

# FROG SWITCH REDEVELOPMENT

## 600 EAST HIGH STREET

### CARLISLE, PA 17013



**Owner:**

REC FS, LLC  
230 South Sporting Hill Road  
Mechanicsburg, PA 17050



**Environmental Engineer:**

Viva Environmental,  
Health & Safety, LLC  
2201 South 3<sup>rd</sup> Street  
Philadelphia, PA 19148



**Phase 1 Environmental Site Assessment:**

BL Companies  
2601 Market Place, Suite 350  
Harrisburg, PA 17110



**Interim Phase 2 Environmental Site Assessment:**

Volpe Center  
220 Binney Street, Kendall Square  
Cambridge, MA 02142-1093



**Construction Manager:**

S.R. Duffie Consulting, LLC  
5 East Main Street  
Mechanicsburg, PA 17055



## CONSTRUCTION DOCUMENTS

### PROJECT MANUAL

JANUARY 2026

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END OF SECTION 000110

**SECTION 000115 – LIST OF DRAWINGS**

Attached find the list of drawings for this project.

END OF SECTION 000115

# Frog Switch Redevelopment

## *Environmental Remediation and Demo - Above Ground*

<b>Drawing #</b>	<b>Description</b>	<b>Dated</b>	<b>Rev #</b>
BL2226	Building Layouts	08/11/2023	0
DPP112625	Demolition Plan Phase 1	12/26/2025	0
FF2226	Foundry Foundations	08/11/2023	0
FP2226	Fence Plan	12/26/2025	0
FSU121625	Facility Utilities	08/11/2023	0
MCP111924	Machine Shop Concrete Plan - Foundations	11/19/2024	0
MSCL32525	Machine Shop Current Layout	11/19/2024	0
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**SECTION 000120 – CONSTRUCTION MILESTONE SCHEDULE**

The Construction Milestone Schedule is an unbiased, practical evaluation of the overall phasing and times for the various activities, and with the exception of certain milestone dates and the completion date, is intended merely as a guide to bidders.

Milestone Dates:

Bid Solicitation Release.....	Monday, February 9, 2026
Pre-Bid Meeting .....	Monday, February 16, 2026
Deadline for Receipt of Bid Questions.....	Friday, February 20, 2026
Final Addendum.....	Friday, February 27, 2026
Bids Due .....	Friday, March 6, 2026
Notice to Proceed.....	Friday, March 20, 2026
Commence Environmental Remediation (Above Ground) .....	Monday, April 20, 2026
Commence Demolition (Above Ground).....	Monday, May 4, 2026
Final Completion Environmental Remediation .....	Friday, June 5, 2026
Final Completion Demolition .....	Friday, October 16, 2026

END OF SECTION 000120

**SECTION 001113 – BID SOLICITATION**

1.1 PROJECT INFORMATION

A. Notice to Bidders: Bids are being solicited for construction of the Project identified below and described within the attached documents. All applicable federal, state, and local laws, regulations, ordinances, rules, and regulations apply to the Contract throughout.

B. Project Name and Location:

FROG SWITCH REDEVELOPMENT

600 East High Street, Carlisle, PA 17013

C. Project Description:

The main objective of this project is to create a clean site for future development. A future RFP will be issued to interested developers.

This will be accomplished by the removal of hazardous materials and demolition of buildings/site appurtenances to the greatest extent possible.

The remediation and demolition will be accomplished in two (2) phases.

Phase 1 – Above ground environmental remediation and demolition.

Phase 2 – Below ground environmental remediation and demolition.

D. Owner:

REC FS, LLC

230 South Sporting Hill Road, Mechanicsburg, PA 17050

E. Environmental Engineer:

Viva Environmental, Health & Safety, LLC

2201 South 3<sup>rd</sup> Street, Philadelphia, PA 19148

F. Phase 1 Environmental Site Assessment:

BL Companies

2601 Market Place, Suite 350, Harrisburg, PA 17110

- G. Interim Phase 2 Environmental Site Assessment:
- Volpe Center
- 220 Binney Street, Kendall Square, Cambridge, MA 02142-1093
- H. Construction Manager:
- SR Duffie Consulting, LLC
- 5 East Main Street, Mechanicsburg, PA 17055
- I. Construction Contracts: Single Prime Contracts consisting of the following:
- a. **Contract 01 – Environmental Remediation Contractor – Above Ground**
  - b. **Contract 02 – Demolition Contractor - Above Ground**

## 1.2 BID SUBMITTAL AND OPENING

- A. Bidders shall email their signed PDF bids to **Project Executive, Don Sokoloski of SRDC, via email at [DSokoloski@srduffieconsulting.com](mailto:DSokoloski@srduffieconsulting.com)** no later than **Friday March 06, 2026, at 2:00 PM** at which time they will be opened.

## 1.3 PRE-BID CONFERENCE AND BID PHASE QUESTIONS

- A. Pre-Bid Meeting: A non-mandatory Pre-Bid Meeting will be held on **Monday February 16, 2025, at 10:00 AM at 600 East High Street, Carlisle, PA 17013.**
- B. Submit all bid phase questions on the **Bid Request for Information (RFI) Form** as provided in **Section 006313**. Bid phase questions shall be submitted via e-mail to all recipients identified on the RFI form. Replies will be issued as an Addenda to the Documents and will become part of the Contract. The deadline for questions is **Friday, February 20, 2026, at 3:00 PM.**

## 1.4 DOCUMENTS

- A. Contract Documents shall consist of Plans, Specifications, Attachments and Addenda.
- B. Electronic Project Bid Documents may be obtained at no cost on **Monday, February 9, 2026**, by contacting Project Executive, Don Sokoloski of SRDC, via email at [DSokoloski@srduffieconsulting.com](mailto:DSokoloski@srduffieconsulting.com).

- C. Please return **Bid Acknowledgement Form 004113** within three (3) days of receipt to Project Executive, Don Sokoloski of SRDC via email at [DSokoloski@srduffieconsulting.com](mailto:DSokoloski@srduffieconsulting.com).
- D. **Bidder Qualifications 004513** must be completed in order for Contractor's Bid to be considered.

#### 1.5 TIME OF COMPLETION

- A. The successful bidder(s) shall begin the Work on receipt of the Notice to Proceed and shall substantially complete the work within the stipulated contract time as noted in the Construction Milestone Schedule.
- B. If the delivery, installation and construction is delayed because of strike, injunctions, governmental controls, or by reason of any cause or circumstances beyond the control of the manufacturer, supplier, or contractor, the time of completion of delivery, installation and construction may be extended upon a written request for a time extension from the Contractor. The request for extension must include detailed justification for the length of the extension. The delivery, installation and construction date will be delayed by several days mutually agreed upon by the Owner and the Contractor.

END OF SECTION 001113

**SECTION 002113 – INSTRUCTIONS TO BIDDERS****1. BIDDER RESPONSIBILITY**

Each Bidder shall familiarize themselves with the entirety of the Project Bid Documents as the Bidder will be held responsible to fully comply therewith. Bidder will notify the Construction Manager of all conflicts, errors and/or discrepancies in the Project Bid Documents. Bidders shall familiarize themselves with the federal, state and local laws, regulations, ordinances, rules, regulations and conditions that may in any manner affect the cost, progress or performance of the Work. Submission of a bid will be considered as conclusive evidence of the Bidder's complete examination and understanding of the plans and specifications as well as stipulated timeframes. Bidders are expected to visit the site of the work to obtain first-hand knowledge of existing conditions which may affect the Work.

Bids will be considered only from firms normally engaged in the type(s) of construction specified in the Project Bid Documents and in possession of certifications, licenses and permits required by law for the scope of work of this Project. Bidders must have adequate organization, facilities, equipment and personnel to ensure timely completion of the Construction Project. The Owner reserves the right, before proceeding with any award, to request additional information from the Bidder. The Bidder shall provide, within ten (10) days of receipt of the Owner's written notification, additional information as requested to assist in the Owner's determination that the Bidder is responsible and has the financial, legal and technical capacity to perform the Work.

**2. BID RFI AND AMENDMENT**

The Owner reserves the right to revise or amend the Contract Documents prior to issuance of the Final Addendum. Any interpretations of these Instructions to Bidders and any supplemental instructions will be in the form of a written Addendum which will be provided to all prospective firms on record. Every request for such interpretation shall be submitted as provided in **Section 006313 Bid RFI Form** and received by the Deadline for Receipt of Bid Questions given in **Section 000120 Construction Milestone Schedule**. Electronic copies of such amendments will be furnished to all parties who receive a bid package in the method described in the **Section 001113 Bid Solicitation**. Only questions answered by formal written addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

**3. PREPARATION AND SUBMISSION OF BIDS**

Each bid shall be made on the official Bid Form as provided in **Section 004116 Bid Form**, shall be signed in ink and submitted as a PDF electronically to the individual/company as noted in **Section 001113 Bid Solicitation**. Bids containing irregularities of any kind, including conditions, omissions, unexplained erasures, alterations, restrictions, reservations, additions, or deletions, may be rejected by the Owner as non-responsive.

**4. BID RECEIPT AND OPENING**

All bids will be opened on the date and time indicated in **Section 001113 Bid Solicitation**. Bids received after the scheduled opening time will not be considered.

**5. BID WITHDRAWAL**

Bids may be withdrawn by written notice, or in person, by a Bidder or the Bidder's representative if the requestor's identity is made known and a receipt for the bid is signed.

**6. REJECTION OF BIDS**

REC FS, LLC reserves the right to award this contract for all or any portion of the scope of work described herein. The organization may, at its sole discretion, select different contractors for different portions of the work, award multiple contracts, or award a single contract for the entire scope. Submission of a proposal constitutes acceptance of these terms.

**7. BASIS OF AWARD**

The Owner reserves the right to select the bid which serves the best interest of the Owner. The Owner also reserves the right to waive any informality in bids received. The Bidder agrees that their bid will be valid for at least sixty (60) calendar days from the date the bids are opened. A Contract, if any, will be awarded by the Owner within sixty (60) calendar days to the successful Bidder after the Owner has determined the bid to be in its best interest.

END OF SECTION 002113

**Frog Switch Redevelopment  
600 East High Street  
Carlisle, PA 17013**

**ABOVE GROUND  
ENVIRONMENTAL REMEDIATION AND DEMOLITION CONTRACTS 01 & 02  
BID ACKNOWLEDGEMENT FORM**

CONTRACTOR NAME:

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DATE:

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In conforming with Grant requirements our company is acknowledging that:

The Contractor stated above is bidding this project:

**Contract 01: Environmental Remediation – Above Ground:**    **YES:** \_\_\_\_\_    **NO:** \_\_\_\_\_

**Contract 02: Demolition – Above Ground:**    **YES:** \_\_\_\_\_    **NO:** \_\_\_\_\_

**Frog Switch Redevelopment  
Environmental Remediation – Above Ground  
600 East High Street  
Carlisle, PA 17013**

**PRIME CONTRACTOR 01 BID FORM (PAGE 1 OF 2)**

BIDDER: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE / E-MAIL: \_\_\_\_\_

DATE: \_\_\_\_\_

PRIME CONTRACT NO. 01 / PACKAGE: Environmental Remediation Contractor – Above Ground

In conformity with and acceptance of the Contract Documents and all the clauses, specifications and drawings included therein, the undersigned submits this Bid and guarantees the validity of same for a period of not less than sixty (60) days after date hereof. It is understood that this Bid Form and all attached documents, clauses, specifications and drawings constitute a legal and binding contract, when accepted and signed by the Owner, to proceed with the purchase of the goods and services intended by this proposal. The Bidder agrees that, if awarded a contract, Bidder will furnish and deliver all materials and will execute the Contract in accordance with the general provisions and drawings to the complete satisfaction and acceptance of the Owner within the contract time as defined in the Contract Documents. It is understood that the Owner reserves the right to reject any or all Proposals, part(s) thereof or item(s) therein and to waive technicalities required for the interest of the Owner.

The Bid Price shall include fees, inspections, utility relocation/installation, deliveries, materials, equipment, installation, disposal and construction costs. **Allowances as identified in Section 012100** are listed separately.

The undersigned Proposer acknowledges receipt of the following Addenda:

ADDENDUM\_\_\_\_, DATED \_\_\_\_\_                      ADDENDUM\_\_\_\_, DATED \_\_\_\_\_

ADDENDUM\_\_\_\_, DATED \_\_\_\_\_                      ADDENDUM\_\_\_\_, DATED \_\_\_\_\_

**BASE BID:**

BASE BID		
	Environmental Remediation (From Bid Breakdown)	\$
	Testing Allowance	\$ 5,000
TOTAL BID	Sum of Lines Above (Numerical)	\$

**ALTERNATES:**

ALT 01-01	Remove & dispose of 1,500 Tons of Hazardous Sand	\$
ALT 01-02	Enviro. Rem. of Small Bldgs Only (Silo, 3,6,13,18,20,24)	\$
ALT 01-03	Enviro. Remediation of Large Bldgs Only (1,2,5)	\$

**UNIT PRICES:**

UP 01-01	Remove and Dispose Transite Roof Materials	\$	/SF
UP01-02	Remove and Dispose Tar Mastic	\$	/LF
UP 01-03	Remove and Dispose Window Caulk	\$	/LF
UP 01-04	Remove and Dispose Window Glazing	\$	/LF
UP 01-04	Remove and Dispose Floor Tile	\$	/SF
UP 01-05	Remove and Dispose Roof Flashing	\$	/LF
UP 01-06	Remove and Dispose Rope Materials	\$	/LF
UP 01-07	Remove and Dispose Thermal System Insulation	\$	/LF
UP 01-08	Remove and Dispose Transite Ceiling Materials	\$	/LF
UP 01-09	Remove and Dispose of Hazardous Sand Materials	\$	/TON

**AUTHORIZED PERSON SUBMITTING PROPOSAL**

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TITLE	DATE	SIGNATURE
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END OF SECTION 004116

**Frog Switch Redevelopment  
Demolition Contractor – Above Ground  
600 East High Street  
Carlisle, PA 17013**

**PRIME CONTRACTOR 02 BID FORM (PAGE 1 OF 2)**

BIDDER: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE / E-MAIL: \_\_\_\_\_

DATE: \_\_\_\_\_

PRIME CONTRACT NO. 02 / PACKAGE: Demolition Contractor – Above Ground

In conformity with and acceptance of the Contract Documents and all the clauses, specifications and drawings included therein, the undersigned submits this Bid and guarantees the validity of same for a period of not less than sixty (60) days after date hereof. It is understood that this Bid Form and all attached documents, clauses, specifications and drawings constitute a legal and binding contract, when accepted and signed by the Owner, to proceed with the purchase of the goods and services intended by this proposal. The Bidder agrees that, if awarded a contract, Bidder will furnish and deliver all materials and will execute the Contract in accordance with the general provisions and drawings to the complete satisfaction and acceptance of the Owner within the contract time as defined in the Contract Documents. It is understood that the Owner reserves the right to reject any or all Proposals, part(s) thereof or item(s) therein and to waive technicalities required for the interest of the Owner.

The Bid Price shall include fees, inspections, utility relocation/installation, deliveries, materials, equipment, installation, disposal and construction costs. **Allowances as identified in Section 012100** are listed separately.

The undersigned Proposer acknowledges receipt of the following Addenda:

ADDENDUM \_\_\_\_, DATED \_\_\_\_\_                      ADDENDUM \_\_\_\_, DATED \_\_\_\_\_

ADDENDUM \_\_\_\_, DATED \_\_\_\_\_                      ADDENDUM \_\_\_\_, DATED \_\_\_\_\_

**BASE BID:**

BASE BID		
	Demolition Contractor (From Bid Breakdown)	\$
TOTAL BID	Sum of Lines Above (Numerical)	\$

**ALTERNATES:**

ALT 01-01	Demolition of Small Bldgs Only (Silo, 3,6,13,18,20,24)	\$
ALT 01-02	Demolition of Large Bldgs Only (1,2,5)	\$

**UNIT PRICES:**

UP 01-01	Remove and dispose of Transformer carcasses 50-499ppm	\$	/LB
UP 01-02	Remove and dispose of Transformer carcasses 500+ ppm	\$	/LB
		\$	/SY

**AUTHORIZED PERSON SUBMITTING PROPOSAL**

TITLE

DATE

SIGNATURE

**SECTION 004117 – BID BREAKDOWN**

**BID BREAKDOWN CONTRACT 01 – Environmental Remediation – Above Ground**

*(The below information is for informational purposes only and is not to be used for additions or deductions against the base bid dollar amount)*

<b>ITEM</b>	<b>DESCRIPTION</b>	<b>PRICE</b>
<b>01</b>	<b>General Conditions/Mobilization</b>	
<b>02</b>	<b>Silo Haz Tar Mastic</b>	
<b>03</b>	<b>Bldg. 1 Transite Ceiling</b>	
<b>04</b>	<b>Bldg. 1 Fire Door</b>	
<b>05</b>	<b>Bldg. 1 Transite Roof, coating and Materials</b>	
<b>06</b>	<b>Bldg. 2 Rope Material</b>	
<b>07</b>	<b>Bldg. 2 Fire Door Material</b>	
<b>08</b>	<b>Bldg. 2 Thermal System Insulation</b>	
<b>09</b>	<b>Bldg. 3 Floor tile</b>	
<b>10</b>	<b>Bldg. 3 Roof Flashing</b>	
<b>11</b>	<b>Bldg. 3 Window Glazing</b>	
<b>12</b>	<b>Bldg. 3 Transite Roof</b>	
<b>13</b>	<b>Bldg. 5 – Window Caulk</b>	
<b>14</b>	<b>Bldg. 20 Window Glazing</b>	
<b>15</b>	<b>Performance and Payment Bond-100% of Bid</b>	
<b>16</b>	<b>TOTAL</b>	

END OF SECTION 004117

**SECTION 004117 – BID BREAKDOWN**

**BID BREAKDOWN CONTRACT 02 – Demolition Contractor – Above Ground**

*(The below information is for informational purposes only and is not to be used for additions or deductions against the base bid dollar amount)*

<b>ITEM</b>	<b>DESCRIPTION</b>	<b>PRICE</b>
<b>01</b>	<b>General Conditions/Mobilization</b>	
<b>02</b>	<b>Silo Demo to Pad</b>	
<b>03</b>	<b>Bldg. 1 Demo to Pad</b>	
<b>04</b>	<b>Bldg. 2 Demo to Pad</b>	
<b>05</b>	<b>Bldg. 3 Demo to Pad</b>	
<b>06</b>	<b>Bldg. 5 Demo to Pad</b>	
<b>07</b>	<b>Bldg. 13 Demo to Pad</b>	
<b>08</b>	<b>Bldg. 18 Demo to Pad</b>	
<b>09</b>	<b>Bldg. 20 Demo to Pad</b>	
<b>10</b>	<b>Bldg. 24 Demo to Pad</b>	
<b>11</b>	<b>Install perimeter fence</b>	
<b>12</b>	<b>Performance and Payment Bond-100% of Bid</b>	
<b>13</b>	<b>TOTAL</b>	

END OF SECTION 004117

**004513**

**Bidder's Qualifications**

# AIA<sup>®</sup> Document A305™ – 2020

## Contractor's Qualification Statement

**THE PARTIES SHOULD EXECUTE A SEPARATE CONFIDENTIALITY AGREEMENT IF THEY INTEND FOR ANY OF THE INFORMATION IN THIS A305-2020 TO BE HELD CONFIDENTIAL.**

**SUBMITTED BY:** \_\_\_\_\_ **SUBMITTED TO:** \_\_\_\_\_  
(Organization name and address.) (Organization name and address.)

**NAME OF PROJECT:** \_\_\_\_\_

### TYPE OF WORK TYPICALLY PERFORMED

(Indicate the type of work your organization typically performs, such as general contracting, construction manager as constructor services, HVAC contracting, electrical contracting, plumbing contracting, or other.)

### THIS CONTRACTOR'S QUALIFICATION STATEMENT INCLUDES THE FOLLOWING:

(Check all that apply.)

- Exhibit A – General Information
- Exhibit B – Financial and Performance Information
- Exhibit C – Project-Specific Information
- Exhibit D – Past Project Experience
- Exhibit E – Past Project Experience (Continued)

### CONTRACTOR CERTIFICATION

The undersigned certifies under oath that the information provided in this Contractor's Qualification Statement is true and sufficiently complete so as not to be misleading.

\_\_\_\_\_  
Organization's Authorized Representative      Date  
Signature

\_\_\_\_\_  
Printed Name and Title

### NOTARY

State of:

County of:

Signed and sworn to before me this \_\_\_\_ day of \_\_\_\_\_

\_\_\_\_\_  
Notary Signature

My commission expires: \_\_\_\_\_

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

## **Certification of Document's Authenticity**

**AIA® Document D401™ – 2003**

I, \_\_\_\_\_, hereby certify, to the best of my knowledge, information and belief, that I created the attached final document simultaneously with this certification at \_\_\_\_\_ on \_\_\_\_\_ under Order No. \_\_\_\_\_ AIA Contract Documents software and that in preparing the attached final document I made no changes to the original text of AIA® Document A305™ – 2020, Contractor's Qualification Statement, as published by the AIA in its software, other than changes shown in the attached final document by underscoring added text and striking over deleted text.

\_\_\_\_\_  
*(Signed)*

\_\_\_\_\_  
*(Title)*

\_\_\_\_\_  
*(Dated)*



# AIA Document A305™ – 2020 Exhibit A

## General Information

This Exhibit is part of the Contractor's Qualification Statement, submitted by \_\_\_\_\_ and dated the \_\_\_\_\_ day of \_\_\_\_\_ in the year \_\_\_\_\_  
*(In words, indicate day, month and year.)*

### § A.1 ORGANIZATION

#### § A.1.1 Name and Location

§ A.1.1.1 Identify the full legal name of your organization.

§ A.1.1.2 List all other names under which your organization currently does business and, for each name, identify jurisdictions in which it is registered to do business under that trade name.

§ A.1.1.3 List all prior names under which your organization has operated and, for each name, indicate the date range and jurisdiction in which it was used.

§ A.1.1.4 Identify the address of your organization's principal place of business and list all office locations out of which your organization conducts business. If your organization has multiple offices, you may attach an exhibit or refer to a website.

#### § A.1.2 Legal Status

§ A.1.2.1 Identify the legal status under which your organization does business, such as sole proprietorship, partnership, corporation, limited liability corporation, joint venture, or other.

- .1 If your organization is a corporation, identify the state in which it is incorporated, the date of incorporation, and its four highest-ranking corporate officers and their titles, as applicable.
- .2 If your organization is a partnership, identify its partners and its date of organization.
- .3 If your organization is individually owned, identify its owner and date of organization.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

- 4 If the form of your organization is other than those listed above, describe it and identify its individual leaders:

§ A.1.2.2 Does your organization own, in whole or in part, any other construction-related businesses? If so, identify and describe those businesses and specify percentage of ownership.

§ A.1.3 Other Information

§ A.1.3.1 How many years has your organization been in business?

§ A.1.3.2 How many full-time employees work for your organization?

§ A.1.3.3 List your North American Industry Classification System (NAICS) codes and titles. Specify which is your primary NAICS code.

§ A.1.3.4 Indicate whether your organization is certified as a governmentally recognized special business class, such as a minority business enterprise, woman business enterprise, service disabled veteran owned small business, woman owned small business, small business in a HUBZone, or a small disadvantaged business in the 8(a) Business Development Program. For each, identify the certifying authority and indicate jurisdictions to which such certification applies.

§ A.2 EXPERIENCE

§ A.2.1 Complete Exhibit D to describe up to four projects, either completed or in progress, that are representative of your organization's experience and capabilities.

§ A.2.2 State your organization's total dollar value of work currently under contract.

§ A.2.3 Of the amount stated in Section A.2.2, state the dollar value of work that remains to be completed:

§ A.2.4 State your organization's average annual dollar value of construction work performed during the last five years.

§ A.3 CAPABILITIES

§ A.3.1 List the categories of work that your organization typically self-performs.

§ A.3.2 Identify qualities, accreditations, services, skills, or personnel that you believe differentiate your organization from others.

**§ A.3.3** Does your organization provide design collaboration or pre-construction services? If so, describe those services.

**§ A.3.4** Does your organization use building information modeling (BIM)? If so, describe how your organization uses BIM and identify BIM software that your organization regularly uses.

