Germantown/Mount Airy Properties
Physical Conditions and Needs Assessment

Premises Y
5423-27 Lena Street
Philadelphia, PA 19144

Submitted to
PHDC
1234 Market Street, 16th Floor
Philadelphia, PA 19107

March 2021
# TABLE OF CONTENTS

**1 Executive Summary**
- 1.1 General Description
- 1.2 General Physical Condition
- 1.3 Opinions of Probable Costs

**2 Purpose and Scope**
- 2.1 Purpose
- 2.2 Site Visit
- 2.3 Useful Life Estimate

**3 Property Address - System Description and Observations**
- 3.1 Overall General Description
  - 3.1.1 Apartment Unit Types and Unit Mix
  - 3.1.2 List of Apartment Units Inspected
- 3.2 Site
  - 3.2.1 Topography
  - 3.2.2 Storm Water Drainage
  - 3.2.3 Access and Egress
  - 3.2.4 Paving, Curbing and Parking
  - 3.2.5 Flatwork
  - 3.2.6 Landscaping and Appurtenances
  - 3.2.7 Recreational Facilities
- 3.2.8 Utilities
  - 3.2.8.1 Water
  - 3.2.8.2 Electricity
  - 3.2.8.3 Natural Gas
  - 3.2.8.4 Sanitary Sewer
  - 3.2.8.5 Special Utility Systems
    - 3.2.8.5.1 Site Lighting
- 3.3 Structural Frame and Building Envelope
  - 3.3.1 Foundation
  - 3.3.2 Building Frame
    - 3.3.2.1 Floor Frame System
    - 3.3.2.2 Crawl Spaces and Penetrations
    - 3.3.2.3 Roof Frame
    - 3.3.2.4 Flashing & Moisture Protection
    - 3.3.2.5 Attic Spaces, Draft Stops, Roof Vents & Penetrations
    - 3.3.2.6 Insulation
    - 3.3.2.7 Stairs, Railings & Balconies Including Connection to Structure
    - 3.3.2.8 Exterior Doors and Entry System
  - 3.3.3 Facades or Curtain wall
    - 3.3.3.1 Sidewall System
  - 3.3.4 Roofing and Roof Drainage
  - 3.3.5 Mechanical and Electrical System
    - 3.4.1 Plumbing
      - 3.4.1.1 Supply and Waste Piping
      - 3.4.1.2 Domestic Hot Water Production
      - 3.4.1.3 Fixtures
<table>
<thead>
<tr>
<th>3.4.2 Heating</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.4.2.1 Heat Generating Equipment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3.4.3 Air Conditioning and Ventilation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.4.3.1 Equipment</td>
</tr>
<tr>
<td>3.4.3.1.1 Air Conditioning and Ventilation</td>
</tr>
<tr>
<td>3.4.3.1.2 Exhaust Systems</td>
</tr>
<tr>
<td>3.4.3.2 Distribution</td>
</tr>
<tr>
<td>3.4.3.3 Control Systems</td>
</tr>
<tr>
<td>3.4.3.4 Sprinkler and Standpipes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3.4.4 Electrical</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.4.4.1 Service, Metering, Distribution Panels</td>
</tr>
<tr>
<td>3.4.4.2 Distribution</td>
</tr>
<tr>
<td>3.4.4.3 Distribution - Tenant Apartments</td>
</tr>
<tr>
<td>3.4.4.4 Lighting - Building Common Area</td>
</tr>
<tr>
<td>3.4.4.5 Lighting - Resident Apartments</td>
</tr>
<tr>
<td>3.4.4.6 Lighting - Site</td>
</tr>
<tr>
<td>3.4.4.7 Emergency Generator</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3.5 Vertical Transportation - Elevators</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>3.6 Life Safety/Fire Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.6.1 Sprinklers and Standpipes</td>
</tr>
<tr>
<td>3.6.2 Alarm Systems</td>
</tr>
<tr>
<td>3.6.3 Other Systems</td>
</tr>
<tr>
<td>3.6.3.1 Intercom System</td>
</tr>
<tr>
<td>3.6.3.2 Apartment Emergency Duress System</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3.7 Interior Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.7.1 Common Areas</td>
</tr>
<tr>
<td>3.7.2 Tenant Spaces</td>
</tr>
<tr>
<td>3.7.2.1 Finishes, Wall, Floors</td>
</tr>
<tr>
<td>3.7.2.2 Appliances</td>
</tr>
<tr>
<td>3.7.2.3 Bath Fixtures and Specialties</td>
</tr>
<tr>
<td>3.7.2.4 Kitchen Fixtures and Specialties</td>
</tr>
<tr>
<td>3.7.2.5 Millwork, Casework, Cabinets and Countertops</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4 Additional Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Environmental Hazards</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5 Opinions of Probable Costs to Remedy Physical Deficiencies</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>6 Out of Scope Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 Accessibility for Persons with Disabilities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7 Limiting Conditions</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>8 Exhibits</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>8.1 Cost Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.1.1 20 Year Table of Quantities &amp; Annual Estimated Costs</td>
</tr>
<tr>
<td>8.1.2 SF Cost Estimate for Full Renovation</td>
</tr>
<tr>
<td>8.1.3 Reserve for Replacement Analysis</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8.2 Photographic Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.2.1 Photos Architectural</td>
</tr>
<tr>
<td>8.2.2 Photos MPEFP</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8.3 Supporting Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.3.1 Flood and Zoning Maps</td>
</tr>
<tr>
<td>8.3.2 Environmental Reports</td>
</tr>
</tbody>
</table>
1 EXECUTIVE SUMMARY

1.1 General Description

The Philadelphia Housing and Development Corporation (PHDC) commissioned BFW Group to conduct a Physical Conditions and Needs Assessment of an inventory of 25 Premises in the Germantown and Mount Airy neighborhoods of Philadelphia.

5423-27 Lena Street is a two-story, ten unit residential building owned by the Philadelphia Housing and Development Corporation (PHDC) and managed by the Philadelphia Housing Authority (PHA).

The site measures approximately fifty feet wide by one hundred and ninety feet deep and is mid-block on a street with a mixture of residential and warehouse buildings. The building has a masonry exterior construction and a heavy timber frame. The site includes a driveway that runs the full length of the building and a small parking lot in the back.

At the time of the writing of this report the building was vacant.

This Physical Conditions and Needs Assessment is intended to document the existing conditions of the building to determine critical repair items, short- and long-term physical needs and cost estimates for the aforementioned needs of the structure to serve as an affordable rental housing building. BFW Group and their consultants were engaged by the property owner, Philadelphia Housing and Development Corporation (PHDC), to review existing physical conditions to identify opportunities for, or impediments to, renovations.

1.2 General Physical Condition

<table>
<thead>
<tr>
<th>System Conditions &amp; Observations Summary</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2.1 Topography</td>
<td>✓</td>
<td></td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>3.2.2 Storm Water Drainage</td>
<td>✓</td>
<td></td>
<td></td>
<td>Not Accessible</td>
</tr>
<tr>
<td>3.2.3 Access and Egress</td>
<td>✓</td>
<td></td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>3.2.4 Paving, Curbing and Parking</td>
<td>✓</td>
<td></td>
<td></td>
<td>Repave and re-stripe parking area, repair/replace curbing as required. Install curb at grade windows to prevent water run-off from entering building.</td>
</tr>
<tr>
<td>3.2.5 Flatwork</td>
<td>✓</td>
<td></td>
<td></td>
<td>Replace broken/heaved sections of concrete walkways.</td>
</tr>
<tr>
<td>3.2.6 Landscaping and Appurtenances</td>
<td>✓</td>
<td></td>
<td></td>
<td>Trim adjoining trees, clear perimeter fence of vegetation.</td>
</tr>
<tr>
<td>3.2.7 Recreational Facilities</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>3.2.8 Utilities</td>
<td>✓</td>
<td></td>
<td></td>
<td>Vandalized piping, at least 50% should be replaced</td>
</tr>
</tbody>
</table>

Building Type: converted warehouse
Property Age: ~100 yrs.
<table>
<thead>
<tr>
<th>Structural Frame and Building Envelope</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3.1 Foundation</td>
<td>✓</td>
<td></td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>3.3.2 Building Frame</td>
<td>✓</td>
<td></td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>3.3.3 Facades or Curtain Wall</td>
<td>✓</td>
<td></td>
<td></td>
<td>Windows should be replaced. Repoint brick façade.</td>
</tr>
<tr>
<td>3.3.4 Roofing and Roof Drainage</td>
<td>✓</td>
<td></td>
<td></td>
<td>Asbestos should be abated</td>
</tr>
<tr>
<td>Mechanical, Plumbing, Fire Protection and Electrical Systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.4.1 Plumbing</td>
<td>✓</td>
<td></td>
<td></td>
<td>Fixtures in units should be replaced. Vandalized plumbing should be replaced.</td>
</tr>
<tr>
<td>3.4.2 Heating</td>
<td>✓</td>
<td></td>
<td></td>
<td>Replace horizontal split systems with gas furnace.</td>
</tr>
<tr>
<td>3.4.3 Air Conditioning and Ventilation</td>
<td>✓</td>
<td></td>
<td></td>
<td>Condensers operating on outdated refrigerants should be replaced</td>
</tr>
<tr>
<td>3.4.4 Electrical</td>
<td>✓</td>
<td></td>
<td></td>
<td>Outdated fixtures should be replaced with LED</td>
</tr>
<tr>
<td>Vertical Transportation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.5. Elevators</td>
<td>✓</td>
<td></td>
<td></td>
<td>Confirm proper function, including recall and interconnection with fire alarm system. Bring inspection to current compliance.</td>
</tr>
<tr>
<td>Life Safety/Fire Protection</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.6.1 Sprinklers and Standpipes</td>
<td>✓</td>
<td></td>
<td></td>
<td>Should be tested and inspected</td>
</tr>
<tr>
<td>3.6.2 Alarm Systems</td>
<td>✓</td>
<td></td>
<td></td>
<td>Install hardwired smoke detectors</td>
</tr>
<tr>
<td>3.6.3 Other Systems</td>
<td>✓</td>
<td></td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>Interior Elements</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.7.1 Common Areas</td>
<td>✓</td>
<td></td>
<td></td>
<td>Finishes and kitchen should be replaced. Remediate mold.</td>
</tr>
<tr>
<td>3.7.2 Tenant Spaces</td>
<td>✓</td>
<td></td>
<td></td>
<td>Finishes and kitchen should be replaced. Remediate mold.</td>
</tr>
</tbody>
</table>

### 1.3 Opinions of Probable Cost

Opinions of probable costs should only be construed as preliminary, order of magnitude budgets. Actual costs will probably vary from the consultant’s opinions of probable costs depending on such matters as type and design of suggested work, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing of the work (if applicable), quality of contractor, quality of project management exercised, market conditions, and whether competitive pricing is solicited, etc.
2 PURPOSE & SCOPE

2.1 Purpose

The purpose of this Physical Conditions and Needs Assessment (PCNA) is to identify the following: 1) Critical Repair Items; 2) Twelve-Month Physical Needs; 3) Long-Term Physical Needs; and 4) Costing. For this PCNA, representative samples of the major independent building components were observed and their physical conditions were evaluated including site and building exteriors and interiors.

