PART 1 – GENERAL

1.01 SUMMARY

A. This section provides a list of known and assumed hazardous materials that may be impacted during renovation, demolition, repair, custodial and/or maintenance activities. The hazardous materials information has been provided through existing surveys conducted by the San Francisco Unified School District (District) and the District’s environmental consultants.

B. Some materials and items found at the Site either contain or may contain materials known to the State of California to be either hazardous, carcinogenic or reproductive toxins. These include but are not limited to asbestos, lead, PCB’s, silica, and other materials.

C. The Contractor shall hold the District and its consultants harmless for claims, damages, losses, and expenses, including attorney’s fees arising out of the Contractor’s hazardous materials related work including releases from any incidental disturbance of existing hazardous materials, on-site or off-site spills of hazardous materials, or from non-compliance with the Contract Documents and regulatory requirements.

1.02 HAZARD COMMUNICATION

A. The District may have conducted previous hazardous materials abatement projects at the site. The hazardous materials abatement oversight information is available for review by appointment only through the District’s Asbestos Control Program at (415) 241-6226.

B. Copies of previous hazardous materials report(s) and the AHERA Management Plan for the site are available for review by appointment only through the District’s Asbestos Control Program at (415) 241-6226.

C. Asbestos Hazards at Spring Valley Elementary School

1. Asbestos has been identified at concentrations greater than one percent (>1%) in the following materials:

   a. Pipe insulation (identified as asbestos in previous sampling reports) on straight pipe runs, pipe elbows and tees throughout at ceiling plenums and wall cavities.
   b. Speckled paint coatings (2% Chrysotile asbestos) on walls at Toilet T54 and Janitor J74 at the First Floor and Men’s Toilet T55 at the Second Floor.
c. Exterior caulking (8% Chrysotile asbestos) at wood window framing / sills / terra cotta tiles and rough openings.

d. Exterior caulking (8% Chrysotile asbestos) at wood door framing / casings and rough openings.

e. Exterior caulking (3% Chrysotile asbestos) at metal louvered vents and rough openings.

2. The following materials have not been sampled and shall be assumed to contain asbestos at concentrations > 1%:

a. Asbestos cement underground sewer, water and drain piping located throughout the entire site.

b. Asbestos cement exhaust piping inside metal ducting at Attic Stairs S85 at the Second Floor.

c. Mechanical flange gaskets.

3. Asbestos has been identified at concentrations less than one percent (<1%) in the following materials:

a. Not used.

4. The following sampled suspect materials had results that reported NO asbestos detected by PLM analysis:

a. Interior paints.

b. Smooth wall and ceiling plasters.

c. Rough cementitious wall and ceiling plasters.

d. Gypsum board and taping compounds on wall and select ceilings.

e. Clay tiles and cement mortar at walls at the Ground Floor at Boiler Room 27, Janitor J73, MDF 27A, Electrical 29, Storage 35 and Storage 36.

f. 12”x12” ceiling tiles and mastics.

g. 12”x12” tan/beige floor tile and mastic at Classroom 2, Library 3, Classroom 4, Elevator E80, Elevator Room E80A, Corridor C91A and Vestibule C91B at the Ground Floor, Storage 12A, Staff Toilet T63, Corridor C91A and Vestibule C91B at the First Floor and Corridor C91A and Vestibule C91B at the Second Floor.

h. 12”x12” blue floor tile and mastic at Classroom 1, Storage 1A and Restroom 1B at the Ground Floor.

i. 12”x12” green floor tile (patched areas) at Teachers Lounge 32 at the Ground Floor (Note: the floor tile mastic was identified to contain asbestos at concentrations >1%).

j. 12”x12” teal green floor tile and mastic at the Ground Floor at Storage 2A.

k. 12”x12” red floor tile and mastic at Storage 3A at the Ground Floor.

l. 12”x12” brown floor tile and mastic at patched areas of Brown / red battleship sheet flooring.

m. Brown/red battleship sheet flooring, backing and glues throughout the campus.

