

**MODIFICATION # 2
TO
SAN RAFAEL CITY SCHOOLS
INDEPENDENT CONSULTANT AGREEMENT
FOR PROFESSIONAL SERVICES
WITH MILLENNIUM CONSULTING ASSOCIATES
FOR SUPPLEMENTARY INDUSTRIAL HYGIENE (HAZMAT) SERVICES AT
SAN RAFAEL HIGH SCHOOL
AS APPROVED BY SAN RAFAEL CITY SCHOOLS BOARD OF EDUCATION
ON SEPTEMBER 25, 2017.**

This Modification No. 2 ("Amendment") amends the Independent Consultant Agreement for Professional Services ("Agreement"), which was entered into by and between San Rafael City Schools ("District") and Millennium Consulting Associates ("Consultant") (together, "Parties") as follows:

RECITALS

WHEREAS, the parties entered into the Agreement executed on or about February 10, 2017; and

WHEREAS, both parties wish to make certain modifications to their Agreement; and

Now, THEREFORE, in consideration of the mutual promises and covenants set forth above and contained herein, the Parties agree as follows:

1. **Exhibit "A"** to the Agreement is deleted in its entirety and replaced with the document titled "**Exhibit "A"**" and attached to this Amendment.
2. In Section 4 of the Agreement ("Compensation"), "Eighty-Seven Thousand, Eight Hundred Forty-Two Dollars (\$87,842.00)" is deleted and replaced with "One Hundred Six Thousand, Eight Hundred Twenty-Eight Dollars (\$106,828.00)".
3. Subsection 4.2.1.2 is added below subsection 4.2.1.1. as follows:

4.2.1.2. San Rafael High School Phase II Environmental Site Assessment Services include the following NTE amounts per task:

Task 1 – NTE \$15,546

Task 2 – NTE \$ 3,440

Total San Rafael High School Phase II NTE: \$ 18,986.00

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4. All other provisions of the Agreement shall remain in full force and effect and are reaffirmed. If there is any conflict between this Agreement and any provision of the Agreement relating to this Amendment only, the provisions of this Amendment shall control.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment.

By _____
Dr. Michael Watenpaugh
Superintendent
San Rafael City Schools

Date

By _____
Jack McCubbin, Principal
Millennium Consulting Associates

9/19/2017

Date

Exhibit “A”

Consultant shall provide Services for asbestos, lead, PCB and hazardous materials abatement surveys, cost estimating, outline specifications preparation, and future design and construction phase services described below:

SCOPE OF WORK FOR CONSULTANTS

1. Hazardous Materials Survey, Cost Estimating, and Outline Specifications

SERVICES GENERALLY

- In general, the services to be provided by the Consultant selected as a result of this process will include:
 - Construction document review,
 - Building inspections/surveying and testing for:
 - Asbestos-containing materials (“ACM”),
 - Lead-containing materials (“LCM”), and
 - Other hazardous materials of importance required prior to demolition,
 - Bulk sampling for ACM and LCM,
 - X-Ray fluorescence (XRF) testing for LCM,
 - Preparation of removal specifications and plans, identifying all items that require abatement prior to demolition,
 - ACM and LCM abatement compliance inspections, including environmental and clearance air monitoring, quality control and assurance programs for field sampling,
 - Project support and analytical services for an emergency or planned repair, renovation, and demolition projects as required by the District.
- Construction Phase Services: The Consultant will monitor the abatement work to ensure compliance with contract specifications and all federal, state, and local regulatory requirements applicable to such work.
- All work shall be performed in accordance with:
 - Asbestos Hazard Emergency Response Act (AHERA),
 - Title 8 of the California Code of Regulations, including Sections 1529 and 1532.1,
 - Education Code Section 49410 et seq.,
 - Health and Safety Code section 25914 et seq.,

- Labor Code Section 6501 et seq., and
- All applicable local, state and federal laws, all in support of the construction commencing throughout the District.