The Philadelphia Housing and Development Corporation (PHDC) wants to identify the required cost to achieve the following: 1) Upgrade all occupied units to meet the Department of Housing and Urban Development's (HUD) Housing Quality Standards (HQS); 2) Stabilize and seal all vacant units/buildings; and 3) Renovate all buildings to meet standards required for the low income housing tax credit program.

The physical condition of building systems and related components are typically defined as being in one of three conditions: Good, Fair or Poor, or a combination thereof. For the purposes of this report, the following definitions are used:

- **Good** = Satisfactory as-is. Requires only routine maintenance over the evaluation period. Repair or replacement may be required due to a system's estimated useful life.
- **Fair** = Satisfactory as-is. Repair or replacement is required due to current physical condition and/or estimated remaining useful life.
- **Poor** = Immediate repair, replacement or significant maintenance is required.

2.2 Site Visit

The building walkthrough was conducted on August 18, 2020. A total of ten (10) dwelling units were inspected (100%) along with common areas, stairwells and corridors.

2.3 Useful Life Estimate

It is our observation that the 5423-27 Lena Street constructed circa 1920, has experienced normal wear and tear for its type and age. Fixtures and finishes within the dwellings and in the common areas, in most cases, have exceeded their useful lives.
3 SYSTEM DESCRIPTIONS & OBSERVATIONS

3.1 OVERALL GENERAL DESCRIPTION

3.1.1 Apartment Unit Types and Unit Mix
The ten (10) units in the building have one-bedroom and one-bathroom. There is one ADA accessible unit on the first floor.

3.1.2 List of Apartment Units Inspected
100% of units were inspected.

3.2 SITE

3.2.1 Topography
The building is located on a city block. Site slopes down from northeast to southwest.

3.2.2 Storm Water Drainage
Not visible for assessment.

3.2.3 Access and Egress
The building shares a common egress stair along the northwest corner of the west side with the 5429 Lena Street four-story building. It also has an egress stair at the south end west side of the building.

3.2.4 Paving, Curbing and Parking
There is an asphalt driveway that runs the full length of the building and a small area for parking in the back. The asphalt appears to be in fair condition. Asphalt area should be repaved to maintain stormwater flow to catch basins.

3.2.5 Flatwork
Curbs and sidewalk in the front of the building appear to be in fair to poor condition. Replace sections of damaged/heaved sidewalks.

3.2.6 Landscaping and Appurtenances
Areas directly northeast and southeast of the site are heavily wooded. There is no landscaping on the site. Trim trees located adjacent to west side of structure.

3.2.7 Recreational Facilities
There are no recreational facilities associated with this property.

3.2.8 Utilities
Sanitary Sewer: City of Philadelphia
Storm Stewer: City of Philadelphia
Domestic Water: City of Philadelphia
Electric Service: PECO Energy Company
Natural Gas Service: Philadelphia Gas Works
3.2.8.1 Water
Domestic water piping was not visible in the majority of the units, visually the piping in the building that was not vandalized is in good to fair condition. Hot water is provided by a gas fired 30-gallon storage type water heater located in each dwelling unit. Depending on the unit the hot water heater and flue connections are in excellent to poor conditions.

Observations/Comments:
Vandalized and missing pipes (estimated at 50%) should be replaced.

3.2.8.2 Electricity
There is one service entrance serving two-meter rooms. Service voltage and capacity could not be confirmed at time of survey. Entrance service and meter banks looked to be in fair to good condition. Distribution panels and disconnect switches all are in good to fair condition.

Each unit had 60amp panels 120/240 powered from PECO meters for lighting and power which are in good to poor condition depending on the unit.

Observations/Comments:
Panels in poor condition should be upgraded to 100 amp panels.

3.2.8.3 Natural Gas
Incoming gas service from PGW is intact and in good condition. There is a gas meter bank with individual meters for each unit which looks to be in good condition.

3.2.8.4 Sanitary Sewer
Not visible for assessment.

3.2.8.5 Special Utility Systems
There are no special utility systems in the building.

3.2.8.5.1 Site Lighting
City light poles on Lena Street and surface mounted fixtures along the length of the building provide site lighting.

3.3 STRUCTURAL FRAME & BUILDING ENVELOPE

3.3.1 Foundation
Likely masonry (not visible for assessment).

3.3.2 Building Frame
3.3.2.1 Floor Frame System
The building is masonry and heavy timber construction. It is a two-story building with load bearing exterior walls.

3.3.2.2 Crawl Spaces and Penetrations
N/A

3.3.2.3 Roof Frame
The roof was not visible for inspection, but is a low sloped roof with a white coating.

3.3.2.4 Flashing & Moisture Protection
Not visible for assessment.
3.3.2.5 Attic Spaces, Draft Stops, Roof Vents & Penetrations
Not visible for assessment.

3.3.2.6 Insulation
Not visible for assessment.

3.3.2.7 Stairs, Railings & Balconies
Stairs at the northwest corner and south end of the building appear to be in fair condition.

3.3.2.8 Exterior Doors and Entry Systems
Doors appear to be fire rated hollow metal doors.

3.3.3 Facades or Curtain Wall
3.3.3.1 Sidewall System
The building is masonry and heavy timber construction. It is a two-story with load bearing exterior walls.

Observations/Comments:
- Star bolt in façade to address bowing is common in a building of this age.
- Repoint exterior brick façade and stone lintels/sills.

3.3.3.2 Fenestration (Window) Systems
Exterior windows appear to be wood double hung, single pane. The window sills appear to be painted wood in fair condition.
Within the apartments exterior windows were replaced with aluminum double hung insulated glass.

Observations/Comments:
- Window replacement is recommended.

3.3.4 Roofing and Roof Drainage
Roof could not be fully assessed due to lack of access.

3.4 MECHANICAL AND ELECTRICAL SYSTEM
3.4.1 Plumbing
3.4.1.1 Supply and Waste Piping
Domestic water and sanitary piping were not able to be assessed.

3.4.1.2 Domestic Hot Water Production
Domestic hot water is provided by a gas fired 30 gallon tank located within each unit.

3.4.1.3 Fixtures
Plumbing fixtures are antiquated and should be replaced.

3.4.2 Heating
3.4.2.1 Heating Generating Equipment
Stair towers are heated via electric unit heaters. Hallways are heated via central direct outside air unit (DOAS) located in the mechanical room; bathrooms and community center are heated via horizontal split system with gas furnace.
3.4.3 Air Conditioning and Ventilation

3.4.3.1 Equipment

3.4.1.1 Air Conditioning and Ventilation
The dwelling units are designed to be heated and air conditioned via ceiling mounted horizontal gas fired split system units. Each apartment has a roof mounted air cool condenser which is piped to the cooling coil in the indoor horizontal air handling unit.

Observations/Comments:

Horizontal split systems indoor units are in fair to good condition, but the outdoor condensing units are in poor condition and are operating on outdated refrigerants.

Recommend that horizontal split systems are replaced with gas furnace.

3.4.1.2 Exhaust Systems

There is an exhaust fan in each bathroom.

3.4.3.2 Distribution

See Section 3.4.3.1 above.

3.4.3.3 Control Systems

A thermostat is provided in each unit.

3.4.3.4 Sprinkler and Standpipes

The building is fully sprinkled; the system has a 6” – 8” incoming water service. Heads are exposed and ceiling mounted.

3.4.4 Electrical

3.4.4.1 Service, Metering, Distribution Panels

All units have 60amp 120/240 panels powered by PECO meters for lighting and power. Electrical outlets are spaced out throughout the apartments; wiring was not visible to assess condition.

3.4.4.2 Distribution
See 3.4.4.1 above

3.4.4.3 Distribution - Tenant Apartments
See 3.4.4.1 above

3.4.4.4 Lighting - Building Common Area

Corridor lighting consists of surface mounted fixtures located approximately every 8’ on center running down the hallway.

Lighting in the community room is provided via surface mounted 2x4 fluorescent fixtures as well as several 1x8 fluorescent fixtures that have been recessed into the ceiling along the perimeter of the tray ceilings.

Lighting in the maintenance office is provided via surface mounted 4x8 fluorescent with what appear to be 4-lamp T-8 bulbs. There appear to be approximately five (5) receptacles around the perimeter of the office space.
3.4.4.5 Lighting - Resident Apartment
Light fixtures in the units are surface mounted. Kitchen lighting consists of a surface mounted 4x4 fluorescent fixture in need of replacement. There is a 6” round fixture located at the entry to each unit. A wall sconce is provided in the bedroom area.

Observations/Comments:
Recommend replacing with LED light fixtures.

3.4.4.6 Lighting - Site
Exterior lighting consists of surface mounted fixtures along the length of the building. Fixtures are old and worn.

Observations/Comments:
Recommend replacing existing fixtures.

3.4.4.7 Emergency Generator
There is no emergency generator in the building. Emergency lighting is provided via emergency battery wall pack along egress path and stair towers.

3.5 VERTICAL TRANSPORTATION

3.5.1 The building is served by a single elevator.

3.6 LIFE SAFETY/FIRE PROTECTION

3.6.1 Sprinklers and Standpipes
All units are fully sprinklered.

Observations/Comments:
Sprinkler systems should be tested and inspected.

3.6.2 Alarm Systems
3.6.2.1 In Common Areas
A fire alarm system is provided throughout this building. Pull stations, notifications and smoke detectors have been noted throughout. Fire extinguishers are wall mounted in cabinets that are not ADA compliant.

Observations/Comments:
Carbon monoxide detectors should be installed.

Battery powered smoke detectors installed in corridors are not hard wired. All smoke detectors should be replaced.

Fire extinguishers cabinets should be replaced with ADA compliant models.