n. Red marmoleum sheet flooring, backing and glues at Toilet T54 at the First Floor.
Existing Hazardous Materials Conditions

o. White floor leveling compounds.
q. Tackboards and mastics.
r. Chalkboards (slate and fiberboard) and mastics.
s. Paper backing with brown mastic (possibly old tackboard backing and glue) at existing tackboard locations throughout Classrooms.
t. 4"x4" blue, white and yellow ceramic wall tile, grout and glue at Boys Toilet T50 and Girls Toilet T61 at the Ground Floor.
u. 2"x2" blue and yellow ceramic floor tile, grout and mortar at Boys Toilet T50 and Girls Toilet T61 at the Ground Floor.
v. 6"x6" pink ceramic base tile, grout and glue at Corridors C90 and C91 at the Ground Floor.
w. 6"x6" tan, white, green and brown ceramic wall tile, grout and glue at Boys Toilet T51 and Girls Toilet T60.
x. 2"x2" tan and green ceramic floor tile, grout and mortar at Boys Toilet T51 and Girls Toilet T60.
y. Off-white sink undercoatings on stainless steel sinks at Storage 2A and Teachers Lounge 32 at the Ground Floor, Storage 6A at the First Floor and Storage 22A at the Second Floor.
z. Gray sealant / caulking at HVAC ducting.
aa. Fiberglass pipe insulation.
bb. Window glazing compounds.
cc. Exterior paints.
da. All roofing materials.
ee. Asphalt coatings and asphalt at play areas.
ff. Concrete retaining walls.
gg. Exterior and interior stucco walls and overhang ceilings.

5. Areas and/or Spaces where asbestos abatement was conducted include:

a. Extensive abatement was conducted during the 2006 Bond Modernization Project including removal of sinks with asbestos undercoating, asbestos floor tiles and mastics, asbestos paint coatings and pipe insulation where impacted.
b. All asbestos-containing roofing materials were removed in the summer of 1997.
c. All asbestos-containing 9"x9" floor tile and mastic were removed from Classrooms 1, 2, 3 and 4, Storage 1A, Girls Toilet T60 and Assembly Hall 26 at the Ground Floor in 1991.
d. All asbestos-containing pipe insulation was removed from Boiler Room 27 in 1986.

D. Lead Hazards at Spring Valley Elementary School

1. Lead has been detected in individual painted surfaces and surface coatings in concentrations greater than 5,000 parts per million (ppm) lead or 1.0 milligram of lead per square centimeter (mg/cm²). Where ranges of lead levels are indicated, Contractor shall presume the highest level is typical. These lead containing surfaces include, but are not limited to the following:
a. Paints, glazings and/or stains on ALL of the following building materials:

1) Plaster, stucco / plaster and concrete walls, columns, beams and ceilings throughout interiors (Note: ceilings concealed by 12”x12” ceiling tile contain LBP) (1.0 to >9.9 mg/cm²).
2) Tackboards with metal trim (1.0 to 1.7 mg/cm²).
3) Metal guard rails at windows at Stairs (7.9 mg/cm²).
4) Exterior wood window sash, jamb, casing / framing and sills (>9.9 to >9.9 mg/cm²).
5) Exterior metal chain link fencing and gates at property boundaries (1.0 to 4.4 mg/cm²).
6) Exterior wood fencing and metal support brackets at property boundaries (>9.9 to >9.9 mg/cm²).
7) Exterior metal fencing and posts around the gas meter at the west side of the building (1.0 mg/cm²).
8) Exterior wood flagpole (>9.9 mg/cm²).

2. Lead has been identified in individual painted surfaces and surface coatings in concentration less than 5,000 ppm lead or 1.0 mg/cm². Where ranges of lead levels are indicated, Contractor shall presume the highest level is typical. These lead containing surfaces include, but are not limited to the following surfaces:

a. Paints, glazings and/or stains on ALL of the following building materials:

