



City of Alameda, California

April 19, 2021

TO: All Prospective Bidders

**RENOVATION OF 2815 SAN DIEGO ROAD
ALAMEDA POINT
PROJECT NO. CDSIP2815SDR**

ADDENDUM NO. 1

Notice to Bidders

Notice of Addendum No. 1 has been electronically issued via e-mail to potential bidders that participated in the Mandatory Pre-Bid Meeting held on March 24, 2021. This Addendum adds front-end work scope and extends the Bid Due Date. This Bid Addendum will also be posted on the City of Alameda, Bid on City Contracts website:

<https://www.alamedaca.gov/BUSINESS/Bid-on-City-Contracts/Invitation-to-Bid-2815-San-Diego-Road-Alameda-Point-Renovation-Improvements>

The following Prospective Bidders attended the Mandatory Pre-Bid Meeting held on March 24, 2021:

Prospective Bidders	Representative	Address	City/State	Zip	Phone	Email
DC Construction	Donny Chu	1068 44 th Avenue	Oakland, CA	94601	(510) 536-1036	donny@dcconstructioninc.com
ESCON Builders	Reza Khorami	29516 Union City Blvd.	Union City, CA	94587	(510) 475-1486	reza@esconbuilders.com
CTE Group, Inc.	Conrad Jansz	3241 Monument Way, #E	Concord, CA	94518	(510) 928-8411	conrad@ctebuilders.com
B Bros Construction	Izet Pondzic	2988 Teagarden Street	San Leandro, CA	94577	(510) 351-9575	beizap@bbroscon.com
Bay Construction Co.	Young Kay	4026 Martin Luther King Jr. Way	Oakland, CA	94609	(510) 867-1294	Yongkay@yahoo.com

Addendum No. 1 is hereby issued to provide changes, modifications, corrections, clarifications, as herein set forth, shall apply to the original Notice to Contractors / Invitation to Bid which was posted on March 17, 2021.

Prospective Bidders need to review the Addendum in its entirety as well as the original Notice to Contractors, Bid Schedule, Instructions to Bidders, Bid Form Checklist, Bid Proposal, Base Bid and Alternate Bid Schedule, Proposal Guaranty Bid Bond, required Certifications, Specifications and Drawings described herein and shall be made part thereof and subject to the all requirements as if originally specified or drawn.

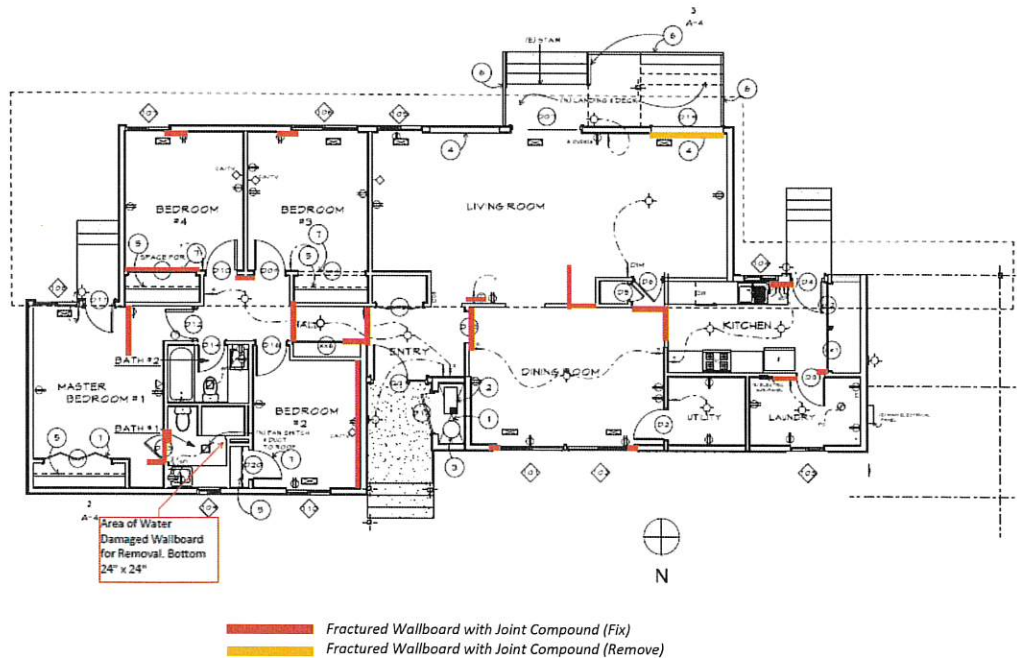
Receipt of **Addendum No. 1** must be acknowledged on the form in the bid proposal in writing.

ADDITIONAL SCOPE OF WORK

- A. Provide the removal of ACM as specified in this section. See other sections of the Specifications and other documents included in the contract documents for additional information and requirements pertaining to the total Project work scope.

- B. ACM Abatement and Disposal Summary Work Scope inclusions:
 - 1. Remove and dispose of damaged section of wallboard with ACM joint compound and texture from the living room (50 ft²) and make necessary patches to fractured sections of wallboard throughout the home (see attached diagram showing areas of damaged wallboard).
 - 2. Remove and dispose of closet framing from all bedrooms.
 - 3. Remove and dispose of mold/ moisture impacted wallboard with ACM joint compound and texture from the bottom 24" x 24" at shower door hinge side wall in master bathroom.
 - 4. Remove and dispose of wall mounted medicine cabinets from both (2) bathrooms.
 - 5. Remove and dispose of all 4" vinyl cove base over ACM wall texturing in bathrooms and laundry rooms (20 ft²).
 - 6. Remove and dispose of all non-ACM vinyl floor tile over ACM mastic (concealed under carpeting) in all bedrooms, bedroom closets and living rooms (1,250 ft²).
 - 7. Remove and dispose of all non-ACM vinyl floor tile over ACM mastic (concealed under 1/4" particle board sub-floor) in entry closet, laundry room and hallway closet (100 ft²). Original subfloor with ACM mastic to remain.

Reference Diagram Showing Fractured Wallboard Locations Containing ACM



Prospective Bidders / Contractors are also required to review the following additions to originally issued specifications, and plans:

- Attachment No. 1: Specifications for Asbestos Abatement and Disposal Section 02080, pages 1- 27.
- Attachment No. 2: Reference Diagram Showing Fractured Wallboard Locations Containing ACM (Enlargement)

The original specifications and plans are included as part of the original Invitation to Bid which were included as links to Exhibits E-1 and E-2 to the Sample Construction Services Agreement. This Addendum No. 1 will also be included in the link under Exhibit F to the Sample Construction Services Agreement.

Table 1 below provides estimated quantities of ACM requiring removal prior to the start of any other interior or exterior scopes of work on the Project.

Table 1- Asbestos Containing Material

ID	Material Description	Material Location	Results	Approx. Quantity*	NESHAP Category1	OSHA Class2
JC-1	Wallboard w/ Joint Compound	Interior: Living Room (50 ft ²) and Fracture Areas Throughout - Walls and Ceilings	White Drywall: ND Joint Compound: 2% CH White Tape: ND Joint Compound: 2% CH Paint: ND	75 ft ²	Friable	Class 2
FA-6	Black Flooring Mastic under 3/4" Particle Board and Non-ACM 12" x 12" White/ Beige Mottled Vinyl Floor Tile w/ Yellow Mastic	Interior: Entry Closet, NW Living Room Closet, East Hallway Closet - Floors	White Tile: ND Yellow Mastic: ND Wood: ND Black Mastic: 5% CH	100 ft ²	Cat I N.F.	Class 2
FA-18	Black/ Yellow Flooring Mastic under Non-ACM Light Colored Vinyl Floor Tile	Interior: Living Rooms, Bedrooms - Floors under Capet	White Tile: ND Black/Yellow Mastic: 5% CH	1,250 ft ²	Cat I N.F.	Class 2

CH = Chrysotile Asbestos Fiber; NA = Not Applicable
 *Approximate quantities should be verified during any project planning as the building was occupied during the survey and ACC was unable to perform a fully destructive investigation to identify all concealed conditions.

*Represents only the quantity of material expected to be impacted by the renovation projects. Floor tile throughout these areas is ACM.

¹ EPA's NESHAPS regulations define categories of asbestos-containing materials (ACM) based on their potential of asbestos fiber release when disturbed:

- Friable - Any material containing more than 1 percent asbestos that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.
- Category I Non-friable ACM (Cat 1 NF) - Asbestos-containing packings, gaskets, resilient floor covering and asphalt roofing products containing more than 1 percent asbestos.
- Category II Non-friable ACM (Cat II NF) - Any material, excluding Category I non-friable ACM containing more than 1 percent asbestos as determined using the methods specified under AHERA, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

² OSHA's Asbestos in Construction Standard (Federal - 29 CFR 1910.126 and California - 8 CCR 1529) define specific "Classes" of work based on the risk of exposure to employees with the potential for disturbance of asbestos-containing materials. The classes of work are defined as

- Class 1 - Asbestos-related activities involving the removal of thermal systems insulation (TSI) and surfacing ACM or presumed ACM.
- Class 2 - Asbestos-related activities involving the removal of ACM which are not TSI or surfacing ACM.

Under the Prospective Bidder Proposal, an Asbestos Abatement Contractor or Subcontractor will supply all labor (subject to Davis-Bacon prevailing wage determinations), supervision, materials, equipment, tools, services, insurance and each and every item of expense necessary for the abatement, removal, handling, management, packaging, transportation and disposal of asbestos-containing construction materials or asbestos-contaminated materials herein called the "Work." This Work shall include the controlled removal of any materials identified herein as "asbestos-containing materials" or "asbestos-containing construction materials", as necessary to facilitate the renovation of the Project for occupancy.

*The following Sections of the original Invitation to Bid have been modified. All other sections, requirements, certifications remain the same as originally described. Please note deletions are shown in ~~strikeout~~, additions are shown in **Bold**:*

NOTICE TO CONTRACTORS

Project Description

The Project is located at 2815 San Diego Road within the Alameda Point Residential District. The Project involves the renovation of an existing single-story, wood frame, four-bedroom, two-bath, approximately 1,980 square foot single family residence. No changes to the existing building footprint or change in use. The general scope of work consists of, but is not limited to, **asbestos abatement and disposal**, minor demolition, rough carpentry, finish carpentry, cabinet restoration, countertop installation, thermal and moisture protection, interior and exterior door installation and hardware, stucco and wall board repair, ceramic tilework and flooring installation, interior and exterior painting, installation of plumbing fixtures and kitchen appliances, general electrical and mechanical involving replacement of light fixtures, outlets and switches, and the replacement of the existing heating and water heater units. Additional concrete driveway and sidewalk repair are scheduled as alternates. Please also see Engineer/Architects Plans, Specifications, Base Bid and Alternate Bid Schedule. The Engineer's Estimate for the base bid for this Project is ~~between \$175,000 and~~ **approximately \$200,000**. The estimated construction term is two months.

The Project is to be carried out in accordance with this Invitation to bid, compliance with Davis-Bacon and Related Acts, terms and conditions of the bid documents, official plans and specifications, and contract for construction. All of these documents including, this Notice and Instructions, specifications and official plans for construction may be obtained at no cost from the following City of Alameda website:

<https://www.alamedaca.gov/BUSINESS/Bid-on-City-Contracts/Invitation-to-Bid-2815-San-Diego-Road-Alameda-Point-Renovation-Improvements>

Bids shall be accompanied by a bid guarantee in the form of a money order, cashier's check, certified check or bank draft payable to the Sponsor, U.S. Government bonds, or a satisfactory bid bond executed by the bidder and acceptable sureties in an amount equal to five percent (5%) of the bid. No bid may be withdrawn for a period of thirty (30) days after bid opening.

All bidders will be required to certify that they are not on the federal Consolidated List of Debarred, Suspended and Negligible Contractors. All bidders are required to be Public Works Contractors registered with the California Department of Industrial Relations. The contract documents required to accompany all bids (Certifications, bid bond, form of bid, etc.) shall be included along with the Bidder's Sealed Bid Proposal per the Instructions to Bidders that follows.

All labor is required to be paid at a rate not less than the greater of the current Federal Davis-Bacon Prevailing Wage or the State of California Prevailing Wage Determination made by the California Director of Industrial Relations (published with bid documents).

Contracts awarded under these contract documents in excess of \$150,000 shall be required to post a performance bond or equivalent security and a Payment bond for contracts over \$25,000. The successful bidder will be required to furnish evidence of Worker's Compensation and Liability Insurance in the favor and amount as required by these contract documents.

The successful bidder will be required to comply with all nondiscrimination laws and regulations pursuant to the provisions of these contract documents. The City of Alameda reserves the right to postpone, accept or reject any

and all bids as the City of Alameda deems in its own best interest, subject to the terms and provisions of the contract documents.