3.6.2.2 In Tenant Spaces
Fire alarm and smoke detectors are provided in tenant units.

Observations/Comments:
Battery powered smoke detectors installed in dwelling units are not hard wired. All smoke detectors should be replaced.

3.6.3 Other Systems
3.6.3.1 Intercom System
An intercom handset is provided at the apartment entry doors.

3.6.3.2 Apartment Emergency Duress System
Pull stations were noted throughout.
3.7 INTERIOR ELEMENTS

3.7.1 Common Areas

General
Hallways are approximately 5’ wide with vinyl tile floors. Corridor finishes appear to be gypsum wallboard painted with a gypsum ceiling. On the first floor a men’s and a women’s bathroom can be accessed from the corridor. An office space with reception and two (2) offices is also accessed from the first floor hallway. There is a gas and electric meter room located south of the offices, followed by a maintenance shop.

There is a maintenance office on the north end of the second floor. It appears that the flooring system at the second floor is a concrete topping slab with finishes consisting of vinyl tile and carpet.

Community Room
A community room is located on the north side of the building. It wraps around the elevator and elevator machine room. The floors are vinyl tile; walls and ceilings are gypsum wallboard.

The Community Room includes a kitchen with a double stainless sink, wood cabinets, a refrigerator and stove and a P-lam countertop. Kitchen floors appear to be a self-stick vinyl tile.

Three (3) tray ceilings have been provided within the space.

Observations/Comments:

- Finishes are in poor condition.
- Recommended that the common kitchen is replaced.
- Floors/carpets should be replaced.
- Areas of mold around the kitchen area at the exterior wall were noted and should be remediated appropriately.
- Renovation of common toilet rooms is recommended.
- Renovate community room, including all finishes.
- Remediate/replace common area drywall due to mold.

3.7.2 Tenant Spaces

3.7.2.1 Finishes, Wall, Floors

Apartment finishes are gypsum wallboard walls and ceiling with what appears to be metal stud framing. Floors throughout the units are 12x12 vinyl tile in poor condition.

Observations/Comments:

- General conditions of the units are poor with noted areas of spalled sheetrock, mold around most walls and doors.

- Finishes throughout should be replaced. Mold remediation is required.

3.7.2.2 Appliances

An electric range and refrigerator are provided.

Observations/Comments:

- All appliances should be replaced.
### 3.7.2.3 Bath Fixtures and Specialties

There is a single bathroom in each unit with vinyl tile, a tank style toilet, floor mounted wood vanity with P-lam top, a porcelain sink and a fiberglass tub with one-piece surround.

**Observations/Comments:**

- Bathroom fixtures are in fair to poor condition and should be replaced.

### 3.7.2.4 Kitchen Fixtures and Specialties

Kitchens are furnished with a single stainless steel sink.

**Observations/Comments:**

- Replace kitchen sink and faucet.

### 3.7.2.5 Millwork, Casework, Cabinets and Countertops

Kitchens consist of wood cabinets, plastic laminate countertop.

**Observations/Comments:**

- Cabinets and countertops are in poor condition and should be replaced.
4 ADDITIONAL CONSIDERATIONS

4.1 ENVIRONMENTAL HAZARDS

Lead-based paint and asbestos testing were completed for this premises.

Asbestos was identified in a sample of silver roof flashing. Approximately 9,500 sf of roof and flashing were identified during inspection.

No lead based paint was detected.

Observations/Comments:

Asbestos should be abated by a licensed contractor.
The 20-year table of quantities and annual costs are included in Exhibit 8.1.1, and 8.1.2. These cover general repairs that apply to the building components site wide and repairs that apply to specific components on site. Based upon site observations and information received from our interviews, the estimated costs are opinions of probable expenditures based upon readily observable conditions and experience with past costs for similar properties. The costs are net of construction management fees and design fees. Actual costs may vary depending on such matters as design, materials, equipment or systems selected, field conditions, phasing of work, management, and unknown factors.
6 OUT OF SCOPE CONSIDERATIONS

6.1 Accessibility for Persons with Disabilities

Units and common areas should be updated to meet current standards for clearances and safety.
7 LIMITING CONDITIONS

BFW has no control over the cost of labor, materials, equipment, or services furnished by others. It is anticipated that the annual escalation in construction costs increase would be two and a half percent (2.5%) per year.
**20 Year Table of Quantities & Annual Estimated Costs**

**Vacant Units/Buildings** - Estimates provided are for stabilization of unit with renovation to HQS standards in year 5.

**Occupied Units** - Estimates provided to bring units up to HQS standards.
<table>
<thead>
<tr>
<th>DIVISION</th>
<th>CAPITAL EXPENSE CATEGORY</th>
<th>DESCRIPTION / COMMENTS</th>
<th>CONDITION</th>
<th>Action</th>
<th>QTL (yr)</th>
<th>EFFECTIVE AGE (yr)</th>
<th>N/A (yr)</th>
<th>QUANTITY</th>
<th>MEASURE</th>
<th>UNIT COST</th>
<th>TOTAL COST</th>
<th>CRITICAL REPAIRS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Division 01-General Requirement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Division 02-Site Construction/Existing Conditions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Division 03-Walls, Floors, Plastics and Composites</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Division 04-Windows, Doors and Fire Alarm/Suppression</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Division 05-Electrical</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Division 06-Wood, Plastics and Composites</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Division 07-Finishes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Division 08-Oppenings</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Division 09-Finishes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Division 10-Specialties</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Division 11-Equipment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Division 12-Mechanical, Plumbing and Fire Alarm/Suppression</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Division 13-Office</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Division 14-Valves and Piping</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Division 15-System Maintenance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Division 16-Electrical</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Subtotal**

| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| **Total**

**$1,435,389**

* $1,435,389

**$190,737**
| DIVISION | CAPITAL EXPENSE CATEGORY | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 (Boost to HQS Standards) | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 | Year 11 | Year 12 | Year 13 | Year 14 | Year 15 | Year 16 | Year 17 | Year 18 | Year 19 | Year 20 |
|----------|--------------------------|--------|--------|--------|--------|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Division 01 - General Requirement | | | | | | | | | | | | | | | | | | | | | |
| | Dividing | | | | | | | | | | | | | | | | | | | | |
| | Contingency | | | | | | | | | | | | | | | | | | | | |
| | Overhead and Profit | | | | | | | | | | | | | | | | | | | | |
| | SubTotal | | | | | | | | | | | | | | | | | | | | |
| Division 02 - Site Construction/Existing Conditions | | | | | | | | | | | | | | | | | | | | |
| | Asbestos | | | | | | | | | | | | | | | | | | | | |
| | Debris Removal (Allowance) | | | | | | | | | | | | | | | | | | | | |
| | Selective Demolition (Allowance) | | | | | | | | | | | | | | | | | | | | |
| | Water Infiltration (Allowance) | | | | | | | | | | | | | | | | | | | | |
| | SubTotal | | | | | | | | | | | | | | | | | | | | |
| Division 03 - Woods, Plastics and Composites | | | | | | | | | | | | | | | | | | | | |
| | Apartments | | | | | | | | | | | | | | | | | | | | |
| | Community Room | | | | | | | | | | | | | | | | | | | | |
| | SubTotal | | | | | | | | | | | | | | | | | | | | |
| Division 04 - Openings | | | | | | | | | | | | | | | | | | | | |
| | Apartments | | | | | | | | | | | | | | | | | | | | |
| | Corridor | | | | | | | | | | | | | | | | | | | | |
| | SubTotal | | | | | | | | | | | | | | | | | | | | |
| Division 05 - Finishes | | | | | | | | | | | | | | | | | | | | |
| | Apartments | | | | | | | | | | | | | | | | | | | | |
| | Community Room | | | | | | | | | | | | | | | | | | | | |
| | Corridor | | | | | | | | | | | | | | | | | | | | |
| | SubTotal | | | | | | | | | | | | | | | | | | | | |
| Division 06 - Specialties | | | | | | | | | | | | | | | | | | | | |
| | Apartments | | | | | | | | | | | | | | | | | | | | |
| | Community Room | | | | | | | | | | | | | | | | | | | | |
| | SubTotal | | | | | | | | | | | | | | | | | | | | |
| Division 07 - Equipment | | | | | | | | | | | | | | | | | | | | |
| | HVAC Equipment | | | | | | | | | | | | | | | | | | | | |
| | Plumbing system | | | | | | | | | | | | | | | | | | | | |
| | Fire Alarm/Suppression (Entire Building) | | | | | | | | | | | | | | | | | | | | |
| | Fire Extinguishers | | | | | | | | | | | | | | | | | | | | |
| | SubTotal | | | | | | | | | | | | | | | | | | | | |
| Division 15 - Mechanical, Plumbing and Fire Alarm/ Suppression | | | | | | | | | | | | | | | | | | | | |
| | Maintenance Office Lighting | | | | | | | | | | | | | | | | | | | | |
| | Estimated Scope/Cost to Remedy MEP Physical | | | | | | | | | | | | | | | | | | | | |
| | Corridor Lighting | | | | | | | | | | | | | | | | | | | | |
| | Community Room Lighting | | | | | | | | | | | | | | | | | | | | |
| | Apartment Lighting | | | | | | | | | | | | | | | | | | | | |
| | Apartment Intercom | | | | | | | | | | | | | | | | | | | | |
| | Exit Signs | | | | | | | | | | | | | | | | | | | | |
| | SubTotal | | | | | | | | | | | | | | | | | | | | |
| Total | | | | | | | | | | | | | | | | | | | | |
Basis of estimate
This estimate’s purpose is to provide a conceptual cost basis for the renovation or replacement of a particular building or property. The estimate will include construction costs only. The costs are based on the average per square foot construction costs in the greater Philadelphia area for low income housing. Per square foot costs will differ depending on the type and function of the property, scope of work and current condition of the property.
<table>
<thead>
<tr>
<th>ITEM</th>
<th>Total</th>
<th>$/SF</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEMOLITION</td>
<td>$147,360.00</td>
<td>$10.00</td>
</tr>
<tr>
<td>SITWORK</td>
<td>$14,736.00</td>
<td>$1.00</td>
</tr>
<tr>
<td>LANDSCAPE &amp; IRRIGATION</td>
<td>$14,736.00</td>
<td>$1.00</td>
</tr>
<tr>
<td>CONCRETE</td>
<td>$14,736.00</td>
<td>$1.00</td>
</tr>
<tr>
<td>MASONRY</td>
<td>$73,680.00</td>
<td>$5.00</td>
</tr>
<tr>
<td>STRUCTURAL STEEL</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>METAL FABRICATIONS</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>ROUGH CARPENTRY</td>
<td>$73,680.00</td>
<td>$5.00</td>
</tr>
<tr>
<td>ARCHITECTURAL WOODWORK</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>THERMAL &amp; MOISTURE PROTECTION</td>
<td>$44,208.00</td>
<td>$3.00</td>
</tr>
<tr>
<td>FIREPROOFING</td>
<td>$29,472.00</td>
<td>$2.00</td>
</tr>
<tr>
<td>SEALANTS</td>
<td>$29,472.00</td>
<td>$2.00</td>
</tr>
<tr>
<td>WINDOWS</td>
<td>$58,944.00</td>
<td>$4.00</td>
</tr>
<tr>
<td>DOORS / FRAMES / HARDWARE</td>
<td>$117,888.00</td>
<td>$8.00</td>
</tr>
<tr>
<td>STOREFRONT / GLAZING</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>INTERIOR GLASS</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>DRYWALL</td>
<td>$73,680.00</td>
<td>$5.00</td>
</tr>
<tr>
<td>TILE</td>
<td>$58,944.00</td>
<td>$4.00</td>
</tr>
<tr>
<td>ACOUSTIC CEILINGS</td>
<td>$58,944.00</td>
<td>$4.00</td>
</tr>
<tr>
<td>CARPET</td>
<td>$88,416.00</td>
<td>$6.00</td>
</tr>
<tr>
<td>PAINTING</td>
<td>$44,208.00</td>
<td>$3.00</td>
</tr>
<tr>
<td>WALL COVERINGS</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>SPECIALTIES</td>
<td>$44,208.00</td>
<td>$3.00</td>
</tr>
<tr>
<td>EQUIPMENT</td>
<td>$73,680.00</td>
<td>$5.00</td>
</tr>
<tr>
<td>FURNISHINGS</td>
<td>$73,680.00</td>
<td>$5.00</td>
</tr>
<tr>
<td>CONVEYING</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>FIRE PROTECTION</td>
<td>$58,944.00</td>
<td>$4.00</td>
</tr>
<tr>
<td>PLUMBING</td>
<td>$147,360.00</td>
<td>$10.00</td>
</tr>
<tr>
<td>HVAC</td>
<td>$176,832.00</td>
<td>$12.00</td>
</tr>
<tr>
<td>ELECTRICAL</td>
<td>$147,360.00</td>
<td>$10.00</td>
</tr>
<tr>
<td>COMMUNICATIONS</td>
<td>$29,472.00</td>
<td>$2.00</td>
</tr>
<tr>
<td>ELECTRONIC SAFETY &amp; SECURITY</td>
<td>$73,680.00</td>
<td>$5.00</td>
</tr>
<tr>
<td>GENERAL REQUIREMENTS</td>
<td>$58,944.00</td>
<td>$4.00</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$1,827,264.00</strong></td>
<td><strong>124</strong></td>
</tr>
<tr>
<td>Construction Contingency - 10%</td>
<td>$182,726.40</td>
<td>$12.40</td>
</tr>
<tr>
<td>Subcontractor Insurance - 2%</td>
<td>$36,545.28</td>
<td>$2.48</td>
</tr>
<tr>
<td>Design Contingency - 2%</td>
<td>$36,545.28</td>
<td>$6.20</td>
</tr>
<tr>
<td>Overhead &amp; Profit - 2.5%</td>
<td>$45,681.60</td>
<td>$3.10</td>
</tr>
<tr>
<td>Permits - 1.5%</td>
<td>$27,408.96</td>
<td>$2.48</td>
</tr>
<tr>
<td>Performance &amp; Payment Bonds - 2%</td>
<td>$36,545.28</td>
<td>$2.48</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>$2,192,716.80</strong></td>
<td><strong>153</strong></td>
</tr>
</tbody>
</table>
### Reserve for Replacement (RFR)

