570-28712-13	PCB-13	69	87
570-28712-14	PCB-14	71	87
570-28712-15	PCB-15	86	105
570-28712-16	PCB-16	47	125
570-28712-17	PCB-17	134	146 X
570-28712-18	PCB-18	48	115
570-28712-19	PCB-19	74	89
570-28712-20	PCB-20	88	91
570-28712-21	PCB-21	99	96
570-28712-21 MS	PCB-21	101	95
570-28712-21 MSD	PCB-21	97	90
570-28712-22	PCB-22	82	87
570-28712-22 MS	PCB-22	83	95
570-28712-22 MSD	PCB-22	85	95
570-28712-23	PCB-23	83	94
570-28712-24	PCB-24	85	95
570-28712-25	PCB-25	84	91
570-28712-26	PCB-26	87	94
570-28712-27	PCB-27	82	93
LCS 570-70390/2-A	Lab Control Sample	74	92
LCS 570-70396/2-A	Lab Control Sample	86	89
LCSD 570-70390/3-A	Lab Control Sample Dup	75	91
LCSD 570-70396/3-A	Lab Control Sample Dup	88	84
MB 570-70390/1-A	Method Blank	96	97
MB 570-70396/1-A	Method Blank	94	93

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene (Surr)

QC Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 570-70390/1-A

Matrix: Solid

Analysis Batch: 70779

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 70390

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.050	0.013	mg/Kg		05/20/20 18:36	05/22/20 16:28	1
Aroclor-1221	ND		0.050	0.013	mg/Kg		05/20/20 18:36	05/22/20 16:28	1
Aroclor-1232	ND		0.050	0.013	mg/Kg		05/20/20 18:36	05/22/20 16:28	1
Aroclor-1242	ND		0.050	0.013	mg/Kg		05/20/20 18:36	05/22/20 16:28	1
Aroclor-1248	ND		0.050	0.013	mg/Kg		05/20/20 18:36	05/22/20 16:28	1
Aroclor-1254	ND		0.050	0.015	mg/Kg		05/20/20 18:36	05/22/20 16:28	1
Aroclor-1260	ND		0.050	0.015	mg/Kg		05/20/20 18:36	05/22/20 16:28	1
Aroclor-1262	ND		0.050	0.015	mg/Kg		05/20/20 18:36	05/22/20 16:28	1
Aroclor-1268	ND		0.050	0.015	mg/Kg		05/20/20 18:36	05/22/20 16:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	96		20 - 155	05/20/20 18:36	05/22/20 16:28	1
Tetrachloro-m-xylene (Surr)	97		25 - 126	05/20/20 18:36	05/22/20 16:28	1

Lab Sample ID: LCS 570-70390/2-A

Matrix: Solid

Analysis Batch: 70779

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 70390

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Aroclor-1016	0.100	0.1078		mg/Kg		108	50 - 142
Aroclor-1260	0.100	0.09894		mg/Kg		99	50 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	74		20 - 155
Tetrachloro-m-xylene (Surr)	92		25 - 126

Lab Sample ID: LCSD 570-70390/3-A

Matrix: Solid

Analysis Batch: 70779

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 70390

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Aroclor-1016	0.100	0.1062		mg/Kg		106	50 - 142	3	30
Aroclor-1260	0.100	0.1024		mg/Kg		102	50 - 150	3	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	75		20 - 155
Tetrachloro-m-xylene (Surr)	91		25 - 126

Lab Sample ID: 570-28712-21 MS

Matrix: Solid

Analysis Batch: 70779

Client Sample ID: PCB-21

Prep Type: Total/NA

Prep Batch: 70390

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Aroclor-1016	ND	F1	0.0995	0.1356		mg/Kg		136	20 - 175
Aroclor-1260	0.033	J	0.0995	0.1583		mg/Kg		126	20 - 180

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QC Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 570-28712-21 MS
Matrix: Solid
Analysis Batch: 70779Client Sample ID: PCB-21
Prep Type: Total/NA
Prep Batch: 70390

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	101		20 - 155
Tetrachloro-m-xylene (Surr)	95		25 - 126

Lab Sample ID: 570-28712-21 MSD
Matrix: Solid
Analysis Batch: 70779Client Sample ID: PCB-21
Prep Type: Total/NA
Prep Batch: 70390

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec.		RPD	Limit
				Result	Qualifier				Limits	RPD		
Aroclor-1016	ND	F1	0.100	0.1769	F1	mg/Kg		177	20 - 175	26	40	
Aroclor-1260	0.033	J	0.100	0.1956		mg/Kg		163	20 - 180	21	40	

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	97		20 - 155
Tetrachloro-m-xylene (Surr)	90		25 - 126

Lab Sample ID: MB 570-70396/1-A
Matrix: Solid
Analysis Batch: 70824Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 70396

Analyte	MB MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
Aroclor-1016	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:05	12:05	1	
Aroclor-1221	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:05	12:05	1	
Aroclor-1232	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:05	12:05	1	
Aroclor-1242	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:05	12:05	1	
Aroclor-1248	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:05	12:05	1	
Aroclor-1254	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:05	12:05	1	
Aroclor-1260	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:05	12:05	1	
Aroclor-1262	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:05	12:05	1	
Aroclor-1268	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:05	12:05	1	

Surrogate	MB MB		Limits	Prepared		Analyzed		Dil Fac
	%Recovery	Qualifier						
DCB Decachlorobiphenyl (Surr)	94		20 - 155	05/20/20 18:52	05/22/20 12:05	12:05	1	
Tetrachloro-m-xylene (Surr)	93		25 - 126	05/20/20 18:52	05/22/20 12:05	12:05	1	

Lab Sample ID: LCS 570-70396/2-A
Matrix: Solid
Analysis Batch: 70824Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 70396

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	
Aroclor-1016	0.100	0.1092		mg/Kg		109	50 - 142	
Aroclor-1260	0.100	0.1079		mg/Kg		108	50 - 150	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	86		20 - 155
Tetrachloro-m-xylene (Surr)	89		25 - 126

QC Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCSD 570-70396/3-A

Matrix: Solid

Analysis Batch: 70824

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 70396

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	
							Limits	RPD	Limit	
Aroclor-1016	0.100	0.1017		mg/Kg		102	50 - 142	7	30	
Aroclor-1260	0.100	0.1046		mg/Kg		105	50 - 150	3	30	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	88		20 - 155
Tetrachloro-m-xylene (Surr)	84		25 - 126

Lab Sample ID: 570-28712-22 MS

Matrix: Solid

Analysis Batch: 70824

Client Sample ID: PCB-22

Prep Type: Total/NA

Prep Batch: 70396

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	
									Limits	
Aroclor-1016	ND		0.0995	0.1053		mg/Kg		106	20 - 175	
Aroclor-1260	ND		0.0995	0.1316		mg/Kg		132	20 - 180	

Surrogate	MS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	83		20 - 155
Tetrachloro-m-xylene (Surr)	95		25 - 126

Lab Sample ID: 570-28712-22 MSD

Matrix: Solid

Analysis Batch: 70824

Client Sample ID: PCB-22

Prep Type: Total/NA

Prep Batch: 70396

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.		RPD	
									Limits	RPD	Limit	
Aroclor-1016	ND		0.0990	0.1053		mg/Kg		106	20 - 175	0	40	
Aroclor-1260	ND		0.0990	0.1311		mg/Kg		132	20 - 180	0	40	

Surrogate	MSD		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	85		20 - 155
Tetrachloro-m-xylene (Surr)	95		25 - 126

Lab Chronicle

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Client Sample ID: PCB-1

Date Collected: 05/15/20 07:56

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.03 g	20 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70779	05/22/20 17:39	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-2

Date Collected: 05/15/20 08:17

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.04 g	20 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70779	05/22/20 17:57	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-3

Date Collected: 05/15/20 08:23

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.06 g	20 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70779	05/22/20 18:15	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-4

Date Collected: 05/15/20 07:51

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.02 g	20 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70779	05/22/20 18:33	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-5

Date Collected: 05/15/20 08:20

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.06 g	20 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70779	05/22/20 18:51	UHHN	ECL 1
Instrument ID: GC58										

Lab Chronicle

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Client Sample ID: PCB-6

Date Collected: 05/15/20 08:22

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.04 g	20 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70779	05/22/20 19:09	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-7

Date Collected: 05/15/20 07:39

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.03 g	10 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70833	05/22/20 13:14	UHHN	ECL 1
Instrument ID: GC31										

Client Sample ID: PCB-8

Date Collected: 05/15/20 08:45

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.02 g	10 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70833	05/22/20 13:33	UHHN	ECL 1
Instrument ID: GC31										

Client Sample ID: PCB-9

Date Collected: 05/15/20 08:42

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.04 g	10 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70833	05/22/20 13:52	UHHN	ECL 1
Instrument ID: GC31										
Total/NA	Prep	3540C			1.04 g	10 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		5			71205	05/26/20 10:20	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-10

Date Collected: 05/15/20 08:15

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.03 g	10 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70833	05/22/20 14:11	UHHN	ECL 1
Instrument ID: GC31										

Lab Chronicle

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Client Sample ID: PCB-11

Date Collected: 05/15/20 08:20

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.02 g	10 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70833	05/22/20 14:30	UHHN	ECL 1
Instrument ID: GC31										

Client Sample ID: PCB-12

Date Collected: 05/15/20 09:10

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.04 g	10 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70833	05/22/20 14:49	UHHN	ECL 1
Instrument ID: GC31										

Client Sample ID: PCB-13

Date Collected: 05/15/20 11:40

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.03 g	10 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70779	05/22/20 19:27	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-14

Date Collected: 05/15/20 11:23

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.04 g	20 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70779	05/22/20 19:45	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-15

Date Collected: 05/15/20 12:06

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.03 g	20 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70779	05/22/20 20:03	UHHN	ECL 1
Instrument ID: GC58										

Lab Chronicle

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Client Sample ID: PCB-16

Date Collected: 05/15/20 10:50

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.02 g	10 mL	70390	05/20/20 18:51	OM8W	ECL 1
Total/NA	Analysis	8082		100	1 mL	1.0 mL	71205	05/26/20 10:37	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-17

Date Collected: 05/15/20 11:38

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.04 g	10 mL	70390	05/20/20 18:51	OM8W	ECL 1
Total/NA	Analysis	8082		100			71205	05/26/20 10:56	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-18

Date Collected: 05/15/20 11:48

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-18

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.06 g	10 mL	70390	05/20/20 18:51	OM8W	ECL 1
Total/NA	Analysis	8082		100			71205	05/26/20 11:13	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-19

Date Collected: 05/18/20 07:30

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-19

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			20.4 g	10 mL	70390	05/20/20 18:51	OM8W	ECL 1
Total/NA	Analysis	8082		1			70779	05/22/20 20:21	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-20

Date Collected: 05/18/20 08:11

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-20

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			20.3 g	10 mL	70396	05/20/20 18:52	OM8W	ECL 1
Total/NA	Analysis	8082		1			70824	05/22/20 12:23	UHHN	ECL 1
Instrument ID: GC66										

Lab Chronicle

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Client Sample ID: PCB-21

Date Collected: 05/18/20 08:19

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-21

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			20.2 g	10 mL	70390	05/20/20 18:51	OM8W	ECL 1
Total/NA	Analysis	8082		1			70779	05/22/20 17:22	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-22

Date Collected: 05/18/20 08:43

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-22

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			20.3 g	10 mL	70396	05/20/20 18:52	OM8W	ECL 1
Total/NA	Analysis	8082		1			70824	05/22/20 12:40	UHHN	ECL 1
Instrument ID: GC66										

Client Sample ID: PCB-23

Date Collected: 05/18/20 08:44

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-23

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			20.2 g	10 mL	70396	05/20/20 18:52	OM8W	ECL 1
Total/NA	Analysis	8082		1			70824	05/22/20 12:58	UHHN	ECL 1
Instrument ID: GC66										

Client Sample ID: PCB-24

Date Collected: 05/18/20 08:51

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-24

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			20.4 g	10 mL	70396	05/20/20 18:52	OM8W	ECL 1
Total/NA	Analysis	8082		1			70824	05/22/20 13:16	UHHN	ECL 1
Instrument ID: GC66										

Client Sample ID: PCB-25

Date Collected: 05/18/20 09:06

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-25

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			20.1 g	10 mL	70396	05/20/20 18:52	OM8W	ECL 1
Total/NA	Analysis	8082		1			70824	05/22/20 13:34	UHHN	ECL 1
Instrument ID: GC66										

Lab Chronicle

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Client Sample ID: PCB-26

Date Collected: 05/18/20 09:09

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-26

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			20.4 g	10 mL	70396	05/20/20 18:52	OM8W	ECL 1
Total/NA	Analysis	8082		1			70824	05/22/20 13:52	UHHN	ECL 1
Instrument ID: GC66										

Client Sample ID: PCB-27

Date Collected: 05/18/20 09:15

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-27

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			20.2 g	10 mL	70396	05/20/20 18:52	OM8W	ECL 1
Total/NA	Analysis	8082		1			70824	05/22/20 14:10	UHHN	ECL 1
Instrument ID: GC66										

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

Accreditation/Certification Summary

Client: Forensic Analytical Consulting Services
 Project/Site: PJ46841

Job ID: 570-28712-1

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-29-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Guam	State	20-003R	10-31-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-20

Method Summary

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	ECL 1
3540C	Soxhlet Extraction	SW846	ECL 1

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494



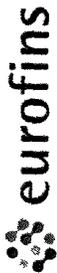
Sample Summary

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-28712-1	PCB-1	Solid	05/15/20 07:56	05/20/20 10:00	
570-28712-2	PCB-2	Solid	05/15/20 08:17	05/20/20 10:00	
570-28712-3	PCB-3	Solid	05/15/20 08:23	05/20/20 10:00	
570-28712-4	PCB-4	Solid	05/15/20 07:51	05/20/20 10:00	
570-28712-5	PCB-5	Solid	05/15/20 08:20	05/20/20 10:00	
570-28712-6	PCB-6	Solid	05/15/20 08:22	05/20/20 10:00	
570-28712-7	PCB-7	Solid	05/15/20 07:39	05/20/20 10:00	
570-28712-8	PCB-8	Solid	05/15/20 08:45	05/20/20 10:00	
570-28712-9	PCB-9	Solid	05/15/20 08:42	05/20/20 10:00	
570-28712-10	PCB-10	Solid	05/15/20 08:15	05/20/20 10:00	
570-28712-11	PCB-11	Solid	05/15/20 08:20	05/20/20 10:00	
570-28712-12	PCB-12	Solid	05/15/20 09:10	05/20/20 10:00	
570-28712-13	PCB-13	Solid	05/15/20 11:40	05/20/20 10:00	
570-28712-14	PCB-14	Solid	05/15/20 11:23	05/20/20 10:00	
570-28712-15	PCB-15	Solid	05/15/20 12:06	05/20/20 10:00	
570-28712-16	PCB-16	Solid	05/15/20 10:50	05/20/20 10:00	
570-28712-17	PCB-17	Solid	05/15/20 11:38	05/20/20 10:00	
570-28712-18	PCB-18	Solid	05/15/20 11:48	05/20/20 10:00	
570-28712-19	PCB-19	Solid	05/18/20 07:30	05/20/20 10:00	
570-28712-20	PCB-20	Solid	05/18/20 08:11	05/20/20 10:00	
570-28712-21	PCB-21	Solid	05/18/20 08:19	05/20/20 10:00	
570-28712-22	PCB-22	Solid	05/18/20 08:43	05/20/20 10:00	
570-28712-23	PCB-23	Solid	05/18/20 08:44	05/20/20 10:00	
570-28712-24	PCB-24	Solid	05/18/20 08:51	05/20/20 10:00	
570-28712-25	PCB-25	Solid	05/18/20 09:06	05/20/20 10:00	
570-28712-26	PCB-26	Solid	05/18/20 09:09	05/20/20 10:00	
570-28712-27	PCB-27	Solid	05/18/20 09:15	05/20/20 10:00	

28712



Calscience

CHAIN OF CUSTODY RECORD

DATE: 05-18-2020

PAGE: 1 OF 3



570-28712 Chain of Custody

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
 For courier service / sample drop off information, contact us26_sales@eurofins.com or call us.

LABORATORY CLIENT: Forensic Analytical		CLIENT PROJECT NAME / NUMBER: PJ46841		P.O. NO.: POHA 6113	
ADDRESS: 21228 Cabot Blvd		PROJECT CONTACT: Wilson wong manager		SAMPLER(S): (PRINT) SS/KM	
CITY: Hayward		STATE: CA		ZIP: 94545	
TEL: (510) 266-4600		E-MAIL: w.wong@forensicanalytical.com		LOG CODE: 10-DAY	
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		GLOBAL ID:		LOG CODE:	
SPECIAL INSTRUCTIONS: Please report result in mg/kg or PPM		UNPRESERVED		PRESERVED	
<p>Reporting limit must be less than 1.0 mg/kg PCB's (8082) & 3540C, memo: soft-slip extraction.</p>		NO. OF CONT.		FIELD FILTERED	
LAB USE ONLY	SAMPLE ID	DATE	SAMPLING TIME	MATRIX	NO. OF CONT.
1	PCB-1	5/15/20	7:56	port field	
2	PCB-2	5/15/20	8:17	port field	
3	PCB-3	5/15/20	8:23	port field	
4	PCB-4	5/15/20	7:51	port fraction	
5	PCB-5	5/15/20	8:20	port fraction	
6	PCB-6	5/15/20	8:22	port fraction	
7	PCB-7	5/15/20	7:34	port can-10's	
8	PCB-8	5/15/20	8:43	port can-10's	
9	PCB-9	5/15/20	8:42	port can-10's	
10	PCB-10	5/15/20	8:15	port can-10's	

REQUESTED ANALYSES

Please check box or fill in blank as needed.

<input type="checkbox"/> TPH(g) <input type="checkbox"/> GRO	<input checked="" type="checkbox"/>
<input type="checkbox"/> TPH(d) <input type="checkbox"/> DRO	<input checked="" type="checkbox"/>
<input type="checkbox"/> TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	<input checked="" type="checkbox"/>
<input type="checkbox"/> BTEX / MTBE <input type="checkbox"/> 8260	<input checked="" type="checkbox"/>
<input type="checkbox"/> VOCs (8260)	<input checked="" type="checkbox"/>
<input type="checkbox"/> Oxygenates (8260)	<input checked="" type="checkbox"/>
<input type="checkbox"/> Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	<input checked="" type="checkbox"/>
<input type="checkbox"/> SVOCs (8270)	<input checked="" type="checkbox"/>
<input type="checkbox"/> Pesticides (8081)	<input checked="" type="checkbox"/>
<input type="checkbox"/> PCBs (8082) & 3540C	<input checked="" type="checkbox"/>
<input type="checkbox"/> PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	<input checked="" type="checkbox"/>
<input type="checkbox"/> T22 Metals <input type="checkbox"/> 6010/747X <input type="checkbox"/> 6020/747X	<input checked="" type="checkbox"/>
<input type="checkbox"/> Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6	<input checked="" type="checkbox"/>

Relinquished by: (Signature) <i>[Signature]</i>	5/19/20	Date: 5/19/20	Time: 12:15
Relinquished by: (Signature) <i>[Signature]</i>	5/19/20 1630	Date: 5/20/2020	Time: 10:00
Relinquished by: (Signature) <i>[Signature]</i>		Date:	Time:

2-712-3 S06

28712

CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

DATE: 05-18-2020
PAGE: 2 OF 3



7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
For courier service / sample drop off information, contact us@eurofins.com or call us.

LABORATORY CLIENT: **Forensic Analytical**

ADDRESS: **21228 Cabot Blvd**

CITY: **Hayward** STATE: **CA** ZIP: **94545**

TEL: **(510) 266-4600** E-MAIL: **wwong@forensicanalytical.com**

CLIENT PROJECT NAME / NUMBER: **P5468A1** P.O. NO.: **POHA6113**

PROJECT CONTACT: **Wilson wong manager** SAMPLER(S): (PRINT) **SS/KM**

PROJECT: **Forensic Analytical**

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING		NO. OF CONT.	Matrix	Unpreserved	Preserved	Field Filtered	TPH (g) GRO	TPH (g) DRO	TPH □ C6-C36 □ C6-C44	TPH	BTEX / MTBE □ 8260 □	VOCs (8260)	Oxygenates (8260)	Prep (5035) □ En Core □ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082) & 3540C	PAHs □ 8270 □ 8270 SIM	T22 Metals □ 6010/747X □ 6020/747X	Cr(VI) □ 7196 □ 7199 □ 218.6	
		DATE	TIME																				
	11 PCB-11	5/15/20	8:20		Can-kin Highway	✓																	
	12 PCB-12	5/15/20	9:10		Can-kin Highway	✓																	
	13 PCB-13	5/15/20	11:40		Vapor Barrier Spec	✓																	
	14 PCB-14	5/15/20	11:23		Vapor Barrier Spec	✓																	
	15 PCB-15	5/15/20	12:06		Vapor Barrier Spec	✓																	
	16 PCB-16	5/15/20	10:50		Sealant	✓																	
	17 PCB-17	5/15/20	11:38		Sealant	✓																	
	18 PCB-18	5/15/20	11:48		Sealant	✓																	
	19 PCB-19	5/18/20	7:30		Soil	✓																	
	20 PCB-20	5/18/20	8:11		Soil	✓																	

TURNAROUND TIME (Rush surcharges may apply to any TAT not 'STANDARD'):
 SAME DAY 24 HR 48 HR 72 HR 5 DAYS STANDARD 10-DAY

GLOBAL ID: _____ LOG CODE: _____

SPECIAL INSTRUCTIONS:
 Please report result in mg/kg or PPM
 Reporting limit must be less than 1.0 mg/kg
 PCB's (8082) & 3540C. Method: soft-slip extraction.

Relinquished by: (Signature)	<i>[Signature]</i>	5/19/20	Received by: (Signature/Affiliation)	<i>[Signature]</i>
Relinquished by: (Signature)	<i>[Signature]</i>	5/19/20	Received by: (Signature/Affiliation)	<i>[Signature]</i>
Relinquished by: (Signature)	<i>[Signature]</i>	5/19/20	Received by: (Signature/Affiliation)	<i>[Signature]</i>

Date: 5/19/20 Time: 12:15
 Date: 5/20/20 Time: 10:00
 Date: _____ Time: _____

Login Sample Receipt Checklist

Client: Forensic Analytical Consulting Services

Job Number: 570-28712-1

Login Number: 28712**List Source: Eurofins Calscience****List Number: 1****Creator: Soriano, Precy**

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Refer to Job Narrative for details.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



SOIL PAINT-CHIP SAMPLE REQUEST FORM

Client: **HAY01 FACS San Francisco**
 California Affordable Housing Initiatives, Inc.

Contact: **Wilson Wong** Phone: **(510) 266-4600**

Site: **California Affordable Housing Initiatives**
 2530 9th Avenue

Client No.: **C25010** FACS Job #: **PJ46841**

Sampled by: **F.M.** PM: **Wilson Wong** Date: **5/18/20**

Special Instructions: E-mail results to E-mail results to wwong@forensicanalytical.com and marina.gonzalez-cortez@forensicanalytical.com

Turnaround Time: 1-Day 2-Day 3-Day 5-Day Other

Analysis: Flame AA (Pb) / Other:

Sample Number	Sample Location	Component	Color	Substrate	Condition
S-Pb1	East wing Rear Yard, NE AREA	So.1	N/A	Dirt	N/A
S-Pb2	Rear yard, Adj. to unit 104 rear				
S-Pb3	Rear yard, Adj. to unit 103 rear				
S-Pb4	Planter area, Adj. to unit 103 front				
S-Pb5	Planter area, Adj. to courtyard				
S-Pb6	West wing, Planter area, Adj. to courtyard				
S-Pb7	Side entrance, Adj. to unit 102				
S-Pb8	Adj. to unit P1				

Shipped via: Fed Ex Airborne UPS US Mail Courier Drop Off Other:

Relinquished by: *[Signature]* Date & Time: **5/19/20**

Received by: *[Signature]* Date & Time: **MAY 19 2020**

Relinquished by: *[Signature]* Date & Time: **05/19/20**

Received by: *[Signature]* Date & Time: **05/19/20**

Condition Acceptable: Yes No

Condition Acceptable: Yes No



Substrate: wood metal concrete plaster drywall brick



**FORENSIC
LABORATORIES**

Final Report

Metals Analysis of Soils - TTLC

(AIHA-LAP, LLC Accreditation, Lab ID #101762)

Forensic Analytical Consulting Svcs
Wilson W Wong
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: M225371
Date Received: 05/19/20
Date Analyzed: 05/26/20
Date Printed: 05/26/20
First Reported: 05/26/20

Job ID / Site: PJ46841; California Affordable Housing Initiatives 2530 9th Avenue Oakland
CA

Date(s) Collected: 5/18/20

SGSFL Job ID: HAY01

Total Samples Submitted: 9

Total Samples Analyzed: 9

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
S-PB1	30871067	Pb	330	mg/kg	20	EPA 3050B/7000B
S-PB2	30871068	Pb	110	mg/kg	6	EPA 3050B/7000B
S-PB3	30871069	Pb	18	mg/kg	6	EPA 3050B/7000B
S-PB4	30871070	Pb	77	mg/kg	6	EPA 3050B/7000B
S-PB5	30871071	Pb	27	mg/kg	6	EPA 3050B/7000B
S-PB6	30871072	Pb	58	mg/kg	6	EPA 3050B/7000B
S-PB7	30871073	Pb	29	mg/kg	6	EPA 3050B/7000B
S-PB8	30871074	Pb	76	mg/kg	6	EPA 3050B/7000B
S-PB9	30871075	Pb	72	mg/kg	6	EPA 3050B/7000B

* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.

Daniele Siu

Daniele Siu, Laboratory Supervisor, Hayward Laboratory

Analytical results and reports are generated by SGS Forensic Laboratories at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGS Forensic Laboratories to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGS Forensic Laboratories. The client is solely responsible for the use and interpretation of test results and reports requested from SGS Forensic Laboratories. SGS Forensic Laboratories is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. Any modifications that have been made to referenced test methods are documented in SGS Forensic Laboratories' Standard Operating Procedures Manual. Sample results have not been blank corrected. Quality control and sample receipt condition were acceptable unless otherwise noted.

Appendix B

Staff Certificates





STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:



Kris Maglunob

CERTIFICATE TYPE:

Lead Sampling Technician

NUMBER:

LRC-00000292

EXPIRATION DATE:

5/13/2021

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD.

State of California
Division of Occupational Safety and Health
Certified Site Surveillance Technician

Kristoffer Maglunob



Name

Certification No. **19-6434**

Expires on **08/14/20**

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



STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:



Gennady Spector

CERTIFICATE TYPE:

Lead Inspector/Assessor
Lead Project Monitor

NUMBER:

LRC-00004999
LRC-00004998

EXPIRATION DATE:

4/22/2021
4/22/2021

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD.

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

Gennady Spector



Name

Certification No. **94-1308**

Expires on **03/02/21**

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.

**Right People
Right Perspective
Right Now**

www.forensicanalytical.com

Attachment C
Abatement Specifications

**ASBESTOS REMOVAL WORK PLAN
2530 9TH AVENUE
OAKLAND, CALIFORNIA**

PART 1 - GENERAL

The following section has been developed due to the presence of Asbestos-Containing Materials (ACM) at the project site located at 2530 9th Avenue, Oakland, California, which has been planned for demolition.

Forensic Analytical Consulting Services (FACS) conducted an asbestos survey at the project site in May 2020 and identified various asbestos-containing materials. Asbestos-containing materials identified in the survey included joint compound, wall texture, sheet flooring backing, and roof flashing. Details of the survey are presented in the survey report dated June 25, 2020.

1.01 SECTION CONTENTS

- A. This section specifies the methods, procedures, and requirements related to the removal and disposal of asbestos-containing materials (ACM) including, but not limited to:
 - 1. Regulatory requirements
 - 2. Submittals
 - 3. Personal protective measures
 - 4. Execution
 - 5. Inspections
 - 6. Waste handling and disposal

1.02 SCOPE OF WORK

- A. This work plan applies to the demolition activities in which Asbestos-Containing Materials will be disturbed by the scheduled work. The Contractor will be responsible for complying with this section in the handling and disposal of ACM.
- B. Contractor shall furnish all labor, transportation, materials, supervision, equipment, insurance, taxes, overhead and all other items of expense, or services necessary for the removal and disposal of the ACM under this work plan.

- C. The work of the Contract can be summarized as follows:
1. Remove the ACM identified in the June 2020 survey report.
 2. Removal of ACM shall follow the requirements as indicated in this work plan, including and not limited to submittals, training, work practice, and air monitoring.
- D. It is the responsibility of the Contractor to examine the sites, to measure the quantities of ACM, and to acquaint with the site conditions that would be encountered. Should the bidding contractor find discrepancies in or omissions from this work plan, or should clarification be needed, the bidding contractor shall notify the Client.

1.03 REGULATIONS

- A. Federal Regulations: Those which govern asbestos abatement work or hauling and disposal of asbestos waste materials include but are not limited to the following:
1. Code of Federal Regulations (CFR)
 - 29 CFR Part 1910, Section 1001
 - 29 CFR Part 1910, Section 134, Respiratory Protection
 - 29 CFR Part 1926.1101, Asbestos Construction Standard
 - 29 CFR Part 1910, Section 20, Access to Employee Exposure & Medical Records
 - 29 CFR Part 1910, Section 1200, Hazard Communication
 - 29 CFR Part 1910, Section 145, Specifications for Accident Prevention Signs and Tags
 - 40 CFR Part 763, Subpart G, CPTS 62044, FLR 2843-9
 - Federal Register, Vol. 50, No. 134, 7/12/85, Worker Protection Rule
 - 40 CFR Part 61, Sub-part A, Regulation for Asbestos
 - 40 CFR Part 61, Appendix A to Subpart M (Revised Subpart

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B) National Emission Standard for Asbestos

40 CFR 763 Subpart E, Asbestos Hazard Emergency Response Act (AHERA)

49 CFR Parts 171 and 172, Hazardous Substances: Final Rule

- B. State and Local Regulations: Abide by all state and local regulations which govern asbestos abatement work or hauling and disposal of asbestos waste materials, including but not limited to:

Bay Area Air Quality Management District (BAAQMD) - Regulation 11 Hazardous Pollutants Rule 2, dated October 7, 1998 or more recent.

California Department of Occupational Safety and Health (Cal-OSHA) – Asbestos Standard For The Construction Industry, Title 8, California Code of Regulations section 1529, et. seq. (8 CCR 1529).

California Health and Safety Code sections 24914 (Hazardous Substance Removal Contracts); 25915, et. seq. (Asbestos Notification Act); and 19827.5 (Demolition Permits).

California Labor Code sections 6501.5 (Employer Registration); and 6501.9 (Determining the Presence of Asbestos Prior to Contracting for Work).

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Prop. 65).

Applicability: The most current issue of the above document shall apply. Where conflict among requirements or with this work plan exists, the more strict or stringent requirement or interpretation shall apply.

- C. This work shall be "classified" as described in 8 CCR Section 1529, as follows.
1. Removal of asbestos-containing backing, roof flashing, wall texture and joint compound shall be classified as OSHA Class II work.

1.04 DEFINITIONS

- A. General: Definitions for terms used in typical asbestos removal work are included below.
1. **ABATEMENT**: Procedure to control fiber release from asbestos-containing building materials.
 - a. Removal - All herein specified procedures necessary to remove asbestos-containing materials from building surfaces and structures.
 - b. Clean-up - All herein specified procedures necessary to clean asbestos-containing material or asbestos-contaminated debris from building surfaces or structures.
 - c. Post-Removal Surface Encapsulation - All herein specified procedures necessary to coat building surfaces and structures from which asbestos-containing materials have been removed to control any residual fiber release.
 - d. Abatement Activities - Any activity which disturbs or has the potential to disturb any asbestos-containing material. This includes, but is not limited to, the following activities: precleaning, installing polyethylene, ACM removal, encapsulation, and enclosure.
 2. **ACBM OR ACM**: Asbestos-Containing Building Materials or Asbestos-Containing Materials.
 3. **AIR LOCK**: A system for permitting ingress or egress without permitting air movement from a contaminated area into an uncontaminated area.
 4. **AIR MONITORING/AIR SAMPLING**: The process of measuring the fiber content of a specific volume of air in a stated period of time. When "aggressive" air sampling is specified, blowers and fans are used to disperse settled fibers into the air during sampling.
 5. **AMENDED WATER**: Water to which a surfactant has been added to reduce water surface tension and thereby provide a more rapid penetration.
 6. **AUTHORIZED VISITOR**:. Client's representative, Client's

personnel or a representative of any regulatory or other agency having jurisdiction over the project.

7. **BARRIER:** Any surface which inhibits air and fiber movement from the work areas. Can be comprised of one or a combination of several materials, including but not limited to plywood, polyethylene sheeting, duct tape and spray-poly. A critical barrier is one which seals any opening (such as doorways, vents, window, penetrations) between the work area and non-work area.
8. **CLIENT:** California Affordable Housing Initiatives and/or their authorized representatives.
9. **CLIENT'S REPRESENTATIVE:** Client's Representative is the party designated by the Client to perform monitoring, inspection, and enforcement of this work plan
10. **CONTAINMENT AREA:** An asbestos removal area which is sealed by critical barriers and fully enclosed with polyethylene sheeting. Workers enter/exit the containment area through a decontamination enclosure system.
11. **CURTAINED DOORWAY:** Device to allow ingress or egress from one room to another while permitting minimal air movement between the rooms, typically constructed by placing two overlapping sheets of opaque 6-mil polyethylene 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.
12. **DECONTAMINATION ENCLOSURE SYSTEM:** A series of connected rooms, with air locks between any two adjacent rooms, for the decontamination of workers and/or materials and equipment, constructed or moved onto site.
13. **EQUIPMENT DECONTAMINATION UNIT:** Decontamination enclosure system for materials and equipment, typically consisting of a designated area of the work area (wash-down station), a washroom, a holding room, a container room, and an uncontaminated area.
14. **FIXED OBJECT:** A unit of equipment or furniture in the work area

which cannot be removed from the work area without dismantling.

15. **HEPA FILTER:** A high efficiency particulate air (HEPA) filter capable of trapping and retraining 99.97% of particles greater than 0.3 microns in diameter.
16. **HEPA VACUUM EQUIPMENT:** Vacuuming equipment with a HEPA filter capable of collecting and retaining asbestos materials/fibers.
17. **MINI-CONTAINMENT:** A mini-containment area provides an airtight enclosure around a high-**hazard** work area that is of limited size (for example a mini-containment may contain a 1'x1' area of SAAM to be removed).
18. **NEGATIVE AIR PRESSURE EQUIPMENT/EXHAUST AIR FILTRATION SYSTEM:** A local ventilation system, capable of maintaining a relative negative pressure throughout the containment area by providing a constant air flow from the containment area, through HEPA filters, to the area outside the building.
19. **NEGATIVE EXPOSURE ASSESSMENT INITIAL:** As stated in 29 CFR 1926.1101, "means a demonstration by the employer which complies with the criteria in paragraph (f) (2) (iii) of this section, that employee exposure during an operation is expected to be consistently below PEL's.
20. **NIOSH:** National Institute for Occupational Safety and Health.
21. **PERSONNEL DECONTAMINATION UNIT:** 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. A three-stage decontamination unit consists of an equipment room, a shower, and a clean room.
 - a. Equipment Room: A contaminated area or room within the personnel decontamination unit with provisions for storage of contaminated clothing and equipment.
 - b. Shower Room: A room between the equipment room and the clean room with hot and cold running water suitably

arranged for complete showering during decontamination.

- c. Clean Room: An uncontaminated area or room which is part of the personnel decontamination unit with provisions for storage of workers' street clothes and protective equipment.
22. **PLASTICIZING**: Procedures necessary using polyethylene sheeting, adhesives, and/or taping to create an airtight work area.
23. **POST REMOVAL ENCAPSULANT**: A liquid substance which can be applied to surfaces from which asbestos-containing materials have been removed to control the possible release of residual asbestos fibers, either by creating a membrane over the surface (bridging encapsulant) or by penetrating into and binding the material (penetrating encapsulant).
24. **SURFACTANT**: A chemical wetting agent added to water to decrease the surface tension, thus improving the water's penetration into porous materials and in effect reducing the quantity of water required for wetting operations.
25. **WET CLEANING/WIPING**: The process of eliminating contamination from building surfaces and objects by using cloths, mops, or other cleaning tools which have been dampened with water. Cleaning materials and non-reusable tools are disposed of as asbestos contaminated waste.

1.05 SUBMITTALS AND NOTICES

A. Pre-Job Submittals and Notices

1. Contractor shall make all required notifications to the appropriate Government Regulatory Agencies prior to beginning work. At least five days prior to commencing work, submit two copies of all notifications to the Client.
2. At least five days prior to commencing work the Contractor shall submit to the Client two (2) copies of the training, medical, and respiratory fit-testing documentation, described below, for each supervisor and worker who will be on-site for this project.
3. Contractor shall use only workers medically qualified and trained for asbestos work and respirator usage. Contractor shall submit

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statement from examining physician that each employee is fit to wear a respirator in accordance with 8 CCR Section 1529 within the last twelve months.

4. The asbestos training shall comply with 8 CCR Section 1529.
5. The Contractor shall provide the procedure he will employ for handling, packaging, transporting, and disposing of asbestos waste. These procedures must meet the requirements of 40 CFR, Part 61 subparts A and M.
6. At least five days prior to commencing work the Contractor shall submit to Client names and qualifications of each party responsible for transporting, storing, treating and disposing of asbestos waste. Include the facility location and a twenty-four-hour point of contact. Furnish two (2) copies of federal, state and local permit applications, permits and corresponding identification numbers.
7. The Contractor shall provide an abatement plan with methods and procedures covering each of the identifiable materials and abatement areas, including waste handling/disposal procedures.

B. Post-Job Submittals and Notices

Upon completion of the work, and prior to final payment, the Contractor will prepare a report and submit it to the Client. The report shall contain:

1. A copy of all notifications to or permits received from Federal, State, and local agencies for this project.
2. Waste Disposal Records, including signed manifests and receipts with certified weight.
3. A copy of the log maintained at the job site throughout the work.
4. Copies of all personal air monitoring results performed by the Contractor, including the location and credentials of the laboratory performing the analysis.
5. The name, title and signature of the person who prepared the report.
6. The report shall contain a statement certifying that the work has

been completed in accordance with this work plan.

1.06 CLIENT'S REPRESENTATIVE

- A. The Client may authorize a credentialed consultant to perform inspection, testing, and monitoring services including, but not limited to:
1. Area air testing to establish pre-abatement and post abatement airborne fiber concentrations at the work area.
 2. Visual inspections to verify Contractor's compliance with this work plan, as well as applicable regulations, hazard control measures, and related decontamination procedures.
 3. Interpretation of this work plan, and coordination with Client and Contractor for enforcement of regulatory and contractual conformance, including stop work issues.
- B. The cost of the Client's Representative will generally be the responsibility of the Client except under special circumstances. The Contractor shall be responsible for the cost of the Client's Representative for additional services performed when: a) The Contractor's Work Area fails final clearance inspection and/or testing; or b) additional workdays or workday hours (overtime) are required by the Contractor; or c) The Contractor exceeds the allowable time frame for completion; or d) additional services associated with response to an uncontrolled, unauthorized release to the environment as a result of the Contractor's performance of the work.

1.07 CONTRACTOR QUALIFICATIONS

- A. General Superintendent: Provide a General Superintendent whenever Contractor's personnel are on site who is experienced in administration and supervision of asbestos abatement projects including work practices, protective measures for building and personnel, disposal procedures, etc. This person is the Contractor's Representative responsible for compliance with all applicable federal, state and local regulations, particularly those relating to asbestos-containing materials.

Experience and Training: The General Superintendent and all workers must have completed a course at an AHERA accredited Asbestos Abatement training provider and have had on-the-job training in asbestos abatement procedures. Submit documentation for each worker per section 1.05. Each supervisor and worker shall have in his/her

possession at all times a current Cal /OSHA certification.

- B. Contractor shall use only workers medically qualified and trained for asbestos work and respirator usage.
- C. The asbestos training shall comply with 8 CCR Section 1529.

PART 2 - PRODUCTS

2.01 PROTECTIVE COVERING

- A. Polyethylene sheets, of 6 mil thickness, in dimensions of adequate width to minimize frequency of joints.

2.02 TAPE

- A. Duct tape, two inches or wider, capable of sealing joints of adjacent sheets of plastic sheeting or for attachment of plastic sheeting to finished or unfinished surfaces.

2.03 PERSONAL PROTECTIVE EQUIPMENT

- A. Workers shall wear full body disposable Tyvek or comparable suits with hoods and separate booties, tape around ankles, wrists, under arms and neck. Suits will be worn inside the work area after the area passes pre-abatement inspection and shall remain in use until the area passes final clearance.
- B. Goggles with side shields will be worn when working with a material that may splash or fragment, or if protective eye wear is specified on the Safety Data Sheets (SDS) for that product.
- C. Additional respiratory protection by supplemental filters, such as organic vapor cartridges, may be needed when handling some coating products. Consult the SDS and obtain the proper filters as necessary. Contractor shall wear appropriate respiratory protection as outlined in 8 CCR Section 1529.
- D. In addition, all OSHA requirements, such as hard hats, hearing protection, etc. are required.

2.04 TOOLS AND EQUIPMENT

- A. Provide suitable tools for the decontamination and removal of asbestos-containing materials including required HEPA vacuums and exhaust units, airless sprayers, ground fault interrupters, hand tools, wipes, ladders, and scaffolds.
- B. Mechanical abrasion tools shall be equipped with local HEPA exhaust and subject to approval by the Client's Representative. All tools and equipment brought on site shall be clean and free of contamination from asbestos and other hazardous materials. HEPA filtered equipment shall be labeled with a warning label and dedicated to asbestos work to prevent combining hazardous wastes of differing characteristics.
- C. Provide adequate support equipment, including, but not limited to lumber, hardware, handwashing facilities, sprayers, hoses, miscellaneous collection devices, and secured holding facilities.

PART 3 - EXECUTION

3.01 GENERAL

- A. The purpose of the Asbestos Construction Standard is to provide protection to workers exposed to asbestos fibers. As a result, all activities which will entail disturbing asbestos-containing materials will be performed in accordance with the following work practices.

3.02 WORKER SAFETY/DECONTAMINATION PROCEDURES

Based on the type of ACM that were present at the project site, ACM abatement work shall be performed as OSHA Class II work in accordance with 8 CCR Section 1529.

- A. Prior to commencement of work, the workers shall be instructed and shall be knowledgeable on the hazards of asbestos exposure, use and fitting of respirators, protective clothing, decontamination procedures and all aspects of asbestos work procedures; workers shall have medical examinations.
- B. The Contractor acknowledges that he alone is responsible for enforcing personnel protection requirements and that this work plan provide only a minimum acceptable standard for each phase of operation.
- C. Provide workers with personally issued and marked respiratory equipment approved by NIOSH and accepted by OSHA. All removal work to be

performed in accordance to 8 CCR Section 1529.

- D. If the Contractor uses Type "C" air supplied respirators, they shall be pressure demand full face respirators.
1. Air supply for Type "C" shall be, at minimum, grade "D" in compliance with OSHA 1910.134. The Contractor shall provide sampling and testing of air in the presence of Client if requested to do so.
 2. Air supply for Type "C" removal operations shall be a positive pressure, externally supplied, compressed air system, incorporating enough high-pressure automatic air storage within an ASME certified air "bank" to provide each individual on line in the work area with sufficient air supply for decontamination in the event of a system failure.
 3. The compressed air system for removal workers shall incorporate a calibration of CO alarm, compressor failure alarm, high temperature alarm, a continuous carbon monoxide monitoring device, and in-line purifying sorbent beds and filters to deliver air free of water, oil, odors, vapors, and particulates. Contractor shall comply with all applicable codes and regulations that apply to the operation of such system. Contractor shall submit documentation to the Client which certifies that CO monitor and alarm devices have been calibrated and tested.
- E. WHERE NOT IN CONFLICT WITH NIOSH AND OSHA REQUIREMENTS, THE CONTRACTOR SHALL PROVIDE AT A MINIMUM, THE FOLLOWING RESPIRATOR PROTECTION FOR EACH PHASE OF OPERATION, UNLESS OTHERWISE APPROVED BY CLIENT:
1. Precleaning/Wet-Wiping of Area: NIOSH certified half-face air purifying respirators equipped with HEPA cartridges.
 2. Plastic Sheet Installation: NIOSH certified half-face air purifying respirators equipped with HEPA cartridges.
 3. Asbestos Removal and Clean-up: In accordance with those requirements stated in 8 CCR Section 1529.
 4. Loading Waste Material on Truck: (outside work area): NIOSH

certified half-face air-purifying respirators equipped with HEPA cartridges.

- F. No visitors shall be allowed in the work area, except as authorized by Client. Provide authorized visitors with suitable respirators with fresh cartridges, depending on phase of operation, whenever they are required to enter the work area, to a maximum of two per day.
- G. If the Contractor uses Type "C" air supplied respirators, one open airline shall be maintained as an emergency reserve at all times. Removal of a worker to provide this line will not be acceptable.
- H. Provide workers with sufficient sets of disposable Tyvek or comparable protective full body clothing. Such clothing shall consist of full body coveralls, footwear and headgear or one-piece coveralls. Provide eye protection and hard hats as required by applicable safety regulations.
- I. Reusable type protective clothing and footwear intended for reuse shall be left in the Contaminated Equipment Room until the end of the asbestos abatement work at which time such items shall be disposed of as asbestos-contaminated waste. Disposable clothing shall not be allowed to accumulate and shall be disposed of as asbestos-contaminated waste.
- J. Provide authorized visitors with suitable protective clothing, headgear, footwear, and gloves as described above whenever they are required to enter the work area.

3.03 GENERAL REMOVAL PROCEDURES

A. SIGNAGE

- 1. Post signs in and around the project area as required to comply with OSHA regulation 8 CCR Section 1529 and all other Federal, State, and local regulations.
- 2. Place caution tape and construction signs around the perimeter or at access to the project area as appropriate to keep out unauthorized personnel.

B. WORK AREA PREPARATION

- 1. Removal of asbestos-containing joint compound, wall texture, and sheet flooring backing shall be performed in a negative pressure

enclosure.

- a. Before commencing with setup, arrange site access and utilities with Client.
 - b. Remove from the work area all movable items such as furniture, tools, equipment, and miscellaneous items and store in area designated by the Client.
 - c. Establish an enclosure with plastic sheeting. Use PVC tubing or lumber as frame work when necessary.
 - d. Seal with plastic sheeting and tape all vents, HVAC ports, windows, and other penetrations into the work area.
 - e. Cover remaining exposed surfaces in the work area with plastic sheeting. Surfaces not covered shall be adequately clean at the end of the removal.
 - f. Install a viewport at the work area so that inspection of the removal activities can be performed from outside the work area.
 - g. Post asbestos warning signs per OSHA regulation 29 CFR 1926.1101.
 - h. Equip the Work Area with negative pressure by installing a negative air machine. The Work Area shall maintain a negative pressure of -0.02 inch of water throughout the abatement work until clearance is achieved.
2. Removal of asbestos-containing roof flashing shall be done in an open work area.
- a. Before commencing with setup, arrange site access and utilities with Client.
 - b. Remove from the work area all movable items such as furniture, tools, equipment, and miscellaneous items and store in area designated by the Client.
 - c. Establish the boundary of the open work area with barrier tapes or physical barriers such as plywood boards or plastic sheeting.

- d. Seal all vents, HVAC ports, windows, and other openings in the work area with plastic sheeting.
- e. Post asbestos warning signs per OSHA regulation 29 CFR 1926.1101.

C. REMOVAL OPERATIONS

- 1. Removal of the above identified ACM shall follow the protocols below.
 - a. Before beginning removal of ACM, thoroughly wet ACM with amended water.
 - b. Don appropriate PPE in accordance with OSHA regulation 29 CFR 1926.1101.
 - c. Carefully mist area with water or amended water while removing ACM to minimize dust or fiber release.
 - d. ACM should be removed manually with handheld tools; use of power tools for removal must first be approved by Client's Representative and must be equipped with a local dust collection device.
 - e. Bag all asbestos waste promptly as they are being generated. All waste shall be placed in airtight asbestos waste bags with proper labeling.
 - f. Detail clean work area using HEPA vacuum and wet wiping.

3.04 INSPECTION PROCEDURE/WORK AREA CLEARANCE

- A. A visual inspection may be performed by the Client's Representative following abatement in order to determine the presence of any remaining asbestos-containing material debris.
- B. Air clearance samples may be collected from the work areas. If air samples are collected by the Client's Representative, the project clearance level is 0.01 f/cc, which is based on the AHERA PCM clearance level.
- C. If the work area is not visibly clean or if air sample results indicate work area is not adequately clean, the Contractor will re-clean using HEPA

vacuums and wet wiping. Additional air samples will be collected after re-cleaning and subject to same clearance levels stated in Section 3.04(B). Contractor shall bear all additional costs due to failure of visual and/or air clearance testing.

- D. The contractor shall be released only after all work areas have been cleared according to the above criteria and accepted by the Client.

3.05 WASTE DISPOSAL/STORAGE

- A. All disposal of asbestos containing, asbestos contaminated, and/or non-hazardous waste will be coordinated and paid for by Contractor.
- B. All ACM that is friable or rendered friable during removal shall be disposed of as friable ACM waste. Nonfriable ACM and associated debris shall be disposed of as nonfriable ACM waste.
- C. The Contractor shall line the bin with a minimum of 6-mil plastic sheeting on the floor and sides of the bin sealed so as to provide a water-tight membrane.
- D. Affix proper labels per EPA and OSHA requirements. Contractor shall provide appropriate generator waste labels. Contractor shall maintain a running and final count of containers deposited into each waste bin.
- E. Each waste load must be accompanied by an Asbestos Waste Manifest and any other certificate required by state or local agencies. Copies of all Asbestos Waste Manifests and other disposal records shall be provided to the Client.
- F. The Contractor shall be responsible for the safe handling and transportation of all waste generated by this contract to the designated waste disposal sites. The Contractor shall bear all costs for all claims, damages, losses and expenses against the Client or the Client's Representatives, including but not limited to attorney's fees arising out of or resulting from spills en route to the waste disposal site.

3.07 STOP WORK ORDERS

- A. The Client and/or Client's Representative has the authority to stop work if it is determined that conditions or procedures are not in compliance with this Work Plan and/or applicable regulations; the Contractor is deficient in providing required submittals; the waste is not securely stored; or a

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potential release of asbestos fibers to outside the work area is imminent based on the Client's and/or Client's Representative's judgment.

- B. The work stoppage shall remain in effect until conditions have been corrected and corrective measures have been taken to the satisfaction of the Client's and/or Client's Representative.

END OF SECTION



September 10, 2020

PCB Waste Characterization, Segregation, and Disposal Plan

**2530 9th Avenue
Oakland, California**

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FACS Project # PJ46841

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Introduction

Forensic Analytical Consulting Services, Inc. (FACS) was retained by California Affordable Housing Initiatives (Client) to provide a PCB Waste Characterization, Segregation, and Disposal Plan for PCB-containing materials identified at the property at 2530 9th Avenue, Oakland, California, which is scheduled for demolition.

Walkway coating containing polychlorinated biphenyls (PCBs) equal to or greater than 50 milligrams per kilogram (≥ 50 mg/kg) has been identified at the exterior walkway of the subject buildings. **Where the term “source material” is used herein, it is used as a summary designation of the coating that contain PCBs at concentrations ≥ 50 mg/kg.** This material is applied on a wood substrate that is assumed to be PCB-contaminated based on the potential for leaching of PCBs from this source material.

FACS also identified roof composite, penetration mastic, roof caulk, and stucco containing PCBs ≥ 1 mg/kg but < 50 mg/kg at various locations on the subject buildings.

Purpose

This plan has been prepared to provide the Client with information obtained during the pre-demolition survey conducted by FACS. The plan includes details regarding the proper characterization, segregation, and disposal of the various identified PCB-containing wastes for compliance with the applicable requirements of 40 CFR 761.

Site Characterization

The subject site, which includes two apartment buildings connected by exterior walkways, is located at 2530 9th Avenue, Oakland, California.

Exterior construction of the buildings consists of a mix of stucco, concrete, and various window assemblies.

Scope of Work

During the course of this project, FACS conducted the following scope of work:

- Identification and sampling of suspect PCB-containing materials on the buildings.
- Identification of porous substrates in contact with materials identified as PCB Bulk Product Waste (Bulk Product Waste).
 - A porous substrate, wood, in contact with a material containing PCBs ≥ 50 mg/kg, the walkway coating, was identified at the site.

PCB Bulk Product Waste Removal and Disposal

The materials identified below will be removed and disposed of under the performance-based disposal strategy of 40 CFR 761.62(a)(3) and by authorization of the *PCB Bulk Product Waste Reinterpretation USEPA Memorandum dated 10/24/2012*.

- The walkway coating with PCBs at concentrations ≥ 50 mg/kg and all wood substrates in contact with it will be disposed of as Bulk Product Waste in a hazardous waste landfill permitted by EPA under section 3004 of RCRA, or by a State authorized under section 3006 of RCRA.
- Materials containing PCBs at concentrations ≥ 1 but < 50 mg/kg, including roof composite, penetration mastic, roof caulk, and stucco, will be disposed in a licensed waste disposal facility permitted to receive wastes of the identified concentrations. Where these materials are found on various assemblies/components in combination with materials containing ≥ 50 mg/kg, the assembly/component will be disposed of as Bulk Product Waste in a hazardous waste landfill permitted by EPA under section 3004 of RCRA, or by a State authorized under section 3006 of RCRA.

Waste/Material Designations

PCB Bulk Product Wastes

Sample results indicate that the coating on the exterior walkway contain PCB concentrations ≥ 50 mg/kg and are therefore, under 40 CFR 761.3, classified as Bulk Product Waste and require special disposal. Table 1 below present a summary of the findings for the materials identified during our investigation to contain PCBs at concentrations ≥ 50 mg/kg, respectively.