1) Wood benches (interior & exterior) (-0.1 to 0.0 mg/cm²).
2) Wood tackboard trim, chalkboard trim and chalkboard trays (-0.2 to 0.3 mg/cm²).
3) Wood floors (-0.1 to 0.0 mg/cm²).
4) Wood door panels (-0.2 to 0.6 mg/cm²).
5) Metal conduit (0.0 to 0.1 mg/cm²).
6) Metal decorative panels at Corridors (0.0 mg/cm²).
7) Metal fire extinguisher cabinets (-0.1 mg/cm²).
8) Metal gates (-0.1 mg/cm²).
9) Wood hanger racks (-0.1 to 0.1 mg/cm²).
10) Metal heater covers (-0.1 mg/cm²).
11) Wood hand rails (-0.1 to 0.0 mg/cm²).
12) Wood shelving (-0.1 to 0.4 mg/cm²).
13) Wood stair treads and risers (-0.2 to 0.0 mg/cm²).
14) Ceramic murals (0.3 mg/cm²).
15) Ceramic floor tiles (-0.5 to -0.1 mg/cm²).
16) Ceramic wall and base tiles (-0.5 to -0.1 mg/cm²).
17) Terra cotta / clay wall and base tile (-0.1 mg/cm²).
18) Exterior concrete, concrete block and stucco / plaster walls, ceilings and retaining walls (-0.3 to 0.1 mg/cm²).
19) Exterior metal downspouts, drain pipes and gutters (-0.1 to 0.0 mg/cm²).
20) Exterior metal louvered vents (-0.1 to 0.0 mg/cm²).
21) Exterior wood, metal and plastic play structures (-0.4 to 0.0 mg/cm²).
22) Exterior asphalt paint striping (-0.3 to 0.0 mg/cm²).
b. Paints and stains on doors, door framing / casing and trim excluding those listed above (-0.4 to 0.3 mg/cm²).

c. Paints on wood window sash, jamb, casings and sills throughout excluding at the Ground Floor at Classroom 1, Restroom 1B, Storage 3A, Storage 25, Storage 30, Kitchen 31, Teachers Lounge 32, Boys Toilet T50, Boys Toilet T51, Girls Toilet T60, Girls Toilet T61 and Janitor J73 (-0.2 to 0.4 mg/cm²).

d. Paints on concrete and wood baseboards and wood and plaster chair rail throughout excluding at Stairs S80, S81 and S82 at ALL Floors and Corridors C90 and C91 at the First and Second Floors (-0.3 to 0.5 mg/cm²).

e. Paints on wood baseboards and chair rail throughout excluding at Storage 1A, Classrooms 1, Kitchen 31 and Teachers Lounge 32 at the Ground Floor and Classroom 6 at the First Floor (-0.3 to 0.5 mg/cm²).

f. Paints on wood baseboards and chair rail throughout excluding Stairs S80, S81 and S82 at all Floors, Corridors C90 and C91 at the First and Second Floors and Storage 1A, Classrooms 1 and 6, Kitchen 31 and Teachers Lounge 32 at the Ground Floor (-0.3 to 0.5 mg/cm²).

g. Paints on wood cabinets throughout excluding Storage 1A and Restroom 1B at the Ground Floor (-0.6 to 0.4 mg/cm²).

h. Paints on wood wall paneling throughout excluding Corridor C91A at the Ground Floor (-0.2 to 0.4 mg/cm²).

i. Paints on metal electrical panels throughout excluding Corridor C90 at All Floors (-0.2 to -0.1 mg/cm²).

j. Paints on wood mirror framing throughout excluding at the Ground Floor at Restroom 1B (-0.1 to -0.1 mg/cm²).

k. Paints on metal piping throughout excluding at Janitor Closets at ALL Floors (-0.2 to 0.1 mg/cm²).

3. The Contractor shall assume that all paints and surface coatings contain detectable quantities of lead requiring compliance with CAL/OSHA lead regulation in the absence of objective data to the contrary. Additionally, the Contractor shall assume that, at a minimum, lead is “present” in all of these materials at levels that have a potential, until proven otherwise, to create a lead hazard.

4. The District has not verified that any paints, coatings, dusts, or materials are “lead free” or below 600 ppm. The Contractor shall treat all paints, coatings, dusts or materials as having a lead content greater than 600 ppm requiring dust controls and personal protective procedures for construction activities in conformance with the Cal/OSHA Lead Construction Standard, 8 CCR 1532.1 lead. Any paint, varnish, or other coating or finish not listed above shall be considered to be lead-based paint with lead levels at or exceeding 5000 ppm lead or 1.0 mg/cm² for this contract.

5. All firms, including sub-contracted firms who impact lead-based paint (LBP) (5,000 ppm lead or 1.0 mg/cm² or greater) at Child Occupied Facilities shall conduct all work in accordance with 40 CFR Part 745. This includes but is not limited to being an EPA certified firm; having an EPA “Certified Renovator”; providing “on-the-job” training for workers; conducting pre-renovation notifications; following specific work practice procedures for containment,
disturbance and final clean-up; and inspection requirements. Renovation is defined in 40 CFR Part 745 as the modification to any existing structure or portion that results in the disturbance of LBP surfaces, unless the activity is performed as part of an abatement. In essence this regulation includes all work activities that disturb LBP surfaces.