<table>
<thead>
<tr>
<th>CRITICAL REPAIRS</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5 Raise to HQS Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$1,453,892</td>
</tr>
<tr>
<td>Existing Reserve Fund</td>
<td>$190,737</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Annual RFR Contribution</td>
<td>$218,500</td>
<td>$218,500</td>
<td>$218,500</td>
<td>$218,500</td>
<td>$218,500</td>
</tr>
<tr>
<td>Previous RFR Plus Contributions</td>
<td>$218,500</td>
<td>$442,463</td>
<td>$674,236</td>
<td>$912,963</td>
<td>$1,158,852</td>
</tr>
<tr>
<td>RFR with 2.5% Rate of Return</td>
<td>$223,963</td>
<td>$455,736</td>
<td>$694,463</td>
<td>$940,352</td>
<td>$1,193,618</td>
</tr>
<tr>
<td>Current Year Balance</td>
<td>$33,226</td>
<td>$455,736</td>
<td>$694,463</td>
<td>$940,352</td>
<td>$1,193,618</td>
</tr>
<tr>
<td>Year 1 Construction Funds</td>
<td>$190,737</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Total Year Funds</td>
<td>$223,963</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

### RFR ASSUMPTIONS

- **Units**: 10
- **Beginning Year**: 2021
- **Investment Rate of Return**: 2.5%
- **Inflation Rate**: 2.5%
- **Existing Reserve Fund**: $-
- **Monthly Reserve Contribution**: $18,208
- **Reserve Cost/Unit/Year**: $21,850
- **Year 1 Construction Funds**: $190,737

### Additional Notes
- **RFR ASSUMPTIONS**
  - Units
  - Beginning Year
  - Investment Rate of Return
  - Inflation Rate
  - Existing Reserve Fund
  - Monthly Reserve Contribution
  - Reserve Cost/Unit/Year
  - Year 1 Construction Funds

- **Monthly Reserve Contribution**
- **Reserve Cost/Unit/Year**
- **Year 1 Construction Funds**

- **RFR ASSUMPTIONS**
  - Units
  - Beginning Year
  - Investment Rate of Return
  - Inflation Rate
  - Existing Reserve Fund
  - Monthly Reserve Contribution
  - Reserve Cost/Unit/Year
  - Year 1 Construction Funds
### Reserve for Replacement (RFR)

<table>
<thead>
<tr>
<th></th>
<th>Year 13</th>
<th>Year 14</th>
<th>Year 15</th>
<th>Year 16</th>
<th>Year 17</th>
<th>Year 18</th>
<th>Year 19</th>
<th>Year 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Reserve Fund</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Expense Sum (Projected)</td>
<td>$218,500</td>
<td>$218,500</td>
<td>$218,500</td>
<td>$218,500</td>
<td>$218,500</td>
<td>$218,500</td>
<td>$218,500</td>
<td>$218,500</td>
</tr>
<tr>
<td>Annual RFR Contribution</td>
<td>$1,943,700</td>
<td>$2,220,511</td>
<td>$2,505,626</td>
<td>$2,799,295</td>
<td>$3,101,774</td>
<td>$3,413,327</td>
<td>$3,734,227</td>
<td>$4,064,754</td>
</tr>
<tr>
<td>RFR with 2.5% Rate of Return</td>
<td>$2,002,011</td>
<td>$2,287,126</td>
<td>$2,580,795</td>
<td>$2,883,274</td>
<td>$3,194,827</td>
<td>$3,515,727</td>
<td>$3,846,254</td>
<td>$4,186,696</td>
</tr>
</tbody>
</table>
8.2 *Photographic Documentation*
LAN Associates, EPAS, Inc.

Photos by: VP on 8/18/20

Photo No. 1
Unit 2K.

LAN No.: 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y - 5423 Lena Street

Photo No. 2
View looking at living room.
Photo No. 3
View of bathroom. (typical)

Photo No. 4
View looking inside bedroom.
Photo No. 5
View of installed hot water heater.

Photo No. 6
View looking towards kitchen.
Photo No. 7
View of closet outside kitchen.

Photo No. 8
View looking into kitchen from living room.
Photo No. 9
Panning right from previous photo. Additional view of kitchen.

Photo No. 10
View looking towards apartment entry from living room.
Photo No. 11
Unit 2J.

Photo No. 12
View looking towards living room from entry.
Photo No. 13
View of installed gas fired hot water heater.

Photo No. 14
View looking into living room.
Photo No. 15
View of kitchen as seen from living room

Photo No. 16
Panning right from previous photo. Overall view of kitchen.

Photo No. 17
Photos by: VP on 8/18/20
View looking towards entry from living room.

Photo No. 18
View of above ceiling air handling unit in the kitchen.

Photo No. 19
LAN No.: 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y - 5423 Lena Street

Photos by: VP on 8/18/20

View of missing fire extinguisher, intercom and missing light switch cover plate outside kitchen.

Photo No. 20
View looking inside bedroom.
Photo No. 21
View of closet within bedroom.

Photo No. 22
Ceiling of bedroom with visible sprinkler head.

Photo No. 23
View of water closet and vanity.

Photo No. 24
View of bathtub and vanity.

Photo No. 25
Photos by: VP on 8/18/20

Additional view of bathtub surround and typical ceiling fixture.

Photo No. 26

View of typical apartment electrical panel.
LAN No.: 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y - 5423 Lena Street

Photos by: VP on 8/18/20

Photo No. 27
View of apartment electric panel breaker descriptions.

Photo No. 28
View looking at apartment entry.
Photo No. 29
View of typical thermostat.

Photo No. 30
Unit 2A.
Photo No. 31
View of living room as seen from entry.

Photo No. 32
View looking at bedroom entry.
Photo No. 33
View inside bedroom.

Photo No. 34
Panning left from previous photo. View at bedroom closet and entry.
Photo No. 35
View looking into apartment bathroom.

Photo No. 36
View of water closet within bathroom.
Photo No. 37
View of living room.

Photo No. 38
Panning right from previous photo looking at apartment kitchen.

Photo No. 39
Panning right from previous photo. Additional view of kitchen and living room entry.
LAN Associates, EPAS, Inc.

Photos by: VP on 8/18/20

Photo No. 40
Panning right view of shared wall between bedroom and living room.

Photo No. 41
View of entry tile flooring.
LAN No.: 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y - 5423 Lena Street

Photos by: VP on 8/18/20

Photo No. 42
View of installed hot water heater.

Photo No. 43
View inside of janitor's closet on the second floor.
LAN No.: 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y - 5423 Lena Street

Photos by: VP on 8/18/20

Photo No. 44
Unit 2E.

Photo No. 45
Photo of Notice posted. Notice indicated fire alarm was inoperable. Notice date was 08/06/18 by L&I.