Table 1: Types of Source Materials Identified as ≥ 50 mg/kg of PCBs					
Material ID No./ Description	Homogeneous Area*	Location at Building	Adjacent Substrates	PCB Concentration (mg/kg)	Photo Nos.**
Walkway Floor Coating	Floor of exterior walkways	On the exterior of each level of the two buildings	Wood	< 98	01, 02
Footnotes *Homogenous Areas are defined as areas in which similar source materials were observed and determined to be the same material. **Photos can be found in Appendix D.					

Porous Substrates

The porous substrate identified during this investigation that are in contact with the walkway coating containing PCBs at concentrations ≥ 50 mg/kg was wood. This non-porous substrate will be defined, labeled, handled, and disposed of as Bulk Product Waste in accordance with 40 CFR 761.62(a)(3) and by authorization of the *PCB Bulk Product Waste Reinterpretation USEPA Memorandum dated 10/24/2012*.

Materials containing PCBs at Concentrations <50 mg/kg

Four (4) other categories of suspect homogeneous were identified, sampled, and reported to contain PCB concentrations ≥ 1 mg/kg but <50 mg/kg and are therefore, according to 40 CFR 761.3, not classified as Bulk Product Waste. Under 40 CFR 761.3, there are no specific requirements to remove and dispose of these materials or to assess the materials in contact with these materials. Based on our observations, the apparent age and condition of the materials, the consistency of the materials across their application, and the lack of observed differences in layers when sampled, these materials appear to be original installations and therefore were not considered replacement materials.

These materials will be properly removed and disposed of at a landfill permitted to receive materials containing PCBs at concentrations <50 and ≥ 1 mg/kg. Tables 2 below presents a summary of the findings for the materials identified during our investigation to contain PCBs at concentrations ≥ 1 mg/kg but <50 mg/kg. The tables also identify the removal/cleaning protocol for each of these materials.

Table 2: Materials containing PCBs ≥ 1 but <50 mg/kg				
Material ID Nos./ Description	PCB Concentration (mg/kg)	Location(s)	Substrate(s)	Removal/Cleaning Protocol
Roof composite	< 1.9	Roof field of the 2 project buildings	Wood	Remove material from components and/or remove components with material intact. Dispose of removed material or components with material intact as ≥ 1 ppm but <50 ppm.
Penetration mastic	< 2.0	At roof penetrations of the 2 project buildings	Metal and roofing composite	Remove material from components and/or remove components with material intact. Dispose of removed material or components with material intact as ≥ 1 ppm but <50 ppm.
Caulk	2.5 – 27	On roofs of the 2 project buildings, at skylights	Metal	Remove material from components and/or remove components with material intact. Dispose of removed material or components with material intact as ≥ 1 ppm but <50 ppm.

Table 2: Materials containing PCBs ≥ 1 but <50 mg/kg				
Material ID Nos./ Description	PCB Concentration (mg/kg)	Location(s)	Substrate(s)	Removal/Cleaning Protocol
Stucco	< 1.9	On exterior walls of the 2 project buildings	Wood	Remove material from components and/or remove components with material intact. Dispose of removed material or components with material intact as ≥ 1 ppm but <50 ppm.

One suspect material, roof flashing, was sampled and reported to either contain detectable concentrations of PCBs <1 mg/kg. Laboratory analytical reports can be found in Appendix B of this report.

Waste Streams Summary

It is the intent of the project to remove as many substrate materials as possible that are in contact with source materials containing PCBs at concentrations ≥ 50 mg/kg as Bulk Product Waste.

The following table provides a summary of the anticipated waste streams and their corresponding waste categories and disposal destinations.

Table 3: Waste Stream Summary and Designated Disposal Sites	
The main applicable regulatory provisions in 40 CFR 761 pertaining to the disposal of PCB Bulk Product Waste associated with this project is 761.62(a).	
Waste Stream	Disposal Site
Source materials containing ≥ 50 mg/kg PCBs (PCB Bulk Product Waste)	A hazardous waste landfill permitted by EPA under section 3004 of RCRA, or by a State authorized under section 3006 of RCRA. Designated site: Kettleman Hills Facility located in Kettleman City, California or US Ecology, Inc. located in Beatty, Nevada
Other PCB Bulk Product Waste (porous substrates attached to PCB Bulk Product source materials)	A hazardous waste landfill permitted by EPA under section 3004 of RCRA, or by a State authorized under section 3006 of RCRA. Designated site: Kettleman Hills Facility located in Kettleman City, California or US Ecology, Inc. located in Beatty, Nevada
PCB Remediation Waste containing PCBs ≥ 50 mg/kg and not attached to source materials	Not Applicable

Table 3: Waste Stream Summary and Designated Disposal Sites	
The main applicable regulatory provisions in 40 CFR 761 pertaining to the disposal of PCB Bulk Product Waste associated with this project is 761.62(a).	
Waste Stream	Disposal Site
PCB Remediation Wastes containing PCBs <50 mg/kg	Not Applicable
Non-liquid cleaning materials and personal protective equipment waste at any concentration, including non-porous surfaces and other non-liquid materials such as rags, gloves, booties, other disposable personal protective equipment, and similar materials resulting from decontamination related to the removal of PCB Bulk Product Wastes.	A hazardous waste landfill permitted by EPA under section 3004 of RCRA, or by a State authorized under section 3006 of RCRA. Designated site(s): Kettleman Hills Facility located in Kettleman City, California or US Ecology, Inc. located in Beatty, Nevada
Liquid wastes generated during the removal of PCB Bulk Product Wastes and/or during the cleanup of tools and equipment used during the removal of the PCB Bulk Product and Remediation wastes.	Not Applicable
Materials containing PCBs at concentrations <50 and ≥ 1 mg/kg.	A landfill permitted to receive materials containing PCBs at concentrations <50 and ≥ 1 mg/kg. Designated site(s): Potrero Hills Landfill located in Suisun City, California or Altamont Landfill located in Livermore, California
Materials containing PCBs at concentrations <1 mg/kg	A landfill accepting common construction debris. Designated site: Potrero Hills Landfill located in Suisun City, California or Recology Hay Road Landfill located in Vacaville, California or Altamont Landfill in Livermore, California or Alco Metals Recycling, San Leandro California
Porous substrate (i.e., concrete) tested and shown to contain PCBs at levels ≤ 0.24 mg/kg.	Not Applicable
Non-porous substrates from which materials containing PCBs at concentrations <50 mg/kg have been removed.	May be disposed of as common construction waste or recycled in accordance with the project goals and plans for disposal and/or recycling of non-hazardous materials.

On-Site Waste Management

- PCB Bulk Product Waste removed from the property and placed directly into waste containers will be managed in accordance with 40 CFR 761.65. The waste will be placed in DOT approved drums or containers and stored in a designated and secured waste storage area at the site for no longer than 30 days in accordance with 40 CFR 761.65(c)(1). Storage containers for off-site transportation of PCB wastes will meet the requirements in 40 CFR 761.65(c)(6). The containers will be labeled consistent with the applicable requirements in 40 CFR 761 and applicable state and local regulations. The labels will clearly show the date when the waste was first generated and placed in the containers.
- The Client will comply with the record-keeping requirements in 40 CFR 761.180; and all applicable requirements in Subpart K such as manifesting of the PCB wastes and Notification of PCB Activity by the transporter of the PCB waste. The transporter of PCB wastes will be the responsible party for completing the Notification of PCB Activity consistent with 40 CFR 761.205.
- Waste transport containers and any equipment (such as moveable equipment, sampling equipment, and tools that contacted PCB Bulk Product Waste) will be decontaminated before reuse and returning to the lessee of the equipment consistent with the self-implementing decontamination procedures of 40 CFR 761.79(c)(2)(i) or (ii) as appropriate to the item being decontaminated. In addition, decontamination will be conducted in accordance with the requirements of 40 CFR 761.79(e) and (g), as well as applicable requirements of 40 CFR 761.79(f).
- Non-liquid cleaning materials and personal protective equipment waste at any concentration, including non-porous surfaces and other non-liquid materials such as rags, gloves, booties, other disposable personal protective equipment, and similar materials resulting from decontamination shall be disposed of in accordance with 40 CFR 761.79(g)(6) and 40 CFR 761.61(a)(5)(v)(A)(3).

Additional Information

- Porous substrates identified as PCB Bulk Product will be physically identified so that the materials removed can be segregated and disposed of in accordance with Table 4.
- All PCB removal work will be conducted in accordance with Cal/OSHA worker safety requirements and per the *Removal of Polychlorinated Biphenyls* specification developed for this project.
- During removal activities, measures will be taken to prevent exposure to and releases of PCBs. This includes the use of dust suppression methods to minimize airborne dust generated during removal activities as necessary.

Please do not hesitate to contact our office at 510-266-4600 if you have any additional questions or concerns.

Respectfully,
Forensic Analytical Consulting Services



Wilson Wong
Senior Project Manager
Forensic Analytical Consulting Services

Appendix A: FACS Data Collection Methods

Polychlorinated Biphenyls (PCBs) – Bulk Materials. Samples of sufficient quantity were collected using disposable chisels, files, and box cutters and placed in small glass sampling containers. Samples were labeled using a unique identification number and transported under chain of custody procedures to an AIHA-accredited analytical laboratory (Eurofins Calscience Inc. Testing Laboratory in Garden Grove, California). In the laboratory, the samples were prepared in accordance with EPA Method 3540C (soxhlet extraction) and analyzed in accordance with EPA Method 8082 (gas chromatography). PCB concentrations in the samples are reported as Aroclors in mg/kg (ppm). All samples were stored and shipped in coolers with ice packs. Please see the laboratory analytical reports for additional details.



Appendix B: Laboratory Reports

Supporting laboratory reports and chain of custody forms are attached.



Environment Testing
America

ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-28712-1
Client Project/Site: PJ46841

For:
Forensic Analytical Consulting Services
21228 Cabot Blvd
Hayward, California 94544

Attn: Mr. Wilson Wong

Authorized for release by:
5/27/2020 3:12:19 PM

Carla Hollowell, Project Manager I
(714)895-5494
carlahollowell@eurofinsus.com



LINKS

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www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate recovery exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Job ID: 570-28712-1

Laboratory: Eurofins Calscience LLC

Narrative

Job Narrative 570-28712-1

Receipt

The samples were received on 5/20/2020 10:00 AM; the samples arrived in good condition, properly preserved, and where required, on ice. The temperature of the cooler at receipt time was 2.3°C.

Receipt Exceptions

No number of container listed on COC: PCB-1 (570-28712-1), PCB-2 (570-28712-2), PCB-3 (570-28712-3), PCB-4 (570-28712-4), PCB-5 (570-28712-5), PCB-6 (570-28712-6), PCB-7 (570-28712-7), PCB-8 (570-28712-8), PCB-9 (570-28712-9), PCB-10 (570-28712-10), PCB-11 (570-28712-11), PCB-12 (570-28712-12), PCB-13 (570-28712-13), PCB-14 (570-28712-14), PCB-15 (570-28712-15), PCB-16 (570-28712-16), PCB-17 (570-28712-17), PCB-18 (570-28712-18), PCB-19 (570-28712-19), PCB-20 (570-28712-20), PCB-21 (570-28712-21), PCB-22 (570-28712-22), PCB-23 (570-28712-23), PCB-24 (570-28712-24), PCB-25 (570-28712-25), PCB-26 (570-28712-26) and PCB-27 (570-28712-27).

PCBs

Method 8082: Due to the matrix, the following samples could not be concentrated to the final method required volume: PCB-1 (570-28712-1), PCB-2 (570-28712-2), PCB-3 (570-28712-3), PCB-4 (570-28712-4), PCB-5 (570-28712-5), PCB-6 (570-28712-6), PCB-14 (570-28712-14) and PCB-15 (570-28712-15). The reporting limits (RLs) are elevated proportionately. Final volume was changed from 10ml to 20ml due sample consistency.

Method 8082: The following samples were diluted due to the nature of the sample matrix: PCB-16 (570-28712-16), PCB-17 (570-28712-17) and PCB-18 (570-28712-18). Elevated reporting limits (RLs) are provided.

Method 8082: Surrogate recovery for the following sample was outside control limits: PCB-17 (570-28712-17). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8082: The following sample appears to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the sample do not closely match any of the laboratory's Aroclor standards used for instrument calibration: PCB-9 (570-28712-9). The sample(s) has been quantified and reported as Aroclor 1262. Due to the poor match with the Aroclor standard(s), there is increased qualitative and quantitative uncertainty associated with this result.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: PCB-1
Date Collected: 05/15/20 07:56
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 17:39	1
Aroclor-1221	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 17:39	1
Aroclor-1232	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 17:39	1
Aroclor-1242	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 17:39	1
Aroclor-1248	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 17:39	1
Aroclor-1254	ND		1.9	0.59	mg/Kg		05/20/20 18:36	05/22/20 17:39	1
Aroclor-1260	ND		1.9	0.59	mg/Kg		05/20/20 18:36	05/22/20 17:39	1
Aroclor-1262	ND		1.9	0.59	mg/Kg		05/20/20 18:36	05/22/20 17:39	1
Aroclor-1268	ND		1.9	0.59	mg/Kg		05/20/20 18:36	05/22/20 17:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	83		20 - 155				05/20/20 18:36	05/22/20 17:39	1
Tetrachloro-m-xylene (Surr)	74		25 - 126				05/20/20 18:36	05/22/20 17:39	1

Client Sample ID: PCB-2
Date Collected: 05/15/20 08:17
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 17:57	1
Aroclor-1221	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 17:57	1
Aroclor-1232	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 17:57	1
Aroclor-1242	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 17:57	1
Aroclor-1248	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 17:57	1
Aroclor-1254	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 17:57	1
Aroclor-1260	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 17:57	1
Aroclor-1262	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 17:57	1
Aroclor-1268	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 17:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	67		20 - 155				05/20/20 18:36	05/22/20 17:57	1
Tetrachloro-m-xylene (Surr)	63		25 - 126				05/20/20 18:36	05/22/20 17:57	1

Client Sample ID: PCB-3
Date Collected: 05/15/20 08:23
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-3
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		1.9	0.51	mg/Kg		05/20/20 18:36	05/22/20 18:15	1
Aroclor-1221	ND		1.9	0.51	mg/Kg		05/20/20 18:36	05/22/20 18:15	1
Aroclor-1232	ND		1.9	0.51	mg/Kg		05/20/20 18:36	05/22/20 18:15	1
Aroclor-1242	ND		1.9	0.51	mg/Kg		05/20/20 18:36	05/22/20 18:15	1
Aroclor-1248	ND		1.9	0.51	mg/Kg		05/20/20 18:36	05/22/20 18:15	1
Aroclor-1254	ND		1.9	0.57	mg/Kg		05/20/20 18:36	05/22/20 18:15	1
Aroclor-1260	ND		1.9	0.57	mg/Kg		05/20/20 18:36	05/22/20 18:15	1
Aroclor-1262	ND		1.9	0.57	mg/Kg		05/20/20 18:36	05/22/20 18:15	1
Aroclor-1268	ND		1.9	0.57	mg/Kg		05/20/20 18:36	05/22/20 18:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	84		20 - 155				05/20/20 18:36	05/22/20 18:15	1
Tetrachloro-m-xylene (Surr)	83		25 - 126				05/20/20 18:36	05/22/20 18:15	1

Client Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: PCB-4
Date Collected: 05/15/20 07:51
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-4
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		2.0	0.53	mg/Kg		05/20/20 18:36	05/22/20 18:33	1
Aroclor-1221	ND		2.0	0.53	mg/Kg		05/20/20 18:36	05/22/20 18:33	1
Aroclor-1232	ND		2.0	0.53	mg/Kg		05/20/20 18:36	05/22/20 18:33	1
Aroclor-1242	ND		2.0	0.53	mg/Kg		05/20/20 18:36	05/22/20 18:33	1
Aroclor-1248	ND		2.0	0.53	mg/Kg		05/20/20 18:36	05/22/20 18:33	1
Aroclor-1254	ND		2.0	0.59	mg/Kg		05/20/20 18:36	05/22/20 18:33	1
Aroclor-1260	ND		2.0	0.59	mg/Kg		05/20/20 18:36	05/22/20 18:33	1
Aroclor-1262	ND		2.0	0.59	mg/Kg		05/20/20 18:36	05/22/20 18:33	1
Aroclor-1268	ND		2.0	0.59	mg/Kg		05/20/20 18:36	05/22/20 18:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	84		20 - 155				05/20/20 18:36	05/22/20 18:33	1
Tetrachloro-m-xylene (Surr)	83		25 - 126				05/20/20 18:36	05/22/20 18:33	1

Client Sample ID: PCB-5
Date Collected: 05/15/20 08:20
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		1.9	0.51	mg/Kg		05/20/20 18:36	05/22/20 18:51	1
Aroclor-1221	ND		1.9	0.51	mg/Kg		05/20/20 18:36	05/22/20 18:51	1
Aroclor-1232	ND		1.9	0.51	mg/Kg		05/20/20 18:36	05/22/20 18:51	1
Aroclor-1242	ND		1.9	0.51	mg/Kg		05/20/20 18:36	05/22/20 18:51	1
Aroclor-1248	ND		1.9	0.51	mg/Kg		05/20/20 18:36	05/22/20 18:51	1
Aroclor-1254	ND		1.9	0.57	mg/Kg		05/20/20 18:36	05/22/20 18:51	1
Aroclor-1260	ND		1.9	0.57	mg/Kg		05/20/20 18:36	05/22/20 18:51	1
Aroclor-1262	ND		1.9	0.57	mg/Kg		05/20/20 18:36	05/22/20 18:51	1
Aroclor-1268	ND		1.9	0.57	mg/Kg		05/20/20 18:36	05/22/20 18:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	85		20 - 155				05/20/20 18:36	05/22/20 18:51	1
Tetrachloro-m-xylene (Surr)	92		25 - 126				05/20/20 18:36	05/22/20 18:51	1

Client Sample ID: PCB-6
Date Collected: 05/15/20 08:22
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-6
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 19:09	1
Aroclor-1221	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 19:09	1
Aroclor-1232	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 19:09	1
Aroclor-1242	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 19:09	1
Aroclor-1248	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 19:09	1
Aroclor-1254	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 19:09	1
Aroclor-1260	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 19:09	1
Aroclor-1262	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 19:09	1
Aroclor-1268	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 19:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	79		20 - 155				05/20/20 18:36	05/22/20 19:09	1
Tetrachloro-m-xylene (Surr)	88		25 - 126				05/20/20 18:36	05/22/20 19:09	1

Client Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: PCB-7
Date Collected: 05/15/20 07:39
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-7
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:14	1
Aroclor-1221	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:14	1
Aroclor-1232	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:14	1
Aroclor-1242	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:14	1
Aroclor-1248	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:14	1
Aroclor-1254	ND		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 13:14	1
Aroclor-1260	ND		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 13:14	1
Aroclor-1262	11		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 13:14	1
Aroclor-1268	ND		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 13:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	135		20 - 155				05/20/20 18:36	05/22/20 13:14	1
Tetrachloro-m-xylene (Surr)	100		25 - 126				05/20/20 18:36	05/22/20 13:14	1

Client Sample ID: PCB-8
Date Collected: 05/15/20 08:45
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-8
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.98	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:33	1
Aroclor-1221	ND		0.98	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:33	1
Aroclor-1232	ND		0.98	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:33	1
Aroclor-1242	ND		0.98	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:33	1
Aroclor-1248	ND		0.98	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:33	1
Aroclor-1254	ND		0.98	0.30	mg/Kg		05/20/20 18:36	05/22/20 13:33	1
Aroclor-1260	ND		0.98	0.30	mg/Kg		05/20/20 18:36	05/22/20 13:33	1
Aroclor-1262	2.5		0.98	0.30	mg/Kg		05/20/20 18:36	05/22/20 13:33	1
Aroclor-1268	ND		0.98	0.30	mg/Kg		05/20/20 18:36	05/22/20 13:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	96		20 - 155				05/20/20 18:36	05/22/20 13:33	1
Tetrachloro-m-xylene (Surr)	93		25 - 126				05/20/20 18:36	05/22/20 13:33	1

Client Sample ID: PCB-9
Date Collected: 05/15/20 08:42
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-9
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.96	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:52	1
Aroclor-1221	ND		0.96	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:52	1
Aroclor-1232	ND		0.96	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:52	1
Aroclor-1242	ND		0.96	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:52	1
Aroclor-1248	ND		0.96	0.26	mg/Kg		05/20/20 18:36	05/22/20 13:52	1
Aroclor-1254	ND		0.96	0.29	mg/Kg		05/20/20 18:36	05/22/20 13:52	1
Aroclor-1260	ND		0.96	0.29	mg/Kg		05/20/20 18:36	05/22/20 13:52	1
Aroclor-1262	27		4.8	1.5	mg/Kg		05/20/20 18:36	05/26/20 10:20	5
Aroclor-1268	ND		0.96	0.29	mg/Kg		05/20/20 18:36	05/22/20 13:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	144		20 - 155				05/20/20 18:36	05/22/20 13:52	1
DCB Decachlorobiphenyl (Surr)	135		20 - 155				05/20/20 18:36	05/26/20 10:20	5
Tetrachloro-m-xylene (Surr)	98		25 - 126				05/20/20 18:36	05/22/20 13:52	1
Tetrachloro-m-xylene (Surr)	108		25 - 126				05/20/20 18:36	05/26/20 10:20	5

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Client Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: PCB-10
Date Collected: 05/15/20 08:15
Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-10
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:11	1
Aroclor-1221	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:11	1
Aroclor-1232	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:11	1
Aroclor-1242	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:11	1
Aroclor-1248	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:11	1
Aroclor-1254	ND		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 14:11	1
Aroclor-1260	ND		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 14:11	1
Aroclor-1262	ND		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 14:11	1
Aroclor-1268	ND		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 14:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	149		20 - 155				05/20/20 18:36	05/22/20 14:11	1
Tetrachloro-m-xylene (Surr)	97		25 - 126				05/20/20 18:36	05/22/20 14:11	1

Client Sample ID: PCB-11
Date Collected: 05/15/20 08:20
Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-11
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.98	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:30	1
Aroclor-1221	ND		0.98	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:30	1
Aroclor-1232	ND		0.98	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:30	1
Aroclor-1242	ND		0.98	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:30	1
Aroclor-1248	ND		0.98	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:30	1
Aroclor-1254	ND		0.98	0.30	mg/Kg		05/20/20 18:36	05/22/20 14:30	1
Aroclor-1260	ND		0.98	0.30	mg/Kg		05/20/20 18:36	05/22/20 14:30	1
Aroclor-1262	ND		0.98	0.30	mg/Kg		05/20/20 18:36	05/22/20 14:30	1
Aroclor-1268	ND		0.98	0.30	mg/Kg		05/20/20 18:36	05/22/20 14:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	126		20 - 155				05/20/20 18:36	05/22/20 14:30	1
Tetrachloro-m-xylene (Surr)	108		25 - 126				05/20/20 18:36	05/22/20 14:30	1

Client Sample ID: PCB-12
Date Collected: 05/15/20 09:10
Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-12
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.96	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:49	1
Aroclor-1221	ND		0.96	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:49	1
Aroclor-1232	ND		0.96	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:49	1
Aroclor-1242	ND		0.96	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:49	1
Aroclor-1248	ND		0.96	0.26	mg/Kg		05/20/20 18:36	05/22/20 14:49	1
Aroclor-1254	ND		0.96	0.29	mg/Kg		05/20/20 18:36	05/22/20 14:49	1
Aroclor-1260	ND		0.96	0.29	mg/Kg		05/20/20 18:36	05/22/20 14:49	1
Aroclor-1262	ND		0.96	0.29	mg/Kg		05/20/20 18:36	05/22/20 14:49	1
Aroclor-1268	ND		0.96	0.29	mg/Kg		05/20/20 18:36	05/22/20 14:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	128		20 - 155				05/20/20 18:36	05/22/20 14:49	1
Tetrachloro-m-xylene (Surr)	102		25 - 126				05/20/20 18:36	05/22/20 14:49	1

Client Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: PCB-13
Date Collected: 05/15/20 11:40
Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-13
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 19:27	1
Aroclor-1221	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 19:27	1
Aroclor-1232	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 19:27	1
Aroclor-1242	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 19:27	1
Aroclor-1248	ND		0.97	0.26	mg/Kg		05/20/20 18:36	05/22/20 19:27	1
Aroclor-1254	ND		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 19:27	1
Aroclor-1260	ND		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 19:27	1
Aroclor-1262	ND		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 19:27	1
Aroclor-1268	ND		0.97	0.29	mg/Kg		05/20/20 18:36	05/22/20 19:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	69		20 - 155				05/20/20 18:36	05/22/20 19:27	1
Tetrachloro-m-xylene (Surr)	87		25 - 126				05/20/20 18:36	05/22/20 19:27	1

Client Sample ID: PCB-14
Date Collected: 05/15/20 11:23
Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-14
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 19:45	1
Aroclor-1221	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 19:45	1
Aroclor-1232	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 19:45	1
Aroclor-1242	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 19:45	1
Aroclor-1248	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 19:45	1
Aroclor-1254	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 19:45	1
Aroclor-1260	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 19:45	1
Aroclor-1262	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 19:45	1
Aroclor-1268	ND		1.9	0.58	mg/Kg		05/20/20 18:36	05/22/20 19:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	71		20 - 155				05/20/20 18:36	05/22/20 19:45	1
Tetrachloro-m-xylene (Surr)	87		25 - 126				05/20/20 18:36	05/22/20 19:45	1

Client Sample ID: PCB-15
Date Collected: 05/15/20 12:06
Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-15
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 20:03	1
Aroclor-1221	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 20:03	1
Aroclor-1232	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 20:03	1
Aroclor-1242	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 20:03	1
Aroclor-1248	ND		1.9	0.52	mg/Kg		05/20/20 18:36	05/22/20 20:03	1
Aroclor-1254	ND		1.9	0.59	mg/Kg		05/20/20 18:36	05/22/20 20:03	1
Aroclor-1260	ND		1.9	0.59	mg/Kg		05/20/20 18:36	05/22/20 20:03	1
Aroclor-1262	ND		1.9	0.59	mg/Kg		05/20/20 18:36	05/22/20 20:03	1
Aroclor-1268	ND		1.9	0.59	mg/Kg		05/20/20 18:36	05/22/20 20:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	86		20 - 155				05/20/20 18:36	05/22/20 20:03	1
Tetrachloro-m-xylene (Surr)	105		25 - 126				05/20/20 18:36	05/22/20 20:03	1

Client Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: PCB-16
Date Collected: 05/15/20 10:50
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-16
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		98	26	mg/Kg		05/20/20 18:51	05/26/20 10:37	100
Aroclor-1221	ND		98	26	mg/Kg		05/20/20 18:51	05/26/20 10:37	100
Aroclor-1232	ND		98	26	mg/Kg		05/20/20 18:51	05/26/20 10:37	100
Aroclor-1242	ND		98	26	mg/Kg		05/20/20 18:51	05/26/20 10:37	100
Aroclor-1248	ND		98	26	mg/Kg		05/20/20 18:51	05/26/20 10:37	100
Aroclor-1254	ND		98	30	mg/Kg		05/20/20 18:51	05/26/20 10:37	100
Aroclor-1260	ND		98	30	mg/Kg		05/20/20 18:51	05/26/20 10:37	100
Aroclor-1262	ND		98	30	mg/Kg		05/20/20 18:51	05/26/20 10:37	100
Aroclor-1268	ND		98	30	mg/Kg		05/20/20 18:51	05/26/20 10:37	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	47		20 - 155				05/20/20 18:51	05/26/20 10:37	100
Tetrachloro-m-xylene (Surr)	125		25 - 126				05/20/20 18:51	05/26/20 10:37	100

Client Sample ID: PCB-17
Date Collected: 05/15/20 11:38
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-17
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		96	26	mg/Kg		05/20/20 18:51	05/26/20 10:56	100
Aroclor-1221	ND		96	26	mg/Kg		05/20/20 18:51	05/26/20 10:56	100
Aroclor-1232	ND		96	26	mg/Kg		05/20/20 18:51	05/26/20 10:56	100
Aroclor-1242	ND		96	26	mg/Kg		05/20/20 18:51	05/26/20 10:56	100
Aroclor-1248	ND		96	26	mg/Kg		05/20/20 18:51	05/26/20 10:56	100
Aroclor-1254	ND		96	29	mg/Kg		05/20/20 18:51	05/26/20 10:56	100
Aroclor-1260	ND		96	29	mg/Kg		05/20/20 18:51	05/26/20 10:56	100
Aroclor-1262	ND		96	29	mg/Kg		05/20/20 18:51	05/26/20 10:56	100
Aroclor-1268	ND		96	29	mg/Kg		05/20/20 18:51	05/26/20 10:56	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	134		20 - 155				05/20/20 18:51	05/26/20 10:56	100
Tetrachloro-m-xylene (Surr)	146	X	25 - 126				05/20/20 18:51	05/26/20 10:56	100

Client Sample ID: PCB-18
Date Collected: 05/15/20 11:48
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-18
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		94	25	mg/Kg		05/20/20 18:51	05/26/20 11:13	100
Aroclor-1221	ND		94	25	mg/Kg		05/20/20 18:51	05/26/20 11:13	100
Aroclor-1232	ND		94	25	mg/Kg		05/20/20 18:51	05/26/20 11:13	100
Aroclor-1242	ND		94	25	mg/Kg		05/20/20 18:51	05/26/20 11:13	100
Aroclor-1248	ND		94	25	mg/Kg		05/20/20 18:51	05/26/20 11:13	100
Aroclor-1254	ND		94	29	mg/Kg		05/20/20 18:51	05/26/20 11:13	100
Aroclor-1260	ND		94	29	mg/Kg		05/20/20 18:51	05/26/20 11:13	100
Aroclor-1262	ND		94	29	mg/Kg		05/20/20 18:51	05/26/20 11:13	100
Aroclor-1268	ND		94	29	mg/Kg		05/20/20 18:51	05/26/20 11:13	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	48		20 - 155				05/20/20 18:51	05/26/20 11:13	100
Tetrachloro-m-xylene (Surr)	115		25 - 126				05/20/20 18:51	05/26/20 11:13	100

Client Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: PCB-19
Date Collected: 05/18/20 07:30
Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-19
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.049	0.013	mg/Kg		05/20/20 18:51	05/22/20 20:21	1
Aroclor-1221	ND		0.049	0.013	mg/Kg		05/20/20 18:51	05/22/20 20:21	1
Aroclor-1232	ND		0.049	0.013	mg/Kg		05/20/20 18:51	05/22/20 20:21	1
Aroclor-1242	ND		0.049	0.013	mg/Kg		05/20/20 18:51	05/22/20 20:21	1
Aroclor-1248	ND		0.049	0.013	mg/Kg		05/20/20 18:51	05/22/20 20:21	1
Aroclor-1254	ND		0.049	0.015	mg/Kg		05/20/20 18:51	05/22/20 20:21	1
Aroclor-1260	ND		0.049	0.015	mg/Kg		05/20/20 18:51	05/22/20 20:21	1
Aroclor-1262	ND		0.049	0.015	mg/Kg		05/20/20 18:51	05/22/20 20:21	1
Aroclor-1268	ND		0.049	0.015	mg/Kg		05/20/20 18:51	05/22/20 20:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	74		20 - 155				05/20/20 18:51	05/22/20 20:21	1
Tetrachloro-m-xylene (Surr)	89		25 - 126				05/20/20 18:51	05/22/20 20:21	1

Client Sample ID: PCB-20
Date Collected: 05/18/20 08:11
Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-20
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:23	1
Aroclor-1221	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:23	1
Aroclor-1232	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:23	1
Aroclor-1242	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:23	1
Aroclor-1248	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:23	1
Aroclor-1254	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:23	1
Aroclor-1260	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:23	1
Aroclor-1262	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:23	1
Aroclor-1268	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	88		20 - 155				05/20/20 18:52	05/22/20 12:23	1
Tetrachloro-m-xylene (Surr)	91		25 - 126				05/20/20 18:52	05/22/20 12:23	1

Client Sample ID: PCB-21
Date Collected: 05/18/20 08:19
Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-21
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND	F1	0.050	0.013	mg/Kg		05/20/20 18:51	05/22/20 17:22	1
Aroclor-1221	ND		0.050	0.013	mg/Kg		05/20/20 18:51	05/22/20 17:22	1
Aroclor-1232	ND		0.050	0.013	mg/Kg		05/20/20 18:51	05/22/20 17:22	1
Aroclor-1242	ND		0.050	0.013	mg/Kg		05/20/20 18:51	05/22/20 17:22	1
Aroclor-1248	ND		0.050	0.013	mg/Kg		05/20/20 18:51	05/22/20 17:22	1
Aroclor-1254	ND		0.050	0.015	mg/Kg		05/20/20 18:51	05/22/20 17:22	1
Aroclor-1260	0.033	J	0.050	0.015	mg/Kg		05/20/20 18:51	05/22/20 17:22	1
Aroclor-1262	ND		0.050	0.015	mg/Kg		05/20/20 18:51	05/22/20 17:22	1
Aroclor-1268	ND		0.050	0.015	mg/Kg		05/20/20 18:51	05/22/20 17:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	99		20 - 155				05/20/20 18:51	05/22/20 17:22	1
Tetrachloro-m-xylene (Surr)	96		25 - 126				05/20/20 18:51	05/22/20 17:22	1

Client Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: PCB-22
Date Collected: 05/18/20 08:43
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-22
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:40	1
Aroclor-1221	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:40	1
Aroclor-1232	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:40	1
Aroclor-1242	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:40	1
Aroclor-1248	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:40	1
Aroclor-1254	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:40	1
Aroclor-1260	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:40	1
Aroclor-1262	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:40	1
Aroclor-1268	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	82		20 - 155				05/20/20 18:52	05/22/20 12:40	1
Tetrachloro-m-xylene (Surr)	87		25 - 126				05/20/20 18:52	05/22/20 12:40	1

Client Sample ID: PCB-23
Date Collected: 05/18/20 08:44
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-23
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:58	1
Aroclor-1221	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:58	1
Aroclor-1232	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:58	1
Aroclor-1242	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:58	1
Aroclor-1248	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:58	1
Aroclor-1254	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:58	1
Aroclor-1260	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:58	1
Aroclor-1262	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:58	1
Aroclor-1268	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	83		20 - 155				05/20/20 18:52	05/22/20 12:58	1
Tetrachloro-m-xylene (Surr)	94		25 - 126				05/20/20 18:52	05/22/20 12:58	1

Client Sample ID: PCB-24
Date Collected: 05/18/20 08:51
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-24
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:16	1
Aroclor-1221	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:16	1
Aroclor-1232	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:16	1
Aroclor-1242	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:16	1
Aroclor-1248	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:16	1
Aroclor-1254	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:16	1
Aroclor-1260	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:16	1
Aroclor-1262	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:16	1
Aroclor-1268	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	85		20 - 155				05/20/20 18:52	05/22/20 13:16	1
Tetrachloro-m-xylene (Surr)	95		25 - 126				05/20/20 18:52	05/22/20 13:16	1

Client Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: PCB-25
Date Collected: 05/18/20 09:06
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-25
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:34	1
Aroclor-1221	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:34	1
Aroclor-1232	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:34	1
Aroclor-1242	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:34	1
Aroclor-1248	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:34	1
Aroclor-1254	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:34	1
Aroclor-1260	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:34	1
Aroclor-1262	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:34	1
Aroclor-1268	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	84		20 - 155				05/20/20 18:52	05/22/20 13:34	1
Tetrachloro-m-xylene (Surr)	91		25 - 126				05/20/20 18:52	05/22/20 13:34	1

Client Sample ID: PCB-26
Date Collected: 05/18/20 09:09
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-26
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:52	1
Aroclor-1221	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:52	1
Aroclor-1232	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:52	1
Aroclor-1242	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:52	1
Aroclor-1248	ND		0.049	0.013	mg/Kg		05/20/20 18:52	05/22/20 13:52	1
Aroclor-1254	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:52	1
Aroclor-1260	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:52	1
Aroclor-1262	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:52	1
Aroclor-1268	ND		0.049	0.015	mg/Kg		05/20/20 18:52	05/22/20 13:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	87		20 - 155				05/20/20 18:52	05/22/20 13:52	1
Tetrachloro-m-xylene (Surr)	94		25 - 126				05/20/20 18:52	05/22/20 13:52	1

Client Sample ID: PCB-27
Date Collected: 05/18/20 09:15
Date Received: 05/20/20 10:00Lab Sample ID: 570-28712-27
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 14:10	1
Aroclor-1221	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 14:10	1
Aroclor-1232	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 14:10	1
Aroclor-1242	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 14:10	1
Aroclor-1248	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 14:10	1
Aroclor-1254	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 14:10	1
Aroclor-1260	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 14:10	1
Aroclor-1262	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 14:10	1
Aroclor-1268	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 14:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	82		20 - 155				05/20/20 18:52	05/22/20 14:10	1
Tetrachloro-m-xylene (Surr)	93		25 - 126				05/20/20 18:52	05/22/20 14:10	1

Surrogate Summary

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCB1 (20-155)	TCX1 (25-126)
570-28712-1	PCB-1	83	74
570-28712-2	PCB-2	67	63
570-28712-3	PCB-3	84	83
570-28712-4	PCB-4	84	83
570-28712-5	PCB-5	85	92
570-28712-6	PCB-6	79	88
570-28712-7	PCB-7	135	100
570-28712-8	PCB-8	96	93
570-28712-9	PCB-9	144	98
570-28712-9	PCB-9	135	108
570-28712-10	PCB-10	149	97
570-28712-11	PCB-11	126	108
570-28712-12	PCB-12	128	102
570-28712-13	PCB-13	69	87
570-28712-14	PCB-14	71	87
570-28712-15	PCB-15	86	105
570-28712-16	PCB-16	47	125
570-28712-17	PCB-17	134	146 X
570-28712-18	PCB-18	48	115
570-28712-19	PCB-19	74	89
570-28712-20	PCB-20	88	91
570-28712-21	PCB-21	99	96
570-28712-21 MS	PCB-21	101	95
570-28712-21 MSD	PCB-21	97	90
570-28712-22	PCB-22	82	87
570-28712-22 MS	PCB-22	83	95
570-28712-22 MSD	PCB-22	85	95
570-28712-23	PCB-23	83	94
570-28712-24	PCB-24	85	95
570-28712-25	PCB-25	84	91
570-28712-26	PCB-26	87	94
570-28712-27	PCB-27	82	93
LCS 570-70390/2-A	Lab Control Sample	74	92
LCS 570-70396/2-A	Lab Control Sample	86	89
LCSD 570-70390/3-A	Lab Control Sample Dup	75	91
LCSD 570-70396/3-A	Lab Control Sample Dup	88	84
MB 570-70390/1-A	Method Blank	96	97
MB 570-70396/1-A	Method Blank	94	93

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene (Surr)

QC Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 570-70390/1-A

Matrix: Solid

Analysis Batch: 70779

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 70390

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.050	0.013	mg/Kg		05/20/20 18:36	05/22/20 16:28	1
Aroclor-1221	ND		0.050	0.013	mg/Kg		05/20/20 18:36	05/22/20 16:28	1
Aroclor-1232	ND		0.050	0.013	mg/Kg		05/20/20 18:36	05/22/20 16:28	1
Aroclor-1242	ND		0.050	0.013	mg/Kg		05/20/20 18:36	05/22/20 16:28	1
Aroclor-1248	ND		0.050	0.013	mg/Kg		05/20/20 18:36	05/22/20 16:28	1
Aroclor-1254	ND		0.050	0.015	mg/Kg		05/20/20 18:36	05/22/20 16:28	1
Aroclor-1260	ND		0.050	0.015	mg/Kg		05/20/20 18:36	05/22/20 16:28	1
Aroclor-1262	ND		0.050	0.015	mg/Kg		05/20/20 18:36	05/22/20 16:28	1
Aroclor-1268	ND		0.050	0.015	mg/Kg		05/20/20 18:36	05/22/20 16:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	96		20 - 155	05/20/20 18:36	05/22/20 16:28	1
Tetrachloro-m-xylene (Surr)	97		25 - 126	05/20/20 18:36	05/22/20 16:28	1

Lab Sample ID: LCS 570-70390/2-A

Matrix: Solid

Analysis Batch: 70779

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 70390

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Aroclor-1016	0.100	0.1078		mg/Kg		108	50 - 142
Aroclor-1260	0.100	0.09894		mg/Kg		99	50 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	74		20 - 155
Tetrachloro-m-xylene (Surr)	92		25 - 126

Lab Sample ID: LCSD 570-70390/3-A

Matrix: Solid

Analysis Batch: 70779

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 70390

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Aroclor-1016	0.100	0.1062		mg/Kg		106	50 - 142	3	30
Aroclor-1260	0.100	0.1024		mg/Kg		102	50 - 150	3	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	75		20 - 155
Tetrachloro-m-xylene (Surr)	91		25 - 126

Lab Sample ID: 570-28712-21 MS

Matrix: Solid

Analysis Batch: 70779

Client Sample ID: PCB-21

Prep Type: Total/NA

Prep Batch: 70390

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Aroclor-1016	ND	F1	0.0995	0.1356		mg/Kg		136	20 - 175
Aroclor-1260	0.033	J	0.0995	0.1583		mg/Kg		126	20 - 180

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QC Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 570-28712-21 MS

Matrix: Solid

Analysis Batch: 70779

Client Sample ID: PCB-21

Prep Type: Total/NA

Prep Batch: 70390

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	101		20 - 155
Tetrachloro-m-xylene (Surr)	95		25 - 126

Lab Sample ID: 570-28712-21 MSD

Matrix: Solid

Analysis Batch: 70779

Client Sample ID: PCB-21

Prep Type: Total/NA

Prep Batch: 70390

Analyte	Sample		Spike Added	MSD MSD		Unit	D	%Rec	%Rec.		RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits	RPD		
Aroclor-1016	ND	F1	0.100	0.1769	F1	mg/Kg		177	20 - 175	26	40	
Aroclor-1260	0.033	J	0.100	0.1956		mg/Kg		163	20 - 180	21	40	

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	97		20 - 155
Tetrachloro-m-xylene (Surr)	90		25 - 126

Lab Sample ID: MB 570-70396/1-A

Matrix: Solid

Analysis Batch: 70824

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 70396

Analyte	MB MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
Aroclor-1016	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:05	12:05	1	
Aroclor-1221	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:05	12:05	1	
Aroclor-1232	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:05	12:05	1	
Aroclor-1242	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:05	12:05	1	
Aroclor-1248	ND		0.050	0.013	mg/Kg		05/20/20 18:52	05/22/20 12:05	12:05	1	
Aroclor-1254	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:05	12:05	1	
Aroclor-1260	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:05	12:05	1	
Aroclor-1262	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:05	12:05	1	
Aroclor-1268	ND		0.050	0.015	mg/Kg		05/20/20 18:52	05/22/20 12:05	12:05	1	

Surrogate	MB MB		Limits	Prepared		Analyzed		Dil Fac
	%Recovery	Qualifier						
DCB Decachlorobiphenyl (Surr)	94		20 - 155	05/20/20 18:52	05/22/20 12:05	12:05	1	
Tetrachloro-m-xylene (Surr)	93		25 - 126	05/20/20 18:52	05/22/20 12:05	12:05	1	

Lab Sample ID: LCS 570-70396/2-A

Matrix: Solid

Analysis Batch: 70824

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 70396

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	
Aroclor-1016	0.100	0.1092		mg/Kg		109	50 - 142	
Aroclor-1260	0.100	0.1079		mg/Kg		108	50 - 150	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	86		20 - 155
Tetrachloro-m-xylene (Surr)	89		25 - 126

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QC Sample Results

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCSD 570-70396/3-A

Matrix: Solid

Analysis Batch: 70824

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 70396

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	
							Limits	RPD	Limit	
Aroclor-1016	0.100	0.1017		mg/Kg		102	50 - 142	7	30	
Aroclor-1260	0.100	0.1046		mg/Kg		105	50 - 150	3	30	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	88		20 - 155
Tetrachloro-m-xylene (Surr)	84		25 - 126

Lab Sample ID: 570-28712-22 MS

Matrix: Solid

Analysis Batch: 70824

Client Sample ID: PCB-22

Prep Type: Total/NA

Prep Batch: 70396

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec.	
				Result	Qualifier				Limits	
Aroclor-1016	ND		0.0995	0.1053		mg/Kg		106	20 - 175	
Aroclor-1260	ND		0.0995	0.1316		mg/Kg		132	20 - 180	

Surrogate	MS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	83		20 - 155
Tetrachloro-m-xylene (Surr)	95		25 - 126

Lab Sample ID: 570-28712-22 MSD

Matrix: Solid

Analysis Batch: 70824

Client Sample ID: PCB-22

Prep Type: Total/NA

Prep Batch: 70396

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec.		RPD	
				Result	Qualifier				Limits	RPD	Limit	
Aroclor-1016	ND		0.0990	0.1053		mg/Kg		106	20 - 175	0	40	
Aroclor-1260	ND		0.0990	0.1311		mg/Kg		132	20 - 180	0	40	

Surrogate	MSD		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	85		20 - 155
Tetrachloro-m-xylene (Surr)	95		25 - 126

Lab Chronicle

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Client Sample ID: PCB-1

Date Collected: 05/15/20 07:56

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.03 g	20 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70779	05/22/20 17:39	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-2

Date Collected: 05/15/20 08:17

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.04 g	20 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70779	05/22/20 17:57	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-3

Date Collected: 05/15/20 08:23

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.06 g	20 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70779	05/22/20 18:15	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-4

Date Collected: 05/15/20 07:51

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.02 g	20 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70779	05/22/20 18:33	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-5

Date Collected: 05/15/20 08:20

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.06 g	20 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70779	05/22/20 18:51	UHHN	ECL 1
Instrument ID: GC58										

Lab Chronicle

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Client Sample ID: PCB-6

Date Collected: 05/15/20 08:22

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.04 g	20 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70779	05/22/20 19:09	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-7

Date Collected: 05/15/20 07:39

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.03 g	10 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70833	05/22/20 13:14	UHHN	ECL 1
Instrument ID: GC31										

Client Sample ID: PCB-8

Date Collected: 05/15/20 08:45

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.02 g	10 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70833	05/22/20 13:33	UHHN	ECL 1
Instrument ID: GC31										

Client Sample ID: PCB-9

Date Collected: 05/15/20 08:42

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.04 g	10 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70833	05/22/20 13:52	UHHN	ECL 1
Instrument ID: GC31										
Total/NA	Prep	3540C			1.04 g	10 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		5			71205	05/26/20 10:20	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-10

Date Collected: 05/15/20 08:15

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.03 g	10 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70833	05/22/20 14:11	UHHN	ECL 1
Instrument ID: GC31										

Lab Chronicle

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Client Sample ID: PCB-11

Date Collected: 05/15/20 08:20

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.02 g	10 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70833	05/22/20 14:30	UHHN	ECL 1
Instrument ID: GC31										

Client Sample ID: PCB-12

Date Collected: 05/15/20 09:10

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.04 g	10 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70833	05/22/20 14:49	UHHN	ECL 1
Instrument ID: GC31										

Client Sample ID: PCB-13

Date Collected: 05/15/20 11:40

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.03 g	10 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70779	05/22/20 19:27	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-14

Date Collected: 05/15/20 11:23

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.04 g	20 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70779	05/22/20 19:45	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-15

Date Collected: 05/15/20 12:06

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.03 g	20 mL	70390	05/20/20 18:36	OM8W	ECL 1
Total/NA	Analysis	8082		1			70779	05/22/20 20:03	UHHN	ECL 1
Instrument ID: GC58										

Lab Chronicle

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Client Sample ID: PCB-16

Lab Sample ID: 570-28712-16

Date Collected: 05/15/20 10:50

Matrix: Solid

Date Received: 05/20/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.02 g	10 mL	70390	05/20/20 18:51	OM8W	ECL 1
Total/NA	Analysis	8082		100	1 mL	1.0 mL	71205	05/26/20 10:37	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-17

Lab Sample ID: 570-28712-17

Date Collected: 05/15/20 11:38

Matrix: Solid

Date Received: 05/20/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.04 g	10 mL	70390	05/20/20 18:51	OM8W	ECL 1
Total/NA	Analysis	8082		100			71205	05/26/20 10:56	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-18

Lab Sample ID: 570-28712-18

Date Collected: 05/15/20 11:48

Matrix: Solid

Date Received: 05/20/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			1.06 g	10 mL	70390	05/20/20 18:51	OM8W	ECL 1
Total/NA	Analysis	8082		100			71205	05/26/20 11:13	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-19

Lab Sample ID: 570-28712-19

Date Collected: 05/18/20 07:30

Matrix: Solid

Date Received: 05/20/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			20.4 g	10 mL	70390	05/20/20 18:51	OM8W	ECL 1
Total/NA	Analysis	8082		1			70779	05/22/20 20:21	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-20

Lab Sample ID: 570-28712-20

Date Collected: 05/18/20 08:11

Matrix: Solid

Date Received: 05/20/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			20.3 g	10 mL	70396	05/20/20 18:52	OM8W	ECL 1
Total/NA	Analysis	8082		1			70824	05/22/20 12:23	UHHN	ECL 1
Instrument ID: GC66										

Lab Chronicle

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Client Sample ID: PCB-21

Date Collected: 05/18/20 08:19

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-21

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			20.2 g	10 mL	70390	05/20/20 18:51	OM8W	ECL 1
Total/NA	Analysis	8082		1			70779	05/22/20 17:22	UHHN	ECL 1
Instrument ID: GC58										

Client Sample ID: PCB-22

Date Collected: 05/18/20 08:43

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-22

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			20.3 g	10 mL	70396	05/20/20 18:52	OM8W	ECL 1
Total/NA	Analysis	8082		1			70824	05/22/20 12:40	UHHN	ECL 1
Instrument ID: GC66										

Client Sample ID: PCB-23

Date Collected: 05/18/20 08:44

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-23

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			20.2 g	10 mL	70396	05/20/20 18:52	OM8W	ECL 1
Total/NA	Analysis	8082		1			70824	05/22/20 12:58	UHHN	ECL 1
Instrument ID: GC66										

Client Sample ID: PCB-24

Date Collected: 05/18/20 08:51

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-24

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			20.4 g	10 mL	70396	05/20/20 18:52	OM8W	ECL 1
Total/NA	Analysis	8082		1			70824	05/22/20 13:16	UHHN	ECL 1
Instrument ID: GC66										

Client Sample ID: PCB-25

Date Collected: 05/18/20 09:06

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-25

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			20.1 g	10 mL	70396	05/20/20 18:52	OM8W	ECL 1
Total/NA	Analysis	8082		1			70824	05/22/20 13:34	UHHN	ECL 1
Instrument ID: GC66										

Lab Chronicle

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Client Sample ID: PCB-26

Date Collected: 05/18/20 09:09

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-26

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			20.4 g	10 mL	70396	05/20/20 18:52	OM8W	ECL 1
Total/NA	Analysis	8082		1			70824	05/22/20 13:52	UHHN	ECL 1
Instrument ID: GC66										

Client Sample ID: PCB-27

Date Collected: 05/18/20 09:15

Date Received: 05/20/20 10:00

Lab Sample ID: 570-28712-27

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			20.2 g	10 mL	70396	05/20/20 18:52	OM8W	ECL 1
Total/NA	Analysis	8082		1			70824	05/22/20 14:10	UHHN	ECL 1
Instrument ID: GC66										

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

Accreditation/Certification Summary

Client: Forensic Analytical Consulting Services
 Project/Site: PJ46841

Job ID: 570-28712-1

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-29-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Guam	State	20-003R	10-31-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-20

Method Summary

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	ECL 1
3540C	Soxhlet Extraction	SW846	ECL 1

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494



Sample Summary

Client: Forensic Analytical Consulting Services
Project/Site: PJ46841

Job ID: 570-28712-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-28712-1	PCB-1	Solid	05/15/20 07:56	05/20/20 10:00	
570-28712-2	PCB-2	Solid	05/15/20 08:17	05/20/20 10:00	
570-28712-3	PCB-3	Solid	05/15/20 08:23	05/20/20 10:00	
570-28712-4	PCB-4	Solid	05/15/20 07:51	05/20/20 10:00	
570-28712-5	PCB-5	Solid	05/15/20 08:20	05/20/20 10:00	
570-28712-6	PCB-6	Solid	05/15/20 08:22	05/20/20 10:00	
570-28712-7	PCB-7	Solid	05/15/20 07:39	05/20/20 10:00	
570-28712-8	PCB-8	Solid	05/15/20 08:45	05/20/20 10:00	
570-28712-9	PCB-9	Solid	05/15/20 08:42	05/20/20 10:00	
570-28712-10	PCB-10	Solid	05/15/20 08:15	05/20/20 10:00	
570-28712-11	PCB-11	Solid	05/15/20 08:20	05/20/20 10:00	
570-28712-12	PCB-12	Solid	05/15/20 09:10	05/20/20 10:00	
570-28712-13	PCB-13	Solid	05/15/20 11:40	05/20/20 10:00	
570-28712-14	PCB-14	Solid	05/15/20 11:23	05/20/20 10:00	
570-28712-15	PCB-15	Solid	05/15/20 12:06	05/20/20 10:00	
570-28712-16	PCB-16	Solid	05/15/20 10:50	05/20/20 10:00	
570-28712-17	PCB-17	Solid	05/15/20 11:38	05/20/20 10:00	
570-28712-18	PCB-18	Solid	05/15/20 11:48	05/20/20 10:00	
570-28712-19	PCB-19	Solid	05/18/20 07:30	05/20/20 10:00	
570-28712-20	PCB-20	Solid	05/18/20 08:11	05/20/20 10:00	
570-28712-21	PCB-21	Solid	05/18/20 08:19	05/20/20 10:00	
570-28712-22	PCB-22	Solid	05/18/20 08:43	05/20/20 10:00	
570-28712-23	PCB-23	Solid	05/18/20 08:44	05/20/20 10:00	
570-28712-24	PCB-24	Solid	05/18/20 08:51	05/20/20 10:00	
570-28712-25	PCB-25	Solid	05/18/20 09:06	05/20/20 10:00	
570-28712-26	PCB-26	Solid	05/18/20 09:09	05/20/20 10:00	
570-28712-27	PCB-27	Solid	05/18/20 09:15	05/20/20 10:00	

28712



Calscience

CHAIN OF CUSTODY RECORD

DATE: 05-18-2020

PAGE: 1 OF 3



570-28712 Chain of Custody

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
 For courier service / sample drop off information, contact us26_sales@eurofins.com or call us.