For bids to be considered responsible contractors must also attend a mandatory pre-bid meeting. The scheduled mandatory pre-bid meeting will be held at the Project job site. Contractors who signed-in at the mandatory pre-bid meeting may submit follow-up questions regarding the bid documents by email to:

Douglas Cole, PM, Community Development Department
dcole@alamedaca.gov

with copies to:

Vincent Wu, PE, Baseline Design, Inc.
vince@baselinealameda.com

and

Babette Jee, Architect
bjee@earthlink.net

Due to the Covid Pandemic, Bids must be presented to the City of Alameda Community Development Department, City Hall West, 950 West Mall Square, Suite 205, Alameda, CA 94501, ~~in a sealed envelope plainly marked on the outside as follows~~ **via email with following spelled out in the Subject line:**

"CITY OF ALAMEDA - SEALED BID FOR 2815 SAN DIEGO ROAD, PROJECT NO. CDSIP-2815SDR".

Bids (scanned.pdf copy) are required to be submitted by email to dcole@alamedaca.gov. Properly marked bids will be time and date stamped until the Bid Submittal Deadline. The Bid Opening will be held ~~outside, in front of the first floor lobby entrance to City Hall West, located on the front steps~~ **Inner-Office** at 950 West Mall Square immediately following the Bid Submittal Deadline. ~~All Contractors in attendance must adhere to current City of Alameda COVID-19 protocols which currently requires wearing a mask and maintaining six foot social distancing standards.~~ All Contractors that submitted a Sealed Bid by the Bid Due Date will receive a copy of the tabulated Bid Summary and notation of the apparent lowest responsible bidder by return email. A copy of the Bid Summary for the Project will also be placed on the City's website referenced above.

BID SCHEDULE

- Mandatory Pre-Bid Meeting to be held at Project Site – 10:00 a.m. on Wednesday, March 24, 2021
- Deadline to submit questions regarding bid documents by email – 5:00 p.m. on Monday, ~~March 29,~~ **April 26,** 2021
- Deadline to deliver sealed bid proposals, certifications and bid bond – 2:00 p.m. on ~~Tuesday, April 13,~~ **Monday May 10,** 2021
- Commencement of Bid Opening – 2:01 p.m. on ~~Tuesday, April 13,~~ **Monday, May 10,** 2021
- Notice of Award of Contract (within 5-days of Bid Opening) on or by ~~Tuesday, April 20,~~ **Monday, May 17,** 2021.
- Following Notice of Award of Contract, successful bidder will have ten days to execute Construction Services Agreement and post required Performance and Payment Bonds and furnish evidence of Worker's Compensation and Liability Insurance, on or by ~~Friday, April 30~~ **Thursday, May 27,** 2021.

INSTRUCTIONS TO BIDDERS

F. TIME LIMIT AND LIQUIDATED DAMAGES: The Contractor shall commence work on or before the tenth (10th) working day following date of mailing of written notification by the Community Development Department that the contract has been awarded. During this ten-(10) working day interval, the necessary contract documents which were not signed shall be executed by the Contractor and returned to the Community Development Department.

1. All work shall be completed within ~~forty-two (42)~~ **forty-three (43)** working days (currently projected for the months of ~~May and June~~ **June and July**) from Notice to Proceed (tentatively scheduled to be issued by ~~May 3, 2021~~ **Friday, May 28, 2021**).

BID FORM CHECKLIST
TO BE INCLUDED IN BID SUBMITTAL

1. ____ BID FORM CHECKLIST
2. ____ PROPOSAL
3. ____ BASE BID & ALTERNATE BID SCHEDULE
4. ____ PROPOSAL GUARANTY BID BOND
5. ____ CONTRACTOR'S LICENSE CERTIFICATION
6. ____ BIDDER QUESTIONNAIRE
7. ____ DESIGNATION OF SUBCONTRACTORS
8. ____ BIDDER'S CERTIFICATION
9. ____ NONLOBBYING CERTIFICATION
10. ____ DISCLOSURE OF LOBBYING ACTIVITIES
11. ____ CONTRACTOR'S / SUBCONTRACTOR'S CERTIFICATION CONCERNING LABOR STANDARDS AND PREVALING WAGE REQUIREMENTS
12. ____ CERTIFICATION FOR BUSINESS CONCERNS SEEKING SECTION 3 PREFERENCE IN CONTRACTING AND DEMONSTRATION OF CAPABILITY (**See Attachment No. 3 for Section 3 Fact Sheet Update**)
13. ____ CERTIFICATION OF BIDDER REGARDING EQUAL EMPLOYMENT OPPORTUNITY
14. ____ BIDDER DEBARMENT AND SUSPENSION CERTIFICATION
15. ____ SUBCONTRACTOR DEBARMENT AND SUSPENSION CERTIFICATION

LIST OF FOLLOW-UP SUBMITTALS FOR SUCESSFUL BIDDER

<u>Item</u>	<u>Due Date / Frequency</u>	<u>Reference</u>
1. CONTRACTOR AGREEMENT	Within 10 days of award	by Thursday, May 27, 2021
2. CONTRACT BONDS	Within 10 days of award	by Thursday, May 27, 2021
3. INSURANCE	Within 10 days of award	by Thursday, May 27, 2021
4. SECTION 3 CERTIFICATION	Within 10 days of award	by Thursday, May 27, 2021
5. EMERGENCY FORM	Preconstruction meeting	TBD
6. TRAFFIC CONTROL PLAN	Preconstruction Meeting	TBD
7. PEDESTRIAN HANDLING PLAN	Preconstruction Meeting	TBD
8. HAULING APPLICATION	Preconstruction Meeting	TBD
9. PEST MANAGEMENT	Preconstruction Meeting	TBD
10. CERTIFIED PAYROLL	Submitted Weekly	---

CITY OF ALAMEDA
2815 SAN DIEGO ROAD RENOVATION IMPROVEMENTS

PROPOSAL

TO THE COMMUNITY DEVELOPMENT DIRECTOR OF THE CITY OF ALAMEDA
ALAMEDA, CALIFORNIA

FOR: 2815 SAN DIEGO ROAD RENOVATION IMPROVEMENTS

(For a more detailed Project Description see both pages 1- 2 of the original Notice to Contractors and page 4 of this Addendum)

Name of Bidder _____

Business Address _____

Place of Residence _____

TO THE COMMUNITY DEVELOPMENT DIRECTOR OF THE CITY OF ALAMEDA:

The undersigned, as bidder, declares that the only persons or parties interested in this proposal as principals are those named herein; that this proposal is made without collusion with any other person, firm or corporations; has carefully examined the location of the proposed work, plans and specifications; and proposes and agrees, if this proposal is accepted, will contract with Agency to provide all necessary machinery, tools, apparatus, and other means of construction, and to do all the work and furnish all the materials specified in this contract in the manner and time prescribed, and according to the requirements of the Engineer as therein set forth; and will take in full payment therefor an amount based on the unit prices specified herein below for the various items of work,

Receipt of Addendum No. 1 is also hereby acknowledged and incorporated into the Bid Proposal.

The total value of said work (Base Bid and Alternate Bid Totals) as estimated herein being:

\$ _____

Total value of said work (Base Bid and Alternate Bid Totals) as estimated herein being (in Words):

And the following being the unit prices bid to-wit:

The unit cost for each item on the attached Base Bid and Alternate Bid Schedule must be inclusive of all costs, whether direct or indirect, including profit and overhead. The sum of all amounts entered in the extended total "Amount" column must be identical to the Base Bid price.

**CITY OF ALAMEDA
2815 SAN DIEGO ROAD RENOVATION IMPROVEMENTS
BASE BID & ALTERNATE BID SCHEDULE**

ITEM	DESCRIPTION	SPEC. REF.	UNIT COST	QTY.	UNIT	AMOUNT
DIVISION 01 GENERAL REQUIREMENTS						
1	Mobilization (2.5% of Base Bid)			1	LS	
2	Covid-19 Requirements			1	LS	
3	Traffic Control			1	LS	
4	Demobilization			1	LS	
5	Provide an Allowance of \$7,000 for Door Repair and Replacement					
6	Provide an Allowance of \$150 for Interior Fixtures and Lamps			12	EA	
7	Provide an Allowance of \$175 for Exterior Fixtures and Lamps			5	EA	
DIVISION 02 EXISTING REQUIREMENTS DEMOLITION (ASBESTOS ABATEMENT AND DISPOSAL)						
8	Remove and dispose of damaged section of wallboard with ACM joint compound and texture from the living room (50 ft ²) and make necessary patches to fractured sections of wallboard throughout the home (see attached diagram showing areas of damaged wallboard).			50	SF	
9	Remove and dispose of closet framing from all bedrooms.			4	EA	
10	Remove and dispose of mold/moisture impacted wallboard with ACM joint compound and texture from the bottom 24" x 24" at shower door hinge side wall in master bathroom.			4	SF	
11	Remove and dispose of wall mounted medicine cabinets from both (2) bathrooms.			2	EA	

ITEM	DESCRIPTION	SPEC. REF.	UNIT COST	QTY.	UNIT	AMOUNT
12	Remove and dispose of all 4" vinyl cove base over ACM wall texturing in bathrooms and laundry rooms (20 ft ²).			20	SF	
13	Remove and dispose of all non-ACM vinyl floor tile over ACM mastic (concealed under carpeting) in all bedrooms, bedroom closets and living rooms (1,250 ft ²).			1,250	SF	
14	Remove and dispose of all non-ACM vinyl floor tile over ACM mastic (concealed under 1/2" particle board sub-floor) in entry closet, laundry room and hallway closet (100 ft ²). Original subfloor with ACM mastic to remain.			100	SF	
DIVISION 02 EXISTING REQUIREMENTS DEMOLITION						
8 15	Remove 4x10 Beams @ Carport including Shoring			3	EA	
9 16	Misc. Deck Demolition, Site Clearing and other improvements			1	EA	
10 17	Remove Existing Carpet & Pad			1,310	SF	
11 18	Remove Existing Sheet Vinyl			275	SF	
12 19	Remove Existing Ceramic Tile			31	SF	
13 20	Demo Existing Stucco Where Shown			204	SF	
DIVISION 03 CONCRETE						
14 21	Concrete Deck Footings			2	EA	
DIVISION 06 WOOD, PLASTICS AND COMPOSITES						
45 22	New Roof Beams @ Carport with CCQ Caps	06-10-00		3	EA	
46 23	Repair 4x10 Outriggers			5	EA	
47 24	Framing for Bedroom Closet Doors (Repair 4x8 Headers for Closets)			4	EA	
48 25	Support for Rear Deck & Railing			40	SF	

ITEM	DESCRIPTION	SPEC. REF.	UNIT COST	QTY.	UNIT	AMOUNT
19 26	Rear Exterior Decking	06-20-00		106	SF	
20 27	Rear Exterior Deck Railing			34	LF	
24 28	Repair Walls and Ceiling Cracks			1	LF	
22 29	Refinish existing worn areas of Wood Doors and Drawers	06-41-16				
23 30	New Kitchen Countertops			72	SF	
DIVISION 07 THERMAL AND MOISTURE PROTECTION						
24 31	Insulate open exterior framing	07-21-00		94	SF	
25 32	Install missing gutter(s)	07-62-00		68	LF	
26 33	Install (N) Downspouts at (N) Gutter			70		
27 34	Exterior Joint Sealants	07-92-00				
DIVISION 08 OPENINGS						
28 35	Keep existing metal bi-fold doors (See Door Schedule for Salvage and Repair). Remove and salvage doors and sliding track hardware for reuse & repair at existing openings.	08-11-00		16	HRS	
29 36	Re-glaze broken glazing in Aluminum Patio Doors			20	SF	
DIVISION 08 OPENINGS (Continued from previous page)						
30 37	All existing Exterior Doors to receive Screens	08-11-66		3	EA	
31 38	Replace Existing interior and exterior doors & repair as noted in Door Schedule (See Allowance)	08-14-00				
32 39	New Wood Sliding Doors at (4) designated Closets (incl. gypsum board, pre-hung doors, & trim)			4	EA	
33 40	All Existing Windows to Receive New Screens	08-51-66		10	EA	

ITEM	DESCRIPTION	SPEC. REF.	UNIT COST	QTY.	UNIT	AMOUNT
34 41	All new lever lockset hardware throughout	08-71-00		13	EA	
35 42	All new Entry locks			3	EA	
36 43	New Deadbolts			4	EA	
DIVISION 09 FINISHES						
37 44	Repair Exterior Stucco at Bottom Edge of Exterior Wall Perimeter (Extend lath and install metal edge bead and new Stucco)	09-24-23		408	SF	
38 45	New Infill Framing at Former Patio Door and Fireplace			162	SF	
39 46	Replace 16 Vents (6"x15-1/4")			16	EA	
40 47	New Gypsum at Old Fireplace Infill Including Exterior Stucco	09-29-00		96	SF	
41 48	Resilient Plank Flooring	09-65-00		1,584	SF	
42 49	Base Boards			542	SF	
43 50	Ceramic Tile at (2) Bathrooms Incl. New Sub Floor, Durarock Base, Thinset Install			32	SF	
44 51	4" Vinyl Topset Cove Base in Kitchen, Laundry & Utility Room	09-65-13		93	LF	
45 52	Interior Painting	09-90-00		5,654	SF	
46 53	Exterior Paint for House and Carport			2,800	SF	
DIVISION 10 SPECIALTIES						
47 54	Medicine Cabinet	10-28-16		2	EA	
48 55	Towel Bars			4	EA	
49 56	Toilet Paper Dispenser			2	EA	
50 57	Existing Shower Door to Remain					