**§ A.3.5** Does your organization use a project management information system? If so, identify that system.

**§ A.4.1** Identify three client references:  
*(Insert name, organization, and contact information)*

**§ A.4.2** Identify three architect references:  
*(Insert name, organization, and contact information)*

**§ A.4.3** Identify one bank reference:  
*(Insert name, organization, and contact information)*

**§ A.4.4** Identify three subcontractor or other trade references:  
*(Insert name, organization, and contact information)*



# AIA Document A305™ – 2020 Exhibit B

## Financial and Performance Information

This Exhibit is part of the Contractor's Qualification Statement, submitted by \_\_\_\_\_ and dated the \_\_\_\_\_ day of \_\_\_\_\_ in the year \_\_\_\_\_.  
*(In words, indicate day, month and year.)*

### § B.1 FINANCIAL

§ B.1.1 Federal tax identification number:

§ B.1.2 Attach financial statements for the last three years prepared in accordance with Generally Accepted Accounting Principles, including your organization's latest balance sheet and income statement. Also, indicate the name and contact information of the firm that prepared each financial statement.

§ B.1.3 Has your organization, its parent, or a subsidiary, affiliate, or other entity having common ownership or management, been the subject of any bankruptcy proceeding within the last ten years?

§ B.1.4 Identify your organization's preferred credit rating agency and identification information.

*(Identify rating agency, such as Dun and Bradstreet or Equifax, and insert your organization's identification number or other method of searching your organization's credit rating with such agency.)*

### § B.2 DISPUTES AND DISCIPLINARY ACTIONS

§ B.2.1 Are there any pending or outstanding judgments, arbitration proceedings, bond claims, or lawsuits against your organization, its parent, or a subsidiary, affiliate, or other entity having common ownership or management, or any of the individuals listed in Exhibit A, Section 1.2, in which the amount in dispute is more than \$75,000?

*(If the answer is yes, provide an explanation.)*

§ B.2.2 In the last five years has your organization, its parent, or a subsidiary, affiliate, or other entity having common ownership or management:

*(If the answer to any of the questions below is yes, provide an explanation.)*

.1 failed to complete work awarded to it?

.2 been terminated for any reason except for an owners' convenience?

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

.3 had any judgments, settlements, or awards pertaining to a construction project in which your organization was responsible for more than \$75,000?

.4 filed any lawsuits or requested arbitration regarding a construction project?

**§ B.2.3** In the last five years, has your organization, its parent, or a subsidiary, affiliate, or other entity having common ownership or management; or any of the individuals listed in Exhibit A Section 1.2;  
*(If the answer to any of the questions below is yes, provide an explanation.)*

.1 been convicted of, or indicted for, a business-related crime?

.2 had any business or professional license subjected to disciplinary action?

.3 been penalized or fined by a state or federal environmental agency?



# AIA Document A305™ – 2020 Exhibit C

## Project Specific Information

This Exhibit is part of the Contractor's Qualification Statement, submitted by \_\_\_\_\_ and dated the \_\_\_\_\_ day of \_\_\_\_\_ in the year \_\_\_\_\_.  
*(In words, indicate day, month and year.)*

### PROJECT:

*(Name and location or address.)*

### CONTRACTOR'S PROJECT OFFICE:

*(Identify the office out of which the contractor proposes to perform the work for the Project.)*

### TYPE OF WORK SOUGHT

*(Indicate the type of work you are seeking for this Project, such as general contracting, construction manager as constructor, design-build, HVAC subcontracting, electrical subcontracting, plumbing subcontracting, etc.)*

### CONFLICT OF INTEREST

Describe any conflict of interest your organization, its parent, or a subsidiary, affiliate, or other entity having common ownership or management, or any of the individuals listed in Exhibit A Section 1.2, may have regarding this Project.

### § C.1 PERFORMANCE OF THE WORK

§ C.1.1 When was the Contractor's Project Office established?

§ C.1.2 How many full-time field and office staff are respectively employed at the Contractor's Project Office?

§ C.1.3 List the business license and contractor license or registration numbers for the Contractor's Project Office that pertain to the Project.

§ C.1.4 Identify key personnel from your organization who will be meaningfully involved with work on this Project and indicate (1) their position on the Project team, (2) their office location, (3) their expertise and experience, and (4) projects similar to the Project on which they have worked.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

§ C.1.5 Identify portions of work that you intend to self-perform on this Project.

§ C.1.6 To the extent known, list the subcontractors you intend to use for major portions of work on the Project.

## § C.2 EXPERIENCE RELATED TO THE PROJECT

§ C.2.1 Complete Exhibit D to describe up to four projects performed by the Contractor's Project Office, either completed or in progress, that are relevant to this Project, such as projects in a similar geographic area or of similar project type. If you have already completed Exhibit D, but want to provide further examples of projects that are relevant to this Project, you may complete Exhibit E.

§ C.2.2 State the total dollar value of work currently under contract at the Contractor's Project Office:

§ C.2.3 Of the amount stated in Section C.2.2, state the dollar value of work that remains to be completed:

§ C.2.4 State the average annual dollar value of construction work performed by the Contractor's Project Office during the last five years.

§ C.2.5 List the total number of projects the Contractor's Project Office has completed in the last five years and state the dollar value of the largest contract the Contractor's Project Office has completed during that time.

## § C.3 SAFETY PROGRAM AND RECORD

§ C.3.1 Does the Contractor's Project Office have a written safety program?

§ C.3.2 List all safety-related citations and penalties the Contractor's Project Office has received in the last three years.

§ C.3.3 Attach the Contractor's Project Office's OSHA 300a Summary of Work-Related Injuries and Illnesses form for the last three years.

§ C.3.4 Attach a copy of your insurance agent's verification letter for your organization's current workers' compensation experience modification rate and rates for the last three years.

## § C.4 INSURANCE

§ C.4.1 Attach current certificates of insurance for your commercial general liability policy, umbrella insurance policy, and professional liability insurance policy, if any. Identify deductibles or self-insured retentions for your commercial general liability policy.

§ C.4.2 If requested, will your organization be able to provide property insurance for the Project written on a builder's risk "all-risks" completed value or equivalent policy form and sufficient to cover the total value of the entire Project on a replacement cost basis?

**§ C.4.3** Does your commercial general liability policy contain any exclusions or restrictions of coverage that are prohibited in AIA Document A101-2017, Exhibit A, Insurance A.3.2.2.2? If so, identify.

**§ C.5 SURETY**

**§ C.5.1** If requested, will your organization be able to provide a performance and payment bond for this Project?

**§ C.5.2** Surety company name:

**§ C.5.3** Surety agent name and contact information:

**§ C.5.4** Total bonding capacity:

**§ C.5.5** Available bonding capacity as of the date of this qualification statement:



# AIA<sup>®</sup> Document A305™ – 2020 Exhibit D

## Contractor's Past Project Experience

	1	2	3	4
PROJECT NAME				
PROJECT LOCATION				
PROJECT TYPE				
OWNER				
ARCHITECT				
CONTRACTOR'S PROJECT EXECUTIVE				
KEY PERSONNEL (include titles)				
PROJECT DETAILS	Contract Amount	Contract Amount	Contract Amount	Contract Amount
	Completion Date	Completion Date	Completion Date	Completion Date
	% Self-Performed Work	% Self-Performed Work	% Self-Performed Work	% Self-Performed Work
PROJECT DELIVERY METHOD	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:
SUSTAINABILITY CERTIFICATIONS				



# AIA Document A305™ – 2020 Exhibit E

## Contractor's Past Project Experience, Continued

	1	2	3	4
PROJECT NAME				
PROJECT LOCATION				
PROJECT TYPE				
OWNER				
ARCHITECT				
CONTRACTOR'S PROJECT EXECUTIVE				
KEY PERSONNEL (include titles)				
PROJECT DETAILS	Contract Amount	Contract Amount	Contract Amount	Contract Amount
	Completion Date	Completion Date	Completion Date	Completion Date
	% Self-Performed Work	% Self-Performed Work	% Self-Performed Work	% Self-Performed Work
PROJECT DELIVERY METHOD	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:
SUSTAINABILITY CERTIFICATIONS				

**004519**

**Non-Collusion Affidavit**



## NON-COLLUSION AFFIDAVIT

<b>PROJECT/PROPERTY LOCATION (STREET ADDRESS):</b>	<b>CONTRACT/PROJECT NUMBER:</b>
--	---------------------------------

This Non-Collusion Affidavit is material to any contract/purchase order awarded pursuant to this bid. According to Section 4507 of Act 57 of May 15, 1998, 62 Pa. C.S., ss 4507, governmental agencies may require Non-Collusion Affidavits to be submitted with any bids.

By submittal of a bid for the above referenced project and execution of this affidavit, the following statements are acknowledged:

- The price(s) and amount of bid have been arrived at independently and without consultation, communication or agreement with any other Contractor, potential Contractor or bidder.
- Neither the price(s), amount of this bid nor the approximate price(s) or amount of bid, have been disclosed to any other company or person who may be a Contractor or potential Contractor, nor will they be disclosed prior to this bid opening.
- No attempt has been made, or will be made, to induce any company or person to refrain from bidding on this contract or submit a proposal higher than this bid, or to submit any intentionally high or noncompetitive bid or other form of complementary bid.
- This bid is made in good faith and not pursuant to any agreement or discussion with, or inducement from any company or person to submit a complementary or other noncompetitive bid.
- To my best knowledge, the Contractor, its affiliates, subsidiaries, officers, directors and employees are not currently under investigation by any governmental agency and have not in the last four years been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding on any public contract.
- The Contractor is not currently under suspension or review by the commonwealth, or any other Federal, State or Local Governmental entity. If certification cannot be made, a written explanation to support the inability of providing such shall be submitted with this bid.

**LEGAL NAME OF CONTRACTOR OR CONSTRUCTION COMPANY (PLEASE PRINT):**

**AUTHORIZED REPRESENTATIVE (PLEASE PRINT):**

**TITLE:**

*I state that I am authorized to make this affidavit on behalf of the above name Contractor or Construction Company and am the person responsible for submitting this bid and price(s) and amount included therein.*

**SIGNATURE (AUTHORIZED REPRESENTATIVE):**

**NOTARY PUBLIC:**

**SWORN TO AND SUBSCRIBED**

**BEFORE ME THIS \_\_\_\_ DAY**

**OF \_\_\_\_\_, 20\_\_\_\_**

**MY COMMISSION EXPIRES:**

\_\_\_\_\_

**The following information is to provide (at minimum) an overall explanation of non-collusion and the role/responsibility of entities desiring to participate in the bidding process for pending projects as advertised.**

- A Non-Collusion Affidavit must be executed by the person responsible (i.e; owner, employee, officer) for making decisions on price(s) and amount(s) quoted in the bid.
- Bid rigging and other efforts to restrain competition, and making false sworn statements in connection with the submission of bids are unlawful and may be subject to criminal prosecution. The person who signs the affidavit should be aware of all bidding requirements and protocol. By signing this document, she or he must be assured that each statement is true and accurate, making diligent inquiry, as necessary, of all other persons employed by or associated with the bidder as to their responsibilities for the preparation, approval and/or submission of the bid.
- In the case of a bid submitted by a joint venture, each party to the venture must be identified in the bid proposal, and an affidavit be submitted separately on behalf of each party.
- The term “complementary bid” as used in the affidavit, incorporates the meaning commonly associated with its’ use in the bidding process. This includes the knowing submission of bid amounts higher than the bid from another Contractor, any intentionally high or noncompetitive bid, and any other form of bid submitted for the purpose of giving a false appearance of competition.
- Failure to submit an affidavit with the bid proposal in compliance with these instructions may result in disqualification of the bid.

**005200**

Standard Form of Agreement

# AIA® Document A132™ – 2019

## Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition

**AGREEMENT** made as of the \_\_\_\_\_ day of \_\_\_\_\_ in the year \_\_\_\_\_  
(In words, indicate day, month and year.)

**BETWEEN** the Owner:  
(Name, legal status, address, and other information)

and the Contractor:  
(Name, legal status, address, and other information)

for the following Project:  
(Name, location, and detailed description)

The Construction Manager:  
(Name, legal status, address, and other information)

The Architect:  
(Name, legal status, address, and other information)

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be used in conjunction with AIA Documents A232™–2019, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition; B132™–2019, Standard Form of Agreement Between Owner and Architect, Construction Manager as Adviser Edition; and C132™–2019, Standard Form of Agreement Between Owner and Construction Manager as Adviser.

AIA Document A232™–2019 is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

The Owner and Contractor agree as follows.

## TABLE OF ARTICLES

1	THE CONTRACT DOCUMENTS
2	THE WORK OF THIS CONTRACT
3	DATE OF COMMENCEMENT AND DATES OF SUBSTANTIAL COMPLETION
4	CONTRACT SUM
5	PAYMENTS
6	DISPUTE RESOLUTION
7	TERMINATION OR SUSPENSION
8	MISCELLANEOUS PROVISIONS
9	ENUMERATION OF CONTRACT DOCUMENTS

EXHIBIT A INSURANCE AND BONDS

EXHIBIT B DETERMINATION OF THE COST OF THE WORK

### ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement, and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. An enumeration of the Contract Documents, other than Modifications, appears in Article 9.

### ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others.

### ARTICLE 3 DATE OF COMMENCEMENT AND DATES OF SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be:

*(Check one of the following boxes.)*

- The date of this Agreement.
- A date set forth in a notice to proceed issued by the Owner.
- Established as follows:  
*(Insert a date or a means to determine the date of commencement of the Work.)*

If a date of commencement of the Work is not selected, then the date of commencement shall be the date of this Agreement.

§ 3.2 The Contract Time shall be measured from the date of commencement of the Work.

**§ 3.3 Substantial Completion of the Project or Portions Thereof**

**§ 3.3.1** Subject to adjustments of the Contract Time as provided in the Contract Documents, the date of Substantial Completion of the Work of all of the Contractors for the Project will be:

*(Insert the date of Substantial Completion of the Work of all Contractors for the Project.)*

**§ 3.3.2** Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work of all of the Contractors for the Project are to be completed prior to Substantial Completion of the entire Work of all of the Contractors for the Project, the Contractors shall achieve Substantial Completion of such portions by the following dates:

**Portion of Work**

**Substantial Completion Date**

**§ 3.4 When the Work of this Contract, or any Portion Thereof, is Substantially Complete**

**§ 3.4.1** Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall substantially complete the entire Work of this Contract:

*(Check one of the following boxes and complete the necessary information.)*

- Not later than \_\_\_\_\_ ( \_\_ ) calendar days from the date of commencement of the Work.
- By the following date: \_\_\_\_\_

**§ 3.4.2** Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work of this Contract are to be substantially complete prior to when the entire Work of this Contract shall be substantially complete, the Contractor shall substantially complete such portions by the following dates:

**Portion of Work**

**Date to be substantially complete**

**§ 3.4.3** If the Contractor fails to substantially complete the Work of this Contract, or portions thereof, as provided in this Section 3.4, liquidated damages, if any, shall be assessed as set forth in Section 4.5.

**ARTICLE 4 CONTRACT SUM**

**§ 4.1** The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be one of the following:

*(Check the appropriate box.)*

- Stipulated Sum, in accordance with Section 4.2 below
- Cost of the Work plus the Contractor's Fee, in accordance with Section 4.3 below
- Cost of the Work plus the Contractor's Fee with a Guaranteed Maximum Price, in accordance with Section 4.4 below

*(Based on the selection above, complete Section 4.2, 4.3, or 4.4 below.)*

**§ 4.2 Stipulated Sum**

**§ 4.2.1** The Contract Sum shall be \_\_\_\_\_ (\$ \_\_\_), subject to additions and deductions as provided in the Contract Documents.

**§ 4.2.2 Alternates**

**§ 4.2.2.1** Alternates, if any, included in the Contract Sum:

Item	Price
------	-------

**§ 4.2.2.2** Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Agreement. Upon acceptance, the Owner shall issue a Modification to this Agreement. *(Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.)*

Item	Price	Conditions for Acceptance
------	-------	---------------------------

**§ 4.2.3** Allowances, if any, included in the Contract Sum: *(Identify each allowance.)*

Item	Price
------	-------

**§ 4.2.4** Unit prices, if any:

*(Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.)*

Item	Units and Limitations	Price per Unit (\$0.00)
------	-----------------------	-------------------------

**§ 4.3 Cost of the Work Plus Contractor's Fee without a Guaranteed Maximum Price**

**§ 4.3.1** The Cost of the Work is as defined in Exhibit B, Determination of the Cost of the Work.

**§ 4.3.2** The Contractor's Fee:

*(State a lump sum, percentage of Cost of the Work or other provision for determining the Contractor's Fee.)*

§ 4.3.3 The method of adjustment of the Contractor's Fee for changes in the Work:

§ 4.3.4 Limitations, if any, on a Subcontractor's overhead and profit for increases in the cost of its portion of the Work:

§ 4.3.5 Rental rates for Contractor-owned equipment shall not exceed \_\_\_\_\_ percent ( \_\_ %) of the standard rental rate paid at the place of the Project.

§ 4.3.6 Unit prices, if any:

*(Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.)*

Item	Units and Limitations	Price per Unit (\$0.00)
------	-----------------------	-------------------------

§ 4.3.7 The Contractor shall prepare and submit to the Construction Manager, within 14 days of executing this Agreement, a written Control Estimate for the Owner's review and approval. The Control Estimate shall include the items in Section B.1 of Exhibit B, Determination of the Cost of the Work.

§ 4.4 Cost of the Work Plus Contractor's Fee with a Guaranteed Maximum Price

§ 4.4.1 The Cost of the Work is as defined in Exhibit B, Determination of the Cost of the Work.

§ 4.4.2 The Contractor's Fee:

*(State a lump sum, percentage of Cost of the Work or other provision for determining the Contractor's Fee.)*

§ 4.4.3 The method of adjustment of the Contractor's Fee for changes in the Work:

§ 4.4.4 Limitations, if any, on a Subcontractor's overhead and profit for increases in the cost of its portion of the Work:

§ 4.4.5 Rental rates for Contractor-owned equipment shall not exceed \_\_\_\_\_ percent ( \_\_ %) of the standard rental rate paid at the place of the Project.

§ 4.4.6 Unit Prices, if any:

*(Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.)*

Item	Units and Limitations	Price per Unit (\$0.00)
------	-----------------------	-------------------------

**§ 4.4.7 Guaranteed Maximum Price**

**§ 4.4.7.1** The Contract Sum is guaranteed by the Contractor not to exceed \_\_\_\_\_ (\$ \_\_\_), subject to additions and deductions by Change Order as provided in the Contract Documents. This maximum sum is referred to in the Contract Documents as the Guaranteed Maximum Price. Costs which would cause the Guaranteed Maximum Price to be exceeded shall be paid by the Contractor without reimbursement by the Owner.

**§ 4.4.7.2 Alternates**

**§ 4.4.7.2.1** Alternates, if any, included in the Guaranteed Maximum Price:

Item	Price
------	-------

**§ 4.4.7.2.2** Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Agreement. Upon acceptance, the Owner shall issue a Modification to this Agreement. *(Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.)*

Item	Price	Conditions for Acceptance
------	-------	---------------------------

**§ 4.4.7.3** Allowances, if any, included in the Guaranteed Maximum Price:  
*(Identify each allowance.)*

Item	Price
------	-------

**§ 4.4.7.4** Assumptions, if any, upon which the Guaranteed Maximum Price is based:  
*(Identify each assumption.)*

**§ 4.4.8** To the extent that the Contract Documents are anticipated to require further development, the Guaranteed Maximum Price includes the costs attributable to such further development consistent with the Contract Documents and reasonably inferable therefrom. Such further development does not include changes in scope, systems, kinds and quality of materials, finishes, or equipment, all of which, if required, shall be incorporated by Change Order.

**§ 4.4.9** The Owner shall authorize preparation of revisions to the Contract Documents that incorporate the agreed-upon assumptions contained in Section 4.4.7.4. The Owner shall promptly furnish such revised Contract Documents to the Contractor. The Contractor shall notify the Owner and Architect of any inconsistencies between the agreed-upon assumptions contained in Section 4.4.7.4 and the revised Contract Documents.

**§ 4.5 Liquidated damages, if any:**

*(Insert terms and conditions for liquidated damages, if any, to be assessed in accordance with Section 3.4.)*

**§ 4.6 Other:**

*(Insert provisions for bonus, cost savings or other incentives, if any, that might result in a change to the Contract Sum.)*

**ARTICLE 5 PAYMENTS**

**§ 5.1 Progress Payments**

**§ 5.1.1** Based upon Applications for Payment submitted to the Construction Manager by the Contractor, and Certificates for Payment issued by the Construction Manager and Architect, the Owner shall make progress payments on account of the Contract Sum, to the Contractor, as provided below and elsewhere in the Contract Documents.

**§ 5.1.2** The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

**§ 5.1.3** Provided that an Application for Payment is received by the Construction Manager not later than the \_\_\_\_ day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the \_\_\_\_ day of the \_\_\_\_ month. If an Application for Payment is received by the Construction Manager after the application date fixed above, payment of the amount certified shall be made by the Owner not later than \_\_\_\_ ( \_\_ ) days after the Construction Manager receives the Application for Payment.

*(Federal, state or local laws may require payment within a certain period of time.)*

**§ 5.1.4 Progress Payments Where the Contract Sum is Based on a Stipulated Sum**

**§ 5.1.4.1** Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form, and supported by such data to substantiate its accuracy, as the Construction Manager and Architect may require. This schedule of values shall be used as a basis for reviewing the Contractor's Applications for Payment.

**§ 5.1.4.2** Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

**§ 5.1.4.3** In accordance with AIA Document A232™–2015, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

**§ 5.1.4.3.1** The amount of each progress payment shall first include:

- .1 That portion of the Contract Sum properly allocable to completed Work;
- .2 That portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing; and
- .3 That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified.

**§ 5.1.4.3.2** The amount of each progress payment shall then be reduced by:

- .1 The aggregate of any amounts previously paid by the Owner;
- .2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A232–2019;
- .3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;

- 4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A232-2019; and
- 5 Retainage withheld pursuant to Section 5.1.7.

**§ 5.1.5 Progress Payments Where the Contract Sum is Based on the Cost of the Work without a Guaranteed Maximum Price**

**§ 5.1.5.1** With each Application for Payment, the Contractor shall submit the cost control information required in Exhibit B, Determination of the Cost of the Work, along with payrolls, petty cash accounts, receipted invoices, or invoices with check vouchers attached, and any other evidence required by the Owner, Construction Manager or Architect to demonstrate that payments already made by the Contractor on account of the Cost of the Work equal or exceed progress payments already received by the Contractor, plus payrolls for the period covered by the present Application for Payment, less that portion of the payments attributable to the Contractor's Fee.

**§ 5.1.5.2** Applications for Payment shall show the Cost of the Work actually incurred by the Contractor through the end of the period covered by the Application for Payment and for which the Contractor has made or intends to make actual payment prior to the next Application for Payment.

**§ 5.1.5.3** In accordance with AIA Document A232-2019 and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

**§ 5.1.5.3.1** The amount of each progress payment shall first include:

- 1 The Cost of the Work as described in Exhibit B, Determination of the Cost of the Work;
- 2 That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified; and
- 3 The Contractor's Fee computed upon the Cost of the Work described in the preceding Section 5.1.5.3.1.1 at the rate stated in Section 4.3.2; or if the Contractor's Fee is stated as a fixed sum in Section 4.3.2 an amount which bears the same ratio to that fixed-sum Fee as the Cost of the Work included in Section 5.1.5.3.1.1 bears to a reasonable estimate of the probable Cost of the Work upon its completion.

**§ 5.1.5.3.2** The amount of each progress payment shall then be reduced by:

- 1 The aggregate of any amounts previously paid by the Owner;
- 2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A232-2019;
- 3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;
- 4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A232-2019;
- 5 The shortfall, if any, indicated by the Contractor in the documentation required by Section 5.1.5.1 to substantiate prior Applications for Payment, or resulting from errors subsequently discovered by the Owner's auditors in such documentation; and
- 6 Retainage withheld pursuant to Section 5.1.7.

**§ 5.1.5.4** The Owner, Construction Manager and Contractor shall agree upon a mutually acceptable procedure for review and approval of payments to Subcontractors and the percentage of retainage held on Subcontracts, and the Contractor shall execute subcontracts in accordance with those agreements.

**§ 5.1.5.5** In taking action on the Contractor's Applications for Payment, the Construction Manager and Architect shall be entitled to rely on the accuracy and completeness of the information furnished by the Contractor, and such action shall not be deemed to be a representation that (1) the Construction Manager and Architect have made a detailed examination, audit or arithmetic verification of the documentation submitted in accordance with Article 5 or other supporting data; (2) that the Construction Manager and Architect have made exhaustive or continuous on-site inspections; or (3) that the Construction Manager and Architect have made examinations to ascertain how or for what purposes the Contractor has used amounts previously paid on account of the Contract. Such examinations, audits and verifications, if required by the Owner, will be performed by the Owner's auditors acting in the sole interest of the Owner.

**§ 5.1.5.6** Except with the Owner's prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ 5.1.5.7 If final completion of the Work is materially delayed through no fault of the Contractor, then the Owner shall pay the Contractor any additional amounts in accordance with Article 9 of AIA Document A232-2019.