LABORATORY CLIENT: Forensic Analytical		CLIENT PROJECT NAME / NUMBER: PJ46841		P.O. NO.: POHA 6113																					
ADDRESS: 21228 Cabot Blvd Hayward		PROJECT CONTACT: Wilson wong manager Forensic Analytical		SAMPLER(S): (PRINT) SS/KM																					
CITY: Hayward	STATE: CA	ZIP: 94545	REQUESTED ANALYSES																						
TEL: (510) 266-4600	E-MAIL: w.wong@forensicanalytical.com	TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD	Please check box or fill in blank as needed.																						
GLOBAL ID:	LOG CODE:																								
SPECIAL INSTRUCTIONS: Please report result in mg/kg or ppm Reporting limit must be less than 1.0 mg/kg PCB's (8082) & 35400, memo: soft-sip extraction.																									
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Field Filtered	Preserved	Unpreserved	<input type="checkbox"/> TPH(g) <input type="checkbox"/> GRO <input type="checkbox"/> TPH(d) <input type="checkbox"/> DRO <input type="checkbox"/> TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	TPH	BTEX / MTBE <input type="checkbox"/> 8260 <input type="checkbox"/>	VOCs (8260)	Oxygenates (8260)	Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082) & 35400	PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	T22 Metals <input type="checkbox"/> 6010/747X <input type="checkbox"/> 6020/747X	C(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6					
		DATE	TIME																						
	PCB-1	5/15/20	7:56	Post Field			<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>								
	PCB-2	5/15/20	8:17	Post Field			<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>								
	PCB-3	5/15/20	8:23	Post Field			<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>								
	PCB-4	5/15/20	7:51	Post Function			<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>								
	PCB-5	5/15/20	8:20	Post Function			<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>								
	PCB-6	5/15/20	8:22	Post Function			<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>								
	PCB-7	5/15/20	7:39	Post Sampling			<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>								
	PCB-8	5/15/20	8:43	Post Sampling			<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>								
	PCB-9	5/15/20	8:42	Post Sampling			<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>								
	PCB-10	5/15/20	8:15	Post Sampling			<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>								
Relinquished by: (Signature) <i>[Signature]</i>		Relinquished by: (Signature) <i>[Signature]</i>		Relinquished by: (Signature/Affiliation) <i>[Signature]</i>		Relinquished by: (Signature/Affiliation) <i>[Signature]</i>		Relinquished by: (Signature/Affiliation) <i>[Signature]</i>		Date: 5/19/20		Date: 5/20/2020		Date: 5/19/20		Date: 5/20/2020		Date: 5/19/20		Date: 5/20/2020		Time: 12:15		Time: 10:00	

28712

CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY: _____

DATE: 05-18-2020 PAGE: 2 OF 3

CLIENT PROJECT NAME / NUMBER: P5468A1 P.O. NO.: PDHAG113

PROJECT CONTACT: Wilson wong manager SAMPLER(S): (PRINT) SS/KM

PROJECT: Forensic Analytical

REQUESTED ANALYSES

Please check box or fill in blank as needed.

TPH (g) GRO	<input type="checkbox"/>	TPH (g) DRO	<input type="checkbox"/>	TPH □ C6-C36 □ C6-C44	<input type="checkbox"/>	BTEX / MTBE □ 8260 □	VOCs (8260)	Oxygenates (8260)	Prep (5035) □ En Core □ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082) & 3540C	PAHs □ 8270 □ 8270 SIM	T22 Metals □ 6010/747X □ 6020/747X	Cr(VI) □ 7196 □ 7199 □ 218.6
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LABORATORY CLIENT: Forensic Analytical

ADDRESS: 21228 Cabot Blvd STATE: CA ZIP: 94545

CITY: Hayward

TEL: (510) 266-4600 E-MAIL: w.wong@forensicanalytical.com

TURNAROUND TIME (Rush surcharges may apply to any TAT not 'STANDARD'):

SAME DAY 24 HR 48 HR 72 HR 5 DAYS STANDARD

LOG CODE: 10-044

SPECIAL INSTRUCTIONS: Please report result in mg/kg or PPM
Reporting limit must be less than 1.0 mg/kg
PCB's (8082) & 3540C. method: soft-slip extraction.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered
		DATE	TIME					
11	PCB-11	5/15/20	8:20	Car-Min Highway		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	PCB-12	5/15/20	9:10	Car-Min Highway		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	PCB-13	5/15/20	11:40	Vapor Barrier Spec		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	PCB-14	5/15/20	11:23	Vapor Barrier Spec		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	PCB-15	5/15/20	12:06	Vapor Barrier Spec		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	PCB-16	5/15/20	10:50	Sealant		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	PCB-17	5/15/20	11:38	Sealant		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	PCB-18	5/15/20	11:48	Sealant		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	PCB-19	5/18/20	7:30	Soil		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	PCB-20	5/18/20	8:11	Soil		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Relinquished by: (Signature) _____ Date: 5/19/20 Time: 12:15

Relinquished by: (Signature) _____ Date: 5/20/2020 Time: 10:00

Relinquished by: (Signature) _____ Date: _____ Time: _____



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28712

CHAIN OF CUSTODY RECORD

DATE: 05-18-2020
 PAGE: 3 OF 3

WO # / LAB USE ONLY

CLIENT PROJECT NAME / NUMBER: P5468A1 P.O. NO.: POHA 0113
 PROJECT CONTACT: Wilson wong manager SAMPLER(S) (PRINT): SS/kM
Forensic Analytical

LABORATORY CLIENT: Forensic Analytical
 ADDRESS: 21228 Cabot Blvd
 CITY: Hayward STATE: CA ZIP: 94545
 TEL: _____ E-MAIL: w.wong@forensicanalytical.com

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
 SAME DAY 24 HR 48 HR 72 HR 5 DAYS STANDARD
 COELT EDF GLOBAL ID: _____ LOG CODE: _____

SPECIAL INSTRUCTIONS:
 Please report result in mg/kg or PPM
 Reporting limit must be less than 1.0 mg/kg
 PCB's (8082) & 3540C. method: soft-slip extraction.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	LOG CODE:		
		DATE	TIME			Unpreserved	Preserved	Field Filtered
21	PCB-21	5/18/20	8:19	Soil				
22	PCB-22	5/18/20	8:43	Soil				
23	PCB-23	5/18/20	8:44	Soil				
24	PCB-24	5/18/20	8:51	Soil				
25	PCB-25	5/18/20	9:06	Soil				
26	PCB-26	5/18/20	9:07	Soil				
27	PCB-27	5/18/20	9:15	Soil				

REQUESTED ANALYSES

Please check box or fill in blank as needed.

<input type="checkbox"/> TPH (g) <input type="checkbox"/> GRO	<input type="checkbox"/> TPH (d) <input type="checkbox"/> DRO	<input type="checkbox"/> TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	<input type="checkbox"/> BTEX / MTBE <input type="checkbox"/> 8260 <input type="checkbox"/>	<input type="checkbox"/> VOCs (8260)	<input type="checkbox"/> Oxygenates (8260)	<input type="checkbox"/> Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	<input type="checkbox"/> SVOCs (8270)	<input type="checkbox"/> Pesticides (8081)	<input type="checkbox"/> PCBs (8082) & 3540C	<input type="checkbox"/> PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> SIM	<input type="checkbox"/> T22 Metals <input type="checkbox"/> 6010/747X <input type="checkbox"/> 6020/747X	<input type="checkbox"/> Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6
---	---	--	---	--------------------------------------	--	---	---------------------------------------	--	--	--	---	--

Relinquished by: (Signature) _____ Date: 5/19/20 Time: 12:15
 Relinquished by: (Signature) _____ Date: 5/20/2020 Time: 10:00
 Relinquished by: (Signature) _____ Date: _____ Time: _____

06/02/14 Revision



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Login Sample Receipt Checklist

Client: Forensic Analytical Consulting Services

Job Number: 570-28712-1

Login Number: 28712**List Source: Eurofins Calscience****List Number: 1****Creator: Soriano, Precy**

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Refer to Job Narrative for details.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix C: Site Photographs

Site Photo



Photo #01: General view of the project site from the parking area

Appendix D: Representative Photographs

This photo log contains representative photographs of the Bulk Product Waste source materials (i.e., ≥ 50 mg/kg) and the adjacent impacted substrates.



Photo #01: Walkway floor coating, first floor walkway



Photo #02: Walkway floor coating, second floor walkway

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Right Perspective
Right Now**

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POLYCHLORINATED BIPHENYLS REMOVAL WORK PLAN
2530 9TH AVENUE
OAKLAND, CALIFORNIA

PART 1 - GENERAL

The following section has been developed for the materials with Polychlorinated Biphenyls (PCB) at the project site located at 2530 9th Avenue, Oakland, California, which has been planned for demolition.

Forensic Analytical Consulting Services (FACS) conducted a PCB survey at the project site in May 2020 and identified various PCB-containing materials. PCB-containing materials identified in the survey included roof composite, penetration mastic, roof caulk, stucco, and walkway coating. Details of the survey are presented in the survey report dated June 25, 2020.

1.01 SECTION CONTENTS

- A. This work plan specifies the methods, procedures, and requirements related to the disturbance, removal and disposal of lead-containing paint including, but not limited to:
 - 1. Regulatory requirements
 - 2. Submittals
 - 3. Personal protective measures
 - 4. Execution
 - 5. Inspections
 - 6. Waste handling and disposal

1.02 SCOPE OF WORK

- A. This work plan applies to the demolition activities in which PCB will be disturbed by the scheduled work. The Contractor shall comply with this work plan in the handling and disposal of PCB.
- B. The removal and disposal of building materials with PCBs is regulated by the Toxic Substances Control Act (TSCA) and Code of Federal Regulations 40 CFR 761.
- C. Building materials with PCB concentrations equal to or greater than 50 ppm are regulated as PCB Bulk Product Waste. Building materials contaminated by PCB Bulk Product Waste, with PCB concentrations equal to or greater than 1 ppm, are regulated either as Excluded Product Waste, or as PCB Bulk Product Waste if dispose of together with the adjacent PCB Bulk Product Waste.
- D. This work plan establishes requirements for the removal and disposal of:
 - (1) PCB Bulk Product Waste in the forms of walkway coating;
 - (2) Excluded

Product Waste in the form of roof composite, penetration mastic, roof caulk, and stucco.

- E. The Contractor shall furnish all labor, materials, services, training, insurance, and equipment as needed to complete removal, segregation, management, and disposal of the materials listed above and as indicated herein. The Contractor shall follow all Federal, State, and local ordinances, regulations, and rules pertaining to removal, storage, transportation, and disposal of PCBs.
- F. The subject building scheduled for demolition contains PCB Bulk Product Waste that will be removed and disposed of in accordance with 40 CFR 761.62(a).
- G. The subject building scheduled for demolition contains PCB Bulk Product Waste and Remediation Waste that shall be managed in accordance with 40 CFR 761.61(c).
- H. The Contractor shall be responsible for establishing all quantity estimates in preparation of their bids, including the location and conditions of all PCB-containing materials to be abated and disposed of under this contract

1.03 DEFINITIONS

- A. United States Environmental Protection Agency (USEPA): Agency responsible for implementing PCBs Manufacturing, Processing, Distribution in Commerce, and Use Prohibition, 40 CFR 761 ("TSCA") Code of Federal Regulations (CFR).
- B. PCB Bulk Product Waste: Building materials containing total PCBs at concentrations equal to or greater than 50 parts per million (ppm). See also 3.02 WASTE MANAGEMENT.
- C. PCB Cleanup Waste: PCB-containing solid and liquid wastes generated during the cleanup of PCB Bulk Product Waste and Excluded Product Waste. See also 3.02 WASTE MANAGEMENT.
- D. Excluded Product Waste: Building materials with PCB concentrations equal to or greater than either 1 ppm (porous materials) or 1 µg/100 cm² (non-porous materials) that have become contaminated due to adjacent PCB Bulk Product Waste. See also 3.02 WASTE MANAGEMENT.
- E. Other PCB-containing Waste: Waste that contains >1 ppm but <50 ppm PCBs. Other PCB-containing Waste that has not been determined to be PCB Bulk Product Waste or Excluded Product Waste. See also 3.02 WASTE MANAGEMENT.
- F. Owner: California Affordable Housing Initiatives

1.05 GENERAL REQUIREMENTS

- A. **All PCB removal and disposal work referenced herein shall be performed in accordance with a Health and Safety Plan (HASP) developed by the Contractor in accordance with Cal/OSHA regulations.**
- B. The contractor shall provide proof of training for all staff that will disturb PCB-containing materials or that will work in work areas where PCB-containing materials are disturbed. All workers entering the controlled work area during the disturbance of PCB-containing materials, including during remediation of PCB-containing materials or during the cleanup of PCB-contaminated dust and debris shall: have current asbestos abatement worker training; be supervised by a qualified asbestos abatement competent person; and have received PCB-awareness training specific for this job site. Such PCB-awareness training shall include at a minimum: materials that may contain PCBs, routes of exposure, health risks associated with exposures to PCBs, selection and use of personal protective equipment, work practices, and spill response measures.
- C. The Contractor shall provide all personnel with PPE, protective clothing, and monitoring equipment consistent with the levels of protection required for each type of work. Workers shall wear, at a minimum, 1/2-face respirators with P100 filters and organic vapor cartridges, water resistant Tyvek-type (or equivalent) suits with boot covers, rubber gloves, and eye protection when disturbing PCB Bulk Product Waste, Excluded Product Waste, PCB Cleanup Waste, and Other PCB-containing Waste unless a job-specific exposure assessment is performed to demonstrate that a reduction in PPE is appropriate.
- D. No power tools (saws, chipping hammers, grinders, wire wheels, etc.) will be used to disturb PCB Bulk Product Waste or Excluded Product Waste unless removal is performed within a "Regulated Work Area" and with additional containment provisions as deemed necessary on site with HEPA vacuum attachments on the power tools.
- E. All equipment and tools shall be provided to the project site free of contamination. Any decontamination of the Contractor's equipment prior to arrival at the project site shall be at the expense of the Contractor. The Contractor is prohibited from decontaminating equipment on site which was not thoroughly decontaminated prior to arrival.
- F. The Regulated Work Area will be demarcated with caution tape and signage at a sufficient distance to keep unauthorized workers and visitors out of the work area. A tool drop zone and personal decontamination facility will be established contiguous to the work zone. Waste stream pathways will be designated.
- G. When working on the interior or exterior of the project buildings, regulated areas will be required to be established for removal of PCB Bulk Product

Waste or Excluded Product Waste.

- H. The Contractor shall provide all drums, overpack drums, storage containers, and related products and materials required for collecting, storing, and transporting the PCB-containing waste in compliance with CA Department of Toxic Substances Control (DTSC), USEPA, and U.S. Department of Transportation (DOT) requirements. All drums and other waste packaging shall meet the requirements of DOT 49 CFR 173.
- I. Contractor shall continually assess weather conditions and stop disturbance of PCB-containing materials if contaminants can be spread outside of the controlled work area by wind, rain or other factors.

1.06 REGULATORY REQUIREMENTS

- A. The work of this work plan shall meet the applicable removal and waste disposal requirements under 40 CFR 761 and be in accordance with other applicable federal, state, and local regulations, laws, codes, and ordinances governing the removal, handling, transportation, and disposal of materials managed under this work plan.
- B. The Contractor shall obtain all federal, state, and local permits required for the removal, handling, transport, and disposal of materials managed under this work plan. The Contractor shall adhere to all permit requirements.
- C. The Contractor shall document that the disposal facility(ies) proposed have all certifications and permits as required by federal, state, and local regulatory agencies to receive and dispose of the materials managed under this work plan.
- D. The following guidance documents are cited for the information and guidance. The list below is not all-inclusive. The Contractor is responsible for a thorough knowledge and full implementation of all requirements for removal, transportation, and disposal of the materials managed under this work plan.
 - 1. Contractors Handling PCBs in Caulk during Renovation; USEPA, EPA-747-F-09-004.
 - 2. Preventing Exposures to PCBs in Caulking Material; USEPA, EPA-747-F-09-005 (September 2009).
 - 3. Current Best Practices for PCBs in Caulk Fact Sheet - Disposal Options for PCBs in Caulk and PCB-Contaminated Soil and Building Materials (Last Updated: December 2012).

1.07 SUBMITTALS

- A. The following submittals are required for review and approval by the Owner's Representative on or before the Pre-Construction Meeting:

PCB Removal Work Plan
2530 9th Avenue, Oakland
September 2020

1. Signed certification stating they have read and understand and will agree and abide by this work;
 2. HASP: Developed in accordance with Cal /OSHA regulations and other applicable federal, state, and local regulations;
 3. Licenses and Permits: Licenses and permits required for complying with any applicable federal, state and local regulations, laws, codes, in connection with the work outlined in this work plan;
 4. Waste Profiles: All waste profiles, applications, and questionnaires, prior to forwarding them to the party requiring these documents;
 5. Materials Product Data: Provide safety data sheets for hazardous materials (e.g. solvents) used in the removal, cleanup and disposal of PCB-containing materials.
 6. Contractor Removal Plan: Include all pertinent information relating to the work outlined in this work plan.
 - i. Name(s), address(es), and contact(s) of subcontractors retained for the work outlined in this work plan.
 - ii. Detailed description of work activities and progress schedule for each phase of the work outlined in this work plan.
 - iii. Description of engineering controls and procedures used to minimize exposure to PCBs and to mitigate migration of dusts and contaminants generated by each type of work outlined in this work plan.
 - iv. Description of means and methods for removal and disposal of the PCB-containing materials.
 - v. Proposed methods of waste storage, disposal, and transportation.
 - vi. Name(s), address(es), and contact(s) of hazardous waste transporter(s) that will transport hazardous waste from the Site to a TSCA-approved disposal facility, including EPA identification number and proof of permit, license, and authorization to transport hazardous waste in all affected states.
 - vii. For each PCB-containing waste stream the following are required to be submitted to the Owner/Owner's Representative: name(s), address(es), and contact(s) of disposal facility(ies) that will be accepting the PCB-containing waste, and a letter of acceptance indicating that the facility will accept the specific removed materials associated with the work outlined in this work plan.
 7. Storm Water Pollution Prevention Plan (SWPPP)
 8. Spill Prevention and Control Plan (SPCP) and/or equivalent plans to prevent pollution of soil and groundwater
- B. Work Method Changes: Owner's and Owner's Representative's approval is required for all modifications to methods, procedures, and/or design, which

PCB Removal Work Plan
2530 9th Avenue, Oakland
September 2020

may be proposed by the Contractor. Any such modifications or substitutions to methods, procedures, or design shall comply with applicable regulations. Contractor shall submit the proposed modification or substitution for review and approval by Owner/Owner's Representative.

- C. The following submittals are required at the completion of the work:
1. Waste manifests and any other documents required to transport and dispose of the items identified in this work plan.
 2. Completion Report: Provide a report that includes a verification statement that materials have been removed associated with activities outlined in this work plan, as well as copies of the waste manifests. This includes the Certificate of Disposal for each shipment of manifested PCB waste. Following receipt of this report, Owner/Owner's Representative will also document completion of the removal of PCB-Containing Material.

1.08 QUALITY ASSURANCE

- A. Owner's Representative will visually inspect areas of removal to confirm adequate removal of PCB-containing materials and may choose to collect air samples, wipe samples, and/or building material samples if necessary, to assist in the determination of the adequacy of removal.
- B. If areas are identified where materials were not adequately removed, the contractor shall remove the materials and request additional inspection by the Owner/Owner's Representative.

1.09 COORDINATION

- A. Extend full cooperation to the Owner in all matters involving the use of the Site and Owner's facilities. At no time shall the Contractor cause or allow to be caused conditions that may cause risk or hazard to the general public or conditions that might impair safe use of the Site.
- B. Provide Site access to the USEPA, DTSC, other regulatory agency, or Owner's Representative upon request.
- C. Provide access for inspection to all work areas to the Owner's Representative through all phases of the work. The Contractor shall provide all ladders, lifts (with trained operator), or other equipment necessary in order for the Owner's Representative to perform inspection, sampling, and approval of work as outlined by this work plan.
- D. Owner and Owner's Representative will prepare a Waste Disposal Plan in accordance with 40 CFR 761 for USEPA review and approval. This work plan has been developed to reflect the anticipated requirements of USEPA approved Waste Disposal Plan.

PART 2 PRODUCTS

2.01 MATERIALS

- A. All materials and equipment proposed to be used on this project shall be subject to the acceptance of the Owner and Owner's Representative. The Contractor shall comply with local, state, and federal regulations pertaining to the selection and use of materials and equipment on this project.
- B. Warning Signs and Labels - Work areas shall be properly demarcated and posted utilizing signs and labels in accordance with Cal/OSHA, TSCA, and USDOT requirements.
- C. Fire retardant polyethylene sheeting shall be in roll size to minimize the frequency of joints, with factory label indicating four (4) or six (6) mil thickness.
- D. Tape (or equivalent) capable of sealing joints in adjacent polyethylene sheets and for the attachment of polyethylene sheets to finished or unfinished surfaces must be capable of adhering under both dry and wet conditions.
- E. Containers for storage, transportation and disposal of PCB-containing waste material shall be impermeable and watertight.
- F. Air filtration devices and vacuum units shall be equipped with HEPA filters.

PART 3 EXECUTION

3.01 ABATEMENT OF PCB-CONTAINING MATERIALS

- A. The intent of this work plan is to identify to the Contractor the PCB-containing materials to be removed and to present applicable regulatory responsibilities the Contractor shall comply with related to PCB-containing materials in order to perform the removal and disposal of PCB-containing building materials.
- B. PCB Bulk Product Waste (walkway coating), Excluded Product Waste (roof composite, penetration mastic, roof caulk, stucco), and Other PCB-containing waste identified under this scope of work shall be removed and disposed in accordance with 40 CFR 761, the Waste Disposal Plan, and this work plan.
- C. The removal and disposal of PCB Bulk Product Waste, Excluded Product Waste, and Other PCB-containing Waste shall be performed in accordance with the following minimal requirements:

1. Temporary fences, barriers or other controls shall be installed around the active work areas to establish the "Construction Zone" and keep the public out;
2. A "Regulated Work Area" shall then be established within the Construction Zone that demarcates the work area utilizing caution tape and appropriate signage;
3. The "Regulated Work Area" shall be established at a sufficient distance to keep nonauthorized personnel out of the work area;
4. Polyethylene sheeting shall be placed on the ground and secured to the Site building;
5. A decontamination unit shall be established directly adjacent to the "Regulated Work Area";
6. Remove all materials containing PCBs >1 ppm with hand tools.
7. Power tools may be used if removal is performed within a contained area with HEPA vacuum attachments on the power tools.
8. All ground surfaces within the Regulated Work Area shall be cleaned of all PCB-associated debris at least daily. Monitor areas adjacent to the "Regulated Work Area" for any release of dust or debris from the "Regulated Area". Remove any dust or debris when observed and at least daily.
9. All removed PCB-containing materials and associated debris shall be placed in double six (6) mil disposal bags or alternative methods that prevent loss or spilling of the waste as it is transported from the removal location to the Waste Storage Area for disposal.
10. All disposable tools, PPE, polyethylene sheeting and other materials shall be placed in six (6) mil disposal bags and transported to the Waste Storage area for disposal.
11. Upon completion of PCB removal, a visual inspection shall be performed by the Owner's Representative to ensure PCB-containing materials and associated debris has been properly removed. The Owner's Representative shall have the opportunity to inspect visually, to collect air, wipe, or building material samples if necessary, and to require additional work if the removal is deemed incomplete.
12. If unsatisfactory conditions are observed by the Owner's Representative, proceed with work only after the observed conditions have been corrected.
13. Contractor must submit and comply with the Storm Water Pollution Prevention Plan (SWPPP) and the Spill Prevention and Control Plan (SPCP) and/or equivalent plans prepared for the project as required to prevent the cross-contamination of PCBs into soil, groundwater, or body of water by PCBs from the site.
14. Manage all wastes generated in accordance with 40 CFR 761 and as

detailed in Article 3.02 herein.

- D. When PCB Bulk Product Waste has impacted adjacent substrate (i.e. the walkway coating and the wood substrate), the substrate shall be removed and disposed of as PCB Bulk Product Waste. The materials will be discussed in the Waste Disposal Plan. Refer to all applicable requirements in C. above, and the following additional minimal requirements apply:
1. PCB-containing waste shall be segregated by the levels of PCB concentrations.
 2. Contractor shall comply with 8 CCR 1530.1, 8 CCR 5155, and 8 CCR 5144 with regard to removal (i.e. mechanical work) of porous building materials, such as stucco.

3.02 WASTE MANAGEMENT

- A. All waste management will be in accordance with applicable local, state and federal regulations. All costs associated with handling, transport and disposal of all waste material generated on this project shall be borne by the Contractor.
- B. The Contractor is responsible for ensuring that all wastes are packaged and sized to meet final waste disposal facility requirements and for obtaining additional data that the waste disposal facility may require to accept waste, except as noted in this work plan.
- C. The wastes generated during the work shall be classified as follows:
1. PCB Bulk Product Waste: PCB-containing materials and debris containing or assumed to contain PCBs at a level of 50 ppm or greater. PCB Bulk Product Waste also includes materials adjacent to PCB-containing caulk that are designated for disposal as PCB Bulk Product Waste in the USEPA Waste Disposal Plan.
 2. Excluded Product Waste: Materials that are 1) contains or is assumed to contain PCBs at a level at or above 1 ppm but less than 50 ppm. Excluded Product Waste also includes all PPE from employees working in the regulated work areas, containment materials, and tools (if not decontaminated) used during the disturbance of any PCB-containing materials (>1 ppm), and all debris generated during disturbance of areas identified as Excluded Product Waste.
 3. Other PCB-containing Waste: Waste containing PCBs at levels equal to or greater than 1 ppm but less than 50 ppm.
 4. All waste must be removed and disposed in compliance with both its PCB waste category.
 5. A Uniform Hazardous Waste Manifest is required for PCB Bulk Product Waste, Excluded Product Waste and PCB Containing Waste to

be removed from the premises.

6. Waste containers shall be placarded as containing PCB waste with markings meeting the USEPA requirements and California requirements.
 7. Wastes shall be disposed of in accordance with 40 CFR 761 (and NESHAP) at a licensed facility that will receive and retain the designated category of waste: PCB Bulk Product Waste, Excluded Product Waste, or Other PCB-containing Waste, for each specific waste stream.
- D. Non-PCB-containing materials and wastes shall be kept separate from PCB-containing materials and wastes. PCB-containing materials and wastes that contain asbestos shall be kept separate from PCB-containing materials and wastes that do not contain asbestos.
- E. All tools and equipment that are not or cannot be decontaminated with a double wipe with a solvent wetted rag in accordance with 40 CFR 761.79(c) shall be disposed as Excluded Product Waste.

3.03 WASTE STORAGE

- A. A secure fenced area with proper signage will be constructed around the Waste Storage Area to restrict public access.
- B. Waste container(s) shall be stored in accordance with 761.65(c) and labeled in accordance with CFR 761.40. Access to containers shall be controlled via a fixed tarp.
- C. When not in use, containers shall be closed by means to prevent water infiltration when not being loaded.
- D. All waste containers shall be within a secured locked fenced area.
- E. All solid waste containers shall be placed on-site at a location approved by the Owner. This area shall be placarded as containing PCB Waste with markings meeting the USEPA requirements of 40 CFR 761.40 and 761.45 and any California requirements.

3.04 SHIPPING PAPERS

- A. A Uniform Hazardous Waste Manifest is required for removal from the premises and disposal of materials categorized as PCB Bulk Product Waste or Excluded Product Waste.
- B. Each manifest, bill of landing, or other applicable documentation, shall note the truck registration number, state of registration, name of driver, and date of removal of material from the site.
- C. The Contractor shall comply with the RCRA Hazardous Waste Manifest policies. One USEPA Identification Number shall be used for all hazardous

waste management associated with this work plan and will be provided by the Owner.

- D. The Owner will be designated as Generator and will sign all manifests and waste profile applications or questionnaires. The Owner's Representative will not sign manifests.
- F. A copy of all shipping papers demonstrating waste's final disposition shall be provided to the Owner.

3.05 TRANSPORT OF CONTAMINATED MATERIAL

- A. No PCB-containing waste shall be transported off-site until all disposal facility documentation has been received, reviewed, and accepted by the Owner.
- B. All hauler(s) shall be licensed in all states affected by transport.
- C. The Contractor shall be responsible for inspecting the access routes for road conditions, overhead clearance, and weight restrictions, and shall provide traffic control when needed.
- D. The Contractor shall be responsible for any and all actions and costs necessary to remedy situations involving material spilled in transit or involving debris, mud, and/or dust tracked or otherwise released offsite. This cleanup and other ancillary activities shall be accomplished at the Contractor's expense.
- E. Trucks and containers shall be covered during transport as required by applicable law.

3.06 SPILL RESPONSIBILITY

- A. The Contractor is solely responsible for any and all spills or leaks during the performance of work under this contract, which occur as a result of or are contributed to by the actions of its agents, employees or subcontractors. Such spills or leaks shall be cleaned to the satisfaction of the Owner or its Representative, and in a manner that complies with applicable federal, state and local laws, codes, policies and regulations. The spill cleanup shall be at no cost to the Owner.
- B. The Contractor shall report all such spills or leaks, regardless of their quantity, to the Owner immediately upon discovery. A written follow-up report shall be submitted to the Owner as soon as possible, but not later than 24 hours after the initial telephone report. The written report shall be in narrative form and, at a minimum, include the following:
 - 1. Description of item spilled (including identity, quantity, manifest number, etc.);

2. Exact time and location of spill, including a description of the area involved;
3. Containment procedures initiated; and
4. Description of cleanup procedures employed or to be employed, including location of disposal of spill residues, and corrective measures to prevent recurrences.

3.07 DECONTAMINATION PROCEDURES

- A. General: Furnish labor, materials, tools, and equipment for decontamination of all personnel, equipment and supplies that enter the Regulated Work Area or are otherwise exposed to PCB-containing material. Provide equipment and decontamination pads, etc. necessary for the decontamination of equipment and personnel.
- B. Materials that contain PCBs shall meet the removal and disposal requirements specified herein.
- C. Equipment and Tools Decontamination: The decontamination procedure shall follow the requirements of 40 CFR 761.79(c)(2), decontamination via a wiping or double wash/rinse with an approved solvent. Equipment and tools that are not or cannot be decontaminated will be managed as Excluded Product Waste.
- D. Personnel Decontamination: Provide and maintain a decontamination area. Decontamination of personnel and equipment is required after performance of activities in the Regulated Work Area. Personnel decontamination shall, at a minimum, consist of: decontamination before breaks and each time workers exit the Regulated Work Area, and at the completion of each work day, to prevent worker exposure and the spread of contaminants off site.
- E. Emergency Decontamination: Should a worker be splashed with contaminants, the worker shall be escorted immediately to the field decontamination station and decontaminated in accordance with the HASP. Site eye wash and shower stations shall be made available and be operable.

END OF SECTION

**LEAD REMOVAL WORK PLAN
2530 9TH AVENUE
OAKLAND, CALIFORNIA**

PART 1 - GENERAL

This work plan has been developed due to the presence of lead-containing materials at the project site located at 2530 9th Avenue, Oakland, California, which has been planned for demolition. As a result of the scheduled demolition, lead-containing paint and ceramic tiles will be disturbed.

Lead paint and ceramic tiles were identified at the project site in the survey performed by Forensic Analytical Consulting Services in May 2020. Details of the survey are presented in the survey report dated June 25, 2020.

1.01 SECTION CONTENTS

- A. This work plan specifies the methods, procedures, and requirements related to the disturbance, removal and disposal of lead-containing paint including, but not limited to:
 - 1. Regulatory requirements
 - 2. Submittals
 - 3. Personal protective measures
 - 4. Execution
 - 5. Inspections
 - 6. Waste handling and disposal

1.02 SCOPE OF WORK

- A. This work plan applies to the demolition activities in which lead paint will be disturbed by the scheduled work. The Contractor shall comply with this work plan in the handling and disposal of lead-containing paint.
- B. Contractor shall also conduct post-removal inspection of the work areas where indicated in this work plan.
- C. The work of this project can be summarized as follows:
 - 1. Removal of building components with lead-containing paint prior to building demolition.

2. Demolition of building with lead-containing paint still on the building.
3. Conduct inspections of work areas either during lead-related work or after lead-related work is completed.

1.03 POTENTIAL LEAD HAZARD

- A. The disturbance of building components with lead-based paint may cause lead contaminated dust to be released into the environment, thereby creating a potential health hazard to workers and occupants. Ingestion or inhalation of lead contaminated dust can cause various health concerns, including but not limited to nausea, anemia, vomiting, kidney disease, nervous system disorders, and reproductive problems.
- B. All contractors, sub-contractors, consultants, and other occupants in the vicinity of a potential lead hazard should be apprised, by the responsible parties and applicable warning signs per OSHA requirements cited herein.
- C. Significant lead exposure may result from activities such as demolition of components, scraping, sanding, or grinding lead-based paint, abrasive blasting of surface coatings, welding, torch cutting, or related procedures. Where in performance of the work specified herein, a lead exposure is potential, strict adherence to the measures and procedures of these specifications shall be mandatory.

1.04 REGULATIONS

- A. The Contractor shall comply with the requirements of the following regulations and guidelines governing lead-related construction and disposal, as well as other applicable federal, state, and local government regulations. The regulations and/or guidelines listed herein are incorporated by reference.

Code of Federal Regulations (CFR)

24 CFR Part 35, Lead-Based Paint Hazards in Federally Owned Housing and Housing Receiving Federal Assistance

29 CFR 1926, Construction Standards

29 CFR 1926.62, Lead in Construction Standard

40 CFR Part 50.12, Ambient Air Quality Standard for Lead

40 CFR Parts 261, 262, 263, 265, and 268, Hazardous Waste Management

40 CFR Part 745 Subpart D, Lead-Based Paint Hazards

49 CFR Parts 172, 173, 178, 179, Hazardous Material Transportation

California Code of Regulations (CCR)

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

8 CCR Division 1, Chapter 4, Subchapter 4, Construction Safety Orders

8 CCR 1532.1, Lead in Construction Standard

8 CCR 5144, Respiratory Protection

22 CCR Division 4 and 4.5, Hazardous Waste

Lead-Based Paint; Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing. U.S. Department of Housing and Urban Development (HUD), June 1995.

1.05 DEFINITIONS

- A. General: Definitions contained in this Section are not necessarily complete, but are general to the extent that they are not defined more explicitly elsewhere in the Contract Documents.
1. **Abatement**: means any set of measures designed to reduce or eliminate lead hazards or lead-based paint for public or residential buildings, but does not include containment or cleaning.
 2. **Action Level**: An airborne concentration of 30 micrograms per cubic meter (30 $\mu\text{g}/\text{m}^3$) of air as an eight (8) hour time weighted average (TWA) as covered by OSHA regulations 29 CFR 1926.62.
 3. **Air Monitoring**: The process of measuring the lead levels of a specific volume of air.
 4. **Authorized Visitor**: The Client's representative, testing lab personnel, or a representative of any federal, state and local regulatory or other agency having authority over the project.
 5. **Breathing Zone**: A hemisphere forward of the shoulders with a radius of approximately 6 inches to 9 inches.
 6. **Certified Industrial Hygienist (C.I.H.)**: A person certified in comprehensive practice by the American Board of Industrial Hygiene and qualified by training and/or experience to specify measures for the recognition, evaluation, and control of

occupational health hazards.

7. **Client:** California Affordable Housing Initiatives.
8. **Client's Representative:** Client's Representative is the party designated by the Client to perform monitoring, inspection, and enforcement of the work plan.
9. **Construction Barrier:** Demarcation of the work area limiting access by unauthorized personnel.
10. **Disposal Bag:** A 6 mil. thick leak-tight plastic bag used for transporting lead waste from work area to disposal site.
11. **Elevated Blood Lead Level:** Means a blood lead concentration equal to or greater than twenty-five (25) micrograms per deciliter ($\mu\text{g}/\text{dl}$).
12. **Encapsulation:** Involves resurfacing or covering surfaces, and sealing or caulking with durable materials, so as to prevent or control chalking, flaking lead-containing substances from becoming part of house dust or accessible to children.
13. **Enclosure:** The construction of an air-tight, impermeable, permanent barrier around lead-containing material to control the release of lead dust into the air.
14. **Filter:** A media component used in respirators to remove solid or liquid particles from the inspired air.
15. **Final Inspection:** Inspection by a qualified inspector, industrial hygienist, or local public health official to determine whether lead-related construction and cleanup are complete.
16. **Hazardous Waste:** As defined in Resource Conservation Recovery Act (RCRA) the term "hazardous waste" means a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.
17. **HEPA Filter:** A High Efficiency Particulate Air filter capable of

trapping and retaining 99.97% of particles greater than 0.3 microns in diameter.

18. **HEPA Filter Vacuum Collection Equipment** (or vacuum cleaner): High Efficiency Particulate Air (absolute) filtered vacuum collection equipment with a filter system capable of collecting and retaining 99.97% of particles of 0.3 microns in diameter or larger.
19. **High Phosphate Detergent:** Detergent which contains at least 5% tri-sodium phosphate (TSP).
20. **Lead-Based Paint:** Surface coatings with lead concentration greater than 5,000 ppm (0.5%) by weight.
21. **Lead Permissible Exposure Limit (PEL):** The employer shall ensure that no employee is exposed to an airborne concentration of lead in excess of 50 micrograms per cubic meter (50 $\mu\text{g}/\text{m}^3$) of air as an eight (8) hour time weighted average (TWA) as covered by OSHA regulations 29 CFR 1926.62.
22. **Lead-Related Construction:** Any construction, alteration, painting, demolition, salvage, renovation, repair, or maintenance of any residential, or public building, including preparation and clean-up, that, by using or disturbing lead-containing material or soil, may result in significant exposure of adults or children to lead.
23. **Negative Pressure Respirator:** A respirator in which the air pressure inside the respiratory-inlet covering is positive during exhalation in relation to the air pressure of the outside atmosphere and negative during inhalation in relation to the air pressure of the outside atmosphere. Negative pressure respirators include all powered-air purifying respirators (PAPRs).
24. **Personal Monitoring:** Sampling of lead concentrations within the breathing zone of an employee.
25. **Respirator:** A device designed to protect the wearer from the inhalation of harmful atmospheres.
26. **RCRA:** Resource Conservation and Recovery Act of 1976. RCRA is an amendment to the Solid Waste Disposal Act of 1965. RCRA was amended in 1980 and most recently on November 8, 1984 by Hazardous and Solid Waste Amendments.

27. **Testing Laboratories:** A "testing laboratory" is an independent entity engaged to perform specific inspections or tests, either at the project site or elsewhere, and to report on, and, if required, to interpret, results of those inspections or tests.
28. **Time Weighted Average (TWA):** The average concentration of a contaminant in air during a specific time period.
29. **Visible Emissions:** Any emissions containing particulate lead material that are visually detectable without the aid of instruments. This does not include condensed uncombined water vapor.
30. **Wet Cleaning:** The process of eliminating lead contamination from building surfaces and objects by using cloth, mops, or other cleaning utensils which have been dampened with high phosphate detergent and afterwards thoroughly decontaminated or disposed of as lead contaminated waste.
31. **Work Area:** The area where lead related work or removal operations are performed which is defined and/or isolated to prevent the spread of lead dust, or debris, and entry by unauthorized personnel.

1.06 SUBMITTALS AND NOTICES

The submittals and notices listed below shall be submitted by the Contractor to the Client as follows:

- A. **Training:** Submit prior to commencing work two (2) copies of the training documentation for each supervisor and worker who will be on-site for this project. This training shall be in accordance with 29 CFR 1926.62 (OSHA Lead in Construction Standard).
- B. **Medical Monitoring:** Submit prior to commencing work two (2) copies of the medical documentation for each supervisor and worker who will be on-site for this project. Contractor shall submit documentation that all employees engaged in removal activities have had the appropriate medical examinations within the prescribed time periods immediately preceding project start-up. Documentation shall include, but is not limited to, baseline blood lead levels performed in accordance with 29 CFR 1926.62 (OSHA Lead in Construction Standard).
- C. **Respiratory Protection:** Submit before starting work a copy of Respiratory Protection Program which is in compliance with ANSI Z88.2-1980, OSHA

29 CFR 1910 and 1926. Contractor shall submit statement from examining physician that each employee is fit to wear a respirator in accordance with 29 CFR 1910.134 within the last twelve months. Contractor shall also provide documentation showing that all employees have passed respiratory fit tests within the past twelve months.

- D. OSHA Lead Compliance Plan: Submit prior to commencing work a detailed plan of the procedures proposed in order to comply with the requirements of 29 CFR 1926.62. Include in the plan all components required under the standard.
- E. Hazard Communication Program: Submit before starting work a copy of Hazard Communication Program which is in compliance with 29 CFR 1910.1200.
- F. Hazardous Waste Management Plan: Submit before starting work a copy of Hazardous Waste Management plan which is in compliance with federal, state, and local hazardous waste regulations and addresses:
1. Identification of hazardous wastes associated with the work.
 2. Estimated quantities of wastes to be generated and disposed of.
 3. Names and qualifications of each contractor that will be transporting, storing, treating, and disposing of the wastes. Include the facility location and a 24-hour point of contact. Furnish two (2) copies of EPA, state, and local permit applications, permits, and EPA Identification numbers.
 4. Names and qualifications (experience and training) of personnel who will be working on-site with hazardous wastes.
 5. List of waste handling equipment to be used in performing the work, to include cleaning, volume reduction, and transport equipment.
 6. Spill prevention, containment, and cleanup contingency measures to be implemented.
 7. The Contractor shall submit name, address, and telephone number of landfill or landfills and transporter to Client for approval, prior to disposal. This includes those landfills used for waste categories determined to be non-hazardous.
- G. Waste Disposal Records:

1. A written record of receipts with certified weight for disposal of materials containing lead and lead based paint contaminated items shall be furnished to the Client within forty-eight (48) hours after disposal has taken place.
2. Provide a schedule showing date, amount, type of material and location disposed of within five (5) working days of disposal.

1.07 CLIENT'S REPRESENTATIVE

- A. The Client may authorize a credentialed consultant to provide the following inspection, testing, and monitoring services including, but not limited to:
 1. Project monitoring and air sampling to verify the Contractor's compliance with this work plan as well as applicable regulations regarding hazard control measures and related decontamination procedures.
 2. Post-removal final inspection and soil sampling to determine whether Contractor has successfully completed the scope of work, clean-up, and have met the project decontamination criteria.
 3. Collection and analysis of typical waste streams produced in order to characterize the waste in accordance with existing state and RCRA hazardous waste criteria. The Consultant may conduct sampling to verify Contractor's characterization of the waste stream(s).
 4. Interpretation of this work plan, and coordination with the Client and Contractor for enforcement of regulatory and contractual conformance, including stop work issues.
- B. The cost of the Client's Representative will generally be the responsibility of the Client except under special circumstances. The Contractor shall be responsible for the cost of the Client's Representative for additional services performed when: a) The Contractor's Work Area fails final clearance inspection; or b) additional workdays or workday hours (overtime) are required by the Contractor; or c) The Contractor exceeds the allowable time frame for completion; or d) additional services associated with response to an uncontrolled, unauthorized release to the environment as a result of the Contractor's performance of the work.

- C. The Client's Representative is separate and does not affect the Contractor's responsibility for retaining their own EPA Lead-Certified Inspector for conducting post-removal clearance inspection.

1.08 CONTRACTOR QUALIFICATIONS

- A. General Superintendent: Provide a General Superintendent whenever Contractor's personnel are on site who is experienced in administration and supervision of lead-related construction projects including work practices, protective measures for building and personnel, disposal procedures, etc. This person is the Contractor's Representative responsible for compliance with all applicable federal, state and local regulations, particularly those relating to lead-containing materials.

Experience and Training: The General Superintendent and all workers must have completed a course that meets the requirements of the EPA Model Accreditation Plan for Lead Workers/Supervisors. Submit documentation for each employee per Section 1.06.

- B. Contractor shall use only workers medically qualified and trained for lead work and respirator usage.
 - 1. The minimum acceptable training course duration is thirty-two (32) hours for each worker, as specified in the EPA Model Accreditation Plan. This training shall also comply with 8 CCR 1532.1 (Cal-OSHA's "Lead in Construction Standard").
 - 2. Contractor shall submit documentation that all employees engaged in removal activities have had the appropriate medical examinations within the prescribed time periods immediately preceding project start-up. Documentation shall include, but is not limited to, baseline blood lead levels performed in accordance with 8 CCR 1532.1 (Cal-OSHA's "Lead in Construction Standard").
 - 3. Contractor shall submit statement from examining physician that each employee is fit to wear a respirator in accordance with 8 CCR 1532.1 (Cal-OSHA's "Lead in Construction Standard") within the last twelve months.
 - 4. Documentation that all employees have passed respiratory fit tests within the past twelve months.
 - 5. The Contractor will provide a copy of their lead compliance program specific for this project, as specified in 8 CCR 1532.1 and indicated

in Section 1.06 -- Submittals, above.

PART 2 - PRODUCTS

2.01 PROTECTIVE COVERING

- A. Polyethylene sheets, of 6 mil thickness, in dimensions of adequate width to minimize frequency of joints.

2.02 TAPE

- A. Duct tape, two inches or wider, capable of sealing joints of adjacent sheets of plastic sheeting or for attachment of plastic sheeting to finished or unfinished surfaces.

2.03 CLEANERS

- A. Wet wiping for decontamination shall be accomplished with a cleaning agent/detergent wash solution. A cleaning agent specifically formulated to clean up lead dust is recommended.

2.04 DISPOSAL CONTAINERS

- A. Provide 6-mil thick polyethylene sheeting, 6-mil leak-tight polyethylene bags and other impervious containers as required by applicable regulations. All waste shall be labeled as potentially hazardous waste unless proven otherwise by appropriate sampling and laboratory analysis.
- B. All hazardous waste shipping containers shall meet applicable DOT requirements.

2.05 WARNING SIGNS AND LABELS

- A. Caution signs in accordance with 8 CCR 1532.2 are to be a minimum of 14 x 20 inches and include phrase "CAUTION - LEAD HAZARD - KEEP OUT UNLESS AUTHORIZED" in lettering at least 2" in height. These signs shall be posted at each approach to the work area.
- B. Cal-OSHA Lead Warning Posters: "WARNING -- LEAD WORK AREA-- NO SMOKING OR EATING" shall be posted at the entrance to each work area.
- C. Hazardous waste labels in accordance with federal, state and local

regulations, including, but not limited to the California Code of Regulations, Title 22 Chapter 30 and the U.S. Department of Transportation 49 CFR Parts 172, 173, 178 and 179.

2.06 PERSONAL PROTECTIVE EQUIPMENT

- A. Workers shall wear full body disposable Tyvek type suits with hoods and separate booties, tape around ankles, wrists, under arms and neck. Suits will be worn inside the work area after the area passes pre-lead-related construction inspection and shall remain in use until the area passes final clearance inspection.
- B. Goggles with side shields will be worn when working with a material that may splash or fragment, or if protective eye wear is specified on the Safety Data Sheets (SDS) for that product.
- C. In addition, all OSHA requirements, such as hard hats, hearing protection, etc. are required.
- D. Additional respiratory protection by supplemental filters, such as organic vapor cartridges, may be needed when handling some coating products. Consult the SDS and obtain the proper filters as necessary. The following guideline indicates types of respirators appropriate for adequate protection against varying lead exposures:

Lead Paint Removal Work Plan
2530 9th Avenue, Oakland
July 2020

RESPIRATORY PROTECTION FACTORS
ASSOCIATED WITH LEAD EXPOSURE OPERATIONS

Respirator Type	Protection Factor	Airborne Concentration of Lead
Air purifying, negative pressure respirator, half-face, HEPA filter	10	Not in excess of 500 $\mu\text{g}/\text{m}^3$
Air purifying, negative pressure respirator, full-face, HEPA filter	50	Not in excess of 2,500 $\mu\text{g}/\text{m}^3$
Type C supplied air positive pressure respirator continuous flow mode half-face	1000	Not in excess of 50,000 $\mu\text{g}/\text{m}^3$
Type C supplied air positive pressure respirator pressure demand mode full facepiece	2000	Not in excess of 100,000 $\mu\text{g}/\text{m}^3$
Type C supplied air positive pressure respirator pressure demand mode full facepiece, equipped with auxiliary positive pressure self contained breathing apparatus (SCBA)	over 2000	Greater than 100,000 $\mu\text{g}/\text{m}^3$
Self contained breathing apparatus (SCBA) positive pressure demand mode full facepiece	over 2000	Greater than 100,000 $\mu\text{g}/\text{m}^3$

2.07 TOOLS AND EQUIPMENT

- A. Provide suitable tools for surface prepping and removal of lead-containing paint including required HEPA vacuums and exhaust units, airless sprayers, ground fault interrupters, hand tools, wipes, ladders, and scaffolds.
- B. Mechanical abrasion tools shall be equipped with local HEPA exhaust and subject to approval by the Client or Client's Representative. All tools and equipment brought on site shall be clean and free of contamination from lead and other hazardous materials. HEPA filtered equipment shall be labeled with a warning label and dedicated to lead-based paint work to prevent combining hazardous wastes of differing characteristics
- C. Provide adequate support equipment, including, but not limited to lumber, hardware, handwashing facilities, sprayers, hoses, miscellaneous collection devices, and secured holding facilities.
- D. It is the responsibility of the Contractor to negotiate with the Client for the use of utilities and to provide transportation of the utilities for construction purposes, including but not limited to, water, electrical power, gas, telephone and sanitary facilities.
- E. The Contractor shall also supply electrical power to the perimeter of containments and/or restricted areas, as necessary, for area air sampling.

PART 3 - EXECUTION

3.01 GENERAL

- A. The purpose of the Lead in Construction Standard is to provide protection to workers exposed to lead in construction equivalent to that under OSHA's general industry standard. The final lead standard for the construction industry applies to all occupational exposure to lead in all construction work in which lead, in any amount, is present in an occupationally related context.
- B. All paint on the building exterior are considered to contain lead unless paint chip sampling result indicates otherwise. As a result, activities that disturb exterior paint will be performed in accordance with the following work practices.

3.02 WORKER SAFETY/DECONTAMINATION PROCEDURES

- A. The Contractor shall employ only workers medically qualified and trained

for lead work and respirator usage.

1. Medically qualified shall mean that the worker has had an occupational medical exam for lead exposure and respirator use within the last 12 months, in accordance with 29 CFR 1926.62, and shall have had a blood lead test within the last 6 months.
 2. Each lead-related construction worker shall have completed formal documented training in lead hazards and lead lead-related construction methods in accordance with 1532.1.
 3. The Contractor's superintendent (Competent Person) and all workers shall have received formal training in lead hazards and lead-related construction methods.
 4. The Contractor shall assure that no worker is permitted to perform lead lead-related construction work until the Client's Representative has received and approved all of that worker's medical, training, and respirator fit test certifications.
- B. The Contractor shall perform exposure assessment in accordance with 8 CCR 1532.1. This includes, but is not limited to, collecting personal air samples to determine the employees' exposure to lead dust during construction activities. Personal samples will be collected by the contractor pursuant to OSHA regulations. Each task performed will be monitored at a flow rate of 1-4 liters per minute on MCE 37mm 0.8 μm pore size cassettes. A minimum of one lab blank will be submitted with each set of samples.
- C. Each worker, upon entering the job location, shall proceed to the designated clean room/area and don, at a minimum, a half-mask, negative pressure respirator equipped with HEPA filters, and disposable, full body, tyvek suit, before entering the work area.
- D. The above PPE must be worn during all phases of the component removal process. **This PPE must be worn for the duration of this project, or until the initial exposure assessment indicates that exposure to lead dust during these activities will not exceed the action level (30 $\mu\text{g}/\text{m}^3$).**
- E. Prior to starting any lead-related work, Contractor shall post lead warning signs at all entrances to work area. These lead warning signs will be in compliance with the Cal-OSHA "Lead in Construction Standard" (8 CCR 1532.1).

- F. All disposable clothing worn in each work shift shall be removed prior to exiting the work area and shall be properly segregated and placed in containers for non-hazardous disposal.
- G. All tools and equipment shall be decontaminated by HEPA vacuuming and/or wet wiping prior to being taken out of the work area.
- H. Workers shall properly decontaminate before exiting the work area.
- I. Workers shall not eat, drink, smoke, or chew gum or tobacco at the work site.
- J. Each worker shall have a final medical blood lead laboratory test within one week of job completion and before engaging in other lead related work.

3.03 GENERAL REMOVAL PROCEDURES

- A. Remove Interior Loose and Peeling Paint: This procedure will entail removing loose and peeling paint from interior lead-painted surfaces. The procedure is outlined below:
 - 1. Post warning signs as stated in Section 3.03. In addition, cordon off the work area at a minimum of 10 feet from the area of paint removal to establish the work area.
 - 2. Seal any openings within the work area such as doors and windows, that leads to other areas of the building.
 - 3. Cover floor and other horizontal surfaces with 6 mil polyethylene sheeting at least 10 feet beyond surfaces being disturbed.
 - 4. Don appropriate PPE as stated in Section 3.03.
 - 5. Perform the removal using hand tools. Mist area of removal with water to minimize release of dust.
 - 6. Carefully place all removed paint chips and debris in 6 mil waste bags and store in a secure area until waste characterization is performed.
 - 7. Clean work area using HEPA vacuum and cleaning agent/detergent solution. Clean bottom layer of poly sheeting with cleaning solution or place sheeting in waste bags for waste characterization.
- B. Remove Exterior Loose and Peeling Paint: This procedure will entail removing loose and peeling paint from exterior lead-painted surfaces. The procedure is outlined below:

1. Establish an enclosure with physical barriers such as plastic sheets or plywood as the work area.
 2. Post warning signs as stated in Section 3.03.
 3. Seal any openings to the interior of the building, such as doors and windows, that are within the work area.
 4. Cover floor and other horizontal surfaces with 6 mil polyethylene sheeting at least 10 feet beyond the removal surfaces.
 5. Don appropriate PPE as stated in Section 3.03.
 6. Perform the loose paint removal using hand tools. Mist area of removal with water to minimize release of dust.
 7. Carefully place all removed paint chips and debris in 6 mil waste bags and store in a secure area until waste characterization is performed.
 8. Clean work area using HEPA vacuum and cleaning agent/detergent solution. Clean bottom layer of poly sheeting with cleaning solution or place sheeting in waste bags for waste characterization.
- C. Removal of Ceramic Tiles or Painted Building Components: This procedure will entail the removal of ceramic tiles or painted building components, such as windows or doors, prior to demolition activities. The procedure is outlined below:
1. Post warning signs as stated in Section 3.03. In addition, cordon off the work area at a minimum of 10 feet (15 feet for exterior work) from the area of removal.
 2. Do not perform removal on the building exterior when it is windy. As an alternative, perform removal within an enclosure constructed using plastic sheets or plywood.
 2. Seal any openings to other areas of the building, such as doorways and windows, that are within the work area.
 3. Cover floor and other horizontal surfaces with 6 mil polyethylene sheeting at least 10 feet beyond surfaces being disturbed.
 4. Don appropriate PPE as stated in Section 3.03.
 5. Perform the removal using hand tools. Mist area of removal with water to minimize release of dust
 5. If necessary, carefully chip away the materials around the component using hand tools. Constantly mist the removal area with water to minimize dust levels. Have a HEPA vacuum readily

accessible to clean up loose debris.

