Mold Remediation Plan

Pelbano Recreation Center
8101 Bustleton Avenue
Philadelphia PA 19152

Prepared For:

George Buckmann, RA, LEED AP
Converse Winkler Architecture LLC
331 Montgomery Ave.
Bala Cynwyd, PA 19004

Prepared by:

BATTA Environmental Associates, Inc
6 Garfield Way
Newark, DE. 19713

March 24, 2021
BEA #995820

Prepared by: [Stephen C. Woronicak / Operations Manager]

Reviewed By: [Todd K. Zeisloft / Project Manager]

1.0 INTRODUCTION

BATTA ENVIRONMENTAL ASSOCIATES, INC. is pleased to provide you with this mold remediation plan as guidance for the handling of mold contaminated materials that may be discovered during renovation activities at the Pelbano Recreational Center located at 8101 Bustleton Avenue in Philadelphia, Pennsylvania. This mold remediation plan has been developed based on the mold assessment that was performed by Nick Mariconda of Batta Environmental Associates, Inc.

on September 27, 2020, A visual assessment and air sampling was performed to document the current conditions within the recreational center as they may related to mold contaminated materials or condition that may promote mold growth. Only select interior areas of interest were sampled, including the Rawhurst AA Room, a Classroom, and the Multi-Purpose Room. An outdoor ambient sample was also secured for comparative purposes. One of the samples (Rawhurst AA Room) had an elevated count for the spores of Chaetomium (1550 spores/m^3), which was not detected in any of the other samples. Chaetomium is common to water damaged materials, and presents a musty odor. This presence may be associated with possible hidden growth within the room. Care should be taken when impacting water damaged materials within this room.

Based on the conditions, within the recreational center, Batta Environmental Associates, Inc. has developed this mold remediation plan when encountering mold contaminated materials. Guidance within this plan is based on the OSHA guidance document “A Brief Guide to Mold in the Workplace.”

2.0 PERSONAL PROTECTIVE EQUIPMENT

Any remediation work that disturbs mold and causes mold spores to become airborne increases the degree of respiratory exposure. Actions that tend to disperse mold include: breaking apart moldy porous materials such as wallboard; destructive invasive procedures to examine or remediate mold growth in a wall cavity; removal of contaminated wallpaper by stripping or peeling; using fans to dry items or ventilate areas.

The primary function of personal protective equipment is to prevent the inhalation and ingestion of mold and mold spores and to avoid mold contact with the skin or eyes. The following sections discuss the various types of PPE that should be used during remediation activities.

2.1 Skin and Eye Protection

Gloves protect the skin from contact with mold, as well as from potentially irritating cleaning solutions. Long gloves that extend to the middle of the forearm are recommended. The glove material should be selected based on the type of substance/ chemical being handled. If you are using a biocide such as chlorine bleach, or a strong cleaning solution, you should select gloves made from natural rubber, neoprene, nitrile, polyurethane, or PVC. If you are using a mild detergent or plain water, ordinary household rubber gloves may be used.

To protect your eyes, use properly fitted goggles or a full face piece respirator. Goggles must be designed to prevent the entry of dust and small particles. Safety glasses or goggles with open vent holes are not appropriate in mold remediation.

2.2 Respiratory Protection

A half mask or full face piece air-purifying respirator shall be used. A full face piece respirator provides both respiratory and eye protection. Please refer to the Mold Removal for the proper respirator use Respirators used to provide protection from mold and mold spores must be certified by the National Institute for Occupational Safety and Health (NIOSH). More protective respirators may have to be selected and used if toxic contaminants such as asbestos or lead are encountered during remediation.

As specified by OSHA in 29 CFR 1910.134 individuals who use respirators must be properly trained, have medical clearance, and be properly fit tested before they begin using a respirator. In addition, use of respirators requires the employer to develop and implement a written respiratory protection program, with worksite-specific procedures and elements.

2.3 Protective Clothing

Appropriate personal protective clothing (i.e., reusable or disposable) is required to minimize cross-contamination between work areas and clean areas, to prevent the transfer and spread of mold and other contaminants to street clothing, and to eliminate skin contact with mold and potential chemical exposures.

Disposable PPE should be discarded after it is used. They should be placed into impermeable bags, and can be discarded as ordinary construction waste. Appropriate precautions and protective equipment for biocide applicators should be selected based on the product manufacturer's warnings and recommendations (e.g., goggles or face shield, aprons or other protective clothing, gloves, and respiratory protection).