**§ 5.1.6 Progress Payments Where the Contract Sum is Based on the Cost of the Work with a Guaranteed Maximum Price**

§ 5.1.6.1 With each Application for Payment, the Contractor shall submit payrolls, petty cash accounts, receipted invoices or invoices with check vouchers attached, and any other evidence required by the Owner, Construction Manager or Architect to demonstrate that payments already made by the Contractor on account of the Cost of the Work equal or exceed progress payments already received by the Contractor plus payrolls for the period covered by the present Application for Payment, less that portion of the progress payments attributable to the Contractor's Fee.

§ 5.1.6.2 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Guaranteed Maximum Price among: (1) the various portions of the Work; (2) any contingency for costs that are included in the Guaranteed Maximum Price but not otherwise allocated to another line item or included in a Change Order; and (3) the Contractor's Fee.

§ 5.1.6.2.1 The schedule of values shall be prepared in such form, and supported by such data to substantiate its accuracy, as the Construction Manager and Architect may require. This schedule of values shall be used as a basis for reviewing the Contractor's Applications for Payment.

§ 5.1.6.2.2 The allocation of the Guaranteed Maximum Price under this Section 5.1.6.2 shall not constitute a separate guaranteed maximum price for the Cost of the Work of each individual line item in the schedule of values.

§ 5.1.6.2.3 When the Contractor allocates costs from a contingency to another line item in the schedule of values, the Contractor shall submit supporting documentation to the Architect and Construction Manager.

§ 5.1.6.3 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment. The percentage of completion shall be the lesser of (1) the percentage of that portion of the Work which has actually been completed; or (2) the percentage obtained by dividing (a) the expense that has actually been incurred by the Contractor on account of that portion of the Work and for which the Contractor has made payment or intends to make payment prior to the next Application for Payment by (b) the share of the Guaranteed Maximum Price allocated to that portion of the Work in the schedule of values.

§ 5.1.6.4 In accordance with AIA Document A232-2019, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

§ 5.1.6.4.1 The amount of each progress payment shall first include:

- .1 That portion of the Guaranteed Maximum Price properly allocable to completed Work as determined by multiplying the percentage of completion of each portion of the Work by the share of the Guaranteed Maximum Price allocated to that portion of the Work in the most recent schedule of values;
- .2 That portion of the Guaranteed Maximum Price properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction or, if approved in writing in advance by the Owner, suitably stored off the site at a location agreed upon in writing;
- .3 That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified; and
- .4 The Contractor's Fee, computed upon the Cost of the Work described in the preceding Sections 5.1.6.4.1.1 and 5.1.6.4.1.2 at the rate stated in Section 4.4.2 or, if the Contractor's Fee is stated as a fixed sum in that Section, an amount that bears the same ratio to that fixed-sum fee as the Cost of the Work included in Sections 5.1.6.4.1.1 and 5.1.6.4.1.2 bears to a reasonable estimate of the probable Cost of the Work upon its completion.

§ 5.1.6.4.2 The amount of each progress payment shall then be reduced by:

- .1 The aggregate of any amounts previously paid by the Owner;
- .2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A232-2019;
- .3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;

- 4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A232-2019;
- 5 The shortfall, if any, indicated by the Contractor in the documentation required by Section 5.1.6.1 to substantiate prior Applications for Payment, or resulting from errors subsequently discovered by the Owner's auditors in such documentation; and
- 6 Retainage withheld pursuant to Section 5.1.7.

§ 5.1.6.5 The Owner and the Contractor shall agree upon a mutually acceptable procedure for review and approval of payments to Subcontractors and the percentage of retainage held on Subcontracts, and the Contractor shall execute subcontracts in accordance with those agreements.

§ 5.1.6.6 In taking action on the Contractor's Applications for Payment, the Construction Manager and Architect shall be entitled to rely on the accuracy and completeness of the information furnished by the Contractor and such action shall not be deemed to be a representation that (1) the Construction Manager or Architect have made a detailed examination, audit, or arithmetic verification of the documentation submitted in accordance with Section 5.1.6.1 or other supporting data; (2) that the Construction Manager or Architect have made exhaustive or continuous on-site inspections; or (3) that the Construction Manager or Architect have made examinations to ascertain how or for what purposes the Contractor has used amounts previously paid on account of the Contract. Such examinations, audits, and verifications, if required by the Owner, will be performed by the Owner's auditors acting in the sole interest of the Owner.

§ 5.1.6.7 Except with the Owner's prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ 5.1.6.8 If final completion of the Work is materially delayed through no fault of the Contractor, then the Owner shall pay the Contractor any additional amounts in accordance with Article 9 of AIA Document A232-2019.

#### § 5.1.7 Retainage

§ 5.1.7.1 For each progress payment made prior to when the Work of this Contract is substantially complete, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

*(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)*

§ 5.1.7.1.1 The following items are not subject to retainage:

*(Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)*

§ 5.1.7.2 Reduction or limitation of retainage, if any, shall be as follows:

*(If the retainage established in Section 5.1.7.1 is to be modified prior to when the entire Work of this Contract is substantially complete, including modifications for completion of portions of the Work as provided in Section 3.4.2, insert provisions for such modifications.)*

§ 5.1.7.3 Except as set forth in this Section 5.1.7.3, when the Work of this Contract is substantially complete, the Contractor may submit an Application for Payment that includes the retainage withheld from prior Applications for Payment pursuant to this Section 5.1.7. The Application for Payment submitted when the Work of this Contract is substantially complete shall not include retainage as follows:

*(Insert any other conditions for release of retainage when the Work of this Contract is substantially complete, or upon Substantial Completion of the Work of all Contractors on the Project or portions thereof.)*

**§ 5.2 Final Payment**

**§ 5.2.1 Final Payment Where the Contract Sum is Based on a Stipulated Sum**

§ 5.2.1.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

- .1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Article 12 of AIA Document A232-2019, and to satisfy other requirements, if any, which extend beyond final payment; and
- .2 a final Certificate for Payment or Project Certificate for Payment has been issued by the Architect.

§ 5.2.1.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the issuance of the final Certificate for Payment or Project Certificate for Payment, or as follows:

**§ 5.2.2 Final Payment Where the Contract Sum is Based on the Cost of the Work with or without a Guaranteed Maximum Price**

§ 5.2.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

- .1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Article 12 of AIA Document A232-2019, and to satisfy other requirements, if any, which extend beyond final payment;
- .2 the Contractor has submitted a final accounting for the Cost of the Work, pursuant to Exhibit B, Determination of the Cost of the Work and a final Application for Payment; and
- .3 a final Certificate for Payment or Project Certificate for Payment has been issued by the Architect in accordance with Exhibit B, Determination of the Cost of the Work.

§ 5.2.2.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the issuance of the final Certificate for Payment or Project Certificate for Payment, or as follows:

§ 5.3 Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located. *(Insert rate of interest agreed upon, if any.)*

\_\_\_\_\_ % \_\_\_\_\_

**ARTICLE 6 DISPUTE RESOLUTION**

**§ 6.1 Initial Decision Maker**

The Architect will serve as Initial Decision Maker pursuant to Article 15 of AIA Document A232-2019, unless the parties appoint below another individual, not a party to this Agreement, to serve as Initial Decision Maker.

*(If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)*

**§ 6.2 Binding Dispute Resolution**

For any Claim subject to, but not resolved by, mediation pursuant to Article 15 of AIA Document A232-2019, the method of binding dispute resolution shall be as follows:

*(Check the appropriate box.)*

- Arbitration pursuant to Article 15 of AIA Document A232-2019.
- Litigation in a court of competent jurisdiction.
- Other: *(Specify)*

If the Owner and Contractor do not select a method of binding dispute resolution, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction.

## **ARTICLE 7 TERMINATION OR SUSPENSION**

### **§ 7.1 Where the Contract Sum is a Stipulated Sum**

**§ 7.1.1** The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A232-2019.

**§ 7.1.1.1** If the Contract is terminated for the Owner's convenience in accordance with Article 14 of AIA Document A232-2019, then the Owner shall pay the Contractor a termination fee as follows:

*(Insert the amount of, or method for determining, the fee, if any, payable to the Contractor following a termination for the Owner's convenience.)*

**§ 7.1.2** The Work may be suspended by the Owner as provided in Article 14 of AIA Document A232-2019.

### **§ 7.2 Where the Contract Sum is Based on the Cost of the Work with or without a Guaranteed Maximum Price**

#### **§ 7.2.1 Termination**

**§ 7.2.1.1** The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A232-2019.

#### **§ 7.2.1.2 Termination by the Owner for Cause**

**§ 7.2.1.2.1** If the Owner terminates the Contract for cause as provided in Article 14 of AIA Document A232-2019, the Owner shall then only pay the Contractor an amount as follows:

- .1 Take the Cost of the Work incurred by the Contractor to the date of termination;
- .2 Add the Contractor's Fee, computed upon the Cost of the Work to the date of termination at the rate stated in Section 4.3.2 or 4.4.2, as applicable, or, if the Contractor's Fee is stated as a fixed sum in that Section, an amount that bears the same ratio to that fixed-sum Fee as the Cost of the Work at the time of termination bears to a reasonable estimate of the probable Cost of the Work upon its completion;
- .3 Subtract the aggregate of previous payments made by the Owner; and
- .4 Subtract the costs and damages incurred, or to be incurred, by the Owner under Article 14 of AIA Document A232-2019.

**§ 7.2.1.2.2** When the Contract Sum is based on the Cost of the Work with a Guaranteed Maximum Price, if the Owner terminates the Contract for cause as provided in Article 14 of AIA Document A232-2019, the amount, if any, to be paid to the Contractor under Article 14 of AIA Document A232-2019 shall not cause the Guaranteed Maximum Price to be exceeded, nor shall it exceed the amount calculated in Section 7.2.1.2.1.

**§ 7.2.1.2.3** The Owner shall also pay the Contractor fair compensation, either by purchase or rental at the election of the Owner, for any equipment owned by the Contractor that the Owner elects to retain and that is not otherwise included in the Cost of the Work under Section 7.2.1.2.1.1. To the extent that the Owner elects to take legal assignment of subcontracts and purchase orders (including rental agreements), the Contractor shall, as a condition of receiving the payments referred to in this Article 7, execute and deliver all such papers and take all such steps, including the legal assignment of such subcontracts and other contractual rights of the Contractor, as the Owner may require for the purpose of fully vesting in the Owner the rights and benefits of the Contractor under such subcontracts or purchase orders. All Subcontracts, purchase orders and rental agreements entered into by the Contractor will contain provisions allowing for assignment to the Owner as described above.

#### **§ 7.2.1.3 Termination by the Owner for Convenience**

If the Owner terminates the Contract for convenience in accordance with Article 14 of AIA Document A232-2019, then the Owner shall pay the Contractor a termination fee as follows:

*(Insert the amount of or method for determining the fee, if any, payable to the Contractor following a termination for the Owner's convenience.)*

### **§ 7.3 Suspension**

The Work may be suspended by the Owner as provided in Article 14 of AIA Document A232–2019; in such case, the Contract Sum and Contract Time shall be increased as provided in Article 14 of AIA Document A232–2019, except that the term “profit” shall be understood to mean the Contractor’s Fee as described in Section 4.3.2 or 4.4.2, as applicable, of this Agreement.

## **ARTICLE 8 MISCELLANEOUS PROVISIONS**

**§ 8.1** Where reference is made in this Agreement to a provision of AIA Document A232–2019 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

**§ 8.2** The Owner’s representative:

*(Name, address, email address, and other information)*

**§ 8.3** The Contractor’s representative:

*(Name, address, email address, and other information)*

**§ 8.4** Neither the Owner’s nor the Contractor’s representative shall be changed without ten days’ prior notice to the other party.

### **§ 8.5 Insurance and Bonds**

**§ 8.5.1** The Owner and the Contractor shall purchase and maintain insurance as set forth in AIA Document A132™–2019, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition, Exhibit A, Insurance and Bonds, and elsewhere in the Contract Documents.

**§ 8.5.2** The Contractor shall provide bonds as set forth in AIA Document A132™–2019, Exhibit A, and elsewhere in the Contract Documents.

**§ 8.6** Notice in electronic format, pursuant to Article 1 of AIA Document A232–2019, may be given in accordance with AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, if completed, or as otherwise set forth below:

*(If other than in accordance with AIA Document E203–2013, insert requirements for delivering notice in electronic format such as name, title, and email address of the recipient and whether and how the system will be required to generate a read receipt for the transmission.)*

### **§ 8.7 Relationship of the Parties**

Where the Contract is based on the Cost of the Work plus the Contractor’s Fee, with or without a Guaranteed Maximum Price, the Contractor accepts the relationship of trust and confidence established by this Agreement and covenants with the Owner to cooperate with the Architect and exercise the Contractor’s skill and judgment in furthering the interests of the Owner; to furnish efficient business administration and supervision; to furnish at all times an adequate supply of workers and materials; and to perform the Work in an expeditious and economical manner consistent with the Owner’s interests. The Owner agrees to furnish and approve, in a timely manner, information required by the Contractor and to make payments to the Contractor in accordance with the requirements of the Contract Documents.

§ 8.8 Other provisions:

**ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS**

§ 9.1 This Agreement is comprised of the following documents:

- .1 AIA Document A132™-2019, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition
- .2 AIA Document A132™-2019, Exhibit A, Insurance and Bonds Exhibit
- .3 AIA Document A232™-2019, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition
- .4 AIA Document E203™-2013, Building Information Modeling and Digital Data Exhibit, dated as indicated below:  
*(Insert the date of the E203-2013 incorporated into this Agreement.)*

- .5 Drawings

Number	Title	Date
--------	-------	------

- .6 Specifications

Section	Title	Date	Pages
---------	-------	------	-------

- .7 Addenda, if any:

Number	Date	Pages
--------	------	-------

Portions of Addenda relating to bidding or proposal requirements are not part of the Contract Documents unless the bidding or proposal requirements are also enumerated in this Article 9.

- .8 Other Exhibits:

*(Check all boxes that apply and include appropriate information identifying the exhibit where required.)*

- AIA Document A132™-2019, Exhibit B, Determination of the Cost of the Work
- AIA Document E235™-2019, Sustainable Projects Exhibit, Construction Manager as Adviser Edition, dated as indicated below:  
*(Insert the date of the E235-2019 incorporated into this Agreement.)*

The Sustainability Plan:

Title	Date	Pages
-------	------	-------

Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages
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**9** Other documents, if any, listed below:

*(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A232-2019 provides that the advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor's bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.)*

This Agreement is entered into as of the day and year first written above.

\_\_\_\_\_  
**OWNER** (Signature)

\_\_\_\_\_  
**CONTRACTOR** (Signature)

\_\_\_\_\_  
(Printed name and title)

\_\_\_\_\_  
(Printed name and title)

**006100**

Bid Bond Form

 **AIA** Document A310™ – 2010**Bid Bond****CONTRACTOR:***(Name, legal status and address)***SURETY:***(Name, legal status and principal place of business)***OWNER:***(Name, legal status and address)***BOND AMOUNT: \$****PROJECT:***(Name, location or address, and Project number, if any)***ADDITIONS AND DELETIONS:**

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this day of ,

\_\_\_\_\_  
*(Contractor as Principal)*

\_\_\_\_\_  
*(Seal)*

\_\_\_\_\_  
*(Witness)*

\_\_\_\_\_  
*(Title)*

\_\_\_\_\_  
*(Surety)*

\_\_\_\_\_  
*(Seal)*

\_\_\_\_\_  
*(Witness)*

\_\_\_\_\_  
*(Title)*



**006113**

Performance & Payment Bonds



# AIA Document A312™ – 2010

## Performance Bond

**CONTRACTOR:**

*(Name, legal status and address)*

**SURETY:**

*(Name, legal status and principal place of business)*

**OWNER:**

*(Name, legal status and address)*

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

**CONSTRUCTION CONTRACT**

Date:

Amount:

Description:

*(Name and location)*

**BOND**

Date:

*(Not earlier than Construction Contract Date)*

Amount:

Modifications to this Bond:  None  See Section 16

**CONTRACTOR AS PRINCIPAL**

Company: *(Corporate Seal)*

**SURETY**

Company: *(Corporate Seal)*

Signature: \_\_\_\_\_

Name  
and Title:

*(Any additional signatures appear on the last page of this Performance Bond.)*

Signature: \_\_\_\_\_

Name  
and Title:

*(FOR INFORMATION ONLY — Name, address and telephone)*

**AGENT or BROKER:**

**OWNER'S REPRESENTATIVE:**

*(Architect, Engineer or other party:)*

**§ 1** The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

**§ 2** If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Section 3.

**§ 3** If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after

- .1 the Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Section 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;
- .2 the Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
- .3 the Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

**§ 4** Failure on the part of the Owner to comply with the notice requirement in Section 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

**§ 5** When the Owner has satisfied the conditions of Section 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

**§ 5.1** Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

**§ 5.2** Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

**§ 5.3** Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Section 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

**§ 5.4** Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

- .1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or
- .2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

**§ 6** If the Surety does not proceed as provided in Section 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Section 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

§ 7 If the Surety elects to act under Section 5.1, 5.2 or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication, for

- .1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
- .2 additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Section 5; and
- .3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

§ 8 If the Surety elects to act under Section 5.1, 5.3 or 5.4, the Surety's liability is limited to the amount of this Bond.

§ 9 The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors and assigns.

§ 10 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

§ 11 Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

§ 12 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

§ 13 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

#### § 14 Definitions

§ 14.1 **Balance of the Contract Price.** The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

§ 14.2 **Construction Contract.** The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

§ 14.3 **Contractor Default.** Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

§ 14.4 **Owner Default.** Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 14.5 **Contract Documents.** All the documents that comprise the agreement between the Owner and Contractor.

§ 15 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 16 Modifications to this bond are as follows:

Sample

*(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)*

**CONTRACTOR AS PRINCIPAL**

**SURETY**

Company: \_\_\_\_\_

*(Corporate Seal)*

Company: \_\_\_\_\_

*(Corporate Seal)*

Signature: \_\_\_\_\_

Name and Title: \_\_\_\_\_

Address \_\_\_\_\_

Signature: \_\_\_\_\_

Name and Title: \_\_\_\_\_

Address \_\_\_\_\_



# AIA Document A312™ – 2010

## Payment Bond

**CONTRACTOR:**

*(Name, legal status and address)*

**SURETY:**

*(Name, legal status and principal place of business)*

**OWNER:**

*(Name, legal status and address)*

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

**CONSTRUCTION CONTRACT**

Date:

Amount:

Description:

*(Name and location)*

**BOND**

Date:

*(Not earlier than Construction Contract Date)*

Amount:

Modifications to this Bond:  None  See Section 18

**CONTRACTOR AS PRINCIPAL**

Company: *(Corporate Seal)*

**SURETY**

Company: *(Corporate Seal)*

Signature: \_\_\_\_\_

Name  
and Title:

*(Any additional signatures appear on the last page of this Payment Bond.)*

Signature: \_\_\_\_\_

Name  
and Title:

*(FOR INFORMATION ONLY — Name, address and telephone)*

**AGENT or BROKER:**

**OWNER'S REPRESENTATIVE:**

*(Architect, Engineer or other party:)*

**§ 1** The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.

**§ 2** If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.

**§ 3** If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Section 13) of claims, demands, liens or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety.

**§ 4** When the Owner has satisfied the conditions in Section 3, the Surety shall promptly and at the Surety's expense defend, indemnify and hold harmless the Owner against a duly tendered claim, demand, lien or suit.

**§ 5** The Surety's obligations to a Claimant under this Bond shall arise after the following:

**§ 5.1** Claimants, who do not have a direct contract with the Contractor,

- .1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
- .2 have sent a Claim to the Surety (at the address described in Section 13).

**§ 5.2** Claimants, who are employed by or have a direct contract with the Contractor, have sent a Claim to the Surety (at the address described in Section 13).

**§ 6** If a notice of non-payment required by Section 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Section 5.1.1.

**§ 7** When a Claimant has satisfied the conditions of Sections 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:

**§ 7.1** Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

**§ 7.2** Pay or arrange for payment of any undisputed amounts.

**§ 7.3** The Surety's failure to discharge its obligations under Section 7.1 or Section 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Section 7.1 or Section 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

**§ 8** The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Section 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

**§ 9** Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

**§ 10** The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to, or give notice on behalf of, Claimants or otherwise have any obligations to Claimants under this Bond.

**§ 11** The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

**§ 12** No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Section 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

**§ 13** Notice and Claims to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.

**§ 14** When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

**§ 15** Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

#### **§ 16 Definitions**

**§ 16.1 Claim.** A written statement by the Claimant including at a minimum:

- .1 the name of the Claimant;
- .2 the name of the person for whom the labor was done, or materials or equipment furnished;
- .3 a copy of the agreement or purchase order pursuant to which labor, materials or equipment was furnished for use in the performance of the Construction Contract;
- .4 a brief description of the labor, materials or equipment furnished;
- .5 the date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
- .6 the total amount earned by the Claimant for labor, materials or equipment furnished as of the date of the Claim;
- .7 the total amount of previous payments received by the Claimant; and
- .8 the total amount due and unpaid to the Claimant for labor, materials or equipment furnished as of the date of the Claim.

**§ 16.2 Claimant.** An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

**§ 16.3 Construction Contract.** The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

§ 16.4 **Owner Default.** Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 16.5 **Contract Documents.** All the documents that comprise the agreement between the Owner and Contractor.

§ 17 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 18 Modifications to this bond are as follows:

*(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)*

**CONTRACTOR AS PRINCIPAL**

**SURETY**

Company: \_\_\_\_\_

*(Corporate Seal)*

Company: \_\_\_\_\_

*(Corporate Seal)*

Signature: \_\_\_\_\_

Name and Title: \_\_\_\_\_

Address \_\_\_\_\_

Signature: \_\_\_\_\_

Name and Title: \_\_\_\_\_

Address \_\_\_\_\_



# AIA® Document A312™ – 2010

## Payment Bond

**CONTRACTOR:**  
*(Name, legal status and address)*

**SURETY:**  
*(Name, legal status and principal place of business)*

**OWNER:**  
*(Name, legal status and address)*

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

**CONSTRUCTION CONTRACT**

Date:  
Amount: \$  
Description:  
*(Name and location)*

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

**BOND**  
Date:  
*(Not earlier than Construction Contract Date)*

Amount: \$  
Modifications to this Bond:  None  See Section 18

**CONTRACTOR AS PRINCIPAL**  
Company: *(Corporate Seal)*

**SURETY**  
Company: *(Corporate Seal)*

Signature: \_\_\_\_\_  
Name and Title:

Signature: \_\_\_\_\_  
Name and Title:

*(Any additional signatures appear on the last page of this Payment Bond.)*

*(FOR INFORMATION ONLY — Name, address and telephone)*

**AGENT or BROKER:**

**OWNER'S REPRESENTATIVE:**  
*(Architect, Engineer or other party:)*

**§ 1** The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.

**§ 2** If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.

**§ 3** If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Section 13) of claims, demands, liens or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety.

**§ 4** When the Owner has satisfied the conditions in Section 3, the Surety shall promptly and at the Surety's expense defend, indemnify and hold harmless the Owner against a duly tendered claim, demand, lien or suit.

**§ 5** The Surety's obligations to a Claimant under this Bond shall arise after the following:

**§ 5.1** Claimants, who do not have a direct contract with the Contractor,

- .1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
- .2 have sent a Claim to the Surety (at the address described in Section 13).

**§ 5.2** Claimants, who are employed by or have a direct contract with the Contractor, have sent a Claim to the Surety (at the address described in Section 13).

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**§ 7.1** Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

**§ 7.2** Pay or arrange for payment of any undisputed amounts.

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**§ 9** Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

**§ 10** The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to, or give notice on behalf of, Claimants or otherwise have any obligations to Claimants under this Bond.

**§ 11** The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

**§ 12** No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Section 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

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**§ 15** Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

#### **§ 16 Definitions**

**§ 16.1 Claim.** A written statement by the Claimant including at a minimum:

- .1 the name of the Claimant;
- .2 the name of the person for whom the labor was done, or materials or equipment furnished;
- .3 a copy of the agreement or purchase order pursuant to which labor, materials or equipment was furnished for use in the performance of the Construction Contract;
- .4 a brief description of the labor, materials or equipment furnished;
- .5 the date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
- .6 the total amount earned by the Claimant for labor, materials or equipment furnished as of the date of the Claim;
- .7 the total amount of previous payments received by the Claimant; and
- .8 the total amount due and unpaid to the Claimant for labor, materials or equipment furnished as of the date of the Claim.