6. Carefully place all removed paint chips and debris in 6 mil waste bags and store in a secure area until waste characterization is performed.
7. Clean work area using HEPA vacuum and cleaning agent/detergent solution. Clean bottom layer of poly sheeting with cleaning solution or place sheeting in waste bags for waste characterization.

D. Demolition of Building: This procedure will entail the demolition of the building with painted components present. The procedure is outlined below:

1. Establish the boundary of the work area at the perimeter of the lot with physical barrier such as chain-link fence or plywood panels. Boundary of the work area shall be established such that debris from the demolition activities will not migrate beyond the work area.
2. Post warning signs as stated in Section 3.03.
3. All workers performing the demolition, including operators of machinery, shall don appropriate PPE as stated in Section 3.03.
4. Perform demolition with special attention to containing all debris within the work area.
5. Equipment used in the work area shall be decontaminated of lead dust and debris before leaving the work area.
6. Water should be applied abundantly at areas of work to minimize dust generation. Runoff should be captured, filtered, and tested for proper disposal.
7. Waste debris shall be placed in waste containers pertaining to their lead content, which will optimize the subsequent waste sampling process and disposal requirements.
8. Clean work area using HEPA vacuum and cleaning agent/detergent solution.

3.04 WORK AREA INSPECTION

- A. The Contractor shall perform a final inspection at each work area following the completion of lead-related work for the presence of any remaining lead containing debris.
- B. The inspection shall be performed by an EPA-Certified Lead Inspector; and shall confirm that the scope of work has been completed, and all debris associated with lead-related activities have been cleaned from the

work area.

- C. The Contractor shall also notify the Client and/or their representative in the event that they would also want to conduct a post-work inspection.
- D. The contractor shall be released only after all work areas have been cleared according to the above criteria and accepted by the Client.

3.05 WASTE STORAGE AND CHARACTERIZATION

- A. The Contractor shall provide for secure on-site storage of Lead-Based Paint (LBP) related waste. Waste storage location shall be approved by the Client. Methods shall be in compliance with the requirements of 40 CFR 261, 262, 263 and 265 and are subject to prior approval by the Client.
- B. Construction materials removed from each Work Area must be evaluated by the Contractor to determine waste characteristics prior to disposal.
- C. Removed intact lead coated components shall be properly segregated, wrapped in 6 mil polyethylene sheeting, labeled and securely sealed with duct tape.
- D. LBP related waste (chips, dust, etc.) produced shall be placed in properly segregated, labeled and sealed containers.
- E. All waste streams and packaged waste shall be stored in a Client designated, secure waste storage area and labeled "PENDING ANALYSIS" with the following information:
 - 1. Waste Category (Chip/Dust and Debris)
 - 2. Date Accumulated
 - 3. Name and Address of Client
 - 4. Origin of Waste
- F. All waste shall be considered hazardous until waste characterization has been performed under the California Code of Regulations, Title 22, including using one or more of the following testing procedures:
 - 1. Total Threshold Limit Concentration (TTLC)
 - 2. Waste Extraction Test (WET)
 - 3. Toxicity Characteristic Leaching Procedure (TCLP)

- G. All waste shall remain stored in secured waste storage areas until results of waste characterization are available. Due to analytical methods of these tests, this may require storage for up to seven working days. Based on the testing protocols, any waste containing greater than or equal to 5 ppm lead using WET or TCLP tests or any waste containing greater than or equal to 1000 ppm using the TTLC test shall be considered a hazardous waste.
- H. The Contractor shall be responsible for collecting a minimum of three (3) representative samples from each waste stream generated.
- I. The Contractor will be responsible for all costs associated with characterization of waste.

3.06 WASTE DISPOSAL

- A. The Contractor is responsible for all costs associated with transportation, characterization and disposal of all waste, hazardous and non-hazardous. Contractor will submit a base bid which will include disposal of all waste as non-hazardous and an alternate bid for the disposal of any waste determined to be hazardous.
- B. The Contractor shall submit name, address, and telephone number of landfill or landfills and transporter to Client for approval, prior to disposal. This includes those landfills used for waste categories determined to be non-hazardous.
- C. The Contractor shall arrange for all hazardous waste to be transported from the site in accordance with the requirements of 40 CFR 263 and 264, and disposed of properly in accordance with 40 CFR 268, 49 CFR Parts 172, 173, 178, and 179 and California Code of Regulations Title 22.
- D. The Contractor shall prepare hazardous waste shipping manifests for review by the Client. All hazardous waste manifests shall be signed by the Client and copies retained by the Client.
- E. Copies of the landfill weight tickets shall be provided to the Client immediately upon receipt in order to verify the amount of waste disposed of at the site.

3.07 STOP WORK ORDERS

- A. The Client and/or Client's Representative has the authority to stop work if

Lead Paint Removal Work Plan
2530 9th Avenue, Oakland
July 2020

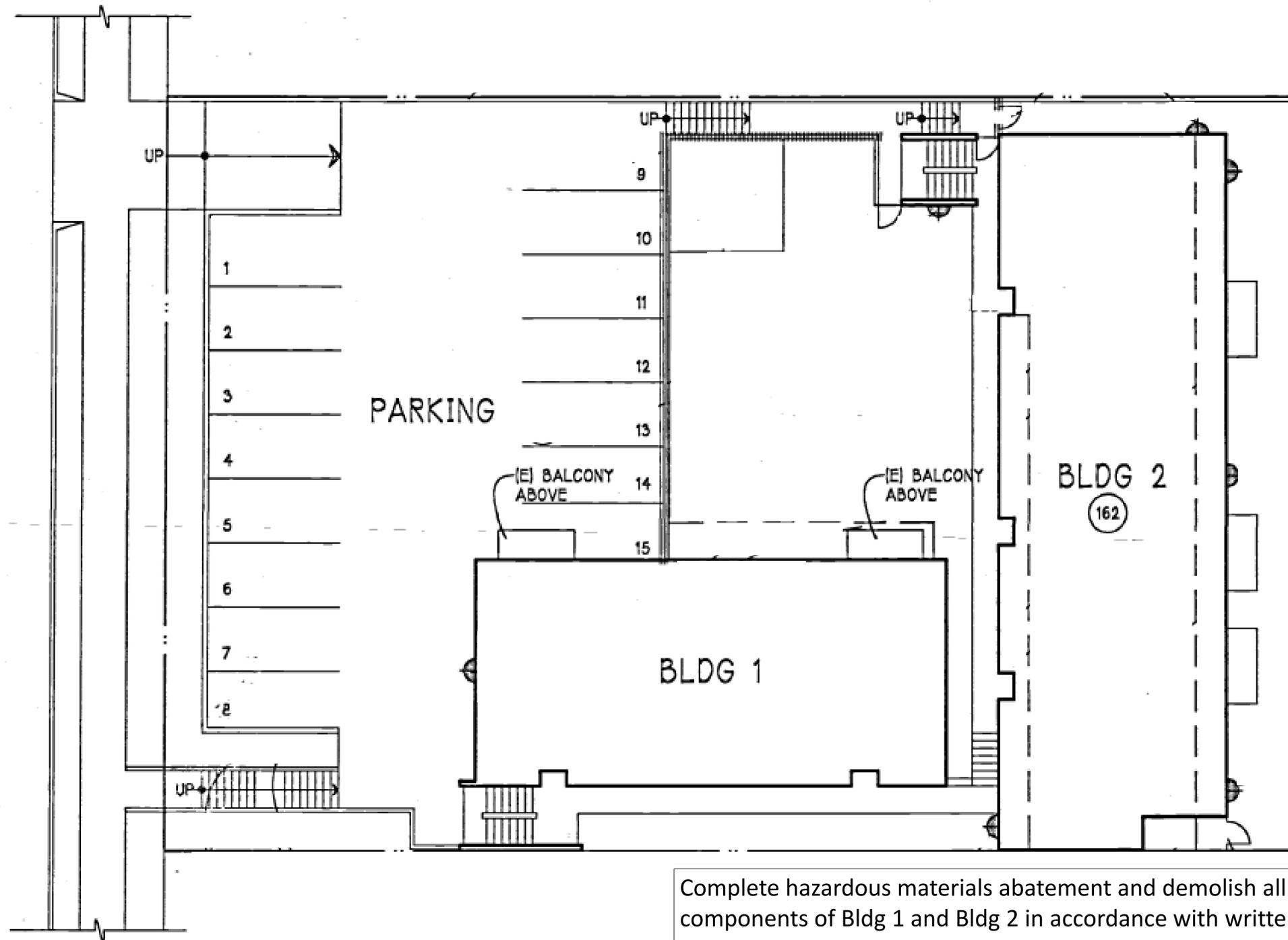
it is determined that conditions or procedures are not in compliance with this work plan and/or applicable regulations; the Contractor is deficient in providing required submittals; the waste is not securely stored; or a potential release of lead dust to outside the work area is imminent based on the Client and/or Client's Representative's judgment.

- B. The work stoppage shall remain in effect until conditions have been corrected and corrective measures have been taken to the satisfaction of the Client and/or Client's Representative.

END OF SECTION

Attachment D
Demolition Site Plan

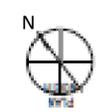
NINTH AVENUE



Complete hazardous materials abatement and demolish all above-grade components of Bldg 1 and Bldg 2 in accordance with written scope of work.

Driveway, parking area, courtyard, retaining walls, and sub-grade foundations to remain.

All trees on site to be protected and remain.



California Affordable Housing Initiatives
 1619 Harrison Street
 Oakland, CA 94612



California Affordable Housing Initiatives, Inc.

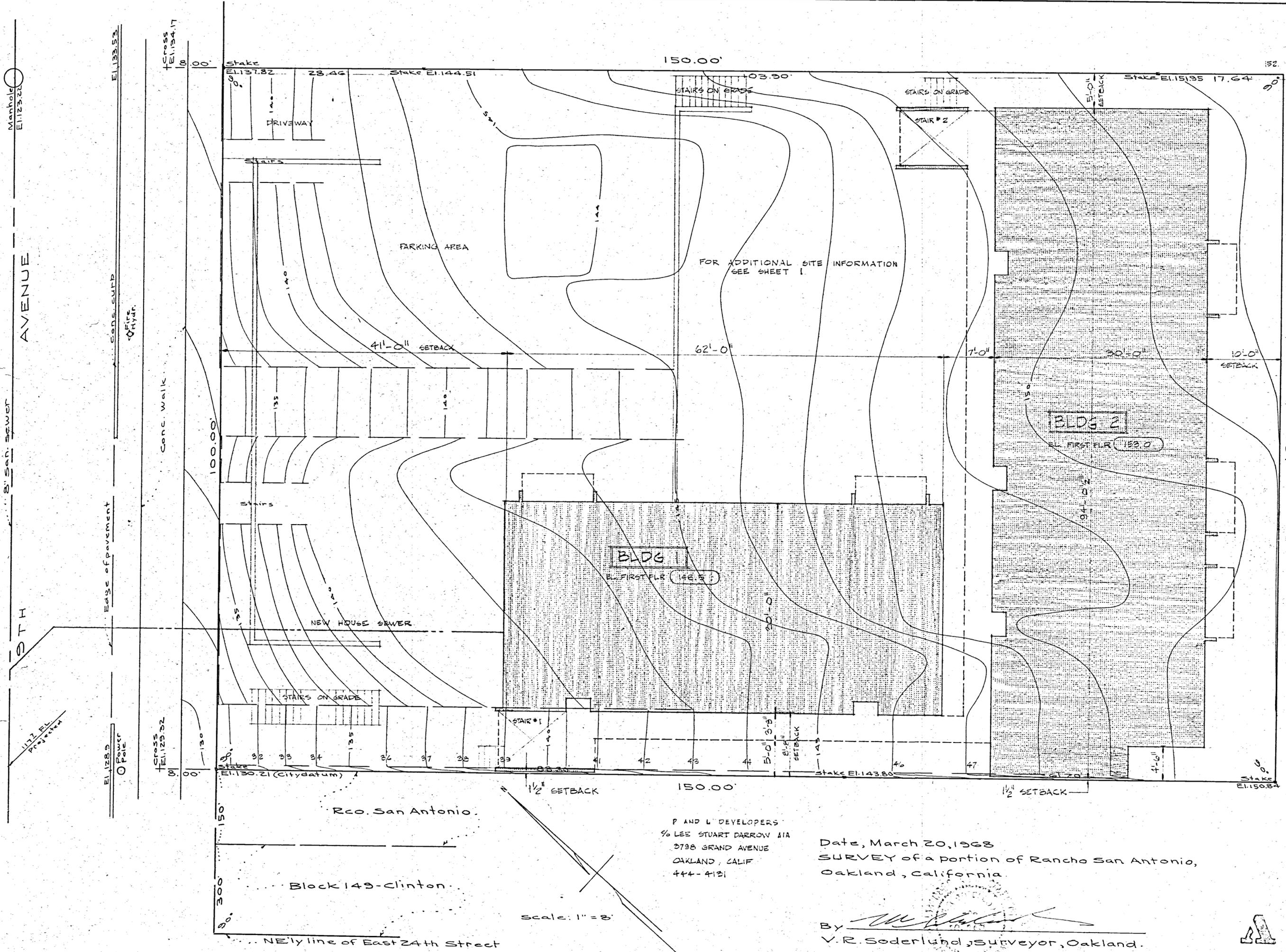
Abatement and Demolition of Two Buildings
 2530 9th Avenue
 Oakland, CA

NO.	DATE	REV.

SHEET NO.	REV.
1	

Attachment E

Original Building Plans (for reference)



9TH AVENUE

8" San. Sewer

9TH

Edge of pavement
Conc. curb
Fire Hydr.

Conc. Walk

Cross El. 1125.32

Cross El. 1134.17

Stake El. 1137.82

Stake El. 144.51

150.00'

103.90'

Stake El. 151.95 17.64

152

100.00'

135

41'-0" SETBACK

62'-0"

7'-0"

30'-0"

10'-0" SETBACK

100.00'

STAIRS

NEW HOUSE SEWER

BLDG 1

EL. FIRST FLR 148.5'

30'-0"

BLDG 2

EL. FIRST FLR 153.0'

34'-0"

30'

32

33

34

36

37

38

39

41

42

43

44

5'-0" 3'-8"

EL. 1143.80

SETBACK

1'-6"

1'-6"

1'-6"

1'-6"

4'-0"

46

47

6'-0"

4'-0"

4'-0"

4'-0"

4'-0"

4'-0"

4'-0"

4'-0"

4'-0"

Stake El. 150.84

Rco. San Antonio.

Block 149-Clinton.

NE 1/4 line of East 24th Street

Scale: 1" = 8'

P AND L DEVELOPERS
 % LEE STUART DARROW AIA
 3798 GRAND AVENUE
 OAKLAND, CALIF
 444-4121

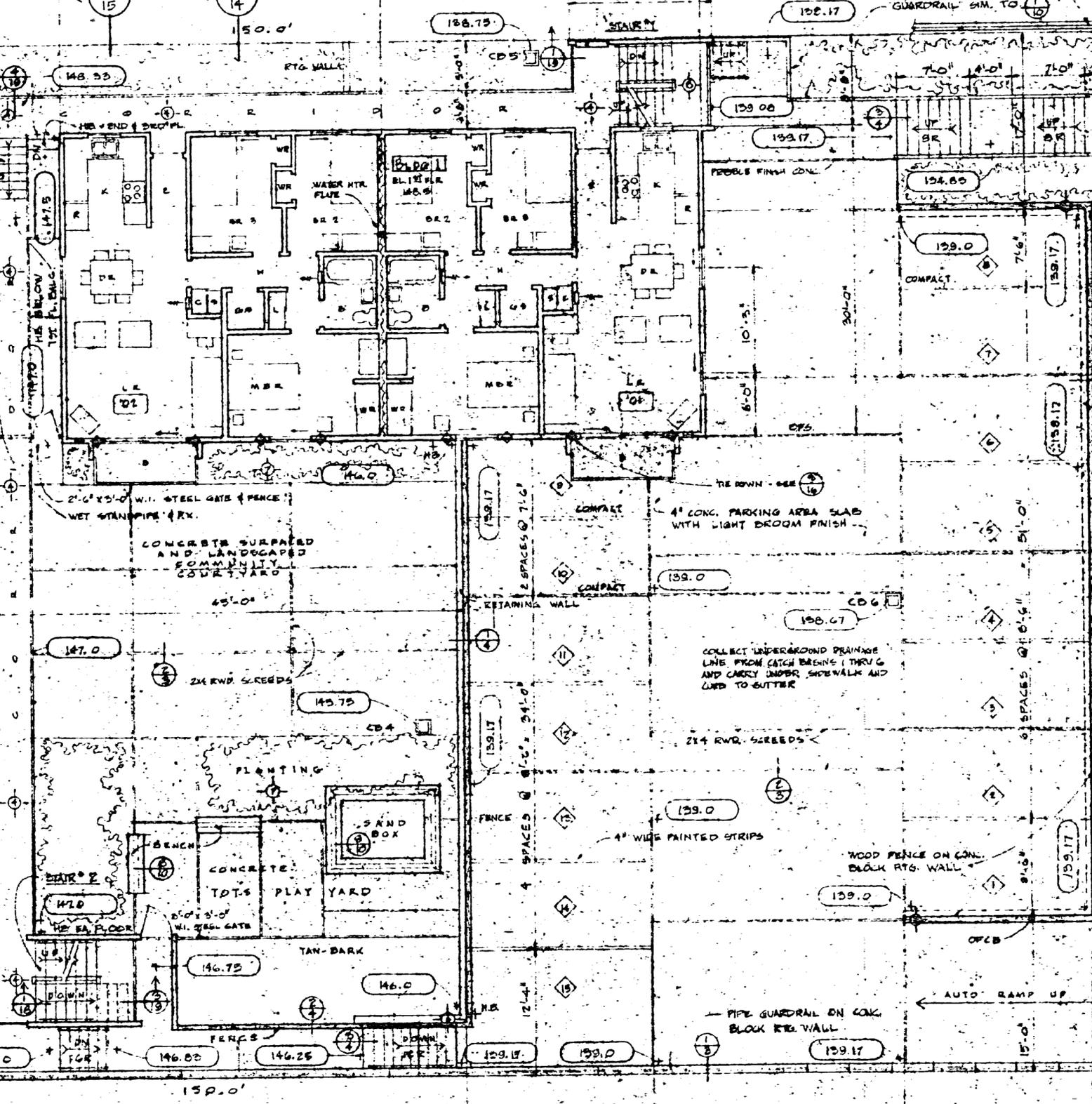
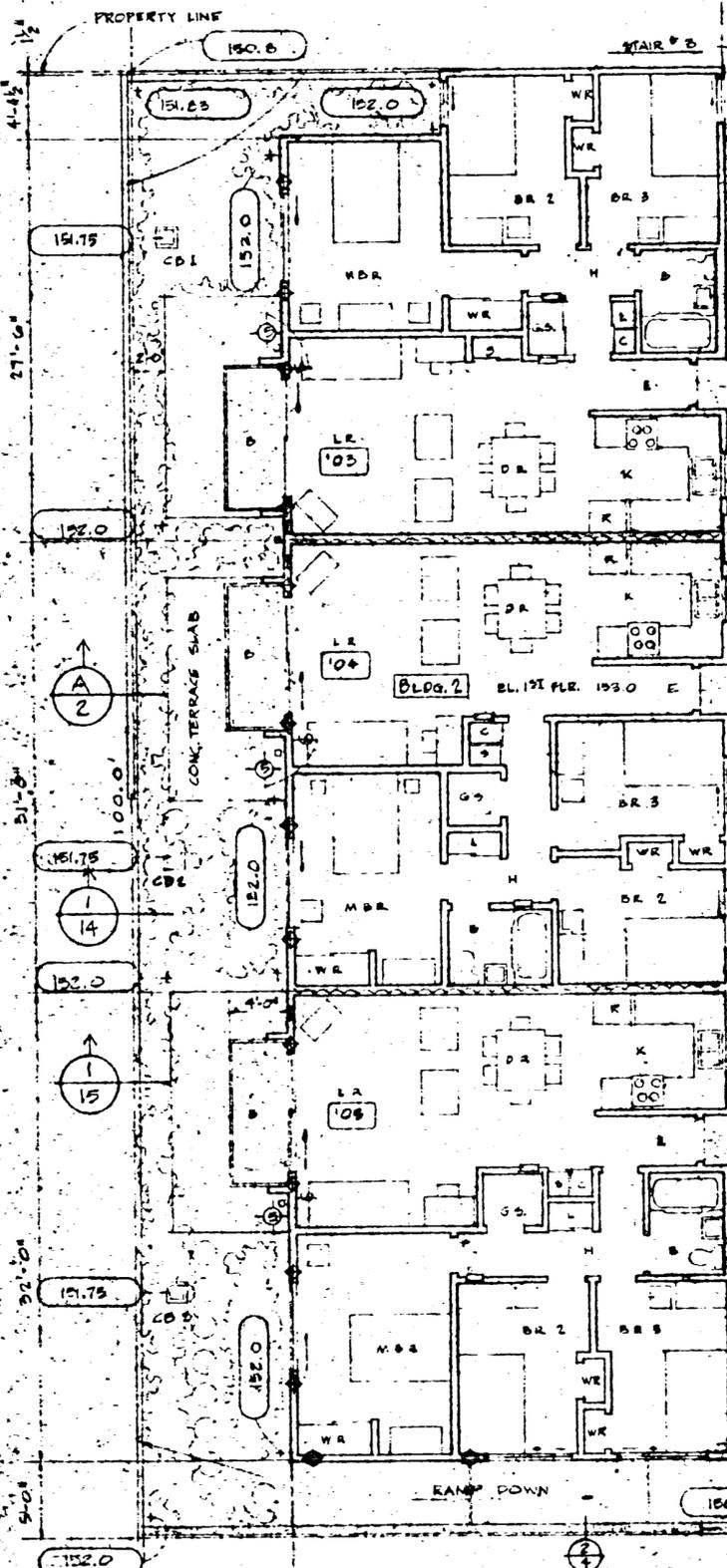
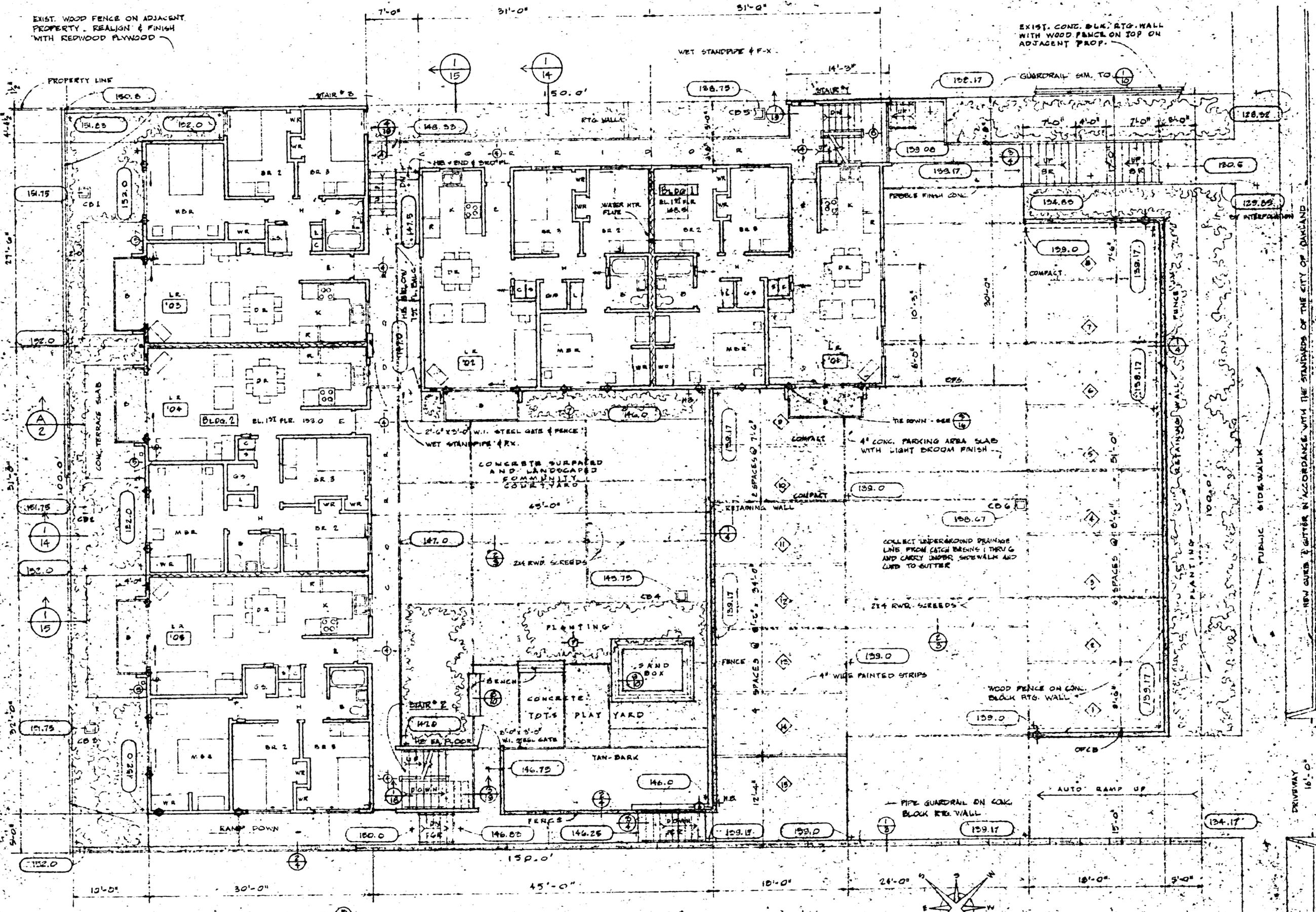
Date, March 20, 1968
 SURVEY of a portion of Rancho San Antonio,
 Oakland, California.

By 
 V.R. Soderlund, Surveyor, Oakland.



EXIST. WOOD FENCE ON ADJACENT PROPERTY - REALIGN & FINISH WITH REDWOOD PLYWOOD

EXIST. CONC. BLK. RTG. WALL WITH WOOD FENCE ON TOP ON ADJACENT PROP.



PLAN OF SITE AND TYPICAL FLOOR
1/8" = 1'-0"

EXIST. CONC. PLANK FENCE ON ADJACENT PROPERTY

⊕ TIE STRAP - SEE 7
⊕ TIE DOWN - SEE 16



4602-PWUP
AIA
3788 GRAND AVENUE
OAKLAND, CALIF. 94611
Lee Stuart Darrow
LEE STUART DARROW
PROJECT NO. CA 2-18
18 UNIT APARTMENT BUILDING
2550 NINTH AVE
OAKLAND CALIFORNIA
PLAN OF SITE AND TYPICAL FLOOR
5-10-68
1

NEW QUES. & BUTTER IN ACCORDANCE WITH THE STANDARDS OF THE CITY OF OAKLAND
NINTH AVENUE

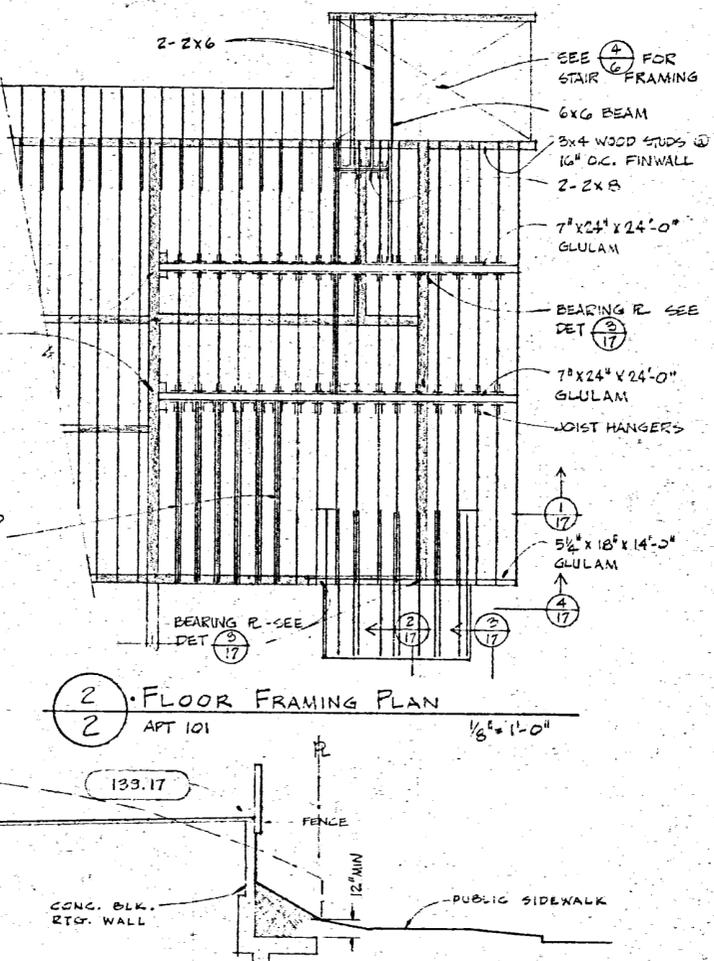
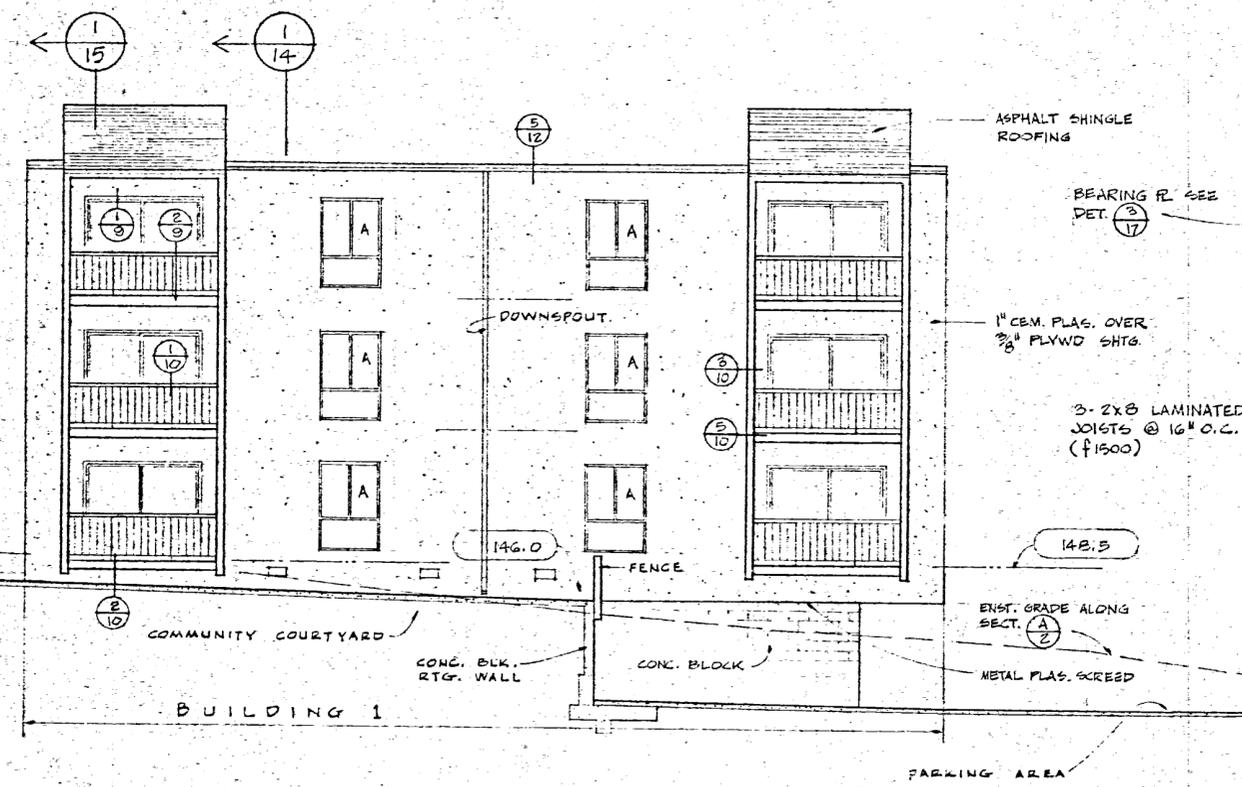
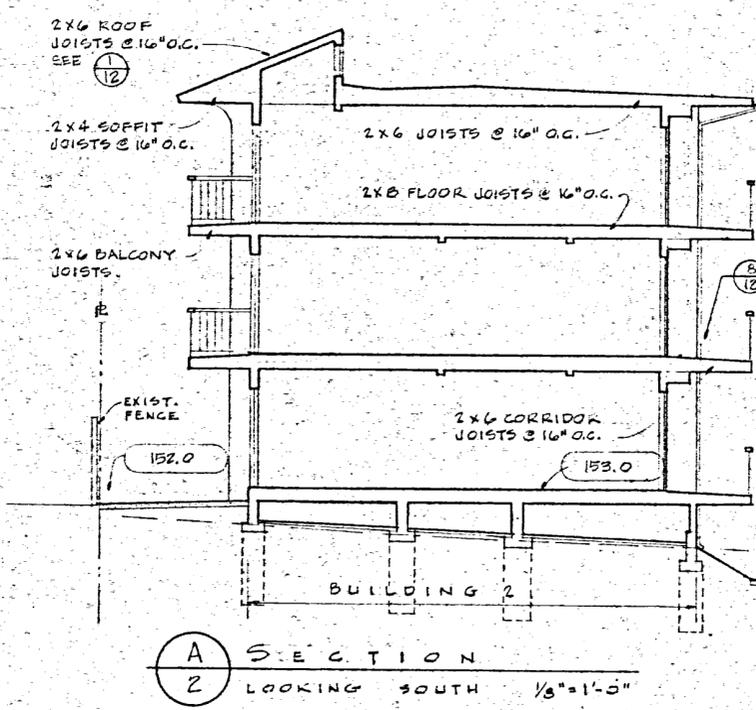
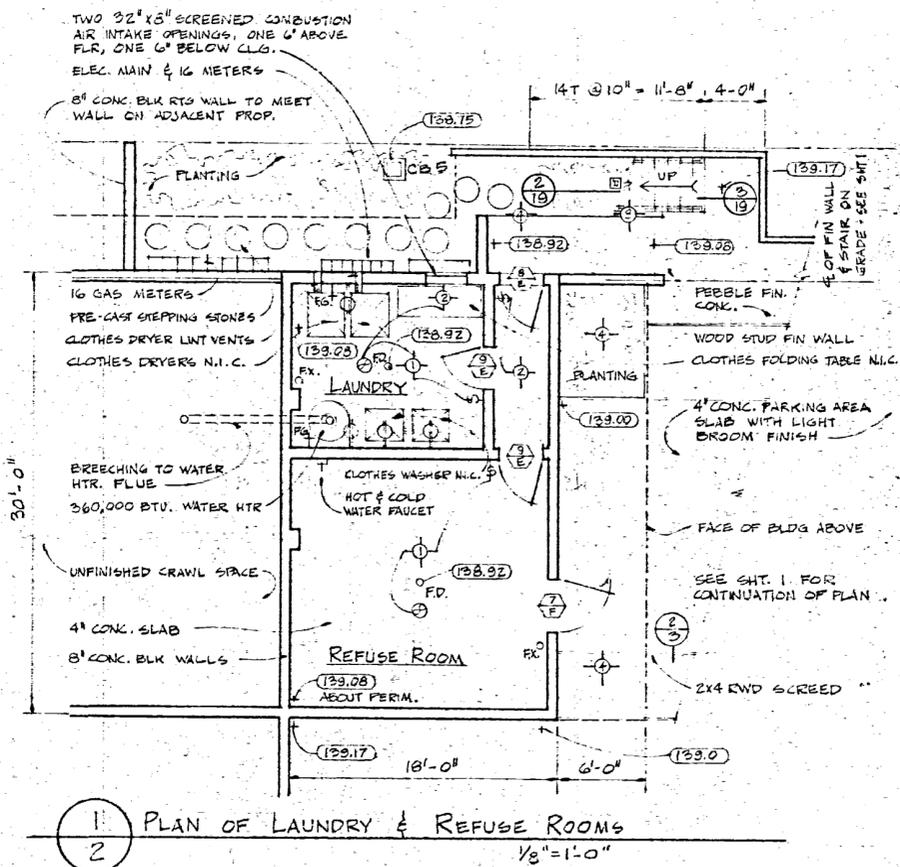
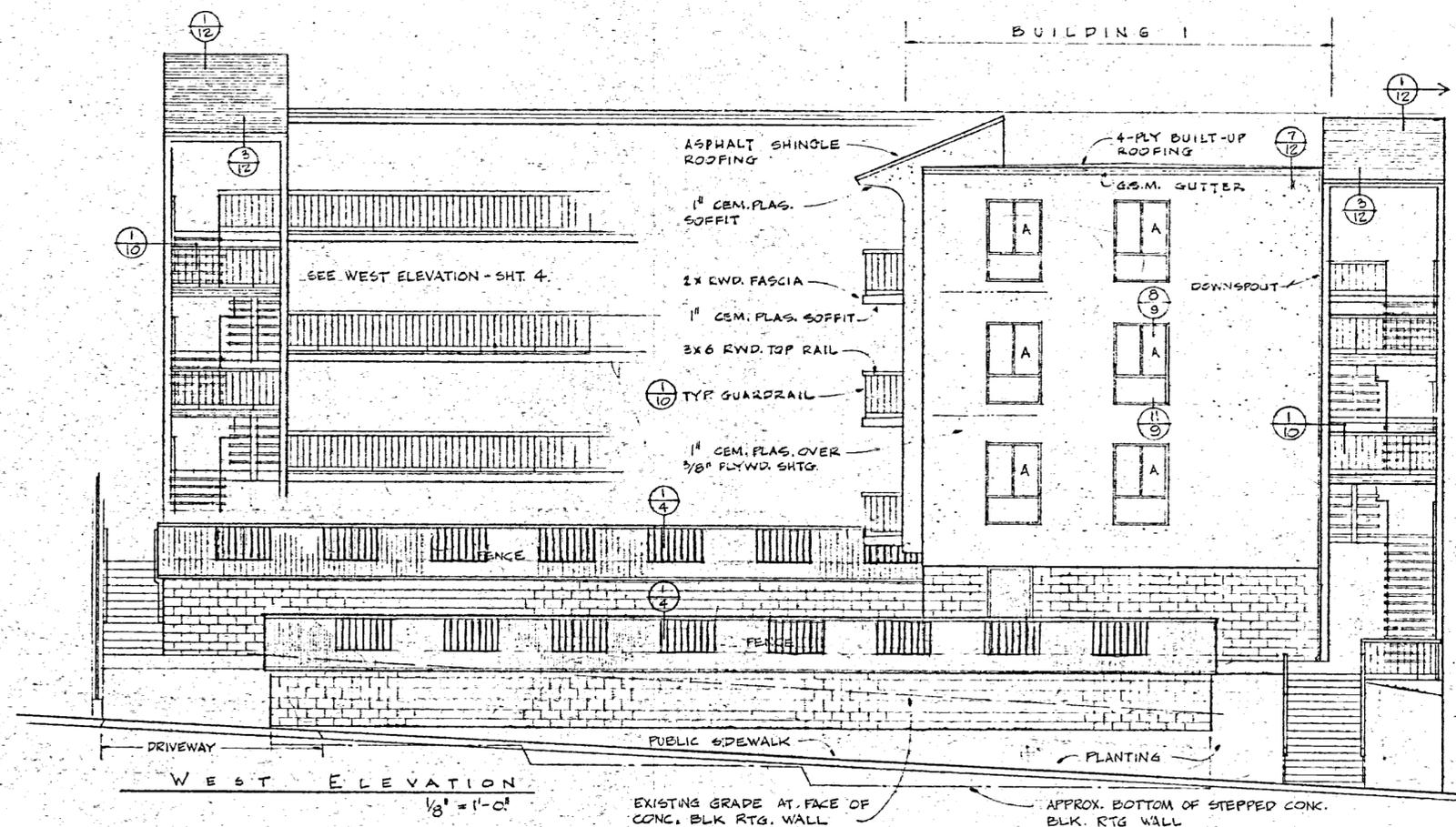
DRIVEWAY 16'-0"

AUTO RAMP UP

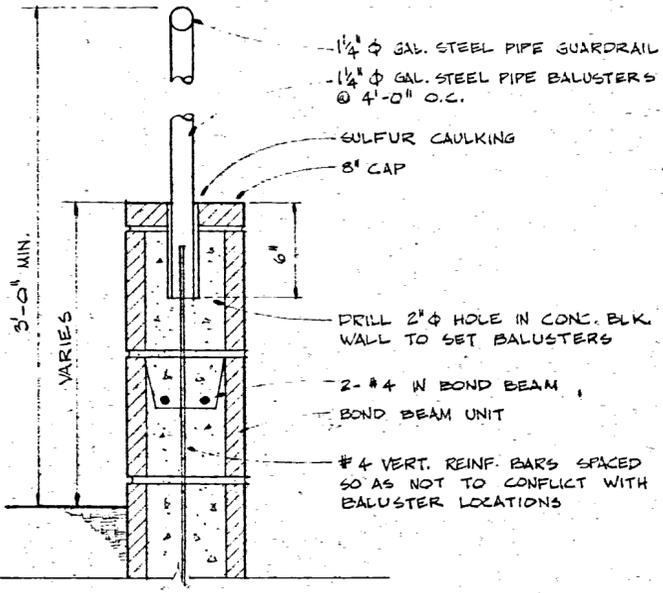
15'-0"

18'-0"

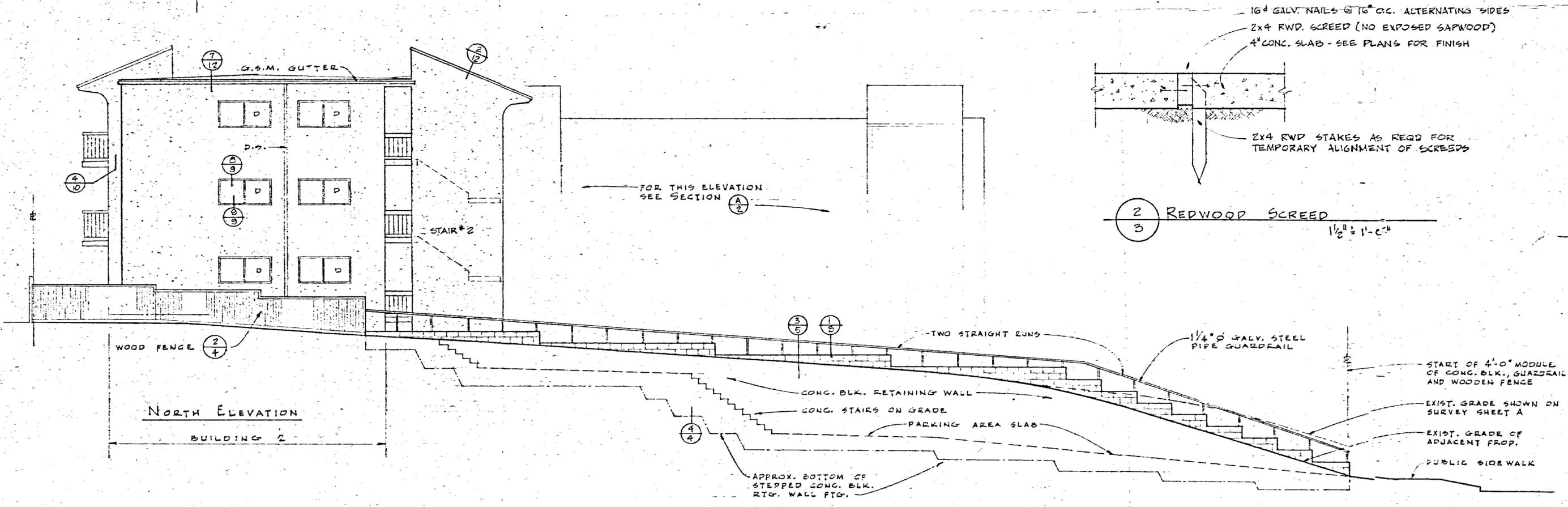
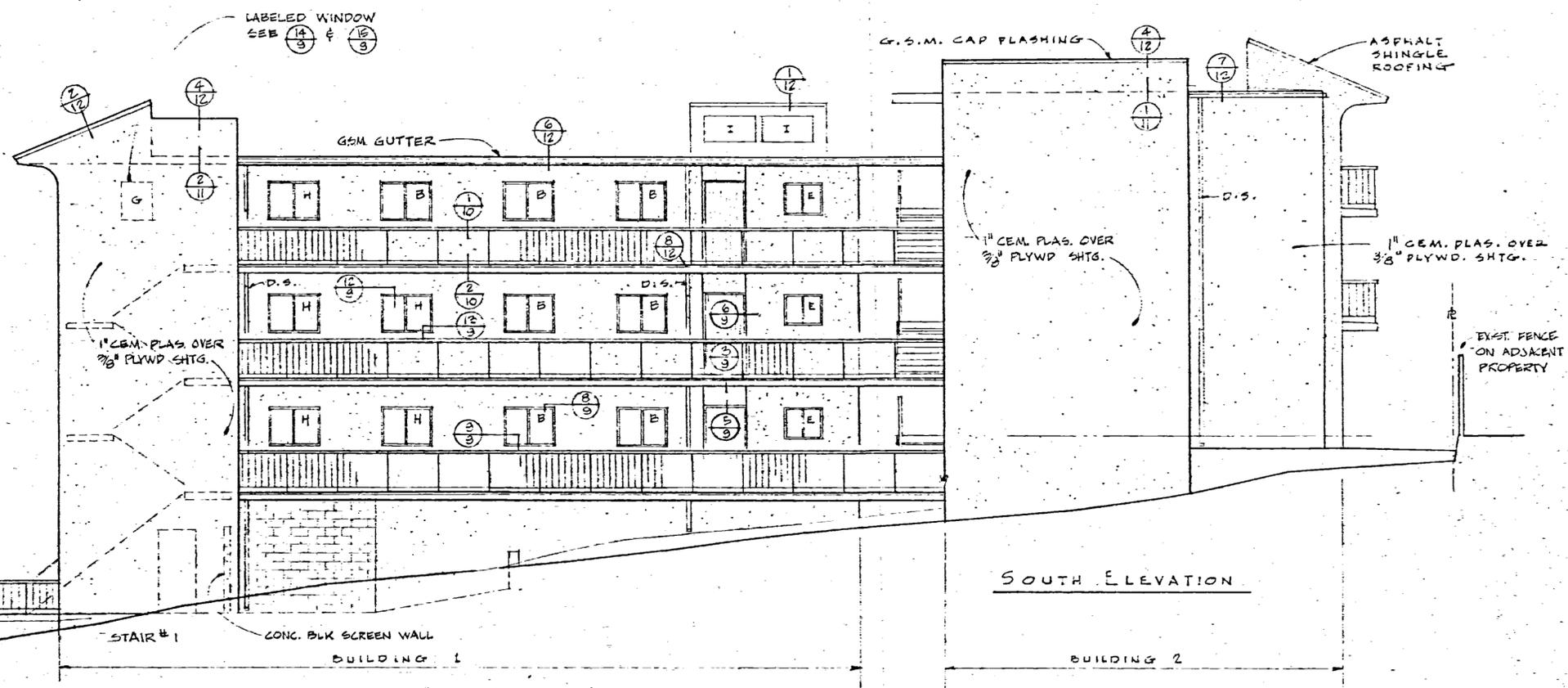
5'-0"



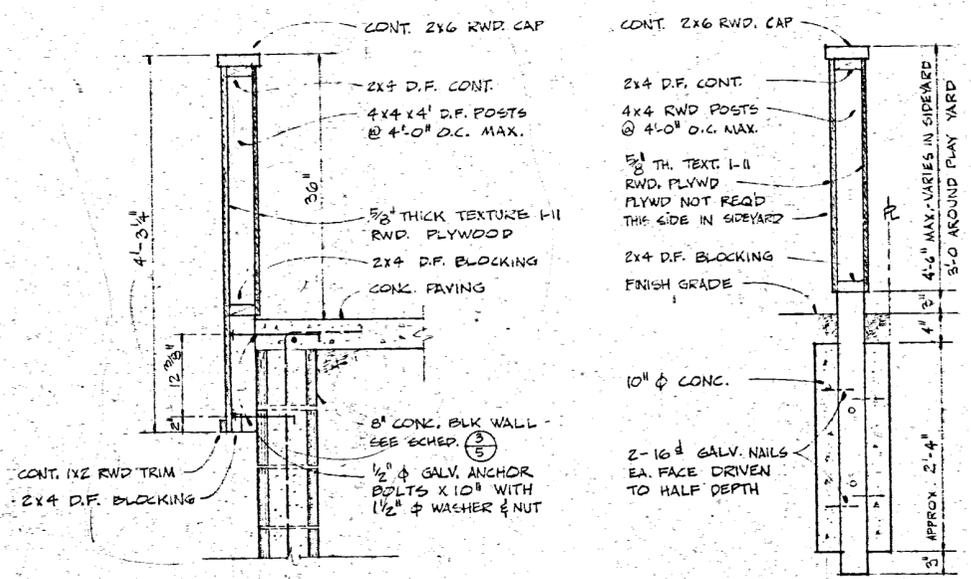
<p>8788 GRAND AVENUE OAKLAND, CALIF. 94611</p> <p><i>Lee Stuart Darrow</i> LEE STUART DARROW AIA</p>	<p>A 15 UNIT APARTMENT BUILDING 2530 NINTH AVENUE OAKLAND, CALIFORNIA</p>	<p>EXTERIOR ELEVATIONS</p>	<p>5-10-68</p>
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1
3 GUARDRAIL DETAIL 1/2" = 1'-0"

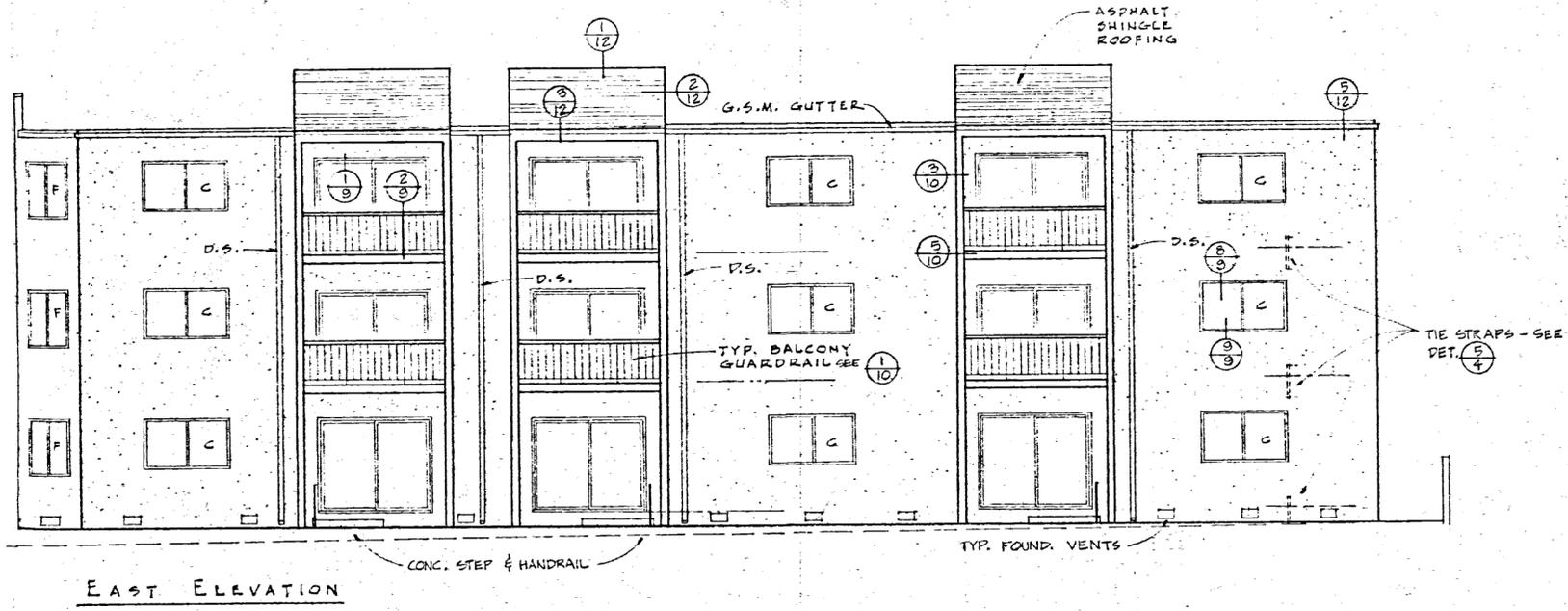


3708 GRAND AVENUE OAKLAND, CALIF. HI 4-4131 <i>Lee Stuart Darrow</i> LEE STUART DARROW ARCHITECT	A 15 UNIT APARTMENT BUILDING 2330 NINTH AVENUE OAKLAND, CALIFORNIA	EXTERIOR ELEVATIONS	3 5-10-68
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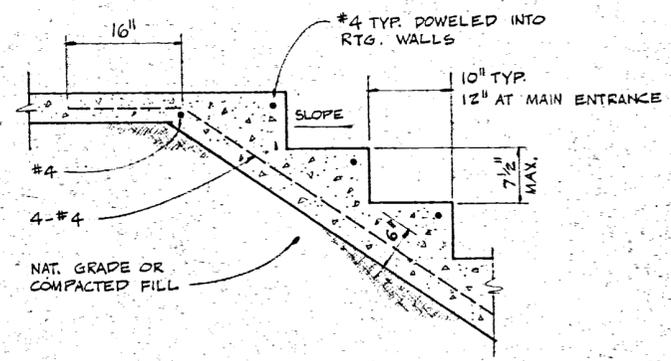