Photo No. 46
View looking into living room from entry.
LAN Associates, EPAS, Inc.

Photos by: VP on 8/18/20

**Photo No. 47**
View looking at bathroom and apartment electrical panel from entry.

**Photo No. 48**
Additional view looking into bathroom.
Photo No. 49
View of water closet within bathroom.

Photo No. 50
View of hot water heater location.
Photo No. 51
View of bedroom closet and entry.

Photo No. 52
Panning left from previous photo. View of ducted forced air in bedroom.
Photo No. 53
View of exterior wall in bedroom.

Photo No. 54
View of entry closet.
Photo No. 55
View of living room from entry.

Photo No. 56
View of kitchen from living room.

Photo No. 57
LAN No.: 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y - 5423 Lena Street

Photos by: VP on 8/18/20

View looking towards entry from living room.

Photo No. 58
Additional view of kitchen.

Photo No. 59
Photos by: VP on 8/18/20

Looking towards shared wall between bedroom and living room.

Photo No. 60

View of entry.
Photos by: VP on 8/18/20

**Photo No. 61**
View looking at exit stair leading down from second floor.

**Photo No. 62**
View of roof access ladder within exit stair.
Photo No. 63
View looking west along rooftop. Depicted in photo are the condensing units for all apartments.

Photo No. 64
Panning right from previous photo. View of plumbing vents.

Photo No. 65
Panning right from previous photo.
Photo No. 66
View looking west across rooftop.

Photo No. 67
View looking east across rooftop.
LAN No.: 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y - 5423 Lena Street

Photos by: VP on 8/18/20

**Photo No. 68**
View looking west at 2nd floor corridor. Note janitor's closet and exit stair are on left side of photo.

**Photo No. 69**
Additional view of second floor corridor.
LAN No.: 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y - 5423 Lena Street

Photos by: VP on 8/18/20

Photo No. 70
Ditto previous photo.

Photo No. 71
West end of second floor corridor.
Photo No. 72
View of west exit stair entrance and elevator lobby.

Photo No. 73
View looking east along second floor corridor.
Photo No. 74
View of east end of second floor corridor.

Photo No. 75
View of west exist stair landing at second floor.
Photo No. 76
View looking down towards intermediate landing between second and first floors.

Photo No. 77
View of first floor landing. West stair tower.
Photo No. 78
View of first floor landing. Door at right leads to exterior. South parking area.

Photo No. 79
View looking towards exit door from first floor corridor.

Photo No. 80
Additional view of exterior exit door.
Photos by: VP on 8/18/20

**Photo No. 81**
Unit 1E.

**Photo No. 82**
View looking towards living room. Hot water heater located at right of photo.
LAN Associates, EPAS, Inc.

Photos by: VP on 8/18/20

Photo No. 83
View into bedroom.

Photo No. 84
View of entry closet and hot water heater.
Photo No. 85
View of apartment entry door.

Photo No. 86
View of kitchen from living room.
Photo No. 87
Additional view of kitchen.

Photo No. 88
View of ceiling above living room entry.
Photo No. 89
Panning down from previous photo. View of living room (shared wall with bedroom).

Photo No. 90
Panning right from previous photo.
**Photo No. 91**
View of bedroom closet and ceiling above.

**Photo No. 92**
View of bedroom closet.
Photo No. 93
View of window located within bedroom.

Photo No. 94
Panning right from previous photo. Depicts exterior wall of bedroom.
Photo No. 95
View of bedroom entry and ceiling.

Photo No. 96
View of bathtub surround.
LAN No.: 2.20341.01
LAN Associates, EPAS, Inc.

BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y - 5423 Lena Street

Photos by: VP on 8/18/20

Photo No. 97
View of bathroom walls.

Photo No. 98
Photos by: VP on 8/18/20

View of water closet.

Photo No. 99
View of installed hot water heater. Note flue piping is missing.
LAN No.: 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y - 5423 Lena Street

Photos by: VP on 8/18/20

**Photo No. 100**
View looking into bathroom and apartment electrical panel at right.

**Photo No. 101**
View inside what might be an exercise or craft room on the first floor.
Photo No. 102
Additional view of exercise/craft room.

Photo No. 103
View at piping above entry to exercise/craft room.
Photos by: VP on 8/18/20

**Photo No. 104**
Ditto photo #102.

**Photo No. 105**
Ditto photo #103.
LAN No.: 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y - 5423 Lena Street

Photos by: VP on 8/18/20

**Photo No. 106**
View of exterior wall at exercise/craft room.

**Photo No. 107**
View of entry door to exercise/craft room from corridor.
Photos by: VP on 8/18/20

**Photo No. 108**
View looking west along 1st floor corridor.

**Photo No. 109**
View inside workshop on first floor.
LAN No.: 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y - 5423 Lena Street

Photos by: VP on 8/18/20

Photo No. 110
Panning left from previous photo.

Photo No. 111
Panning right from photo #109.
LAN No.: 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y

Photos by: VP on 8/18/20

Photo No. 113
Panning left from photo #110.

Photo No. 114
Overall view of workshop.
Photos by: VP on 8/18/20

**Photo No. 115**
Depicts view of workshop ceiling.

**Photo No. 116**
Depicts view of laundry area and washer hookups.

**Photo No. 117**
View of laundry room entry from corridor.
Photos by: VP on 8/18/20

**Photo No. 118**
Panning left from previous photo. Pictured are the gas connections for dryers as well as the exhaust ductwork.

**Photo No. 119**
Panning left from previous photo. Gas hookup on right and double basin utility sink on left.

**Photo No. 120**
View of exterior wall at laundry room.
LAN No.: 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y

Photos by: VP on 8/18/20

**Photo No. 121**
Panning up from previous photo. View of laundry room ceiling.

**Photo No. 122**
Depicts view of gas meters.
LAN No.: 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y

Photos by: VP on 8/18/20

**Photo No. 123**
Depicts view of water service and ceiling mounted air handler.

**Photo No. 124**
Panning left from previous photo.
LAN No. 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y

Photos by: VP on 8/18/20

Photo No. 125
Panning up from photo #123. View of meter room ceiling.

Photo No. 126
Detail view of water service.

Photo No. 127
View within meter room towards electric service beyond.
LAN Associates, EPAS, Inc.

Photos by: VP on 8/18/20

Photo No. 128
View of gas piping overhead leading to corridor.

Photo No. 129
Overall view of meter room entry from corridor.

Photo No. 130
Depicts view of electrical meters.
Photos by: VP on 8/18/20

**Photo No. 131**
Panning left from previous photo. View of electrical raceway and additional panelboards.

**Photo No. 132**
Panning left from previous photo.
LAN No.: 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y

Photos by: VP on 8/18/20

**Photo No. 133**
Panning right from photo #130. View of fire alarm control panel.

**Photo No. 134**
Additional view of meter room.
LAN No.: 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y

Photos by: VP on 8/18/20

Photo No. 135
View looking west along first floor corridor.

Photo No. 136
View looking east along first floor corridor.
Photos by: VP on 8/18/20

Photo No. 137
View of west end of the first floor corridor. Please note male and female bathrooms are located on left of photo.

Photo No. 138
View looking into leasing office from corridor.
Photos by: VP on 8/18/20

Photo No. 139
View looking to the left immediately upon entry to leasing office.

Photo No. 140
Panning right from previous photo. View looking straight upon entry to leasing office.

Photo No. 141
View looking up at ceiling within leasing office.
**Photo No. 142**
Panning right from photo #140. View of private office.

**Photo No. 143**
View inside private office from previous photo.

**Photo No. 144**
View looking back out to reception area of leasing office.
Photo No. 145
View inside female toilet room from corridor.

Photo No. 146
Panning right from previous photo.
Photo No. 147
View of lavatory within female toilet room.

Photo No. 148
View inside male toilet room from corridor.
LAN Associates, EPAS, Inc.

Photos by: VP on 8/18/20

**Photo No. 149**
Unit 1A. (Handicapped unit)

**Photo No. 150**
View looking inside unit 1A.
Photos by: VP on 8/18/20

**Photo No. 151**
View of living room from entry.

**Photo No. 152**
View of kitchen from living room. Note under cabinets have been removed and counter lowered to ADA height.

**Photo No. 153**
View of apartment entry from living room.
Photo No. 154
View of bedroom.

Photo No. 155
View of apartment entry door (left) and bathroom beyond.
LAN No.: 2.20341.01
LAN Associates, EPAS, Inc.
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y

Photos by: VP on 8/18/20

**Photo No. 156**
View looking into bedroom from entry.

**Photo No. 157**
View of bedroom closet.
Photos by: VP on 8/18/20

**Photo No. 158**
View of bedroom entry.

**Photo No. 159**
View of exterior wall in bedroom. Note, windows do not meet ADA compliance for reach.
Photo No. 160
View of converted walk-in shower.

Photo No. 161
Panning down from previous photo.

Photo No. 162
View of converted water closet and lavatory. Note the rear grab bar does not meet current ADA size of 36" min.
LAN No.: 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y

Photos by: VP on 8/18/20

**Photo No. 163**
View looking at ceiling above water closet and lavatory.

**Photo No. 164**
View at living room, bedroom and entry from bathroom. Note that not all door hardware is lever style in compliance with ADA requirements.
LAN No.: 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y

Photos by: VP on 8/18/20

Photo No. 165
View of installed hot water heater.

Photo No. 166
View of ceiling mounted light fixture at entry.
Photo No. 167
View looking west at first floor corridor.

Photo No. 168
View of elevator machine equipment.
LAN No.: 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y

Photos by: VP on 8/18/20

**Photo No. 169**
Panning left from previous photo. View of disconnect for elevator equipment.

**Photo No. 170**
View of notes on elevator equipment.
Photo No. 171
View of elevator inspection sticker.

Photo No. 172
Panning down from previous photo.
LAN Associates, EPAS, Inc.

Photos by: VP on 8/18/20

**Photo No. 173**
View of building vestibule and elevator lobby.

**Photo No. 174**
View looking east along first floor corridor.
Photo No. 175
View of community room entry door.

Photo No. 176
View inside community room.

Photo No. 177
Additional view of community room, turned 180 degrees from previous photo.
Photo No. 178
View of storage closet within community room.

Photo No. 179
View looking towards community room entry and kitchen area.

Photo No. 180
View of community room kitchen.
LAN Associates, EPAS, Inc.