**§ 16.2 Claimant.** An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

**§ 16.3 Construction Contract.** The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

§ 16.4 **Owner Default.** Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 16.5 **Contract Documents.** All the documents that comprise the agreement between the Owner and Contractor.

§ 17 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 18 Modifications to this bond are as follows:

*(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)*

**CONTRACTOR AS PRINCIPAL**

Company:

*(Corporate Seal)*

**SURETY**

Company:

*(Corporate Seal)*

Signature: \_\_\_\_\_

Name and Title:

Address:

Signature: \_\_\_\_\_

Name and Title:

Address:

**All RFIs must be submitted on this form, via e-mail, to the individuals listed below.**

PROJECT NAME: **Frog Switch Redevelopment**

DATE:

TO:

**Don Sokoloski**, SRDC, Project Executive

[dsokoloski@srduffieconsulting.com](mailto:dsokoloski@srduffieconsulting.com)

FROM:

FIRM:

E-MAIL ADDRESS:

Specification Section: \_\_\_\_\_ Paragraph: \_\_\_\_\_

Drawing Reference: \_\_\_\_\_ Detail: \_\_\_\_\_

Request for Information:

RESPONSE:

---

Response From:

Date Received:

Date Returned:

---

Signed by:

---

**007200**

General Conditions



# AIA<sup>®</sup> Document A232<sup>™</sup> – 2019

## General Conditions of the Contract for Construction, Construction Manager as Adviser Edition

for the following PROJECT:  
(Name, and location or address)

**THE CONSTRUCTION MANAGER:**  
(Name, legal status, and address)

**THE OWNER:**  
(Name, legal status, and address)

**THE ARCHITECT:**  
(Name, legal status, and address)

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be used in conjunction with AIA Documents A132<sup>™</sup>-2019, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition; B132<sup>™</sup>-2019, Standard Form of Agreement Between Owner and Architect, Construction Manager as Adviser Edition; and C132<sup>™</sup>-2019, Standard Form of Agreement Between Owner and Construction Manager as Adviser.

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- 5 SUBCONTRACTORS
- 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS
- 7 CHANGES IN THE WORK
- 8 TIME
- 9 PAYMENTS AND COMPLETION
- 10 PROTECTION OF PERSONS AND PROPERTY
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- 12 UNCOVERING AND CORRECTION OF WORK
- 13 MISCELLANEOUS PROVISIONS
- 14 TERMINATION OR SUSPENSION OF THE CONTRACT
- 15 CLAIMS AND DISPUTES

## ARTICLE 1 GENERAL PROVISIONS

### § 1.1 Basic Definitions

**§ 1.1.1 The Contract Documents.** The Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Architect. Unless specifically enumerated in the Agreement, the Contract Documents do not include the advertisement or invitation to bid, Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor's bid or proposal, or portions of addenda relating to bidding or proposal requirements.

**§ 1.1.2 The Contract.** The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect's consultants, (2) between the Owner and the Construction Manager or the Construction Manager's consultants, (3) between the Owner and the Architect or the Architect's consultants, (4) between the Contractor and the Construction Manager or the Construction Manager's consultants, (5) between the Owner and a Subcontractor or Sub-subcontractor (6) between the Construction Manager and the Architect, or (7) between any persons or entities other than the Owner and Contractor. The Construction Manager and Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of their duties.

**§ 1.1.3 The Work.** The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

**§ 1.1.4 The Project.** The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by other Contractors, and by the Owner's own forces and Separate Contractors.

**§ 1.1.5 Contractors.** Contractors are persons or entities, other than the Contractor or Separate Contractors, who perform Work under contracts with the Owner that are administered by the Architect and Construction Manager.

**§ 1.1.6 Separate Contractors.** Separate Contractors are persons or entities who perform construction under separate contracts with the Owner not administered by the Architect and Construction Manager.

**§ 1.1.7 The Drawings.** The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.

**§ 1.1.8 The Specifications.** The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

**§ 1.1.9 Instruments of Service.** Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

**§ 1.1.10 Initial Decision Maker.** The Initial Decision Maker is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2. The Initial Decision Maker shall not show partiality to the Owner or Contractor and shall not be liable for results of interpretations or decisions rendered in good faith.

### § 1.2 Correlation and Intent of the Contract Documents

**§ 1.2.1** The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as

binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

**§ 1.2.1.1** The invalidity of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract Documents violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Contract Documents shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.

**§ 1.2.2** Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

**§ 1.2.3** Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

### **§ 1.3 Capitalization**

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles, or (3) the titles of other documents published by the American Institute of Architects.

### **§ 1.4 Interpretation**

In the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

### **§ 1.5 Ownership and Use of Drawings, Specifications, and Other Instruments of Service**

**§ 1.5.1** The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, sub-subcontractors, and suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect's or Architect's consultants' reserved rights.

**§ 1.5.2** The Contractor, Subcontractors, Sub-subcontractors, and suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to any protocols established pursuant to Sections 1.7 and 1.8, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the Owner, Architect, and the Architect's consultants.

### **§ 1.6 Notice**

**§ 1.6.1** Except as otherwise provided in Section 1.6.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission if a method for electronic transmission is set forth in the Agreement.

**§ 1.6.2** Notice of Claims as provided in Section 15.1.3 shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

### **§ 1.7 Digital Data Use and Transmission**

The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form. The parties will use AIA Document E203™-2013, Building Information Modeling and Digital Data Exhibit, to establish the protocols for the development, use, transmission, and exchange of digital data.

### **§ 1.8 Building Information Models Use and Reliance**

Any use of, or reliance on, all or a portion of a building information model without agreement to protocols governing the use of, and reliance on, the information contained in the model and without having those protocols set forth in AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, and the requisite AIA Document G202™–2013, Project Building Information Modeling Protocol Form, shall be at the using or relying party's sole risk and without liability to the other party and its contractors or consultants, the authors of, or contributors to, the building information model, and each of their agents and employees.

## **ARTICLE 2 OWNER**

### **§ 2.1 General**

**§ 2.1.1** The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as otherwise provided in Section 4.2.1, the Construction Manager and the Architect do not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.

**§ 2.1.2** The Owner shall furnish to the Contractor, within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of, or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein.

### **§ 2.2 Evidence of the Owner's Financial Arrangements**

**§ 2.2.1** Prior to commencement of the Work, and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. The Contractor shall have no obligation to commence the Work until the Owner provides such evidence. If commencement of the Work is delayed under this Section 2.2.1, the Contract Time shall be extended appropriately.

**§ 2.2.2** Following commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract only if (1) the Owner fails to make payments to the Contractor as the Contract Documents require; (2) the Contractor identifies in writing a reasonable concern regarding the Owner's ability to make payment when due; or (3) a change in the Work materially changes the Contract Sum. If the Owner fails to provide such evidence, as required, within fourteen days of the Contractor's request, the Contractor may immediately stop the Work and, in that event, shall notify the Owner that the Work has stopped. However, if the request is made because a change in the Work materially changes the Contract Sum under (3) above, the Contractor may immediately stop only that portion of the Work affected by the change until reasonable evidence is provided. If the Work is stopped under this Section 2.2.2, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided in the Contract Documents.

**§ 2.2.3** After the Owner furnishes evidence of financial arrangements under this Section 2.2, the Owner shall not materially vary such financial arrangements without prior notice to the Contractor.

**§ 2.2.4** Where the Owner has designated information furnished under this Section 2.2 as "confidential," the Contractor shall keep the information confidential and shall not disclose it to any other person. However, the Contractor may disclose "confidential" information, after seven (7) days' notice to the Owner, where disclosure is required by law, including a subpoena or other form of compulsory legal process issued by a court or governmental entity, or by court or arbitrator(s) order. The Contractor may also disclose "confidential" information to its employees, consultants, sureties, Subcontractors and their employees, Sub-subcontractors, and others who need to know the content of such information solely and exclusively for the Project and who agree to maintain the confidentiality of such information.

### **§ 2.3 Information and Services Required of the Owner**

**§ 2.3.1** Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities. Unless otherwise provided under the Contract Documents, the Owner, assisted by the Construction Manager, shall secure and pay for the building permit.

**§ 2.3.2** The Owner shall retain an architect lawfully licensed to practice architecture, or an entity lawfully practicing architecture, in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.

**§ 2.3.3** The Owner shall retain a construction manager adviser lawfully practicing construction management in the jurisdiction where the Project is located. That person or entity is identified as the Construction Manager in the Agreement and is referred to throughout the Contract Documents as if singular in number.

**§ 2.3.4** If the employment of the Construction Manager or Architect terminates, the Owner shall employ a successor construction manager or architect to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Construction Manager or Architect, respectively.

**§ 2.3.5** The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

**§ 2.3.6** The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.

**§ 2.3.7** Unless otherwise provided in the Contract Documents, the Owner shall furnish to the Contractor one copy of the Contract Documents for purposes of making reproductions pursuant to Section 1.5.2.

**§ 2.3.8** The Owner shall forward all communications to the Contractor through the Construction Manager. Other communication shall be made as set forth in Section 4.2.6.

#### **§ 2.4 Owner's Right to Stop the Work**

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or repeatedly fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3.

#### **§ 2.5 Owner's Right to Carry Out the Work**

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-day period after receipt of notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such default or neglect. Such action by the Owner and amounts charged to the Contractor are both subject to review by the Construction Manager and prior approval of the Architect, and the Construction Manager or Architect may, pursuant to Section 9.5.1, withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Construction Manager's and Architect's and their respective consultants' additional services made necessary by such default, neglect, or failure. If current and future payments are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. If the Contractor disagrees with the actions of the Owner or the Architect, or the amounts claimed as costs to the Owner, the Contractor may file a Claim pursuant to Article 15.

### **ARTICLE 3 CONTRACTOR**

#### **§ 3.1 General**

**§ 3.1.1** The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term "Contractor" means the Contractor or the Contractor's authorized representative.

**§ 3.1.2** The Contractor shall perform the Work in accordance with the Contract Documents.

**§ 3.1.3** The Contractor shall not be relieved of its obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Construction Manager or Architect in their administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

**§ 3.2 Review of Contract Documents and Field Conditions by Contractor**

**§ 3.2.1** Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become generally familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents.

**§ 3.2.2** Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 2.3.5, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Construction Manager and Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information submitted to the Construction Manager in such form as the Construction Manager and Architect may require. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents.

**§ 3.2.3** The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Construction Manager and Architect any nonconformity discovered by or made known to the Contractor as a request for information submitted to Construction Manager in such form as the Construction Manager and Architect may require.

**§ 3.2.4** If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Architect issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall submit Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner, subject to section 15.1.7, as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.

**§ 3.3 Supervision and Construction Procedures**

**§ 3.3.1** The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under the Contract. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and shall be solely responsible for the jobsite safety of such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely notice to the Owner, the Construction Manager, and the Architect, and shall propose alternative means, methods, techniques, sequences, or procedures. The Architect shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. The Construction Manager shall review the proposed alternative for sequencing, constructability, and coordination impacts on the other Contractors. Unless the Architect or the Construction Manager objects to the Contractor's proposed alternative, the Contractor shall perform the Work using its alternative means, methods, techniques, sequences, or procedures.

**§ 3.3.2** The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.

**§ 3.3.3** The Contractor shall be responsible for inspection of portions of the Project already performed to determine that such portions are in proper condition to receive subsequent Work.

### **§ 3.4 Labor and Materials**

**§ 3.4.1** Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

**§ 3.4.2** Except in the case of minor changes in the Work approved by the Architect in accordance with Section 3.12.8 or ordered by the Architect in accordance with Section 7.4, the Contractor may make substitutions only with the consent of the Owner, after evaluation by the Architect, in consultation with the Construction Manager, and in accordance with a Change Order or Construction Change Directive.

**§ 3.4.3** The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them.

### **§ 3.5 Warranty**

**§ 3.5.1** The Contractor warrants to the Owner, Construction Manager, and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Construction Manager or Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

**§ 3.5.2** All material, equipment, or other special warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 9.8.4.

### **§ 3.6 Taxes**

The Contractor shall pay sales, consumer, use and similar taxes for the Work or portions thereof provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

### **§ 3.7 Permits, Fees, Notices, and Compliance with Laws**

**§ 3.7.1** Unless otherwise provided in the Contract Documents, the Owner, assisted by the Construction Manager, shall secure and pay for the building permit. The Contractor shall secure and pay for other permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded.

**§ 3.7.2** The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.

**§ 3.7.3** If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

**§ 3.7.4 Concealed or Unknown Conditions.** If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner, Construction Manager, and the Architect before conditions are disturbed and in no event later than 14 days after first observance of the conditions. The Architect and Construction Manager will promptly investigate such conditions and, if the Architect, in consultation with the Construction Manager, determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend that an equitable adjustment be made in the Contract Sum or Contract Time, or both. If the Architect, in consultation with the Construction Manager, determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of

the Contract is justified, the Architect shall promptly notify the Owner, Construction Manager, and Contractor, stating the reasons. If the Owner or Contractor disputes the Architect's determination or recommendation, either party may submit a Claim as provided in Article 15.

**§ 3.7.5** If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner, Construction Manager, and Architect. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

### **§ 3.8 Allowances**

**§ 3.8.1** The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.

**§ 3.8.2** Unless otherwise provided in the Contract Documents:

- .1 allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- .2 Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit, and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances; and
- .3 whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2.

**§ 3.8.3** Materials and equipment under an allowance shall be selected by the Owner with reasonable promptness.

### **§ 3.9 Superintendent**

**§ 3.9.1** The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor.

**§ 3.9.2** The Contractor, as soon as practicable after award of the Contract, shall notify the Owner and Architect, through the Construction Manager, of the name and qualifications of a proposed superintendent. Within 14 days of receipt of the information, the Construction Manager may notify the Contractor, stating whether the Owner, the Construction Manager, or the Architect (1) has reasonable objection to the proposed superintendent or (2) require additional time for review. Failure of the Construction Manager to provide notice within the 14-day period shall constitute notice of no reasonable objection.

**§ 3.9.3** The Contractor shall not employ a proposed superintendent to whom the Owner, Construction Manager, or Architect has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed.

### **§ 3.10 Contractor's Construction and Submittal Schedules**

**§ 3.10.1** The Contractor, promptly after being awarded the Contract, shall submit for the Owner's and Architect's information, and the Construction Manager's use in developing the Project schedule, a Contractor's construction schedule for the Work. The schedule shall contain detail appropriate for the Project, including (1) the date of commencement of the Work, interim schedule milestone dates, and the date of Substantial Completion; (2) an apportionment of the Work by construction activity; and (3) the time required for completion of each portion of the Work. The schedule shall provide for the orderly progress on of the Work to completion and shall not exceed time limits current under the Contract Documents. The schedule shall be revised at appropriate intervals as required by the conditions of the Work and Project. The Contractor shall cooperate with the Construction Manager in scheduling and performing the Contractor's Work to avoid conflict with, and as to cause no delay in, the work or activities of other Contractors, or the construction or operations of the Owner's own forces or Separate Contractors.

**§ 3.10.2** The Contractor, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, shall submit a submittal schedule for the Construction Manager's and Architect's approval. The Architect and Construction Manager's approval shall not be unreasonably delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Construction Manager and Architect reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, or fails to provide submittals in accordance with the approved submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.

**§ 3.10.3** The Contractor shall participate with other Contractors, the Construction Manager, and the Owner in reviewing and coordinating all schedules for incorporation into the Project schedule that is prepared by the Construction Manager. The Contractor shall make revisions to the construction schedule and submittal schedule as deemed necessary by the Construction Manager to conform to the Project schedule.

**§ 3.10.4** The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner, Construction Manager, and Architect, and incorporated into the approved Project schedule.

**§ 3.11 Documents and Samples at the Site**

The Contractor shall make available, at the Project site, the Contract Documents, including Change Orders, Construction Change Directives, and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and the approved Shop Drawings, Product Data, Samples, and similar required submittals. These shall be in electronic form or paper copy, available to the Construction Manager, Architect, and Owner, and delivered to the Construction Manager for submittal to the Owner upon completion of the Work as a record of the Work as constructed.

**§ 3.12 Shop Drawings, Product Data, and Samples**

**§ 3.12.1** Shop Drawings are drawings, diagrams, schedules, and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.

**§ 3.12.2** Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

**§ 3.12.3** Samples are physical examples that illustrate materials, equipment, or workmanship, and establish standards by which the Work will be judged.

**§ 3.12.4** Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. Their purpose is to demonstrate how the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect and Construction Manager is subject to the limitations of Sections 4.2.10 through 4.2.12. Informational submittals upon which the Construction Manager and Architect are not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Construction Manager or Architect without action.

**§ 3.12.5** The Contractor shall review for compliance with the Contract Documents, approve, and submit to the Construction Manager, Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents, in accordance with the Project submittal schedule approved by the Construction Manager and Architect or, in the absence of an approved Project submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of other Contractors, Separate Contractors, or the Owner's own forces. The Contractor shall cooperate with the Construction Manager in the coordination of the Contractor's Shop Drawings, Product Data, Samples, and similar submittals with related documents submitted by other Contractors.

**§ 3.12.6** By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents to the Owner, Construction Manager, and Architect, that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

**§ 3.12.7** The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples, or similar submittals, until the respective submittal has been reviewed and approved by the Architect.

**§ 3.12.8** The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from the requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Construction Manager and Architect of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals, by the Architect's approval thereof.

**§ 3.12.9** The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar submittals, to revisions other than those requested by the Construction Manager and Architect on previous submittals. In the absence of such notice, the Architect's approval of a resubmission shall not apply to such revisions.

**§ 3.12.10** The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures. The Contractor shall not be required to provide professional services in violation of applicable law.

**§ 3.12.10.1** If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents. The Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional. Shop Drawings, and other submittals related to the Work, designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner, the Architect, and the Construction Manager shall be entitled to rely upon the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor the performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review and approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Construction Manager shall review submittals for sequencing, constructability, and coordination impacts on other Contractors.

**§ 3.12.10.2** If the Contract Documents require the Contractor's design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Construction Manager and Architect at the time and in the form specified by the Architect.

### **§ 3.13 Use of Site**

**§ 3.13.1** The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders of public authorities, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

**§ 3.13.2** The Contractor shall coordinate the Contractor's operations with, and secure the approval of, the Construction Manager before using any portion of the site.

### **§ 3.14 Cutting and Patching**

**§ 3.14.1** The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly. All areas requiring cutting, fitting, or patching shall be restored to the condition existing prior to the cutting, fitting, or patching, unless otherwise required by the Contract Documents.

**§ 3.14.2** The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner, Separate Contractors, or of other Contractors by cutting, patching, or otherwise altering such

construction, or by excavation. The Contractor shall not cut or otherwise alter construction by the Owner, Separate Contractors, or by other Contractors except with written consent of the Construction Manager, Owner, and such other Contractors or Separate Contractors. Consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold, from the Separate Contractors, other Contractors, or the Owner, its consent to cutting or otherwise altering the Work.

### **§ 3.15 Cleaning Up**

**§ 3.15.1** The Contractor shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus materials from and about the Project.

**§ 3.15.2** If the Contractor fails to clean up as provided in the Contract Documents, the Owner, or Construction Manager with the Owner's approval, may do so and the Owner shall be entitled to reimbursement from the Contractor.

### **§ 3.16 Access to Work**

The Contractor shall provide the Owner, Construction Manager, and Architect with access to the Work in preparation and progress wherever located.

### **§ 3.17 Royalties, Patents and Copyrights**

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner, Construction Manager, and Architect harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications, or other documents prepared by the Owner, Architect, or Construction Manager. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Architect through the Construction Manager.

### **§ 3.18 Indemnification**

**§ 3.18.1** To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Construction Manager, Architect, Construction Manager's and Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18.

**§ 3.18.2** In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.

## **ARTICLE 4 ARCHITECT AND CONSTRUCTION MANAGER**

### **§ 4.1 General**

**§ 4.1.1** The Architect is the person or entity retained by the Owner pursuant to Section 2.3.2 and identified as such in the Agreement.

**§ 4.1.2** The Construction Manager is the person or entity retained by the Owner pursuant to Section 2.3.3 and identified as such in the Agreement.

**§ 4.1.3** Duties, responsibilities, and limitations of authority of the Construction Manager and Architect as set forth in the Contract Documents shall not be restricted, modified, or extended without written consent of the Owner, Construction Manager, Architect, and Contractor. Consent shall not be unreasonably withheld.

## **§ 4.2 Administration of the Contract**

**§ 4.2.1** The Construction Manager and Architect will provide administration of the Contract as described in the Contract Documents and will be the Owner's representatives during construction until the date the Architect issues the final Certificate for Payment. The Construction Manager and Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

**§ 4.2.2** The Architect will visit the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. On the basis of the site visits, the Architect will keep the Owner and the Construction Manager reasonably informed about the progress and quality of the portion of the Work completed, and promptly report to the Owner and Construction Manager known deviations from the Contract Documents and defects and deficiencies observed in the Work.

**§ 4.2.3** The Construction Manager shall provide one or more representatives who shall be in attendance at the Project site whenever the Work is being performed. The Construction Manager will determine in general if the Work observed is being performed in accordance with the Contract Documents, will keep the Owner and Architect reasonably informed of the progress of the Work, and will promptly report to the Owner and Architect known deviations from the Contract Documents and the most recent Project schedule, and defects and deficiencies observed in the Work.

**§ 4.2.4** The Construction Manager will schedule and coordinate the activities of the Contractor and other Contractors in accordance with the latest approved Project schedule.

**§ 4.2.5** The Construction Manager, except to the extent required by Section 4.2.4, and Architect will not have control over, charge of, or responsibility for, the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents, and neither will be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. Neither the Construction Manager nor the Architect will have control over or charge of, or be responsible for acts or omissions of, the Contractor, Subcontractors, or their agents or employees, or of any other persons or entities performing portions of the Work.

**§ 4.2.6 Communications.** The Owner shall communicate with the Contractor and the Construction Manager's consultants through the Construction Manager about matters arising out of or relating to the Contract Documents. The Owner and Construction Manager shall include the Architect in all communications that relate to or affect the Architect's services or professional responsibilities. The Owner shall promptly notify the Architect of the substance of any direct communications between the Owner and the Construction Manager otherwise relating to the Project. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and suppliers shall be through the Contractor. Communications by and with other Contractors shall be through the Construction Manager. Communications by and with the Owner's own forces and Separate Contractors shall be through the Owner. The Contract Documents may specify other communication protocols.

**§ 4.2.7** The Construction Manager and Architect will review and certify all Applications for Payment by the Contractor, in accordance with the provisions of Article 9.

**§ 4.2.8** The Architect and Construction Manager have authority to reject Work that does not conform to the Contract Documents, and will notify each other about the rejection. Whenever the Construction Manager considers it necessary or advisable, the Construction Manager will have authority to require inspection or testing of the Work in accordance with Sections 13.4.2 and 13.4.3, upon written authorization of the Owner, whether or not the Work is fabricated, installed or completed. The foregoing authority of the Construction Manager will be subject to the provisions of Sections 4.2.18 through 4.2.20 inclusive, with respect to interpretations and decisions of the Architect. However, neither the Architect's nor the Construction Manager's authority to act under this Section 4.2.8 nor a decision made by either of them in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect or the Construction Manager to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons performing any of the Work.

**§ 4.2.9** Utilizing the submittal schedule provided by the Contractor, the Construction Manager shall prepare, and revise as necessary, a Project submittal schedule incorporating information from other Contractors, the Owner, Owner's

consultants, Owner's Separate Contractors and vendors, governmental agencies, and participants in the Project under the management of the Construction Manager. The Project submittal schedule and any revisions shall be submitted to the Architect for approval.

**§ 4.2.10** The Construction Manager will receive and promptly review for conformance with the submittal requirements of the Contract Documents, all submittals from the Contractor such as Shop Drawings, Product Data, and Samples. Where there are other Contractors, the Construction Manager will also check and coordinate the information contained within each submittal received from the Contractor and other Contractors, and transmit to the Architect those recommended for approval. By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Construction Manager represents to the Owner and Architect that the Construction Manager has reviewed and recommended them for approval. The Construction Manager's actions will be taken in accordance with the Project submittal schedule approved by the Architect or, in the absence of an approved Project submittal schedule, with reasonable promptness while allowing sufficient time to permit adequate review by the Architect.

**§ 4.2.11** The Architect will review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Architect's professional judgment to permit adequate review. Upon the Architect's completed review, the Architect shall transmit its submittal review to the Construction Manager.