3.0 QUANTITIES

During the initial non-intrusive investigation, no visible mold was identified. However, numerous areas of water damaged were noted throughout the facility. Furthermore, air sampling data indicated elevated mold spores within the recreation center (Rawhurst AA Room) at the time of the assessment. When impacting water damaged materials, it should be assumed that hidden mold growth may be present. Care should be taken during demolition to reduce dust and identify possible mold growth.

The following removal criteria will apply to any discovered mold contaminated materials in the areas indicated by the RCP notes in attached drawing t the end of the plan.

- 10 sq. ft. or less - Level I: Small Isolated Areas

- 10 - 30 sq. ft. - Level II: Mid-Sized Isolated Areas
  - R3 – 21 SF
  - R5 – 30 SF
  - R10 – 17 SF
  - R14 – 25 SF

- 30 - 100 square feet - Level III: Large Isolated Areas
  - R1 – 72 SF
  - R7 – 33 SF
  - R9 – 34 SF

- Greater than 100 contiguous square feet in an area - Level IV: Extensive Contamination
  - R11 – 106 SF

Specific details when impacted mold contaminated materials can be found in Section 4.0 Removal Methods.

4.0 REMOVAL METHODS

This section presents remediation guidelines for the removal of mold contaminated building materials. The removal methods are designed to protect the health of the mold remediation personnel and other outside contractors during remediation. These methods are based on the size of the area impacted by mold contamination. If possible, remediation activities should be scheduled during off-hours when building occupants are less likely to be affected.

The following guidelines are based on OSHA guidelines for the proper handling of mold contaminated materials.

4.1 Level I: Small Isolated Areas (10 sq. ft. or less) - e.g., ceiling tiles, small areas on walls.

- Remediation can be conducted by the regular building maintenance staff as long as they are trained on proper clean-up methods, personal protection, and potential health hazards. This training can be performed as part of a program to comply with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

- Respiratory protection (e.g., N-95 disposable respirator) is recommended. Respirators must be used in accordance with the OSHA respiratory protection standard (29 CFR 1910.134). Gloves and eye protection should be worn.

- The work area should be unoccupied. Removing people from spaces adjacent to the work area is not necessary, but is recommended for infants (less than 12 months old), persons recovering from recent surgery, immune-suppressed people, or people with chronic inflammatory lung diseases (e.g., asthma, hypersensitivity pneumonitis, and severe allergies).

- Containment of the work area is not necessary. Dust suppression methods, such as misting (not soaking) surfaces prior to remediation, are recommended.

- Contaminated materials that cannot be cleaned should be removed from the building in a sealed impermeable plastic bag. These materials may be disposed of as ordinary waste.

- The work area and areas used by remediation workers for egress should be cleaned with a damp cloth or mop and a detergent solution.

- All areas should be left dry and visibly free from contamination and debris.

4.2 Level II: Mid-Sized Isolated Areas (10 - 30 sq. ft.) - e.g., individual wallboard panels.

- Remediation can be conducted by the regular building maintenance staff. Such persons should receive training on proper clean-up methods, personal protection, and potential health hazards. This training can be performed as part of a program to comply with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

- Respiratory protection (e.g., N-95 disposable respirator) is recommended. Respirators must be used in accordance with the OSHA respiratory protection standard (29 CFR 1910.134). Gloves and eye protection should be worn.

- The work area should be unoccupied. Removing people from spaces adjacent to the work area is not necessary, but is recommended for infants (less than 12 months old), persons recovering from recent surgery, immune-suppressed people, or people with chronic inflammatory lung diseases (e.g., asthma, hypersensitivity pneumonitis, and severe allergies).

- Surfaces in the work area that could become contaminated should be covered with a secured plastic sheet(s) before remediation to contain dust/debris and prevent further contamination.

- Dust suppression methods, such as misting (not soaking) surfaces prior to remediation, are recommended.

- Contaminated materials that cannot be cleaned should be removed from the building in a sealed impermeable plastic bag. These materials may be disposed of as ordinary waste.

- The work area and areas used by remediation workers for egress should be HEPA vacuumed and cleaned with a damp cloth or mop and a detergent solution.

- All areas should be left dry and visibly free from contamination and debris.

4.3 Level III: Large Isolated Areas (30 - 100 square feet) - e.g., several wallboard panels.

- It is recommended that personnel be trained in the handling of hazardous materials and equipped with respiratory protection (e.g., N-95 disposable respirator). Respirators must be used in accordance with the OSHA respiratory protection standard (29 CFR 1910.134). Gloves and eye protection should be worn.

- Surfaces in the work area and areas directly adjacent that could become contaminated should be covered with a secured plastic sheet(s) before remediation to contain dust/ debris and prevent further contamination.

- Seal ventilation ducts/grills in the work area and areas directly adjacent with plastic sheeting.