Photos by: VP on 8/18/20

**Photo No. 181**
Additional view of community room kitchen.

---

**Photo No. 182**
Panning right from previous photo. Looking towards main portion of community room.
LAN No. 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y

Photos by: VP on 8/18/20

**Photo No. 183**
View of building vestibule and mailbox area.

**Photo No. 184**
View of vestibule doors leading to first floor corridor.
Photos by: VP on 8/18/20

**Photo No. 185**
View of shared exit stair at first floor with 5429 Lena St.

**Photo No. 186**
View of entry ramp to vestibule.

**Photo No. 187**
Additional view of entry ramp from shared parking area with 5429 Lena St.
Photos by: VP on 8/18/20

**Photo No. 188**
View of partial north elevation.

**Photo No. 189**
Panning right from previous photo.

**Photo No. 190**
Additional view looking east along north elevation.
Photos by: VP on 8/18/20

**Photo No. 191**
View of sidewalk and curbing along north near entry ramp.

**Photo No. 192**
View looking east at sidewalks along north side of building.

**Photo No. 193**
View of drop curb at parking area on north side.
LAN No.: 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y

Photos by: VP on 8/18/20

**Photo No. 194**
View of growing vegetation above second floor windows along north side.

---

**Photo No. 195**
Additional view of vegetative growth at second floor windows, north side.
Photos by: VP on 8/18/20

**Photo No. 196**
View of driveway to Wakefield St. and installed site lighting.

**Photo No. 197**
View looking west at sidewalks and driveway from Wakefield St.
Photo No. 198
View of northeast corner of building with vegetative growth at second floor windows along north side.

Photo No. 199
View of east façade.

Photo No. 200
Panning down from previous photo.
Photos by: VP on 8/18/20

Photo No. 201
View of asphalt sidewalk along east side of building.

Photo No. 202
View of drop curb at southeast corner of building.
LAN No. 2.20341.01
BFW Group, LLC/PHDC PCNA of Germantown/Mount Airy Properties - Premises Y

Photos by: VP on 8/18/20

**Photo No. 203**
View of south façade, east side, showing discoloration at parapet and vegetative growth along second floor windows.

**Photo No. 204**
View looking west along south façade.

**Photo No. 205**
View of south parking area and asphalt curbing.
Photo No. 206
Close-up view of sidewalk at southeast corner of building.

Photo No. 207
View of stairs leading down to existing stair egress.
Photos by: VP on 8/18/20

**Photo No. 208**
Additional view of south parking lot and perimeter fencing.

**Photo No. 209**
Panning left from previous photo.

**Photo No. 210**
Panning left from previous photo.
Photos by: VP on 8/18/20

Photo No. 211
Panning left from previous photo.

Photo No. 212
Panning left from previous photo.

Photo No. 213
Detail view of masonry at parapet and along downspout. Evidence of water scouring from storm water was noted.
Photos by: **VP** on **8/18/20**

**Photo No. 214**
View of catch basin and surrounding settled asphalt outside of workshop.

**Photo No. 215**
Additional view of south façade, west side.

**Photo No. 216**
View of electrical transformer at south side parking areas.
LAN Associates, EPAS, Inc.

Photos by: VP on 8/18/20

Photo No. 217
Detail view of masonry on south façade, west end. Brick repointing/repair is required.

Photo No. 218
Depicts view of vehicular gate from Lena St. along south side.
Photos by: VP on 8/18/20

**Photo No. 219**
View looking east from Lena St. along south side parking area. Note asphalt replacement is required.

**Photo No. 220**
View of fencing and landscaping on east side of property.
Photo No. 221
View looking west along north side of building. Concrete and asphalt sidewalk will require replacement.

Photo No. 222
View of stone retaining wall along north parking lot. It is uncertain whether or not this wall is on or part of the property.
LAN Associates, EPAS, Inc.

Photos by: VP on 8/18/20

Photo No. 223
Additional view of stone retaining wall.

cc: File #2.20341.01
8.2.2 PHOTO EXHIBITS

MEP

Unit 1a kitchen.

First floor water fountain in management office.

First floor corridor heater at main entrance.

Unit 1a electric wiring next to indoor unit.

First floor fire alarm strobe.

Unit 1a indoor unit label.
First floor public bathroom.

Unit 1a electric panel.

First floor management room pvc piping for indoor unit.

First floor management room sink/faucet.

First floor mechanical room.

First floor elevator room.
First floor elevator room panel.

First floor corridor heater at main entrance.

Sprinkler head in Unit A.

Unit 1a indoor gas unit.
8.3 SUPPORTING DOCUMENTATION
FEMA Flood Zone Map

FEMA Flood Zone Information
outside the 0.2% annual chance floodplain as identified by Floor Insurance Rate (FIRM) map number 4207570095G issued by the National Flood Insurance Program (NFIP). 5423-27 Lena Street is located in EPA Radon Zone 3, indicating a low potential for the presence of Radon and a predicted average indoor radon screening level of less than 2 pCi/L.

Aerial View
City of Philadelphia Zoning Map

Zoned RSA - 5 - Residential Single Family Attached-5

Allows for detached or semi-detached single family dwellings, duplexes and places of worship.
8.3.2 ENVIRONMENTAL REPORTS
October 19, 2020

Attention: PHDC Germantown CNA

Reference: Asbestos Bulk Sampling
5423-27 Lena Street, Philadelphia, PA
Criterion’s Project Number: 201379

We are pleased to provide you with the results of our asbestos inspection and bulk sampling, which was conducted by Criterion Laboratories, Inc. (Criterion) on August 18, 2020. The analytical method employed was Polarized Light Microscopy (PLM) with Dispersion Staining following the EPA “Interim Method” for the determination of asbestos in bulk building materials (EPA-600/M4-82-020, or 40 CFR Part 763, Appendix E to Subpart E). Our laboratory is certified by the National Institute of Standards and Technology’s NVLAP Program (Lab Code No. 102046-0).

In accordance with the EPA’s Toxic Substances and Control Act (TSCA) regulation, a material is classified as asbestos-containing if it contains greater than one (1) percent (>1%) asbestos as analyzed by PLM.

As indicated on the attached certificate, **asbestos (>1%) was identified** in the sample of silver roof flashing from around the roof drain (Sample number 201379-02-002-03-21). A total of 9,500 sf of roof and flashing was identified during the inspection, but it should be noted that quantities are approximated and should be verified by abatement contractor.

The following materials were observed, sampled, submitted for analysis, and found not to be asbestos-containing materials.

- Soft cementitious flooring
- White Dimond Pattern Linoleum
- Drywall and joint compound
- 12”x12” Beige Floor Tile
- 12”x12” White Floor Tile
- Yellow Linoleum
- 12”x12” Blue Floor Tile
- 12”x12” Grey Floor Tile
- 12”x12” Gray Streak Floor Tile
- 12”x12” Tan Floor Tile
- 12”x12” Blue/Grey Floor Tile
- Roof
- Mortar

Sincerely,

Melissa Billingsley
Project Manager

Attachment
Disclaimer

Information contained herein was obtained by means of onsite observations, bulk sampling and analytical data. Conclusions will be based upon the data obtained. This is not to imply that the data gathered is all the information that exists which may be pertinent to the site. Any areas inaccessible to the inspection team due to reasons beyond the control of Criterion (i.e., hidden pipe chases, behind hard walls, above hard ceilings, secured spaces, etc.) will not be included in this inspection.

This report is intended to strictly comply with EPA, OSHA and State of Pennsylvania regulations governing asbestos. This report should be referenced prior to disturbing any materials that may contain asbestos.

All identified asbestos-containing materials (ACM) should be removed by a Pennsylvania-licensed asbestos abatement contractor prior to renovations that impact these materials.
## Results of Polarized Light Microscopy

<table>
<thead>
<tr>
<th>Sample Number</th>
<th>Material Description</th>
<th>Appearance</th>
<th>Layer</th>
<th>Non-Asbestos</th>
<th>Asbestos</th>
</tr>
</thead>
<tbody>
<tr>
<td>201379-02-002-03-01</td>
<td>Tan Cement</td>
<td>1</td>
<td>Cellulose - 2%</td>
<td>98%</td>
<td>None Detected</td>
</tr>
<tr>
<td>201379-02-002-03-02</td>
<td>White Joint Compound</td>
<td>1</td>
<td>Cellulose - 3%</td>
<td>97%</td>
<td>None Detected</td>
</tr>
<tr>
<td>201379-02-002-03-03</td>
<td>Gray Drywall</td>
<td>1</td>
<td>Cellulose - 4%</td>
<td>96%</td>
<td>None Detected</td>
</tr>
<tr>
<td>201379-02-002-03-04</td>
<td>White Linoleum</td>
<td>1</td>
<td>Cellulose - 2%</td>
<td>98%</td>
<td>None Detected</td>
</tr>
<tr>
<td>201379-02-002-03-04</td>
<td>Tan Backing</td>
<td>2</td>
<td>Cellulose - 20%</td>
<td>80%</td>
<td>None Detected</td>
</tr>
<tr>
<td>201379-02-002-03-05</td>
<td>Beige Tile</td>
<td>1</td>
<td>Cellulose - 3%</td>
<td>97%</td>
<td>None Detected</td>
</tr>
<tr>
<td>201379-02-002-03-05</td>
<td>Yellow Mastic</td>
<td>2</td>
<td>Cellulose - 5%</td>
<td>95%</td>
<td>None Detected</td>
</tr>
<tr>
<td>201379-02-002-03-06</td>
<td>White Tile</td>
<td>1</td>
<td>Cellulose - 3%</td>
<td>97%</td>
<td>None Detected</td>
</tr>
<tr>
<td>201379-02-002-03-06</td>
<td>Yellow Mastic</td>
<td>2</td>
<td>Cellulose - 5%</td>
<td>95%</td>
<td>None Detected</td>
</tr>
<tr>
<td>201379-02-002-03-07</td>
<td>Tan Linoleum</td>
<td>1</td>
<td>Cellulose - 3%</td>
<td>97%</td>
<td>None Detected</td>
</tr>
</tbody>
</table>
## Results of Polarized Light Microscopy

**Client:** BFW Group, LLC  
**Site Address:** Germantown Properties  
**Project #:** 201379  
**Sample Date:** 8/18/2020  
**Sample Received Date:** 8/19/2020  
**Sample Analysis Date(s):** 8/21/2020