**§ 4.2.12** Review of the Contractor's submittals by the Construction Manager and Architect is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Construction Manager and Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5, and 3.12. The Construction Manager and Architect's review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences, or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

**§ 4.2.13** The Construction Manager will prepare Change Orders and Construction Change Directives.

**§ 4.2.14** The Construction Manager and the Architect will take appropriate action on Change Orders or Construction Change Directives in accordance with Article 7, and the Architect will have authority to order minor changes in the Work as provided in Section 7.4. The Architect, in consultation with the Construction Manager, will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

**§ 4.2.15** Utilizing the documents provided by the Contractor, the Construction Manager will maintain at the site for the Owner one copy of all Contract Documents, approved Shop Drawings, Product Data, Samples, and similar required submittals, in good order and marked currently to record all changes and selections made during construction. These will be available to the Architect and the Contractor, and will be delivered to the Owner upon completion of the Project.

**§ 4.2.16** The Construction Manager will assist the Architect in conducting inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion in conjunction with the Architect pursuant to Section 9.8; and receive and forward to the Owner written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10. The Construction Manager will forward to the Architect a final Application and Certificate for Payment or final Project Application and Project Certificate for Payment upon the Contractor's compliance with the requirements of the Contract Documents.

**§ 4.2.17** If the Owner and Architect agree, the Architect will provide one or more Project representatives to assist in carrying out the Architect's responsibilities at the site. The Owner shall notify the Construction Manager of any change in the duties, responsibilities and limitations of authority of the Project representatives.

**§ 4.2.18** The Architect will interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of the Construction Manager, Owner, or Contractor through the Construction Manager. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

§ 4.2.19 Interpretations and decisions of the Architect will be consistent with the intent of, and reasonably inferable from, the Contract Documents and will be in writing or in the form of drawings. When making such interpretations and decisions, the Architect will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either, and will not be liable for results of interpretations or decisions so rendered in good faith.

§ 4.2.20 The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

§ 4.2.21 The Construction Manager will receive and review requests for information from the Contractor, and forward each request for information to the Architect, with the Construction Manager's recommendation. The Architect will review and respond in writing, through the Construction Manager, to requests for information about the Contract Documents. The Construction Manager's recommendation and the Architect's response to each request will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information.

## **ARTICLE 5 SUBCONTRACTORS**

### **§ 5.1 Definitions**

§ 5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include other Contractors or Separate Contractors or the subcontractors of other Contractors or Separate Contractors.

§ 5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

### **§ 5.2 Award of Subcontracts and Other Contracts for Portions of the Work**

§ 5.2.1 Unless otherwise stated in the Contract Documents, the Contractor, as soon as practicable after award of the Contract, shall notify the Construction Manager, for review by the Owner, Construction Manager and Architect, of the persons or entities proposed for each principal portion of the Work, including those who are to furnish materials or equipment fabricated to a special design. Within 14 days of receipt of the information, the Construction Manager may notify the Contractor whether the Owner, the Construction Manager or the Architect (1) has reasonable objection to any such proposed person or entity or, (2) requires additional time for review. Failure of the Construction Manager to provide notice within the 14-day period shall constitute notice of no reasonable objection.

§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner, Construction Manager or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

§ 5.2.3 If the Owner, Construction Manager or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner, Construction Manager or Architect has no reasonable objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

§ 5.2.4 The Contractor shall not substitute a Subcontractor, person, or entity for one previously selected if the Owner, Construction Manager or Architect makes reasonable objection to such substitution.

### **§ 5.3 Subcontractual Relations**

By appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work, that the Contractor, by these Contract Documents, assumes toward the Owner, Construction Manager and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner, Construction Manager and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically

provided otherwise in the subcontract agreement, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

#### **§ 5.4 Contingent Assignment of Subcontracts**

**§ 5.4.1** Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that

- .1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 14.2 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor; and
- .2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract.

**§ 5.4.2** Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension.

**§ 5.4.3** Upon assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor Contractor or other entity. If the Owner assigns the subcontract to a successor Contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor Contractor's obligations under the subcontract.

### **ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS**

#### **§ 6.1 Owner's Right to Perform Construction with Own Forces and to Award Other Contracts**

**§ 6.1.1** The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and with Separate Contractors retained under Conditions of the Contract substantially similar to those of this Contract, including those provisions of the Conditions of the Contract related to insurance and waiver of subrogation.

**§ 6.1.2** When the Owner performs construction or operations with the Owner's own forces or Separate Contractors, the Owner shall provide for coordination of such forces and Separate Contractors with the Work of the Contractor, who shall cooperate with them.

**§ 6.1.3** Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces or with Separate Contractors, the Owner or its Separate Contractors shall have the same obligations and rights that the Contractor has under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6, and Articles 10, 11, and 12.

#### **§ 6.2 Mutual Responsibility**

**§ 6.2.1** The Contractor shall afford the Owner's own forces, Separate Contractors, Construction Manager and other Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.

**§ 6.2.2** If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner's own forces, Separate Contractors or other Contractors, the Contractor shall, prior to proceeding with that portion of the Work, promptly notify the Construction Manager and Architect of apparent discrepancies or defects in the construction or operations by the Owner or Separate Contractor or other Contractors that would render it unsuitable for proper execution and results of the Contractor's Work. Failure of the Contractor to notify the Construction Manager and the Architect of apparent discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner's or Separate Contractor's or other Contractors' completed or partially completed construction is fit and proper to receive the Contractor's Work. The Contractor shall not be responsible for

discrepancies or defects in the construction or operations by the Owner or Separate Contractors or other Contractors that are not apparent.

**§ 6.2.3** The Contractor shall reimburse the Owner for costs the Owner incurs, including costs that are payable to a Separate Contractor or to other Contractors, because of the Contractor's delays, improperly timed activities or defective construction. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of delays, improperly timed activities, damage to the Work or defective construction by the Owner's own forces, Separate Contractors, or other Contractors.

**§ 6.2.4** The Contractor shall promptly remedy damage that the Contractor wrongfully causes to completed or partially completed construction, or to property of the Owner, Separate Contractors, or other Contractors as provided in Section 10.2.5.

**§ 6.2.5** The Owner, Separate Contractors, and other Contractors shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.

### **§ 6.3 Owner's Right to Clean Up**

If a dispute arises among the Contractor, Separate Contractors, other Contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Construction Manager, with notice to the Architect, will allocate the cost among those responsible.

## **ARTICLE 7 CHANGES IN THE WORK**

### **§ 7.1 General**

**§ 7.1.1** Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

**§ 7.1.2** A Change Order shall be based upon agreement among the Owner, Construction Manager, Architect and Contractor. A Construction Change Directive requires agreement by the Owner, Construction Manager and Architect and may or may not be agreed to by the Contractor. An order for a minor change in the Work may be issued by the Architect alone.

**§ 7.1.3** Changes in the Work shall be performed under applicable provisions of the Contract Documents. The Contractor shall proceed promptly with changes in the Work, unless otherwise provided in the Change Order, Construction Change Directive, or order for a minor change in the Work.

### **§ 7.2 Change Orders**

A Change Order is a written instrument prepared by the Construction Manager and signed by the Owner, Construction Manager, Architect, and Contractor, stating their agreement upon all of the following:

- .1 The change in the Work;
- .2 The amount of the adjustment, if any, in the Contract Sum; and
- .3 The extent of the adjustment, if any, in the Contract Time.

### **§ 7.3 Construction Change Directives**

**§ 7.3.1** A Construction Change Directive is a written order prepared by the Construction Manager and signed by the Owner, Construction Manager and Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

**§ 7.3.2** A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.

**§ 7.3.3** If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

- .1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- .2 Unit prices stated in the Contract Documents or subsequently agreed upon;

- 3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
- 4 As provided in Section 7.3.4.

**§ 7.3.4** If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Construction Manager shall determine the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Construction Manager may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.4 shall be limited to the following:

- 1 Costs of labor, including applicable payroll taxes, fringe benefits required by agreement or custom, workers' compensation insurance, and other employee costs approved by the Construction Manager and Architect;
- 2 Costs of materials, supplies, and equipment, including cost of transportation, whether incorporated or consumed;
- 3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;
- 4 Costs of premiums for all bonds and insurance, permit fees, and sales, use, or similar taxes, directly related to the change; and
- 5 Costs of supervision and field office personnel directly attributable to the change.

**§ 7.3.5** If the Contractor disagrees with the adjustment in the Contract Time, the Contractor may make a Claim in accordance with applicable provisions of Article 15.

**§ 7.3.6** Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Construction Manager of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

**§ 7.3.7** A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

**§ 7.3.8** The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Construction Manager and Architect. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

**§ 7.3.9** Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Construction Manager and Architect will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Construction Manager and Architect determine to be reasonably justified. The interim determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a Claim in accordance with Article 15.

**§ 7.3.10** When the Owner and Contractor agree with a determination made by the Construction Manager and Architect concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Construction Manager shall prepare a Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

#### **§ 7.4 Minor Changes in the Work**

The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. The Architect's order for minor changes shall be in writing. If the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Construction Manager and shall not proceed to implement the change in the Work. If the Contractor performs the Work set forth in the Architect's order for a minor

change without prior notice to the Construction Manager that such change will affect the Contract Sum or Contract Time, the Contractor waives any adjustment to the Contract Sum or extension of the Contract Time.

## **ARTICLE 8 TIME**

### **§ 8.1 Definitions**

**§ 8.1.1** Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

**§ 8.1.2** The date of commencement of the Work is the date established in the Agreement.

**§ 8.1.3** The date of Substantial Completion is the date certified by the Architect in accordance with Section 9.8.

**§ 8.1.4** The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

### **§ 8.2 Progress and Completion**

**§ 8.2.1** Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

**§ 8.2.2** The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, commence the Work prior to the effective date of insurance required to be furnished by the Contractor and Owner.

**§ 8.2.3** The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

### **§ 8.3 Delays and Extensions of Time**

**§ 8.3.1** If the Contractor is delayed at any time in the commencement or progress of the Work by (1) an act or neglect of the Owner, Architect, Construction Manager, or an employee of any of them, or of the Owner's own forces, Separate Contractors, or other Contractors; (2) by changes ordered in the Work; (3) by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, adverse weather conditions documented in accordance with Section 15.1.6.2, or other causes beyond the Contractor's control; (4) by delay authorized by the Owner pending mediation and binding dispute resolution; or (5) by other causes that the Contractor asserts and the Architect, based on the recommendation of the Construction Manager, determines justify delay, then the Contract Time shall be extended for such reasonable time as the Architect may determine.

**§ 8.3.2** Claims relating to time shall be made in accordance with applicable provisions of Article 15.

**§ 8.3.3** This Section 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.

## **ARTICLE 9 PAYMENTS AND COMPLETION**

### **§ 9.1 Contract Sum**

**§ 9.1.1** The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

**§ 9.1.2** If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed so that application of such unit prices to the actual quantities causes substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

### **§ 9.2 Schedule of Values**

Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit a schedule of values to the Construction Manager, before the first Application for Payment, allocating the entire Contract Sum to the various portions of the Work. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy, required by the Construction Manager and the Architect. This schedule, unless objected to by the Construction Manager or Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment. The Construction Manager shall forward to the Architect the Contractor's schedule of values. Any changes to the schedule of values shall be submitted to the Construction Manager and supported by such data to substantiate its

accuracy as the Construction Manager and the Architect may require, and unless objected to by the Construction Manager or the Architect, shall be used as a basis for reviewing the Contractor's subsequent Applications for Payment.

### **§ 9.3 Applications for Payment**

**§ 9.3.1** At least fifteen days before the date established for each progress payment, the Contractor shall submit to the Construction Manager an itemized Application for Payment prepared in accordance with the schedule of values, if required under Section 9.2, for completed portions of the Work. The application shall be notarized, if required, and supported by all data substantiating the Contractor's right to payment that the Owner, Construction Manager or Architect require, such as copies of requisitions, and releases of waivers of lien from Subcontractors and suppliers, and shall reflect retainage if provided for in the Contract Documents.

**§ 9.3.1.1** As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives, or by interim determinations of the Construction Manager and Architect, but not yet included in Change Orders.

**§ 9.3.1.2** Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or supplier, unless such Work has been performed by others whom the Contractor intends to pay.

**§ 9.3.2** Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage, and transportation to the site, for such materials and equipment stored off the site.

**§ 9.3.3** The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims, security interests, or encumbrances, in favor of the Contractor, Subcontractors, suppliers, or other persons or entities that provided labor, materials and equipment relating to the Work.

### **§ 9.4 Certificates for Payment**

**§ 9.4.1** Where there is only one Contractor, the Construction Manager will, within seven days after the Construction Manager's receipt of the Contractor's Application for Payment, review the Application, certify the amount the Construction Manager determines is due the Contractor, and forward the Contractor's Application and Certificate for Payment to the Architect. Within seven days after the Architect receives the Contractor's Application for Payment from the Construction Manager, the Architect will either (1) issue to the Owner a Certificate for Payment, in the full amount of the Application for Payment, with a copy to the Construction Manager; or (2) issue to the Owner a Certificate for Payment for such amount as the Architect determines is properly due, and notify the Construction Manager and Owner of the Architect's reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Application for Payment, and notify the Construction Manager and Owner of the Architect's reason for withholding certification in whole as provided in Section 9.5.1. The Construction Manager will promptly forward to the Contractor the Architect's notice of withholding certification.

**§ 9.4.2** Where there is more than one Contractor performing portions of the Project, the Construction Manager will, within seven days after the Construction Manager receives all of the Contractors' Applications for Payment: (1) review the Applications and certify the amount the Construction Manager determines is due each of the Contractors; (2) prepare a Summary of Contractors' Applications for Payment by combining information from each Contractor's application with information from similar applications for progress payments from the other Contractors; (3) prepare a Project Application and Certificate for Payment; (4) certify the amount the Construction Manager determines is due all Contractors; and (5) forward the Summary of Contractors' Applications for Payment and Project Application and Certificate for Payment to the Architect.

**§ 9.4.2.1** Within seven days after the Architect receives the Project Application and Project Certificate for Payment and the Summary of Contractors' Applications for Payment from the Construction Manager, the Architect will either (1)

issue to the Owner a Project Certificate for Payment, with a copy to the Construction Manager; or (2) issue to the Owner a Project Certificate for Payment for such amount as the Architect determines is properly due, and notify the Construction Manager and Owner of the Architect's reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Project Application for Payment, and notify the Construction Manager and Owner of the Architect's reason for withholding certification in whole as provided in Section 9.5.1. The Construction Manager will promptly forward the Architect's notice of withholding certification to the Contractors.

**§ 9.4.3** The Construction Manager's certification of an Application for Payment or, in the case of more than one Contractor, a Project Application and Certificate for Payment, shall be based upon the Construction Manager's evaluation of the Work and the data in the Application or Applications for Payment. The Construction Manager's certification will constitute a representation that, to the best of the Construction Manager's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is, or Contractors are, entitled to payment in the amount certified.

**§ 9.4.4** The Architect's issuance of a Certificate for Payment or, in the case of more than one Contractor, Project Application and Certificate for Payment, shall be based upon the Architect's evaluation of the Work, the recommendation of the Construction Manager, and data in the Application for Payment or Project Application for Payment. The Architect's certification will constitute a representation that, to the best of the Architect's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is, or Contractors are, entitled to payment in the amount certified.

**§ 9.4.5** The representations made pursuant to Sections 9.4.3 and 9.4.4 are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion, and to specific qualifications expressed by the Construction Manager or Architect.

**§ 9.4.6** The issuance of a Certificate for Payment or a Project Certificate for Payment will not be a representation that the Construction Manager or Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work; (2) reviewed construction means, methods, techniques, sequences, or procedures; (3) reviewed copies of requisitions received from Subcontractors and suppliers and other data requested by the Owner to substantiate the Contractor's right to payment; or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

#### **§ 9.5 Decisions to Withhold Certification**

**§ 9.5.1** The Construction Manager or Architect may withhold a Certificate for Payment or Project Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Construction Manager's or Architect's opinion the representations to the Owner required by Section 9.4.3 and 9.4.4 cannot be made. If the Construction Manager or Architect is unable to certify payment in the amount of the Application, the Construction Manager will notify the Contractor and Owner as provided in Section 9.4.1 and 9.4.2. If the Contractor, Construction Manager and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment or a Project Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Construction Manager or Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment or Project Certificate for Payment previously issued, to such extent as may be necessary in the Construction Manager's or Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from the acts and omissions described in Section 3.3.2 because of

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims, unless security acceptable to the Owner is provided by the Contractor;
- .3 failure of the Contractor to make payments properly to Subcontractors or suppliers for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a Separate Contractor or other Contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 repeated failure to carry out the Work in accordance with the Contract Documents.

**§ 9.5.2** When either party disputes the Architect's decision regarding a Certificate for Payment under Section 9.5.1, in whole or in part, that party may submit a Claim in accordance with Article 15.

**§ 9.5.3** When the reasons for withholding certification are removed, certification will be made for amounts previously withheld.

**§ 9.5.4** If the Architect or Construction Manager withholds certification for payment under Section 9.5.1, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or supplier to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify the Architect and the Construction Manager, and both will reflect such payment on the next Certificate for Payment.

#### **§ 9.6 Progress Payments**

**§ 9.6.1** After the Architect has issued a Certificate for Payment or Project Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents, and shall so notify the Construction Manager and Architect.

**§ 9.6.2** The Contractor shall pay each Subcontractor, no later than seven days after receipt of payment from the Owner, the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

**§ 9.6.3** The Construction Manager will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Owner, Construction Manager and Architect on account of portions of the Work done by such Subcontractor.

**§ 9.6.4** The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors and suppliers to ascertain whether they have been properly paid. Neither the Owner, Construction Manager nor Architect shall have an obligation to pay, or to see to the payment of money to, a Subcontractor or supplier, except as may otherwise be required by law.

**§ 9.6.5** The Contractor's payments to suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

**§ 9.6.6** A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

**§ 9.6.7** Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors or provided by suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, create any fiduciary liability or tort liability on the part of the Contractor for breach of trust, or entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

**§ 9.6.8** Provided the Owner has fulfilled its payment obligations under the Contract Documents, the Contractor shall defend and indemnify the Owner from all loss, liability, damage or expense, including reasonable attorney's fees and litigation expenses, arising out of any lien claim or other claim for payment by any Subcontractor or supplier of any tier. Upon receipt of notice of a lien claim or other claim for payment, the Owner shall notify the Contractor. If approved by the applicable court, when required, the Contractor may substitute a surety bond for the property against which the lien or other claim for payment has been asserted.

#### **§ 9.7 Failure of Payment**

If the Construction Manager and Architect do not issue a Certificate for Payment or a Project Certificate for Payment, through no fault of the Contractor, within fourteen days after the Construction Manager's receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within seven days after the date established in the

Contract Documents, the amount certified by the Construction Manager and Architect or awarded by binding dispute resolution, then the Contractor may, upon seven additional days' notice to the Owner, Construction Manager and Architect, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided for in the Contract Documents.

#### **§ 9.8 Substantial Completion**

**§ 9.8.1** Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the Work for its intended use.

**§ 9.8.2** When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall notify the Construction Manager, and the Contractor and Construction Manager shall jointly prepare and submit to the Architect a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

**§ 9.8.3** Upon receipt of the list, the Architect, assisted by the Construction Manager, will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Architect's inspection discloses any item, whether or not included on the list, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect, assisted by the Construction Manager, to determine Substantial Completion.

**§ 9.8.4** When the Architect, assisted by the Construction Manager, determines that the Work of all of the Contractors, or designated portion thereof, is substantially complete, the Construction Manager will prepare, and the Construction Manager and Architect shall execute, a Certificate of Substantial Completion that shall establish the date of Substantial Completion; establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance; and fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

**§ 9.8.5** The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in the Certificate. Upon such acceptance, and consent of surety if any, the Owner shall make payment of retainage applying to the Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

#### **§ 9.9 Partial Occupancy or Use**

**§ 9.9.1** The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor and Construction Manager shall jointly prepare and submit a list to the Architect as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Architect after consultation with the Construction Manager.

**§ 9.9.2** Immediately prior to such partial occupancy or use, the Owner, Construction Manager, Contractor, and Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

**§ 9.9.3** Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

### **§ 9.10 Final Completion and Final Payment**

**§ 9.10.1** Upon completion of the Work, the Contractor shall forward to the Construction Manager a notice that the Work is ready for final inspection and acceptance, and shall also forward to the Construction Manager a final Contractor's Application for Payment. Upon receipt, the Construction Manager shall perform an inspection to confirm the completion of Work of the Contractor. The Construction Manager shall make recommendations to the Architect when the Work of all of the Contractors is ready for final inspection, and shall then forward the Contractors' notices and Application for Payment or Project Application for Payment, to the Architect, who will promptly make such inspection. When the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Construction Manager and Architect will promptly issue a final Certificate for Payment or Project Certificate for Payment stating that to the best of their knowledge, information and belief, and on the basis of their on-site visits and inspections, the Work has been completed in accordance with the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Construction Manager's and Architect's final Certificate for Payment or Project Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

**§ 9.10.2** Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect through the Construction Manager (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect, (3) a written statement that the Contractor knows of no reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment (5) documentation of any special warranties, such as manufacturers' warranties or specific Subcontractor warranties, and (6), if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts and releases and waivers of liens, claims, security interests, or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien, claim, security interest, or encumbrance. If a lien, claim, security interest, or encumbrance remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging the lien, claim, security interest, or encumbrance, including all costs and reasonable attorneys' fees.

**§ 9.10.3** If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Construction Manager and Architect so confirm, the Owner shall, upon application by the Contractor and certification by the Construction Manager and Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed, corrected, and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of the surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect through the Construction Manager prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

**§ 9.10.4** The making of final payment shall constitute a waiver of Claims by the Owner except those arising from

- .1 liens, Claims, security interests, or encumbrances arising out of the Contract and unsettled;
- .2 failure of the Work to comply with the requirements of the Contract Documents;
- .3 terms of special warranties required by the Contract Documents; or
- .4 audits performed by the Owner, if permitted by the Contract Documents, after final payment.

**§ 9.10.5** Acceptance of final payment by the Contractor, a Subcontractor, or a supplier, shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

## **ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY**

### **§ 10.1 Safety Precautions and Programs**

The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract. The Contractor shall submit the Contractor's safety program to the Construction Manager for review and coordination with the safety programs of other Contractors. The Construction Manager's responsibilities for review and coordination of safety programs shall not extend to direct control over or charge of the acts or omissions of the Contractors, Subcontractors, agents or employees of the Contractors or

Subcontractors, or any other persons performing portions of the Work and not directly employed by the Construction Manager.

## **§ 10.2 Safety of Persons and Property**

**§ 10.2.1** The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury, or loss to

- .1 employees on the Work and other persons who may be affected thereby;
- .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Contractor, a Subcontractor, or a Sub-subcontractor;
- .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction; and
- .4 construction or operations by the Owner, Separate Contractors, or other Contractors.

**§ 10.2.2** The Contractor shall comply with, and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, bearing on safety of persons or property or their protection from damage, injury, or loss.

**§ 10.2.3** The Contractor shall implement, erect, and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards; promulgating safety regulations; and notifying the owners and users of adjacent sites and utilities of the safeguards.

**§ 10.2.4** When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

**§ 10.2.5** The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2, 10.2.1.3 and 10.2.1.4 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2, 10.2.1.3 and 10.2.1.4. The Contractor may make a Claim for the cost to remedy the damage or loss to the extent such damage or loss is attributable to acts or omissions of the Owner, Construction Manager or Architect or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18.

**§ 10.2.6** The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner, Construction Manager and Architect.

**§ 10.2.7** The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

### **§ 10.2.8 Injury or Damage to Person or Property**

If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, notice of the injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

## **§ 10.3 Hazardous Materials**

**§ 10.3.1** The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials or substances. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and notify the Owner, Construction Manager and Architect of the condition.

**§ 10.3.2** Upon receipt of the Contractor's notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor, Construction Manager and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of the material or substance or who are to perform the task of removal or safe containment of the material or substance. The Contractor, the Construction Manager and the Architect will promptly reply to the Owner in writing stating whether or not any of them has reasonable objection to the persons or entities proposed by the Owner. If the Contractor, Construction Manager or Architect has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor, the Construction Manager and the Architect have no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable additional costs of shutdown, delay, and start-up.

**§ 10.3.3** To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Construction Manager, Architect, their consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance presents the risk of bodily injury or death as described in Section 10.3.1 and has not been rendered harmless, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss, or expense is due to the fault or negligence of the party seeking indemnity.

**§ 10.3.4** The Owner shall not be responsible under this Section 10.3 for hazardous materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for hazardous materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances.

**§ 10.3.5** The Contractor shall reimburse the Owner for the cost and expense the Owner incurs (1) for remediation of hazardous materials or substances the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.

**§ 10.3.6** If, without negligence on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall reimburse the Contractor for all cost and expense thereby incurred.