ITEM	DESCRIPTION	SPEC. REF.	UNIT COST	QTY.	UNIT	AMOUNT
51 58	New Shower Curtain Rod			1	EA	
52 59	Robe Hooks			4	EA	
DIVISION 11 EQUIPMENT						
53-60	Range Hood	11-30-13		1	EA	
54-61	Refrigerator			1	EA	
55 62	Garbage Disposer			1	EA	
56 63	Washer & Dryer			1	SET	
DIVISION 22 PLUMBING						
<i>Note: Check Fixtures/Fittings after Water is Turned On</i>						
58 64	Replace Existing Water Heater with New 40 Gal/Energy Efficient Unit. Insulate Pipes as Required by Code.	22-34-30		1	EA	
59 65	Check Fixtures/Fittings after Water is Turned On					
60 66	Replace Existing Toilets			2	EA	
61 67	New Lavatory Faucets			2	EA	
62 68	Existing Shower Pan to Remain					
63 69	Existing Shower Door to Remain					
DIVISION 22 PLUMBING (Continued from previous page)						
64-70	New Showerhead Fitting			1	EA	
65 71	New Tub Showerhead Fittings			1	EA	
DIVISION 23 HEATING, VENTILATION AND AIR CONDITIONING (HVAC)						
66 72	Replace Existing 63,000BTU Downflow Furnace with New Energy Efficient Mode Using Existing Duct Work.	23-00-00		1	EA	
67-73	Test System and Provide a Report that the Unit is Operationally Complete and Safe.			1	EA	

ITEM	DESCRIPTION	SPEC. REF.	UNIT COST	QTY.	UNIT	AMOUNT
68-74	Install New Bathroom Exhaust Fan with Humidity Sensor / Timer at Existing Location with Existing Ducts to Roof (Coordinate with Electrical)	23-34-00		2	EA	
DIVISION 26 ELECTRICAL						
<i>Note: Electrician to Verify Outlets for Residential Equipment is Adequate and to Code.</i>						
69 75	Provide and Install New Smoke/CO2 Detectors Where Required by Code, Hardwired with Battery Backup.	26-00-00		3	EA	
70 76	Electrical Hookup of Kitchen Hood			3	HRS	
74 77	Electrician to Supply and Wire Bathroom Exhaust Fans with Accessory Controls.			4	HRS	
72 78	Replace 12 Existing Interior Light Fixtures (Locations to Remain the Same with Existing Switching)			12	EA	
73 79	Replace 5 Existing Exterior Light Fixtures (Locations to Remain the Same with Existing Switching)			5	EA	
74 80	Interior Light Fixtures and Lamps (See Allowance)					
75 81	Exterior Light Fixtures and Lamps (See Allowance)					
TOTAL BASE BID: ITEMS 1 THROUGH 75 81 INCLUSIVE (IN WORDS):						

ITEM	DESCRIPTION	SPEC. REF.	UNIT COST	QTY.	UNIT	AMOUNT
BID ALTERNATE #1						
DIVISION 09 FINISHES						
76 82	New Carpet in Bedrooms and Living Room Instead of Resilient Flooring	09-68-16		1,014	SF	
77 83	New Resilient Flooring Instead of New Carpet in Bedrooms and Living Room Instead of New Carpet			- 1,014	SF	
BID ALTERNATE #2						
DIVISION 09 FINISHES						
78 84	New Ceramic Surround at Shower Requiring Surface Prep to Accept Ceramic Tile Finish	09-30-13		82	SF	
79 85	New Ceramic Tile Surround at Bath Requiring Surface Prep to Accept Ceramic Tile Finish			55	SF	
BID ALTERNATE #3						
DIVISION 02 EXISTING REQUIREMENTS DEMOLITION						
80 86	Demo & Remove Existing Driveway Ramp (12'x6")	02-41-00		192	SF	
DIVISION 03 CONCRETE						
81 87	Concrete Driveway Slab - 5' W/#4 @ 12" o.c. over gravel	03-00-00		192	SF	
BID ALTERNATE #4						
DIVISION 02 EXISTING REQUIREMENTS DEMOLITION						
82 88	Demo & Remove Existing Concrete Sidewalk and Curb Ramp (12'x5' + 12'x6')	02-41-00		132	SF	
DIVISION 03 CONCRETE						
83 89	(N) Concrete Driveway Slab - 5" w/#4@12" o.c. over gravel (12'x5')	03-00-00		60	SF	
84 90	(N) Concrete Sidewalk (12'x6')			72	SF	

**CITY OF ALAMEDA
 2815 SAN DIEGO ROAD RENOVATION IMPROVEMENTS
 BASE BID & ALTERNATE BID PROPOSAL**

TOTAL BASE BID AND ALTERNATE BIDS	TOTAL BID AMOUNTS IN WORDS
TOTAL BASE BID: ITEMS 1 THROUGH 75 81 INCLUSIVE (IN WORDS):	
TOTAL ADD ALTERNATE BID #1: ITEMS 76 82 THROUGH 77 83 INCLUSIVE (IN WORDS):	
TOTAL ADD ALTERNATE BID #2: ITEMS 78 84 THROUGH 79 85 INCLUSIVE (IN WORDS):	
TOTAL ADD ALTERNATE BID #3: ITEMS 80 86 THROUGH 81 87 INCLUSIVE (IN WORDS):	
TOTAL ADD ALTERNATE BID #4: ITEMS 82 88 THROUGH 84 90 INCLUSIVE (IN WORDS):	
TOTAL BASE BID AND ALTERNATE BID TOTAL: ITEMS 1 THROUGH 90 INCLUSIVE (IN WORDS):	

BIDDER'S NAME:

This Bid Schedule must be completed in ink and must be included with the sealed Bid Proposal. The unit cost for each item must be inclusive of all costs, whether direct or indirect, including profit and overhead. The sum of all amounts entered in the extended total "Amount" column must be identical to the Base Bid price.

ALTERNATE BID ITEMS

If and when Alternate bid items are called for in the Contract Documents, the lowest responsive bid will be determined on the basis of a total lump sum, equal to the sum of the Base Bid Schedule work only, unless otherwise provided in the Notice Inviting Bids. (Note: Bid Alternates will NOT be part of the determination of lowest responsive bids.)

City may elect to include one or more of the Alternate bid items in the Project scope of work. Accordingly, the City reserves the right to hold the Awarded Contractor to its Bid Alternate bids for no less than 60 days from the award of Contract, and each bidder must ensure that each bid item (Base Bid or Alternate) is balanced and contains a proportionate share of profit, overhead and other costs or expenses which will be incurred by the Bidder.

The time required for completion of the Alternate bid items has been factored into the Contract Time and no additional time will be allowed for performing any of the alternate bid items.

END BID PROPOSAL

April 19, 2021

2815 San Diego Road Renovation Improvements
Project No. CDSIP2815SDR
Addendum No. 1

ATTACHMENT NO. 1
Specifications for Asbestos Abatement and Disposal Section 02080, pages 1- 27.

SECTION 02-82-00

ASBESTOS ABATEMENT AND DISPOSAL

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. The General Conditions and Division I General Requirements shall be included in and made part of this Section.
- B. Examine all other Sections of the Specifications for requirements therein affecting the work of this Section of the Specifications.

1.02 COMPLIANCE AND INTENT

- C. The Contractor is responsible for repair, to the satisfaction of the Owner, of surfaces not scheduled for demolition that become damaged as a result of the work. All unscheduled repair work shall be at no increase to contract price.
- D. This project deals with abatement of asbestos-containing materials (ACM). It is necessary for the Contractor to coordinate all abatement work with the specifications. During all work, provide monitoring and worker protective equipment in accord with the California Occupational Safety and Health Administration (Cal-OSHA) and as required by this specification. Where there is conflict, the most stringent requirement shall apply.
- E. The work covered by this specification includes the handling, removal, and proper disposal of asbestos-containing materials. All hazardous materials shall be removed and disposed of according to all federal, state and local regulations. The Contractor shall determine if additional hazardous materials will be impacted by the scope of the abatement work. The cleanup of any incidental asbestos found in areas undergoing abatement of asbestos that become separated from the buildings during the dismantling process are part of the work.
- F. The abatement workers shall have received Cal-OSHA accredited training and be certified for asbestos abatement work.
- G. Furnish all labor, materials, facilities, equipment, services, employee training, medical monitoring, permits and agreements necessary to perform the work required for asbestos abatement in accordance with this specification.
- H. Comply with all federal, state, and local regulations pertaining to asbestos removal, storage, transportation and disposal; employee health and safety; Contractor certifications; and all licenses, permits, and training.
- I. Work on the premises shall be confined to areas designated in the Contract Documents. Materials and equipment shall be stored within areas designated by the Owner. Should additional space be required, the Contractor shall request permission for additional space and shall adequately safeguard occupants from associated health and safety hazards.
- J. Perform all work specified herein with competent persons trained, knowledgeable and qualified in state-of-the-art techniques relating to asbestos abatement, handling, and the subsequent cleaning of contaminated areas.
- K. During removal activities, the Contractor shall protect against contamination of soil, water, plant life, and adjacent building areas, and shall ensure that there is no airborne release of dusts. The

Owner may collect air samples in the building and in adjacent areas to evaluate the Contractor's performance. Evidence of settled dust or airborne levels of contaminants above background will require the implementation of additional controls at no increase to contract price.

- L. It is the Contractor's responsibility to determine the quantities of ACM that will require removal prior to commencement of the project. The Contractor shall conduct a site visit to determine exact locations of materials that will require abatement. This section provides appropriate protocols for handling and disposal of ACM. All ACM shall be removed according to the procedures outlined in this specification. If additional suspect ACM are discovered during the course of the abatement work, immediately notify the Owner and/or the Owner's Designated Representative.
- M. The work of this section shall be performed by an entity that holds a current, valid asbestos handling license issued by the California State Contractor's Licensing Board (SCLB) and a current valid Certificate of Registration for Asbestos-Related Work issued by the California Department of Industrial Relations-Division of Occupational Safety and Health (Cal-OSHA), unless other specified. Display copies of CSLB license and Cal-OSHA Registration in a visible place at the job-site.
- N. ACM removed during the abatement activities shall be disposed of in an approved manner complying with all applicable federal, state, and local regulations. Appropriate waste manifests or letters of salvage shall be furnished to the Owner thereby limiting the Owner's liability for improperly salvaged items. Materials are conveyed to the Contractor "as is," without any warranty, expressed or implied, including but not limited to, any warranty to marketability or fitness for a particular purpose, or any purpose. The Owner or the Owner's Environmental Consultant shall approve the non-ACM hazardous waste disposal site(s) prior to disposal for materials that may be disposed of in that manner.
- O. All interior asbestos abatement work shall be conducted using a negative pressure enclosure and three stage decontamination units unless otherwise specified. The removal of asbestos-containing materials shall be removed using wet methods and allowing no visible emissions or runoff to storm drains. Evidence of the release of asbestos above the background level will necessitate additional controls including but not limited to an enclosure.

1.03 DEFINITIONS

The following definitions pertain to work of this section.

- 1. Abatement: Process of controlling fiber release from ACM including encapsulation, enclosure, controlled renovation procedures, removal, clean-up and disposal.
- 2. ACM: Asbestos-containing material
- 3. Aggressive Sampling: Air sampling either during or following the agitation of the air.
- 4. AHERA: Asbestos Hazard Emergency Response Act (40 CFR Part 763).
- 5. Airlock: A system for permitting ingress and egress with minimum air movement between a contaminated area and uncontaminated areas. Typically consists of two curtained or gasketed doorways separated by a distance of at least six feet such that one passes through one doorway into the airlock, allowing the doorway to close off the opening. This airlock must be maintained in uncontaminated condition at all times.
- 6. Ambient Air Quality: The quality of air (in terms of airborne fiber content) that is present in a given space.
- 7. Area Monitoring: Sampling of airborne asbestos fiber concentrations within the work area and outside the work area. Sampling shall represent airborne concentrations that may reach the breathing zone.