**Collected By:** Criterion Laboratories, Inc.  
**Analyzed By:** Marrs, Collin

<table>
<thead>
<tr>
<th>Sample Number</th>
<th>Material Description</th>
<th>Appearance</th>
<th>Layer</th>
<th>Non-Asbestos</th>
<th>Asbestos</th>
<th>Asbestos Type</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>201379-02-002-03-07</td>
<td>Linoleum (yellow)</td>
<td>Tan Backing</td>
<td>2</td>
<td>Cellulose - 20%</td>
<td>80%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>2nd floor Unit 2A in kitchen under 12x12 tile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-08</td>
<td>Light Blue Tile</td>
<td>12x12 floor tile (blue)</td>
<td>1</td>
<td>Cellulose - 3%</td>
<td>97%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>2nd floor Unit 2i in foyer &amp; kitchen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-08</td>
<td>Yellow Mastic</td>
<td>12x12 floor tile (blue)</td>
<td>2</td>
<td>Cellulose - 5%</td>
<td>95%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>2nd floor Unit 2i in foyer &amp; kitchen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-09</td>
<td>White Linoleum</td>
<td>Linoleum (white diamond pattern)</td>
<td>1</td>
<td>Cellulose - 3%</td>
<td>97%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>2nd floor Unit 2i in bathroom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-09</td>
<td>Tan Backing</td>
<td>Linoleum (white diamond pattern)</td>
<td>2</td>
<td>Cellulose - 55%</td>
<td>45%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>2nd floor Unit 2i in bathroom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-10</td>
<td>Gray Tile</td>
<td>12x12 floor tile (grey)</td>
<td>1</td>
<td>Cellulose - 2%</td>
<td>98%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>2nd floor Unit 2B living room</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-10</td>
<td>Yellow Mastic</td>
<td>12x12 floor tile (grey)</td>
<td>2</td>
<td>Cellulose - 5%</td>
<td>95%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>2nd floor Unit 2B living room</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-11</td>
<td>Yellow Linoleum</td>
<td>Linoleum (yellow)</td>
<td>1</td>
<td>Cellulose - 5%</td>
<td>95%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>2nd floor Unit 2B kitchen, bathroom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-11</td>
<td>Tan Backing</td>
<td>Linoleum (yellow)</td>
<td>2</td>
<td>None Detected</td>
<td>100%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>2nd floor Unit 2B kitchen, bathroom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-11</td>
<td>Yellow Mastic</td>
<td>Linoleum (yellow)</td>
<td>3</td>
<td>Cellulose - 4%</td>
<td>96%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>2nd floor Unit 2B kitchen, bathroom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Results of Polarized Light Microscopy

<table>
<thead>
<tr>
<th>Sample Number</th>
<th>Material Description</th>
<th>Appearance</th>
<th>Location</th>
<th>Layer</th>
<th>Non-Asbestos Fibrous %</th>
<th>Non-Fibrous %</th>
<th>Asbestos Type</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>201379-02-002-03-12</td>
<td>Gray Tile 12x12 floor tile (grey streaks) 2nd floor Unit 2C foyer</td>
<td>Gray Tile</td>
<td>1st floor hallway and throughout building</td>
<td>1</td>
<td>Cellulose - 2%</td>
<td>98%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-12</td>
<td>Yellow Mastic 12x12 floor tile (grey streaks) 2nd floor Unit 2C foyer</td>
<td>Yellow Mastic</td>
<td>1st floor hallway and throughout building</td>
<td>2</td>
<td>Cellulose - 4%</td>
<td>96%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-13</td>
<td>White Linoleum Linoleum (white Diamond pattern) 2nd floor Unit 2D under 2 layers in kitchen</td>
<td>White Linoleum</td>
<td>1st floor hallway and throughout building</td>
<td>1</td>
<td>Cellulose - 3%</td>
<td>97%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-13</td>
<td>White Backing Linoleum (white Diamond pattern) 2nd floor Unit 2D under 2 layers in kitchen</td>
<td>White Backing</td>
<td>1st floor hallway and throughout building</td>
<td>2</td>
<td>Cellulose - 15%</td>
<td>85%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-13</td>
<td>Yellow Mastic Linoleum (white Diamond pattern) 2nd floor Unit 2D under 2 layers in kitchen</td>
<td>Yellow Mastic</td>
<td>1st floor hallway and throughout building</td>
<td>3</td>
<td>Cellulose - 4%</td>
<td>96%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-13</td>
<td>White Tile Linoleum (white Diamond pattern) 2nd floor Unit 2D under 2 layers in kitchen</td>
<td>White Tile</td>
<td>1st floor hallway and throughout building</td>
<td>4</td>
<td>Cellulose - 2%</td>
<td>98%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-13</td>
<td>Yellow Mastic Linoleum (white Diamond pattern) 2nd floor Unit 2D under 2 layers in kitchen</td>
<td>Yellow Mastic</td>
<td>1st floor hallway and throughout building</td>
<td>5</td>
<td>Cellulose - 3%</td>
<td>97%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-13</td>
<td>Black Mastic Linoleum (white Diamond pattern) 2nd floor Unit 2D under 2 layers in kitchen</td>
<td>Black Mastic</td>
<td>1st floor hallway and throughout building</td>
<td>6</td>
<td>Cellulose - 2%</td>
<td>98%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-14</td>
<td>Gray Drywall Drywall 1st floor hallway and throughout building</td>
<td>Gray Drywall</td>
<td>1st floor hallway and throughout building</td>
<td>1</td>
<td>Cellulose - 4%</td>
<td>96%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-14</td>
<td>White Joint Compound Drywall 1st floor hallway and throughout building</td>
<td>White Joint Compound</td>
<td>1st floor hallway and throughout building</td>
<td>2</td>
<td>Cellulose - 2%</td>
<td>98%</td>
<td>None Detected</td>
<td>---</td>
</tr>
</tbody>
</table>
# Results of Polarized Light Microscopy

<table>
<thead>
<tr>
<th>Sample Number</th>
<th>Material Description</th>
<th>Location</th>
<th>Appearance</th>
<th>Layer</th>
<th>Non-Asbestos</th>
<th>Asbestos Type</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>201379-02-002-03-15</td>
<td>Joint compound</td>
<td>1st floor hallway</td>
<td>White Joint Compound</td>
<td>1</td>
<td>Cellulose - 3%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-16</td>
<td>12x12 floor tile (tan)</td>
<td>1st floor foyer and hallway</td>
<td>Tan Tile</td>
<td>1</td>
<td>None Detected</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-16</td>
<td>12x12 floor tile (tan)</td>
<td>1st floor foyer and hallway</td>
<td>Yellow Mastic</td>
<td>2</td>
<td>Cellulose - 10%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-17</td>
<td>Linoleum (yellow)</td>
<td>1st floor Maintenance office kitchen</td>
<td>Yellow Linoleum</td>
<td>1</td>
<td>Cellulose - 4%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-17</td>
<td>Linoleum (yellow)</td>
<td>1st floor Maintenance office kitchen</td>
<td>Tan/Green Backing/Matic</td>
<td>2</td>
<td>Cellulose - 45%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-18</td>
<td>12x12 tile (blue/grey)</td>
<td>1st floor Maintenance office</td>
<td>Blue Tile</td>
<td>1</td>
<td>Cellulose - 2%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-18</td>
<td>12x12 tile (blue/grey)</td>
<td>1st floor Maintenance office</td>
<td>Yellow Mastic</td>
<td>2</td>
<td>Cellulose - 8%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-18</td>
<td>12x12 tile (blue/grey)</td>
<td>1st floor Maintenance office</td>
<td>White Leveling Compound</td>
<td>3</td>
<td>Cellulose - 3%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-19</td>
<td>Linoleum (white Diamond pattern)</td>
<td>1st floor laundry room</td>
<td>White Linoleum</td>
<td>1</td>
<td>Cellulose - 4%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-19</td>
<td>Linoleum (white Diamond pattern)</td>
<td>1st floor laundry room</td>
<td>Tan Backing</td>
<td>2</td>
<td>Cellulose - 35%</td>
<td>None Detected</td>
<td>---</td>
</tr>
</tbody>
</table>
# Results of Polarized Light Microscopy

<table>
<thead>
<tr>
<th>Sample Number</th>
<th>Material Description</th>
<th>Location</th>
<th>Appearance</th>
<th>Layer</th>
<th>Non-Asbestos</th>
<th>Asbestos</th>
<th>Asbestos Type</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>201379-02-002-03-19</td>
<td>Linoleum (white Diamond pattern)</td>
<td>1st floor laundry room</td>
<td>White Backing</td>
<td>3</td>
<td>Cellulose - 3%</td>
<td>97%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-20</td>
<td>Black Roofing</td>
<td>Roof sample (2 layers)</td>
<td>Black Roofing</td>
<td>1</td>
<td>Cellulose - 2%</td>
<td>98%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-20</td>
<td>Black Roofing</td>
<td>Roof sample (2 layers)</td>
<td>Black Roofing</td>
<td>2</td>
<td>Cellulose - 10%</td>
<td>90%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-20</td>
<td>Black Roofing</td>
<td>Roof sample (2 layers)</td>
<td>Black Roofing</td>
<td>3</td>
<td>Fiber Glass - 15%</td>
<td>85%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-20</td>
<td>Black Roofing</td>
<td>Roof sample (2 layers)</td>
<td>Black Roofing</td>
<td>4</td>
<td>Fiber Glass - 10%</td>
<td>90%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-20</td>
<td>Brown Backing</td>
<td>Roof sample (2 layers)</td>
<td>Brown Backing</td>
<td>5</td>
<td>Cellulose - 95%</td>
<td>5%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-21</td>
<td>Black Roofing</td>
<td>Roof flashing</td>
<td>Black Roofing</td>
<td>1</td>
<td>Cellulose - 15%</td>
<td>85%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-21</td>
<td>Silver Roofing</td>
<td>Roof flashing</td>
<td>Silver Roofing</td>
<td>2</td>
<td>None Detected</td>
<td>98%</td>
<td>Chrysotile</td>
<td>2%</td>
</tr>
<tr>
<td>201379-02-002-03-21</td>
<td>Black Roofing</td>
<td>Roof flashing</td>
<td>Black Roofing</td>
<td>3</td>
<td>Cellulose - 15%</td>
<td>85%</td>
<td>None Detected</td>
<td>---</td>
</tr>
<tr>
<td>201379-02-002-03-21</td>
<td>Silver Roofing</td>
<td>Roof flashing</td>
<td>Silver Roofing</td>
<td>4</td>
<td>Synthetic - 10%</td>
<td>90%</td>
<td>None Detected</td>
<td>---</td>
</tr>
</tbody>
</table>
## Results of Polarized Light Microscopy

<table>
<thead>
<tr>
<th>Sample Number</th>
<th>Material Description</th>
<th>Appearance</th>
<th>Layer</th>
<th>Non-Asbestos</th>
<th>Asbestos</th>
<th>Asbestos Type</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>201379-02-002-03-22</td>
<td>Mortar</td>
<td>Gray/White Mortar</td>
<td>1</td>
<td>Cellulose - 3%</td>
<td>97%</td>
<td>None Detected</td>
<td>---</td>
</tr>
</tbody>
</table>

**Sample Count:** 22

Criterion Laboratories, Inc. bears no responsibility for sample collection activities of non-Criterion personnel. Results apply to sample(s) as received. This report relates only to the samples reported above, and when reproduced, must be in its entirety. Estimated accuracy, precision and uncertainty data available on request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting Limit is 1%. QC data associated with this sample set is within acceptable limits. Samples were received in good condition, unless otherwise noted.