#### **§ 10.4 Emergencies**

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

### **ARTICLE 11 INSURANCE AND BONDS**

#### **§ 11.1 Contractor's Insurance and Bonds**

**§ 11.1.1** The Contractor shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Contractor shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Owner, Construction Manager and Construction Manager's consultants, and the Architect and Architect's consultants, shall be named as additional insureds under the Contractor's commercial general liability policy or as otherwise described in the Contract Documents.

**§ 11.1.2** The Contractor shall provide surety bonds of the types, for such penal sums, and subject to such terms and conditions as required by the Contract Documents. The Contractor shall purchase and maintain the required bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

**§ 11.1.3** Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

**§ 11.1.4 Notice of Cancellation or Expiration of Contractor's Required Insurance.** Within three (3) business days of the date the Contractor becomes aware of an impending or actual cancellation or expiration of any insurance required by the Contract Documents, the Contractor shall provide notice directly to the Owner, and separately to the Construction Manager, of such impending or actual cancellation or expiration. Upon receipt of notice from the Contractor, the Owner shall, unless the lapse in coverage arises from an act or omission of the Owner, have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by the Contractor. The furnishing of notice by the Contractor shall not relieve the Contractor of any contractual obligation to provide any required coverage.

## **§ 11.2 Owner's Insurance**

**§ 11.2.1** The Owner shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Owner shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located.

**§ 11.2.2 Failure to Purchase Required Property Insurance.** If the Owner fails to purchase and maintain the required property insurance, with all of the coverages and in the amounts described in the Agreement or elsewhere in the Contract Documents, the Owner shall inform both the Contractor and the Construction Manager, separately and in writing, prior to commencement of the Work. Upon receipt of notice from the Owner, the Contractor may delay commencement of the Work and may obtain insurance that will protect the interests of the Contractor, Subcontractors, and Sub-Subcontractors in the Work. When the failure to provide coverage has been cured or resolved, the Contract Sum and Contract Time shall be equitably adjusted. In the event the Owner fails to procure coverage, the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent the loss to the Owner would have been covered by the insurance to have been procured by the Owner. The cost of the insurance shall be charged to the Owner by a Change Order. If the Owner does not provide written notice, and the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain the required insurance, the Owner shall reimburse the Contractor for all reasonable costs and damages attributable thereto.

**§ 11.2.3 Notice of Cancellation or Expiration of Owner's Required Property Insurance.** Within three (3) business days of the date the Owner becomes aware of an impending or actual cancellation or expiration of any property insurance required by the Contract Documents, the Owner shall provide notice directly to the Contractor, and separately to the Construction Manager, of such impending or actual cancellation or expiration. Unless the lapse in coverage arises from an act or omission of the Contractor: (1) the Contractor, upon receipt of notice from the Owner, shall have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by either the Owner or the Contractor; (2) the Contract Time and Contract Sum shall be equitably adjusted; and (3) the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent any loss to the Owner would have been covered by the insurance had it not expired or been cancelled. If the Contractor purchases replacement coverage, the cost of the insurance shall be charged to the Owner by an appropriate Change Order. The furnishing of notice by the Owner shall not relieve the Owner of any contractual obligation to provide required insurance.

## **§ 11.3 Waivers of Subrogation**

**§ 11.3.1** The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents, and employees, each of the other; (2) the Construction Manager and Construction Manager's consultants; (3) the Architect and Architect's consultants; (4) other Contractors and any of their subcontractors, sub-subcontractors, agents, and employees; and (5) Separate Contractors, if any, and any of their subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire, or other causes of loss, to the extent those losses are covered by property insurance required by the Agreement or other property insurance applicable to the Project, except such rights as they have to proceeds of such insurance. The Owner or Contractor, as appropriate, shall require similar written waivers in favor of the individuals and entities identified above from the Construction Manager, Construction Manager's consultants, Architect, Architect's consultants, other Contractors, Separate Contractors, subcontractors, and sub-subcontractors. The policies of insurance purchased and maintained by each person or entity agreeing to waive claims pursuant to this Section 11.3.1 shall not prohibit this waiver of subrogation. This waiver of subrogation shall be effective as to a person or entity (1) even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, (2) even though that person or entity did not pay the insurance premium directly or indirectly, or (3) whether or not the person or entity had an insurable interest in the damaged property.

**§ 11.3.2** If during the Project construction period the Owner insures properties, real or personal or both, at or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, to the extent permissible by such policies, the Owner waives all rights in accordance with the terms of Section 11.3.1 for damages caused by fire or other causes of loss covered by this separate property insurance.

**§ 11.4 Loss of Use, Business Interruption, and Delay in Completion Insurance**

The Owner, at the Owner's option, may purchase and maintain insurance that will protect the Owner against loss of use of the Owner's property, or the inability to conduct normal operations, due to fire or other causes of loss. The Owner waives all rights of action against the Contractor, Architect, and Construction Manager for loss of use of the Owner's property, due to fire or other hazards however caused.

**§ 11.5 Adjustment and Settlement of Insured Loss**

**§ 11.5.1** A loss insured under the property insurance required by the Agreement shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.5.2. The Owner shall pay the Construction Manager, Architect and Contractor their just shares of insurance proceeds received by the Owner, and by appropriate agreements the Construction Manager, Architect and Contractor shall make payments to their consultants and Subcontractors in similar manner.

**§ 11.5.2** Prior to settlement of an insured loss, the Owner shall notify the Contractor of the terms of the proposed settlement as well as the proposed allocation of the insurance proceeds. The Contractor shall have 14 days from receipt of notice to object to the proposed settlement or allocation of the proceeds. If the Contractor does not object, the Owner shall settle the loss and the Contractor shall be bound by the settlement and allocation. Upon receipt, the Owner shall deposit the insurance proceeds in a separate account and make the appropriate distributions. Thereafter, if no other agreement is made or the Owner does not terminate the Contract for convenience, the Owner and Contractor shall execute a Change Order for reconstruction of the damaged or destroyed Work in the amount allocated for that purpose. If the Contractor timely objects to either the terms of the proposed settlement or the allocation of the proceeds, the Owner may proceed to settle the insured loss, and any dispute between the Owner and Contractor arising out of the settlement or allocation of the proceeds shall be resolved pursuant to Article 15. Pending resolution of any dispute, the Owner may issue a Construction Change Directive for the reconstruction of the damaged or destroyed Work.

**ARTICLE 12 UNCOVERING AND CORRECTION OF WORK**

**§ 12.1 Uncovering of Work**

**§ 12.1.1** If a portion of the Work is covered contrary to the Construction Manager's or Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by either, be uncovered for their examination and be replaced at the Contractor's expense without change in the Contract Time.

**§ 12.1.2** If a portion of the Work has been covered that the Construction Manager or Architect has not specifically requested to examine prior to its being covered, the Construction Manager or Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an equitable adjustment to the Contract Sum and Contract Time as may be appropriate. If such Work is not in accordance with the Contract Documents, the costs of uncovering the Work, and the cost of correction, shall be at the Contractor's expense.

**§ 12.2 Correction of Work**

**§ 12.2.1 Before Substantial Completion**

The Contractor shall promptly correct Work rejected by the Construction Manager or Architect or failing to conform to the requirements of the Contract Documents, discovered before Substantial Completion, and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Construction Manager's and Architect's services and expenses made necessary thereby, shall be at the Contractor's expense.

**§ 12.2.2 After Substantial Completion**

**§ 12.2.2.1** In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof, or after the date for commencement of warranties established under Section 9.9.1, or by terms of any applicable special warranty required by the Contract Documents, any of the

Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so, unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner, Construction Manager or Architect, the Owner may correct it in accordance with Section 2.5.

**§ 12.2.2** The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

**§ 12.2.3** The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.

**§ 12.2.3** The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

**§ 12.2.4** The Contractor shall bear the cost of correcting destroyed or damaged construction of the Owner, Separate Contractors, or other Contractors, whether completed or partially completed, caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.

**§ 12.2.5** Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the one-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

### **§ 12.3 Acceptance of Nonconforming Work**

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

## **ARTICLE 13 MISCELLANEOUS PROVISIONS**

### **§ 13.1 Governing Law**

The Contract shall be governed by the law of the place where the Project is located excluding that jurisdiction's choice of law rules. If the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 15.4.

### **§ 13.2 Successors and Assigns**

**§ 13.2.1** The Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. Except as provided in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

**§ 13.2.2** The Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate the assignment.

### **§ 13.3 Rights and Remedies**

**§ 13.3.1** Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

§ 13.3.2 No action or failure to act by the Owner, Construction Manager, Architect, or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed upon in writing.

#### § 13.4 Tests and Inspections

§ 13.4.1 Tests, inspections, and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules, and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. The Contractor shall give the Construction Manager and Architect timely notice of when and where tests and inspections are to be made so that the Construction Manager and Architect may be present for such procedures. The Owner shall bear costs of tests, inspections, or approvals that do not become requirements until after bids are received or negotiations concluded. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

§ 13.4.2 If the Construction Manager, Architect, Owner, or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection, or approval not included under Section 13.4.1, the Construction Manager and Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection, or approval, by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Construction Manager and Architect of when and where tests and inspections are to be made so that the Construction Manager and Architect may be present for such procedures. Such costs, except as provided in Section 13.4.3, shall be at the Owner's expense.

§ 13.4.3 If procedures for testing, inspection, or approval under Sections 13.4.1 and 13.4.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Construction Manager's and Architect's services and expenses, shall be at the Contractor's expense.

§ 13.4.4 Required certificates of testing, inspection, or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Construction Manager for transmittal to the Architect.

§ 13.4.5 If the Construction Manager or Architect is to observe tests, inspections, or approvals required by the Contract Documents, the Construction Manager or Architect will do so promptly and, where practicable, at the normal place of testing.

§ 13.4.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

#### § 13.5 Interest

Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at the rate the parties agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

### ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

#### § 14.1 Termination by the Contractor

§ 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, for any of the following reasons:

- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
- .2 An act of government, such as a declaration of national emergency, that requires all Work to be stopped;
- .3 Because the Construction Manager has not certified or the Architect has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents; or
- .4 The Owner has failed to furnish to the Contractor reasonable evidence as required by Section 2.2.

**§ 14.1.2** The Contractor may terminate the Contract if, through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, repeated suspensions, delays, or interruptions of the entire Work by the Owner as described in Section 14.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

**§ 14.1.3** If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days' notice to the Owner, Construction Manager and Architect, terminate the Contract and recover from the Owner payment for Work executed, as well as reasonable overhead and profit on Work not executed, and costs incurred by reason of such termination.

**§ 14.1.4** If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, or their agents or employees, or any other persons performing portions of the Work because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' notice to the Owner, Construction Manager and Architect, terminate the Contract and recover from the Owner as provided in Section 14.1.3.

#### **§ 14.2 Termination by the Owner for Cause**

**§ 14.2.1** The Owner may terminate the Contract if the Contractor

- .1 repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to Subcontractors or suppliers in accordance with the respective agreements between the Contractor and the Subcontractors or suppliers;
- .3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 otherwise is guilty of substantial breach of a provision of the Contract Documents.

**§ 14.2.2** When any of the reasons described in Section 14.2.1 exist, after consultation with the Construction Manager, and upon certification by the Architect that sufficient cause exists to justify such action, the Owner may, without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

- .1 Exclude the Contractor from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- .2 Accept assignment of subcontracts pursuant to Section 5.4; and
- .3 Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.

**§ 14.2.3** When the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

**§ 14.2.4** If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Construction Manager's and Architect's services and expenses made necessary thereby, and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, shall, upon application, be certified by the Initial Decision Maker after consultation with the Construction Manager, and this obligation for payment shall survive termination of the Contract.

#### **§ 14.3 Suspension by the Owner for Convenience**

**§ 14.3.1** The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work, in whole or in part for such period of time as the Owner may determine.

**§ 14.3.2** The Contract Sum and the Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay, or interruption under Section 14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent:

- .1 that performance is, was, or would have been, so suspended, delayed, or interrupted, by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of this Contract.

#### **§ 14.4 Termination by the Owner for Convenience**

**§ 14.4.1** The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.

**§ 14.4.2** Upon receipt of notice from the Owner of such termination for the Owner's convenience, the Contractor shall

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

**§ 14.4.3** In case of such termination for the Owner's convenience, the Owner shall pay the Contractor for Work properly executed; costs incurred by reason of the termination, including costs attributable to termination of Subcontracts; and the termination fee, if any, set forth in the Agreement.

### **ARTICLE 15 CLAIMS AND DISPUTES**

#### **§ 15.1 Claims**

**§ 15.1.1 Definition.** A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, a change in the Contract Time, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. This Section 15.1.1 does not require the Owner to file a Claim in order to impose liquidated damages in accordance with the Contract Documents.

#### **§ 15.1.2 Time Limits on Claims**

The Owner and Contractor shall commence all Claims and causes of action against the other and arising out of or related to the Contract, whether in contract, tort, breach of warranty or otherwise, in accordance with the requirements of the binding dispute resolution method selected in the Agreement and within the period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Contractor waive all Claims and causes of action not commenced in accordance with this Section 15.1.2.

#### **§ 15.1.3 Notice of Claims**

**§ 15.1.3.1** Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered prior to expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party and to the Initial Decision Maker with a copy sent to the Construction Manager and Architect, if the Architect is not serving as the Initial Decision Maker. Claims by either party under this Section 15.1.3.1 shall be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later.

**§ 15.1.3.2** Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party. In such event, no decision by the Initial Decision Maker is required.

#### **§ 15.1.4 Continuing Contract Performance**

**§ 15.1.4.1** Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

**§ 15.1.4.2** The Contract Sum and Contract Time shall be adjusted in accordance with the Initial Decision Maker's decision, subject to the right of either party to proceed in accordance with this Article 15. The Architect will issue Certificates for Payment in accordance with the decision of the Initial Decision Maker.

**§ 15.1.5 Claims for Additional Cost.** If the Contractor wishes to make a Claim for an increase in the Contract Sum, notice as provided in Section 15.1.3 shall be given before proceeding to execute the portion of the Work that is the subject of the Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

### **§ 15.1.6 Claims for Additional Time**

**§ 15.1.6.1** If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided in Section 15.1.3 shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay on y one Claim is necessary.

**§ 15.1.6.2** If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated and had an adverse effect on the scheduled construction.

**§ 15.1.7 Waiver of Claims for Consequential Damages.** The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes

- .1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
- .2 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Section 15.1.7 shall be deemed to preclude assessment of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

### **§ 15.2 Initial Decision**

**§ 15.2.1** Claims, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3, 10.4, and 11.5, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to mediation of any Claim. If an initial decision has not been rendered within 30 days after the Claim has been referred to the Initial Decision Maker, the party asserting the Claim may demand mediation and binding dispute resolution without a decision having been rendered. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

**§ 15.2.2** The Initial Decision Maker will review Claims and within ten days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

**§ 15.2.3** In evaluating Claims, the Initial Decision Maker may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Initial Decision Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner's expense.

**§ 15.2.4** If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of the request, and shall either (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished, or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part.

**§ 15.2.5** The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties, the Construction Manager, and the Architect, if the Architect is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be final and binding on the parties but subject to mediation and, if the parties fail to resolve their dispute through mediation, to binding dispute resolution.

**§ 15.2.6** Either party may file for mediation of an initial decision at any time, subject to the terms of Section 15.2.6.1.

**§ 15.2.6.1** Either party may, within 30 days from the date of receipt of an initial decision, demand in writing that the other party file for mediation. If such a demand is made and the party receiving the demand fails to file for mediation within 30 days of receipt thereof, then both parties waive their rights to mediate or pursue binding dispute resolution proceedings with respect to the initial decision.

**§ 15.2.7** In the event of a Claim against the Contractor, the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

**§ 15.2.8** If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

### **§ 15.3 Mediation**

**§ 15.3.1** Claims, disputes, or other matters in controversy arising out of or related to the Contract, except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.7, shall be subject to mediation as a condition precedent to binding dispute resolution.

**§ 15.3.2** The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration is stayed pursuant to this Section 15.3.2, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

**§ 15.3.3** Either party may, within 30 days from the date that mediation has been concluded without resolution of the dispute or 60 days after mediation has been demanded without resolution of the dispute, demand in writing that the other party file for binding dispute resolution. If such a demand is made and the party receiving the demand fails to file for binding dispute resolution within 60 days after receipt thereof, then both parties waive their rights to binding dispute resolution proceedings with respect to the initial decision.

**§ 15.3.4** The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

### **§ 15.4 Arbitration**

**§ 15.4.1** If the parties have selected arbitration as the method for binding dispute resolution in the Agreement, any Claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of the Agreement. The Arbitration shall be conducted in the place where the Project is located, unless another location is mutually agreed upon. A demand for arbitration shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded.

**§ 15.4.1.1** A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation, but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the Claim would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the Claim.

**§ 15.4.2** The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

§ 15.4.3 The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement, shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

**§ 15.4.4 Consolidation or Joinder**

§ 15.4.4.1 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation, (2) the arbitrations to be consolidated substantially involve common questions of law or fact, and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).

§ 15.4.4.2 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent.

§ 15.4.4.3 The Owner and Contractor grant to any person or entity made a party to an arbitration conducted under this Section 15.4, whether by joinder or consolidation, the same rights of joinder and consolidation as those of the Owner and Contractor under this Agreement.

Sample

**007346**

**Wage Rate Determination Schedule**

**BUREAU OF LABOR LAW COMPLIANCE  
PREVAILING WAGES PROJECT RATES**

Project Name:	Frog Switch Redevelopment Project
General Description:	The project includes construction, demolition, environmental assessment and remediation, and abatement activities to redevelop the former Frog, Switch, and Manufacturing facility.
Project Locality	Carlisle Borough
Awarding Agency:	REC FS LLC
Contract Award Date:	3/1/2026
Serial Number:	26-00472
Project Classification:	Building/Highway
Determination Date:	1/20/2026
Assigned Field Office:	Harrisburg
Field Office Phone Number:	(717)787-4763
Toll Free Phone Number:	(800)932-0665
Project County:	Cumberland County

**BUREAU OF LABOR LAW COMPLIANCE  
PREVAILING WAGES PROJECT RATES**

<b>Project: 26-00472 - Building</b>	<b>Effective Date</b>	<b>Expiration Date</b>	<b>Hourly Rate</b>	<b>Fringe Benefits</b>	<b>Total</b>
Asbestos & Insulation Workers	7/1/2024		\$40.00	\$29.86	\$69.86
Asbestos & Insulation Workers	6/30/2025		\$41.50	\$29.86	\$71.36
Boilermaker (Commercial, Institutional, and Minor Repair Work)	3/1/2024		\$36.71	\$19.13	\$55.84
Boilermakers	1/1/2024		\$52.10	\$35.72	\$87.82
Bricklayers, Stone Masons, Pointers, Caulkers, Cleaners	5/4/2025		\$40.47	\$19.68	\$60.15
Bricklayers, Stone Masons, Pointers, Caulkers, Cleaners	5/3/2026		\$42.32	\$19.68	\$62.00
Carpenters - Piledriver/Welder	1/1/2025		\$43.38	\$22.72	\$66.10
Carpenters - Piledriver/Welder	1/1/2026		\$44.63	\$23.47	\$68.10
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2025		\$36.84	\$20.44	\$57.28
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2026		\$36.84	\$22.69	\$59.53
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2027		\$36.84	\$24.94	\$61.78
Cement Finishers & Plasterers	5/4/2025		\$32.23	\$22.27	\$54.50
Cement Finishers & Plasterers	5/3/2026		\$34.23	\$22.27	\$56.50
Cement Finishers & Plasterers	5/3/2027		\$33.49	\$25.01	\$58.50
Cement Masons	5/1/2024		\$33.80	\$22.80	\$56.60
Cement Masons	5/1/2025		\$34.65	\$22.95	\$57.60
Drywall Finisher	5/1/2024		\$30.33	\$22.79	\$53.12
Drywall Finisher	5/1/2025		\$31.83	\$23.26	\$55.09
Electricians	6/1/2025		\$40.00	\$27.78	\$67.78
Electricians	6/1/2026		\$40.00	\$29.78	\$69.78
Elevator Constructor	1/1/2025		\$63.40	\$40.03	\$103.43
Elevator Constructor	1/1/2026		\$61.26	\$45.78	\$107.04
Glazier	5/1/2024		\$32.46	\$20.93	\$53.39
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	7/1/2025		\$38.76	\$33.38	\$72.14
Laborers (Class 01 - See notes)	5/1/2023		\$23.11	\$18.03	\$41.14
Laborers (Class 02 - See notes)	5/1/2023		\$25.11	\$18.03	\$43.14
Laborers (Class 03 - See notes)	5/1/2023		\$27.01	\$18.22	\$45.23
Laborers (Class 04 - See notes)	5/1/2023		\$28.51	\$18.22	\$46.73
Laborers (Class 05 - See notes)	5/1/2023		\$29.01	\$18.22	\$47.23
Laborers (Class 06 - See notes)	5/1/2023		\$25.11	\$18.03	\$43.14
Marble Mason	5/1/2025		\$37.20	\$19.24	\$56.44
Marble Mason	5/1/2026		\$39.15	\$19.24	\$58.39
Millwright	6/1/2025		\$43.00	\$22.95	\$65.95
Millwright	6/1/2026		\$44.97	\$22.95	\$67.92
Operators (Building, Class 01 - See Notes)	5/1/2025		\$44.89	\$30.92	\$75.81
Operators (Building, Class 01 - See Notes)	5/1/2026		\$46.05	\$31.76	\$77.81
Operators (Building, Class 01A - See Notes)	5/1/2025		\$47.14	\$31.58	\$78.72
Operators (Building, Class 01A - See Notes)	5/1/2026		\$48.30	\$32.42	\$80.72
Operators (Building, Class 02 - See Notes)	5/1/2025		\$44.61	\$30.83	\$75.44
Operators (Building, Class 02 - See Notes)	5/1/2026		\$45.77	\$31.67	\$77.44

**BUREAU OF LABOR LAW COMPLIANCE  
PREVAILING WAGES PROJECT RATES**

<b>Project: 26-00472 - Building</b>	<b>Effective Date</b>	<b>Expiration Date</b>	<b>Hourly Rate</b>	<b>Fringe Benefits</b>	<b>Total</b>
Operators (Building, Class 02A - See Notes)	5/1/2025		\$46.86	\$31.50	\$78.36
Operators (Building, Class 02A - See Notes)	5/1/2026		\$48.02	\$32.34	\$80.36
Operators (Building, Class 03 - See Notes)	5/1/2025		\$41.88	\$30.03	\$71.91
Operators (Building, Class 03 - See Notes)	5/1/2026		\$43.04	\$30.87	\$73.91
Operators (Building, Class 04 - See Notes)	5/1/2025		\$40.74	\$29.70	\$70.44
Operators (Building, Class 04 - See Notes)	5/1/2026		\$41.90	\$30.54	\$72.44
Operators (Building, Class 05 - See Notes)	5/1/2025		\$40.30	\$29.56	\$69.86
Operators (Building, Class 05 - See Notes)	5/1/2026		\$41.45	\$30.41	\$71.86
Operators (Building, Class 06 - See Notes)	5/1/2025		\$39.42	\$29.30	\$68.72
Operators (Building, Class 06 - See Notes)	5/1/2026		\$40.58	\$30.14	\$70.72
Operators (Building, Class 07A- See Notes)	5/1/2025		\$54.56	\$35.21	\$89.77
Operators (Building, Class 07A- See Notes)	5/1/2026		\$56.03	\$36.14	\$92.17
Operators (Building, Class 07B- See Notes)	5/1/2025		\$54.22	\$35.10	\$89.32
Operators (Building, Class 07B- See Notes)	5/1/2026		\$55.69	\$36.03	\$91.72
Painters Class 1 (see notes)	5/1/2024		\$27.59	\$18.08	\$45.67
Painters Class 1 (see notes)	5/1/2025		\$28.42	\$18.36	\$46.78
Painters - Line Stripping	12/1/2024		\$44.12	\$27.91	\$72.03
Painters - Line Stripping	12/1/2025		\$45.12	\$29.41	\$74.53
Painters Class 2 (see notes)	5/1/2020		\$27.43	\$15.99	\$43.42
Painters Class 3 (see notes)	5/1/2020		\$33.18	\$15.99	\$49.17
Pile Driver Divers (Building, Heavy, Highway)	1/1/2025		\$62.82	\$22.72	\$85.54
Pile Driver Divers (Building, Heavy, Highway)	1/1/2026		\$64.70	\$23.47	\$88.17
Piledrivers	1/1/2025		\$41.88	\$22.72	\$64.60
Piledrivers	1/1/2026		\$43.13	\$23.47	\$66.60
Plasterers	5/1/2024		\$32.93	\$21.08	\$54.01
Plasterers	5/1/2025		\$34.68	\$21.23	\$55.91
Plumber/Pipefitter	5/1/2023		\$41.36	\$29.72	\$71.08
Plumber/Pipefitter	5/1/2025		\$45.30	\$29.91	\$75.21
Roofers (Composition)	5/1/2024		\$44.13	\$34.77	\$78.90
Roofers (Composition)	5/1/2025		\$46.03	\$34.77	\$80.80
Roofers (Shingle)	5/1/2024		\$34.35	\$22.20	\$56.55
Roofers (Slate & Tile)	5/1/2024		\$37.35	\$22.20	\$59.55
Sheet Metal Workers	6/1/2024		\$43.09	\$43.14	\$86.23
Sheet Metal Workers	6/1/2025		\$45.02	\$44.71	\$89.73
Sign Makers and Hangars	7/15/2024		\$32.32	\$25.82	\$58.14
Sign Makers and Hangars	7/15/2025		\$33.48	\$26.41	\$59.89
Sprinklerfitters	4/1/2024		\$46.45	\$28.62	\$75.07
Sprinklerfitters	4/1/2025		\$49.75	\$29.21	\$78.96
Terrazzo Finisher	5/1/2024		\$35.66	\$20.76	\$56.42
Terrazzo Finisher	5/1/2025		\$36.32	\$21.68	\$58.00
Terrazzo Grinder	5/1/2024		\$36.42	\$20.76	\$57.18
Terrazzo Grinder	5/1/2025		\$37.10	\$21.68	\$58.78
Terrazzo Mechanics	5/1/2024		\$36.44	\$22.51	\$58.95
Terrazzo Mechanics	5/1/2025		\$37.17	\$23.43	\$60.60