PRE-DESIGN PHASE: SURVEY, OUTLINE SPECIFICATIONS, COST ESTIMATING

- Prepare a detailed survey/inspection of EACH Site for the presence of asbestos and lead containing materials, which will include review of available pertinent existing historical documentation/previous reports of proposed areas where materials or areas of ACM and LCM may be located.
- Meet with the District Representatives as needed to decide what abatement steps should be undertaken in connection with the modernization plans for the Site.
- Develop a management plan to identify ACM and LCM.
- Assess, sample and analyze materials for ACM at the Site:
- Visual assessment of accessible areas.
- Preliminary assessment to determine homogeneous area and sampling schemes.
- Non-destructive bulk sampling and analysis by Polarized Light Microscopy (PLM) of suspect ACM. Analysis to be in accordance with United States Environmental Protection Agency (USEPA) protocol as found in the Asbestos Hazard Emergency Response Act (Code of Federal Regulation, Section 40, Part 763).
- Assess, sample and analyze LCM at the respective school sites:
- Visual assessment of accessible areas.
- Preliminary assessment to determine homogeneous areas and sampling schemes.
- X-ray fluorescence (XRF) sampling of painted surfaces to assess lead content. If inconclusive, sample tests are to be provided.
- Consultant shall provide seventy two (72) hours' notice to the designated representative of the District prior to starting any on-

site assessment or sampling. The Consultant shall notify the District representative for all work to be performed, including the date and time of the Consultant's visit. Sampling may only be performed when staff and students are not present in the areas to be sampled. The Consultant shall not displace staff or students for sampling purposes.

- Consultant shall provide a Hazardous Building Material Survey (HBMS) report for the Site. HBMS reports shall include a summary of findings and recommendations, and individual detailed sections for ACM, LCM, PCB'S, hazardous chemicals, underground storage tanks, and other hazardous materials.
- Outline specifications for use during the design phase establishing requirements and procedures for abatement of hazardous materials during each of the future projects.
- Cost estimates for each site indicating costs for abatement of identified hazardous materials.
- District will provide, if available, copies of any available existing hazardous material reports prepared by others, as-built/record drawings (CD, if available) and copies of relevant modernization design drawings currently in progress to the selected Consultant.

DESIGN/PRE-BID PHASE

- Consultant shall prepare a LCM/ACM scope of work and project-specific Specifications for the Site as directed by the District, which will include but not be limited to: work procedures, abatement drawings identifying type, extent and location at each building of ACM and LCM and disposal requirements, air sampling criteria and work area preparation.
- Consultant shall assist District in the preparation of other bidding/contract documents for abatement contractors.
- Consultant shall be available to attend Pre-Bid meetings to answer questions from bidding contractors.

CONSTRUCTION PHASE

- Consultant shall provide oversight of abatement and remediation activities.

- Consultant shall review contractor submittals, including the contractor's hazardous remediation plan, worker certificates, medical clearances, respirator fit tests and Injury Illness Prevention Plan (IIPP).
- Consultant shall attend and participate in weekly project meetings, and any other meetings, as required.
- Consultant shall monitor construction contractor with regard to monitoring abatement work (asbestos and lead removal), for compliance with abatement scope of work and specifications, as well as all necessary air monitoring, wipe sampling and necessary testing.
- Consultant shall collect asbestos air samples during abatement work and analyze within twenty-four (24) hours. Clearance air samples at conclusion of abatement work shall be analyzed in accordance with the requirements of the Asbestos Hazard Emergency Response Act (AHERA), the Asbestos School Hazard Abatement Reauthorization Act (ASHARA), 40 Code of Federal Regulations (CFR), Environmental Protection Agency (EPA) rules regarding asbestos containing materials in schools and other applicable requirements of responsible regulatory agencies.
- Consultant shall characterize waste materials from lead abatement work. Waste characterization shall be performed in accordance with applicable requirements of responsible regulatory agencies. This includes characterization of wastes as hazardous waste and/or Resource Conservation Recovery Act (RCRA) hazardous waste.

CLOSEOUT

- Within thirty (30) days of completion of the abatement work, Consultant shall provide District documentation detailing abatement work completed, results of monitoring and contractor observations, results of clearance sampling, copies of waste manifests for the disposal of hazardous and non-hazardous waste for the Site, site inspection reports (daily field reports) of abatement activities and summary of abatement activities, abatement activity personnel, and certification that the abatement activities complied with all applicable Health and Safety laws, guidelines, and requirements of Cal/OSHA Title 8, California Department of Education (CDE), Department of Toxic Substances Control (DTSC), and the California Division of the State Architect (DSA).