8. Asbestos Fibers: Refers to asbestos fibers having an aspect ratio of 3:1, and those fibers longer than five (5) microns.
9. Asbestos Permissible Exposure Limit (PEL): A level of airborne fibers specified by OSHA as an occupational exposure standard for asbestos. This level represents the 8-hour time-weighted average of 0.1 fibers per cubic centimeter of air as measured by Phase Contrast Microscopy (PCM) analytical method.
10. Asbestos-Containing Material (ACM): Those manufactured products and construction materials including structural and mechanical building materials, as well as packings and gaskets that contain more than one percent (1.0%) asbestos by weight.
11. Asbestos: Asbestos includes asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-gunerite (amosite), anthophyllite, tremolite, and actinolite. For the purposes of determining worker respiratory protection, both the asbestiform and non-asbestiform of the above minerals, and any chemically treated or altered materials shall be considered as asbestos.
12. Authorized Visitor: Designated employees or consultants for the Owner and representatives of any federal, state or local regulatory or other agency having jurisdiction over the project.
13. Baseline: Refers to the background levels of asbestos monitored before abatement.
14. Breathing Zone: A hemisphere forward of the shoulders and head with a radius of approximately six to nine inches.
15. Breach: A rift or gap in the critical or secondary barriers that allow egress of air from the containment to outside, or vice versa.
16. Bridging Encapsulant: An encapsulant that forms a discrete layer on the surface of an in-situ asbestos matrix.
17. Cal-OSHA: State of California, Occupational Safety & Health Administration.
18. Chain-of-Custody: A legal concept involving documentation of the physical possession of a sample(s) from the moment it is collected, transported, analyzed, and ultimately stored in an archive.
19. Change Rooms: Refers to the two chambers in the decontamination area used to change into and out of protective clothing.
20. Certified Industrial Hygienist (CIH): A person certified by the American Board of Industrial Hygiene.
21. Clean Room: An uncontaminated area or room that is part of the worker decontamination enclosure system, with provisions for storage of workers' street clothes and protective equipment.
22. Clearance Level: Clearance level for samples analyzed by PCM will be less than 0.01 fibers per cubic centimeter of air and for TEM will be less than 70 structures per square millimeter (<70 s/mm²). Samples may be collected by aggressive or non-aggressive sampling methods and the minimum air volume shall be 1,200 liters.
23. Competent Person: One who is capable of identifying existing and predictable hazards and who has the authority to take prompt corrective measures to eliminate them.
24. Critical Barrier: A unit of temporary construction that provides the only separation between asbestos work area and an adjacent potential occupied space. This includes the

- decontamination unit, perimeter walls, ceilings, penetrations and any temporary critical barriers between the work area and the uncontaminated environment.
25. CSLB: Contractors State Licensing Board
 26. Decontamination Area: Area which is constructed to provide the means for workers to store clothing, equipment and other articles, and to properly remove contamination upon concluding work activities that result in exposure to these hazardous materials.
 27. DOP: Dioctylphthalate, the challenge aerosol used to perform on-site leak testing of HEPA filtration equipment.
 28. DOT: Federal Department of Transportation.
 29. DOSH: Division of Occupational Safety & Health (see also Cal-OSHA)
 30. Decontamination Unit: Refers to system of airlocks used to decontaminate personnel, waste bags, equipment, etc. when exiting the work area. A decontamination unit shall be set up for each containment area.
 31. Demolition: The wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations or the intentional burning of any facility.
 32. Disposal Bag: Minimum six (6) mil thick leak-tight plastic bags used for transporting asbestos waste from a work area to disposal or shipping container. Each disposal bag must have required labels according to Title 8 CCR 1529 (Cal-OSHA asbestos rule), 5194 (HAZCOM). RACM waste must be additionally labeled according to 49 CFR 171-179 (USDOT), and 40 CFR 61 Subpart M (NESHAP). Hazardous waste disposal bags must be labeled with generator's name, address, site location, generator number, and and all other required information.
 33. Encapsulant: A liquid material that can be applied to ACM that controls the possible release of asbestos fibers from the material either by creating a membrane over the surface (bridging) or by penetrating into the material and binding its components together (penetrating encapsulant).
 34. Encapsulation: A specified procedure necessary to coat ACM or asbestos contaminated surfaces with an encapsulant to control the possible release of asbestos fibers into the ambient air.
 35. Enclosure: The construction of an airtight, impermeable, permanent barrier surrounding the ACM to prevent the release of asbestos fibers into the air.
 36. Environmental Consultant: CIH, Certified Asbestos Consultant (CAC), and/or Certified Site Surveillance Technician (CSST) retained by the Owner.
 37. Equipment Decontamination Enclosure System: A decontamination enclosure system for materials and equipment, typically in a designated area of the work area, and including a washroom, a holding area, and an uncontaminated area.
 38. Equipment Room: A contaminated area or room that is part of the worker decontamination enclosure system, with provisions for storage of contaminated clothing and equipment. The equipment room shall be kept clean from asbestos-containing debris at all times.
 39. Excursion Limit: A California Code of Regulations (Title 8 CCR 1529) requirement that ensures no employee exposed to airborne concentrations of asbestos in excess of 1.0 fibers per cubic centimeter of air as averaged over a sampling period of thirty (30) minutes.
 40. Filter: A media component used in respirators to remove solid or liquid particles from the inspired air.

41. Fixed Object: A unit of equipment or furniture in the work area that cannot be removed from the work area.
42. Friable Asbestos-Containing Material: Material that contains more than 1.0% asbestos by weight, and that can be crumbled, pulverized or reduced to powder by hand pressure when dry.
43. Foreman: An individual who typically fulfills the duties of "competent person" as defined by Title 8 CCR 1529. This individual must supply documentation of a passing grade in an Cal-OSHA accredited course in Asbestos Contractor/Supervisor training. The foreman must be on-site during all abatement work.
44. Glove Bag: A polyethylene bag with two inward projecting long sleeve gloves, designed to enclose an object from which an ACM is to be removed. Bags shall be seamless at the bottom, have a minimum thickness of 6 mil, and shall be labeled appropriately.
45. Glove Bag Technique: A method for removing ACM from heating, ventilation and air conditioning (HVAC) ducts, piping runs, valves, joints, elbows, and other non-planar surfaces. The glove bag is constructed and installed in such a manner that it surrounds the object or material to be removed and contains all asbestos fibers released during the process. Secondary containment shall be provided for all glove bag work unless otherwise noted.
46. Gross or Full Abatement: Designated rooms, spaces, or areas of the project that have been totally sealed, contained in polyethylene, equipped with decontamination enclosure systems, and placed under negative pressure.
47. HEPA: High Efficiency Particulate Air filter capable of filtering out airborne particulate 0.3 microns or greater in diameter at 99.97 percent efficiency.
48. Manifest: The document authorized by both Federal and State authorities for tracking the movement of ACM.
49. Movable Object: A unit of equipment or furniture in the work area that can be removed from the work area (e.g., smoke detectors, lights, etc.)
50. 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.
51. Negative Pressure: Air pressure lower than surrounding areas, generally caused by exhausting air from a sealed space (work area).
52. NESHAP: National Emission Standard for Hazardous Air Pollutants – EPA Regulation 40 CFR Subpart M, Part 61.
53. NIOSH: National Institute for Occupational Safety and Health: Sets test standards, analytical methods, and certifies performance of various respirator designs (research institute within Federal OSHA).
54. NIST: National Institute of Standards and Technology: Administers the NVLAP Program.
55. NOA – Naturally Occuring Asbestos. Found in soil, fill and concrete.
56. NVLAP: National Voluntary Laboratory Accreditation Program – evaluates and certifies laboratories doing PLM and TEM analyses.
57. Passive Sampling: Refers to air sampling with no air agitation.
58. Permissible Exposure Limits (PEL): A level of airborne fibers specified by OSHA as an occupational exposure standard for asbestos. This level represents the 8-hour time-weighted average of 0.1 fibers

per cubic centimeter of air and 30-minute excursion limit of 1.0 fibers per cubic centimeter of air as measured by Phase Contrast Microscopy (PCM) analytical method.

59. Phase Contrast Microscopy (PCM): Technique using a light microscope equipped to provide enhanced contrast between the fibers and the background. Filters are cleared with a chemical solution and viewed through the microscope at a magnification of approximately 400X. This method does not distinguish between fiber types and only counts those fibers longer than 5 microns and wider than approximately 0.25 microns. Because of these limitations, fiber counts by PCM typically provide only an index of the total concentration of airborne asbestos in the environment monitored.
60. Polarized Light Microscopy (PLM): An optical microscope technique used to identify asbestos content and distinguish between different types of asbestos fibers by their shape and unique optical properties.
61. Powered Air Purifying Respirator (PAPR): A full facepiece respirator that has the breathing air powered to the wearer after it has been purified through a filter.
62. Protection Factor: The ratio of the ambient concentration of an airborne substance to the concentration of the substance inside the respirator at the breathing zone of the wearer. The protection factor is a measure of the degree of protection provided by a respirator to the wearer.
63. Remodel: Replacement or improvement of an existing building or portion thereof where exposure to airborne asbestos may result. Remodel includes, but is not limited to, installation of materials, demolition, cutting, patching, and removal of building materials.
64. Respirator: A device designed to protect the wearer from the inhalation of harmful atmospheres.
65. Shower Room: A room between the clean room and the equipment room in the work decontamination enclosure system. This room contains hot and cold or warm running water and soap suitably arranged for complete showering during decontamination. The shower room comprises an airlock between contaminated and clean areas.
66. Surfactant: A chemical wetting agent added to water to improve penetration, this reducing the quantity of water required for a given operation or area.
67. Transmission Electron Microscopy (TEM): Asbestos structure analysis for a specified volume of air. TEM is a technique that focuses an electron beam onto a thin sample. As the beam transmits through certain areas of the sample, an image resulting from varying densities of the sample is projected onto a fluorescent screen. TEM is the state-of-the-art analytical method for identifying asbestos fibers collected in air samples in non-industrial settings. TEM microscopes equipped with selected area electron diffraction (SAED) capabilities also can provide information on the crystal structure of an individual particle.
68. TSI – Thermal Systems Insulation
69. Visible Emissions: Any emission containing particulate material that is visually detectable without the aid of instruments. This does not include condensed uncombined water vapor.
70. Visual Inspection: A visual inspection by Environmental Consultant, of the work area under adequate lighting to ensure that the work area is free of visible PCB material, debris, and dust.
71. Washroom: A room between the work area and the holding area in the equipment decontamination enclosure system equipped with water for decontamination of equipment and sealed waste containers. The washroom or shower room comprises one airlock.

72. **Water Filtration:** Refers to water filtration to as small a particulate size as technically feasible, but not more than 5 microns.
73. **Wet Cleaning:** The process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops, HEPA vacuuming, or other cleaning utensils dampened with amended water and afterward thoroughly decontaminated or disposed of as asbestos contaminated waste.
74. **Work Area:** The area where asbestos removal is performed and that is defined or isolated to prevent the spread of asbestos fibers, dust or debris, and entry by unauthorized personnel. Work area is a regulated area as defined by Title 8 CCR 1529.

1.04 SCOPE OF WORK

- P. Provide the removal of ACM as specified in this section. See other sections of the Specifications and other documents included in the contract documents for information and requirements that affect the work of this Section.
- Q. Scope inclusions:
 1. Remove and dispose of damaged section of wallboard with ACM joint compound and texture from the living room (50 ft²) and make necessary patches to fractured sections of wallboard throughout the home (see attached diagram showing areas of damaged wallboard).
 2. Remove and dispose of closet framing from all bedrooms.
 3. Remove and dispose of mold/ moisture impacted wallboard with ACM joint compound and texture from the bottom 24" x 24" at shower door hinge side wall in master bathroom.
 4. Remove and dispose of wall mounted medicine cabinets from both (2) bathrooms.
 5. Remove and dispose of all 4" vinyl cove base over ACM wall texturing in bathrooms and laundry rooms (20 ft²).
 6. Remove and dispose of all non-ACM vinyl floor tile over ACM mastic (concealed under carpeting) in all bedrooms, bedroom closets and living rooms (1,250 ft²).
 7. Remove and dispose of all non-ACM vinyl floor tile over ACM mastic (concealed under ¼" particle board sub-floor) in entry closet, laundry room and hallway closet (100 ft²). Original subfloor with ACM mastic to remain.

Table 1 below provides estimated quantities of ACM requiring removal. A 20% variance of quantity of actual ACM shown in the Table and estimated ACM is not considered a changed condition. The Contractor is responsible for field verifying quantities of ACM and difficulty in abating the same.

Table 1 – Asbestos-Containing Materials

ID	Material Description	Material Location	Results	Approx. Quantity*	NESHAP Category1	OSHA Class2
JC-1	Wallboard w/ Joint Compound	Interior: Living Room (50 ft ²) and Fracture Areas Throughout - Walls and Ceilings	White Drywall: ND Joint Compound: 2% CH White Tape: ND Joint Compound: 2% CH Paint: ND	75 ft ²	Friable	Class 2
FA-6	Black Flooring Mastic under ¼" Particle Board and Non-ACM 12" x 12" White/ Beige Mottled Vinyl Floor Tile w/ Yellow Mastic	Interior: Entry Closet, NW Living Room Closet, East Hallway Closet - Floors	White Tile: ND Yellow Mastic: ND Wood: ND Black Mastic: 5% CH	100 ft ²	Cat I N.F.	Class 2
FA-18	Black/ Yellow Flooring Mastic under Non-ACM Light Colored Vinyl Floor Tile	Interior: Living Rooms, Bedrooms - Floors under Capet	White Tile: ND Black/Yellow Mastic: 5% CH	1,250 ft ²	Cat I N.F.	Class 2

CH = Chrysotile Asbestos Fiber; NA = Not Applicable
 *Approximate quantities should be verified during any project planning as the building was occupied during the survey and ACC was unable to perform a fully destructive investigation to identify all concealed conditions.