**BUREAU OF LABOR LAW COMPLIANCE  
PREVAILING WAGES PROJECT RATES**

<b>Project: 26-00472 - Building</b>	<b>Effective Date</b>	<b>Expiration Date</b>	<b>Hourly Rate</b>	<b>Fringe Benefits</b>	<b>Total</b>
Terrazzo Setter	5/1/2019		\$31.81	\$19.67	\$51.48
Tile & Marble Finisher	5/1/2025		\$35.31	\$16.99	\$52.30
Tile & Marble Finisher	5/1/2026		\$37.26	\$16.99	\$54.25
Tile Setter	5/1/2025		\$37.20	\$19.24	\$56.44
Tile Setter	5/1/2026		\$39.15	\$19.24	\$58.39
Truckdriver class 1(see notes)	5/1/2025		\$41.87	\$0.00	\$41.87
Truckdriver class 2 (see notes)	5/1/2025		\$41.94	\$0.00	\$41.94
Truckdriver class 3 (see notes)	5/1/2025		\$42.43	\$0.00	\$42.43
Window Film / Tint Installer	6/1/2019		\$24.52	\$12.08	\$36.60
Window Film / Tint Installer	6/1/2024		\$26.37	\$14.83	\$41.20

**BUREAU OF LABOR LAW COMPLIANCE  
PREVAILING WAGES PROJECT RATES**

<b>Project: 26-00472 - Heavy/Highway</b>	<b>Effective Date</b>	<b>Expiration Date</b>	<b>Hourly Rate</b>	<b>Fringe Benefits</b>	<b>Total</b>
Carpenter	5/1/2025		\$36.87	\$20.49	\$57.36
Carpenter	5/1/2026		\$37.63	\$21.18	\$58.81
Carpenter Welder	5/1/2025		\$37.62	\$20.49	\$58.11
Carpenter Welder	5/1/2026		\$38.38	\$21.18	\$59.56
Carpenters - Piledriver/Welder	1/1/2025		\$37.62	\$20.49	\$58.11
Carpenters - Piledriver/Welder	1/1/2026		\$38.38	\$21.18	\$59.56
Cement Finishers	5/1/2016		\$26.40	\$22.48	\$48.88
Electric Lineman	6/3/2024		\$52.80	\$30.61	\$83.41
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	7/1/2024		\$37.26	\$32.63	\$69.89
Laborers (Class 01 - See notes)	5/1/2024		\$25.61	\$19.49	\$45.10
Laborers (Class 01 - See notes)	5/1/2025		\$26.61	\$19.99	\$46.60
Laborers (Class 02 - See notes)	5/1/2024		\$32.23	\$19.49	\$51.72
Laborers (Class 02 - See notes)	5/1/2025		\$33.23	\$19.99	\$53.22
Laborers (Class 03 - See notes)	5/1/2024		\$29.22	\$19.49	\$48.71
Laborers (Class 03 - See notes)	5/1/2025		\$30.22	\$19.99	\$50.21
Laborers (Class 04 - See notes)	5/1/2024		\$29.57	\$19.49	\$49.06
Laborers (Class 04 - See notes)	5/1/2025		\$30.57	\$19.99	\$50.56
Laborers (Class 05 - See notes)	5/1/2024		\$30.24	\$19.49	\$49.73
Laborers (Class 05 - See notes)	5/1/2025		\$31.24	\$19.99	\$51.23
Laborers (Class 06 - See notes)	5/1/2024		\$29.66	\$19.49	\$49.15
Laborers (Class 06 - See notes)	5/1/2025		\$30.66	\$19.99	\$50.65
Laborers (Class 07 - See notes)	5/1/2024		\$29.95	\$19.49	\$49.44
Laborers (Class 07 - See notes)	5/1/2025		\$30.95	\$19.99	\$50.94
Laborers (Class 08 - See notes)	5/1/2024		\$30.43	\$19.49	\$49.92
Laborers (Class 08 - See notes)	5/1/2025		\$31.43	\$19.99	\$51.42
Millwright	6/1/2025		\$45.46	\$23.33	\$68.79
Millwright	6/1/2026		\$47.52	\$23.33	\$70.85
Operators (Heavy, Class 01 - See Notes)	5/1/2024		\$42.30	\$29.66	\$71.96
Operators (Heavy, Class 01 - See Notes)	5/1/2025		\$43.46	\$30.50	\$73.96
Operators (Heavy, Class 01 - See Notes)	5/1/2026		\$44.61	\$31.35	\$75.96
Operators (Heavy, Class 01A - See Notes)	5/1/2024		\$44.55	\$30.32	\$74.87
Operators (Heavy, Class 01A - See Notes)	5/1/2025		\$45.71	\$31.16	\$76.87
Operators (Heavy, Class 01A - See Notes)	5/1/2026		\$46.86	\$32.01	\$78.87
Operators (Heavy, Class 02 - See Notes)	5/1/2024		\$42.02	\$29.57	\$71.59
Operators (Heavy, Class 02 - See Notes)	5/1/2025		\$43.18	\$30.41	\$73.59
Operators (Heavy, Class 02 - See Notes)	5/1/2026		\$44.34	\$31.25	\$75.59
Operators (Heavy, Class 02A - See Notes)	5/1/2024		\$44.27	\$30.24	\$74.51
Operators (Heavy, Class 02A - See Notes)	5/1/2025		\$45.43	\$31.08	\$76.51
Operators (Heavy, Class 02A - See Notes)	5/1/2026		\$46.59	\$31.92	\$78.51
Operators (Heavy, Class 03 - See Notes)	5/1/2024		\$39.11	\$28.70	\$67.81
Operators (Heavy, Class 03 - See Notes)	5/1/2025		\$40.26	\$29.55	\$69.81
Operators (Heavy, Class 03 - See Notes)	5/1/2026		\$41.43	\$30.38	\$71.81
Operators (Heavy, Class 04 - See Notes)	5/1/2024		\$37.96	\$28.38	\$66.34
Operators (Heavy, Class 04 - See Notes)	5/1/2025		\$39.12	\$29.22	\$68.34

**BUREAU OF LABOR LAW COMPLIANCE  
PREVAILING WAGES PROJECT RATES**

<b>Project: 26-00472 - Heavy/Highway</b>	<b>Effective Date</b>	<b>Expiration Date</b>	<b>Hourly Rate</b>	<b>Fringe Benefits</b>	<b>Total</b>
Operators (Heavy, Class 04 - See Notes)	5/1/2026		\$40.28	\$30.06	\$70.34
Operators (Heavy, Class 05 - See Notes)	5/1/2024		\$37.51	\$28.25	\$65.76
Operators (Heavy, Class 05 - See Notes)	5/1/2025		\$38.67	\$29.09	\$67.76
Operators (Heavy, Class 05 - See Notes)	5/1/2026		\$39.83	\$29.93	\$69.76
Operators (Heavy, Class 06 - See Notes)	5/1/2024		\$36.64	\$27.98	\$64.62
Operators (Heavy, Class 06 - See Notes)	5/1/2025		\$37.80	\$28.82	\$66.62
Operators (Heavy, Class 06 - See Notes)	5/1/2026		\$38.96	\$29.66	\$68.62
Operators (Heavy, Class 07A - See Notes)	5/1/2024		\$51.39	\$33.77	\$85.16
Operators (Heavy, Class 07A - See Notes)	5/1/2025		\$52.85	\$34.71	\$87.56
Operators (Heavy, Class 07A - See Notes)	5/1/2026		\$54.32	\$35.64	\$89.96
Operators (Heavy, Class 07B - See Notes)	5/1/2024		\$51.04	\$33.67	\$84.71
Operators (Heavy, Class 07B - See Notes)	5/1/2025		\$52.51	\$34.60	\$87.11
Operators (Heavy, Class 07B - See Notes)	5/1/2026		\$53.97	\$35.54	\$89.51
Operators (Highway, Class 01 - See Notes)	5/1/2024		\$41.41	\$29.39	\$70.80
Operators (Highway, Class 01 - See Notes)	5/1/2025		\$42.56	\$30.24	\$72.80
Operators (Highway, Class 01 - See Notes)	5/1/2026		\$43.72	\$31.08	\$74.80
Operators (Highway, Class 01a - See Notes)	5/1/2024		\$43.66	\$30.07	\$73.73
Operators (Highway, Class 01a - See Notes)	5/1/2025		\$44.81	\$30.92	\$75.73
Operators (Highway, Class 01a - See Notes)	5/1/2026		\$45.97	\$31.76	\$77.73
Operators (Highway, Class 02 - See Notes)	5/1/2024		\$40.24	\$29.04	\$69.28
Operators (Highway, Class 02 - See Notes)	5/1/2025		\$41.39	\$29.89	\$71.28
Operators (Highway, Class 02 - See Notes)	5/1/2026		\$42.55	\$30.73	\$73.28
Operators (Highway, Class 03 - See Notes)	5/1/2024		\$39.55	\$28.83	\$68.38
Operators (Highway, Class 03 - See Notes)	5/1/2025		\$40.70	\$29.68	\$70.38
Operators (Highway, Class 03 - See Notes)	5/1/2026		\$41.87	\$30.51	\$72.38
Operators (Highway, Class 04 - See Notes)	5/1/2024		\$39.10	\$28.70	\$67.80
Operators (Highway, Class 04 - See Notes)	5/1/2025		\$40.26	\$29.54	\$69.80
Operators (Highway, Class 04 - See Notes)	5/1/2026		\$41.41	\$30.39	\$71.80
Operators (Highway, Class 05 - See Notes)	5/1/2024		\$38.58	\$28.56	\$67.14
Operators (Highway, Class 05 - See Notes)	5/1/2025		\$39.73	\$29.41	\$69.14
Operators (Highway, Class 05 - See Notes)	5/1/2026		\$40.89	\$30.25	\$71.14
Operators (Highway, Class 06 - See Notes)	5/1/2024		\$41.64	\$29.46	\$71.10
Operators (Highway, Class 06 - See Notes)	5/1/2025		\$42.80	\$30.30	\$73.10
Operators (Highway, Class 06 - See Notes)	5/1/2026		\$43.95	\$31.15	\$75.10
Operators (Highway, Class 06/A - See Notes)	5/1/2024		\$43.89	\$30.12	\$74.01
Operators (Highway, Class 06/A - See Notes)	5/1/2025		\$45.05	\$30.96	\$76.01
Operators (Highway, Class 06/A - See Notes)	5/1/2026		\$46.21	\$31.80	\$78.01
Operators (Highway, Class 07/A - See Notes)	5/1/2024		\$50.32	\$33.45	\$83.77
Operators (Highway, Class 07/A - See Notes)	5/1/2025		\$51.79	\$34.38	\$86.17
Operators (Highway, Class 07/A - See Notes)	5/1/2026		\$53.25	\$35.32	\$88.57
Operators (Highway, Class 07/B - See Notes)	5/1/2024		\$48.91	\$33.03	\$81.94
Operators (Highway, Class 07/B - See Notes)	5/1/2025		\$50.37	\$33.97	\$84.34
Operators (Highway, Class 07/B - See Notes)	5/1/2026		\$51.84	\$34.90	\$86.74
Painters Class 1 (see notes)	5/1/2018		\$23.92	\$14.37	\$38.29

**BUREAU OF LABOR LAW COMPLIANCE  
PREVAILING WAGES PROJECT RATES**

<b>Project: 26-00472 - Heavy/Highway</b>	<b>Effective Date</b>	<b>Expiration Date</b>	<b>Hourly Rate</b>	<b>Fringe Benefits</b>	<b>Total</b>
Painters - Line Stripping	12/1/2024		\$44.12	\$27.91	\$72.03
Painters - Line Stripping	12/1/2025		\$45.12	\$29.41	\$74.53
Painters Class 2 (see notes)	5/1/2025		\$30.55	\$18.36	\$48.91
Painters Class 3 (see notes)	5/1/2025		\$36.30	\$18.36	\$54.66
Pile Driver Divers (Building, Heavy, Highway)	1/1/2022		\$56.40	\$20.50	\$76.90
Piledrivers	5/1/2025		\$36.87	\$20.49	\$57.36
Piledrivers	5/1/2026		\$37.63	\$21.18	\$58.81
Steamfitters (Heavy and Highway - Gas Distribution)	5/1/2022		\$48.43	\$40.28	\$88.71
Truckdriver class 1(see notes)	5/1/2025		\$41.87	\$0.00	\$41.87
Truckdriver class 2 (see notes)	5/1/2025		\$41.94	\$0.00	\$41.94
Truckdriver class 3 (see notes)	5/1/2025		\$42.43	\$0.00	\$42.43

**SECTION 011001 – PA SITES KEY COMPLIANCE GUIDELINES**

Compliance with **all** PA SITES requirements, including the key items in these guidelines, will be monitored frequently throughout your phase of the project and will be reviewed once more during the legislatively mandated closeout audit.

This project is funded in part by a Commonwealth of Pennsylvania PA SITES grant and, as such, is subject to Pennsylvania Prevailing Wage Rates, payment and performance bonds equal to 100% of the contract value, and insurance certificates that include the Commonwealth of PA as additionally insured.

**Portions of the PA SITES Agreement that should be reviewed and understood by bidders:**

- **Liability Insurance**
- **Other Liability Requirements**
- **Nondiscrimination / Sexual Harassment**
- **Contractor Responsibility**
- **Americans with Disabilities Act**
- **Worker Protection and Investment**
- **Compliance with Anti-Pollution Regulations**
- **Compliance with the Prohibition of Illegal Alien Labor on Assisted Projects Act**

End of Section 011001

Contract No: C000094392

**PENNSYLVANIA STRATEGIC INVESTMENTS TO ENHANCE SITES (PA SITES) PROGRAM  
GRANT CONTRACT**

This contract is between the Commonwealth of Pennsylvania ("Commonwealth"), acting through the Department of Community and Economic Development ("Grantor"), and

**REC FS LLC  
230 S Sporting Hill Rd Ste 100  
Mechanicsburg PA 17050-3212**

("Grantee").

Under Section 1808-A of Article XVIII-A of the Act of July 11, 2024 (P.L. 550, No. 54), known as the Fiscal Code, Grantor is authorized to award grants to eligible applicants for eligible projects to develop competitive sites for businesses to relocate or expand within the Commonwealth.

The parties, intending to be legally bound, agree as follows:

**ARTICLE I  
AMOUNT OF THE CONTRACT**

Subject to the terms of this Contract, the Grantor makes available to the Grantee out of funds appropriated a grant in the sum of SIX MILLION, ONE HUNDRED THIRTY SIX THOUSAND, SIX HUNDRED NINETY EIGHT DOLLARS (\$6,136,698.00) AND NO CENTS ---- or such portion as may be required by the Grantee and authorized by the Grantor, subject to the condition that it must be used by the Grantee to carry out the activities described in the application submitted by the Grantee and as approved by the Grantor, and which is incorporated by reference. In addition, this Contract is subject to Appendix A, Commitment Letter, and Appendix B, Special Conditions.

**ARTICLE II  
EFFECTIVE DATES**

The term of this contract commences on the Effective Date (as defined below) and ends on JUNE 30, 2028, subject to the other provisions of this contract.

The Effective Date is the date the fully executed Contract is sent to the Grantee. A fully executed contract is one that has been signed by the Grantee and by the Grantor and contains all approvals required by Commonwealth contracting procedures.

This contract is not binding in any way, nor will the Commonwealth be bound, until this document has been fully executed and sent to the Grantee. Any cost incurred by the Grantee prior to the contract becoming effective are incurred at the Grantee's risk.

**ARTICLE III  
PAYMENT PROVISIONS AND FISCAL RESPONSIBILITIES**

(a) The Grantor shall pay the Grantee for eligible project costs incurred under this contract between MAY 6, 2025 and JUNE 30, 2028 ("Contract Activity Period") as follows:

- (1) Subject to the availability of state funds and other terms of this contract, the Grantor shall reimburse the Grantee based upon the Grantor's determination of the Grantee's needs and in accordance with the proposed budget as set forth in Appendix B.

The Grantor may pay the Grantee for eligible project costs at intervals to be determined by the Grantor. Neither the Commonwealth nor the Grantor is liable for any expenditure exceeding the amount stated in this contract or amendments hereto.

The Grantor shall have the right to disapprove any expenditure made by the Grantee which is not in accordance with the terms of this contract and the Grantor may adjust payment to the Grantee accordingly.

- (2) Initial payments to the Grantee to perform the activities under this contract and all other payments shall be made on invoice forms and in accordance with instructions provided by the Grantor.

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- (3) To receive reimbursement under this Contract, the Grantee shall submit requests for payment based on the Grantee's estimate of expenditures, at intervals as determined by the Grantee to meet disbursement needs. Unless otherwise instructed by the Grantor, this estimate may not exceed the current disbursement needs of the Grantee in order that the amount of cash on hand and available to the Grantee is as close to daily needs as administratively feasible. The Grantor may, however, set a minimum payment level or amount for each request for payment.
- (b) Conditions for Payment:
    - (1) Grant payments under this Contract are conditioned upon the completion of any Special Conditions described in Appendix A or otherwise incorporated into this Contract.
    - (2) Costs allocated to program administration are limited to those described in the project budget or as otherwise revised in accordance with the amendment provisions of this Contract described in the Article entitled Amendments and Modifications.
    - (3) Payment by the Commonwealth and all other terms of this Contract are subject to the effect of any federal deficit reduction legislation upon the availability of funds awarded by this Contract.
  - (c) The Grantee shall charge to the project account all approved costs of the project. All approved costs, including activities contributed by the Grantee or others and charged to the project account, must be supported by properly executed vouchers or other records indicating in proper detail the nature and propriety of the charge.

(d) Requirement to Invest Grant Funds:

The funds paid to the Grantee in accordance with this Contract must be deposited by the Grantee in a bank or other financial institution in a separate and special expenditures account, to be maintained within its existing accounting system or set up independently; identifiable by reference to the Grantor, proposal name or contract number. The account must be insured by the FDIC.

Subject to applicable rules and regulations and to the provisions of this article, the funds must be continuously invested and reinvested and deposited and redeposited by the Grantee, in accordance with applicable state laws, with a view toward maximizing yield and minimizing the instances of uninvested funds.

Interest or any other income or accumulations earned on funds awarded pursuant to this Contract and totaling more than \$500.00 over the Contract Activity Period must be repaid to the Grantor by means of a check made payable to the Commonwealth of Pennsylvania and submitted simultaneously with the Grantee's Project Audit or Closeout Report.

(e) Conditions for Repayment of Grant Funds:

(1) Misuse or Failure to Use Funds.

- (A) The Grantee shall use the funds granted under this agreement, or as much as may be necessary, to carry out the project in accordance with the terms of this Contract. If after all or any part of the funds has been paid to the Grantee and the Grantee fails to carry out the activities, the Grantee shall repay the Grantor the funds previously paid.
- (B) If the Grantee does not use all or a portion of the funds paid under the terms of this Contract in accordance with this Contract, the Grantee shall be liable to the Grantor for the amount of funds unused or improperly used and shall return those funds to the Grantor.

In the event the Grantor is entitled to repayment of all or a portion of the funds granted under this agreement, the repayment must include all interest, income, accumulations and the monetary equivalent of any appreciation in value of any property (real, personal or mixed) purchased with the funds granted them. Repayment must be in the form and manner directed by the Grantor.

(2) Violation of the Prohibition of Illegal Alien Labor on Assisted Projects Act.

If the Grantee:

- (A) knowingly employs, or knowingly permits any of its subcontractors to knowingly employ, the labor services of an illegal alien on activities funded in whole or in part by grants or loans issued by an executive agency of the Commonwealth of Pennsylvania; and
- (B) the Grantee or any of its subcontractors are sentenced under Federal law for an offense involving knowing use of labor by an illegal alien on activities funded in whole or in part by grants or loans issued by an executive agency of the Commonwealth of Pennsylvania,

the Grantee shall repay to the Grantor all grant funds received by the Grantee from the Grantor pursuant to this Contract. Repayment must be in the form and manner directed by the Grantor.

**ARTICLE IV  
BONDING, INSURANCE AND TAX LIABILITY REQUIREMENTS**

(a) Fidelity Bonding:

Unless otherwise authorized by the Grantor, the Grantee shall procure fidelity bonding for anyone authorized to sign checks, certify vouchers and/or handle or control funds, checks, securities or property. If a check signing machine is used which is not operated under the direct supervision of the authorized signer or counter-signer, the machine operator must be bonded in the same amount as the check-signer. The amount of the bond required must be adequate to insure the security of all funds received under this Contract as determined by the Grantor and the bond must be maintained until the Contract is closed out by the Grantor.

(b) Liability Insurance:

The Grantee's standard liability insurance policies shall protect, or shall be endorsed to protect, the Commonwealth from claims of bodily injury and/or property damage arising out of any activities performed by the Grantee or its employees or agents under this Contract, including business and non-business invitees, and their property and all other property sustaining damage as a direct or indirect result of the execution of this project when validly present on Grantee's premises whether or not actually engaged in the project at the time the claim inures. The policies must not include any provision limiting then existing sovereign immunity of the Commonwealth or of its agents or employees. Upon request, the Grantee shall furnish to the Grantor proof of insurance as required by this paragraph.

(c) Other Liability Requirements:

The Grantee shall provide workers' compensation insurance where it is required and shall accept full responsibility for the payment of premiums for workers' compensation and social security and any other taxes or payroll deductions required by law for its employees who are performing activities specified by this Contract.

**ARTICLE V  
COMPLIANCE WITH APPLICABLE STATUTES AND REGULATIONS**

All activities authorized by this Contract must be performed in accordance with applicable statutes, regulations, conditions, directives, guidelines and any additional requirements as may be attached as Appendix C or are otherwise provided by the Grantor. The Grantee acknowledges that this Contract is subject to all requirements described in this provision and further agrees that it will comply with future requirements determined by the Grantor as necessary.

(a) Compliance with State Statutes and Regulations:

The Grantee shall comply with all applicable state statutes and regulations.

(b) Commonwealth Standard Terms and Conditions:

(1) Definitions. Capitalized terms used in these Commonwealth standard terms and conditions that are not otherwise defined in these provisions have the meanings specified in the agreement to which they are attached.

(2) Indemnification. The Grantee shall indemnify and defend the Commonwealth against all third-party claims, suits, demands, losses, damages, costs, and expenses, including without limitation, litigation expenses, attorneys' fees, and liabilities, arising out of or in connection with any activities performed by the Grantee or its employees and agents pursuant to this agreement, as determined by the Commonwealth in its sole discretion.

(3) Nondiscrimination/Sexual Harassment.

(A) Representations. The Grantee represents that it is presently in compliance with and will remain in compliance with all applicable federal, state, and local laws, regulations, and policies relating to nondiscrimination and sexual harassment for the term of the agreement. The Grantee shall, upon request and within the time periods requested by the Commonwealth, furnish all necessary employment documents and records, including EEO-1 reports, and permit access to its books, records, and accounts by the Commonwealth for the purpose of ascertaining compliance with provisions of this Nondiscrimination/Sexual Harassment Clause.