- The work area and areas directly adjacent should be unoccupied. Removing people from spaces near the work area is recommended for infants, persons having undergone recent surgery, immunosuppressed people, or people with chronic inflammatory lung diseases. (e.g., asthma, hypersensitivity pneumonitis, and severe allergies).

- Dust suppression methods, such as misting (not soaking) surfaces prior to mediation, are recommended.

- Contaminated materials that cannot be cleaned should be removed from the building in sealed impermeable plastic bags. These materials may be disposed of as ordinary waste.

- The work area and surrounding areas should be HEPA vacuumed and cleaned with a damp cloth or mop and a detergent solution.

- All areas should be left dry and visibly free from contamination and debris.

- Note: If abatement procedures are expected to generate a lot of dust (e.g., abrasive cleaning of contaminated surfaces, demolition of plaster walls) or the visible concentration of the mold is heavy (blanket coverage as opposed to patchy), it is recommended that the remediation procedures for Level IV be followed.

4.4 Level IV: Extensive Contamination (greater than 100 contiguous square feet in an area).

- Personnel trained in the handling of hazardous materials and equipped with:
  - Full face piece respirators with HEPA cartridges;
  - Disposable protective clothing covering entire body including both head and shoes; and Gloves.

- Containment of the affected area:
  - Complete isolation of work area from occupied spaces using plastic sheeting sealed with duct tape (including ventilation ducts/grills, fixtures, and other openings);
  - The use of an exhaust fan with a HEPA filter to generate negative pressurization; and Airlocks and decontamination room.

- Contaminated materials that cannot be cleaned should be removed from the building in sealed impermeable plastic bags. The outside of the bags should be cleaned with a damp cloth and a detergent solution or HEPA vacuumed in the decontamination chamber prior to their transport to uncontaminated areas of the building. These materials may be disposed of as ordinary waste.

- The contained area and decontamination room should be HEPA vacuumed and cleaned with a damp cloth or mopped with a detergent solution and be visibly clean prior to the removal of isolation barriers..

5.0 LIMITATIONS

Findings are based on the assessment that was requested and agreed upon by George Buckmann, RA, LEED AP, Converse Winkler Architecture LLC.

Be advised that the data provided with this report only represents fungal growth and exposure potentials that existed at the time of the investigation. Growth and exposure potentials may change due to changes in environmental conditions (such as those caused by water intrusion), use of mechanical systems, or other factors. Also be advised that exposure data recorded during these investigations may not be sufficiently broad to adequately assess the suitability of the indoor air quality for all individuals, particularly those who are extremely sensitive to certain chemical and/or biological substances or for those individuals with immune deficiencies. If persons entering the subject property persistently experience non-specific ill effects, such as eye irritation, allergy symptoms, headaches, or skin rash, then those affected should be referred to a medical professional in order to determine or specify the possible cause(s) of such reactions. If additional information becomes known, then additional monitoring may be warranted.

Batta Environmental Associates, Inc. (BATTA) adheres to guidelines/recommendations developed by the American Industrial Hygiene Association and the American Conference of Governmental Industrial Hygienists for investigation, evaluation, and control of microbiological contaminants. Currently there are no regulations for fungal exposures.

The data, information, interpretations, and recommendations contained in this technical report are presented solely as a basis and guide to the existing conditions at the evaluated properties expressed in this report. Batta Environmental Associates, Inc. developed the conclusions and professional opinions presented herein in accordance with generally accepted industrial hygiene principles and practices. As with all industrial hygiene evaluations and reports, the opinions expressed here are subject to revision in light of new information that may be developed in the future, and no warranties are expressed or implied.

This report has not been prepared for use by parties other than that of the client. It may not contain sufficient information for the purpose of the other parties or other uses. If any significant changes are made to site conditions, resident activities, equipment, etc. described in this report, the conclusions and recommendations contained herein may be invalid, unless the changes are reviewed by Batta Environmental Associates, Inc. and the conclusions and recommendations are modified or approved in writing.

RCP KEY NOTES

(R1) REMOVE AND REPLACE ACOUSTIC CEILING TILES (APPROXIMATE CEILING SURFACE AREA: +/- 72 SF).DAMAGED DUE TO ROOF LEAK AT ROOF DRAIN. MATCH EXISTING TILES.

(R2) EXISTING CLOSETS / SHELVING TO REMAIN IN PLACE. CONTRACTOR TO COVER AND PROTECT DURING REPLACEMENT / REPAIR / PAINTING OF GWB CEILING / WALLS. ALL ITEMS DISPLAYED AT THESE LOCATIONS ARE TO BE COVERED AND STORED IN A SEPARATE SPACE THAT IS NOT IN CONTRACT DURING THE EXTENT OF TEH GWB WORK.