2. Services Regarding Davidson Middle School Annex

In addition to the Services identified above, in Section 1, Consultant shall provide the following services for the District's Davidson Annex preparation for temporary housing, pre-design services, bid support, monitoring and closeout services, to include:

Pre-Renovation Hazardous Material Survey and assessment of the Annex (exterior, interior and roof), and immediate Annex grounds (as applicable to the scope). For the purposes of this contract, hazardous materials are described as asbestos containing materials (ACM), lead containing materials (LCM), other regulated materials (ORMS) such as poly-chlorinated biphenyls (PCB's), and universal wastes (light fixtures, thermostats, illuminated exit signs).

- A. Task 1 – Historical Hazmat Data Review, Initial Site Survey** – As part of this task, Consultant will review data obtained from San Rafael City Schools (SRCS) for the Annex. Following review of the available SRCS data, Consultant will perform a visual survey of the interior, exterior and roof of the school and exterior play yard areas that comprise the school grounds. The purpose of the visual survey is to confirm the presence and condition of suspect asbestos containing building materials, lead containing building components or paint coating systems, PCB's, and ORM's identified in existing SRCS files. The visual assessment will be used to develop a sampling plan for the pre-renovation survey.

Following the initial site review, Consultant will develop a site-specific sampling and analysis plan. The work plan will include defining homogeneous sample groups (HSG) for asbestos sampling. The number of samples to be collected will conform to AHERA sampling requirements for TSI, surfacing and current EPA guidance for miscellaneous suspect ACMs.

The work plan will include conducting lead bulk sampling and X-ray Fluorescent (SRF) surveying as part of the hazmat assessment survey. In addition, the work plan will include asphalt concrete sampling for asbestos and soil sampling for naturally occurring asbestos (ONLY). The asphalt concrete and soil sampling will be limited to depths of five feet below existing site grade (BGS) unless exterior renovation work will require excavation to depths greater than five feet. The asphalt coring and soil sampling budget has been included in this proposal under Task 1.

The visual inspection and sampling will be performed and supervised by personnel who are qualified and certified in their perspective professional fields (asbestos and lead). The sampling program will be performed after the work plan has been developed. However, selected materials may be

sampled during the initial site inspection. The scope of the sampling program is described in Task 1 below.

Hazmat Survey

Based on Task 1, Millennium will conduct a hazardous material survey to close the data gaps described above. This task will include performing the following:

- XRF survey to evaluate paint coating systems and suspect lead containing building components for lead,
- Bulk sampling of damaged paint coating systems for lead,
- Bulk sampling of caulking, sealants, and suspect components for PCBs;
- Bulk sampling of previous buildings materials and components that were assumed ACM or contains no existing data

Bulk samples and/or paint chip samples, will be collected in conformance with HUD and/or CDPH sampling procedures and will be analyzed for total lead by EPA Method 3050B/7000B. Bulk samples will be analyzed for asbestos content using the EPA Method 600/R-93/116, 1993. This method is referred to as the "Improved Method" and is recommended by EPA as a preferred substitute to the Interim Method EPA 600/M4--82-020, 1982. Bulk samples for asbestos that exhibit trace (<1% asbestos) or will be analyzed by Point Counting (1000 Point Count).

Asphalt and Soil Testing for Environmental Assessment

Under this task Millennium will collect asphalt concrete core samples and representative soil samples at general representative locations for the entire site. Where available, this work will be coordinated with a separate geotechnical investigation to be performed by SRCSD's geotechnical consultant (if one will be contracted for the design). Where this coordination is not practical, Millennium will subcontract with a utility locator subcontractor (if feasible and if information provided by USA North 811 services are insufficient) to assist in the subsurface investigation and perform the field services of asphalt coring and collection of samples itself. Should subsurface conditions impede general soils investigation, Millennium will hire a subcontractor to perform coring/boring, which may be at an additional cost to the original proposal.

Millennium anticipated performing three (3) soil borings to a maximum depth of five (5) feet below ground surface (bgs). Asphalt cores and soil samples will be collected from each boring. Soil sample depths will be staggered between soil borings. Groundwater is not anticipated to be encountered unless deeper soil borings will be performed. The soil samples will be placed in a cooler containing water ice. Samples, will be logged onto a chain of custody.