*Represents only the quantity of material expected to be impacted by the renovation projects. Floor tile throughout these areas is ACM.

¹EPA's NESHAPS regulations define categories of asbestos-containing materials (ACM) based on their potential of asbestos fiber release when disturbed:

- Friable - Any material containing more than 1 percent asbestos that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.
- Category I Non-friable ACM (Cat 1 NF) - Asbestos-containing packings, gaskets, resilient floor covering and asphalt roofing products containing more than 1 percent asbestos.
- Category II Non-friable ACM (Cat II NF) - Any material, excluding Category I non-friable ACM containing more than 1 percent asbestos as determined using the methods specified under AHERA, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

²OSHA's Asbestos in Construction Standard (Federal - 29 CFR 1910.126 and California - 8 CCR 1529) define specific "Classes" of work based on the risk of exposure to employees with the potential for disturbance of asbestos-containing materials. The classes of work are defined as

- Class 1 - Asbestos-related activities involving the removal of thermal systems insulation (TSI) and surfacing ACM or presumed ACM.
- Class 2 - Asbestos-related activities involving the removal of ACM which are not TSI or surfacing ACM.

R. The following materials shall be disposed of as regulated asbestos-containing material (RACM): wallboard with joint compound, vinyl cove base with attached texture.

S. Vinyl Floor Tile is a Category I Non-friable waste and can be disposed of as Category I Non-friable ACM if they are not rendered friable during removal. If a removal solvent is used to abate the flooring mastic, the Contractor shall perform waste characterization and dispose of the material as required.

1.05 REFERENCES

The publications listed below form a part of this specification by reference. The publications are referred to in the text by basic designation only. If there is a conflict between any of the listed regulations or standards, then the most stringent or restrictive shall apply.

A. American National Standards Institute (ANSI) and American Society for Testing and Materials (ASTM)

1. ANSI Z9.2, 1979 (R 1991), Fundamentals Governing the Design and Operation of Local Exhaust Systems
2. ANSI Z87.1, 2003, Occupational and Educational Eye and Face Protection
3. ANSI Z88.2 1992, Respiratory Protection
4. ANSI Z89.1, 1986, Requirements for Protective Headgear for Industrial Workers
5. ANSI Z41, 1999, Personal Protection – Protective Footwear
6. ANSI Z88.6, 1984, Respiratory Protection – Respiratory Use Physical Qualifications for Personnel
7. ASTM C 732, 1982 (R 1987) Aging Effects of Artificial Weathering on Latex Sealants
8. ASTM D 522, 1993 (Rev. A) Mandrel Bend Test of Attached Organic Coatings
9. ASTM D 1331, Solutions of Surface-Active Agents
10. ASTM D 2794, 1993 Resistance of Coatings to the Effects of Rapid Deformation (Impact)
11. ASTM E 84, 1991 (Rev. A) Surface Burning Characteristics of Building Materials
12. ASTM E 96, 1994 Water Vapor Transmission of Materials
13. ASTM E 119, 1988 Fire Tests of Building Construction and Materials
14. ASTM E 736, 1992 Cohesion/Adhesion of Sprayed Fire-Resistive Materials Applied to Structural Members
15. ASTM E849, 1986 Safety and Health Requirement Relating to Occupational Exposure to Asbestos
16. ASTM E 1368, 1990 Visual Inspection of Asbestos Abatement Projects
17. ASTM E1494, 1992 Specifications for Encapsulants for Friable Asbestos-Containing Building Materials

B. California Assembly Bills (CAB)

1. CAB 040, Yearly Registration of Contractors

C. California Code of Regulations (CCR)

1. Title 8 CCR 5208, General Industry - Asbestos
2. CCR CARS, Carcinogen and Asbestos Registration Sections 340-344.53, 341.6 Amended, and 341.9 Amended Through 341.14
3. CCR ESO, Electrical Safety Orders, Chapter 4, Subchapter 5
4. CCR 1523, Illumination
5. CCR 1529, Asbestos in the Construction Industry
6. CCR 1531, Construction Respiratory Protective Equipment
7. CCR 3203, Injury and Illness Prevention Program
8. CCR 3204, Access to Employee Exposure and Medical Records

14 40 CFR 763, Asbestos Containing Material in Schools

K. State and Local Regulations

1. Regulation 11, Rule 2, Bay Area Air Quality Management District

L. Underwriters Laboratories, Inc. (UL)

1. UL 586-96, 1996 Test Performance of High-Efficiency Particulate Air Filter Units

1.06 SUBMITTALS PRIOR TO START OF WORK

- A. The reviews by the Owner or Owner's designated representative are intended to be only for general conformance with the requirements. The Owner or the Owner's designated representative assumes no responsibility for permits, licenses, notices, materials and methods, equipment or temporary construction required to execute the work described in this Section of the Specification or in other Sections of the Specification or in other documents included in the contract documents.
- B. Before commencing work involving the abatement of asbestos, submit the following for review by the Owner or Owner's designated representative:
1. Provide a detailed asbestos abatement work plan that follows Attachment A – Asbestos Abatement Work Plan Outline.
 2. Provide an asbestos site safety plan prior to project initiation. The site safety plan shall deal with, at a minimum: site safety and health hazards; fiber release incidents; control of water leakage or discharge within and/or from the work area; medical emergency; asbestos handling procedures; fall protection; electrical safety; Contractor's internal administrative and inspection procedures; earthquakes and/or fire emergency procedures; protocol for responding to complaints or questions from interested parties; 24-hour emergency telephone numbers for company officers with authority to respond to emergencies.
 3. Competent Person (as defined by Title 8 CCR 1529): Demonstrate education and specialized training with successful completion of examination of a Cal-OSHA accredited asbestos training course.
 4. Workers: Demonstrate education and specialized training with successful completion of a Cal-OSHA accredited asbestos training course.
 5. Submit current certificates (less than 11 months) signed by each employee and trainer that the employee has received proper training in the handling of materials that contain asbestos. Include documentation showing that the worker understands the following; health implications and risks involved (including the illnesses possible from exposure to airborne asbestos fibers), the use and limits of the respiratory equipment to be used, and the results of monitoring of airborne quantities of asbestos concerning health and respiratory equipment.
 6. Proof of Respirator Fit Testing: Provide proof of respirator fit testing. Fit testing records must be less than eleven (11) months old and document testing on the type of respiratory protective equipment used for this project. Fit testing records must be signed by the Competent Person.
 7. Foreman Training: Submit evidence that the foreman to be used on the job fulfills the qualifications detailed in this specification and has experience in similar jobs.
 8. Medical Examinations: Submit evidence signed by a physician that each employee used on the job has received an appropriate medical examination as detailed in Title 8 CCR 1529. The submitted document must be less than eleven (11) months old.

9. Written Notification to Fire and Police Departments: Provide documentation showing notification to local fire and police departments of the abatement three (3) days before commencement.
10. Rental Equipment: When rental equipment is to be used in the abatement areas or to transport hazardous waste, the Contractor shall provide written notification regarding intended use of the rental equipment to the rental agency before use, with copies to the Environmental Consultant and the Owner or Owner's designated representative's representative.
11. Certificates of Compliance: Submit manufacturer's certification that vacuums, ventilation equipment, and other equipment required to contain airborne asbestos fibers conform to ANSI Z9.2. Submit results of onsite DOP testing of all HEPA-filtered ventilation equipment.
12. Submit a statement of intent to dispose of all waste at a Landfill from the Owner's Pre-Approved list. Submit uniform hazardous waste manifests prepared, signed and dated by an agent of the landfill. The manifest must certify the amount of hazardous materials delivered to the landfill. The manifest must be provided to the Owner or Owner's designated representative within ten working days after delivery.
13. Satisfactory proof that written notification and subsequent updates have been provided to the Bay Area Air Quality Management District, in accordance with Regulation 11, Rule 2, Cal-OSHA, and Title 40 CFR Part 61 Subparts A&M, National Emission Standards for hazardous Air Pollutant, U.S. EPA.
14. Licenses: Submit copies of state and local licenses, evidence of Cal-OSHA registration and permits necessary to carry out the work of this contract.
15. Notification of Other Contractors: If other contractors are working at the job site, before beginning any work the Contractor must inform all other contractors in writing regarding the location, nature, and requirements of the work areas.
16. Material Safety Data Sheets/Specification Sheets: The Contractor shall submit Material Safety Data and Specification Sheets for all chemicals, encapsulants, etc. to be used for this project.

1.07 SUBMITTALS AT THE COMPLETION OF THE PROJECT

- C. Upon completion of on-site work, Contractor shall provide a detailed project summary that will include each of the items listed below. The project Summary shall be submitted and approved by the Owner's representative prior to acceptance of final pay request and shall include the following:
 1. Copies of the Security and Safety Logs showing names of persons entering the workspace. The logs shall include date and time of entry and exit, supervisor's record of any accident (detailed description of accident).
 2. Chain of custody documentation and laboratory reports for all analyss performed.
 3. Emergency evacuations and any other safety or health incident.
 4. Waste manifests including Land Disposal Restrictions Notice and Certification.
 5. Personal air sample results.
 6. Pressure differential strip chart readings for each differential recording device on the site.
 7. Project Summary:
 - a. Abatement contractor's name and address, certification number (CSLB), registration number (DOSH) and Tax ID number.
 - b. Hazardous waste hauler certifications (DHS, DOT).

- c. Name, address and registration number of hazardous waste hauler.
- d. Laboratory performing analyses (NVLAP).
- e. Contract number and name of project.
- f. Specific inventory (including locations and approximate quantities) of the hazardous materials which were removed or handled.
- g. Number of employees working on the project.
- h. Dates of commencement and completion of on-site work.
- i. Work method employed (i.e., glove bag, mini-containment, full containment with negative air and decontamination enclosure system, etc.)
- j. Name, location, telephone number and EPA registration of waste disposal site(s) used.
- k. DOP testing results.

1.08 CONTRACTOR MONITORING

- D. The Owner or Owner's designated representative reserves the right to perform air sampling and wipe sampling in selected areas during the course of the project. Owner or Owner's designated representative reserves the right to stop work within in an area if in the course of performing monitoring, the Owner or Owner's designated representative observes instances of substantial non-conformance with this Section or other Sections of the Specification presenting health hazards to workers, the general public or the surrounding areas. Work shall not resume until the corrective measures have been enforced. Instances of substantial non-conformance shall include, but not be limited to, the following:
 1. Activities or misconduct imperiling worker's safety and health.
 2. Airborne fiber concentrations as measured by PCM outside of the containment area exceeding background or 0.01f/cc whichever is greater. Airborne concentrations as measured by TEM outside of the containment area exceeding background or 70 S/mm², whichever is greater.
 3. Loss of negative pressurization for more than two minutes.
 4. Breaches in containment resulting in potential release of asbestos to non-work areas.
- E. The Environmental Consultant may perform air sampling inside and outside the hazardous materials work area during all phases of the work. The Contractor shall cooperate fully with the Consultant and ensure the cooperation of his workers during collection of air samples and work area inspections.
- F. When visual inspections or air monitoring are specified, the Contractor shall notify the Owner or Owner's designated representative in writing 24 hours in advance of the day and time when the Contractor will be ready for such inspections or monitoring. Such requests shall be initiated by the Contractor's Competent Person or Foreman indicating that the work area has been previously inspected and is ready for inspection/testing.
- G. Air monitoring generated by the Owner or Owner's designated representative shall not be used by the Contractor to represent compliance with regulatory agency requirements for monitoring of workers exposure to airborne asbestos, nor shall any other activity on the part of the Owner or Owner's designated representative be construed to meet the Contractor's compliance with applicable health and safety regulations.