(R3) REMOVE / REPLACE / SAND / PAINT GWB CEILING. APPROXIMATE CEILING AREA: +/- 21 SF

(R4) REMOVE / REPLACE / SAND / PAINT GWB WALLS / CEILING JOIST COVER.APPROXIMATE WALL AREA: +/- 30 SF

(R5) REMOVE / REPLACE / SAND / PAINT GWB CEILING. APPROXIMATE CEILING AREA: +/- 30 SF

(R6) REMOVE / REPLACE / SAND / PAINT GWB WALLS / CEILING JOIST COVER. APPROXIMATE WALL AREA: +/- 50SF

(R7) REMOVE / REPLACE / SAND / PAINT GWB CEILING. APPROXIMATE CEILING AREA: +/- 33 SF

(R8) REMOVE / REPLACE / SAND / PAINT GWB WALLS / CEILING JOIST COVER. APPROXIMATE WALL AREA: +/- 50 SF

(R9) REMOVE / REPLACE / SAND / PAINT GWB SOFFIT. APPROXIMATE CEILING AREA: +/- 34 SF

(R10) REMOVE / REPLACE / SAND / PAINT GWB CEILING. APPROXIMATE CEILING AREA: +/- 17 SF

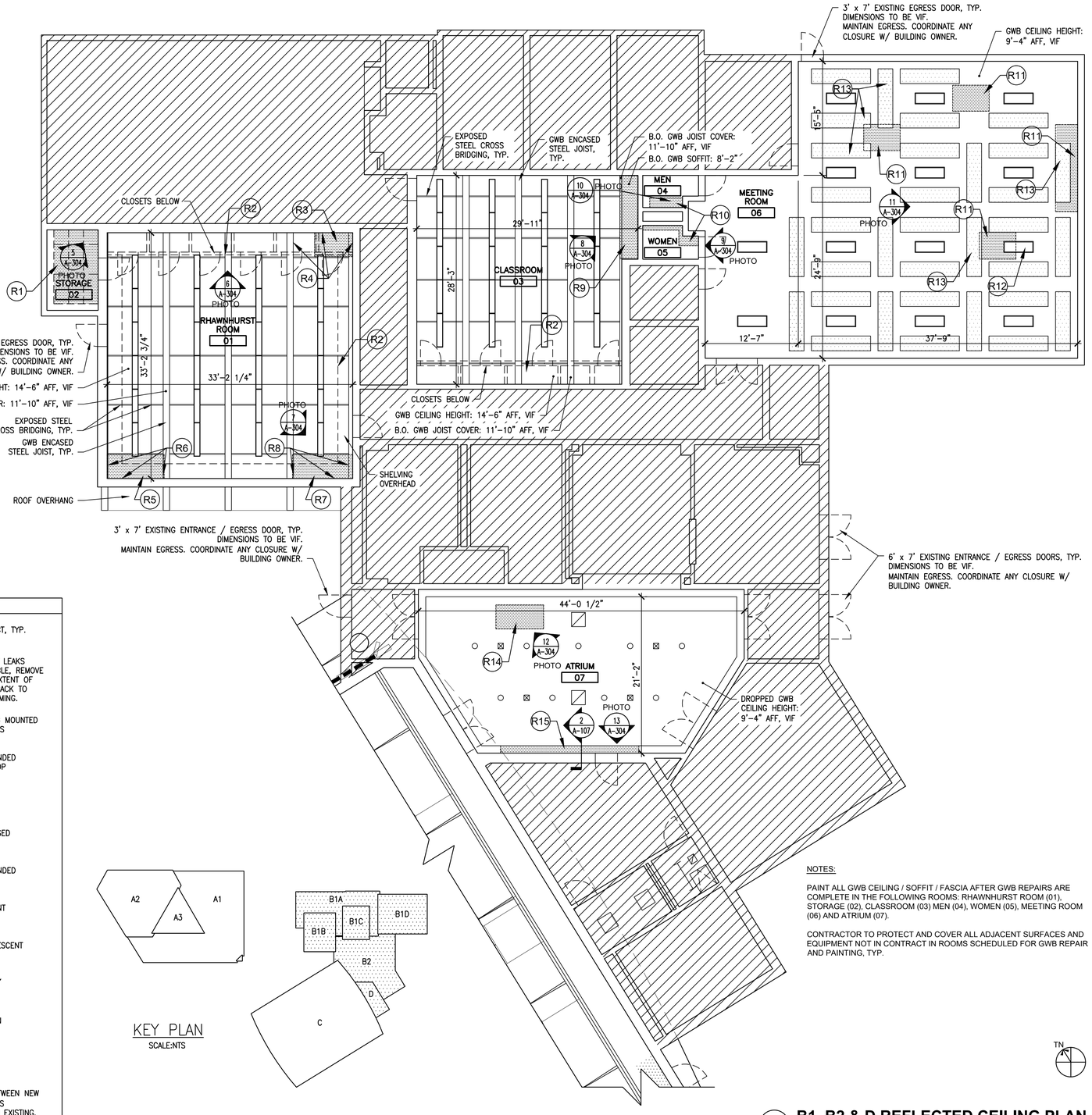
(R11) REMOVE / REPLACE / SAND / PAINT GWB CEILING. APPROXIMATE CEILING AREA: +/- 106 SF