1 FENCE DETAIL
4 3/4" = 1'-0"

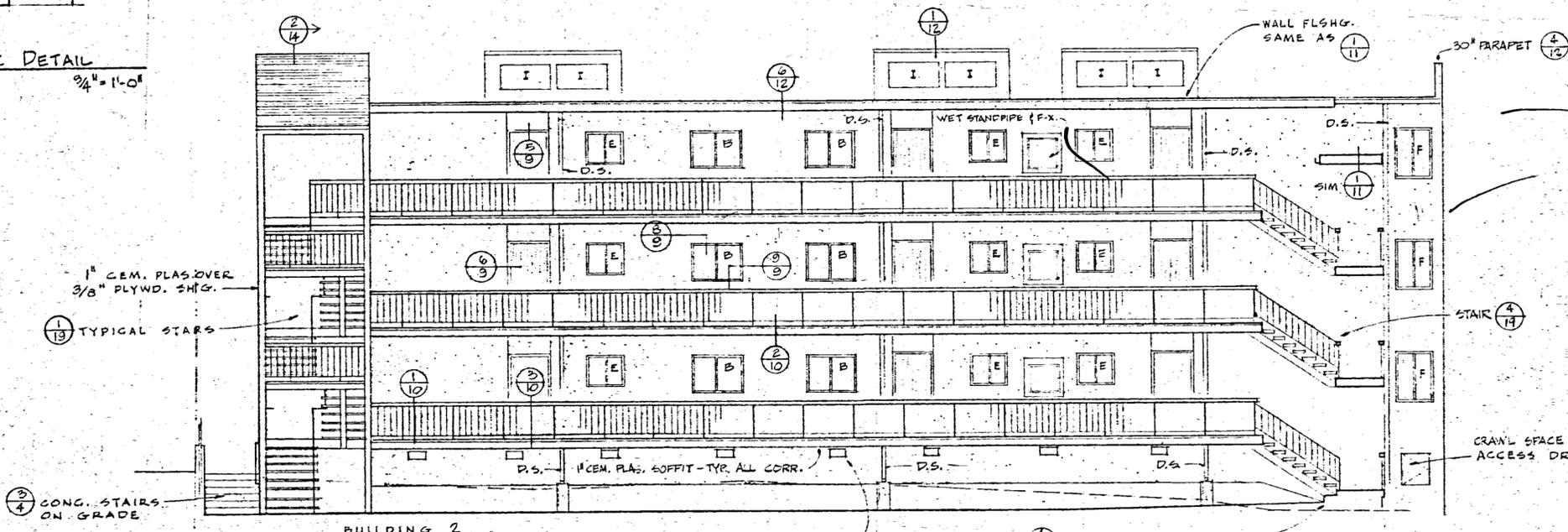
2 FENCE DETAIL
4 3/4" = 1'-0"



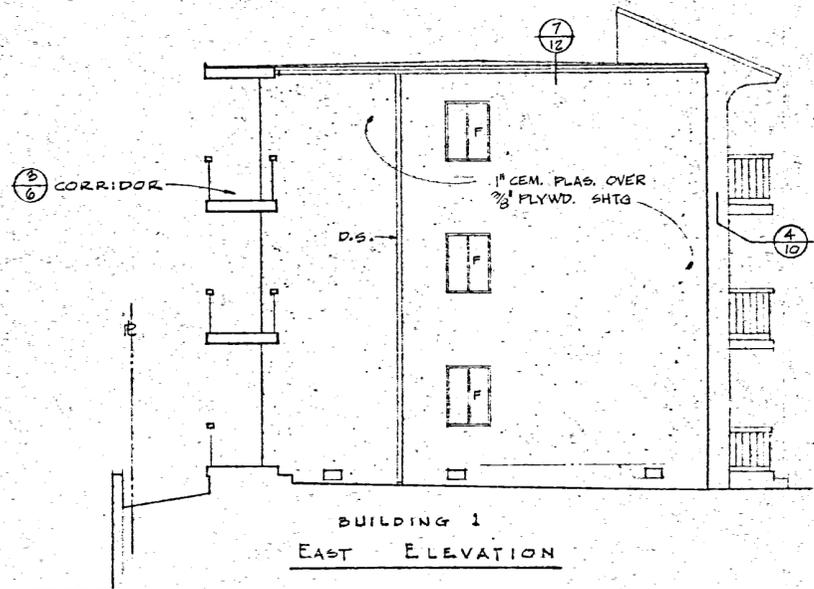
EAST ELEVATION



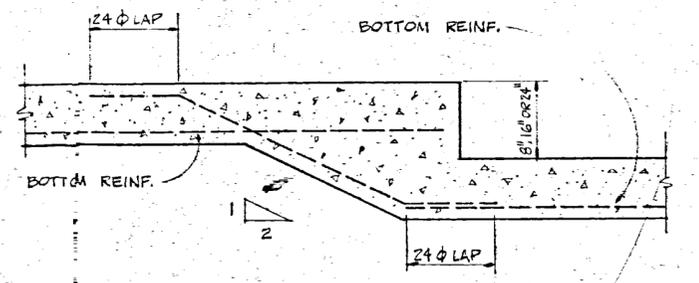
3 CONC. STAIRS ON GRADE
4 3/4" = 1'-0"



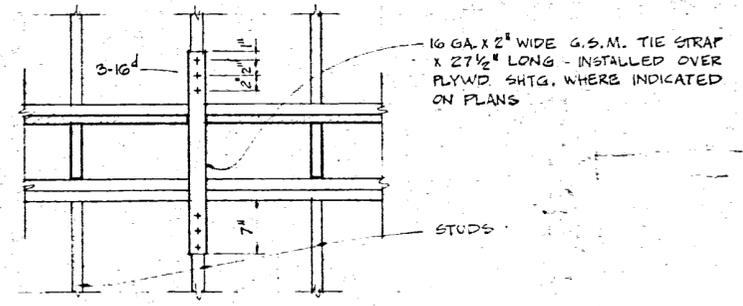
BUILDING 2
WEST ELEVATION



BUILDING 1
EAST ELEVATION

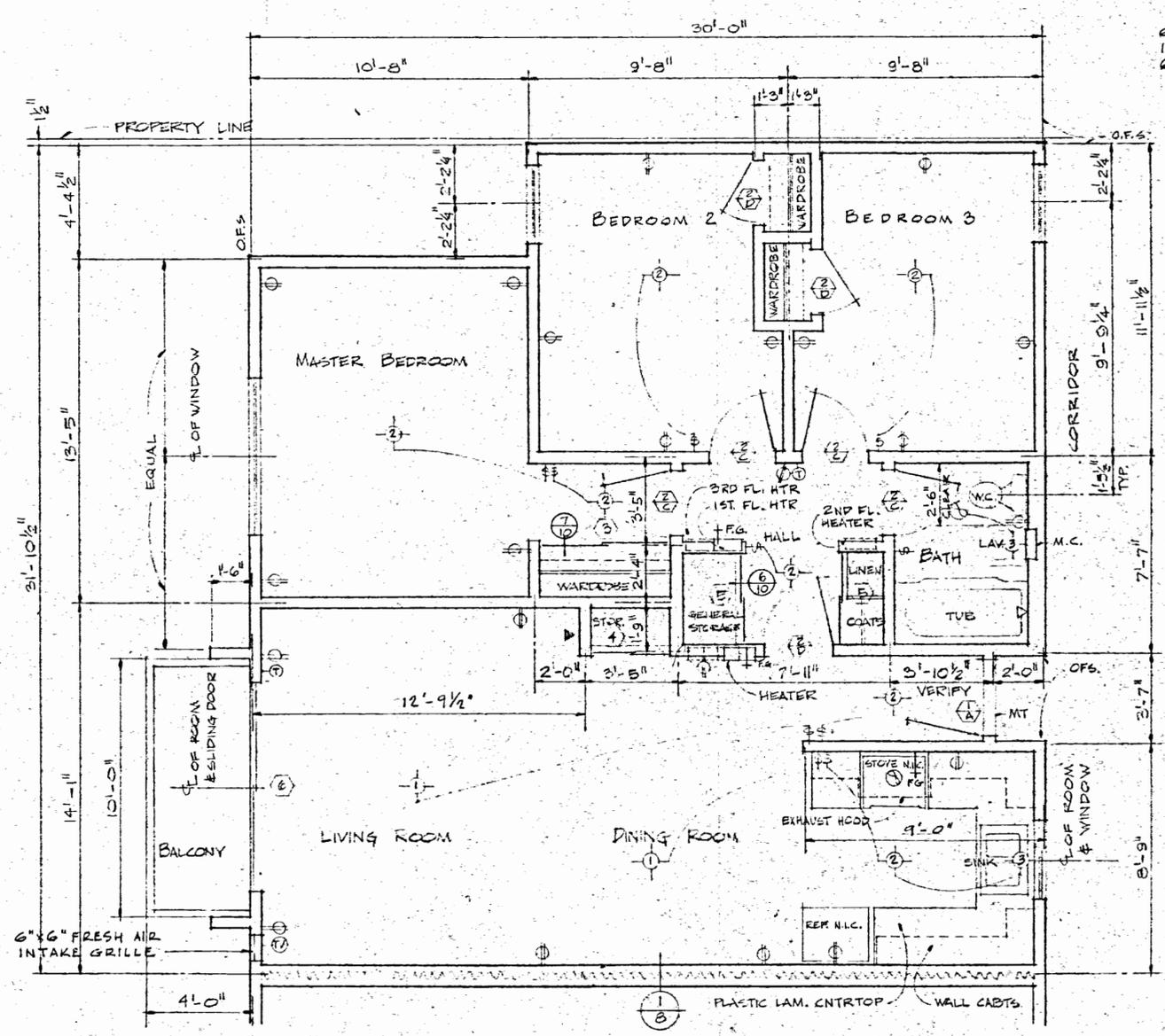


4 ELEVATION OF STEPPED FOOTING
OF CONCRETE BLOCK RETAINING WALL
1/2" = 1'-0"

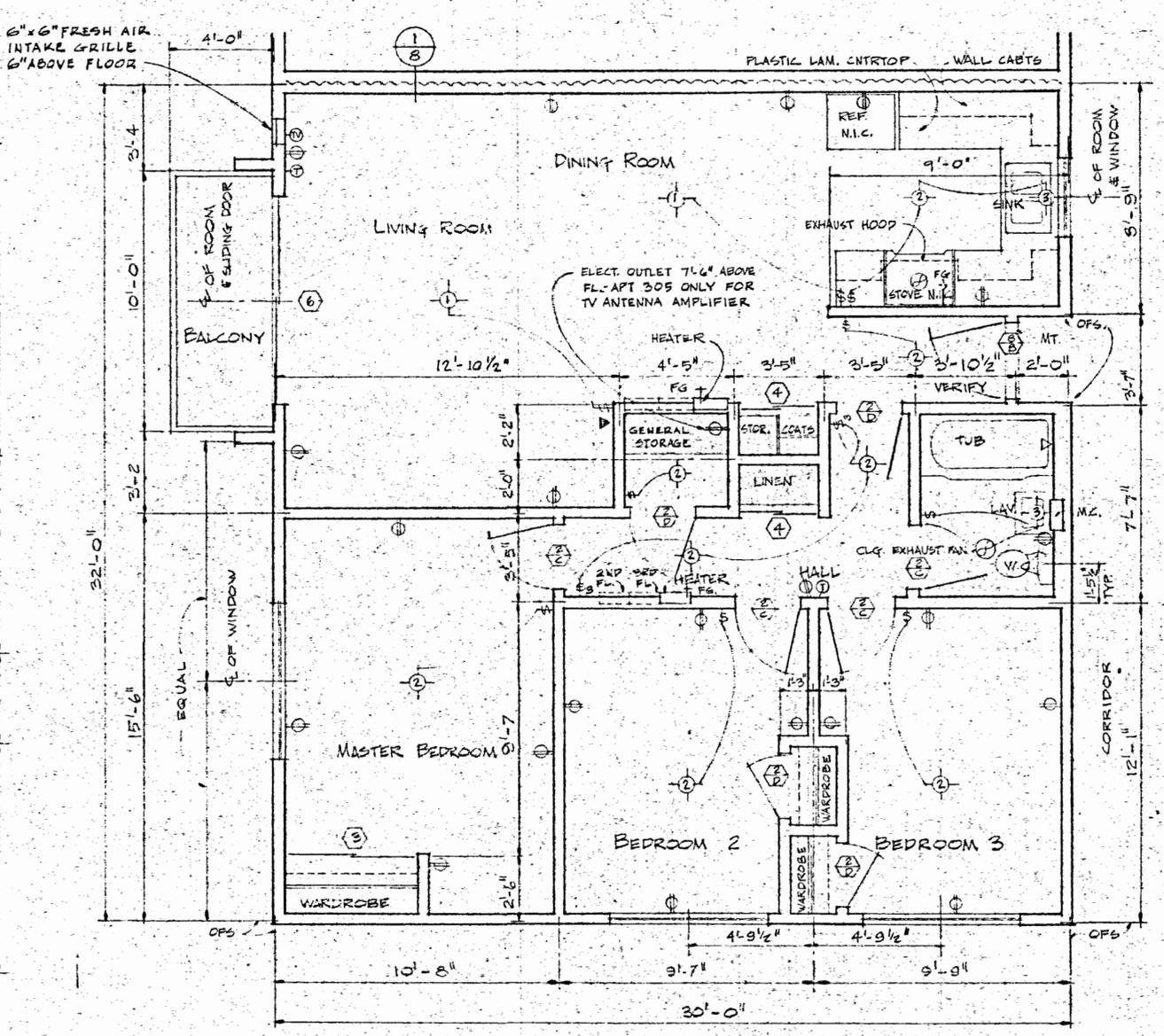


5 TIE STRAP DETAIL
4 60 REQUIRED
3/4" = 1'-0"

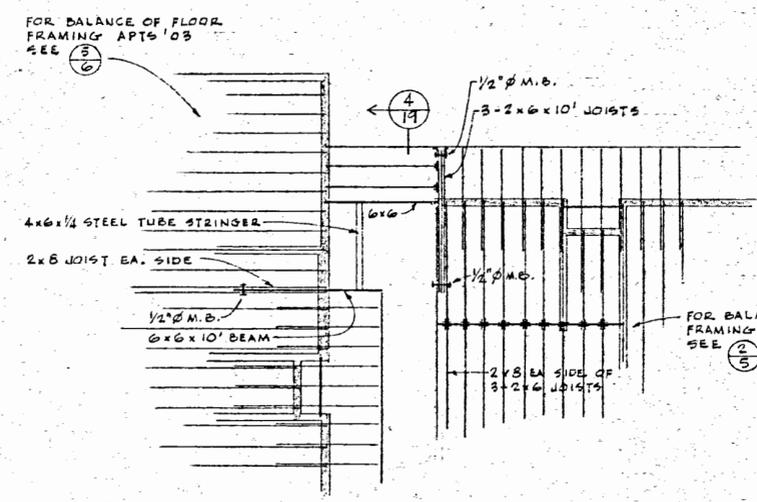
<p>3799 GRAND AVENUE OAKLAND, CALIF. 94612</p> <p><i>Lee Stuart Darrow</i> LEE STUART DARROW AIA</p>	<p>A 15 UNIT APARTMENT BUILDING 2530 NINTH AVENUE OAKLAND, CALIFORNIA</p>	<p>EXTERIOR ELEVATIONS</p> <p style="text-align: right;">4</p> <p style="text-align: right;">5-10-68</p>
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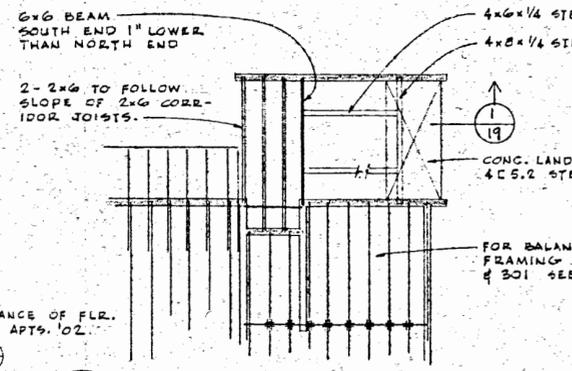
1 PLAN OF APARTMENT TYPE '03
 1/4" = 1'-0"



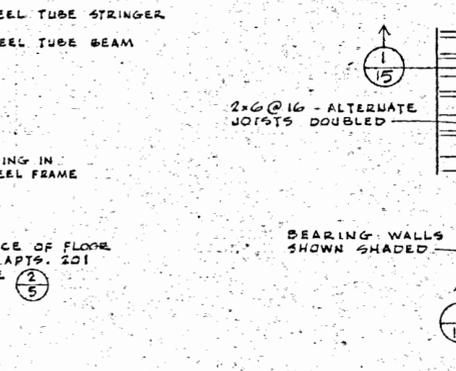
2 PLAN OF APARTMENT TYPE '05
 1/4" = 1'-0"



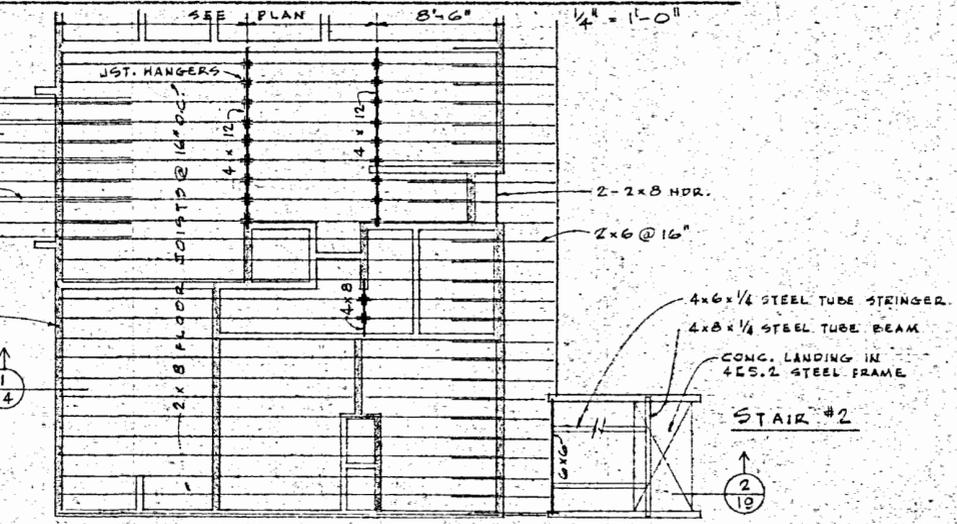
3 FRAMING PLAN - STAIR #3
 1/8" = 1'-0"



4 FRAMING PLAN - STAIR #1
 1/8" = 1'-0"



5 FLOOR FRAMING PLAN
 TYPICAL FOR APTS. '03 AND '05
 1/8" = 1'-0"



6 FRAMING PLAN - STAIR #2
 1/8" = 1'-0"

<p>3798 GRAND AVENUE OAKLAND, CALIF. HI 44131</p> <p><i>Lee Stuart Darrow</i> LEE STUART DARROW</p>	<p>A 15 UNIT APARTMENT BUILDING 2530 NINTH AVENUE OAKLAND, CALIFORNIA</p>	<p>PLAN OF APARTMENT TYPES '03 & '05 FRAMING PLANS</p> <p>5-10-68</p>
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Attachment F

Small Project Design Review Conditions of Approval



CITY OF OAKLAND
SMALL PROJECT DESIGN REVIEW
APPROVAL

DATE: 1/30/21

SUBMISSION DATE: 12/1/20

PROJECT ADDRESS: 2530 9th Ave.

APN: 022 034202701

CASE FILE NO.: DS210022

APPLICANT NAME: Barbara Sanders

MAILING ADDRESS: 2401 Rampart St.
Oakland, CA 94602

GENERAL PLAN: Mixed Housing Type

ZONING: RM-3

CEQA EXEMPTION: 15301

Dear Applicant:

Your application to demolish two (2) three-story vacant apartment buildings (15 units) in significant disrepair conforms to the Small Project Design Review Criteria Checklist and to all applicable zoning regulations, and is therefore **APPROVED**. **This approval is subject to the Conditions of Approval stated in the following section of this letter.**

This design review approval becomes effective immediately and shall expire **two calendar years** from the date of this letter, unless all necessary permits for construction or alteration have been issued within such period. Upon written request and payment of appropriate fees submitted no later than the expiration date of this permit, such period of time may be extended by the Director of City Planning or designee, with additional extensions subject to approval by the approving body. Expiration of any necessary building permit for this project may invalidate this Approval if the said extension period has also expired.

NOTICE TO ALL PARTIES: The time within which judicial review must be sought of disposition of the Director of City Planning is governed by Section 1094.6 of the Code of Civil Procedure of the State of California. With certain exceptions, the time is ninety (90) days from date of the decision.

Please note that any desired modifications to the approved plans must be submitted for review by the Planning Department prior to the changes taking place.

Small Project Design Review Case No. DS210022
2530 9th Ave.
Page 2

To apply for a building permit you must complete an application form and submit additional sets of plans to the Building Services Division. For more information about building permit requirements, please contact the Building Services Division at (510) 238-3443.

If you have any questions regarding this approval, please contact the Planning and Zoning Division at (510) 238-3911.

Signed,



Daniel Findley

-for-

ROBERT MERKAMP
Zoning Manager
Bureau of Planning, Zoning Division

SMALL PROJECT DESIGN REVIEW
CONDITIONS OF APPROVAL
ATTACHED AND INCORPORATED INTO CASE: DS210022
2530 9TH AVE.

STANDARD CONDITIONS OF APPROVAL THAT APPLY TO ALL PROJECTS

1. Approved Use

The project shall be constructed and operated in accordance with the authorized use as described in the approved application materials, and the approved plans 12/1/20on 12/1/20as amended by the following conditions of approval and mitigation measures, if applicable (“Conditions of Approval” or “Conditions”).

2. Effective Date, Expiration, Extensions and Extinguishment

This Approval shall become effective immediately, unless the Approval is appealable, in which case the Approval shall become effective in ten (10) calendar days unless an appeal is filed. Unless a different termination date is prescribed, this Approval shall expire **two years** from the Approval date, or from the date of the final decision in the event of an appeal, unless within such period a complete building permit application has been filed with the Bureau of Building and diligently pursued towards completion, or the authorized activities have commenced in the case of a permit not involving construction or alteration. Upon written request and payment of appropriate fees submitted no later than the expiration date of this Approval, the Director of City Planning or designee may grant a one-year extension of this date, with additional extensions subject to approval by the approving body. Expiration of any necessary building permit or other construction-related permit for this project may invalidate this Approval if said Approval has also expired. If litigation is filed challenging this Approval, or its implementation, then the time period stated above for obtaining necessary permits for construction or alteration and/or commencement of authorized activities is automatically extended for the duration of the litigation

3. Minor and Major Changes

- a. Minor changes to the approved project, plans, Conditions, facilities, or use may be approved administratively by the Director of City Planning
- b. Major changes to the approved project, plans, Conditions, facilities, or use shall be reviewed by the Director of City Planning to determine whether such changes require submittal and approval of a revision to the Approval by the original approving body or a new independent permit/approval. Major revisions shall be reviewed in accordance with the procedures required for the original permit/approval. A new independent permit/approval shall be reviewed in accordance with the procedures required for the new permit/approval.

4. Compliance with Conditions of Approval

- a. The project applicant and property owner, including successors, (collectively referred to hereafter as the “project applicant” or “applicant”) shall be responsible for compliance with all the Conditions of Approval and any recommendations contained in any submitted and approved technical report at his/her sole cost and expense, subject to review and approval by the City of Oakland.
- b. The City of Oakland reserves the right at any time during construction to require certification by a licensed professional at the project applicant’s expense that the as-built project conforms to all applicable requirements, including but not limited to, approved maximum heights and minimum setbacks. Failure to construct the project in accordance with the Approval may result in remedial reconstruction, permit revocation, permit modification, stop work, permit suspension, or other corrective action.

Small Project Design Review Case No. DS210022

2530 9th Ave.

Page 2

- c. Violation of any term, Condition, or project description relating to the Approval is unlawful, prohibited, and a violation of the Oakland Municipal Code. The City of Oakland reserves the right to initiate civil and/or criminal enforcement and/or abatement proceedings, or after notice and public hearing, to revoke the Approval or alter these Conditions if it is found that there is violation of any of the Conditions or the provisions of the Planning Code or Municipal Code, or the project operates as or causes a public nuisance. This provision is not intended to, nor does it, limit in any manner whatsoever the ability of the City to take appropriate enforcement actions. The project applicant shall be responsible for paying fees in accordance with the City's Master Fee Schedule for inspections conducted by the City or a City-designated third-party to investigate alleged violations of the Approval or Conditions.

5. Signed Copy of the Approval/Conditions

A copy of the Approval letter and Conditions shall be signed by the project applicant, attached to each set of permit plans submitted to the appropriate City agency for the project, and made available for review at the project job site at all times.

6. Blight/Nuisances

The project site shall be kept in a blight/nuisance-free condition. Any existing blight or nuisance shall be abated within sixty (60) days of approval, unless an earlier date is specified elsewhere.

7. Indemnification

- a. To the maximum extent permitted by law, the project applicant shall defend (with counsel acceptable to the City), indemnify, and hold harmless the City of Oakland, the Oakland City Council, the Oakland Redevelopment Successor Agency, the Oakland City Planning Commission, and their respective agents, officers, employees, and volunteers (hereafter collectively called "City") from any liability, damages, claim, judgment, loss (direct or indirect), action, causes of action, or proceeding (including legal costs, attorneys' fees, expert witness or consultant fees, City Attorney or staff time, expenses or costs) (collectively called "Action") against the City to attack, set aside, void or annul this Approval or implementation of this Approval. The City may elect, in its sole discretion, to participate in the defense of said Action and the project applicant shall reimburse the City for its reasonable legal costs and attorneys' fees.
- b. Within ten (10) calendar days of the filing of any Action as specified in subsection (a) above, the project applicant shall execute a Joint Defense Letter of Agreement with the City, acceptable to the Office of the City Attorney, which memorializes the above obligations. These obligations and the Joint Defense Letter of Agreement shall survive termination, extinguishment, or invalidation of the Approval. Failure to timely execute the Letter of Agreement does not relieve the project applicant of any of the obligations contained in this Condition or other requirements or Conditions of Approval that may be imposed by the City.

8. Severability

The Approval would not have been granted but for the applicability and validity of each and every one of the specified Conditions, and if one or more of such Conditions is found to be invalid by a court of competent jurisdiction this Approval would not have been granted without requiring other valid Conditions consistent with achieving the same purpose and intent of such Approval.

9. Special Inspector/Inspections, Independent Technical Review, Project Coordination and Monitoring

The project applicant may be required to cover the full costs of independent third-party technical review and City monitoring and inspection, including without limitation, special inspector(s)/inspection(s) during times of extensive or specialized plan-check review or construction, and inspections of potential

Small Project Design Review Case No. DS210022
2530 9th Ave.
Page 3

violations of the Conditions of Approval. The project applicant shall establish a deposit with Engineering Services and/or the Bureau of Building, if directed by the Director of Public Works, Building Official, Director of City Planning, Director of Transportation, or designee, prior to the issuance of a construction-related permit and on an ongoing as-needed basis.

10. Trash and Blight Removal

Requirement: The project applicant and his/her successors shall maintain the property free of blight, as defined in chapter 8.24 of the Oakland Municipal Code. For nonresidential and multi-family residential projects, the project applicant shall install and maintain trash receptacles near public entryways as needed to provide sufficient capacity for building users.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

11. Graffiti Control

Requirement:

c. During construction and operation of the project, the project applicant shall incorporate best management practices reasonably related to the control of graffiti and/or the mitigation of the impacts of graffiti. Such best management practices may include, without limitation:

- i. Installation and maintenance of landscaping to discourage defacement of and/or protect likely graffiti-attracting surfaces.
- ii. Installation and maintenance of lighting to protect likely graffiti-attracting surfaces.
- iii. Use of paint with anti-graffiti coating.
- iv. Incorporation of architectural or design elements or features to discourage graffiti defacement in accordance with the principles of Crime Prevention Through Environmental Design (CPTED).
- v. Other practices approved by the City to deter, protect, or reduce the potential for graffiti defacement.

d. The project applicant shall remove graffiti by appropriate means within seventy-two (72) hours. Appropriate means include the following:

- i. Removal through scrubbing, washing, sanding, and/or scraping (or similar method) without damaging the surface and without discharging wash water or cleaning detergents into the City storm drain system.
- ii. Covering with new paint to match the color of the surrounding surface.
- iii. Replacing with new surfacing (with City permits if required).

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

STANDARD CONDITIONS OF APPROVAL THAT APPLY TO ALL CONSTRUCTION WITH AND WITHOUT GRADING PERMITS

12. Dust Controls – Construction Related

Requirement: The project applicant shall implement all of the following applicable dust control measures during construction of the project:

Small Project Design Review Case No. DS210022

2530 9th Ave.

Page 4

- a) Water all exposed surfaces of active construction areas at least twice daily. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever feasible.
- b) Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).
- c) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- d) Limit vehicle speeds on unpaved roads to 15 miles per hour.
- e) All demolition activities (if any) shall be suspended when average wind speeds exceed 20 mph.
- f) All trucks and equipment, including tires, shall be washed off prior to leaving the site.
- g) Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

13. Criteria Air Pollutant Controls - Construction Related

Requirement: The project applicant shall implement all of the following applicable basic control measures for criteria air pollutants during construction of the project as applicable:

- a) Idling times on all diesel-fueled commercial vehicles over 10,000 lbs. shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations). Clear signage to this effect shall be provided for construction workers at all access points.
- b) Idling times on all diesel-fueled off-road vehicles over 25 horsepower shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes and fleet operators must develop a written policy as required by Title 23, Section 2449, of the California Code of Regulations (“California Air Resources Board Off-Road Diesel Regulations”).
- c) All construction equipment shall be maintained and properly tuned in accordance with the manufacturer’s specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. Equipment check documentation should be kept at the construction site and be available for review by the City and the Bay Area Air Quality District as needed.
- d) Portable equipment shall be powered by grid electricity if available. If electricity is not available, propane or natural gas generators shall be used if feasible. Diesel engines shall only be used if grid electricity is not available and propane or natural gas generators cannot meet the electrical demand.
- e) Low VOC (i.e., ROG) coatings shall be used that comply with BAAQMD Regulation 8, Rule 3: Architectural Coatings.
- f) All equipment to be used on the construction site shall comply with the requirements of Title 13, Section 2449, of the California Code of Regulations (“California Air

Small Project Design Review Case No. DS210022
2530 9th Ave.
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Resources Board Off-Road Diesel Regulations”) and upon request by the City (and the Air District if specifically requested), the project applicant shall provide written documentation that fleet requirements have been met.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

14. Asbestos in Structures

Requirement: The project applicant shall comply with all applicable laws and regulations regarding demolition and renovation of Asbestos Containing Materials (ACM), including but not limited to California Code of Regulations, Title 8; California Business and Professions Code, Division 3; California Health and Safety Code sections 25915-25919.7; and Bay Area Air Quality Management District, Regulation 11, Rule 2, as may be amended. Evidence of compliance shall be submitted to the City upon request.

When Required: Prior to approval of construction-related permit

Initial Approval: Applicable regulatory agency with jurisdiction

Monitoring/Inspection: Applicable regulatory agency with jurisdiction

15. Naturally-Occurring Asbestos

Requirement: The project applicant shall comply with all applicable laws and regulations regarding construction in areas of naturally-occurring asbestos, including but not limited to, the Bay Area Air Quality Management District’s (BAAQMD) Asbestos Airborne Toxic Control Measures for Construction, Grading, Quarrying, and Surface Mining Operations (implementing California Code of Regulations, section 93105, as may be amended) requiring preparation and implementation of an Asbestos Dust Mitigation Plan to minimize public exposure to naturally-occurring asbestos. Evidence of compliance shall be submitted to the City upon request.

When Required: Prior to approval of construction-related permit

Initial Approval: Applicable regulatory agency with jurisdiction

Monitoring/Inspection: Applicable regulatory agency with jurisdiction

16. Archaeological and Paleontological Resources – Discovery During Construction

Requirement: Pursuant to CEQA Guidelines section 15064.5(f), in the event that any historic or prehistoric subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant shall notify the City and consult with a qualified archaeologist or paleontologist, as applicable, to assess the significance of the find. In the case of discovery of paleontological resources, the assessment shall be done in accordance with the Society of Vertebrate Paleontology standards. If any find is determined to be significant, appropriate avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined unnecessary or infeasible by the City. Feasibility of avoidance shall be determined with consideration of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery, excavation) shall be instituted. Work may proceed on other parts of the project site while measures for the cultural resources are implemented.

In the event of data recovery of archaeological resources, the project applicant shall submit an Archaeological Research Design and Treatment Plan (ARDTP) prepared by a qualified archaeologist for review and approval by the City. The ARDTP is required to identify how the proposed data recovery

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program would preserve the significant information the archaeological resource is expected to contain. The ARDTP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The ARDTP shall include the analysis and specify the curation and storage methods. Data recovery, in general, shall be limited to the portions of the archaeological resource that could be impacted by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practicable. Because the intent of the ARDTP is to save as much of the archaeological resource as possible, including moving the resource, if feasible, preparation and implementation of the ARDTP would reduce the potential adverse impact to less than significant. The project applicant shall implement the ARDTP at his/her expense.

In the event of excavation of paleontological resources, the project applicant shall submit an excavation plan prepared by a qualified paleontologist to the City for review and approval. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by a qualified paleontologist, as appropriate, according to current professional standards and at the expense of the project applicant.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

17. Human Remains – Discovery During Construction

Requirement: Pursuant to CEQA Guidelines section 15064.5(e)(1), in the event that human skeletal remains are uncovered at the project site during construction activities, all work shall immediately halt and the project applicant shall notify the City and the Alameda County Coroner. If the County Coroner determines that an investigation of the cause of death is required or that the remains are Native American, all work shall cease within 50 feet of the remains until appropriate arrangements are made. In the event that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of section 7050.5 of the California Health and Safety Code. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance, and avoidance measures (if applicable) shall be completed expeditiously and at the expense of the project applicant.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

18. Construction-Related Permit(s)

Requirement: The project applicant shall obtain all required construction-related permits/approvals from the City. The project shall comply with all standards, requirements and conditions contained in construction-related codes, including but not limited to the Oakland Building Code and the Oakland Grading Regulations, to ensure structural integrity and safe construction.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

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19. Hazardous Materials Related to Construction

Requirement: The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential negative effects on groundwater, soils, and human health. These shall include, at a minimum, the following:

- a. Follow manufacture's recommendations for use, storage, and disposal of chemical products used in construction;
- b. Avoid overtopping construction equipment fuel gas tanks;
- c. During routine maintenance of construction equipment, properly contain and remove grease and oils;
- d. Properly dispose of discarded containers of fuels and other chemicals;
- e. Implement lead-safe work practices and comply with all local, regional, state, and federal requirements concerning lead (for more information refer to the Alameda County Lead Poisoning Prevention Program); and
- f. If soil, groundwater, or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the project applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notifying the City and applicable regulatory agency(ies) and implementation of the actions described in the City's Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

20. Erosion and Sedimentation Control Measures for Construction

Requirement: The project applicant shall implement Best Management Practices (BMPs) to reduce erosion, sedimentation, and water quality impacts during construction to the maximum extent practicable. At a minimum, the project applicant shall provide filter materials deemed acceptable to the City at nearby catch basins to prevent any debris and dirt from flowing into the City's storm drain system and creeks.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

- OR IF ON A HILLSIDE PROPERTY MORE THAN 20% SLOPE

Erosion and Sedimentation Control Plan for Construction

a. ***Erosion and Sedimentation Control Plan Required***

Requirement: The project applicant shall submit an Erosion and Sedimentation Control Plan to the City for review and approval. The Erosion and Sedimentation Control Plan shall include all necessary measures to be taken to prevent excessive stormwater runoff or carrying by stormwater runoff of solid materials on to lands of adjacent property owners, public streets, or to creeks as a result of conditions created by grading and/or construction operations. The Plan shall include, but not be limited to, such measures as short-term erosion control planting, waterproof slope covering, check

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dams, interceptor ditches, benches, storm drains, dissipation structures, diversion dikes, retarding berms and barriers, devices to trap, store and filter out sediment, and stormwater retention basins. Off-site work by the project applicant may be necessary. The project applicant shall obtain permission or easements necessary for off-site work. There shall be a clear notation that the plan is subject to changes as changing conditions occur. Calculations of anticipated stormwater runoff and sediment volumes shall be included, if required by the City. The Plan shall specify that, after construction is complete, the project applicant shall ensure that the storm drain system shall be inspected and that the project applicant shall clear the system of any debris or sediment.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: N/A

b. ***Erosion and Sedimentation Control During Construction***

Requirement: The project applicant shall implement the approved Erosion and Sedimentation Control Plan. No grading shall occur during the wet weather season (October 15 through April 15) unless specifically authorized in writing by the Bureau of Building.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

AND

Drainage Plan for Post-Construction Stormwater Runoff on Hillside Properties

Requirement: The project applicant shall submit and implement a Drainage Plan to be reviewed and approved by the City. The Drainage Plan shall include measures to reduce the volume and velocity of post-construction stormwater runoff to the maximum extent practicable. Stormwater runoff shall not be augmented to adjacent properties, creeks, or storm drains. The Drainage Plan shall be included with the project drawings submitted to the City for site improvements.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

21. Site Design Measures to Reduce Stormwater Runoff

Requirement: Pursuant to Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES), the project applicant is encouraged to incorporate appropriate site design measures into the project to reduce the amount of stormwater runoff. These measures may include, but are not limited to, the following:

- a. Minimize impervious surfaces, especially directly connected impervious surfaces and surface parking areas;
- b. Utilize permeable paving in place of impervious paving where appropriate;
- c. Cluster structures;
- d. Direct roof runoff to vegetated areas;
- e. Preserve quality open space; and
- f. Establish vegetated buffer areas.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: N/A

22. Source Control Measures to Limit Stormwater Pollution

Requirement: Pursuant to Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES), the project applicant is encouraged to incorporate appropriate source control measures to limit pollution in stormwater runoff. These measures may include, but are not limited to, the following:

- a. Stencil storm drain inlets “No Dumping – Drains to Bay;”
- b. Minimize the use of pesticides and fertilizers;
- c. Cover outdoor material storage areas, loading docks, repair/maintenance bays and fueling areas;
- d. Cover trash, food waste, and compactor enclosures; and
- e. Plumb the following discharges to the sanitary sewer system, subject to City approval:
- f. Discharges from indoor floor mats, equipment, hood filter, wash racks, and, covered outdoor wash racks for restaurants;
- g. Dumpster drips from covered trash, food waste, and compactor enclosures;
- h. Discharges from outdoor covered wash areas for vehicles, equipment, and accessories;
- i. Swimming pool water, if discharge to on-site vegetated areas is not feasible; and
- j. Fire sprinkler test water, if discharge to on-site vegetated areas is not feasible.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: N/A

23. Construction Days/Hours

Requirement: The project applicant shall comply with the following restrictions concerning construction days and hours:

- a. Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pier drilling and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m.
- b. Construction activities are limited to between 9:00 a.m. and 5:00 p.m. on Saturday. In residential zones and within 300 feet of a residential zone, construction activities are allowed from 9:00 a.m. to 5:00 p.m. only within the interior of the building with the doors and windows closed. No pier drilling or other extreme noise generating activities greater than 90 dBA are allowed on Saturday.
- c. No construction is allowed on Sunday or federal holidays.

Construction activities include, but are not limited to, truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held on-site in a non-enclosed area.

Any construction activity proposed outside of the above days and hours for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis by the City, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby residents’/occupants’ preferences. The project applicant shall notify property owners and occupants located within 300 feet at least 14 calendar days prior to construction activity proposed outside of the above days/hours. When submitting a request to the City to allow construction activity outside of the above days/hours, the project applicant shall submit information concerning the type and duration of proposed construction activity and the draft public notice for City review and approval prior to distribution of the public notice.

When Required: During construction

Initial Approval: N/A

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Monitoring/Inspection: Bureau of Building

24. Construction Noise

Requirement: The project applicant shall implement noise reduction measures to reduce noise impacts due to construction. Noise reduction measures include, but are not limited to, the following:

- a. Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds) wherever feasible.
- b. Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.
- c. Applicant shall use temporary power poles instead of generators where feasible.
- d. Stationary noise sources shall be located as far from adjacent properties as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction.
- e. The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

25. Operational Noise

Requirement: Noise levels from the project site after completion of the project (i.e., during project operation) shall comply with the performance standards of chapter 17.120 of the Oakland Planning Code and chapter 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the City.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

26. Construction Activity in the Public Right-of-Way

a. ***Obstruction Permit Required***

Requirement: The project applicant shall obtain an obstruction permit from the City prior to placing any temporary construction-related obstruction in the public right-of-way, including City streets, sidewalks, bicycle facilities, and bus stops.

When Required: Prior to approval of construction-related permit

Initial Approval: Department of Transportation

Monitoring/Inspection: Department of Transportation

b. ***Traffic Control Plan Required***

Requirement: In the event of obstructions to vehicle or bicycle travel lanes, bus stops, or sidewalks, the project applicant shall submit a Traffic Control Plan to the City for review and approval prior to obtaining an obstruction permit. The project applicant shall submit evidence of City approval of the Traffic Control Plan with the application for an obstruction permit. The Traffic Control Plan shall contain a set of comprehensive traffic control measures for auto, transit, bicycle, and pedestrian accommodations (or detours, if accommodations are not feasible), including detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes. The Traffic Control Plan shall be in conformance with the City's Supplemental Design Guidance for Accommodating Pedestrians, Bicyclists, and Bus Facilities in Construction Zones. The project applicant shall implement the approved Plan during construction.

Initial Approval: Department of Transportation

Monitoring/Inspection: Department of Transportation

c. ***Repair of City Streets***

Requirement: The project applicant shall repair any damage to the public right-of way, including streets and sidewalks, caused by project construction at his/her expense within one week of the occurrence of the damage (or excessive wear), unless further damage/excessive wear may continue; in such case, repair shall occur prior to approval of the final inspection of the construction-related permit. All damage that is a threat to public health or safety shall be repaired immediately.

When Required: Prior to building permit final

Initial Approval: N/A

Monitoring/Inspection: Department of Transportation

27. Construction and Demolition Waste Reduction and Recycling

Requirement: The project applicant shall comply with the City of Oakland Construction and Demolition Waste Reduction and Recycling Ordinance (chapter 15.34 of the Oakland Municipal Code) by submitting a Construction and Demolition Waste Reduction and Recycling Plan (WRRP) for City review and approval, and shall implement the approved WRRP. Projects subject to these requirements include all new construction, renovations/alterations/modifications with construction values of \$50,000 or more (except R-3 type construction), and all demolition (including soft demolition) except demolition of type R-3 construction. The WRRP must specify the methods by which the project will divert construction and demolition debris waste from landfill disposal in accordance with current City requirements. The WRRP may be submitted electronically at www.greenhalosystems.com or manually at the City's Green Building Resource Center. Current standards, FAQs, and forms are available on the City's website and in the Green Building Resource Center.

When Required: Prior to approval of construction-related permit

Initial Approval: Public Works Department, Environmental Services Division

Monitoring/Inspection: Public Works Department, Environmental Services Division

STANDARD CONDITIONS OF APPROVAL THAT APPLY TO ALL PROJECTS THAT INCLUDE RESIDENTIAL ADDITIONS OVER 500 SQ. FT. OF FLOOR AREA; CONSTRUCTION OF NEW NONRESIDENTIAL FACILITIES; OR NONRESIDENTIAL ADDITIONS OVER 1,000 SQ. FT. OF FLOOR AREA.]

28. Landscape Plan

a. ***Landscape Plan Required***

Requirement: The project applicant shall submit a final Landscape Plan for City review and approval that is consistent with the approved Landscape Plan. The Landscape Plan shall be included with the

set of drawings submitted for the construction-related permit and shall comply with the landscape requirements of chapter 17.124 of the Planning Code. Proposed plants shall be predominantly drought-tolerant. Specification of any street trees shall comply with the Master Street Tree List and Tree Planting Guidelines (which can be viewed at <http://www2.oaklandnet.com/oakcal/groups/pwa/documents/report/oak042662.pdf> and <http://www2.oaklandnet.com/oakcal/groups/pwa/documents/form/oak025595.pdf>, respectively), and with any applicable streetscape plan.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: N/A

b. ***Landscape Installation***

Requirement: The project applicant shall implement the approved Landscape Plan unless a bond, cash deposit, letter of credit, or other equivalent instrument acceptable to the Director of City Planning, is provided. The financial instrument shall equal the greater of \$2,500 or the estimated cost of implementing the Landscape Plan based on a licensed contractor's bid.

When Required: Prior to building permit final

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

c. ***Landscape Maintenance***

Requirement: All required planting shall be permanently maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with applicable landscaping requirements. The property owner shall be responsible for maintaining planting in adjacent public rights-of-way. All required fences, walls, and irrigation systems shall be permanently maintained in good condition and, whenever necessary, repaired or replaced.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

STANDARD CONDITIONS OF APPROVAL THAT APPLY TO ALL PROJECTS THAT REMOVE A PROTECTED TREE

29. Tree Removal During Bird Breeding Season

Requirement: To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of birds shall not occur during the bird breeding season of February 1 to August 15 (or during December 15 to August 15 for trees located in or near marsh, wetland, or aquatic habitats). If tree removal must occur during the bird breeding season, all trees to be removed shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days prior to the start of work and shall be submitted to the City for review and approval. If the survey indicates the potential presence of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the California Department of Fish and Wildlife, and will be based to a large extent on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest.

When Required: Prior to removal of trees

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Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

30. **Tree Permit**

a. ***Tree Permit Required***

Requirement: Pursuant to the City's Tree Protection Ordinance (OMC chapter 12.36), the project applicant shall obtain a tree permit and abide by the conditions of that permit.

When Required: Prior to approval of construction-related permit

Initial Approval: Permit approval by Public Works Department, Tree Division; evidence of approval submitted to Bureau of Building

Monitoring/Inspection: Bureau of Building

b. ***Tree Protection During Construction***

Requirement: Adequate protection shall be provided during the construction period for any trees which are to remain standing, including the following, plus any recommendations of an arborist:

- i. Before the start of any clearing, excavation, construction, or other work on the site, every protected tree deemed to be potentially endangered by said site work shall be securely fenced off at a distance from the base of the tree to be determined by the project's consulting arborist. Such fences shall remain in place for duration of all such work. All trees to be removed shall be clearly marked. A scheme shall be established for the removal and disposal of logs, brush, earth and other debris which will avoid injury to any protected tree.
- ii. Where proposed development or other site work is to encroach upon the protected perimeter of any protected tree, special measures shall be incorporated to allow the roots to breathe and obtain water and nutrients. Any excavation, cutting, filling, or compaction of the existing ground surface within the protected perimeter shall be minimized. No change in existing ground level shall occur within a distance to be determined by the project's consulting arborist from the base of any protected tree at any time. No burning or use of equipment with an open flame shall occur near or within the protected perimeter of any protected tree.
- iii. No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees shall occur within the distance to be determined by the project's consulting arborist from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. No heavy construction equipment or construction materials shall be operated or stored within a distance from the base of any protected trees to be determined by the project's consulting arborist. Wires, ropes, or other devices shall not be attached to any protected tree, except as needed for support of the tree. No sign, other than a tag showing the botanical classification, shall be attached to any protected tree.
- iv. Periodically during construction, the leaves of protected trees shall be thoroughly sprayed with water to prevent buildup of dust and other pollution that would inhibit leaf transpiration.
- v. If any damage to a protected tree should occur during or as a result of work on the site, the project applicant shall immediately notify the Public Works Department and the project's consulting arborist shall make a recommendation to the City Tree Reviewer as to whether the damaged tree can be preserved. If, in the professional opinion of the Tree Reviewer, such tree cannot be preserved in a healthy state, the Tree Reviewer shall require replacement of any tree removed with another tree or trees on the same site deemed adequate by the Tree Reviewer to compensate for the loss of the tree that is removed.
- vi. All debris created as a result of any tree removal work shall be removed by the project applicant from the property within two weeks of debris creation, and such debris shall be

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properly disposed of by the project applicant in accordance with all applicable laws, ordinances, and regulations.

When Required: During construction

Initial Approval: Public Works Department, Tree Division

Monitoring/Inspection: Bureau of Building

c. ***Tree Replacement Plantings***

Requirement: Replacement plantings shall be required for tree removals for the purposes of erosion control, groundwater replenishment, visual screening, wildlife habitat, and preventing excessive loss of shade, in accordance with the following criteria:

- i. No tree replacement shall be required for the removal of nonnative species, for the removal of trees which is required for the benefit of remaining trees, or where insufficient planting area exists for a mature tree of the species being considered.
- ii. Replacement tree species shall consist of *Sequoia sempervirens* (Coast Redwood), *Quercus agrifolia* (Coast Live Oak), *Arbutus menziesii* (Madrone), *Aesculus californica* (California Buckeye), *Umbellularia californica* (California Bay Laurel), or other tree species acceptable to the Tree Division.
- iii. Replacement trees shall be at least twenty-four (24) inch box size, unless a smaller size is recommended by the arborist, except that three fifteen (15) gallon size trees may be substituted for each twenty-four (24) inch box size tree where appropriate.
- iv. Minimum planting areas must be available on site as follows:
 - For *Sequoia sempervirens*, three hundred fifteen (315) square feet per tree;
 - For other species listed, seven hundred (700) square feet per tree.
- v. In the event that replacement trees are required but cannot be planted due to site constraints, an in lieu fee in accordance with the City's Master Fee Schedule may be substituted for required replacement plantings, with all such revenues applied toward tree planting in city parks, streets and medians.
- vi. The project applicant shall install the plantings and maintain the plantings until established. The Tree Reviewer of the Tree Division of the Public Works Department may require a landscape plan showing the replacement plantings and the method of irrigation. Any replacement plantings which fail to become established within one year of planting shall be replanted at the project applicant's expense.

When Required: Prior to building permit final

Initial Approval: Public Works Department, Tree Division

Monitoring/Inspection: Bureau of Building

31. **Tree Removal Permit**

Prior to issuance of a demolition, grading, or building permit

Prior to removal of any protected trees, per the Protected Tree Ordinance, located on the project site or in the public right-of-way adjacent to the project, the project applicant must secure a tree removal permit from the Tree Division of the Public Works Agency, and abide by the conditions of that permit.

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STANDARD CONDITIONS OF APPROVAL THAT APPLY TO ALL PROJECTS WITH NEW EXTERIOR LIGHTING

32. Lighting

Requirement: Proposed new exterior lighting fixtures shall be adequately shielded to a point below the light bulb and reflector to prevent unnecessary glare onto adjacent properties.

When Required: Prior to building permit final

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

STANDARD CONDITIONS OF APPROVAL THAT APPLY TO ALL PROJECTS THAT ARE REQUIRED TO COMPLY WITH OAKLAND'S GREEN BUILDING ORDINANCE

33. Green Building Requirements

a. *Compliance with Green Building Requirements During Plan-Check*

Requirement: The project applicant shall comply with the requirements of the California Green Building Standards (CALGreen) mandatory measures and the applicable requirements of the City of Oakland Green Building Ordinance (chapter 18.02 of the Oakland Municipal Code).

- i. The following information shall be submitted to the City for review and approval with the application for a building permit:
 - Documentation showing compliance with Title 24 of the current version of the California Building Energy Efficiency Standards.
 - Completed copy of the final green building checklist approved during the review of the Planning and Zoning permit.
 - Copy of the Unreasonable Hardship Exemption, if granted, during the review of the Planning and Zoning permit.
 - Permit plans that show, in general notes, detailed design drawings, and specifications as necessary, compliance with the items listed in subsection (ii) below.
 - Copy of the signed statement by the Green Building Certifier approved during the review of the Planning and Zoning permit that the project complied with the requirements of the Green Building Ordinance.
 - Signed statement by the Green Building Certifier that the project still complies with the requirements of the Green Building Ordinance, unless an Unreasonable Hardship Exemption was granted during the review of the Planning and Zoning permit.
 - Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance.
- ii. The set of plans in subsection (i) shall demonstrate compliance with the following:
 - CALGreen mandatory measures.
 - Green building point/level certification per the appropriate checklist.
 - All green building points identified on the checklist approved during review of the Planning and Zoning permit, unless a Request for Revision Plan-check application is submitted and approved by the Bureau of Planning that shows the previously approved points that will be eliminated or substituted.
 - The required green building point minimums in the appropriate credit categories.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

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Monitoring/Inspection: N/A

b. ***Compliance with Green Building Requirements During Construction***

Requirement: The project applicant shall comply with the applicable requirements of CALGreen and the Oakland Green Building Ordinance during construction of the project.

The following information shall be submitted to the City for review and approval:

- i. Completed copies of the green building checklists approved during the review of the Planning and Zoning permit and during the review of the building permit.
- ii. Signed statement(s) by the Green Building Certifier during all relevant phases of construction that the project complies with the requirements of the Green Building Ordinance.
- iii. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

c. ***Compliance with Green Building Requirements After Construction***

Requirement: Prior to the finaling the Building Permit, the Green Building Certifier shall submit the appropriate documentation to City staff and attain the minimum required point level.