PART 2 - PRODUCTS

2.01 SIGNS AND LABELS:

- H. Provide labeling in accordance with State and Federal EPA requirements. Provide the required signs, labels, warnings, placards or posted instructions for containers used to transport hazardous material to the landfill.
- I. Location of Caution Signs and Labels: Provide bilingual caution signs at all approaches to work areas in languages used by the Contractor's employees. Locate signs at such a distance that personnel may read the sign and take the necessary protective steps required before entering the area. Provide labels and affix to all asbestos-containing materials, scrap, waste, debris, and other products contaminated with hazardous materials.
- J. Warning Sign Format: Vertical format conforming to Title 8 CCR 1529:

DANGER

ASBESTOS

MAY CAUSE CANCER

CAUSES DAMAGE TO LUNGS

AUTHORIZED PERSONNEL ONLY

WEAR RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING IN THIS AREA

- K. Warning Label Format: Provide labels that comply with Title 8 CCR 1529 of sufficient size to be clearly legible, displaying the following legend:

DANGER

CONTAINS ASBESTOS FIBERS

MAY CAUSE CANCER

CAUSES DAMAGE TO LUNGS

DO NOT BREATHE DUST

AVOID CREATING DUST

2.02 ENCAPSULANTS

- L. Encapsulants shall be U.L. Listed, in full-scale E-119 fire test.
- M. Average depth of penetration shall meet manufacturer's recommendations.
- N. Dry mil thickness of bridging encapsulating systems (if used) shall be as indicated in the specific treatment instructions included in this specification, and as recommended by the manufacturer.
- O. Performance Requirements: Classification - penetrating encapsulant; spray applied and brushable. Product shall be tested and listed by EPA and possess the following characteristics:
 - 1. Flame resistance/flame spread ~25 (ASTM E162) V6.
 - 2. Fire classification - UL Class A approved in the specific or similar assembly to its intended application.
 - 3. Product shall be tested and rated non-toxic and non-irritating under the Federal Hazardous Substances Control Act and contain no methylene chloride.
 - 4. Material shall be tinted sufficiently to provide a readable contrast to background color to which it is applied.

2.03 PLASTIC SHEETING:

- P. Use fire-retardant (FR) polyethylene (poly) film.

1. Thickness - 6-mil, minimum, NO EXCEPTIONS.
2. Flame Resistance/Flame Spread Rate <25.
3. Conforms to NFPA #701 and Tested in accordance with ASTM E-84.

2.04 TAPE, ADHESIVE, SEALANTS:

- Q. Tape, 2" or wider, shall be capable of sealing joints of adjacent sheet of polyethylene and shall attach polyethylene sheet to finished or unfinished surfaces or similar materials. Tape shall be capable of adhering under dry and wet conditions, including use of amended water. Taping to critical or sensitive surfaces shall be completed using preservation sealing tape.
- R. Spray adhesive for sealing polyethylene to polyethylene shall contain no methylene chloride or methyl chloroform (1,1,1-trichloroethane) compounds.
- S. Fire resistant sealants shall be compatible with concrete, metals, wood, etc. Sealant shall prevent fire, smoke, water and toxic fumes from penetrating. Sealant shall have a flame spread, smoke and fuel contribution of zero, and shall be ASTM and UL rated for 3 hours for standard method of fire test for fire stop systems.

2.05 STRIP CHART RECORDER(S):

- T. Where interior work areas are required, each shall have a minimum differential pressure of 0.025 inches water gage at all times. Fluctuations below 0.025 inches of water column are unacceptable and may require temporary cessation of work until conditions are corrected.
- U. Multiple continuous circular chart recorder(s) shall be used to document the level of pressure difference between the containment space and all other spaces as deemed necessary by the Owner or Owner's designated representative. Defective or non-operating instrumentation may require temporary cessation of work until instrumentation is repaired or replaced.
- V. The strip chart recorder will be checked a minimum of four times per day by a person familiar with the operation. Each check shall be documented on the circular chart with a time and date notation and the initials of the person performing the check. A copy of the circular chart shall be submitted daily to the Owner or Owner's designated representative.
- W. Differential air pressure systems shall be in accordance with Appendix J of EPA's "Guidance for Controlling Asbestos-Containing Materials in Buildings, EPA 560/5-85-024. The Differential pressure system shall be continuously monitored by the Contractor using a recording instrument connected to an appropriate strip chart recorder. The recording instrument shall be connected to an audible alarm that will activate at a pressure differential of -0.025 inches water gauge air pressure.

2.06 VACUUM EQUIPMENT:

- X. All vacuum equipment used in the work area shall use HEPA filtration systems and be of the wet-dry type. The Contractor shall provide on-site independent DOP testing to document the effectiveness of the vacuum units. The test results shall be signed by the individual performing the testing.

2.07 LOCAL EXHAUST SYSTEM:

- Y. Where containments are required, sufficient High Efficiency Particulate Absolute (HEPA) ventilation units shall be used to maintain the negative pressure in each interior work area at 0.025 inches of water column and a minimum of four (4) air changes per hour.

- Z. The ventilation system shall remain in operation 24 hours a day until the work area has passed the specified clearance criteria. HEPA filtered air which is exhausted to maintain negative pressure shall be exhausted from the building at locations approved by the Owner or Owner's designated representative. Exhausted air shall not be near or adjacent to other building intake vents or louvers or at entrances to buildings. Other HEPA units shall operate within the enclosure to circulate air and control fiber counts.
- AA. The Contractor shall provide on-site independent DOP testing to document the effectiveness of the air filtration units. The test results shall be signed by the individual performing the testing. Repeat testing if the unit or the air filtration units have been repaired or replaced. Provide documentation to the Owner or Owner's designated representative with 24 hours of DOP testing.

2.08 RESERVE EQUIPMENT:

- BB. Contractor shall have the following equipment on site: two reserve, functioning and DOP-tested HEPA Filter Vacuum Cleaning Units, two reserve and DOP-tested HEPA area filtration units for every four containments. Contractor shall also have sufficient polyethylene (poly), respirators, protective equipment, tape, tools, decontamination enclosure systems for each work area.
- CC. Provide authorized visitors, Owner, Consultants or other contractors requiring access to the work area with suitable protective clothing, headgear, eye protection, as described in this specification, whenever the visitor must enter the work area. The Contractor shall have available and maintain at all times a minimum of three (3) suits and other suitable protective equipment for this purpose. All protective equipment shall be new and for the exclusive use of visitors.
- DD. The Contractor shall document that each visitor has been trained and fit-tested prior to entering an abatement area.

2.09 SCAFFOLDING:

- EE. Scaffolding, as required to do the specified work, shall meet all applicable safety regulations and DOSH standards. A non-skid surface shall be furnished on all scaffold surfaces subject to foot traffic. Contractor must comply with Owner's and General Contractor's Fall Protection Requirements.

2.10 TRANSPORTATION EQUIPMENT:

- FF. Transportation equipment, as required, shall be lockable and suitable for loading, temporary storage, transit and unloading of contaminated waste without exposure to persons or property. Any vehicle used to transport asbestos waste shall be properly registered with all applicable controlling agencies.

2.11 CONNECTIONS TO WATER SUPPLY:

- GG. Contractor shall assure that all connections to the site's water system shall include backflow protection. Valves shall be temperature and pressure rated for operation of the temperatures and pressures encountered. After use, connections and fittings shall be removed without damage or alteration to existing water piping and equipment. Leaking or dripping valves shall be piped to the nearest drain or located over an existing sink or grade where water shall not damage existing finishes or equipment.
- HH. Employ heavy-duty abrasion-resistant hoses with a pressure rating greater than the maximum pressure of the water distribution system in each work area. Provide fittings as required to allow for connection to existing wall hydrants or spouts.

2.12 WATER HEATER:

- II. The hot water supply must be adequate to allow for 15 minutes of continuous usage while maintaining a water temperature of 85 F °. At minimum provide UL rated 40-gallon electric water heater to supply hot water for the decontamination unit shower. Provide relief valve compatible with water heater operation; pipe relief valve down to drip pan on floor with type L copper. Drip pans shall consist of a 24 inch X 24 inch X 6 inch deep pan, made of 19 gauge galvanized steel with handles. Drip pan shall be securely fastened to the water heater with bailing wire or similar material. Wiring of the water heater shall comply with NEMA, NEC and UL standards.

2.13 OTHER TOOLS AND EQUIPMENT:

- JJ. The Contractor shall provide other suitable tools for the stripping, removal and disposal activities.
- KK. Prohibited Equipment: The following equipment is prohibited from use on this project unless accepted in writing by the Owner or Owner's designated representative:
1. High or low pressure water blasting equipment for hosing of work areas.
 2. Bead blasting or other uncontained abrasive blasting methods.
 3. Vacuum-powered removal or collection equipment located outside the asbestos work area, such as a "Vacu-Loader".
 4. Gasoline, propane, diesel or other fuel powered equipment inside the building, unless previously approved in writing by the Owner or Owner's designated representative.
 5. Equipment that creates excessive noise or vibration that would affect the safety of the building or generate complaints from neighboring building occupants. No equipment shall exceed an A-weighted sound level of 85 dB as measured at 3 ft. from the radiating source without written permission of the Owner or Owner's designated representative.
 6. Metal wire-brushes.
 7. Flammable solvents with a flash point below 140 degrees F or materials containing ethylene glycol ether, methylene chloride, ethyl chloroform (1,1,1-trichloroethane), or other hazardous substances.
 8. Non-fire retardant polyethylene sheeting.
 9. Polyurethane spray foam for application in fire-rated assemblies, including but not limited to penetrations into stairwells, mechanical rooms, electrical closets, rated floor-to-floor assemblies, etc.

PART 3 - EXECUTION

3.01 INITIAL AREA ISOLATION

- LL. The Owner or the Owner's designated representative reserves the right to inspect and approve all containment setups before any abatement is undertaken.
- MM. If a containment area is breached (failure of polyethylene seals, visible dust emission, fiber counts above background level, etc.), the Contractor shall take immediate action to control the breach and clean the area to the satisfaction of the Owner or the Owner's designated representative.
- NN. If sample results indicate that conditions have exceeded the baseline, as determined by the Owner or Owner's designated representative, all work shall cease. Work shall not recommence until the condition(s) causing the increase have been corrected.
- OO. Verify that all electrical power, gas, sewage, water, phone lines, fire life safety lines and sprinkler systems to the work area have been shut down and disconnected so that there is no possibility of reactivation and electrical shock.
- PP. Provide all connections for temporary utilities in the work area needed throughout abatement. Temporary electrical power shall be according to OSHA and the National Electrical Code for Wet Environments.
- QQ. Contractor shall conform to the Owner's lockout requirements, and secure the work area at all times. Area entrances and exits shall be secured by the Contractor throughout the abatement phase. Unauthorized visitors are strictly prohibited. Only the Contractor, Owner or Owner's designative representatives are permitted at the job site. Contractor shall ensure that all doors, gates, windows, and potential entrances to the work areas and the designated waste location areas are secured and locked at the end of each workday.
- RR. Contractor shall store all materials, equipment, and supplies for the project inside the buildings or in areas designated by the Owner and in accordance with Owner requirements.
- SS. As required, establish designated limits for the abatement work area with continuous barriers. Use barrier tape (3-inch) with a pre-printed asbestos warning throughout exterior asbestos abatement activities. Provide signs around the perimeter of all the interior works areas according to EPA and Cal-OSHA.
- TT. Contractor shall store all materials, equipment, and supplies for the project inside the buildings or in areas designated by the Owner.
- UU. Contractor shall provide temporary sanitary services of adequate capacity to handle the maximum estimated crew size plus an additional twenty percent. Contractor shall maintain the temporary facilities throughout the duration of the project.
- VV. The Contractor shall be responsible for identifying all HVAC components (if applicable) that lead into or out of the work areas. All components shall be disconnected and sealed airtight for the duration of the abatement work. All openings shall be sealed with two (2) layers of 6 mil polyethylene secured with duct tape, as applicable.
- WW. Pre-clean the work area and fixed objects in the work area using HEPA filtered vacuums and/or wet cleaning methods. Protect fixed objects with protective barriers (as appropriate) and cover with 6 mil poly sealed with tape.

3.02 CONTAINMENT SET-UP PROCEDURES

- XX. Contractor shall construct critical barrier negative pressure containment for the removal of asbestos-containing floor tile and ceramic tile systems. The work area(s) shall be placed under negative pressure as outlined in this specification throughout the abatement work period.
- YY. If encountered, all pipe insulation shall be removed utilizing the glove bag method within the same enclosure as floor tile work.
- ZZ. To permit the inspector to view the majority of the work area, the Contractor shall provide easily accessible viewing ports from the clean space into each abatement area. Viewing ports must be a minimum of 2' x 2', clear-see-through plastic with no scratches, tape or glue marks.
- AAA. Pressure differential recorders with strip charts are required to monitor the pressure differential in the work area. The recorders must be calibrated prior to arriving on site and shall be recalibrated monthly throughout the project. Recalibration shall be performed by qualified technicians following the procedures outlined by the manufacturers. Provide documentation of calibration before beginning work and monthly thereafter.
- BBB. A two-chamber decontamination unit may be allowed during the abatement work conducted in critical barrier containments. The unit shall be located immediately outside the contained area and shall contain a wash down area. A pre-fabricated unit is acceptable.
- CCC. Contractor shall construct an equipment decontamination enclosure system consisting of a washroom, holding area and clean room separated by airlocks.
- DDD. Separate areas of the building required to remain in operation from areas of the building undergoing asbestos abatement by means of airtight barriers constructed with suitable wood or metal framing. Apply a minimum of 3/8 inch sheathing on the work and public sides of the barrier. Only fire-rated building materials shall be used.
- EEE. Approved fire extinguishers (Class ABC, multi-purpose, dry chemical type, rated: 4A; 60BC) shall be readily available to workers (maximum travel distance of 50 feet) inside and adjacent to work area(s). Personnel and emergency exits shall be clearly indicated on the inside of the containment area. The emergency exit plan shall be approved by the Environmental Consultant prior to the set up of any work areas.