6. The EPA certified Contractor or Sub-contractor(s) “Certified Renovator” shall be responsible for identifying the specific job activities which impact lead-based paint (LBP) during renovation that requires the use of “containment” as described in 40 CFR Part 745. Work also includes but is not limited to provide “on-the-job” training for workers; conduct pre-renovation notifications; follow specific work practice procedures for containment, disturbance and final clean-up; and inspection requirements as defined by regulation.

7. In addition to lead-containing paints and coatings, the Contractor shall assume that lead is present at detectable levels over 600 ppm in existing plumbing components and solders, glazing compounds, roof jacks, and surficial soils.

E. Metallic Mercury and mercury compounds are present at this site in fluorescent lighting tubes, high intensity discharge lamps, mercury switches and mercury thermostats. All demolition and disposal of these items shall be conducted in accordance with applicable safety and environmental regulation and the requirements of the Contract Documents.

F. Polychlorinated biphenyl (PCB)-containing fluorescent lighting ballasts. This site contains fluorescent lighting fixtures manufactured or installed prior to 1979. All fixtures known or presumed to have been installed prior to 1979 shall be considered to contain PCB ballasts unless otherwise noted in the contract documents. Removal, handling and disposal of PCB ballasts is subject to applicable regulation and requirements of the Contract Documents.

G. This site is presumed to contain smoke detectors with low level radioactive materials. Removal, handling and disposal of smoke detectors with low level radioactive materials is subject to applicable regulations and requires coordination with the manufacturer for proper disposal.

H. This site contains is presumed to contain self-luminating exit signs with low level radioactive tritium (i.e. tritium-tubes). Removal, handling and disposal of self-luminating exit signs with low level radioactive tritium (i.e. tritium-tubes) is subject to applicable regulations and requires coordination with the manufacturer for proper disposal.

I. This site contains emergency exit signs with back-up emergency light fixtures with lead back-up batteries and back-up emergency light fixtures with lead back-up batteries. Removal, handling and disposal and / or recycling of lead batteries are subject to applicable regulation and requirements of the Contract Documents.

J. Crystalline Silica is presumed present in all concrete, plaster, ceramic tile, grouts, and other cementitious materials at this site as well as soils. Worker protection and control of air dust during cutting, drilling, demolition and other construction operations is the responsibility of the Contractor.
K. The Contractor shall take into consideration all existing known and presumed hazardous materials that may be disturbed or otherwise impacted by the Work of this project. All work of this project that disturbs or otherwise impacts hazardous material shall be considered included in the Work of the project and shall be conducted in accordance with all applicable regulations and the Contract Documents. The Contractor shall use appropriately trained and qualified personnel to conduct all hazardous material related work and shall adhere to the requirements for handling, removal, clean-up, and disposal in accordance with the Contract Documents and all applicable Cal/OSHA, Cal/EPA, Department of Health Services (DHS), and Bay Area Air Quality Management District (BAAQMD) regulations.

1.03 RELATED DOCUMENTS

A. Contract Documents including hazardous material-related plans and specifications and all other project construction documents. Refer to Section 01 11 00 Summary of Hazardous Materials Work, Article 1.04 Related Documents for a more detailed listing.

1.04 USE OF HAZARDOUS MATERIALS INFORMATION

A. Hazardous material information identified herein was obtained for the use of the District and its Consultants for planning and design stages of the Project. The above mentioned survey data and reports are not, as a whole, part of the Contract Documents, but can be relied upon by the Contractor to characterize general site conditions, although quantities, friability and other factors may have changed or altered since the published report dates.

B. All statements, findings and interpretations in the above mentioned reports are those of the Survey or Environmental Consultant. The District makes no representation, either expressed or implied, as to the completeness or adequacy of the above mentioned reports. Bidders are advised that the limited testing of components allows for generalizations in describing the extent of hazardous materials. Contractors may visit the site and investigate to identify locations of hazardous materials identified herein. Specific components or materials, should be checked against the referenced survey reports and the Contract Documents, or be tested at affected locations, prior to disturbance of such components.

PART 2 – PRODUCTS: NOT USED

PART 3 – EXECUTION: NOT USED

END OF SECTION