When Required: Prior to Final Approval

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

APPLICANT:

I have read and understand and accept responsibility for the conditions of approval for Small Project Design Review Application Number: DS210022, located at 2530 9th Ave.. I agree to abide by and conform to these conditions and will inform the owner and contractor of the conditions. I also agree to abide by and conform to all provisions of the Oakland Planning Code and Municipal Code pertaining to the project located at 2530 9th Ave..

2-1-21

Date

barbara sanders

Applicant Signature

Attachment G

Standard Form of Contract

CAHI's standard form of agreement for Construction is attached. Contractor, by submitting a bid, agree to enter into a contract with CAHI substantially in the form accompanying this Request for Proposals, including all payment / performance bonds and insurance requirements.

DRAFT AIA® Document A102™ - 2017

Standard Form of Agreement Between Owner and Contractor

where the basis of payment is the Cost of the Work Plus a Fee with a Guaranteed Maximum Price

AGREEMENT made as of the « » day of « » in the year « »
(In words, indicate day, month and year.)

BETWEEN the Owner:
(Name, legal status, address and other information)

California Affordable Housing Initiatives, Inc.
1619 Harrison Street
Oakland, CA 94612
Telephone: (510) 238-5300

and the Contractor:
(Name, legal status, address and other information)

« »
« »
« »
« »

for the following Project:
(Name, location and detailed description)

2530 9th Avenue
Oakland, CA 94606

The Architect:
(Name, legal status, address and other information)

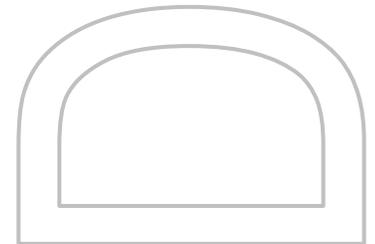
N/A

The Owner and Contractor agree as follows.

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

The parties should complete A102™-2017, Exhibit A, Insurance and Bonds, contemporaneously with this Agreement. AIA Document A201™-2017, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.



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EXHIBIT A INSURANCE AND BONDS**ARTICLE 1 THE CONTRACT DOCUMENTS**

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. If anything in the other Contract Documents, other than a Modification, is inconsistent with this Agreement, this Agreement shall govern. An enumeration of the Contract Documents, other than a Modification, appears in Article 16.

ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, including Work reasonably inferable from the Contract Documents, in compliance with all applicable federal, state, and local laws, regulations and other government requirements applicable to the Work, except as specifically indicated in the Contract Documents to be the responsibility of others.

ARTICLE 3 RELATIONSHIP OF THE PARTIES

The Contractor accepts the relationship of trust and confidence established by this Agreement and covenants with the Owner to cooperate with the Owner, as applicable, and exercise the Contractor's skill and judgment in furthering the interests of the Owner; to furnish efficient business administration and supervision; to furnish at all times an adequate supply of workers and materials; and to perform the Work in an expeditious and economical manner consistent with the Owner's interests. The Owner agrees to furnish and approve, in a timely manner, information

required by the Contractor and to make payments to the Contractor in accordance with the requirements of the Contract Documents.

ARTICLE 4 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 4.1 The date of commencement of the Work shall be:
(Check one of the following boxes.)

- [« »] The date of this Agreement.
- [« »] A date set forth in a notice to proceed issued by the Owner.
- [« »] Established as follows:
(Insert a date or a means to determine the date of commencement of the Work.)

« »

If a date of commencement of the Work is not selected, then the date of commencement shall be the date of this Agreement.

§ 4.2 The Contract Time shall be measured from the date of commencement of the Work.

§ 4.3 Substantial Completion

§ 4.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion of the entire Work:
(Check one of the following boxes and complete the necessary information.)

- [« »] Not later than « » (« ») calendar days from the date of commencement of the Work.
- [« »] By the following date: « »

§ 4.3.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work are to be completed prior to Substantial Completion of the entire Work, the Contractor shall achieve Substantial Completion of such portions by the following dates:

Portion of Work	Substantial Completion Date

§ 4.3.3 If the Contractor fails to achieve Substantial Completion as provided in this Section 4.3, liquidated damages, if any, shall be assessed as set forth in Section 5.1.6.

ARTICLE 5 CONTRACT SUM

§ 5.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum is the Cost of the Work as defined in Article 7 plus the Contractor's Fee. The Contract Sum is based on the Contractor's Schedule of Values attached as an exhibit to this Agreement and is incorporated herein by reference.

§ 5.1.1 The Contractor's Fee:
(State a lump sum, percentage of Cost of the Work, or other provision for determining the Contractor's Fee.)

including overhead and profit, is equal to [] percent ([]%) of that portion of the Cost of the Work that is incurred by Contractor and shall be billed monthly proportionate to the percentage of Work completed. The cost of insurance and bond premiums shall not be included in the Cost of the Work for the purposes of calculating the Contractor's Fee.

§ 5.1.2 The method of adjustment of the Contractor's Fee for changes in the Work:

For changes in the Work, the total amount of overhead and profit claimed shall not exceed [] percent ([]%) of the documented direct costs of the work to be performed pursuant to the Change Order or Construction Change Directive. When both additions and credits are involved in any one change, the allowance for overhead and profit shall be figured on the basis of the net increase if any. The same overhead and profit limits as established for change order additions shall be credited to change order deductions. No other cost, including special damages of any type, arising out of or connected with the performance of extra work, of any nature, may be recovered by the Contractor.

§ 5.1.3 Limitations, if any, on a Subcontractor’s overhead and profit for increases in the cost of its portion of the Work:

See Section 5.1.2 for the maximum cumulative limit on overhead and profit

§ 5.1.4 Rental rates for Contractor-owned equipment shall not exceed « » percent (« » %) of the standard rental rate paid at the place of the Project.

§ 5.1.5 Unit prices, if any:

(Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.)

Item	Units and Limitations	Price Per Unit (\$0.00)
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§ 5.1.6 Liquidated damages, if any:

(Insert terms and conditions for liquidated damages, if any.)

§ 5.1.7 Other:

(Insert provisions for bonus, cost savings or other incentives, if any, that might result in a change to the Contract Sum.)

At the completion of the Contractor’s final job cost accounting, the difference between (i) the total aggregate sum of the Cost of the Work plus the Contactor’s Fee and (ii) the Guaranteed Maximum Price (the “Savings”) shall be shared by the Owner and Contractor as follows: [] percent ([]%) of such Savings shall inure to the benefit of the Owner and the remainder, if any, shall be paid to the Contractor as an additional fee subject to the fourteen percent (14%) limit set forth in Section 5.1.1 above. Insurance and bond amounts, and any unused portion of the Contractor’s contingency if allowed by Owner, shall not be included in calculating Savings. Any Savings in allowance categories shall go to the Owner one hundred percent (100%) through deductive Change Order. The Contractor shall not be entitled to any portion of Savings if the Owner terminates this Contract for cause or if the Contractor terminates the Contract for any reason prior to Substantial Completion. Any Savings shall not be paid until the date due for Final Payment and is subject to deductions for amounts due Owner under this Agreement.

§ 5.2 Guaranteed Maximum Price

§ 5.2.1 The Contract Sum is guaranteed by the Contractor not to exceed « » (\$ « »), subject to additions and deductions by Change Order as provided in the Contract Documents. This maximum sum is referred to in the Contract Documents as the Guaranteed Maximum Price. Costs which would cause the Guaranteed Maximum Price to be exceeded shall be paid by the Contractor without reimbursement by the Owner.

If the Guaranteed Maximum Price includes a contingency line item (the “Contract Contingency”) for use by Contractor, such Contract Contingency and any withdrawal from the Contract Contingency is subject to the approval of the Owner. Contractor shall provide the Owner a written request describing the amount of funds requested and the reason why use of the Contract Contingency is appropriate and necessary for the completion of the Work. The Contract Contingency is not allocated to any particular item of the Cost of the Work and is established for increases in Cost in the Work incurred by Contractor for unforeseen causes or details not capable of reasonable anticipation at the time of the Owner’s approval of the Guaranteed Maximum Price and such other costs, if any, that are expressly authorized by the Contract Documents to be paid from such Contract Contingency and are not included in other line items in the Schedule of Values. In no event shall the Contract Contingency be available for: (i) costs not to be reimbursed in accordance with Article 8; (ii) the Contractor’s Fee; (iii) General Conditions Costs; (iv) the Correction of Work rejected by Owner as not being in conformance with the Contract Documents; (v) costs that could have been avoided by mitigation efforts of the Contractor; and (vi) items arising from the negligence or willful misconduct of the Contractor or its Subcontractors. Any funds remaining in the Contract Contingency category as of

the final accounting shall inure one hundred percent (100%) to the Owner. Contractor shall provide the Owner with a monthly report indicating the status of the Contract Contingency.

§ 5.2.2 Alternates

§ 5.2.2.1 Alternates, if any, included in the Guaranteed Maximum Price:

Item	Price

§ 5.2.2.2 Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Agreement. Upon acceptance, the Owner shall issue a Modification to this Agreement.
(Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.)

Item	Price	Conditions for Acceptance

§ 5.2.3 Allowances, if any, included in the Guaranteed Maximum Price: All Allowances shall be expressly identified in the Contractor's Schedule of Values and shall indicate the scope of coverage of the Allowance. Contractor shall give written notice to the Owner if the estimated costs to perform the Work and/or supply the material or equipment by the Allowance will exceed the amount estimated for that Allowance prior to commencing Work covered by the Allowance. If the actual cost of any Allowance items is more or less than the Allowance amount set forth in the Schedule of Values, the difference shall be transferred to the Owner as an additive or deductive Change Order, as applicable, and the amount of the difference shall not be considered in the calculation of Savings.
(Identify each allowance.)

Item	Price

§ 5.2.4 Assumptions, if any, upon which the Guaranteed Maximum Price is based:
(Identify each assumption.)

<< >>

§ 5.2.5 By executing this Agreement and furnishing the Owner with both a Schedule of Values, attached as an exhibit to this Agreement, and a construction schedule, attached as an exhibit to this Agreement, the Contractor represents that the Contract Documents and the materials and information furnished to the Contractor as of the date of this Agreement, have described the scope, construction requirements and design of the Work in sufficient detail to enable the Contractor to firmly establish the Guaranteed Maximum Price. Where the Owner and the Contractor have agreed that there is uncertainty in regard to an item, the Contractor has qualified and/or identified that item in any Qualifications and Exclusions provided by the Contractor.

§ 5.2.6 The Owner shall authorize preparation of revisions to the Contract Documents that incorporate the agreed-upon assumptions contained in Section 5.2.4. The Owner shall promptly furnish such revised Contract Documents to the Contractor. The Contractor shall notify the Owner of any inconsistencies between the agreed-upon assumptions contained in Section 5.2.4 and the revised Contract Documents.

ARTICLE 6 CHANGES IN THE WORK

§ 6.1 Adjustments to the Guaranteed Maximum Price on account of changes in the Work may be determined by any of the methods listed in Article 7 of AIA Document A201™-2017, General Conditions of the Contract for Construction. General conditions/requirements shall not be included in additive Change Orders unless the Owner has approved additional Contract Time and the Owner has approved additional general conditions/requirements pursuant to Article 8 of the A201-2017.

§ 6.2 Adjustments to subcontracts awarded on the basis of a stipulated sum shall be determined in accordance with Article 7 of A201-2017, as they refer to "cost" and "fee," and not by Articles 5, 7 and 8 of this Agreement. Adjustments to subcontracts awarded with the Owner's prior written consent on the basis of cost plus a fee shall be calculated in accordance with the terms of this Agreement, unless the Owner has furnished the Contractor with prior

written approval of the form and substance of a subcontract, in which case such adjustments shall be calculated in accordance with the terms and conditions of that subcontract.

§ 6.3 In calculating adjustments to the Guaranteed Maximum Price, the terms “cost” and “costs” as used in Article 7 of AIA Document A201–2017 shall mean the Cost of the Work as defined in Article 7 of this Agreement and the term “fee” shall mean the Contractor’s Fee as defined in Section 5.1.1 of this Agreement.

§ 6.4 INTENTIONALLY DELETED.

ARTICLE 7 COSTS TO BE REIMBURSED

§ 7.1 Cost of the Work

§ 7.1.1 The term Cost of the Work shall mean costs necessarily incurred by the Contractor in the proper performance of the Work. The Cost of the Work shall include only the items set forth in this Article 7.

§ 7.1.2 Where, pursuant to the Contract Documents, any cost is subject to the Owner’s prior approval, the Contractor shall obtain such approval in writing prior to incurring the cost.

§ 7.1.3 Costs shall be at rates not higher than the standard paid at the place of the Project, except with prior approval of the Owner.

§ 7.1.4 Costs as defined herein shall be actual costs paid by the Contractor, less all discounts, rebates, and salvages that shall be taken by the Contractor, subject to Article 9 of this Agreement. All payments made by the Owner pursuant to this Article 7, whether those payments are actually made before or after the execution of this Agreement, are included within the Guaranteed Maximum Price specified in Section 5.2 above. Provided, however, that in no event shall the Owner be required to reimburse the Contractor for any portion of the Cost of the Work incurred prior to the Commencement Date unless the Contractor has received the Owner’s written consent prior to incurring such cost.

§ 7.1.5 Notwithstanding the breakdown or categorization of any costs to be reimbursed in this Article 7 or elsewhere in the Contract Documents, there shall be no duplication of payment in the event any particular items for which payment is requested can be characterized as falling into more than one of the types of compensable or reimbursable categories.

§ 7.2 Labor Costs

§ 7.2.1 Wages or salaries of construction workers directly employed by the Contractor to perform the construction of the Work at the site or, with the Owner’s prior written approval, at off-site workshops.

§ 7.2.2 Wages or salaries of the Contractor’s supervisory and administrative personnel when stationed at the site and performing Work, with the Owner’s prior approval.

§ 7.2.2.1 Wages or salaries of the Contractor’s supervisory and administrative personnel when performing Work and stationed at a location other than the site, but only for that portion of time required for the Work, and limited to the personnel and activities listed below:

(Identify the personnel, type of activity and, if applicable, any agreed upon percentage of time to be devoted to the Work.)

« »

§ 7.2.3 INTENTIONALLY DELETED.

§ 7.2.4 Costs paid or incurred by the Contractor, as required by law or collective bargaining agreements, for taxes, insurance, contributions, assessments, and benefits and, for personnel not covered by collective bargaining agreements, customary benefits such as sick leave, medical and health benefits, holidays, vacations and pensions, provided such costs are based on wages and salaries included in the Cost of the Work under Sections 7.2.1 through 7.2.3.

§ 7.2.5 If agreed rates for labor costs, in lieu of actual costs, are provided in this Agreement, the rates shall remain unchanged throughout the duration of this Agreement, unless the parties execute a Modification.

§ 7.3 Subcontract Costs

Payments made by the Contractor to Subcontractors in accordance with the requirements of the subcontracts and this Agreement.

§ 7.4 Costs of Materials and Equipment Incorporated in the Completed Construction

§ 7.4.1 Costs, including transportation and storage at the site, of materials and equipment incorporated, or to be incorporated, in the completed construction.

§ 7.4.2 Costs of materials described in the preceding Section 7.4.1 in excess of those actually installed to allow for reasonable waste and spoilage. Unused excess materials, if any, shall become the Owner's property at the completion of the Work and shall be properly stored at the site in accordance with the Owner's instructions or, at the Owner's option, shall be sold by the Contractor. Any amounts realized from such sales shall be credited to the Owner as a deduction from the Cost of the Work.

§ 7.5 Costs of Other Materials and Equipment, Temporary Facilities and Related Items

§ 7.5.1 Costs of transportation, storage, installation, dismantling, maintenance, and removal of materials, supplies, temporary facilities, machinery, equipment and hand tools not customarily owned by construction workers that are provided by the Contractor at the site and fully consumed in the performance of the Work. Any such items used but not consumed, which are paid for by the Owner, shall become the property of the Owner, and shall be delivered to the Owner upon completion of the Work in accordance with the Owner's instructions. If the Owner elects, however, the Contractor may purchase any such items from the Owner at a price mutually acceptable to the parties.

§ 7.5.2 Rental charges for temporary facilities, machinery, equipment, and hand tools not customarily owned by construction workers that are provided by the Contractor at the site, and the costs of transportation, installation, dismantling, minor repairs, and removal of such temporary facilities, machinery, equipment, and hand tools. Rates and quantities of equipment owned by the Contractor, or a related party as defined in Section 7.8, shall be subject to the Owner's prior approval. The total rental cost of any such equipment may not exceed the purchase price of any comparable item.

§ 7.5.3 Costs of removal of debris from the site of the Work and its proper and legal disposal.

§ 7.5.4 Costs of the Contractor's site office, including general office equipment and supplies.

§ 7.5.5 Costs of materials and equipment suitably stored off the site at a mutually acceptable location, subject to the Owner's prior approval.

§ 7.6 Miscellaneous Costs

§ 7.6.1 Premiums for that portion of insurance and bonds required by the Contract Documents that can be directly attributed to this Contract.

§ 7.6.1.1 INTENTIONALLY DELETED.

§ 7.6.1.2 INTENTIONALLY DELETED.

§ 7.6.2 Sales, use, or similar taxes, imposed by a governmental authority, that are related to the Work and for which the Contractor is liable.

§ 7.6.3 Fees and assessments for the building permit, and for other permits, licenses, and inspections, for which the Contractor is required by the Contract Documents to pay.

§ 7.6.4 Fees of laboratories for tests required by the Contract Documents; except those related to defective or nonconforming Work for which reimbursement is excluded under Article 13 of AIA Document A201-2017 or by other provisions of the Contract Documents, and which do not fall within the scope of Section 7.7.3.

§ 7.6.5 Royalties and license fees paid for the use of a particular design, process, or product, required by the Contract Documents.

§ 7.6.5.1 The cost of defending suits or claims for infringement of patent rights arising from requirements of the Contract Documents, payments made in accordance with legal judgments against the Contractor resulting from such suits or claims, and payments of settlements made with the Owner's consent, unless the Contractor had reason to believe that the required design, process or product was an infringement of a copyright or a patent, and the Contractor failed to promptly furnish such information to the Owner as required by Article 3 of AIA Document A201–2017. The costs of legal defenses, judgments, and settlements, shall not be included in the Cost of the Work used to calculate the Contractor's Fee or subject to the Guaranteed Maximum Price.

§ 7.6.6 Costs for communications services, electronic equipment, and software, directly related to the Work and located at the site, with the Owner's prior written approval.

§ 7.6.7 Costs of document reproductions and delivery charges.

§ 7.6.8 Deposits lost for causes other than the Contractor's negligence or failure to fulfill a specific responsibility in the Contract Documents.

§ 7.6.9 Legal, mediation and arbitration costs, including attorneys' fees, other than those arising from disputes between the Owner and Contractor, reasonably incurred by the Contractor after the execution of this Agreement in the performance of the Work and with the Owner's prior approval, which shall not be unreasonably withheld.

§ 7.6.10 Expenses incurred in accordance with the Contractor's standard written personnel policy for relocation and temporary living allowances of the Contractor's personnel required for the Work, with the Owner's prior written approval.

§ 7.6.11 That portion of the reasonable expenses of the Contractor's supervisory or administrative personnel incurred while traveling in discharge of duties connected with the Work with the Owner's prior written approval.

§ 7.7 Other Costs and Emergencies

§ 7.7.1 Other costs incurred in the performance of the Work, with the Owner's prior written approval.

§ 7.7.2 Costs incurred in taking action to prevent threatened damage, injury, or loss, in case of an emergency affecting the safety of persons and property, as provided in Article 10 of AIA Document A201–2017 to the extent not (i) caused by the Contractor, a Subcontractor, or anyone for whom either is responsible; or (ii) capable of being prevented through timely notice of an unsafe condition to the Owner.

§ 7.7.3 Costs of repairing or correcting damaged or nonconforming Work executed by the Contractor, Subcontractors, or suppliers, provided that such damaged or nonconforming Work was not caused by the negligence of, or failure to fulfill a specific responsibility by, the Contractor, and only to the extent that the cost of repair or correction is not recovered by the Contractor from insurance, sureties, Subcontractors, or suppliers, provided that any absence of collectible insurance is not due to the Contractor's breach of a contract for insurance or breach of its obligation to maintain insurance under this Agreement.

§ 7.8 Related Party Transactions

§ 7.8.1 For purposes of this Section 7.8, the term "related party" shall mean (1) a parent, subsidiary, affiliate, or other entity having common ownership of, or sharing common management with, the Contractor; (2) any entity in which any stockholder in, or management employee of, the Contractor holds an equity interest in excess of ten percent in the aggregate; (3) any entity which has the right to control the business or affairs of the Contractor; or (4) any person, or any member of the immediate family of any person, who has the right to control the business or affairs of the Contractor.

§ 7.8.2 If any of the costs to be reimbursed arise from a transaction between the Contractor and a related party, the Contractor shall notify the Owner of the specific nature of the contemplated transaction, including the identity of the related party and the anticipated cost to be incurred, before any such transaction is consummated or cost incurred. If the Owner, after such notification, authorizes the proposed transaction in writing, then the cost incurred shall be included as a cost to be reimbursed, and the Contractor shall procure the Work, equipment, goods, or service, from the related party, as a Subcontractor, according to the terms of Article 10. If the Owner fails to authorize the transaction in writing, the Contractor shall procure the Work, equipment, goods, or service from some person or

entity other than a related party according to the terms of Article 10. In no event shall such transaction exceed the costs of a transaction with a party that is not a “related party.”

ARTICLE 8 COSTS NOT TO BE REIMBURSED

§ 8.1 The Cost of the Work shall not include the items listed below:

- .1 Salaries and other compensation of the Contractor’s personnel stationed at the Contractor’s principal office or offices other than the site office, except as specifically provided in Section 7.2, or as may be provided in Article 15;
- .2 Bonuses, profit sharing, incentive compensation, and any other discretionary payments, paid to anyone hired by the Contractor or paid to any Subcontractor or vendor, unless the Owner has provided prior approval;
- .3 Expenses of the Contractor’s principal office and offices other than the site office;
- .4 Overhead and general expenses, except as may be expressly included in Article 7;
- .5 The Contractor’s capital expenses, including interest on the Contractor’s capital employed for the Work;
- .6 Except as provided in Section 7.7.3 of this Agreement, costs due to the negligence of, or failure to fulfill a specific responsibility of the Contract by, the Contractor, Subcontractors, and suppliers, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable;
- .7 Rental cost of machinery, except as specifically provided in Section 7.5.2;
- .8 Any cost not specifically and expressly described in Article 7; and
- .9 Costs, other than costs included in Change Orders approved by the Owner, that would cause the Guaranteed Maximum Price to be exceeded.

ARTICLE 9 DISCOUNTS, REBATES AND REFUNDS

§ 9.1 Cash discounts obtained on payments made by the Contractor shall accrue to the Owner if (1) before making the payment, the Contractor included the amount to be paid, less such discount, in an Application for Payment and received payment from the Owner, or (2) the Owner has deposited funds with the Contractor with which to make payments; otherwise, cash discounts shall accrue to the Contractor. Trade discounts, rebates, refunds, and amounts received from sales of surplus materials and equipment shall accrue to the Owner, and the Contractor shall make provisions so that they can be obtained.

§ 9.2 Amounts that accrue to the Owner in accordance with the provisions of Section 9.1 shall be credited to the Owner as a deduction from the Cost of the Work.

ARTICLE 10 SUBCONTRACTS AND OTHER AGREEMENTS

§ 10.1 Those portions of the Work that the Contractor does not customarily perform with the Contractor’s own personnel shall be performed under subcontracts or other appropriate agreements with the Contractor. The Owner may designate specific persons from whom, or entities from which, the Contractor shall obtain bids. The Contractor shall obtain bids from Subcontractors, and from suppliers of materials or equipment fabricated especially for the Work, who are qualified to perform that portion of the Work in accordance with the requirements of the Contract Documents. The Contractor shall deliver such bids to the Owner with an indication as to which bids the Contractor intends to accept. The Owner then has the right to review the Contractor’s list of proposed subcontractors and suppliers and, subject to Section 10.1.1, to object to any subcontractor or supplier. Any approval or objection by the Owner, shall not relieve the Contractor of its responsibility to perform the Work in accordance with the Contract Documents. The Contractor shall not be required to contract with anyone to whom the Contractor has reasonable objection.

§ 10.1.1 When a specific subcontractor or supplier (1) is recommended to the Owner by the Contractor; (2) is qualified to perform that portion of the Work; and (3) has submitted a bid that conforms to the requirements of the Contract Documents without reservations or exceptions, but the Owner requires that another bid be accepted, then the Contractor may require that a Change Order be issued to adjust the Guaranteed Maximum Price by the difference between the bid of the person or entity recommended to the Owner by the Contractor and the amount attributable to such subcontract or other agreement in the original Schedule of Values submitted by the Contractor and accepted by the Owner.

§ 10.2 Subcontracts or other agreements shall conform to the applicable payment provisions of this Agreement, and shall not be awarded on the basis of cost plus a fee without the Owner’s prior written approval. If a subcontract is

awarded on the basis of cost plus a fee, the Contractor shall provide in the subcontract for the Owner to receive the same audit rights with regard to the Subcontractor as the Owner receives with regard to the Contractor in Article 11.

ARTICLE 11 ACCOUNTING RECORDS

The Contractor shall keep full and detailed records and accounts related to the Cost of the Work, and exercise such controls, as may be necessary for proper financial management under this Contract and to substantiate all costs incurred. The accounting and control systems shall be satisfactory to the Owner. The Owner and the Owner's auditors shall, during regular business hours and upon reasonable notice, be afforded access to, and shall be permitted to audit and copy, the Contractor's records and accounts, including complete documentation supporting accounting entries, books, job cost reports, correspondence, instructions, drawings, receipts, subcontracts, Subcontractor's proposals, Subcontractor's invoices, purchase orders, vouchers, memoranda, and other data relating to this Contract. The Contractor shall preserve these records for a period of three years after final payment, or for such longer period as may be required by law. If the Owner's audit reveals an overcharge, the Contractor shall pay the Owner upon demand one hundred percent (100%) of such overcharge and the Owner's administrative expenses incurred in determining the overcharge.

ARTICLE 12 PAYMENTS

§ 12.1 Progress Payments

§ 12.1.1 Provided the Contractor is not in breach of its obligations under the Contract Documents, and based upon Applications for Payment submitted to the Owner by the Contractor, including submission of supporting documentation requested by the Owner, the Owner shall make progress payments on account of the Contract Sum, to the Contractor, as provided below and elsewhere in the Contract Documents.

§ 12.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month. Contractor's monthly allowable draw of general conditions shall be at a rate equal to the percentage of the Work which has been completed, and shall be in accordance with a schedule of payments to be agreed upon with the Owner (the "General Conditions Payment Schedule"). If at any time the amount of general conditions paid to the Contractor as percentage of the total general conditions due, exceeds the percentage of the Work completed, or the Lender or Owner requires a readjustment in the monthly amount, the Owner and the Contractor shall adjust the General Conditions Payment Schedule as necessary to bring the payment amount in line with the percentage of Work that has been completed.

« »

§ 12.1.3 After a complete Application for Payment is received by the Owner, including any supporting documentation requested by the Owner, the Owner shall make payment of the amount certified to the Contractor not later than thirty (30) days thereafter.
(Federal, state or local laws may require payment within a certain period of time.)

§ 12.1.4 With each Application for Payment, the Contractor shall submit payrolls, petty cash accounts, receipted invoices or invoices with check vouchers attached, and any other evidence required by the Owner to demonstrate that payments already made by the Contractor on account of the Cost of the Work equal or exceed progress payments already received by the Contractor plus payrolls for the period covered by the present Application for Payment, less that portion of the progress payments attributable to the Contractor's Fee.

§ 12.1.5 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Guaranteed Maximum Price among: (1) the various portions of the Work; (2) any contingency for costs that are included in the Guaranteed Maximum Price but not otherwise allocated to another line item or included in a Change Order; and (3) the Contractor's Fee.

§ 12.1.5.1 The schedule of values shall be prepared in such form and supported by such data to substantiate its accuracy as the Owner may require. The schedule of values shall be used as a basis for reviewing the Contractor's Applications for Payment.

§ 12.1.5.2 The allocation of the Guaranteed Maximum Price under this Section 12.1.5 shall not constitute a separate guaranteed maximum price for the Cost of the Work of each individual line item in the schedule of values.

§ 12.1.5.3 When the Contractor allocates costs from a contingency to another line item in the schedule of values, the Contractor shall submit supporting documentation to the Owner in accordance with the requirements of the Contract Documents.

§ 12.1.6 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment. The percentage of completion shall be the lesser of (1) the percentage of that portion of the Work which has actually been completed; or (2) the percentage obtained by dividing (a) the expense that has actually been incurred by the Contractor on account of that portion of the Work and for which the Contractor has made payment or intends to make payment prior to the next Application for Payment, by (b) the share of the Guaranteed Maximum Price allocated to that portion of the Work in the schedule of values.

§ 12.1.7 In accordance with AIA Document A201–2017 and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

§ 12.1.7.1 The amount of each progress payment shall first include:

- .1 That portion of the Guaranteed Maximum Price properly allocable to completed Work as determined by multiplying the percentage of completion of each portion of the Work by the share of the Guaranteed Maximum Price allocated to that portion of the Work in the most recent schedule of values;
- .2 That portion of the Guaranteed Maximum Price properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction or, if approved in writing in advance by the Owner, suitably stored off the site at a location agreed upon in writing;
- .3 That portion of Construction Change Directives that the Owner determines to be included; and
- .4 The Contractor's Fee, computed upon the Cost of the Work described in the preceding Sections 12.1.7.1.1 and 12.1.7.1.2 at the rate stated in Section 5.1.1 or, if the Contractor's Fee is stated as a fixed sum in that Section, an amount that bears the same ratio to that fixed-sum fee as the Cost of the Work included in Sections 12.1.7.1.1 and 12.1.7.1.2 bears to a reasonable estimate of the probable Cost of the Work upon its completion.

§ 12.1.7.2 The amount of each progress payment shall then be reduced by:

- .1 The aggregate of any amounts previously paid by the Owner;
- .2 The amount, if any, for Work that remains uncorrected and for which the Owner has previously withheld payment;
- .3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;
- .4 For Work performed or defects discovered since the last payment application, any amount for which payment may be withheld;
- .5 The shortfall, if any, indicated by the Contractor in the documentation required by Section 12.1.4 to substantiate prior Applications for Payment, or resulting from errors subsequently discovered by the Owner's auditors in such documentation;
- .6 Other amounts properly held or deducted by the Owner at the of each progress payment; and
- .7 Retainage withheld pursuant to Section 12.1.8.

§ 12.1.7.3 In addition to other requirements under this Section 12.1, as a condition of the Owner's payment of an Application for Payment, Contractor shall furnish the following with each Application for Payment:

- .1 Insurance certificates and copies of any policies required under this Agreement, to the extent not previously provided;
- .2 Verified list of Subcontractors and sub-subcontractors of any tier performing Work;
- .3 Unconditional Waivers and Releases in Exchange for Progress Payment in accordance with Civil Code section 8134 on behalf of Contractor and all subcontractors, material suppliers and equipment suppliers of any tier who performed Work during the previous pay period;
- .4 Conditional Waivers and Releases in Exchange for Progress Payment in accordance with Civil Code section 8132 on behalf of Contractor and all subcontractors, material suppliers and equipment suppliers of any tier who performed Work during the current pay period; and
- .5 A Schedule of Values indicating the percentage completion of each portion of Work as of the end of the period covered by the Application for Payment.

§ 12.1.8 Retainage

§ 12.1.8.1 For each progress payment made prior to Substantial Completion of the Work, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)

« »

§ 12.1.8.1.1 The following items are not subject to retainage:

(Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)

« »

§ 12.1.8.2 Reduction or limitation of retainage, if any, shall be as follows:

(If the retainage established in Section 12.1.8.1 is to be modified prior to Substantial Completion of the entire Work, insert provisions for such modification.)

The Owner shall have the option but not the obligation to reduce the retention requirements of this Agreement or release any portion of retention prior to the date specified in this Agreement. Exercise of this option by the Owner shall not be a waiver of any of the Owner's rights to retention in connection with other payments to the Contractor.

§ 12.1.8.3 INTENTIONALLY DELETED.

(Insert any other conditions for release of retainage, such as upon completion of the Owner's audit and reconciliation, upon Substantial Completion.)

« »

§ 12.1.9 INTENTIONALLY DELETED.

§ 12.1.10 Except with the Owner's prior written approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and suitably stored at the site.

§ 12.1.11 The Owner and the Contractor shall agree upon a mutually acceptable procedure for review and approval of payments to Subcontractors, and the percentage of retainage held on Subcontracts, and the Contractor shall execute subcontracts in accordance with those agreements. Except with Owner's prior written approval, payments to Subcontractors shall be subject to the same retainage as the Contractor.

§ 12.1.12 In taking action on the Contractor's Applications for Payment the Owner shall be entitled to rely on the accuracy and completeness of the information furnished by the Contractor, and such action shall not be deemed to be a representation that (1) the Owner has made a detailed examination, audit, or arithmetic verification, of the documentation submitted in accordance with Section 12.1.4 or other supporting data; (2) that the Owner has made exhaustive or continuous on-site inspections; or (3) that the Owner has made examinations to ascertain how or for what purposes the Contractor has used amounts previously paid on account of the Contract. Such examinations, audits, and verifications, if required by the Owner, will be performed by the Owner's auditors acting in the sole interest of the Owner.

§ 12.2 Final Payment

§ 12.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

- .1 the Contractor has fully performed the Contract, except for the Contractor's responsibility to correct Work as provided in Article 12 of AIA Document A201-2017, and to satisfy other requirements, if any, which extend beyond final payment;
- .2 the Contractor has submitted a final accounting for the Cost of the Work and a final Application for Payment; and
- .3 all conditions set forth in Section 9.10.2 of AIA Document A201-2017 have been satisfied.

§ 12.2.2 Owner may conduct an audit of the Cost of the Work at any time including at the request of Lenders on the Project.

§ 12.2.2.1 INTENTIONALLY DELETED.

§ 12.2.2.2 INTENTIONALLY DELETED.

§ 12.2.2.3 INTENTIONALLY DELETED.

§ 12.2.3 The Owner’s final payment to the Contractor shall be made in accordance with Section 9.10.2 of AIA Document A201-2017.

§ 12.2.4 INTENTIONALLY DELETED.

§ 12.2.5 In addition to other requirements under this Section 12.2, as a condition of the Owner’s payment of Contractor’s final Application for Payment, Contractor shall furnish the following:

- .1 Insurance certificates and copies of any policies required under this Agreement, to the extent not previously provided;
- .2 Verified list of Subcontractors and sub-subcontractors of any tier performing Work;
- .3 Warranties and operation and maintenance manuals for work performed and materials and equipment incorporated or installed on the Project;
- .4 Conditional Waivers and Releases in Exchange for Final Payment in accordance with Civil Code section 8136 on behalf of Contractor and all subcontractors, material suppliers and equipment suppliers of any tier who performed Work during the current pay period;
- .5 A Schedule of Values indicating the percentage completion of each portion of Work as of the end of the period covered by the Application for Payment; and

Within forty-five (45) days of Owner’s payment of Contractor’s final Application for Payment, Contractor shall furnish Unconditional Waivers and Releases in Exchange for Final Payment in accordance with Civil Code section 8138 on behalf of Contractor and all subcontractors, material suppliers and equipment suppliers of any tier who performed Work.

§ 12.3 Interest
INTENTIONALLY DELETED.

ARTICLE 13 DISPUTE RESOLUTION

§ 13.1 Initial Decision Maker

Should any dispute (“Claim”) arise between the parties concerning this Agreement, the Contract Documents, or the Work, the parties shall attempt to resolve the Claim in good faith through informal resolution, and if the Claim cannot be resolved through informal resolution, the parties shall attempt to resolve the Claim pursuant to Article 15 of AIA Document A201-2017. (If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)

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« »
« »
« »

§ 13.2 Binding Dispute Resolution

For any Claim subject to, but not resolved by mediation pursuant to Article 15 of AIA Document A201–2017, the method of binding dispute resolution shall be as follows:

(Check the appropriate box.)

- Arbitration pursuant to Section 15 of AIA Document A201–2017
- Litigation in a court of competent jurisdiction
- Other *(Specify)*

« »

If the Owner and Contractor do not select a method of binding dispute resolution, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction.

ARTICLE 14 TERMINATION OR SUSPENSION

§ 14.1 Termination

§ 14.1.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A201–2017.

§ 14.1.2 Termination by the Owner for Cause

§ 14.1.2.1 If the Owner terminates the Contract for cause as provided in Article 14 of AIA Document A201–2017, the amount, if any, to be paid to the Contractor under Article 14 of AIA Document A201–2017 shall not cause the Guaranteed Maximum Price to be exceeded, nor shall it exceed an amount calculated as follows:

- .1 Take the Cost of the Work incurred by the Contractor to the date of termination;
- .2 Add the Contractor’s Fee, computed upon the Cost of the Work to the date of termination at the rate stated in Section 5.1.1 or, if the Contractor’s Fee is stated as a fixed sum in that Section, an amount that bears the same ratio to that fixed-sum Fee as the Cost of the Work at the time of termination bears to a reasonable estimate of the probable Cost of the Work upon its completion;
- .3 Subtract the aggregate of previous payments made by the Owner, any accrued but unpaid liquidated damages amount due, an amount equal to 150% of any liens recorded against the Work or the site, the amount of any payments intended for unfinished work, and any other amount withheld by Owner pursuant to the Contract Documents; and
- .4 Subtract the costs and damages incurred, or to be incurred, by the Owner under Article 14 of AIA Document A201–2017.

§ 14.1.2.2 The Owner shall also pay the Contractor fair compensation, either by purchase or rental at the election of the Owner, for any equipment owned by the Contractor that the Owner elects to retain and that is not otherwise included in the Cost of the Work under Section 14.1.2.1.1. To the extent that the Owner elects to take legal assignment of subcontracts and purchase orders (including rental agreements), the Contractor shall, as a condition of receiving the payments referred to in this Article 14, execute and deliver all such papers and take all such steps, including the legal assignment of such subcontracts and other contractual rights of the Contractor, as the Owner may require for the purpose of fully vesting in the Owner the rights and benefits of the Contractor under such subcontracts or purchase orders.

§ 14.1.3 Termination by the Owner for Convenience

INTENTIONALLY DELETED.

§ 14.2 Suspension

The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201–2017; in such case, the Guaranteed Maximum Price and Contract Time may be increased if so provided in Article 14 of AIA Document A201–2017, except that the term “profit” shall be understood to mean the Contractor’s Fee as described in Article 5 and Section 6.4 of this Agreement.

ARTICLE 15 MISCELLANEOUS PROVISIONS

§ 15.1 Where reference is made in this Agreement to a provision of AIA Document A201–2017 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

§ 15.2 The Owner’s representative:

(Name, address, email address and other information)

« »
« »
« »
« »
« »
« »
« »

§ 15.3 The Contractor’s representative:
(Name, address, email address and other information)



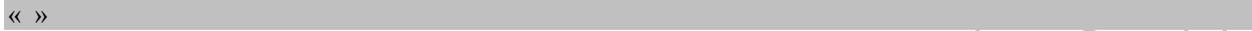
§ 15.4 Neither the Owner’s nor the Contractor’s representative shall be changed without ten days’ prior notice to the other party.

§ 15.5 Insurance and Bonds

§ 15.5.1 The Owner and the Contractor shall purchase and maintain insurance as set forth in AIA Document A102™–2017, Standard Form of Agreement Between Owner and Contractor where the basis of payment is the Cost of the Work Plus a Fee with a Guaranteed Maximum Price, Exhibit A, Insurance and Bonds, and elsewhere in the Contract Documents.

§ 15.5.2 The Contractor shall provide bonds as set forth in AIA Document A102™–2017 Exhibit A, and elsewhere in the Contract Documents.

§ 15.6 Notice in electronic format, pursuant to Article 1 of AIA Document A201–2017, may be given in accordance with AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, if completed, or as otherwise set forth below:
(If other than in accordance with AIA Document E203–2013, insert requirements for delivering notice in electronic format such as name, title, and email address of the recipient and whether and how the system will be required to generate a read receipt for the transmission.)



§ 15.7 Other provisions:

§ 15.7.1 Contractor Representations. The Contractor represents and warrants the following to the Owner (in addition to any other representations and warranties contained in the Contract Documents) as a material inducement to the Owner to execute this Agreement, which representations and warranties shall survive the execution and delivery of this Agreement and any termination of this Agreement:

- .1 The Contractor and its Subcontractors are financially solvent, able to pay all debts as they mature, and possessed of sufficient working capital to complete the Work and perform all obligations hereunder;
- .2 The Contractor is able to furnish the plant, tools, materials, supplies, equipment, and labor itself or through its Subcontractors required to complete the Work and perform its obligations hereunder, and has sufficient experience and competence to do so;
- .3 The Contractor is authorized to do business in the State of California and is properly licensed by all necessary governmental and public and quasi-public authorities having jurisdiction over the Contractor and over the Work and the Project;
- .4 The Contractor’s execution of this Agreement and performance thereof is within the Contractor’s duly authorized powers;
- .5 The Contractor is a sophisticated contractor who possesses a high level of experience and expertise in the business administration, construction, construction management, and superintendence of projects of the size, complexity, and nature of this particular Project, and will perform the Work with the care, skill, and diligence of such a Contractor;

- .6 Except as disclosed to Owner in writing, there are no claims, actions, investigations, suits, or proceedings pending affecting Contractor's performance under the Contract Documents; and
- .7 All financial information delivered to Owner, including all information relating to the financial condition of the Contractor or any of its partners, joint venturers, or members (as applicable), fairly and accurately represents the financial condition being reported on as of its date. All such information is prepared in accordance with generally accepted accounting principles consistently applied, unless otherwise noted. There has been no material adverse change in the financial condition of any of the persons described above-reported at any time to Owner, except as previously disclosed to Owner in writing in later financial information and found acceptable to Owner in its sole and absolute discretion.

§ 15.7.2 Contractor Notifications. Contractor shall notify Owner promptly in writing of any and all of the following:

- .1 Any litigation or claim of any kind affecting or relating to Contractor or its subsidiaries or any material subcontractor where the amount claimed is or maybe one hundred Thousand Dollars (\$100,000) or more whether covered by insurance or not.
- .2 Any termination of a construction contract to which Contractor is a party.
- .3 Any default or potential default of a Subcontractor or material supplier (including without limitation, its inability to maintain its schedule).
- .4 Any material adverse change in Contractor's or any Material Subcontractor's financial condition, any material adverse change in Contractor's or any M Subcontractor's operations, or any change in the management of Contractor or any Material Subcontractors.
- .5 Any other circumstance, event, or occurrence that results in a material adverse change in Contractor's or any Material Subcontractor's ability to timely perform any of its obligations under any of the Contract Documents.

For the purposes of this Section, "Material Subcontractor" means a subcontractor performing greater than \$150,000 of work on the Project.

§ 15.7.6 Nondiscrimination. During the performance of the Contract, the Contractor shall assure that no otherwise qualified person shall be excluded from participation or employment, denied program benefits, or be subjected to discrimination based on race, color, national origin, sex, age, or disability, under any work performed pursuant to this Contract, as required by applicable laws and all implementing regulations.

§ 15.7.7 Lead-based Paint. Contractor shall comply with the requirements of the Lead-Based Paint Poisoning Prevention Act, as amended (42 U.S.C. 4821 et seq.), the Residential Lead-Based Paint Hazard Reduction Act (42 U.S.C. 4851 et seq.), and implementing regulations at 24 C.F.R. Part 35.

§ 15.7.8 Conditions of Approval/Mitigation Measures. Contractor shall comply with the Conditions of Approval/Mitigation Requirements set forth in an exhibit to this Agreement.

§ 15.7.9 Entire Agreement/Amendment. This Agreement (which includes any exhibits, riders or schedules attached hereto) constitutes the entire agreement between the parties and there are no other agreements, understandings, representations or warranties, oral or written, relating to the subject matter hereof between the parties. The parties to this Contract have read and reviewed this Contract and agree that any rule of construction to the effect that ambiguities are to be resolved against the drafting party (including, but not limited to, Civil Code Section 1654) shall not apply to this Contract. This Agreement may not be amended, changed or modified, in whole or in part, except in writing, signed by both parties.

§ 15.7.10 Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original, but all of which together shall constitute but one and the same instrument.

§ 15.7.11 Statutory Mandated Requirement. California Business and Professions Code Section 7030 provides as follows:

CONTRACTORS ARE REQUIRED BY LAW TO BE LICENSED AND REGULATED BY THE CONTRACTORS' STATE LICENSE BOARD WHICH HAS JURISDICTION TO INVESTIGATE COMPLAINTS AGAINST CONTRACTORS IF A COMPLAINT REGARDING A PATENT ACT OR OMISSION IS FILED WITHIN FOUR YEARS OF THE DATE OF THE ALLEGED VIOLATION. A COMPLAINT REGARDING A LATENT ACT OR OMISSION PERTAINING TO STRUCTURAL DEFECTS MUST BE FILED WITHIN 10 YEARS OF THE DATE OF THE ALLEGED VIOLATION. ANY QUESTIONS CONCERNING A CONTRACTOR MAY BE REFERRED TO THE REGISTRAR, CONTRACTORS' STATE LICENSE BOARD, P.O. BOX 26000, SACRAMENTO, CA 95826.

ARTICLE 16 ENUMERATION OF CONTRACT DOCUMENTS

§ 16.1 This Agreement is comprised of the following documents:

- .1 AIA Document A102™–2017, Standard Form of Agreement Between Owner and Contractor
- .2 AIA Document A102™–2017, Exhibit A, Insurance and Bonds
- .3 AIA Document A201™–2017, General Conditions of the Contract for Construction
- .4 AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, dated as indicated below:
(Insert the date of the E203-2013 incorporated into this Agreement.)

N/A

- .5 Drawings

Number	Title	Date
N/A		

- .6 Specifications

Section	Title	Date	Pages
N/A			

- .7 Addenda, if any:

Number	Date	Pages
N/A		

Portions of Addenda relating to bidding or proposal requirements are not part of the Contract Documents unless the bidding or proposal requirements are also enumerated in this Article 16.

- .8 Other Exhibits:

(Check all boxes that apply.)

- AIA Document E204™–2017, Sustainable Projects Exhibit, dated as indicated below:
(Insert the date of the E204-2017 incorporated into this Agreement.)

- The Sustainability Plan:

Title	Date	Pages

- Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages

.9 Other documents, if any, listed below:
(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201–2017 provides that the advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor’s bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.)

- Exhibit A: AIA Document A102™–2017, Insurance and Bonds
- Exhibit B: Contractor’s Schedule of Values
- Exhibit C: Construction Schedule
- Exhibit D: FACS Asbestos, lead, PCB Survey Report dated June 25, 2020
- Exhibit E: Asbestos Removal Work Plan dated July 2020
- Exhibit F: Lead Removal Work Plan dated July 2020
- Exhibit G: Polychlorinated Biphenyls Removal Work Plan dated July 2020
- Exhibit H: FACS Waste Characterization, Segregation, and Disposal Plan dated September 10, 2020
- Exhibit I: Abatement and Demolition Drawings dated []
- Exhibit J: Conditions of Approval/Mitigation Requirements

This Agreement entered into as of the day and year first written above.

Owner

CALIFORNIA AFFORDABLE HOUSING INITIATIVES, INC., a California nonprofit public benefit corporation

 OWNER (Signature)

Patricia Wells, Executive Officer
 (Printed name and title)

Contractor

« »

 CONTRACTOR (Signature)

« » « »
 (Printed name and title)

DRAFT AIA® Document A102™ – 2017 Exhibit A

Insurance and Bonds

This Insurance and Bonds Exhibit is part of the Agreement, between the Owner and the Contractor, dated the « » day of « » in the year « »
(In words, indicate day, month and year.)

for the following **PROJECT**:
(Name and location or address)

2539 9th Avenue
Oakland, CA 94606

THE OWNER:
(Name, legal status and address)

California Affordable Housing Initiatives, Inc.
1619 Harrison Street
Oakland, CA 94612
Telephone: (510) 238-5300

THE CONTRACTOR:
(Name, legal status and address)

« »« »
« »

TABLE OF ARTICLES

- A.1 GENERAL
- A.2 OWNER'S INSURANCE
- A.3 CONTRACTOR'S INSURANCE AND BONDS
- A.4 SPECIAL TERMS AND CONDITIONS

ARTICLE A.1 GENERAL

The Owner and Contractor shall purchase and maintain insurance, and provide bonds, as set forth in this Exhibit. As used in this Exhibit, the term General Conditions refers to AIA Document A201™–2017, General Conditions of the Contract for Construction.

ARTICLE A.2 OWNER'S INSURANCE

§ A.2.1 General

Prior to commencement of the Work, the Owner shall secure the insurance, and provide evidence of the coverage, required under this Article A.2 and, upon the Contractor's request, provide a copy of the property insurance policy or policies required by Section A.2.3. The copy of the policy or policies provided shall contain all applicable conditions, definitions, exclusions, and endorsements.

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be used in conjunction with AIA Document A201™–2017, General Conditions of the Contract for Construction. Article 11 of A201™–2017 contains additional insurance provisions.

ELECTRONIC COPYING of any portion of this AIA® Document to another electronic file is prohibited and constitutes a violation of copyright laws as set forth in the footer of this document.

§ A.2.2 Liability Insurance

The Owner shall be responsible for purchasing and maintaining the Owner’s usual general liability insurance.

§ A.2.3 Required Property Insurance

§ A.2.3.1 Unless this obligation is placed on the Contractor pursuant to Section A.3.3.2.1, the Owner shall purchase and maintain, from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located, property insurance written on a builder's risk “all-risks” completed value or equivalent policy form and sufficient to cover the total value of the entire Project on a replacement cost basis. The Owner’s property insurance coverage shall be no less than the amount of the initial Contract Sum, plus the value of subsequent Modifications and labor performed and materials or equipment supplied by others. The property insurance shall be maintained until Substantial Completion unless otherwise provided in the Contract Documents or otherwise agreed in writing by the parties to this Agreement. This insurance shall include the insurable interests of the Owner, Contractor, Subcontractors, and Sub-subcontractors in the Project as insureds. This insurance shall include the interests of mortgagees as loss payees if required by Lenders of the Project. All benefits, such as return premiums, premium refunds, dividends due or to become due to the Owner in connection with the insurance provided by the Owner, shall accrue to the benefit of the Owner.

§ A.2.3.1.1 Causes of Loss. The insurance required by this Section A.2.3.1 shall provide coverage for direct physical loss or damage.

(Indicate below the cause of loss and any applicable sub-limit.)

Causes of Loss	Sub-Limit

§ A.2.3.1.2 Specific Required Coverages. INTENTIONALLY DELETED.

(Indicate below type of coverage and any applicable sub-limit for specific required coverages.)

Coverage	Sub-Limit

§ A.2.3.1.3 INTENTIONALLY DELETED.

§ A.2.3.1.4 Deductibles and Self-Insured Retentions. If the insurance required by this Section A.2.3 is subject to deductibles or self-insured retentions, the Owner shall be responsible for all loss not covered because of such deductibles or retentions. Provided, however, that if the cause of any payment under such insurance is due to the fault of the Contractor, then Contractor shall pay the deductible or self-insured retention.

§ A.2.3.2 Occupancy or Use Prior to Substantial Completion. The Owner’s occupancy or use of any completed or partially completed portion of the Work prior to Substantial Completion shall not commence until the insurance company or companies providing the insurance under Section A.2.3.1 have consented in writing to the continuance of coverage. The Owner and the Contractor shall take no action with respect to partial occupancy or use that would cause cancellation, lapse, or reduction of insurance, unless they agree otherwise in writing.

§ A.2.3.3 Insurance for Existing Structures

If the Work involves remodeling an existing structure or constructing an addition to an existing structure, the Owner shall purchase and maintain “all-risks” property insurance, on a replacement cost basis, protecting the existing structure against direct physical loss or damage from the causes of loss identified in Section A.2.3.1, notwithstanding the undertaking of the Work. The Owner shall be responsible for all co-insurance penalties.

§ A.2.4 Optional Extended Property Insurance.

The Owner shall purchase and maintain the insurance selected and described below.

(Select the types of insurance the Owner is required to purchase and maintain by placing an X in the box(es) next to the description(s) of selected insurance. For each type of insurance selected, indicate applicable limits of coverage or other conditions in the fill point below the selected item.)

[] **§ A.2.4.1 Loss of Use, Business Interruption, and Delay in Completion Insurance,** to reimburse the

Owner for loss of use of the Owner’s property, or the inability to conduct normal operations due to a covered cause of loss.

« »

[« »] § **A.2.4.2 Ordinance or Law Insurance**, for the reasonable and necessary costs to satisfy the minimum requirements of the enforcement of any law or ordinance regulating the demolition, construction, repair, replacement or use of the Project.

« »

[« »] § **A.2.4.3 Expediting Cost Insurance**, for the reasonable and necessary costs for the temporary repair of damage to insured property, and to expedite the permanent repair or replacement of the damaged property.

« »

[« »] § **A.2.4.4 Extra Expense Insurance**, to provide reimbursement of the reasonable and necessary excess costs incurred during the period of restoration or repair of the damaged property that are over and above the total costs that would normally have been incurred during the same period of time had no loss or damage occurred.

« »

[« »] § **A.2.4.5 Civil Authority Insurance**, for losses or costs arising from an order of a civil authority prohibiting access to the Project, provided such order is the direct result of physical damage covered under the required property insurance.

« »

[« »] § **A.2.4.6 Ingress/Egress Insurance**, for loss due to the necessary interruption of the insured’s business due to physical prevention of ingress to, or egress from, the Project as a direct result of physical damage.

« »

[« »] § **A.2.4.7 Soft Costs Insurance**, to reimburse the Owner for costs due to the delay of completion of the Work, arising out of physical loss or damage covered by the required property insurance: including construction loan fees; leasing and marketing expenses; additional fees, including those of architects, engineers, consultants, attorneys and accountants, needed for the completion of the construction, repairs, or reconstruction; and carrying costs such as property taxes, building permits, additional interest on loans, realty taxes, and insurance premiums over and above normal expenses.

« »

§ A.2.5 Other Optional Insurance.

The Owner shall purchase and maintain the insurance selected below.

(Select the types of insurance the Owner is required to purchase and maintain by placing an X in the box(es) next to the description(s) of selected insurance.)