All soil samples will be transmitted to McCampbell Analytical, Inc. (MAI) under chain of custody by Millennium personnel. MAI will formulate the composite samples for the NOA analyses. Millennium will transmit the composite samples for NOA and the asphalt core samples to EMSL Analytical in San Leandro, CA for analysis. The sampling and analysis plan will include analyzing discrete and composite (2:1 or 3:1) soil samples for the following constituents:

Table - Soil Sampling and Analysis Plan

Analytical Method	Number of Analyses
Naturally Occurring Asbestos (NOA) by CARB 435 (1,000 point Count).	3 - Composite Soil Sample (2:1 or 3:1) ¹
Asbestos (1,000 point count with gravimetric reduction)	2 - Asphalt/ Concrete Only

Notes:

1. NOA to be analyzed on composite of soil samples (2:1 or 3:1 composite) from 0 to 5 feet bgs from each boring.

All analyses will be performed at standard turnaround times (5 days depending on analytical method). All analyses will be performed using Level II Quality Assurance/Quality Control (QA/QC) protocols.

Should surface treatments or soil conditions impede subsurface investigations performed by Millennium personnel, Millennium will sub-contract out the subsurface work. Difficult conditions regarding subsurface work may require additional costs to the original

proposal. Millennium will communicate all site conditions prior to progressing work on difficult site conditions.

B. Task 2: Pre-Renovation Hazardous Material Survey Report

Under this task, Millennium will document the results of the Pre-renovation Hazardous Materials Survey and Assessment including the results of the existing data review and site sampling program.

C. Task 3: Outline Technical Specifications (Construction Documents)

Millennium will assist in the preparation of project construction documents for both public bidding and Job Order Contracting delivery methods, and for project change orders. In providing construction document services, Millennium will:

1. Develop hazardous material specifications for the specific work to be performed for the abatement of hazardous materials (asbestos, lead, and Other Regulated Materials/ Universal Wastes to be disturbed by scheduled building renovation. The hazardous material specifications will utilize standard specifications (asbestos, lead, ORMs).

Hazardous material specifications shall address contractor qualifications submittals, removal and decontamination procedures, proper worker protection and final clearance criteria. The specifications shall incorporate all applicable federal, state and local laws, regulations, documents, codes, SRCSD policies and requirements that govern hazardous materials abatement/containment work, along with describing all labor, materials, services, permits and fees that are required to accomplish the hazardous materials abatement/containment and any required restoration. The hazardous material specification will also address all applicable regulatory requirements for demolition (including NESHAP permitting where appropriate), removal, transportation and disposal of hazardous materials. The hazmat specifications shall include a list of all agencies required to be notified by the contractor. The hazmat specifications will also include hazmat schedule that will detail the hazardous materials present in each room.

2. Develop hazardous material abatement drawings. The drawings will show the approximate location of hazardous materials to be removed including piping requiring abatement. Drawings will be full size, and will utilize backgrounds to be provided by the project architect.

D. Task 4: Bidding Services:

Millennium will assist SRCSD during the bidding phase by providing the following:

1. Attending two pre-bid walks to review the hazardous materials related work as described in the project specifications.
2. Provide written responses to Request for Information (RFI's) and prepare written addenda pertaining to hazardous material related work as required. All written responses will be coordinated with the Project Architect or through the SRCSD Project Manager.

E. Task 5: Inspection and Monitoring Services:

Millennium will provide hazardous material (Hazmat) abatement inspection and monitoring services by providing the following:

1. Attending an initial pre-construction meeting to review necessary abatement submittals.
2. Attending weekly construction progress meetings (as necessary) to coordinate abatement monitoring, with planned work activities during the various project phases.
3. Reviewing hazardous material subcontractor submittals for conformance with the project specifications.
4. Inspecting abatement enclosures and/or regulated areas prior to initiation of abatement and/or demolition activities for conformance with project specifications.
5. Performing necessary clearance inspections and testing;
6. Performing final acceptance testing and wipe testing and microbial swab (if necessary) following completion of work and prior to turnover to the SRCSD.

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F. Task 6: Project Closeout:

Millennium will provide project closeout services by providing the following:

7. Review contractor red-lined drawings related to hazmat abatement work;
8. Preparing as-built drawings showing areas that have been abated and identify remaining hazardous materials that were not abated or disturbed, and
9. Preparing and/or reviewing required close-out documents.