(R12) REMOVE, STORE, AND PROTECT (E) CEILING MOUNTED LIGHT FIXTURE AS REQUIRED TO ACCOMMODATE CEILING REPAIRS AND PAINTING.

(R13) REMOVE, STORE, AND PROTECT (E) CEILING MOUNTED ACOUSTICAL PANELS TO ACCOMMODATE CEILING REPAIRS. REINSTALL PANELS AFTER PAINTING IS COMPLETE. (TYPICAL).

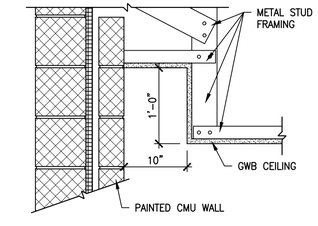
(R14) REMOVE / REPLACE / SAND / PAINT GWB CEILING. APPROXIMATE CEILING AREA: +/-25 SF

(R15) REMOVE / REPLACE / SAND / PAINT GWB CEILING / SOFFIT. APPROXIMATE CEILING AREA: +/-69 SF



REFLECTED CEILING PLAN LEGEND

- NOT IN CONTRACT, TYP.
- AREAS OF ROOF LEAKS WHERE APPLICABLE, REMOVE AND REPLACE EXTENT OF DAMAGED GWB BACK TO ASSOCIATED FRAMING.
- EXISTING CEILING MOUNTED ACOUSTIC PANELS
- EXISTING SUSPENDED BASKETBALL HOOP
- EXISTING FLUSH CEILING LIGHTS
- EXISTING RECESSED CEILING LIGHT
- EXISTING SUSPENDED LIGHT FIXTURE
- EXISTING PENDANT LIGHT FIXTURE
- EXISTING FLUORESCENT LIGHT FIXTURE
- EXISTING SUPPLY AIR GRILLE
- EXISTING RETURN AIR GRILLE
- EXISTING ROOF HATCH
- CONNECTION BETWEEN NEW AND (E) LEADERS PAINT TO MATCH EXISTING.



2 ATRIUM CEILING DETAIL
Scale: 1" = 1' - 0"

KEY PLAN
SCALE:NTS

NOTES:

PAINT ALL GWB CEILING / SOFFIT / FASCIA AFTER GWB REPAIRS ARE COMPLETE IN THE FOLLOWING ROOMS: RHAWNHURST ROOM (01), STORAGE (02), CLASSROOM (03) MEN (04), WOMEN (05), MEETING ROOM (06) AND ATRIUM (07).

CONTRACTOR TO PROTECT AND COVER ALL ADJACENT SURFACES AND EQUIPMENT NOT IN CONTRACT IN ROOMS SCHEDULED FOR GWB REPAIR AND PAINTING, TYP.

TN

1 B1, B2 & D REFLECTED CEILING PLAN
Scale: 1/8" = 1' - 0"

APPROVED:

ARCHITECT/ENGINEER OF RECORD DATE

APPROVED FOR BID:

REBUILD PROJECT MANAGER DATE

Designer:

CONVERSE WINKLER ARCHITECTURE

Seal:

Key Plan:

REVISION	DESCRIPTION	DATE

Project:

PELBANO REC CENTER ROOF REPLACEMENT

Sheet Title:

REC CENTER BUILDING B1,B & D RCP

Submission:

Engineering Manager: XXX

Consultant: CONVERSE WINKLER ARCHITECTURE

Task No.: | Drawn By: CO

Date: MAR 1, 2021 | Checked By: AB

Work No.: 16517E-03-01 CW-1909.03 | Drawing No.: A-107

Sheet No.: 12 of XX

z:\cwa projects\cw-1909 rebuild philadelphia on-call\1909.03 pelbano recreation center roof\04 drawings\01_current\02_cad 3/10/21