[« »] § **A.2.5.1 Cyber Security Insurance** for loss to the Owner due to data security and privacy breach, including costs of investigating a potential or actual breach of confidential or private information. *(Indicate applicable limits of coverage or other conditions in the fill point below.)*

« »

[« »] **§ A.2.5.2 Other Insurance***(List below any other insurance coverage to be provided by the Owner and any applicable limits.)***Coverage****Limits****ARTICLE A.3 CONTRACTOR'S INSURANCE AND BONDS****§ A.3.1 General**

§ A.3.1.1 Certificates of Insurance. The Contractor shall, for itself and for its Subcontractors, provide certificates of insurance and endorsements acceptable to the Owner as well, within 10 days of request by the Owner, complete copies of the policies of the Contractor and of its Subcontractors, evidencing compliance with the requirements in this Article A.3 at the following times: (1) prior to commencement of the Work; (2) upon renewal or replacement of each required policy of insurance; and (3) upon the Owner's written request. An additional certificate evidencing continuation of commercial liability coverage, including coverage for completed operations, shall be submitted with the final Application for Payment and thereafter upon renewal or replacement of such coverage until the expiration of the periods required by Section A.3.2.1 and Section A.3.3.1. The certificates will show the Owner as an additional insured on the Contractor's Commercial General Liability and excess or umbrella liability policy or policies.

Each certificate and endorsement must have an original signature by an authorized agent of the respective insurer. These certificates and the insurance policies required by this Article shall contain a provision that coverages afforded under the policies will not be canceled or allowed to expire until at least thirty (30) days' prior written notice has been given to the Owner (except ten (10) days for non-payment).

In no event shall any failure of the Owner to receive certified copies or certificates of policies required in this Article or to demand receipt of such certified copies or certificates prior to the Contractor's commencing the Work be construed as a waiver by the Owner of the Contractor's obligations to obtain insurance pursuant to this Article. The obligation to procure and maintain any insurance required by this Article is a separate responsibility of the Contractor and independent of the duty to furnish a certified copy or certificate of such insurance policies.

The Contractor shall require that all Subcontractors maintain and provide insurance in like form as set forth above and below including the additional insured and certificate of insurance requirements.

§ A.3.1.2 Deductibles and Self-Insured Retentions. The Contractor shall disclose to the Owner any deductible or self-insured retentions applicable to any insurance required to be provided by the Contractor. Contractor shall be solely responsible to pay any amount that lies within the deductible or self-insured retention of Contractor's insurance policies, regardless of the amount of the deductible or self-insured retention and regardless of the cause of the loss, injury or damage. The Owner may require proof of ability to pay losses, and related investigation, claim administration and defense expenses within the retention.

§ A.3.1.3 Additional Insured Obligations. The Owner, the Lenders and such other persons and entities as may be designated by Owner in writing, shall be named as additional insureds under the Commercial General Liability and Automobile Liability policies required in this Exhibit by way of endorsement acceptable to Owner. The Additional Insured endorsement shall provide coverage arising out of both ongoing and completed operations. The endorsement must specify Contractor as the named insured and shall include the policy number and expiration date. The additional insured endorsement shall provide that the insurance is primary insurance with respect to the interests of such additional insureds, and that any other insurance or self-insurance maintained by or available to the additional insured shall be excess and non-contributory with the insurance provided hereunder. The coverage provided to the additional insureds must be at least as broad as that provided to the Contractor and may not contain any additional exclusionary language or limitations applicable to the additional insureds. The endorsement shall provide that no act or omission of an additional insured shall affect or limit the coverage otherwise provided.

§ A.3.1.4 When any required insurance, due to the attainment of a normal expiration date or renewal date, shall expire, the Contractor shall supply the Owner with Certificates of Insurance and amendatory riders or endorsements that clearly evidence the continuation of all coverage in the same manner, limits of protection, and scope of coverage as was provided by the previous policy. In the event any renewal or replacement policy, for whatever

reason obtained or required, is written by a carrier other than that with whom the coverage was previously placed, or the subsequent policy differs in any way from the previous policy, the Contractor shall also furnish the Owner with a certified copy of the renewal or replacement policy unless the Owner provides the Contractor with prior written consent to submit only a Certificate of Insurance for any such policy. All renewal and replacement policies shall be in form and substance satisfactory to the Owner and written by carriers acceptable to the Owner.

§ A.3.1.5 If the Contractor fails to purchase and maintain, or require to be purchased or maintained, any insurance required in this Article, the Owner may, but shall not be obligated to, (i) upon five (5) days' written notice to the Contractor, purchase such insurance on behalf of the Contractor and shall be entitled to be reimbursed by the Contractor upon demand, or (ii) terminate this Contract, and Owner shall retain all remedies for breach of this Agreement. Owner shall have the right to offset the cost of any such insurance, including without limitation, premiums, against any sums payable to Contractor under this Contract. If the Contractor fails to obtain insurance required by this Contract, the Contractor shall fully indemnify, defend and hold harmless the Owner and its officers, directors, shareholders, employees and Affiliates from any and all claims for which the required insurance would have provided coverage.

§A.3.1.6 Any aggregate limit under the Contractor's liability insurance shall, by endorsement, apply to the Work separately.

§A.3.1.7 None of the requirements contained herein as to types, limits and acceptability of insurance coverages to be maintained by the Contractor are intended to, and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Contractor under the Contract or at law, including without limitation, Contractor's indemnification obligations and liability in excess of the limits and coverages required herein. Neither receipt of certificates, endorsements, or policies showing less or different coverage than required, nor any other forbearance or omission by or for the Owner, shall be deemed a waiver of, or estoppel to assert, any right or obligation regarding the insurance requirements herein.

§A.3.1.8 The Owner shall bear no responsibility whatsoever for any tools, temporary structures, machinery or equipment owned, leased, borrowed or otherwise used by the Contractor, its Subcontractors, or any employees while at the jobsite or elsewhere. The Contractor shall be fully responsible for all material to be used in construction until such time as the material becomes an integral part of the structure(s). Prior to this time, any loss or damage to such material shall be borne fully by the Contractor, who shall have no recourse whatsoever to the Owner. Any deductible relative to the Contractor's property will be borne solely by the Contractor. The Contractor is fully responsible for protection of such unattached property without regard to whatever protective measures are provided by the Owner, if any.

§ A.3.2 Contractor's Required Insurance Coverage

§ A.3.2.1 The Contractor shall purchase and maintain the following types and limits of insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located and with a rating of not less than A- VII as defined by A.M. Best Company. The insurance required shall be written for not less than limits of liability specified below or required by law, whichever coverage is greater. To the extent that the requirements set forth by Project Lenders, are more extensive than those set forth in the Contract Documents, the more extensive requirements shall control. Coverages, whether written on an occurrence or claims-made basis, shall be maintained without interruption from the date of commencement of the Work until the date of final payment and termination of any coverage required to be maintained after final payment, and, with respect to the Contractor's completed operations coverage, until the expiration of the period for correction of Work or for such other period for maintenance of completed operations coverage as specified below. Any deductibles or self-insured retentions associated with the above coverage must be declared to and approved by the Owner. The Owner may require proof of ability to pay losses, and related investigation, claim administration and defense expenses within the retention. The Contractor shall maintain the required insurance until the expiration of the period for correction of Work as set forth in Section 12.2.2 of the General Conditions, unless a different duration is stated below:

(If the Contractor is required to maintain insurance for a duration other than the expiration of the period for correction of Work, state the duration.)

<< >>

§ A.3.2.2 Commercial General Liability

§ A.3.2.2.1 Commercial General Liability insurance for the Project written on an occurrence form with policy limits of not less than **One Million Dollars (\$ 1,000,000)** each occurrence, **Two Million Dollars (\$ 2,000,000)** general aggregate, and **Two Million Dollars (\$ 2,000,000)** aggregate for products-completed operations hazard, providing coverage for claims including

- .1 damages because of bodily injury, sickness or disease, including occupational sickness or disease, and death of any person;
- .2 personal injury and advertising injury;
- .3 damages because of physical damage to or destruction of tangible property, including the loss of use of such property;
- .4 bodily injury or property damage arising out of completed operations; and
- .5 the Contractor's indemnity obligations under Section 3.18 of the General Conditions.

Products and Completed Operations Insurance shall be maintained for a minimum period of ten years after final payment, and contractor shall continue to furnish evidence of such coverage to Owner on an annual basis during the aforementioned period.

"Claims-made" and "modified occurrence" policy forms are not acceptable.

In addition to the commercial general liability insurance set forth above, Contractor shall obtain an "installation floater" or equivalent builder's risk property insurance covering the Contractor's interest in the Property and all of Contractor's total equipment and personal property during the course of construction.

The Owner may consider a general aggregate and aggregate for products-completed operations hazard limit of One Million Dollars (\$ 1,000,000) for Subcontractors upon request of Contractor.

§ A.3.2.2.2 The Contractor's Commercial General Liability policy under this Section A.3.2.2 shall not contain an exclusion or restriction of coverage for the following:

- .1 Claims by one insured against another insured, if the exclusion or restriction is based solely on the fact that the claimant is an insured, and there would otherwise be coverage for the claim.
- .2 Claims for property damage to the Contractor's Work arising out of the products-completed operations hazard where the damaged Work or the Work out of which the damage arises was performed by a Subcontractor.
- .3 Claims for bodily injury other than to employees of the insured.
- .4 Claims for indemnity under Section 3.18 of the General Conditions arising out of injury to employees of the insured.
- .5 Claims or loss excluded under a prior work endorsement or other similar exclusionary language.
- .6 Claims or loss due to physical damage under a prior injury endorsement or similar exclusionary language.
- .7 Claims related to residential, multi-family, or other habitational projects, if the Work is to be performed on such a project.
- .8 Claims related to roofing, if the Work involves roofing.
- .9 Claims related to exterior insulation finish systems (EIFS), synthetic stucco or similar exterior coatings or surfaces, if the Work involves such coatings or surfaces.
- .10 Claims related to earth subsidence or movement, where the Work involves such hazards.
- .11 Claims related to explosion, collapse and underground hazards, where the Work involves such hazards.

§ A.3.2.3 Automobile Liability covering vehicles owned, and non-owned vehicles used, by the Contractor, with policy limits of not less than **One Million Dollars (\$ 1,000,000)** per accident, for bodily injury, death of any person, and property damage arising out of the ownership, maintenance and use of those motor vehicles along with any other statutorily required automobile coverage.

The Owner may consider a limit of Five Hundred Thousand (\$ 500,000) for Subcontractors upon request of Contractor.

§ **A.3.2.4** The Contractor may achieve the required limits and coverage for Commercial General Liability and Automobile Liability through a combination of primary and excess or umbrella liability insurance, provided such primary and excess or umbrella insurance policies result in the same or greater coverage as the coverages required under Section A.3.2.2 and A.3.2.3, and in no event shall any excess or umbrella liability insurance provide narrower coverage than the primary policy. The excess policy shall not require the exhaustion of the underlying limits only through the actual payment by the underlying insurers.

§ **A.3.2.5** Workers' Compensation at statutory limits.

§ **A.3.2.6** Employers' Liability with policy limits not less than One Million Dollars (\$ 1,000,000) each accident, One Million Dollars (\$ 1,000,000) each employee, and One Million Dollars (\$ 1,000,000) policy limit. Such policies shall contain a waiver of subrogation on a form acceptable to Owner.

§ **A.3.2.7** Jones Act, and the Longshore & Harbor Workers' Compensation Act, as required, if the Work involves hazards arising from work on or near navigable waterways, including vessels and docks

§ **A.3.2.8** If the Contractor is required to furnish professional services as part of the Work, the Contractor shall procure Professional Liability insurance covering performance of the professional services, including full prior acts coverage sufficient to cover any and all claims and suits arising out of all such work (or a retroactive date no later than the date on which the Contractor commences such work), with policy limits of not less than One Million Dollars (\$ 1,000,000) per claim and Two Million Dollars (\$ 2,000,000) in the aggregate, maximum deductible or self-insured retention amount of Fifty Thousand Dollars (\$ 50,000) per claim. The policy shall include without limitation, contractual liability coverage covering the obligations assumed by the Contractor in the Contract Documents. Contractor shall maintain this coverage continuously in effect during the term of the Contract and until all claims and suits arising out of such work are barred by the applicable statute of limitations and repose. In the event that Contractor subcontracts any portion of the Design-Build Work, the Contractor shall require any such Subcontractor to purchase and maintain the insurance coverage as provide in this subsection.

§ **A.3.2.9** If the Work involves the transport, dissemination, use, or release of pollutants, the Contractor shall procure Pollution Liability insurance, with policy limits of not less than Two Million Dollars (\$ 2,000,000) per claim and Three Million Dollars (\$ 3,000,000) in the aggregate endorsed to include Non-Owned Disposal Site coverage. Coverage must be maintained for at least three (3) years after completion of the Project.

§ **A.3.2.10** Coverage under Sections A.3.2.8 and A.3.2.9 may be procured through a Combined Professional Liability and Pollution Liability insurance policy, with combined policy limits of not less than Two Million Dollars (\$ 2,000,000) per claim and Three Million Dollars (\$ 3,000,000) in the aggregate.

§ **A.3.2.11** Insurance for maritime liability risks associated with the operation of a vessel, if the Work requires such activities, with policy limits of not less than One Million Dollars (\$ 1,000,000) per claim and Two Million Dollars (\$ 2,000,000) in the aggregate.

§ **A.3.2.12** Insurance for the use or operation of manned or unmanned aircraft, if the Work requires such activities, with policy limits of not less than One Million Dollars (\$ 1,000,000) per claim and Two Million (\$ 2,000,000) in the aggregate.

§ **A.3.3 Contractor's Other Insurance Coverage**

§ **A.3.3.1** Insurance selected and described in this Section A.3.3 shall be purchased from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Contractor shall maintain the required insurance until the expiration of the period for correction of Work as set forth in Section 12.2.2 of the General Conditions, unless a different duration is stated below:

(If the Contractor is required to maintain any of the types of insurance selected below for a duration other than the expiration of the period for correction of Work, state the duration.)

« »

§ A.3.3.2 The Contractor shall purchase and maintain the following types and limits of insurance in accordance with Section A.3.3.1.

(Select the types of insurance the Contractor is required to purchase and maintain by placing an X in the box(es) next to the description(s) of selected insurance. Where policy limits are provided, include the policy limit in the appropriate fill point.)

[] **§ A.3.3.2.1** Property insurance of the same type and scope satisfying the requirements identified in Section A.2.3, which, if selected in this section A.3.3.2.1, relieves the Owner of the responsibility to purchase and maintain such insurance except insurance required by Section A.2.3.1.3 and Section A.2.3.3. The Contractor shall comply with all obligations of the Owner under Section A.2.3 except to the extent provided below. The Contractor shall disclose to the Owner the amount of any deductible, and the Owner shall be responsible for losses within the deductible. Upon request, the Contractor shall provide the Owner with a copy of the property insurance policy or policies required. The Owner shall adjust and settle the loss with the insurer and be the trustee of the proceeds of the property insurance in accordance with Article 11 of the General Conditions unless otherwise set forth below: *(Where the Contractor's obligation to provide property insurance differs from the Owner's obligations as described under Section A.2.3, indicate such differences in the space below. Additionally, if a party other than the Owner will be responsible for adjusting and settling a loss with the insurer and acting as the trustee of the proceeds of property insurance in accordance with Article 11 of the General Conditions, indicate the responsible party below.)*

« »

[] **§ A.3.3.2.2 Railroad Protective Liability Insurance**, with policy limits of not less than **One Million Dollars** (\$ 1,000,000) per claim and **Two Million Dollars** (\$ 2,000,000) in the aggregate, for Work within fifty (50) feet of railroad property.

[] **§ A.3.3.2.3 Asbestos Abatement Liability Insurance**, with policy limits of not less than **Two Million Dollars** (\$ 2,000,000) per claim and **Three Million Dollars** (\$ 3,000,000) in the aggregate, for liability arising from the encapsulation, removal, handling, storage, transportation, and disposal of asbestos-containing materials.

[] **§ A.3.3.2.4** Insurance for physical damage to property while it is in storage and in transit to the construction site on an "all-risks" completed value form.

[] **§ A.3.3.2.5** Property insurance on an "all-risks" completed value form, covering property owned by the Contractor and used on the Project, including scaffolding and other equipment.

[] **§ A.3.3.2.6 Other Insurance**
(List below any other insurance coverage to be provided by the Contractor and any applicable limits.)

Coverage

Limits

§ A.3.4 Performance Bond and Payment Bond

The Owner may require that Contractor furnish a Performance Bond and a Labor and Material (Payment) Bond, each bond to be in the amount of one hundred percent (100%) of the Contract Sum as security for the faithful performance and payment of all obligations under the Contract Documents. These bonds shall be in such form and with such sureties as are licensed in the State of California and are named in the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Treasury Department and for amounts which are not in excess of the acceptable amount set forth on such list for the respective surety. Should the Owner that Contractor furnish a Performance Bond and/or a Labor and Material (Payment) Bond after execution of the Contract, the Owner shall pay the premiums for such bonds.

Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

ARTICLE A.4 SPECIAL TERMS AND CONDITIONS

Special terms and conditions that modify this Insurance and Bonds Exhibit, if any, are as follows:

« »



DRAFT AIA® Document A201™ - 2017

General Conditions of the Contract for Construction

for the following PROJECT:

(Name and location or address)

2530 9th Avenue
Oakland, CA 94606

THE OWNER:

(Name, legal status and address)

California Affordable Housing Initiatives, Inc.
1619 Harrison Street
Oakland, CA 94612
Telephone: (510) 238-5300

THE ARCHITECT:

(Name, legal status and address)

N/A

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- 13 MISCELLANEOUS PROVISIONS

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

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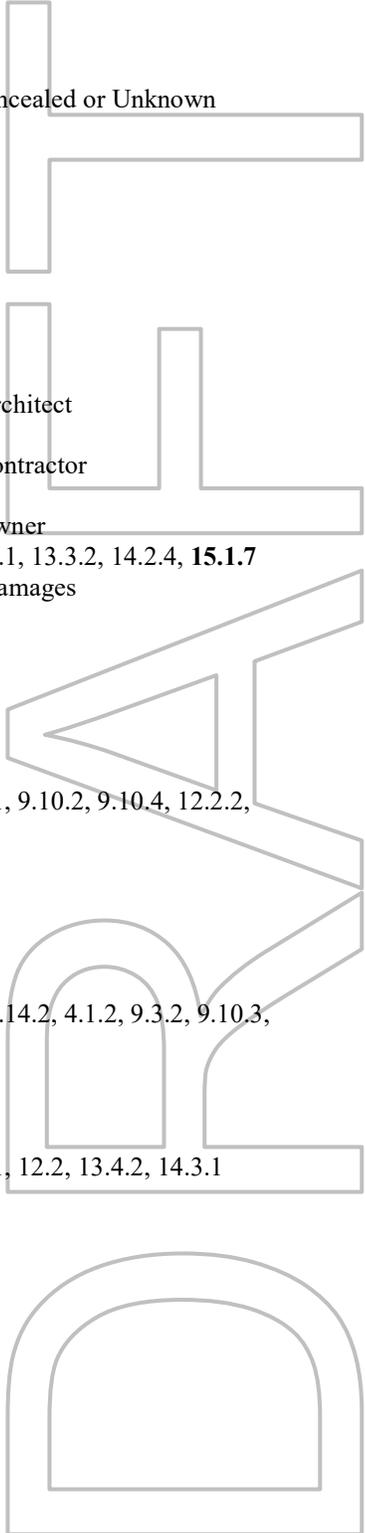
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ARTICLE 1 GENERAL PROVISIONS

§ 1.1 Basic Definitions

§ 1.1.1 The Contract Documents

The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement or Contract) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Owner. Unless specifically enumerated in the Agreement, the Contract Documents do not include the advertisement or invitation to bid, Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor's bid or proposal, or portions of Addenda relating to bidding or proposal requirements. Each party hereby agrees to do all acts and things and to make, execute and deliver such written instruments, as shall from time to time be reasonably required to carry out the terms and provisions of the Contract Documents.

§ 1.1.2 The Contract

The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification. Nothing expressed or implied in the Contract is intended or shall be construed to confer upon or give any person or entity, others than the parties hereto, any right or remedies under or by reason of the Contract. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Owner's consultants, (2) between the Owner and a Subcontractor or a Sub-subcontractor (except the Owner's status as a third-party beneficiary under subcontracts as set forth in Section 5.3), or (3) between any persons or entities other than the Owner and the Contractor.

§ 1.1.3 The Work

The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project. Drawings are partly diagrammatic and may not show each and every piece of required material needed for completed installation. Drawings show the general arrangement, design and extent of the Work. Construction not detailed or specified shall be equal or similar to adjacent detailed or specified construction. All manufactured items of one specified type or items to be used for similar purposes shall be by one manufacturer and of identical finish and design appearance. In cases where a later model or product has superseded that specified, the superseding replacement model shall be installed. All products shall be installed consistent with the manufacturer's directions and instructions. Any manufacturer's installation instructions which are inconsistent with the requirements of the Contract Documents shall be promptly brought to the attention of the Owner.

§ 1.1.4 The Project

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner and by Separate Contractors.

§ 1.1.5 The Drawings

The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.

§ 1.1.6 The Specifications

The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

§ 1.1.7 Instruments of Service

Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Owner and the Owner's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

§ 1.1.8 Initial Decision Maker

INTENTIONALLY DELETED.

§ 1.2 Correlation and Intent of the Contract Documents

§ 1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results. In the event of inconsistencies within or between parts of the Contract Documents or between Contract Documents and applicable laws, statutes, codes, ordinances, rules and regulations of federal, state, city or municipal governments or agencies now in force or that may be enacted hereafter, the Contractor shall comply with the more stringent requirements.

§ 1.2.1.1 Titles of articles, paragraphs and subparagraphs are for convenience only and neither limit nor amplify the provisions of this Contract in itself. Wherever possible, each provision of the Contract shall be interpreted in a manner as to be effective and valid under applicable law. The invalidity of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract Documents violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Contract Documents shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.

§ 1.2.2 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

§ 1.2.3 Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

§ 1.2.4 The terms "knowledge," "recognize," and "discover," their respective derivatives, and similar terms in the Contract Documents, as used in reference to the Contractor shall be interpreted to mean that which the Contractor knows (or should know), recognizes (or should recognize), and discovers (or should discover) in exercising the care, skill, and diligence required by the Contract Documents. Analogously, the expression "reasonably inferable" and similar terms in the Contract Documents shall be interpreted to mean reasonably inferable by a contractor familiar with the Project and exercising the care, skill, and diligence required of the Contractor by the Contract Documents.

§ 1.3 Capitalization

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles, or (3) the titles of other documents published by the American Institute of Architects.

§ 1.4 Interpretation

In the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

§ 1.5 Ownership and Use of Drawings, Specifications, and Other Instruments of Service

§ 1.5.1 With respect to the Contractor's use of the Owner's Instruments of Service, the Owner and the Owner's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Owner's or Owner's consultants' reserved rights.

§ 1.5.2 The Contractor, Subcontractors, Sub-subcontractors, and suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to any protocols established pursuant to Sections 1.7 and 1.8, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and suppliers may

not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the Owner and the Owner's consultants.

§ 1.6 Notice

§ 1.6.1 Except as otherwise provided in Section 1.6.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission if a method for electronic transmission is set forth in the Agreement. At the Owner's request, a copy of written notices shall be delivered to Lenders on the Project.

§ 1.6.2 Notice of Claims as provided in Section 15.1.3 shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

§ 1.7 Digital Data Use and Transmission

The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form.

§ 1.8 Building Information Models Use and Reliance

INTENTIONALLY DELETED.

ARTICLE 2 OWNER

§ 2.1 General

§ 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. The term "Owner" means the Owner or the Owner's authorized representative.

§ 2.1.2 The Owner shall furnish to the Contractor, within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of, or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein.

§ 2.2 Evidence of the Owner's Financial Arrangements

§ 2.2.1 Prior to commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract.

§ 2.2.2 Following commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract only if (1) the Owner fails to make payments to the Contractor as the Contract Documents require; (2) the Contractor identifies in writing a reasonable concern regarding the Owner's ability to make payment when due; or (3) a change in the Work materially changes the Contract Sum.

§ 2.2.3 INTENTIONALLY DELETED.

§ 2.2.4 INTENTIONALLY DELETED.

§ 2.3 Information and Services Required of the Owner

§ 2.3.1 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

§ 2.3.2 INTENTIONALLY DELETED.

§ 2.3.3 INTENTIONALLY DELETED.

§ 2.3.4 The Owner shall furnish to the Contractor a survey describing the physical location of the site of the Project, and a legal description of the site that the Owner possessed as of the date of execution of the Contract. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work. Receipt of this survey shall not release the Contractor from any duty to conduct a reasonable and customary independent investigation of the site as detailed in the Contract Documents.

§ 2.3.5 The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.

§ 2.3.6 Unless otherwise provided in the Contract Documents, the Owner shall furnish to the Contractor one copy of the Contract Documents for purposes of making reproductions pursuant to Section 1.5.2.

§ 2.3.7 All information received by the Contractor (including, without limitation, information concerning the nature of Owner's or its affiliate's organization, business, products, services, market research, assets, revenues and any plans or materials prepared for Owner pursuant to, or in connection with, the terms of the Contract) shall be kept confidential by the Contractor and its representatives and shall not be used in any manner by the Contractor or its representatives except in connection with the performance of their duties under the Contract; provided, however, that the Contractor may disclose such information to its employees, Subcontractors, officers, directors or agents to the extent necessary to the performance of its duties under the Contract. The foregoing confidentiality provisions shall not apply to such portions of the information received that are generally available to the public or required by law to be disclosed. The obligations under this paragraph shall survive the expiration or termination of the Contract.

§ 2.4 Owner's Right to Stop the Work

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3. The Contractor shall not be entitled to any adjustment in Contract Time or Contract Sum as a result of any such order.

§ 2.5 Owner's Right to Carry Out the Work

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a five-day period after receipt of notice from the Owner (or within forty-eight (48) hours in the case of health and safety issues) to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such default or neglect or may, pursuant to Section 9.5.1, withhold or nullify a Certificate for Payment in whole or in part, or backcharge the Contractor, to the extent reasonably necessary to reimburse the Owner for the reasonable cost of correcting such deficiencies, including, but not limited to, Owner's expenses and compensation for any additional services of consultants made necessary by such default, neglect, or failure. If current and future payments are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. If the Contractor disagrees with the actions of the Owner, or the amounts claimed as costs to the Owner, the Contractor may file a Claim pursuant to Article 15.

§ 2.6 EXTENT OF OWNER RIGHTS

§ 2.6.1 The rights stated in this Article 2 and elsewhere in the Contract Documents are cumulative and not in limitation of any rights of the Owner granted in the Contract Documents, at law, or in equity.

§ 2.6.2 In no event shall the Owner have control over, charge of, or any responsibility for construction means, methods, techniques, sequences, or procedures or for safety precautions and programs in connection with the Work, notwithstanding any of the rights and authority granted the Owner in the Contract Documents.

ARTICLE 3 CONTRACTOR**§ 3.1 General**

§ 3.1.1 The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term “Contractor” means the Contractor or the Contractor’s authorized representative.

§ 3.1.2 The Contractor shall perform the Work in accordance with the Contract Documents.

§ 3.1.3 The Contractor shall not be relieved of its obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Owner in the Owner’s administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

§ 3.2 Review of Contract Documents and Field Conditions by Contractor

§ 3.2.1 Execution of the Contract by the Contractor is a representation by the Contractor that, prior to the commencement of the Work, the Contractor has made an inspection of the site and existing conditions (or was provided an opportunity by Owner to make such inspection) to the extent applicable to the performance of the Work and as necessary to establish the Contract Sum and Contract Time, including but not limited to (i) the physical conditions of the site including soil and ground conditions, existing underground utilities, and all structures located on the site; (ii) conditions of existing improvements that will be rehabilitated as part of the Project to the extent the existing improvements have been made available to Contractor by Owner (provided that the parties acknowledge that if the Work involves the rehabilitation of portions of existing improvements that any conditions identified by Contractor in the areas made available by Owner for inspection, that similar conditions are likely to be found in the portions of the existing improvements not inspected by the Contractor), (iii) all conditions and structures on adjoining properties; (iv) the nature and location of the general area including prevailing weather conditions; (v) the availability and cost of labor, equipment, materials, and supplies; (vi) the site utilities and utility connections; and (vii) conditions related to transportation, handling, storage and disposal of materials. Contractor further acknowledges that it has fully satisfied itself as to the nature, character, and quality of surface and subsurface conditions to the extent such information is reasonably ascertainable from an inspection of the site, from information available from the local municipality and other public bodies, and from the Contract Documents. The Contractor shall promptly report to the Owner any discovered conditions, defects, damage, or other materially adverse condition(s) discovered by, or otherwise revealed to the Contractor at the Site. The Owner shall not be required to make any adjustments in either the Contract Sum or the Contract Time in connection with any failure by the Contractor to have complied with the requirements of this Section.

§ 3.2.2 Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 2.3.4, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. If, during the progress of the Work, the Contractor discovers any error, inconsistency or omission in the Contract Documents or existing conditions or defects at the Site or in the Work, the Contractor shall immediately report such matter to the Owner and shall halt all affected Work until such discrepancies have been corrected in accordance with requirements of Article 7. Additions to the Contract Sum or Contract Time shall not be allowed for correction of problems that could have been avoided by careful review of the Contract Documents and/or existing on ongoing conditions by the Contractor, and/or minor adjusting of size or locations of various items for proper fit or as set forth in Section 3.7.4 regarding concealed or unknown conditions. It is recognized that the Contractor’s review is made in the Contractor’s capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents.

§ 3.2.3 The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders, or all other requirements of public authorities now in force or that may be enacted hereafter applicable to the performance of the Work (collectively, the “Applicable Requirements”), unless such Applicable Requirements bear on the performance of the Work. The Contractor shall promptly report to the Owner any nonconformity discovered by or made known to the Contractor as a request for information in such form as the Owner may require. It is recognized that the Contractor’s review is made in the Contractor’s capacity as a contractor and not as a licensed design professional unless otherwise specifically provided in the Contract Documents.

§ 3.2.4 If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Owner issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall submit a request for a Change Order in accordance with Article 7. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Owner shall not be required to make any adjustments to the Contract Time or Contract Sum, and the Contractor shall assume full responsibility for any such costs and damages to the Owner, including, but not limited to, damages relating to delays, as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to Applicable Requirements, unless the Contractor recognized such error, inconsistency, omission, or difference and failed to report it to the Owner.

§ 3.3 Supervision and Construction Procedures

§ 3.3.1 The Contractor shall supervise and direct the Work, including portions of the Work performed by its Subcontractors as well as verify that materials, equipment and other items furnished by Subcontractors are in accordance with the Contract Documents, using the Contractor's best skill and attention. The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The Contractor shall not replace its Project superintendent without the Owner's advanced written approval of the replacement. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under the Contract. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and shall be solely responsible for the jobsite safety of such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely notice to the Owner, and shall propose alternative means, methods, techniques, sequences, or procedures and shall not proceed with that portion of the Work without further written instructions from the Owner. The Owner shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. Unless the Owner objects to the Contractor's proposed alternative based on design intent, the Contractor shall perform the Work using its proposed alternative means, methods, techniques, sequences, or procedures.

§ 3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors and for any damages, losses, costs, expenses, including, but not limited to, reasonable attorneys' fees resulting from such acts or omissions.

§ 3.3.3 The Contractor shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work. The Contractor shall repair damage to utility lines, utility cables and water, sewer, or other utility pipes and damage to public improvements, including, but not limited to, sidewalks, caused by the Contractor or any Subcontractor during the performance of the Work.

§ 3.4 Labor and Materials

§ 3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

§ 3.4.2 Except in the case of minor changes in the Work approved by the Owner in accordance with Section 3.12.8 or ordered by the Architect in accordance with Section 7.4, the Contractor may make substitutions only with the written consent of the Owner, after evaluation by the Owner and in accordance with a Change Order or Construction Change Directive.

§ 3.4.3 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them.

§ 3.4.4 The Contractor shall only employ or use labor in connection with the Work capable of working harmoniously with all trades, crafts, and any other individuals associated with the Project. The Contractor shall also use best efforts to minimize the likelihood of any strike, work stoppage, or other labor disturbance.

- .1 If the Work is to be performed by trade unions, the Contractor shall make all necessary arrangements to reconcile, without delay, damage, or cost to the Owner and without recourse to the Owner, any conflict between the Contract Documents and any agreements or regulations of any kind at any time in the force among members or councils that regulate or distinguish the activities that shall not be included in the work of any particular trade.
- .2 In case the progress of the Work is affected by any undue delay in furnishing or installing any items or materials or equipment required under the Contract Documents because of such conflict involving any such labor agreement or regulation, the Owner may require that other material or equipment of equal kind and quality be provided pursuant to a Change Order or Construction Change Directive.

§ 3.5 Warranty

§ 3.5.1 The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements shall be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. The Contractor's warranty in this Section 3.5.1 is but one of many warranties made by Contractor, whether in the Contract Documents or otherwise, and does not in any way limit Contractor's other obligations relating to the Contract Documents and/or arising under law. In the event that any warranties set forth in the Specifications exceed the warranties set forth in this Section in scope or in time, the more extensive warranties shall control.

§ 3.5.2 All material, equipment, or other special warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 9.8.4. Contractor agrees to perform the Work in such manner so as to preserve any and all such warranties.

§ 3.6 Taxes

The Contractor shall pay sales, consumer, use and similar taxes for the Work provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

§ 3.7 Permits, Fees, Notices and Compliance with Laws

§ 3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit as a Cost of the Work, as well as for other permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded. All connection charges, assessments, or inspection fees as may be imposed by any municipal agency or utility company shall be the Owner's responsibility.

§ 3.7.2 The Contractor shall comply with and give notices required by Applicable Requirements and shall cause all Work to be performed in compliance with Applicable Requirements. The Contractor shall procure and obtain all bonds required of the Owner or the Contractor by the municipality in which the Project is located or any other public or private body with jurisdiction over the Project. In connection with such bonds, the Contractor shall prepare all applications, supply all necessary backup material, and furnish the surety with any required personal undertakings. The Contractor shall also obtain and pay all charges for all approvals for street closings, parking meter approval, and other similar matters as may be necessary or appropriate from time to time for the performance of the Work.

§ 3.7.3 If the Contractor performs Work that is contrary to Applicable Requirements, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

§ 3.7.4 Concealed or Unknown Conditions

If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then the Contractor shall promptly provide notice to the Owner before conditions are disturbed and in no event later than 7 days after first observance of the conditions. The Owner will promptly investigate such conditions and, if the Owner determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend that an equitable adjustment be made in the Contract Sum or Contract Time, or both. If the Owner determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Owner shall promptly notify the Contractor in writing, stating the reasons. If the Contractor disputes the Owner's determination, the Contractor may submit a Claim as provided in Article 15. Any Claim for an increase in Contract Time or Contract Sum based on, or challenging the decision of the Owner shall be resolved pursuant to the Change Order procedure set forth in Article 7. No adjustment in the Contract Time or Contract Sum shall be permitted, however, in connection with any concealed or unknown condition that does not differ materially from those conditions disclosed or that reasonably should have been disclosed by the Contractor's (1) prior inspections, tests, reviews, and preconstruction services for the Project, or (2) inspections, tests, reviews, and preconstruction services that the Contractor had the opportunity to make or should have performed in connection with the Project.

§ 3.7.5 If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

§ 3.8 Allowances

§ 3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.

§ 3.8.2 Unless otherwise provided in the Contract Documents,

- .1 allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- .2 Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit, and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances; and
- .3 whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2.

§ 3.8.3 Materials and equipment under an allowance shall be selected by the Owner with reasonable promptness.

§ 3.9 Superintendent

§ 3.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work, including portions of the Work performed by its Subcontractors. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor.

§ 3.9.2 The Contractor, as soon as practicable after award of the Contract, shall notify the Owner of the name and qualifications of a proposed superintendent. Within 14 days of receipt of the information, the Owner may notify the Contractor, stating whether the Owner (1) has reasonable objection to the proposed superintendent or (2) requires additional time for review. Failure of the Owner to provide notice within the 14-day period shall constitute notice of no reasonable objection.

§ 3.9.3 The Contractor shall not employ a proposed superintendent to whom the Owner has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's prior written consent, which shall not unreasonably be withheld or delayed.

§ 3.10 Contractor's Construction and Submittal Schedules

§ 3.10.1 The Construction Schedule is attached to the Agreement as an Exhibit. The schedule shall contain detail appropriate for the Project, including (1) the date of commencement of the Work, interim schedule milestone dates, and the date of Substantial Completion; (2) an apportionment of the Work by construction activity; (3) the time required for completion of each portion of the Work and show the critical path; (4) show areas of the Site affected by that Work per phase of the Work; (5) show coordination with any other contractors working on the Site; and (6) show coordination with Owner's schedule for relocating tenants from the Site and moving tenants back on to the Site to the extent applicable. The Contractor shall incorporate into the Schedule, time sufficient to address weather days resulting from reasonably anticipated weather conditions for the period during which the Work is to be performed and shall indicate the number of "weather days". The term "weather day" means any regular scheduled work day during which the Contractor is unable make progress in completion of the Work due to inclement weather. The Contractor shall submit documentation substantiating any claimed weather dates which each application for payment including documentation showing that the delay impacts the critical path such that use of the weather day is necessary to allow Substantial Completion to occur within the established Contract Time.

The schedule shall provide for the orderly progression of the Work to completion and shall not exceed time limits current under the Contract Documents. Subject to the approval of the Owner, the schedule shall be revised at appropriate intervals as required by the conditions of the Work and Project. Following the Owner's approval of such revisions to the Schedule, if any, such revisions shall be attached to and incorporated into the Schedule provided, however, an extension to the Contract Time shall only be effective pursuant to a Change Order in accordance with Article 7.

§ 3.10.2 The Contractor, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, shall submit a submittal schedule for the Owner's approval. The submittal schedule shall (1) be coordinated with the Construction Schedule, as amended in accordance with Section 3.10.1, and (2) allow the Owner reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, or fails to provide submittals in accordance with the approved submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.

§ 3.10.3 The Contractor shall perform the Work in strict accordance with the Schedule as may be amended pursuant to Section 3.10.1, and shall expedite the Work if construction falls behind the dates and times set forth in the Schedule and shall provide a recovery Schedule if requested by Owner. The Contractor shall have the sole and exclusive responsibility for completing the Work according to the Schedule. Any proposed revisions to the Schedule shall be submitted by the Contractor pursuant to the Change Order procedure set forth in Article 7. If the Owner determines that the performance of the Work has not reached the level of completion set forth in the Schedule or the Contract Documents, the Owner shall have the right to require the Contractor to take all measures necessary to expedite the Work including but not limited to working additional shifts or overtime, supplying additional labor, equipment, facilities, and other similar measures. Such measures shall continue until the progress of the Work complies with the stage of completion required by the Contract Documents. The Owner's right to require such measures is solely for the purpose of ensuring Contractor compliance with the Schedule. The Contractor shall not be entitled to an adjustment in Contract Sum in connection with such measures required by the Owner. The Owner may exercise the rights furnished in this Section as frequently as Owner deems necessary to ensure that the Contractor's performance of the Work will comply with the Contract Time.

§ 3.11 Documents and Samples at the Site

The Contractor shall make available, at the Project site, the Contract Documents, including Change Orders, Construction Change Directives, and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and the approved Shop Drawings, Product Data, Samples, and similar required submittals. These shall be in electronic form or paper copy, available to the Owner, and delivered to the Owner upon completion of the Work as a record of the Work as constructed.

§ 3.12 Shop Drawings, Product Data and Samples

§ 3.12.1 Shop Drawings are drawings, diagrams, schedules, and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.

§ 3.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

§ 3.12.3 Samples are physical examples that illustrate materials, equipment, or workmanship, and establish standards by which the Work will be judged.

§ 3.12.4 Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. Their purpose is to demonstrate how the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Owner is subject to the limitations of Section 4.2.7. Informational submittals upon which the Owner is not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Owner without action.

§ 3.12.5 The Contractor shall review for compliance with the Contract Documents, approve, and submit to the Owner, Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents, in accordance with the submittal schedule approved by the Owner or, in the absence of an approved submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of Separate Contractors.

§ 3.12.6 By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents to the Owner that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

§ 3.12.7 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples, or similar submittals, until the respective submittal has been approved by the Owner.

§ 3.12.8 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from the requirements of the Contract Documents by the Owner's approval of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Owner in writing of such deviation at the time of submittal and (1) the Owner has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals, by the Owner's approval thereof.

§ 3.12.9 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar submittals, to revisions other than those requested by the Owner on previous submittals. In the absence of such written notice, the Owner's approval of a resubmission shall not apply to such revisions.

§ 3.12.10 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures (such services to be provided by the Contractor are collectively referred to herein as the "Design-Build Work"). The components of the Work comprising the "Design-Build Work" may be more particularly described in an Exhibit to the Agreement. The Contractor shall not be required to provide professional services in violation of applicable law.

§ 3.12.10.1 In connection with the Design-Build Work, or if professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Contractor by the Contract Documents, the Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional, pursuant to an agreement between the Contractor and such design professional meeting the requirements of Section 5.3 Such design professional shall be reasonably acceptable to the Owner and such design

professional's signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional. Shop Drawings, and other submittals related to the Work, designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Owner and shall comply with all Applicable Requirements. The Owner shall be entitled to rely upon the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals.

§ 3.12.10.2 If the Contract Documents require the Contractor's design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Owner at the time and in the form specified by the Owner.

§ 3.13 Use of Site

The Contractor shall confine operations at the site to areas permitted by Applicable Requirements, lawful orders of public authorities, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment. The Contractor shall ensure that the Work, at all times, is performed in a manner that affords reasonable and safe access, both vehicular and pedestrian, to the site of the Work, including, but not limited to as applicable, all portions of the site utilized by Owner's tenants or other users, and all adjacent areas including necessary emergency ingress and egress. The Work shall be performed, to the fullest extent reasonably possible, in such manner that public areas adjacent to the site of the Work shall be free from all debris, building materials, and equipment likely to cause hazardous conditions. Only materials and equipment that are to be used directly in the Work shall be brought to and stored on the site by the Contractor. After equipment is no longer required for the Work, it shall be promptly removed from the site. Protection of construction materials and equipment stored at the Project site from weather, theft, damage, and all other adversity is solely the responsibility of the Contractor.

§ 3.13.1 Where the Project is a rehabilitation Project, the Contractor acknowledges that Owner's tenants shall be occupying the Project while the Contractor is performing the Work. The Contractor shall take all reasonable precautions to ensure that the Work is performed in such a manner so as not to endanger, threaten, or impair the safety of tenants or their guests and invitees to the Project, and shall construct and maintain reasonable safeguards as required by the condition and progress of the Work. Contractor shall take all reasonably available efforts to eliminate unnecessary noise, dust, or obstructions during the performance of the Work. Contractor shall ensure that all Subcontractors are aware that the Project will be occupied by Owner's tenants during the performance of the Work and shall require in all subcontracts that Subcontractors take necessary safety precautions when performing work on the Project including proper handling, treating and disposing of any potentially hazardous materials found on the Project.

§ 3.13.2 The Contractor shall take care to protect the premises surrounding the work areas, including but not limited to, existing utilities, equipment, vegetation, interior flooring and walls to the extent impacted by the performance of the Work and shall utilize protective coverings as appropriate. Contractor shall be responsible for repairing any damage to vegetation, structures, equipment, utilities, or improvements, including those that are the property of a third party (including, but not limited to, any tenant of Owner if applicable), resulting from the failure to comply with the requirements of this Contract or failure to exercise reasonable care in performing the Work. If the Contractor fails or refuses to repair the damage promptly, the Owner may have the necessary work performed and charge the cost to the Contractor.

§ 3.13.3 In order to minimize any disruption or interference with the Owner's tenants use of the Project, the Contractor shall comply with, and shall cause all Subcontractors and all persons under each of their control or supervision to comply with, each of the following requirements:

- .1** Vehicles access shall only be along public and private roads, and any parked vehicles shall not obstruct the parking areas of Owner's tenants, and any guest parking areas. Prior to the commencement of the Work, the Contractor and the Owner shall determine: (i) the parking area(s) for Contractor's and Subcontractor's vehicular parking; and (ii) areas for storage of supplies and materials (if any). Thereafter, Contractor, Subcontractors and each of their employees and agents shall only park and store supplies and materials in such designated areas;
- .2** In the event entry into a residential unit occupied by a tenant is necessary in connection with the performance of the Work, then the Contractor shall notify the Owner, and no entry into such unit shall be permitted until the Owner has provided notice to the tenant in accordance with the tenant's lease,

and the Owner has notified the Contractor of the specific date and time such entry is permitted. In such event the Contractor shall use commercially reasonable efforts to minimize the time period that Work is performed within the residential unit, and, in addition to the requirements set forth in Section 3.15, below, upon completion of the portion of the Work within the residential unit, the Contractor shall cause such residential unit to be restored to the condition that existed immediately prior to entry by the Contractor, Subcontractor, or either of their employees or agents (other than the Work);

- 3 If Contractor is responsible for providing temporary toilet facilities under the Contract Documents, then the Contractor, Subcontractors, and each of their employees and agents shall only use such facilities provided by the Contractor. If the Contractor is not responsible for providing temporary toilet facilities under the Contract Documents, then, prior to the commencement of the Work, the Owner shall designate public restrooms within the Project to be made available to the Contractor, the Subcontractors, and each of their employees. In no event shall Contractor, Subcontractor(s), or any of their employees or agents use any restroom within an occupied residential unit;
- 4 Where the Project is a rehabilitation Project, in the event that the performance of the Work requires existing utilities (including, but not limited to, water, heat, electricity, or telecommunications) to be shut-off, then the Contractor shall not cause such utilities to be shut off until: (i) Contractor has notified Owner of such requirement, and (ii) Owner has notified the Owner's tenants of such requirement in accordance with the residents' leases. In such event the Contractor shall use commercially reasonable efforts to minimize the time period that any utility serving the Project is shut-off.

§ 3.14 Cutting and Patching

§ 3.14.1 The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly. Work which connects to existing work shall correspond in all respects with that to which it connects; provided, however, such new work shall be in compliance with the Contract Documents. All areas requiring cutting, fitting, or patching shall be restored to the condition existing prior to the cutting, fitting, or patching, unless otherwise required by the Contract Documents.

§ 3.14.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or Separate Contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter construction by the Owner or a Separate Contractor except with written consent of the Owner and of the Separate Contractor. Consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold, from the Owner or a Separate Contractor, its consent to cutting or otherwise altering the Work.

§ 3.15 Cleaning Up

§ 3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. Special consideration shall be given to any materials posing a hazard to the residents of the Project. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus materials from and about the Project. If applicable, the Contractor shall clean all glass, replace all broken glass, remove stains, spots, dust and dust from finished surfaces; clean all hardware; remove extraneous paint and smears from surfaces; clean all fixtures and wash all concrete, but only to the extent the need for such work was caused by Contractor.

§ 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and the Owner shall be entitled to reimbursement from the Contractor, pursuant to a deductive Change order, or otherwise.

§ 3.16 Access to Work

The Contractor shall provide the Owner with access to the Work in preparation and progress wherever located.

§ 3.17 Royalties, Patents and Copyrights

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications, or other documents prepared by the Owner. However, if an infringement of a copyright or patent is

discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Owner.

§ 3.18 Indemnification

§ 3.18.1 To the fullest extent permitted by law, the Contractor shall indemnify, defend and hold harmless the Owner (and its officers, directors, affiliates and partners or members), , Owner’s consultants, and agents and employees of any of them and Lenders on the Project, from and against claims, damages, losses, and expenses, including but not limited to attorneys’ fees, arising out of or resulting from performance of the Work, but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18.

The Contractor’s indemnity obligations under this Paragraph 3.18 shall also specifically include, to the extent caused by the negligent acts or omissions of the Contractor, without limitation, all fines, penalties, damages, liability, costs, expenses (including, without limitation, reasonable attorney’s fees), and punitive damages (if any) arising out of or in connection with, any (i) violation of or failure to comply with any Applicable Requirements that bears upon the performance of the Work by the Contractor, a Subcontractor, or any person or entity from whom either is responsible, (ii) means, methods, procedures, techniques, or sequences of execution or performance of the Work, and (iii) failure to secure and pay for permits, fees, approvals, licenses, and inspections as required under the Contract Documents, or any violation of any permit or other approval of a public authority applicable to the Work, by the Contractor, a Subcontractor, or any person or entity for whom either is responsible.

§ 3.18.2 In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or a Subcontractor under workers’ compensation acts, disability benefit acts, or other employee benefit acts.

§ 3.18.3 The Contractor shall defend the Owner and the Owner’s affiliates, employees, and successors in any and all actions brought by Subcontractors or material suppliers against the Owner to foreclose a mechanic’s lien on the real property of the Work, to enforce any stop notice against the Work or for common counts or any other claim arising out of the Work, except if such actions or claims are caused solely by the Owner’s failure to pay the Contractor in breach of its obligation under the terms of this Contract. The Contractor shall indemnify the Owner and its affiliates and employees, and successors with respect to such actions or claims, including, but not limited to, reasonable attorneys’ fees, and for amounts paid by the Owner in good faith settlement of mechanic’s lien foreclosure, stop notice and common counts actions against the real property of the Work.

§ 3.18.4 The Contractor shall indemnify and hold harmless all of the persons or entities to be indemnified pursuant to Paragraph 3.18 from and against any costs and expenses (including reasonable attorney’s fees) incurred by any of the indemnitees in enforcing any of the Contractor’s defense, indemnity and hold harmless obligations under this Contract.

§ 3.18.5 This Section 3.18 shall survive the termination or expiration of this Contract.

ARTICLE 4 ARCHITECT

§ 4.1 General

§ 4.1.1 INTENTIONALLY DELETED.

§ 4.1.2 INTENTIONALLY DELETED.

§ 4.2 Administration of the Contract

§ 4.2.1 INTENTIONALLY DELETED.

§ 4.2.2 INTENTIONALLY DELETED.

§ 4.2.3 INTENTIONALLY DELETED.

§ 4.2.4 Communications

INTENTIONALLY DELETED.

§ 4.2.5 INTENTIONALLY DELETED.

§ 4.2.6 The Owner has authority to reject Work that does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable, the Architect, with the consent of the Owner, will have authority to require inspection or testing of the Work in accordance with Sections 13.4.2 and 13.4.3, whether or not the Work is fabricated, installed or completed.

§ 4.2.7 The Owner will review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Owner's action will be taken in accordance with the submittal schedule approved by the Owner or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Owner's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Owner's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5, and 3.12. The Owner's review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences, or procedures. The Owner's approval of a specific item shall not indicate approval of an assembly of which the item is a component. The Contractor shall pay for the cost of the Owner's review if the review indicates that the Contractor's submittal is repeatedly not in conformance with the Contract Documents.

§ 4.2.8 The Owner will prepare Change Orders, based on proposed Change Order requests by the Contractor, and Construction Change Directives, and may order minor changes in the Work as provided in Section 7.4. The Owner will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

§ 4.2.9 The Owner will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion pursuant to Section 9.8; receive and forward to the Owner, for the Owner's review and records, written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10; and will, subject to the Owner's review, approve a final Certificate for Payment pursuant to Section 9.10.

§ 4.2.10 The Owner will provide one or more Project representatives. The Owner shall notify the Contractor of any change in the duties, responsibilities and limitations of authority of the Project representatives.

§ 4.2.11 The Owner will interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of the Contractor. The Owner's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

§ 4.2.12 INTENTIONALLY DELETED.

§ 4.2.13 The Owner's decisions on matters relating to aesthetic effect, in connection with administration of the Agreement, will be final if consistent with the intent expressed in the Contract Documents.

§ 4.2.14 The Owner will review and respond to requests for information about the Contract Documents. The Owner's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If appropriate, the Owner will prepare and issue supplemental Drawings and Specifications in response to the requests for information.

ARTICLE 5 SUBCONTRACTORS**§ 5.1 Definitions**

§ 5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site, including, but not limited to, any entity described in Section 3.12.10. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an

authorized representative of the Subcontractor. The term “Subcontractor” does not include a Separate Contractor or the subcontractors of a Separate Contractor.

§ 5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term “Sub-subcontractor” is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

§ 5.1.3 Any specific requirement in the Contract that the responsibilities or obligations of the Contractor also apply to a Subcontractor is added for emphasis and is also hereby deemed to include a Subcontractor of any tier. The omission of a reference to a Subcontractor in connection with any of the Contractor’s responsibilities or obligations shall not be construed to diminish, abrogate, or limit any responsibilities or obligations of a subcontractor of any tier under the Contract Documents or the applicable subcontract.

§ 5.1.4 The Contractor shall identify which portions of the Work will be self-performed by the Contractor or by affiliates of the Contractor, or if equipment will be leased from affiliates of the Contractor. The Owner reserves the right to require competitive bidding of any work to be self-performed by Contractor or an affiliate.

§ 5.2 Award of Subcontracts and Other Contracts for Portions of the Work

§ 5.2.1 The Contractor shall select all Subcontractors, and in connection with such selection, if requested by Lenders to the Project or at Owner's request, provide the Owner with a draft copy of its form subcontract, and disclose to the Owner the name, trade, and subcontract amounts for each subcontractor prior to the commencement of the Work. Subcontractors shall have the required licenses and expertise necessary to perform the proposed subcontract work. Unless otherwise stated in the Contract Documents, the Contractor, as soon as practicable after award of the Contract, but in any event prior to entering into a contract with a proposed Subcontractor, shall notify the Owner of the persons or entities proposed for each principal portion of the Work, including those who are to furnish materials or equipment fabricated to a special design. Within 14 days of receipt of the information, the Owner may notify the Contractor whether the Owner (1) has reasonable objection to any such proposed person or entity or (2) requires additional time for review. Failure of the Owner to provide notice within the 14-day period shall constitute notice of no reasonable objection. If any contract between the Contractor and a Subcontractor is materially altered so that it differs from the form subcontract provided to the Owner with regard to terms other than (1) the description of the Work to be performed pursuant to the subcontract, and (2) the subcontract price, that subcontract shall be submitted to Owner for its review prior to the commencement of the Work. The Owner’s review of any subcontract shall not limit or otherwise impair Contractor’s obligations to require each subcontract to comply with the Contract Documents. Review by the Owner, if any, shall in no way be deemed to be a representation by the Owner that the subcontract complies with the Contract Documents, or the enforceability or business advantage of the subcontract. Contractor shall assure all subcontracts contain the Lender requirements attached as an Exhibit to the Contract.