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3. Supplemental Services For San Rafael High School Phase II Environmental Site Assessment

For the San Rafael High School site, Consultant shall complete the following tasks as part of Consultant's Phase II Environmental Site Assessment Services:

SCOPE OF WORK

Task 1 – Investigation Planning, Site Preparation, and Sampling

Millennium will perform a limited Phase II ESA at Building M and Building O. Millennium recommends that 72 soil samples be collected as outlined in Table 1 below:

Table 1: Proposed Work Plan

Location	Sample Depths (ft-bgs)	Boring Type	Sample Type	Sample Quantity/Interval	Analytical Summary
Building M (Auto Shop)	0.5 to 2.0, 4.5 to 6.0	Direct Push	Soil	10 samples/boring x 4 borings @ ~2' and 6'; Total Samples: 40	VOCs +/- Oxygenates Excluding Acrolein & 2CEVE by P&T and GC-MS (EPA Method 8260B), TPH(g, d, mo) (EPA Method 8015B), CAM17 Heavy Metals (EPA Method 200.8 / 6020A), PCBs Aroclors only by GC-ECD (EPA Method 8082)
Building O (Metal Shop)	0.5 to 2.0, 4.5 to 6.0	Direct Push	Soil	8 samples/boring x 4 borings @ ~2' and 6'; Total Samples: 32	VOCs +/- Oxygenates Excluding Acrolein & 2CEVE by P&T and GC-MS (EPA Method 8260B), CAM17 Heavy Metals (EPA Method 200.8 / 6020A), PCBs Aroclors only by GC-ECD (EPA Method 8082)

Millennium will initiate field investigation by conducting subsurface utility clearances at all proposed sampling locations. This will be performed by coordinating with local agencies through USA Underground Alert and utilizing third party utility and subsurface locating services. Millennium personnel will conduct the sampling with a C-57 licensed subcontracted driller. The soil samples collected during drilling will be collected in containers provided by the analytical laboratory.

Soil samples will be field screened using an Organic Vapor Analyzer equipped with a Photo Ionization Detector (OVA-PID). Due to the relatively shallow soil sampling, no groundwater samples will be collected. All soil samples will be placed in a cooler containing ice. Samples will be logged onto a chain of custody.

All borings performed will be in conformance with applicable boring permits and permit close-out documents, including boring logs.

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The soil samples will be shipped to McCampbell Analytical under chain of custody by Millennium personnel. The soil samples will be analyzed for the following constituents:

- Volatile Organic Compounds (VOCs) by EPA Method 8260B;
- Total Petroleum Hydrocarbons (TPH) as gasoline, diesel, and motor oil (g, d, mo) by EPA Method 8015B;
- CAM17 Heavy Metals by EPA Method 6020/7041; and
- Polychlorinated biphenyls (PCBs) as Aroclors by EPA Method 8082.

Estimated analytical quantities based on the above and in Table 1 are detailed in the attached cost detail spreadsheet. All analyses will be performed at the standard 5 day turn-around time. All analyses will be performed using Level II Quality Assurance/Quality Control (QA/QC) protocols.

Task 2 – Project Management, Data Analysis, & Reporting

Following completion of the field work and review of the analytical results, Millennium will prepare a written report. The analytical results will be compared to Environmental Screening Levels (ESLs) established by the San Francisco Bay Regional Water Quality Control Board (Water Board). The ESLs are considered to be conservative. Consequently, the Water Board, under most circumstances, considers the presence of a chemical in soil at concentrations below the corresponding ESL to not pose a significant, long-term (chronic) threat to human health and the environment.

The report will also present the visual observations during the field investigation, soil sampling results, findings, and conclusions. Based on comparison of the ESLs with the analytical data, Millennium will develop specific conclusions and recommendations about onsite reuse and offsite disposal options for excess soil, and if additional worker protection will be required during site demolition activities.

Soils that have analyte concentrations below the DTSC Total Threshold Limit Concentration (TTLC), but have the potential to exceed the Soluble Threshold Limit Concentration will be analyzed using the Waste Extraction Test (WET). Soils that have the potential for exceeding Federal regulated levels for hazardous waste will be analyzed using the Toxicity Characteristic Leachate Procedure (TCLP). For budgeting purposes, Millennium will assume that 10% of the collected samples for VOCs and CAM17 Metals will require analysis using the WET and 5% of the collected samples for VOCs and CAM17 Metals will require analysis using the TCLP.

TIMELINE

Start of work on the limited Phase II ESA is dependent on the following:

- District availability prior to the start of the 2017-2018 school year. The District will be required to move the automobiles out of Building M in order for the driller to have access to boring locations; and
- Driller availability. Millennium will schedule a driller within 5 days of executing the notice to proceed.

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