3.03 PERSONNEL PROTECTION

FFF. Informed Workers:

1. All workers shall be informed of the hazards of ACM and any other hazardous materials exposure. Workers shall also be instructed in the use and fitting of respirators, protective clothing, decontamination procedures, and all other aspects associated with the abatement work.

GGG. Personal Hygiene Practices:

1. The Contractor shall enforce and follow good personal hygiene practices during the abatement of ACM. These practices will include but not be limited to the following: no eating, drinking, smoking or applying cosmetics in the work area. The Contractor shall provide a clean space, separated from the work area, for these activities.
2. Workers shall remove street clothes in the clean room and put on a respirator and clean protective clothing before entering the work area. Upon exiting the work area, remove gross contamination from clothing before leaving the work area; proceed to the change room and remove clothing except respirators; proceed to the shower; clean the outside of the respirator with soap and water while showering; remove respirator and thoroughly wash. Following showering, proceed directly to the clean room and dress in street clothes. Do not wear disposable clothing outside the decontamination enclosure system.

3. If data gathered by the Owner or Owner's designated representative in areas adjacent to the work areas shows exposure to airborne asbestos or other hazardous materials exceeding Cal-OSHA criteria, that area will become regulated and workers must wear protective clothing and approved respirators and must have a shower facility provided to them.

HHH. Respirators:

1. Establish a respiratory protection program as outlined by ANSI and required by Cal-OSHA. Select respirators from those approved by the National Institute for Occupational Safety and Health (NIOSH). Respirators selected must be approved by the Competent Person. Submit program for review a minimum of five (5) working days prior to the commencement of abatement activities.
2. Provide workers with approved and personally-issued respirators with replaceable filters. Provide sufficient quantity of filters approved by NIOSH for use in asbestos environments so that workers can change filters as required by the manufacturer.
3. At a minimum, provide each employee with the following respiratory protection for each work phase:
 - a. Pre-cleaning, containment set-up, and containment removal work: NIOSH-approved, half-face respirators with HEPA cartridges.
 - b. Asbestos abatement of floor tile and associated mastics, and HVAC duct cements, mastics and adhesives: half-face respirators with HEPA cartridges and organic vapor cartridges (as necessary).
4. At all times, respiratory protection selected shall, at a minimum, meet the requirements of the Table 1 below.

Table 1 – Respiratory Protection

<u>Airborne Concentration of Asbestos</u>	<u>Required Respirator</u>
Not in excess of 1.0 f/cc (10 X PEL)	Half-mask air purifying respirator other than a disposable respirator, equipped with high efficiency filters
Not in excess of 5.0 f/cc (50 X PEL)	Full facepiece air purifying respirator equipped with high efficiency filters
Not in excess of 10 f/cc (100 X PEL)	Any powered air purifying respirator equipped with high efficiency filters or any supplied air respirator operated in continuous flow mode
Not in excess of 100 f/cc (1,000 X PEL)	Full facepiece supplied air respirator operated in pressure demand mode
Greater than 100 f/cc or unknown concentration	Full facepiece supplied air respirator operated in pressure demand mode, equipped with an auxiliary positive pressure self-contained breathing apparatus

5. Provide Type C continuous flow or pressure-demand, supplied-air respirators if the average airborne concentration of asbestos exceeds 100 times the permissible exposure limit; i.e., 8-hour time-weighted average (TWA) and ceiling limit. Use the respirators presented in Title 8 CCR 1529 that afford adequate protection at such upper concentrations of airborne asbestos. When Type C Respirators are required provide the following:
 - a. The air supply system shall provide Grade D breathing air that conforms to OSHA and ANSI Commodity Specification for Air.
 - b. Compressed Air System for Type C Respirators shall be high pressure, with a compressor capable of satisfying the respirator manufacturer's recommendations. The

compressed air system shall have compressor failure alarm, high temperature alarm, and a carbon monoxide alarm. It also shall have suitable in-line air purifying absorbent beds and filters to assure Grade D breathing air.

- c. Use of Belt: Type C respirators shall be worn with belt to minimize possibility of dislodging face mask when hose is snagged in the work area.

III. Protective Clothing:

1. Provide personnel exposed to asbestos fibers with fire retardant disposable protective whole body clothing, head coverings, gloves, and foot coverings. Provide appropriate gloves to protect workers hands from exposure to hazardous materials. Make sleeves secure at the wrists and make foot coverings secure at the ankles with tape. Ensure that all personnel entering and leaving the work area follow this procedure. Suits shall be of adequate size to accommodate the largest employee. Foot covers may be part of the coveralls. Non-disposable footwear shall be left in the work area until it is decontaminated or disposed of at the completion of the job.
2. Protective clothing 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 inspection.

JJJ. Eye Protection: Provide safety glasses or goggles to personnel removing or handling asbestos-containing materials and waste.

KKK. Shower Requirements: Contractor shall assure that all certified employees and visitors use protective equipment and the shower or wash down facility following each entry into the containment area after the start of the asbestos abatement.

LLL. Emergency Precautions and Procedures:

1. Establish emergency and fire exits from the work area. Display necessary signage at exits and paths to exits with representative visual aids. A diagram of all emergency and fire exits shall be posted in a conspicuous area proximate to the entrance to each work area.
2. The Contractor's supervisor/competent person shall be trained and certified in first aid and CPR, and be prepared to administer first aid to injured personnel after decontamination. Seriously injured personnel shall be treated immediately or evacuated without delay for decontamination. When an injury occurs, the Contractor shall implement fiber reduction techniques until the injured person has been removed from the work area.
3. In the event of a loss of negative pressure to the work area, work shall stop immediately and entrances to the work area sealed tight. The Contractor shall also institute fiber reduction controls until negative pressure is re-established to acceptable levels.

3.04 ASBESTOS REMOVAL (GROSS REMOVAL TECHNIQUE)

MMM. The Contractor shall abate all asbestos containing materials listed in this specification.

NNN. The Contractor shall continuously apply wetting agent throughout the removal process. The wetting agent shall be applied with a low-pressure fine spray to minimize fiber releases. The materials shall be thoroughly saturated so that there is no detectable fiber release. All ACM shall be immediately packaged in leak-tight containers following removal.

OOO. Minimize removal activities of ACM that generate airborne particulate. To the extent feasible, score or cut-out ACM in sections, wetting along the scoring line continually, and misting the air with an airless sprayer to knock down suspended particulate. After completion of removal work, surfaces from which asbestos has been removed shall be detail cleaned and/or wet cleaned to remove all visible material and residue.

PPP. Wet clean the exterior surfaces of waste containers in the equipment decontamination enclosure system prior to removal from the work area. Ensure that workers do not enter from uncontaminated areas into contaminated areas in the equipment decontamination enclosure system. The Contractor shall transport asbestos-containing waste bags to the waste debris box at designated hours approved by the Owner or Owner's designated representative. RACM shall be packaged in a minimum of two (2) 6-mil polyethylene bags. Bags shall be properly labeled for RACM disposal including site-specific generator labels. Non-friable waste shall be packaged in a leaktight container and properly labeled while stored on-site.

QQQ. Asbestos-containing debris and contaminated water shall be cleaned from the work area at the end of each work shift. The Contractor shall clean the work area using wet methods and HEPA vacuum equipment.

3.05 ASBESTOS EXTERIOR REMOVAL

RRR. Establish a regulated area consisting of barrier tape and asbestos warning signs at least 10 feet from the work area. The edge of the roof can be considered one such barrier if sufficient controls have been established to prevent loss of debris from the roof.

SSS. Provide a decontamination enclosure system at the point of entry/exit to the roof area.

TTT. Seal off openings within 50 feet of the work area including ducts, grills, and windows.

UUU. Utilize fall protection and safety devices at all times during roof work whenever exposed to falls greater than six feet including at perimeter, shaft or skylights.

VVV. Asbestos sealants/mastics shall be wet cut or scraped and removed from non-asbestos containing equipment unless the entire equipment is disposed.

WWW. Place all removed asbestos materials in waste bags or containers. All waste shall be removed from the roof at the end of each workday. In no case shall waste disposal containers be dropped or thrown. All ACM waste disposal containers shall be handled in a careful manner to prevent spills.

XXX. Acceptable clearance criteria for removal shall be no visible three-dimensional residue at removal locations. The Owner or Owner's designated representative reserves the right to conduct visual inspections at the completion of the work.

3.06 REGULATED AREA MONITORING

YYY. Prior to each work shift and continuously throughout the project, each containment and decontamination enclosure system shall be inspected and repaired as needed.

ZZZ. Ambient asbestos fiber levels outside each work area shall not exceed 0.01 f/cc (PCM) or 70 s/mm² (TEM) or background whichever is greater. If the asbestos fiber concentrations outside work areas exceed those levels shown above, then abatement must stop and operations be reviewed and modified until the fiber count can be reduced to within the acceptable limits.

3.07 AIR MONITORING

AAAA. The purpose of any air monitoring that may be conducted by the Owner or Owner's designated representative will be to detect possible release of fibers or dusts (asbestos or lead) emanating from the work areas.

BBBB. All PCM air sample analysis shall comply with NIOSH Method 7400. All TEM analysis shall be consistent with AHERA protocols.

CCCC. The Owner or Owner's designated representative reserves the right to perform and / or observe final clearance inspection and sampling.

DDDD. The method of analysis for pre-abatement and clearance air samples shall be via Phase Contrast Microscopy (PCM). The method of analysis for in-progress asbestos air samples shall be PCM and TEM at the option of the Owner or Owner's designated representative.

EEEE. The Contractor shall be responsible for all personal air sampling. These samples shall be taken each shift and for each distinct crew operation, and shall be used to verify adequacy of fiber control and respiratory protection. Personal breathing zone air sampling shall be in accordance with the Cal-OSHA asbestos standard. A minimum of 25% of the workforce shall be monitored during each shift. All sample results shall be available on-site within 24-hours of sample collection. If two consecutive shifts of non-compliant or overloaded samples are noted, the contractor shall hire an CAC/CSST at their own expense to assist in compliance with the specifications.

3.08 CLEARANCE INSPECTIONS

FFFF. The Owner or Owner's designated representative reserves the right to conduct visual inspections. Contractor shall notify the Owner or Owner's designated representative when the decontamination process in each containment area is complete. Evidence of debris will require additional clean up by the Contractor. Contractor shall be responsible for re-cleaning all areas found to be deficient.

GGGG. If the Owner or Owner's designated representative determines that the work area is sufficiently clean, the Contractor may proceed. If the Owner or Owner's designated representative determines that certain areas require additional cleaning, the Contractor shall re-clean the work area and request a second inspection of the re-cleaned area. All costs incurred by the Owner or Owner's designated representative for inspections required after the second inspection will be charged to the Contractor.

HHHH. Once the initial visual is passed, the Contractor shall remove all but the containment critical barriers.

IIII. Following the visual inspection, the Contractor shall provide a coating of non-diluted encapsulant in the work area. The Contractor shall allow the encapsulant to dry for the period specified by the manufacturer.

JJJJ. Asbestos Clearance Testing: Following encapsulation and drying time, the Contractor shall conduct air clearance sampling. Clearance air sampling shall not take place until all encapsulant is dry. The Owner or Owner's designated representative reserves the right to approve the initiation of clearance sampling.

3.09 ASBESTOS CLEARANCE CRITERIA:

KKKK. The clearance level per containment shall be less than 0.01 fibers per cubic centimeter via phase contrast microscopy (PCM) or less than 70 structures per square millimeter via transmission electron microscopy (TEM). Aggressive air sampling shall be used for clearance purposes. Multiple samples shall be collected in large containment areas.

LLLL. If air samples do not pass the required clearance criteria, the area shall be re-cleaned and new samples shall be collected by the Owner or Owner's designated representative. The Contractor shall be responsible for all costs associated with re-sampling and re-analyses. This amount will be deducted by the Owner from the Contractor's final payment.

MMMM. The Owner or Owner's designated representative shall notify the Contractor in writing of acceptable asbestos fiber concentrations. The Contractor shall then remove all the remaining barriers in the work area.