Note: If your project number ends with an "R", it is a revised report and replaces the original document in full. The above results represent the analysis of bulk sample(s) by Criterion Laboratories, Inc. according to EPA 40 CFR Part 763 Appendix E to Subpart E - Polarized Light Microscopy. The concentration of asbestos is determined by visual estimation.

**THIS IS THE LAST PAGE OF THE REPORT**
### Chain of Custody

**Matrix**  
Bulk/Building Material

**Analyte**  
Asbestos

**Analysis Type**  
PLM

**Container**  
Bag

**Project**  
201379

**Client**  
BFW Group, LLC

**Site Address**  
Germantown Properties  
Philadelphia, PA

**Turnaround**  
48 Hour

**Field Tech**  
Michael Martin

**Sample Notes**

**Chain of Custody Notes**

### Additional Analytes

<table>
<thead>
<tr>
<th>Sample Number</th>
<th>Location</th>
<th>Material Description</th>
<th>Received Condition</th>
<th>Date</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>201379-02-002-03-01</td>
<td>2nd floor hallway under tile &amp; throughout building</td>
<td>Soft cementitious flooring</td>
<td>Good</td>
<td>8/19/2020</td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-02</td>
<td>2nd floor &amp; throughout building</td>
<td>Joint compound</td>
<td>Good</td>
<td>8/19/2020</td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-03</td>
<td>2nd floor hallway &amp; throughout building</td>
<td>Drywall</td>
<td>Good</td>
<td>8/19/2020</td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-04</td>
<td>2nd floor Unit 2K in kitchen, bathroom, closet</td>
<td>Linoleum (white diamond pattern)</td>
<td>Good</td>
<td>8/19/2020</td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-05</td>
<td>2nd floor Unit 2A living room</td>
<td>12x12 floor tile (beige)</td>
<td>Good</td>
<td>8/19/2020</td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-06</td>
<td>2nd floor Unit 2A kitchen</td>
<td>12x12 floor tile (white)</td>
<td>Good</td>
<td>8/19/2020</td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-07</td>
<td>2nd floor Unit 2A in kitchen under 12x12 tile</td>
<td>Linoleum (yellow)</td>
<td>Good</td>
<td>8/19/2020</td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-08</td>
<td>2nd floor Unit 2i in foyer &amp; kitchen</td>
<td>12 x12 floor tile (blue)</td>
<td>Good</td>
<td>8/19/2020</td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-09</td>
<td>2nd floor Unit 2i in bathroom</td>
<td>Linoleum (white diamond pattern)</td>
<td>Good</td>
<td>8/19/2020</td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-10</td>
<td>2nd floor Unit2B living room</td>
<td>12x12 floor tile (grey)</td>
<td>Good</td>
<td>8/19/2020</td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-11</td>
<td>2nd floor Unit 2B kitchen, bathroom</td>
<td>Linoleum (yellow)</td>
<td>Good</td>
<td>8/19/2020</td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-12</td>
<td>2nd floor Unit 2C foyer</td>
<td>12x12 floor tile (grey streaks)</td>
<td>Good</td>
<td>8/19/2020</td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-13</td>
<td>2nd floor Unit 2D under 2 layers in kitchen</td>
<td>Linoleum (white Diamond pattern)</td>
<td>Good</td>
<td>8/19/2020</td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-14</td>
<td>1st floor hallway and throughout building</td>
<td>Drywall</td>
<td>Good</td>
<td>8/19/2020</td>
<td></td>
</tr>
<tr>
<td>201379-02-002-03-15</td>
<td>1st floor hallway</td>
<td>Joint compound</td>
<td>Good</td>
<td>8/19/2020</td>
<td></td>
</tr>
<tr>
<td>Sample Count</td>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Handling Chain Type</th>
<th>Handled By</th>
<th>Date</th>
<th>Time</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Results To</td>
<td>Melissa Billingsley</td>
<td>8/19/2020</td>
<td>13:26</td>
<td></td>
</tr>
<tr>
<td>Send Reports To</td>
<td>BFW Group, LLC</td>
<td>8/19/2020</td>
<td>13:26</td>
<td></td>
</tr>
<tr>
<td>Samples Taken By</td>
<td>Michael Martin</td>
<td>8/19/2020</td>
<td>13:26</td>
<td></td>
</tr>
<tr>
<td>Received By</td>
<td>Michael Martin</td>
<td>8/19/2020</td>
<td>13:26</td>
<td></td>
</tr>
<tr>
<td>Transported By</td>
<td>Michael Martin</td>
<td>8/19/2020</td>
<td>13:26</td>
<td></td>
</tr>
<tr>
<td>Relinquished By</td>
<td>Michael Martin</td>
<td>8/19/2020</td>
<td>13:26</td>
<td></td>
</tr>
<tr>
<td>Received By</td>
<td>Lauren Mitchell</td>
<td>8/19/2020</td>
<td>13:14</td>
<td></td>
</tr>
<tr>
<td>Analyzed By</td>
<td>Collin Marrs</td>
<td>8/21/2020</td>
<td>16:20</td>
<td></td>
</tr>
</tbody>
</table>
October 22, 2020

Attention: PHDC Germantown CNA

Reference: Lead XRF Testing Results
5423-27 Lena Street, Philadelphia, PA
Criterion’s Project Number: 201379

As per your request, Criterion Laboratories, Inc. (Criterion) performed a lead-based paint inspection of the residence located at 5423-27 Lena Street in Philadelphia, PA. The purpose of the inspection was to confirm the presence, if any, and condition of lead-based painted surfaces.

Criterion performed a lead-based paint inspection on August 18, 2020. Painted surfaces were analyzed for lead using an X-ray Fluorescence Spectrometer (XRF) manufactured by Thermo Scientific-NITON.

The Environmental Protection Agency (E.P.A.) considers 1.0 milligrams of lead per square centimeter of painted surface, or greater, to be lead-based paint (≥1.0 mg/cm²).

The City of Philadelphia’s Department of Public Health document entitled “Regulations Relating to Labeling, Application and Removal of Lead Paint”, dated December 26, 1977, states that any paint lacquer or other applied liquid surface coating, and putty or caulking or other sealing compound with a lead content of 0.7 mg/cm² or greater, is considered lead-based.

During the inspection, **no** lead-based paint was detected on any of the components sampled (refer to Attachments).

Sincerely,

Melissa Billingsley
Project Manager

Attachments
Testing Report Legend

Recommendations

HR – Hazard Reduction

It is recommended that these surfaces be periodically observed for chalking, peeling or cracking.
If the surface is chalking, it can be cleaned with Trisodium Phosphate and repainted. If it is peeling or cracking, it should be repaired or abated.

AR – Abatement Replacement

A strategy of abatement that entails the removal of building components coated with lead-based paint and installation of new components free of lead-based paint.

A Encp – Abatement Encapsulation

“Encapsulant” means a coating or rigid material that relies on adhesion to a lead-based paint surface and is not mechanically fastened to the substrate with a 20-year warranty.

“Encapsulation” means a process to make lead-based paint inaccessible by providing a barrier between the lead-based paint and the environment, where the primary means of attachment for the encapsulant is bonding of a product to the surface covered either by the product itself or through the use of an adhesive.

A Encl – Abatement Enclosure

“Enclosure” means the installation of a rigid, durable barrier that is mechanically attached to building components, with all edges and seams sealed with caulk or other sealant and having a design life of at least 20 years.

CA – Complete Abatement

A process designed either to permanently eliminate lead-based paint hazards on a component and includes, but is not limited to: the removal of lead-based paint and lead-contaminated dust.

OSHA

Any painted surface that has lead content should not be sanded, demolished or disturbed without the proper engineering controls and work methods. As spelled out under OSHA’s CFR Part 1926 Lead Exposure in Construction, Interim Rule. Improper disturbance of any paint with lead content can cause lead to become airborne.

NA – Non-applicable

X-ray Fluorescence Spectrometer (XRF) results indicated 0.0 or below, which indicates no lead detected by the XRF Spectrometer.
**Surface/Condition**

**Surface**

- A determination of whether a painted surface is considered friction/impact surface or non-friction impact surface.
- Friction/Impact Surface – any interior or exterior surface subject to abrasion, friction or damage by repeated impact or contact.
- Non-friction/Impact Surface – any interior or exterior surface not subject to abrasion, friction or damage by repeated impact or contact.

**Condition**

- An intact good paint surface is smooth, continuous and free of surface defect, which would result in the release of paint dust or chips.
- Large surfaces such as walls, floors and ceilings should be rated as follows:
  - Good or intact condition shall indicate a surface that is entirely intact;
  - Fair condition shall indicate a surface where less than or equal to two square feet of surface are not intact;
  - Poor condition shall indicate a surface where more than two square feet of surface are not intact.
- Components without large surfaces, such as window sills, baseboards, or other small areas, shall be rated as follows:
  - Good or intact condition shall indicate that the surface is entirely intact;
  - Fair condition shall indicate that less than or equal to 10 percent of the surface is not intact;
- Poor condition shall indicate that more than 10 percent of the surface is not intact.
- Exterior components with large surface areas shall be rated as follows:
  - Good or intact condition shall indicate that the surface is entirely intact;
  - Fair condition shall indicate that less than or equal to ten square feet of surface is not intact;
  - Poor condition shall indicate that more than ten square feet of surface is not intact.

**Wall**

When entering a room the wall that is the address side of the room is labeled as “A” Wall. The walls are then labeled in a clockwise fashion as “B” Wall and “D” Wall.