§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

§ 5.2.3 If the Owner has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner has no reasonable objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor’s Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

§ 5.2.4 The Contractor shall not substitute a Subcontractor, person, or entity for one previously selected if the Owner makes reasonable objection to such substitution.

§ 5.3 Subcontractual Relations

By appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor’s Work that the Contractor, by these Contract Documents, assumes toward the Owner. Each

subcontract agreement shall preserve and protect the rights of the Owner under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors. Any part of the Work performed for the Contractor by a Subcontractor shall be pursuant to a written subcontract between the Contractor and such Subcontractor, consistent with the requirements of this Contract. Each subcontract shall, among other matters:

- .1 Require that the Work be performed in accordance with the requirements of the Contract Documents;
- .2 Require the Subcontractor to carry and maintain liability insurance in accordance with the Contract Documents;
- .3 Require the Subcontractor to furnish such certificates and waivers, including waivers of mechanic's lien rights, as the Lender or the Owner may reasonably request;
- .4 Require the Subcontractor to cooperate with the Lender to the Work to the same extent as the Contractor is required to cooperate with the Lender according to the Contract Documents;
- .5 Include the applicable Lender requirements attached as an Exhibit to the Agreement;
- .6 Shall specifically provide that the Owner is an intended third-party beneficiary of such subcontract and that the Subcontractor recognizes the rights of the Owner under Section 5.4 below; and
- .7 Require the Subcontractor to comply with all provisions of this Contract regarding the Owner's tenants to the extent applicable, including, but not limited to, all obligations set forth in Section 3.13.

§ 5.4 Contingent Assignment of Subcontracts

§ 5.4.1 Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that

- .1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 14.2 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor; and
- .2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

If the Owner accepts the assignment of a subcontract agreement as set forth above, then the Owner assumes the Contractor's rights and obligations under the subcontract.

§ 5.4.2 INTENTIONALLY DELETED.

§ 5.4.3 Upon acceptance of such assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor contractor or other entity. If the Owner assigns the subcontract to a successor contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor contractor's obligations under the subcontract, except if Owner obtains a release from the applicable Subcontractor.

ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

§ 6.1 Owner's Right to Perform Construction and to Award Separate Contracts

§ 6.1.1 The term "Separate Contractor(s)" shall mean other contractors retained by the Owner under separate agreements. The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and with Separate Contractors, including portions of the Work which have been removed by Change Order, retained under Conditions of the Contract substantially similar to those of this Contract.

§ 6.1.2 When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term “Contractor” in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.

§ 6.1.3 The Owner shall provide for coordination of the activities of the Owner’s own forces and of each Separate Contractor with the Work of the Contractor. The Contractor shall do its utmost to cooperate with each separate contractor and shall coordinate its construction schedule with the schedules of the other contractors and the Owner to expedite the timely completion of the Work. The Contractor shall participate with any Separate Contractors and the Owner in reviewing their construction schedules. The Contractor shall make any revisions to its construction schedule deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, Separate Contractors, and the Owner until subsequently revised.

§ 6.1.4 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner’s own forces or with Separate Contractors, the Owner or its Separate Contractors shall have the same obligations and rights that the Contractor has under this Article 6.

§ 6.2 Mutual Responsibility

§ 6.2.1 The Contractor shall afford the Owner and Separate Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor’s construction and operations with theirs as required by the Contract Documents.

§ 6.2.2 If part of the Contractor’s Work depends for proper execution or results upon construction or operations by the Owner or a Separate Contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly notify the Owner of apparent or known discrepancies or defects in the construction or operations by the Owner or Separate Contractor that would render it unsuitable for proper execution and results of the Contractor’s Work. Failure of the Contractor to notify the Owner of apparent or known discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner’s or Separate Contractor’s completed or partially completed construction is fit and proper to receive the Contractor’s Work. The Contractor shall not be responsible for discrepancies or defects in the construction or operations by the Owner or Separate Contractor that are not apparent or known.

§ 6.2.3 The Contractor shall reimburse the Owner for costs the Owner incurs that are payable to a Separate Contractor because of the Contractor’s delays, improperly timed activities or defective construction. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of a Separate Contractor’s delays, improperly timed activities, damage to the Work or defective construction.

§ 6.2.4 The Contractor shall promptly remedy damage that the Contractor causes to completed or partially completed construction or to property of the Owner or Separate Contractor as provided in Section 10.2.5.

§ 6.2.5 The Owner and each Separate Contractor shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.

§ 6.3 Owner’s Right to Clean Up

If a dispute arises among the Contractor, Separate Contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Owner will allocate the cost among those responsible.

ARTICLE 7 CHANGES IN THE WORK

§ 7.1 General

§ 7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

§ 7.1.2 Notwithstanding any provision to the contrary in the Contract Documents, a Change Order shall be based upon agreement among the Owner or the Owner’s authorized representative, the Contractor and the Lender to the Work, as applicable. Failure of the Lender to the Work to approve a Change Order shall not be grounds for finding

any party to this Contract in default. A Construction Change Directive may or may not be agreed to by the Contractor. When submitting its proposed Change Order, the Contractor shall include a detailed breakdown of the impact of the proposed change on the cost of labor, materials, and the Schedule, and shall furnish documentation regarding the proposed Change Order, including spreadsheets upon request of the Owner. The Contractor shall submit Change Orders within fourteen (14) days of the date the Contractor discovers the circumstances giving rise to the Change Order request.

§ 7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents. The Contractor shall proceed promptly with changes in the Work, unless otherwise provided in the Change Order, Construction Change Directive, or order for a minor change in the Work.

§ 7.1.4 Notwithstanding any provision to the contrary in the Contract Documents, no Change in the Work, whether by way of alteration or addition to the Work, shall be the basis for an addition to the Contract Sum or a change in the Contract Time unless and until such alteration or addition has been authorized by a Change Order or Construction Change Directive executed and issued in accordance with and in strict compliance with the requirements of the Contract Documents.

This requirement is of the essence of the Contract Documents. Accordingly, in the absence of an executed Change Order, no (1) course of conduct or dealings between the parties, nor (2) express or implied acceptance of alterations or additions to the Work, nor (3) any claims that the Owner has been unjustly enriched by any alterations or additions to the Work (whether or not there is in fact any such unjust enrichment), shall be the basis for any claim by the Contractor to increase the Contract Sum or to change the Contract Time. All Change Orders shall be final and binding on the Owner and the Contractor.

§ 7.2 Change Orders

§ 7.2.1 A Change Order is a written instrument prepared by the Owner based on information provided by the Contractor and signed by the Owner and Contractor stating their agreement upon all of the following:

- .1 The change in the Work;
- .2 The amount of the adjustment, if any, in the Contract Sum; and
- .3 The extent of the adjustment, if any, in the Contract Time.

§ 7.2.2 Agreement on any Change Order shall constitute a final settlement of all matters relating to the change in the Work that is the subject of the Change Order, including, but not limited to, all direct and indirect costs associated with such change and any and all adjustments to the Contract Sum and the Contract Time.

§ 7.3 Construction Change Directives

§ 7.3.1 A Construction Change Directive is a written order prepared by the Owner and signed by the Owner, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

§ 7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.

§ 7.3.3 If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

- .1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- .2 Unit prices stated in the Contract Documents or subsequently agreed upon;
- .3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
- .4 As provided in Section 7.3.4.

§ 7.3.4 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Owner shall determine the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable

amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Owner may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.4 shall be limited to the following:

- .1 Costs of labor, including applicable payroll taxes, fringe benefits required by agreement or custom, workers' compensation insurance, and other employee costs approved by the Owner;
- .2 Costs of materials, supplies, and equipment, including cost of transportation, whether incorporated or consumed;
- .3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;
- .4 Costs of premiums for all bonds and insurance, permit fees, and sales, use, or similar taxes, directly related to the change; and
- .5 Costs of supervision and field office personnel directly attributable to the change.

§ 7.3.5 If the Contractor disagrees with the adjustment in the Contract Time, the Contractor may make a Claim in accordance with applicable provisions of Article 15.

§ 7.3.6 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Owner of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

§ 7.3.7 A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

§ 7.3.8 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Owner. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

§ 7.3.9 Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Owner's determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a Claim in accordance with Article 15.

§ 7.3.10 When the Owner and Contractor agree to adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and shall be documented by preparation and execution of an appropriate Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

§ 7.4 Minor Changes in the Work

The Owner may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time, and if the Owner does not object to the change in advance of the issuance of the order. The Owner's order for minor changes shall be in writing. If the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Owner and shall not proceed to implement the change in the Work. If the Contractor performs the Work set forth in the Owner's order for a minor change without prior notice to the Owner that such change will affect the Contract Sum or Contract Time, the Contractor waives any adjustment to the Contract Sum or extension of the Contract Time.

ARTICLE 8 TIME

§ 8.1 Definitions

§ 8.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

§ 8.1.2 The date of commencement of the Work is the date established in the Agreement.

§ 8.1.3 The date of Substantial Completion is the date certified by the Owner in accordance with Section 9.8.

§ 8.1.4 The term “day” as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

§ 8.2 Progress and Completion

§ 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the Contractor has accounted for and anticipated foreseeable delays, including, but not limited to, delays due to weather, and confirms that the Contract Time is a reasonable period for performing the Work.

§ 8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, commence the Work prior to the effective date of insurance required to be furnished by the Contractor and Owner. Unless the date of commencement is established by the Contract Documents or a notice to proceed given by the Owner, the Contractor shall notify the Owner in writing not less than five days or other agreed period before commencing the Work to permit the timely filing of mortgages, mechanic’s liens and other security interests.

§ 8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

§ 8.3 Delays and Extensions of Time

§ 8.3.1 Except as set forth below, the occurrence of events that delay the Work shall not excuse the Contractor from its obligations to achieve completion of the Work within the Contract Time. The Contract Time may be extended by Change Order for each day the Contractor is delayed in the commencement or progress of the Work provided that the Contractor demonstrates that the following conditions have been met:

- .1 at the time that the event causing the delay commences, the Contractor is in compliance with the Contract Documents and has provided the Owner with the most recent update to the Schedule;
- .2 performance of the Work is not, was not, or would not have been delayed by any other cause for which the Contractor is not entitled to an extension in the Contract Time under the Contract Documents;
- .3 the delay is not caused, or could not reasonably have been anticipated, by the Contractor;
- .4 the delay could not be limited or avoided by the Contractor’s timely notice to the Owner of the delay or reasonable likelihood that the delay would occur;
- .5 the delay is of a duration of more than one day;
- .6 the delay will prevent the Contractor from achieving substantial completion within the Contract Time; and
- .7 the delay is caused by: (i) labor disputes, fire, acts of the public enemy, unavoidable casualties or other similar causes beyond the Contractor’s control; (ii) unknown physical site conditions which could not have been ascertainable from an inspection of the site, from information available from the local municipality and other public bodies or from the Contract Documents; (iii) errors or omissions in the Plans and Specifications; (iv) the Owner’s decision to suspend the Work unless such decision is the result of a breach by the Contractor of its obligations under the Contract Documents; (v) the failure of the Owner to timely perform any Contract obligation unless such failure is the result of a breach by the Contractor of its obligations under the Contract Documents; or (vi) the Owner’s decision to materially change the scope of the Work unless such decision is the result of a breach by the Contractor of its obligations under the Contract Documents.

§ 8.3.2 Claims relating to time shall be made in accordance with applicable provisions of Article 7.

§ 8.3.3 Notwithstanding anything to the contrary in the Contract Documents, an extension in the Contract Time, to the extent permitted under Subparagraph 8.3.1 shall be the sole remedy of the Contractor for any (1) delay in the commencement, prosecution, or completion of the Work, (2) hindrance of obstruction in the performance of the Work, (3) loss of productivity, or (4) other similar claims (collectively referred to in this Subparagraph 8.3.3 as

"Delays") whether or not such Delays are foreseeable. The Contractor shall not be entitled to any compensation or recovery of any damages in connection with any Delay, including, without limitation, consequential damages, lost opportunity costs, impact damages, or other similar remuneration. The Owner's exercise of any of its right or remedies under the Contract Documents (including, without limitation, ordering changes in the Work, or directing suspension, rescheduling, or correction of the Work), regardless of the extent or frequency of the Owner's exercise of such rights or remedies, shall not be construed as active interference with the Contractor's performance of the Work.

ARTICLE 9 PAYMENTS AND COMPLETION

§ 9.1 Contract Sum

§ 9.1.1 The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

§ 9.1.2 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed in a proposed Change Order so that application of such unit prices to the actual quantities causes substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

§ 9.2 Schedule of Values

The schedule of values allocating the entire Contract Sum to the various portions of the Work is attached to the Agreement as an Exhibit. This schedule, unless objected to by the Owner, shall be used as a basis for reviewing the Contractor's Applications for Payment. Any changes to the schedule of values shall be submitted to the Owner and supported by such data to substantiate its accuracy as the Owner may require, and unless objected to by the Owner, shall be used as a basis for reviewing the Contractor's subsequent Applications for Payment. The schedule of values, and any amendment thereto approved in writing by the Owner pursuant to a Change Order, shall indicate which work will be completed by Subcontractors and which work will be completed by the Contractor's own forces. General Conditions, overhead and profit shall be called out as separate items.

§ 9.3 Applications for Payment

§ 9.3.1 At least ten days before the date established for each progress payment, unless otherwise required by the Contract Documents, the Contractor shall submit to the Owner an itemized Application for Payment prepared in accordance with the schedule of values, if required under Section 9.2, for completed portions of the Work. The application shall be notarized, if required, and supported by all data substantiating the Contractor's right to payment that the Owner requires, such as copies of requisitions, and releases and waivers of liens from Subcontractors and suppliers, and shall reflect retainage if provided for in the Contract Documents.

§ 9.3.1.1 As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives, or approved by the Owner, but not yet included in Change Orders.

§ 9.3.1.2 Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or supplier, unless such Work has been performed by the Contractor, or by others whom the Contractor intends to pay.

§ 9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner and the Owner's lender(s), as applicable, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage, and transportation to the site, for such materials and equipment stored off the site.

§ 9.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims,

security interests, or encumbrances, in favor of the Contractor, Subcontractors, suppliers, or other persons or entities that provided labor, materials, and equipment relating to the Work.

§ 9.3.4 Lien Waivers and Releases. With each Application for Payment, the Contractor shall furnish the Owner with waivers and releases from all Subcontractors and material persons and/or the subcontractors thereof, in such form as is acceptable to the Owner. The waiver and release forms to be submitted with each Application for Payment shall be consistent with California law (current version of California Civil Code Sections 8132-8138) and shall include the following:

- (a) completed conditional waiver and release forms for all Subcontractors (and their lower tier subcontractor, if any) for whose work in the preceding month payment is sought in the Application for Payment; and
- (b) completed unconditional waiver and release forms for all Subcontractors and all of their lower tier subcontractor and material persons for whose work and/or materials payment was made by the Owner in response to the Contractor's immediately preceding Application for Payment.

Each waiver and release form shall cover all Work, labor and materials, including, but not limited to equipment and fixtures of all kinds, done, performed or furnished in connection with the portion of the Work included in the Application for Payment to which it pertains, and it shall be completed in all respects and shall be signed only by an authorized representative of the Subcontractor or material persons named therein.

In addition to producing such waivers, if requested by Owner, the Contractor shall obtain, and maintain, a bond, in a form and from such surety as is acceptable to the Owner, sufficient to satisfy and/or release all potential claims, including attorneys' fees and other costs, related to all claims and/or lien rights of entities who will not provide such waivers. If the Contractor fails to provide such waivers or bond, the Owner may elect to either (1) withhold from any Progress Payment or any payment due an amount up to one hundred and fifty percent (150%) of the amount necessary to satisfy any anticipated claims by subcontractors, material suppliers and lower tier subcontractors and material suppliers, including anticipated costs and fees, or (2) release the Progress Payment or other payment due. Failure of the Owner to withhold any or part of any payment pursuant to this Section shall not be a waiver of any right of the Owner under the Contract. Withholding of any payment or part of any payment by the Owner pursuant to this Section shall not be a breach of the Contract.

§ 9.3.5 Contractor's Obligation to Maintain Lien-Free Title. If any claim of mechanic's lien or stop notice is filed or made against the real property of the Work, the Contractor shall immediately pay and fully discharge the mechanic's lien or stop notice claim, or, in the alternative, may deliver to the Owner a release of lien or stop notice by surety bond in a legally sufficient form and amount to discharge the mechanic's lien or stop notice. The Contractor shall provide whatever documentation, deposits or surety is reasonably required by the title insurance company providing title insurance on the Work in order to obtain lien-free endorsements prior to the Owner's payment of any payment, including any Progress Payment. If the Contractor fails to immediately provide the documentation, deposits, records of payment or surety bonds required by this Section, the Owner may (1) obtain any deposits or surety, or (2) make payments to claimants against the Work, the Contractor, the Owner or the Owner's affiliates in good faith, as reasonably required to release the mechanic's lien or stop notice claim. The Owner may withhold the cost of obtaining such deposits or surety or of making such payments from any payment that would otherwise be due to the Contractor. Failure of the Owner to withhold any or part of any payment pursuant to this Section shall not be a waiver of any right of the Owner under the Contract. Withholding of any payment or part of any payment by the Owner pursuant to this Section shall not be a breach of the Contract.

§ 9.3.6 Withholding of Payments Due to Claims of Subcontractors. If any Subcontractor, material supplier to the Work, or lower tier subcontractor or material supplier files or serves any claim or lien, stop notice, common count or other demand for payment against the Owner, or the real property of the Work, the Owner may either (1) withhold from any Progress Payment or other payment an amount up to one hundred and fifty percent (150%) of the amount necessary to satisfy the claim, stop notice, common count or other demand for payment, including all anticipated costs and fees related to the defense of such claim, including but not limited to attorneys' fees, or (2) release the Progress Payment or other payment. Failure of the Owner to withhold any or part of a Progress Payment pursuant to this Section shall not be a waiver of any right of the Owner under the Contract. Withholding of any payment by the Owner pursuant to this Section shall not be a breach of the Contract.

§ 9.3.7 An Application for Payment may require the approval of the Lenders.

§ 9.4 Certificates for Payment

§ 9.4.1 INTENTIONALLY DELETED.

§ 9.4.2 INTENTIONALLY DELETED.

§ 9.5 Decisions to Withhold Payment

§ 9.5.1 The Owner may withhold payment of an Application for Payment in whole or in part, to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 3.3.2, because of

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims, unless security acceptable to the Owner is provided by the Contractor;
- .3 failure of the Contractor to make payments properly to Subcontractors or suppliers for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a Separate Contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;
- .7 failure to provide conditional or unconditional releases from any Subcontractor or supplier as required by the Contract Documents; or
- .8 failure to carry out the Work in accordance with the Contract Documents.

§ 9.5.2 If the Contractor disputes any determination by the Architect with respect to any Certificate for Payment, the Contractor shall nevertheless expeditiously continue to prosecute the Work.

§ 9.5.3 When the reasons for withholding payment are removed, payment will be made for amounts previously withheld.

§ 9.5.4 The Owner may, at its sole option, issue direct checks to any Subcontractor or supplier or joint checks to the Contractor and to any Subcontractor or supplier. If the Owner makes payments by joint check, the Owner shall notify the Contractor and the Contractor shall reflect such payment on its next Application for Payment. The Contractor and the Subcontractor shall be responsible for the allocation and disbursement of funds included as part of any such joint payment. In no event shall any joint payment be construed to create any (i) contract between the Owner and the subcontractor, (ii) obligations from the Owner to such subcontractor, or (iii) rights in such subcontractor against the Owner.

§ 9.5.5 The Owner shall not be deemed to be in breach of this Contract by reason of the withholding of any payment from the Contractor in whole or in part when the Owner has determined in good faith that such payment must be withheld to protect the Owner from loss because of the items listed in Subparagraph 9.5.1.

§ 9.6 Progress Payments

§ 9.6.1 After the Owner has approved an Application for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents.

§ 9.6.2 The Contractor shall pay each Subcontractor, no later than seven days after receipt of payment from the Owner, the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

§ 9.6.3 INTENTIONALLY DELETED.

§ 9.6.4 The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors and suppliers to ascertain whether they have been properly paid. Neither the Owner shall have an obligation to pay, or to see to the payment of money to, a Subcontractor or supplier, except as may otherwise be required by law.

§ 9.6.5 The Contractor's payments to suppliers shall be treated in a manner similar to that provided in Sections 9.6.2 and 9.6.4.

§ 9.6.6 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

§ 9.6.7 INTENTIONALLY DELETED.

§ 9.6.8 The Contractor shall defend the Owner (and the Owner's partners or members, as applicable), the Owner's affiliates and employees, and successors in any and all actions brought by Subcontractors or material suppliers against the Owner to foreclose a mechanic's lien on the real property of the Work, to enforce any stop notice against the Work or for common counts or any other claim arising out of the Work, except if such actions or claims are caused solely by the Owner's failure to pay the Contractor in breach of its obligation under the terms of this Contract. The Contractor shall indemnify the Owner and its affiliates and employees, and successors with respect to such actions or claims, including, but not limited to, reasonable attorneys' fees, and for amounts paid by the Owner in good faith settlement of mechanic's lien foreclosure, stop notice and common counts actions against the real property of the Work.

§ 9.7 Failure of Payment

§ 9.7.1 If the Owner does not approve an Application for Payment, through no fault of the Contractor, within seven days after receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within seven days after the date established in the Contract Documents, then the Contractor may, upon seven additional days' notice to the Owner, stop the Work until payment of the amount owing has been received.

§ 9.7.2 If the Owner is entitled to reimbursement or payment from the Contractor under or pursuant to the Contract Documents, such payment shall be made promptly upon demand by the Owner. Notwithstanding anything contained in the Contract Documents to the contrary, if the Contractor fails to promptly make any payment due the Owner, or if the Owner incurs reasonable costs and expenses related to cure of any default of the Contractor or to correct defective Work, the Owner shall have an absolute right to offset such amount against the Contract Sum and may, at the Owner's sole discretion, elect either to (1) deduct an amount equal to the amount to which the Owner is entitled from any payment thereafter due the Contractor from the Owner, or (2) issue a written notice to the Contractor reducing the Contract Sum by an amount equal to that which the Owner is entitled.

§ 9.8 Substantial Completion

§ 9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use. Provided, however, that as a condition precedent to Substantial Completion, the Owner has received a certificate of occupancy (or equivalent permit sign-off) and any other permits, approvals, licenses and other documents from any governmental authority having jurisdiction thereof necessary for the beneficial occupancy of the Project, which are the responsibility of the Contractor. The Contractor shall perform the Work such that the Owner may obtain a final certificate of occupancy within the time required by any temporary certificate of occupancy.

§ 9.8.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall notify the Owner of such determination. Promptly thereafter, the Owner shall prepare a comprehensive list of items, to be completed or corrected by the Contractor prior to final payment (the "Punchlist"). Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

§ 9.8.3 No later than ten days following the Contractor's receipt of the Punchlist, the Contractor shall complete and/or correct the items designated therein, and submit a request to the Owner for an additional inspection to determine Substantial Completion. No later than ten days following the Owner's receipt of the Contractor's request, the Owner or the Owner will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Owner's inspection discloses any item, whether or not included on the Punchlist, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Owner. In such case, the Contractor shall then submit a request for another inspection by the Owner to determine Substantial Completion.

§ 9.8.4 When the Work or designated portion thereof is substantially complete, the Owner will prepare a Certificate of Substantial Completion that, when signed by the Owner, shall establish the date of Substantial Completion; establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance; and fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§ 9.8.5 The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in the Certificate.

§ 9.8.6 If the Certificate of Substantial Completion is conditioned upon, or contains any list of, unfinished items which must be completed or corrected whether or not such items appeared on the initial Punchlist, or if any time prior to Final Payment, Owner discovers additional items which must be completed or corrected, the Owner may withhold from any payment otherwise due under this Contract, including any remaining Progress Payment, Final Payment or any retained percentage, an additional amount not more than 150% of the cost of completing those items.

If a percentage of payment is withheld, the estimated completion costs shall be determined by the Owner in good faith. If the Owner withholds any payment or percentage of payment pursuant to this Section, such payment or percentage of payment shall not be released to the Contractor until each item has been corrected and inspected by the Owner. Withholding of any amount by the Owner pursuant to this Section shall not be a breach of this Contract. Failure of the Owner to withhold any amount pursuant to this Section shall not prejudice any legal rights of the Owner or constitute a waiver of any kind.

§ 9.9 Partial Occupancy or Use

§ 9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor shall prepare and submit a list to the Owner as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor.

§ 9.9.2 Immediately prior to such partial occupancy or use, the Owner and the Contractor shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

§ 9.9.3 Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

§ 9.10 Final Completion and Final Payment

§ 9.10.1 Upon receipt of the Contractor's notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Owner will promptly make such inspection. When the Owner finds the Work acceptable under the Contract Documents and the Contract fully performed, including, but not limited to any work set forth on the Punchlist, the Owner will promptly approve the final Application for Payment and make Final Payment. Until the time of Final Payment, the Owner shall remain the legal and beneficial owner of all retention held.

§ 9.10.2 In accordance with the Agreement, neither final payment nor any remaining retained percentage shall become due until Owner has accepted the Work and, if the Owner files a Notice of Completion, 35 days have elapsed from such filing, or if the Owner does not file a Notice of Completion, 45 days have elapsed from completion of the Work. If the Owner files a Notice of Completion such notice shall be filed in the office of the appropriate County Recorder, and shall be filed within the time frame provided for in California Civil Code Section 8182. The Owner shall accept the Work only after the following have occurred.

- .1 The Contractor has submitted to the Owner: (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment, (5) three complete sets of "as built" drawings and other documents set forth in Section 3.11, (6) copies of complete installation, operation and maintenance manuals, including all manufacturers' literature, of equipment and materials used in the Project; (7) copies of all assignments of warranties of the Contractor and all Subcontractors and material persons; (8) the names, addresses and telephone numbers of all Subcontractors, and principal vendors on the Project; (9) all inspection reports, permits and if applicable, temporary and final certificates of occupancy and licenses necessary for the occupancy of the Project; and (10) a final statement of the cost of the Work allocated in accordance with the Schedule of Values, audited or certified by a certified public accountant, and in a form which has been approved by the Owner for the Work.
- .2 All persons, firms and corporations, including all laborers, material persons, suppliers and Subcontractors who have furnished equipment, supplied materials or performed work for or in connection with the Work, including but not limited to those persons who could file a claim of lien, have been paid or will be paid in full out of the remaining retained percentage; and those persons, firms and corporations have submitted their final statements with a final release and waiver of all rights to mechanic's lien, stop notice or recourse against surety on the bond (which may be subject to final payment if those persons have not been paid in full). The Contractor shall make these waivers available to the Owner for inspection by the Owner. In the event a dispute has arisen between the Contractor and one of the parties listed above in this Section which prevents the Contractor from obtaining the waiver of rights required by this Section from that party, the Contractor may satisfy the requirements of this Section by (a) supplying a payment bond issued by a surety licensed to do business in the State of California and acceptable to the Owner to remove the effect of any lien, stop notice, or related claim against the Work or the real property upon which the Work is built, and (b) agreeing to defend and indemnify the Owner against any actions filed by such person who has supplied materials to or performed work for or in connection with the Work. The Contractor shall also have submitted an affidavit to the Owner that all waivers described in this Article have been obtained from all parties described in this Article or that the claims of such parties have been satisfied by the obtaining of a bond.
- .3 All labor has been performed and materials supplied and incorporated into the Work in a good work person like manner consistent with the Contract Documents.
- .4 The Work, premises and surrounding area have been cleaned up consistent with the Contract Documents.
- .5 All portions of the Work requiring inspection by any governmental authority have been inspected and approved by such authority and all requisite certificates of occupancy, approvals, licenses and permits have been issued.
- .6 The Contractor has submitted a conditional lien waiver followed promptly by an unconditional lien waiver upon the Contractor's receipt of payment, and the Owner has assurances from the title company that the Site and the Work are free from all liens related to the Work.
- .7 The Lenders to the Work have authorized release of the Final Payment, if applicable.

§ 9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, the Owner shall, upon application by the Contractor, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed, corrected, and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of the

surety and the Owner's Lenders, as applicable, to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Owner prior to payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

§ 9.10.4 The making of final payment shall not constitute a waiver of any Claims by the Owner.

§ 9.10.5 Acceptance of final payment by the Contractor, a Subcontractor, or a supplier, shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

§ 10.1 Safety Precautions and Programs

The Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract, and for providing safe conditions for the performance of the Work. Other than the portions of the site under the Owner's control and that are not subject to any portion of the Work, the Owner shall have no liability or responsibility for the physical condition or safety of the site or any improvements located on the site until acceptance of the Work by the Owner.

§ 10.2 Safety of Persons and Property

§ 10.2.1 The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury, or loss to

- .1 employees on the Work and other persons who may be affected thereby;
- .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Contractor, a Subcontractor, or a Sub-subcontractor; and
- .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

§ 10.2.2 The Contractor shall comply with, and give notices required by Applicable Requirements and lawful orders of public authorities, bearing on safety of persons or property or their protection from damage, injury, or loss.

§ 10.2.3 The Contractor shall implement, erect, and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards; promulgating safety regulations; and notifying the owners and users of adjacent sites and utilities of the safeguards. The Contractor shall also be responsible for, at the Contractor's sole cost and expense, all measures necessary to protect any property adjacent to the Project and improvements thereon. Any damage to such property or improvements shall be promptly repaired by the Contractor.

§ 10.2.4 When use or storage of explosives or other hazardous materials or equipment, or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel. The Contractor shall also give the Owner reasonable advance notice of the use or storage of explosives or other hazardous materials.

§ 10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2 and 10.2.1.3 except to the extent damage or loss is attributable to acts or omissions of the Owner or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18.

§ 10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner.

§ 10.2.7 The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition. When all or a portion of the Work is suspended for any reason, the Contractor shall securely fasten down all coverings and protect the Work, as necessary, from injury by any cause.

§ 10.2.8 Injury or Damage to Person or Property

If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, notice of the injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter, including, but not limited to statements of witness. In addition, if death, serious personal injuries, or material damage (including, but not limited to, any material damage within an occupied residential unit, or material damage or destruction of any personal property of Owner's tenants) occur, then the incident shall be reported immediately by telephone or messenger to the Owner.

§ 10.3 Hazardous Materials and Substances

§ 10.3.1 The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials or substances (as defined in the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended), including but not limited to asbestos or polychlorinated biphenyl (PCB). If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from such a material or substance, encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and notify the Owner in writing of the condition. The Contractor shall continue all other Work that is not affected by such condition.

§ 10.3.2 Upon receipt of the Contractor's notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of the material or substance or who are to perform the task of removal or safe containment of the material or substance. The Contractor will promptly reply to the Owner in writing stating whether or not either has reasonable objection to the persons or entities proposed by the Owner. If the Contractor has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor has no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable additional costs of shutdown, delay, and start-up. The term "rendered harmless" shall be interpreted to mean that levels of asbestos and polychlorinated biphenyls are less than any applicable exposure standards set forth in Occupational Safety and Health Administration regulations or that any excess of such standards has been encapsulated or other such action has been taken such that the levels are no longer harmful.

§ 10.3.3 INTENTIONALLY DELETED.

§ 10.3.4 Contractor shall not permit any hazardous material or substance to be brought to or used on the Project site except to the extent such hazardous material or substance is necessary to and customarily used in the construction or residential projects like the Project. Any hazardous material or substance brought or used on the Project site by the Contractor, any Subcontractor, any material supplier, or any entity for whom any of them is responsible, shall be used, stored and disposed of in compliance with all applicable laws related to such hazardous materials or substances. Any damage to the property referred to in Sections 10.2.1.2 and 10.2.1.3 resulting from the improper storage or use of hazardous materials or substances shall be remedied by the Contractor at its sole cost and expense in accordance with applicable laws. The Contractor shall provide the Owner notice of any release of hazardous materials or substance at the Project site. In no event, however, shall the Owner have any responsibility for any substance or material that is brought to the Project site by the Contractor, any Subcontractor, any material supplier, or any entity for whom any of them is responsible. The Contractor agrees not to import any fill that are hazardous, toxic or made up of any items that are hazardous or toxic.

§ 10.3.5 The Contractor shall indemnify the Owner for the cost and expense the Owner incurs (1) for remediation of hazardous materials or substances the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.

§ 10.3.6 If, without negligence or willful misconduct on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall reimburse the Contractor for all cost and expense thereby incurred.

§ 10.3.7 If Contractor's scope of work includes the off-haul of contaminated soil, hazardous materials (including asbestos) remediation, or mold remediation, Contractor shall comply with the requirements of all applicable federal, state and local laws, and any environmental reports and any mold remediation plan provided to Contractor by Owner, in the removal, transportation and disposal of the materials. Contractor shall obtain all necessary permits for any contaminated soil or hazardous materials or mold removal work. The Contractor shall indemnify, defend, and hold harmless the Owner, and Owner's officers, directors, employees, agents, affiliates and Lenders to the Project, from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from the performance of such work, including, but not limited to, any claim made by Owner's tenants in connection with such work. The Contractor shall ensure that any Subcontractor performing any removal or remediation work possesses the necessary expertise, insurance and licenses. All contaminated and hazardous material shall be transported to an appropriately permitted facility. The Contractor shall and shall cause any Subcontractors performing the removal and remediation work to take all necessary safety precautions during the performance of the work including but not limited to necessary protection of surrounding areas to prevent the spread of contamination, the protection of workers performing the removal and remediation work, and the protection of the health and safety of Owner's tenants.

§ 10.4 Emergencies

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

ARTICLE 11 INSURANCE AND BONDS

§ 11.1 Contractor's Insurance and Bonds

§ 11.1.1 The Contractor shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Contractor shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located.

§ 11.1.2 The Contractor shall provide surety bonds of the types, for such penal sums, and subject to such terms and conditions as required by AIA Document Exhibit A for Insurance Requirements.

§ 11.1.3 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

§ 11.1.4 **Notice of Cancellation or Expiration of Contractor's Required Insurance.** Within three (3) business days of the date the Contractor becomes aware of an impending or actual cancellation or expiration of any insurance required by the Contract Documents, the Contractor shall provide notice to the Owner of such impending or actual cancellation or expiration. Upon receipt of notice from the Contractor, the Owner shall, unless the lapse in coverage arises from an act or omission of the Owner, have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by the Contractor. The furnishing of notice by the Contractor shall not relieve the Contractor of any contractual obligation to provide any required coverage.

§ 11.2 Owner's Insurance

§ 11.2.1 The Owner shall purchase and maintain insurance of the types and limits of liability, containing the endorsements as the Owner deems necessary.

§ 11.2.2 **Failure to Purchase Required Property Insurance.** If the Owner does not intend to purchase property insurance the Owner shall so inform the Contractor in writing prior to commencement of the Work. The Contractor may then effect insurance that will protect the interests of the Contractor, Subcontractors and Sub-subcontractors in the Work, and by appropriate Change Order the cost thereof shall be charged to the Owner. If the cause of any loss payment under such insurance is the fault of the Contractor, then the Contractor shall pay any deductibles.

§ 11.2.3 Notice of Cancellation or Expiration of Owner's Required Property Insurance. Within three (3) business days of the date the Owner becomes aware of an impending or actual cancellation or expiration of any property insurance required by the Contract Documents, the Owner shall provide notice to the Contractor of such impending or actual cancellation or expiration.

§ 11.3 Waivers of Subrogation

§ 11.3.1 If permitted by the parties' insurance companies without penalty, the Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents, and employees, each of the other; (2) the Owner's consultants; and (3) Separate Contractors, if any, and any of their subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire, or other causes of loss, to the extent those losses result in the actual recovery of insurance proceeds under any property insurance required by the Agreement or other property insurance applicable to the Project, except such rights as they have to proceeds of such insurance. The Owner or Contractor, as appropriate, shall require similar written waivers in favor of the individuals and entities identified above from the Separate Contractors, subcontractors, and sub-subcontractors. The policies of insurance purchased and maintained by each person or entity agreeing to waive claims pursuant to this section 11.3.1 shall not prohibit this waiver of subrogation. This waiver of subrogation shall be effective as to a person or entity (1) even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, (2) even though that person or entity did not pay the insurance premium directly or indirectly, or (3) whether or not the person or entity had an insurable interest in the damaged property.

§ 11.3.2 INTENTIONALLY DELETED.

§ 11.4 Loss of Use, Business Interruption, and Delay in Completion Insurance

The Owner, at the Owner's option, may purchase and maintain insurance that will protect the Owner against loss of use of the Owner's property, or the inability to conduct normal operations, due to fire or other causes of loss. The

§ 11.5 Adjustment and Settlement of Insured Loss

§ 11.5.1 A loss insured under the property insurance required by the Agreement shall be adjusted by the Owner, in good faith, and made payable to the Owner for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.5.2.

§ 11.5.2 Prior to settlement of an insured loss, the Owner shall notify the Contractor of the terms of the proposed settlement as well as the proposed allocation of the insurance proceeds. The Contractor shall have 14 days from receipt of notice to object in writing to the proposed settlement or allocation of the proceeds. If the Contractor does not object in writing, the Owner shall settle the loss and the Contractor shall be bound by the settlement and allocation.

ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

§ 12.1 Uncovering of Work

§ 12.1.1 If a portion of the Work is covered contrary to the Owner's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by the Owner, be uncovered for the Owner's examination and be replaced at the Contractor's expense without change in the Contract Time or Contract Sum.

§ 12.1.2 If a portion of the Work has been covered that the Owner has not specifically requested to examine prior to its being covered, the Owner may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an equitable adjustment to the Contract Sum and Contract Time as may be appropriate. If such Work is not in accordance with the Contract Documents, the costs of uncovering the Work, and the cost of correction, shall be at the Contractor's expense.

§ 12.2 Correction of Work

§ 12.2.1 Before Substantial Completion

The Contractor shall promptly correct Work rejected by the Owner or failing to conform to the requirements of the Contract Documents, whether discovered before Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Owner's consultant's services and expenses made necessary thereby, shall be at the Contractor's expense.

§ 12.2.2 After Substantial Completion

§ 12.2.2.1 In addition to and not in limitation of the Contractor's obligations under Section 3.5, or any other obligation under the Contract Documents, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so, unless the Owner has previously given the Contractor a written acceptance of such condition. This obligation shall also apply to any repair or replacement part of the Work that is damaged by the defective Work. If the Contractor fails to correct nonconforming Work within 7 days after receipt of notice from the Owner, or fails to diligently prosecute such correction to completion, the Owner may correct it in accordance with Section 2.5.

§ 12.2.2.2 The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

§ 12.2.2.3 Upon completion of any Work under or pursuant to this paragraph 12.2, the one (1) year correction period in connection with the Work requiring correction shall be renewed and recommence. The obligations under paragraph 12.2 shall cover any repairs and replacement to any part of the Work or other property that is damaged by the defective Work.

§ 12.2.3 The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

§ 12.2.4 In addition, if the Contractor, a Subcontractor, or any for whom either is responsible uses or damages any portion of the Work including but not limited to if caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents, including, without limitation, mechanical, electrical, plumbing, and other building systems, machinery, equipment, or other mechanical device, the Contractor shall cause such item to be restored to "like new" condition at no expense to the Owner. In addition, the Contractor shall promptly remedy damage and loss arising in conjunction with the Project caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or any directly or indirectly employed by any of them, or anyone for whose acts they may be liable and for which the Contractor is responsible.

§ 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Enforcement of the Contractor's repair obligation shall be in addition to and not in limitation of any other rights or remedies available to the Owner. Establishment of the one-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

§ 12.3 Acceptance of Nonconforming Work

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so in writing instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

ARTICLE 13 MISCELLANEOUS PROVISIONS**§ 13.1 Governing Law**

The Contract shall be governed by the laws of the State of California.

§ 13.2 Successors and Assigns

§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. The Contractor shall not assign the Agreement in whole, or in part, without the prior written consent of the Owner. Should the Contractor make an assignment without such consent, the Contractor shall nevertheless remain legally responsible

for all obligations under the Agreement. Provided, however, that should Contractor subcontract any portion of the Work, Contractor shall remain legally responsible for all obligations under the Agreement.

§ 13.2.2 The Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate the assignment.

§ 13.3 Rights and Remedies

§ 13.3.1 Except as expressly provided in the Contract Documents, duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

§ 13.3.2 No waiver shall be implied from any delay or failure by the Owner to take action on any breach of the Contractor or to pursue any remedy allowed under the Contract or applicable law. Any extension of time granted to Contractor to perform any obligation under the Contract shall not operate as a waiver or release from any of its obligations under the Contract. Consent by the Owner to any act or omission by the Contractor shall not be construed to be a consent to any other or subsequent act or omission or to waive the requirement for the Owner's written consent to future waivers.

§13.3.3 In any action or proceeding to enforce, arising out of, alleging breach of, or for declaratory relief with regard to the Contract, the prevailing party shall be entitled to recover its reasonable attorneys' fees and other costs associated with the action or proceeding.

§ 13.4 Tests and Inspections

§ 13.4.1 Tests, inspections, and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules, and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. The Owner shall bear costs of tests, inspections, or approvals that do not become requirements until after bids are received or negotiations concluded. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require the property owner to do so.

§ 13.4.2 If the Owner or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection, or approval not included under Section 13.4.1, the Owner will instruct the Contractor to make arrangements for such additional testing, inspection, or approval, by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Owner of when and where tests and inspections are to be made so that the Owner may be present for such procedures. Such costs, except as provided in Section 13.4.3, shall be at the Owner's expense.

§ 13.4.3 If procedures for testing, inspection, or approval under Sections 13.4.1 and 13.4.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Owner's consultant's services and expenses, shall be at the Contractor's expense. The Contractor also agrees that the cost of testing services required for the convenience of the Contractor in his scheduling and performance of the Work, and the cost of testing services related to remedial operations performed to correct deficiencies in the Work, shall be borne by the Contractor.

§ 13.4.4 Required certificates of testing, inspection, or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Owner.

§ 13.4.5 INTENTIONALLY DELETED.

§ 13.4.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

§ 13.5 Interest

Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at the rate the parties agree upon in writing.

ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT**§ 14.1 Termination by the Contractor**

§ 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, for any of the following reasons:

- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
- .2 An act of government, such as a declaration of national emergency, that requires all Work to be stopped; or
- .3 Because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents.

§ 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, repeated suspensions, delays, or interruptions of the entire Work by the Owner as described in Section 14.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

§ 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days' notice to the Owner, terminate the Contract and recover from the Owner payment for Work executed in accordance with the Contract Documents, as well as overhead and profit on such Work due as of the termination as such amounts are determined pursuant to the Agreement, and reasonable costs incurred by reason of such termination as documented by the Contractor to the Owner. The Owner shall be credited for (i) payments previously made to the Contractor for the terminated portion of the Work, (ii) claims that the Owner has against the Contractor under the Contract, and (iii) the value of the materials, supplies, equipment, or other items that are to be disposed of by the Contractor that are part of the Contract Sum. Such payment shall be the sole and exclusive remedy to which Contractor is entitled for termination pursuant to Sections 14.1.1, 14.1.2.

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, or their agents or employees or any other persons or entities performing portions of the Work because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' notice to the Owner, terminate the Contract and recover from the Owner as provided in Section 14.1.3.

§ 14.2 Termination by the Owner for Cause

§ 14.2.1 The Owner may terminate the Contract if the Contractor

- .1 repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to Subcontractors or suppliers in accordance with the Contract Documents and respective agreements between the Contractor and the Subcontractors or suppliers;
- .3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 otherwise is in breach of a provision of the Contract Documents.

§ 14.2.2 When any of the reasons described in Section 14.2.1 exist, the Owner may, without prejudice to any other rights or remedies of the Owner available at law or in equity and after giving the Contractor and the Contractor's surety, if any, seven days' notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

- .1 Exclude the Contractor from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- .2 Accept assignment of subcontracts pursuant to Section 5.4; and
- .3 Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.

§ 14.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until all conditions set forth in Section 9.10 have been satisfied.

§ 14.2.4 If the costs of finishing the Work and all damages and costs related thereto exceed the unpaid balance of the Contract Sum, then the Contractor shall pay the difference to the Owner. This obligation for payment shall survive termination of the Contract.

§ 14.2.5 The parties acknowledge that if: (i) Contractor is adjudged as bankrupt, (ii) Contractor makes a general assignment for the benefit of creditors, (iii) a receiver is appointed for the benefit of Contractor's creditors, (iv) a receiver is appointed on account of Contractor's insolvency, or (v) the Contractor otherwise admits or acknowledges that Contractor is unable to pay its debts as they become due, then such event or occurrence could impair or frustrate Contractor's performance of this Agreement. Accordingly, it is agreed that upon such event or occurrence, Owner shall be entitled to request from Contractor, or its successor in interest, adequate assurance of future performance in accordance with the terms and conditions hereof, in a form reasonably determined by the Owner. Failure to comply with such request within ten (10) days after delivery of the request by Owner shall entitle Owner to terminate this Agreement and to the accompanying rights set forth in this Section. In all events until the Owner has received and accepted the Contractor's adequate assurance of performance and actual performance in accordance therewith, notwithstanding any provision hereof to the contrary, including, but not limited to Article 7, above, Owner shall be entitled to proceed with the Work with its own forces or with other contractors on a time and material or other appropriate basis (as determined in the sole discretion of the Owner), the cost of which will be deducted from any amounts owed to Contractor.

§ 14.2.6 If Owner terminates this Contract pursuant to this section and it shall be determined that the Owner's termination was wrongful or otherwise unjustified, then notwithstanding any other provisions of this Contract, such termination shall automatically be deemed to have been a termination for the Owner's convenience pursuant to Section 14.4 hereof, and Contractor's sole right, remedy and recourse shall be governed and determined by Section 14.4.

§ 14.3 Suspension by the Owner for Convenience

§ 14.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work, in whole or in part for such period of time as the Owner may determine.

§ 14.3.2 The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay, or interruption under Section 14.3.1. No adjustment shall be made to the extent

- .1 that performance is, was, or would have been, so suspended, delayed, or interrupted, by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of the Contract.

§ 14.4 Termination by the Owner for Convenience

§ 14.4.1 The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.

§ 14.4.2 Upon receipt of notice from the Owner of such termination for the Owner's convenience, the Contractor shall

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

§ 14.4.3 Upon such termination, the Contractor shall recover as its sole remedy payment for work properly performed in connection with the terminated portion of the Work prior to the effective date of termination and for items properly and timely fabricated off the project site, delivered and stored in accordance with the Owner's instructions. The Contractor hereby waives and forfeits all other claims for payment and damages, including, without limitation, anticipated profits. The Owner shall be credited for (i) payments previously made to the Contractor for the terminated portion of the Work, (ii) claims that the Owner has against the Contractor under the Contract, and (iii) the value of the materials, supplies, equipment, or other items that are to be disposed of by the Contractor that are part of the Contract Sum.

§ 14.5 Upon termination of this Contract for any reason, the Contractor shall

- .1 withdraw its employees, workmen, machinery and equipment from the Site in an orderly manner, as directed by the Owner;
- .2 furnish Owner with a complete accounting of the Cost of the Work incurred to the date of termination together with a final status report updating the progress of the Work up to the date of termination; and
- .3 deliver to Owner all of those items enumerated in Section 9.10.2, above, to the extent that said items are available, all Shop Drawings, Project Data and Samples available, and all other of Contractor's construction documents and records relating to the Work performed under this Contract.

ARTICLE 15 CLAIMS AND DISPUTES

§ 15.1 Claims

§ 15.1.1 Definition

A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. This Section 15.1.1 does not require the Owner to file a Claim in order to impose liquidated damages in accordance with the Contract Documents.

§ 15.1.2 Time Limits on Claims

INTENTIONALLY DELETED.

§ 15.1.3 Notice of Claims

§ 15.1.3.1 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered prior to expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party. Claims by either party under this Section 15.1.3.1 shall be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later. The claimant shall use its best efforts to furnish the other party, as expeditiously as possible, with written notice of any Claim, including, without limitation, those in connection with concealed or unknown conditions, once such claim is recognized, and shall cooperate with the party against whom the claim is made in any effort to mitigate the alleged or potential damages, delay, or other adverse consequences arising out of the condition that is cause of such a Claim.

§ 15.1.3.2 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party.

§ 15.1.4 Continuing Contract Performance

§ 15.1.4.1 Notwithstanding the making of any Claim or the existence of any dispute regarding any Claim, Contractor shall not cause any delay, cessation, or termination in or of Contractor's performance of the Work, but shall diligently proceed with performance of the Work in accordance with the Contract Documents

§ 15.1.4.2 INTENTIONALLY DELETED.

§ 15.1.5 Claims for Additional Cost

If the Contractor wishes to make a Claim for an increase in the Contract Sum, notice as provided herein shall be given before proceeding to execute the portion of the Work that is the subject of the Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4. All claims for additions to the Contract Sum shall be made in accordance with the Change Order procedure set forth in Article 7.

§ 15.1.6 Claims for Additional Time

§ 15.1.6.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided herein shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay, only one Claim is necessary. All claims for additions to the Contract Time shall be made in accordance with the Change Order procedure set forth in Article 7.

§ 15.1.6.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, including the

Contractor’s daily job logs, could not have been reasonably anticipated, and had an adverse effect on the critical path of the scheduled construction.

§ 15.1.7 Waiver of Claims for Consequential Damages

INTENTIONALLY DELETED.

§ 15.2 Initial Decision

§ 15.2.1 INTENTIONALLY DELETED.

§ 15.2.2 INTENTIONALLY DELETED.

§ 15.2.3 INTENTIONALLY DELETED.

§ 15.2.4 INTENTIONALLY DELETED.

§ 15.2.5 . INTENTIONALLY DELETED.

§ 15.2.6 INTENTIONALLY DELETED.

§ 15.2.6.1 INTENTIONALLY DELETED.

§ 15.2.7 INTENTIONALLY DELETED.

§ 15.2.8 INTENTIONALLY DELETED.

§ 15.3 Mediation

§ 15.3.1 The parties acknowledge that in certain circumstances non-binding mediation may be the most productive and efficient method of resolving a dispute. The parties hereby agree, without binding themselves to choose mediation, to consider in their respective sole discretion, the use of mediation prior to resolving any dispute in accordance with Section 15.4, Arbitration below.

§ 15.3.2 INTENTIONALLY DELETED.

§ 15.3.3 INTENTIONALLY DELETED.

§ 15.3.4 INTENTIONALLY DELETED.

§ 15.4 Arbitration

§ 15.4.1 The parties have selected arbitration as the method for binding dispute resolution in the Agreement, Subject to the limitations set forth in Section 15.4.2. Any Claim not resolved by the parties shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by JAMS pursuant to its construction arbitration rules and procedures (“JAMS Rules”) currently in effect.

§ 15.4.1.1 A demand for arbitration shall be made within a reasonable time after a Claim has arisen, but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the Claim would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the Claim.

§ 15.4.2 The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by the parties shall be specifically enforceable under applicable law in any court having jurisdiction thereof. This consent to arbitrate shall not apply (1) when a person or entity necessary or beneficial to the full resolution of the claim cannot be joined in or bound by the arbitration proceeding; or (2) if the amount due in the controversy exceeds fifty thousand dollars (\$50,000). Such claims not subject to arbitration shall be resolved by a court of competent jurisdiction.

§ 15.4.3 The arbitrator or arbitrators shall make an award in writing that is consistent with the terms of this Agreement and the laws of the State of California and that includes findings of fact and a reasoned decision. The

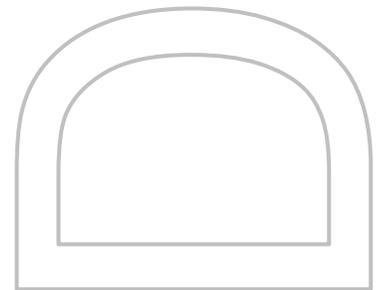
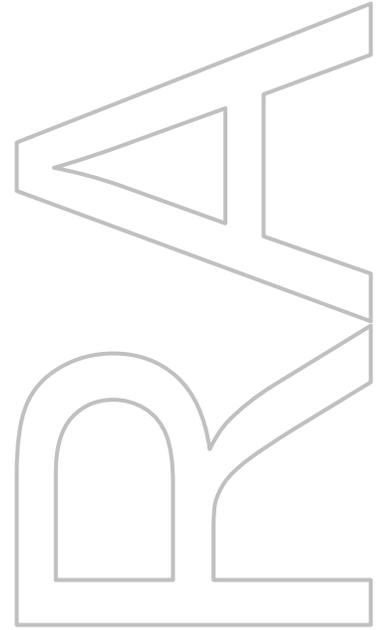
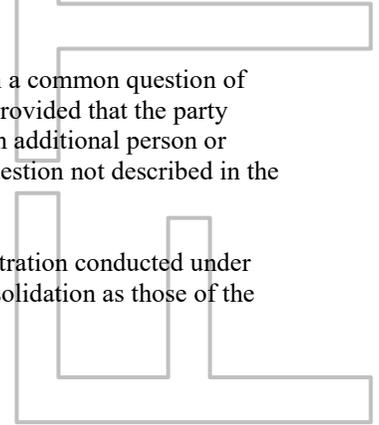
award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof. The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement, shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

§ 15.4.4 Consolidation or Joinder

§ 15.4.4.1 Either party may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation, (2) the arbitrations to be consolidated substantially involve common questions of law or fact, (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s), and (4) such consolidation is consistent with the limitations set forth in Section 15.4.2.

§ 15.4.4.2 Either party may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent.

§ 15.4.4.3 The Owner and Contractor grant to any person or entity made a party to an arbitration conducted under this Section 15.4, whether by joinder or consolidation, the same rights of joinder and consolidation as those of the Owner and Contractor under this Agreement.



Attachment H
Project Experience