3.10 ASBESTOS DISPOSAL

- NNNN. It is the responsibility of the Contractor to determine current waste handling, labeling, transportation and disposal regulations for the work site and for each waste disposal landfill. The Contractor must comply fully with these Specifications, local, state, and federal regulations and provide documentation of the same. Only Owner approved haulers and landfills may be utilized on this project.
- OOOO. Ensure that polyethylene bags are sealed air-tight. All bags shall be wet cleaned prior to removing them from the equipment decontamination enclosure system.
- PPPP. Ensure all disposal containers are properly labeled according to 8 CCR 1529, 5194 (HAZCOM), 49 CFR 171-179 (USDOT), 40 CFR 61 Subpart M (NESHAP), and any local regulations and state regulations as required by this specification.
- QQQQ. Filter all wastewater to the technically feasible limit, but not more than five (5) microns before disposal. Comply with all current local, state and federal codes relating to waste water release.
- RRRR. Asbestos-containing waste that is properly labeled and double-bagged, may be temporarily stored in areas approved by the Owner. Areas must be made secure before storing the waste. Waste is not to remain in temporary storage area for longer than four (4) days before final load-out of materials.
- SSSS. All asbestos waste shall be double-wrapped prior to transport from the site.
- TTTT. All vehicles used to transport hazardous waste must be registered with the Department of Toxic Substances Control and Department of Transportation and display the proper registration and expiration stickers.
- UUUU. Trucks must have an enclosed cargo area with a storage compartment that is fully lined with a minimum of one (1) layer of 6-mil polyethylene on the walls and two (2) layers on the floor. The driver of the vehicle must stop the vehicle in a safe location at least once during each two hours or one hundred miles of travel whichever is less and inspect the contents of the shipment. At the time of inspection if any form of binding is found to be loose the driver shall immediately take action to remedy the situation for safe transportation.
- VVVV. All vehicles and containers used to transport waste are subject to inspection and approval of Owner prior to departure from site.
- WWWW. Contractor shall not throw bags into the truck in a way that may cause the bags to burst open.
- XXXX. Contractor shall provide at minimum one (1) day advance notification to the Owner when signatures are required on manifest(s). The Contractor shall ensure that the Hazardous Waste Manifest is correctly filled out. The Contractor shall give the appropriate copies to the Owner and shall also instruct the Owner in writing that they must send the appropriate copy to the Department of Toxic Substances Control.
- YYYY. If a debris box is used, the Contractor shall make all necessary arrangement with the Owner including obtaining all appropriate permits.
- ZZZZ. Contractor is responsible for all coordination with the waste disposal site and with the waste hauling company.
- AAAAA. Debris box for hazardous waste shall be fully lined with a double layer of polyethylene sheeting and must be locked at all times when unattended.
- BBBBB. Debris box shall be constructed with minimum 20-gauge steel with no windows or openings other than the door. The door of the container shall have a secure cover on the locking device with access to the lock only at the key-hole. Once the debris box is filled and the manifest is signed, Contractor must transport the debris box off the job site.

CCCCC. Disposal shall be in an Owner approved landfill that meets EPA requirements. Do not throw bags into landfills in a way that may cause the bags to burst open.

END OF SECTION

ATTACHMENT A
ASBESTOS ABATEMENT WORK PLAN OUTLINE

In accordance with the contract documents, the Contractor is required to prepare a written, site-specific Asbestos Abatement Work Plan, and submit to the Owner for approval prior to start of work. This plan is required for the contractor to meet Cal-OSHA requirements as well as the contract documents and shall describe work procedures and control methods that will protect the Owner's facilities and the environment.

I. Location of Work:

The work to be completed under this work plan will be completed at:

(Location within building)

Previous asbestos inspections or surveys have found that ACM are present at the following locations:

(List all materials and locations to assure the Owner and the Contractor are aware of all hazardous materials locations)

II. Description of Work:

Describe the anticipated work scope

III. Schedule:

Phase/Task

Anticipated Date(s)

Mobilization

Set-up of work area(s), containments

Abatement

Final Cleaning

Visual Inspection

Final Clearance (visual and air sampling)

Teardown

Demobilization

IV. Equipment and Materials

List all equipment and materials to be used, such as the following:

HEPA Vacuums

Scrapers

Power saws

Pry bars

Cutting shears

Other hand tools

Encapsulants/sealants

Disposable coveralls

Respiratory protection

Fall Protection

Negative air filtration units

Manometers

Shower facilities

Airless sprayers/compressors

Cleaning detergents

Solvents (must be approved by Owner)

Gloves

Eye & foot protection

Scaffolds/Ladders

Gas/Diesel Powered Equipment

V. Crew

List all workers and supervisors with emergency contact names and pagers.

Clearly identify the supervisor and competent person who has authority for all safety and health.

VI. Control Measures and Work Practices

Describe in a narrative format, the specific work procedures, exposure/ contamination controls, and engineering controls. This description should include, but not be limited to, the following:

OSHA Class I, II, III and IV work	Wet methods
Negative pressure enclosure	Glovebag removal
Respiratory protection	HEPA vacuums
Mini-containments	Solvent removal of mastic
List other procedures	

VII. Respiratory Protection and Protective Clothing/Personal Protective Equipment

List all respiratory protection including types and manufacturers which are anticipated for this project. Identify the phases of the project for which respirators will be required or likely to be required. List all personal protective equipment anticipated to be used on the project.

VIII. Decontamination/Hygiene Facilities

Identify the types and locations of decontamination or hygiene facilities to be used on this project. Specify use of disposable towels, soap, hot and cold water, and other supplies. Specify the required use of the facilities, including use of the facilities prior to eating, drinking, smoking and before leaving the project site. Describe handling or treatment of asbestos-contaminated solid waste and wastewater.

IX. Air Monitoring Data

Identify general worker air monitoring protocols to be followed on this project, including worker category classifications, frequency of monitoring, anticipated laboratory to be used for analysis, pump calibration techniques, etc. Identify the competent person responsible for conducting personal air monitoring and proposed consultant if air sampling requirements are not met from two consecutive shifts.

X. Containment Diagram

Include a diagram (hand written is acceptable) of the containment(s) showing the containment perimeter in relation to the surrounding areas, locations of negative air machines and exhaust locations, direction of airflow, and decontamination areas.

XI. Waste

Describe how all waste on this project will be packaged, labeled, stored, transported, manifested and disposed

XII. Preparation of Asbestos Abatement Work Plan

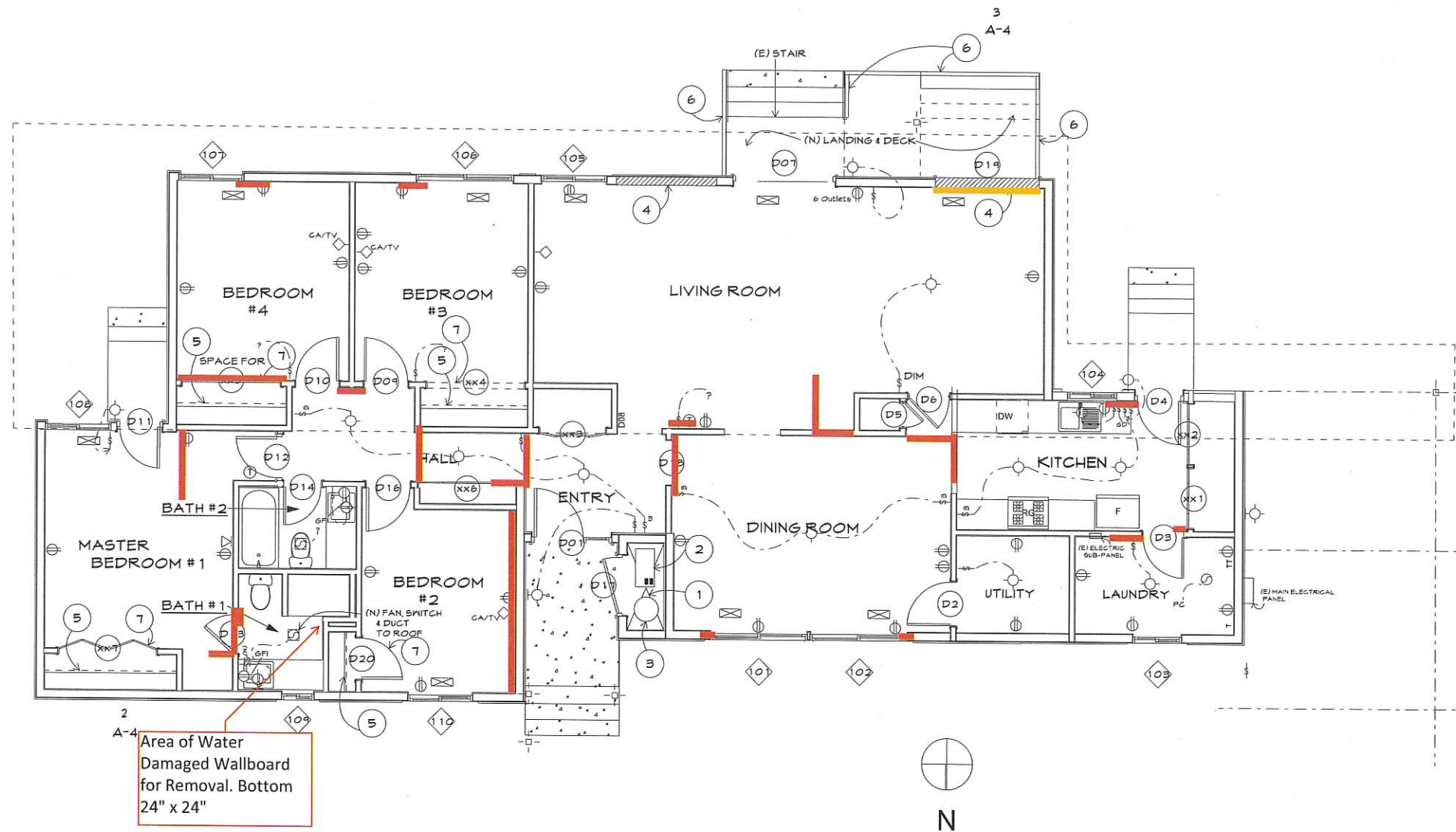
Date Prepared and Prepared By (signature, name and title)

April 19, 2021

2815 San Diego Road Renovation Improvements
Project No. CDSIP2815SDR
Addendum No. 1

ATTACHMENT NO. 2
Reference Diagram Showing Fractured Wallboard Locations Containing ACM (Enlargement)

- Fractured Wallboard with Joint Compound (Fix)
- Fractured Wallboard with Joint Compound (Remove)



Area of Water Damaged Wallboard for Removal. Bottom 24" x 24"

MEP PLAN
SCALE: 1/4" = 1'-0"

BABETTE JEE ARCHITECT
805 Camellia Street, Berkeley, CA 94710
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MEP FLOOR PLAN

2815 San Diego Rd.
Alameda, CA 94501
City of Alameda
Community Development
Department

Date:	2/7/21
Scale:	AS NOTED
Drawn:	
Job:	
Sheet:	

MEP-1

April 19, 2021

2815 San Diego Road Renovation Improvements
Project No. CDSIP2815SDR
Addendum No. 1

ATTACHMENT NO. 3
Update to Section 3 Fact Sheet
(for Certification for Business Concerns Seeking Section 3 Preference in Contracting and
Demonstrating of Capability)

Section 3 Fact Sheet (Updated for 2021)

Section 3 is a provision of the Housing and Urban Development Act of 1968 intended to ensure that the expenditure of certain federal funds, such as Community Development Block Grant, are used to give contracting and employment opportunities to low-income persons or businesses.

Section 3 Businesses Are One of the Following:

1. Businesses that are 51 percent or more owned by Section 3 residents (see below for definition);
2. Businesses whose permanent, full-time employees include persons, at least 30 percent of whom are currently Section 3 residents, or within three years of the date of first employment with the firm were Section 3 residents; or
3. Businesses that provide evidence of a commitment to subcontract 25%, or higher, of the contract amount to subcontractors that are Section 3 businesses as described above.

Businesses concerns seeking to receive Section 3 preference shall submit a *Certification for Business Concerns Seeking Section 3 Preference*, provided in bid packet, and submit evidence verifying that they meet the definitions provided above. A Section 3 business concern shall have the ability and capacity to perform successfully under the terms and conditions of the proposed contract.

Section 3 Residents Are:

1. Residents of Public and Indian Housing; or
2. Individuals that reside in Alameda, in which the Section 3 covered assistance is expended, and whose income do not exceed the local HUD income limits set forth for low- or very low-income households, below.

Maximum Income for Various Income Categories 2021

Area Median Income = **\$125,600**

FY 2021 Income Limit Area	Median Family Income Explanation	FY 2021 Income Limit Category	Persons in Family							
			1	2	3	4	5	6	7	8
Oakland-Fremont, CA HUD Metro FMR Area	\$125,600	Very Low (50%) Income Limits (\$) Explanation	47,950	54,800	61,650	68,500	74,000	79,500	84,950	90,450
		Extremely Low Income Limits (\$)* Explanation	28,800	32,900	37,000	41,100	44,400	47,700	51,000	54,300
		Low (80%) Income Limits (\$) Explanation	76,750	87,700	98,650	109,600	118,400	127,150	135,950	144,700

(Rounded to nearest \$50.00)

**NOTE: Family size adjustments in each category are based on the percentages below, with family of 4 as the base*

Number of persons:	1	2	3	4	5	6	7	8
Adjustment:	70%	80%	90%	Base	108%	116%	124%	132%

For families above 8 add 8% to the adjustment, for example for a family of 9 the adjustment is 140% (132% + 8%)

New Hires

Section 3 also requires that any new employment opportunities generated by the Section 3-covered project be directed toward low-income Section 3 residents as defined above.