(B) Nondiscrimination/Sexual Harassment Obligations. The Grantee shall not:

(i) in any manner discriminate in the hiring of any employee(s) for the performance of the activities required under this agreement or any subgrant agreement, contract, or subcontract, by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the Pennsylvania Human Relations Act ("PHRA") and applicable federal laws, against any citizen of this Commonwealth who is qualified and available to perform the work to which the employment relates.

- (ii) in any manner discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the PHRA and applicable federal laws, against or intimidate any of its employees.
  - (iii) in any manner discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the PHRA and applicable federal laws, in the provision of services under this agreement or any subgrant agreement, contract, or subcontract.
  - (iv) in any manner discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of PHRA and applicable federal laws, against any subgrantee, contractor, subcontractor, or supplier who is qualified to perform the work to which this agreement relates.
  - (v) in any manner discriminate against employees by reason of participation in or decision to refrain from participating in labor activities protected under the Public Employee Relations Act, Pennsylvania Labor Relations Act, or National Labor Relations Act, as applicable, and to the extent determined by entities charged with the Acts' enforcement and shall comply with any provision of law establishing organizations as employees' exclusive representatives.
- (C) Establishment of Grantee Policy. The Grantee shall establish and maintain a written nondiscrimination and sexual harassment policy that complies with the applicable law and these Nondiscrimination/Sexual Harassment provisions and shall inform its employees in writing of the policy. The policy must contain a provision that states that sexual harassment will not be tolerated and employees who practice it will be disciplined. For the entire period of this agreement, the Grantee shall: (1) post its written nondiscrimination and sexual harassment policy or these Nondiscrimination/Sexual Harassment provisions conspicuously in easily accessible and well-lighted places customarily frequented by employees at or near where the grant activities are performed; or (2) provide electronic notice of the policy or this clause to its employees not less than annually.
- (D) Notification of Violations. The Grantee's obligations pursuant to these provisions are ongoing from the effective date and through the termination date of the agreement. Accordingly, the Grantee shall notify the Commonwealth if, at any time during the term of this agreement, it becomes aware of any actions or occurrences that would result in violation of these provisions.

- (E) Cancellation or Termination of Agreement. The Commonwealth may cancel or terminate this agreement and all money due or to become due under this agreement may be forfeited for a violation of the terms and conditions of these Nondiscrimination/Sexual Harassment provisions. In addition, the granting agency may proceed with debarment or suspension and may place the Grantee in the Contractor Responsibility File.
- (F) Subgrant Agreements, Contracts, and Subcontracts. The Grantee shall include these Nondiscrimination/Sexual Harassment provisions in its subgrant agreements, contracts, and subcontracts with all subgrantees, contractors, and subcontractors providing goods or services under this agreement. The incorporation of these provisions in the Grantor's subgrants, contracts, or subcontracts does not create privity of contract between the Commonwealth and any subgrantee, contractor, or subcontractor, and no third-party beneficiaries are created by those provisions. If the Grantee becomes aware of a subgrantee's, contractor's, or subcontractor's violation of these provisions, the Grantee shall use its best efforts to ensure the subgrantee's, contractor's, or subcontractor's compliance with these provisions.

(4) Grantee Integrity.

- (A) Definitions. For purposes of these Grantee Integrity Provisions, the following definitions apply:
  - (i) "Affiliate" means two or more entities where (a) a parent entity owns more than 50% of the voting stock of each of the entities; (b) a common shareholder or group of shareholders owns more than 50% of the voting stock of each of the entities; or (c) the entities have a common proprietor or general partner.
  - (ii) "Grantee" means the individual or entity, that has entered into this agreement with the Commonwealth.
  - (iii) "Grantee Related Parties" means any Affiliates of the Grantee and the Grantee's executive officers, Pennsylvania officers and directors, or owners of five percent or more interest in the Grantee.
  - (iv) "Financial Interest" means ownership of more than a five percent interest in any business or holding a position as an officer, director, trustee, partner, employee, or holding any position of management.

- (v) "Gratuity" means tendering, giving, or providing anything of more than nominal monetary value including, but not limited to, cash, travel, entertainment, gifts, meals, lodging, loans, subscriptions, advances, deposits of money, services, employment, or contracts of any kind. The exceptions set forth in the Governor's Code of Conduct, Executive Order 1980-18, as may be amended, 4 Pa. Code §7.153(b), apply.
  - (vi) "Non-Solicitation Award Process" means a method of awarding grants based on predetermined criteria, without the solicitation of grant applications.
- (B) Representations and Warranties.
- (i) Grantee Representation and Warranties. The Grantee represents, to the best of its knowledge and belief, and warrants that within the last five years neither the Grantee nor Grantee Related Parties have:
    - (1) been indicted or convicted of a crime involving moral turpitude or business honesty or integrity in any jurisdiction;
    - (2) been suspended, debarred, or otherwise disqualified from entering into any contract with any governmental agency;
    - (3) had any business license or professional license suspended or revoked;
    - (4) had any sanction or finding of fact imposed as a result of a judicial or administrative proceeding related to fraud, extortion, bribery, bid rigging, embezzlement, misrepresentation or anti-trust; and
    - (5) been, and are not currently, the subject of a criminal investigation by any federal, state, or local prosecuting or investigative agency or civil anti-trust investigation by any federal, state, or local prosecuting or investigative agency.
  - (ii) Contractor Explanation. If the Grantee cannot make the representations and warranties set forth above at the time of its submission of its grant application or if the agreement is awarded pursuant to a Non-Solicitation Award Process at the

time of the execution of the agreement, the Grantee shall submit a written explanation outlining the reasons why it cannot make those representations and warranties. The Commonwealth may, based on its evaluation of the explanation provided, determine whether it is in the Commonwealth's best interest to execute the agreement.

- (iii) Further Representations. By submitting any bills, invoices, or requests for payment pursuant to the agreement, the Grantee further represents that it has not violated any of these Grantee Integrity Provisions during the term of the agreement.
  - (iv) Notice. The Grantee shall immediately notify the Commonwealth, in writing, if at any time during the term of the agreement it becomes aware of any event that would cause the Contractor's certification or explanation to change. The Grantee acknowledges that the Commonwealth may, in its sole discretion, terminate the agreement for cause if it learns that any of the certifications made in these Grantee Integrity Provisions are currently false or misleading due to intervening factual circumstances or were false or misleading or should have been known to be false or misleading when entering into the agreement.
- (C) Grantee Responsibilities. During the term of this agreement, the Grantee shall:
- (i) maintain the highest standards of honesty and integrity.
  - (ii) take no action in violation of any applicable laws, regulations, or other requirements applicable to the Grantee that govern Commonwealth contracting or grant administration.
  - (iii) establish and implement a written business integrity policy that includes, at a minimum, the requirements of these Grantee Integrity Provisions as they relate to the Grantee's activity with the Commonwealth and Commonwealth employees and ensure that its employees comply with the policy.
  - (iv) not accept, agree to give, offer, confer, agree to confer, or promise to confer, directly or indirectly, any gratuity or pecuniary benefit to any person, or to influence or attempt to influence any person in violation of any federal or state law, regulation, executive order, statement of policy,

management directive, or bulletin applicable to the award of grants or the administration of this agreement.

- (v) not have a financial interest in any other subgrantee, contractor, subcontractor, or supplier providing services, labor, or material under this agreement, unless the financial interest is disclosed to the Commonwealth in writing and the Commonwealth consents to Grantee's financial interest. The Grantee must disclose the financial interest to the Commonwealth at the time of submission of its grant application, or if a Non-Solicitation Award Process is used, no later than the date the Grantee signs the agreement. The Commonwealth shall be deemed to have consented if the required disclosure is received and all of the required Commonwealth signatures are affixed.
  - (vi) comply with the requirements of the Lobbying Disclosure Act (65 Pa.C.S. § 13A01 et seq.) regardless of the method of award.
  - (vii) comply with the requirements of Section 1641 of the Pennsylvania Election Code (25 P.S. § 3260a) if this agreement was awarded pursuant to a Non-Solicitation Award Process.
  - (viii) immediately notify the Commonwealth or the Office of the State Inspector General, in writing, when the Grantee has reason to believe that any breach of ethical standards as set forth in law, the Governor's Code of Conduct, or these Grantee Integrity Provisions has occurred or may occur, including, but not limited to, contact by a Commonwealth officer or employee, which, if acted upon, would violate the ethical standards.
- (D) Investigations. If a State Inspector General investigation is initiated, the Grantee shall:
- (i) reimburse the Commonwealth for the reasonable costs of investigation incurred by the Office of the State Inspector General for investigations of the Grantee's compliance with the terms of this or any other agreement between the Grantee and the Commonwealth that results in the suspension or debarment of the Grantee. The Grantee shall not be responsible for investigative costs for investigations that do not result in the Grantee's suspension or debarment.

- (ii) cooperate with the Office of the State Inspector General in its investigation of any alleged Commonwealth agency or employee breach of ethical standards and any alleged Grantee non-compliance with these Grantee Integrity Provisions and make identified Grantee employees and volunteers available for interviews at reasonable times and places.
      - (iii) upon the inquiry or request of an Inspector General, provide, or if appropriate, make promptly available for inspection or copying, any information of any type or form deemed relevant by the Office of the State Inspector General to Grantee's integrity and compliance with these provisions. This information may include, but is not be limited to, the Grantee's business or financial records, documents or files of any type or form that refer to or concern this agreement.
  - (E) Termination. For violation of any of these Grantee Integrity Provisions, the Commonwealth may terminate this agreement and any other contract with the Grantee, claim liquidated damages in an amount equal to the value of anything received in breach of these Grantee Integrity provisions, claim damages for all additional costs and expenses incurred in obtaining another grantee to complete performance under this agreement, and debar and suspend the Grantee from doing business with the Commonwealth. These rights and remedies are cumulative, and the use or non-use of any one does not preclude the use of all or any other. These rights and remedies are in addition to those the Commonwealth may have under law, statute, regulation, or otherwise.
  - (F) Subcontracts. The Grantee shall include these Grantee Integrity Provisions in its subgrant agreements, contracts, and subcontracts with all subgrantees, contractors, and subcontractors providing goods or services under this agreement. The incorporation of this provision in the Grantee's subgrant agreements, contracts, and subcontracts shall not create privity of contract between the Commonwealth and any subgrantee, contractor, or subcontractor, and no third-party beneficiaries are created by the inclusion of these provisions. If the Grantee becomes aware of a subgrantee's, contractor's, or subcontractor's violation of these provision, the Grantee shall use its best efforts to ensure their compliance with these provisions.
- (5) Contractor Responsibility.
- (A) Definition. For the purpose of these provisions, the term "Contractor" means as any person, including, but not limited to, a bidder, offeror,

loan recipient, grantee or lessor, who has furnished or performed or seeks to furnish or perform, goods, supplies, services, leased space, construction or other activity, under a contract, grant, lease, purchase order or reimbursement agreement with the Commonwealth. The term also includes a permittee, licensee, or any agency, political subdivision, instrumentality, public authority, or other public entity in the Commonwealth.

- (B) **Contractor Representations.**
- (i) The Contractor represents for itself and its subgrantees, contractors, and subcontractors required to be disclosed or approved by the Commonwealth, that as of the date of its execution of this agreement, that neither the Contractor, nor any of its subgrantees, contractors, and subcontractors, are under suspension or debarment by the Commonwealth or any governmental entity, instrumentality, or authority and, if the Contractor cannot make this representation, the Contractor shall submit, along with the agreement, a written explanation of why the certification cannot be made.
  - (ii) The Contractor represents that, as of the date of its execution of this agreement, it has no tax liabilities or other Commonwealth obligations, or has filed a timely administrative or judicial appeal, if any liabilities or obligations exist, or is subject to a duly approved deferred payment plan if any liabilities exist.
- (C) **Notification.** The Contractor shall notify the Commonwealth if, at any time during the term of the agreement, it becomes delinquent in the payment of taxes, or other Commonwealth obligations, or if it or, to the best of its knowledge, any of its subgrantees, contractors, or subcontractors are suspended or debarred by the Commonwealth, the federal government, or any other state or governmental entity. The Contractor shall provide this notification within 15 days of the date of suspension or debarment.
- (D) **Default.** The Contractor's failure to notify the Commonwealth of its suspension or debarment by the Commonwealth, any other state, or the federal government constitutes an event of default of the agreement with the Commonwealth.
- (E) **Reimbursement.** The Contractor shall reimburse the Commonwealth for the reasonable costs of investigation incurred by the Office of State Inspector General for investigations of the Contractor's compliance with the terms of this agreement or any other agreement

between the Contractor and the Commonwealth that results in the suspension or debarment of the Contractor. These costs include, but are not limited to, salaries of investigators, including overtime; travel and lodging expenses; and expert witness and documentary fees. The Contractor shall not be responsible for investigative costs for investigations that do not result in the Contractor's suspension or debarment.

- (F) Suspension and Debarment List. The Contractor may obtain a current list of suspended and debarred Commonwealth contractors by visiting the eMarketplace website at <http://www.emarketplace.state.pa.us> and clicking the Debarment list tab.

(6) Americans With Disabilities Act.

- (A) No Exclusion. Pursuant to the Americans with Disabilities Act, 42 U.S. Code § 12101, et seq., no qualified individual with a disability may, on the basis of the disability, be excluded from participation in this contract or from activities provided for under this agreement.
- (B) Compliance. For all goods and services provided pursuant to this agreement, the Grantee shall comply with Title II of the Americans with Disabilities Act, the "General Prohibitions Against Discrimination" set forth in 28 C. F. R. § 35.130, and all other regulations promulgated under Title II of the Americans with Disabilities Act that apply to state and local governments.
- (C) Indemnification. The Grantee shall indemnify the Commonwealth against all third-party claims, suits, demands, losses, damages, costs, and expenses, including without limitation, litigation expenses, attorneys' fees, and liabilities, arising out of or in connection with the Grantee's failure or its employee's or agent's failure to comply with the provisions of paragraph a, as determined by the Commonwealth in its sole discretion.

(7) Applicable Law and Forum.

This contract is governed by and must be interpreted and enforced in accordance with the laws of the Commonwealth of Pennsylvania (without regard to any conflict of laws provisions) and the decisions of the Pennsylvania courts. The Contractor consents to the jurisdiction of any court of the Commonwealth of Pennsylvania and any federal courts in Pennsylvania and waives any claim or defense that such forum is not convenient or proper. Any Pennsylvania court or tribunal has in personam jurisdiction over the Contractor, and the Contractor consents to service of

process in any manner authorized by Pennsylvania law. This provision may not be interpreted as a waiver or limitation of the Commonwealth's rights or defenses.

(8) Right to Know Law.

(A) **Applicability.** The Pennsylvania Right-to-Know Law, 65 P.S. §§ 67.101-3104, ("RTKL") applies to this contract.

(B) **Grantee Assistance.** If the Commonwealth needs the Grantee's assistance in any matter arising out of the RTKL related to this contract, the Commonwealth shall notify the Grantee that it requires the Grantee's assistance, and the Grantee shall provide to the Commonwealth:

(i) access to, and copies of, any document or information in the Grantee's possession (Requested Information) arising out of this contract that the Commonwealth reasonably believes is a public record under the RTKL, within ten calendar days after receipt of written notification; and

(ii) any other assistance as the Commonwealth may reasonably request, in order to comply with the RTKL with respect to this contract.

(C) **Trade Secret or Confidential Proprietary Information.** If the Grantee considers the Requested Information to include a Trade Secret or Confidential Proprietary Information, as those terms are defined by the RTKL, or other information that the Contractor considers exempt from production under the RTKL, the Grantee shall notify the Commonwealth and provide, within seven calendar days of receipt of the written notice a written statement, signed by a representative of the Grantee, that explains why the requested material is exempt from public disclosure under the RTKL. If the Commonwealth determines that the Requested Information is clearly not exempt from disclosure, the Grantee shall provide the Requested Information to the Commonwealth within five business days of receipt of written notice of the Commonwealth's determination.

(D) **Reimbursement.**

(i) **Commonwealth Reimbursement.** If the Grantee fails to provide the Requested Information and the Commonwealth is ordered to produce the Requested Information, the Grantee shall reimburse the Commonwealth for any

damages, penalties, or costs that the Commonwealth may incur as a result of the Grantee's failure, including any statutory damages assessed against the Commonwealth.

- (ii) **Contractor Reimbursement.** The Commonwealth will reimburse the Grantee for any costs that the Grantee incurs as a direct result of complying with these provisions only to the extent allowed under the fee schedule established by the Office of Open Records or as otherwise provided by the RTKL.
  
- (E) **Challenges of Commonwealth Release.** The Grantee may file a legal challenge to any Commonwealth decision to release a record to the public with the Office of Open Records, or in the Pennsylvania Courts, however, the Grantee shall reimburse the Commonwealth for any legal expenses incurred by the Commonwealth as a result of the challenge, including any damages, penalties or costs that the Commonwealth may incur as a result of the Grantee's legal challenge, regardless of the outcome.
  
- (F) **Waiver.** As between the parties, the Grantee waives all rights or remedies that may be available to it as a result of the Commonwealth's disclosure of Requested Information pursuant to the RTKL.
  
- (G) **Survival.** The Grantee's obligations contained in this Section survive the termination or expiration of this contract.
  
- (9) **Offset.**

The Commonwealth may set off the amount of any state tax liability or other obligation of the Grantee, or its subsidiaries, owed to the Commonwealth against any payments due the Grantee under any contract between the Commonwealth and Grantee.

- (10) **Automated Clearing House (ACH) Payments.**
  - (A) **Payment Method.** The Commonwealth shall make payments to the Grantee through the Automated Clearing House (ACH). Within 10 days of the grant award, the Grantee must submit or must have submitted its ACH information within its user profile in the Commonwealth's Master Database. The Grantee may enroll to receive remittance information via electronic addenda and email (e-Remittance). ACH and e-Remittance information is available at the following:

<https://www.budget.pa.gov/Services/ForVendors/Pages/Direct-Deposit-and-e-Remittance.aspx>.

- (B) Unique Identifier. The Grantee must submit a unique invoice number with each invoice submitted. The Commonwealth shall list the Grantee's unique invoice number on its ACH remittance advice to enable the Grantee to properly apply the state agency's payment to the respective invoice or program.
- (C) ACH Information in the Commonwealth's Master Database. The Grantee shall ensure that the ACH information contained in Commonwealth's Master Database is accurate and complete. The Grantee's failure to maintain accurate and complete information may result in delays in payments.

(11) Worker Protection and Investment.

The Grantee shall comply with all applicable Pennsylvania state labor laws and worker safety laws including, but not limited to, the following:

- (A) Construction Workplace Misclassification Act;
- (B) Employment of Minors Child Labor Act;
- (C) Minimum Wage Act;
- (D) Prevailing Wage Act;
- (E) Equal Pay Law;
- (F) Employer to Pay Employment Medical Examination Fee Act;
- (G) Seasonal Farm Labor Act;
- (H) Wage Payment and Collection Law;
- (I) Industrial Homework Law;
- (J) Construction Industry Employee Verification Act;
- (K) Act 102: Prohibition on Excessive Overtime in Healthcare;

- (L) Apprenticeship and Training Act; and
- (M) Inspection of Employment Records Law.

(c) Reimbursement for Travel and Per Diem:

Reimbursement to the Grantee for any travel, lodging or meals under this Contract is at or below state rates, unless the Grantee has higher rates which have been approved by its officers/officials, and published prior to entering into contract negotiations with the Commonwealth. Documentation in support of travel and per diem is the same as required of state employees. Higher rates must be supported by a copy of the minutes or other official documents, and submitted to the Grantor.

(d) Compliance with Anti-Pollution Regulations:

The Grantee and its subcontractors agree that in the performance of their obligations under this Contract they shall minimize pollution and shall strictly comply with all applicable environmental laws and regulations.

(e) Compliance with the Prohibition of Illegal Alien Labor on Assisted Projects Act.

Pursuant to the Act of May 11, 2006 (P.L. 173, No. 43), known as the Prohibition of Illegal Alien Labor on Assisted Projects Act, the Grantee shall not knowingly employ, or knowingly permit any of its subcontractors to knowingly employ, the labor services of an illegal alien on activities funded in whole or in part by a grant or loan issued by an executive agency of the Commonwealth of Pennsylvania.

If the Grantee:

- (A) knowingly employs, or knowingly permits any of its subcontractors to knowingly employ, the labor services of an illegal alien on activities funded in whole or in part by grants or loans issued by an executive agency of the Commonwealth of Pennsylvania; and
- (B) the Grantee or any of its subcontractors are sentenced under Federal law for an offense involving knowing use of labor by an illegal alien on activities funded in whole or in part by grants or loans issued by an executive agency of the Commonwealth of Pennsylvania.

the Grantee shall:

- (A) repay to the Grantor all grant funds received by the Grantee from the Grantor pursuant to this Contract, and
- (B) be ineligible to apply for any Commonwealth grant or loan for a period of two years.

## **ARTICLE VI ASSIGNMENT, TRANSFER, COLLATERAL USE**

This Contract is binding upon and inures to the benefit of the Grantor, the Grantee, and their respective successors and assigns, except that the Grantee shall not assign or transfer its rights under this agreement without the prior written consent of the Grantor. Approval of an assignment does not establish any legal relationship between the Commonwealth or the Grantor and any other third party, and under no circumstances will the Commonwealth be held liable for any act or omission committed pursuant to an assignment.

## **ARTICLE VII INDEPENDENT CONTRACTOR**

Notwithstanding anything contained in this agreement to the contrary, the rights and duties granted to and assumed by the Grantee are those of an independent contractor only. Nothing contained in this agreement is construed as to create an employment, agency or partnership relationship between the Grantor and the Grantee.

## **ARTICLE VIII INTEREST OF PARTIES AND OTHERS**

No officer, member, employee, independent contractor or elected official of the Commonwealth and no member of its governing body who exercises any functions or responsibilities in the review or approval of activities being performed under this Contract shall participate in any decision relating to this Contract which affects his/her personal interest or the interest of any corporation, partnership or association in which he/she is directly or indirectly interested. Nor shall any officer, member, elected official or employee of the Commonwealth or any member of its governing body have any interest direct or indirect in this Contract or the Contract proceeds.

The Grantee covenants that the Grantee (including directors, officers, members and employees of the Grantee) presently has no interest and shall not acquire any interest, directly or indirectly, which would conflict in any manner or degree with the performance of activities required to be performed under this Contract. The Grantee further covenants that no person having any such interest shall be employed in the performance of activities for this Contract.

The Grantee represents and warrants that no elected state official, any employee of the Grantor, immediate family member (parent, spouse, domestic partner, child, brother or sister, daughter-in-law or son-in-law, or grandchild) of elected state officials or Grantor's employees, or any entity in which any above listed person shall have an ownership interest of 5% or greater, or in which entity any above listed person will have a controlling interest, has received or will receive a direct or indirect pecuniary benefit from or as a result of the full execution of this Contract. Further, the Grantee represents and warrants that it has not

and will not enter any contract for goods or services with the persons enumerated above using any funds made available to Grantee under this Contract.

## **ARTICLE IX SUBCONTRACTS**

The Grantee shall not execute or concur in any subcontract with any person or entity in any respect concerning the activities governed by this agreement without prior written approval of the Grantor. Prior written approval is not required for the purchase by the Grantee of articles, supplies, equipment and activities which are both necessary for and merely incidental to the performance of the work required under this Contract. The Grantee shall not execute or concur in any subcontract declared disapproved by the Grantor. A subcontractor will be automatically disapproved, without a declaration from the Grantor, if the subcontractor is currently or becomes suspended or debarred by the Commonwealth or the federal government. In any event, the Grantee shall be responsible for the quantity and quality of the performance of any of its subcontracts.

All subcontracts must contain provisions of nondiscrimination/sexual harassment as specified in the Article entitled Compliance with Applicable Statutes and Regulations, subsection (b)(3). In addition, all subcontracts involving the pass through of Contract funds to subrecipients must include the audit requirements contained in the Article entitled Contract Audit and Closeout Requirements. The Grantee shall ensure that all required audits of subcontractors are performed, and for resolving any findings contained in the audit reports. All costs deemed unallowable in the subcontract audit report are required to be returned to the Grantor, through the Grantee.

## **ARTICLE X BIDDING REQUIREMENTS**

If the Grantee is a political subdivision or other entity for which open and competitive bidding procedures have been established by law, the Grantee shall comply with those procedures if they are applicable to the project being funded with the grant funds. Otherwise, the Grantee shall comply with open and competitive bidding procedures in awarding all grants, subgrants, contracts, subcontracts or other agreements in excess of \$10,000.00 for construction, reconstruction, demolition, alteration and repair, for acquisition of machinery and equipment, or for engagement of the services of a professional consultant, when the grants, subgrants, contracts, subcontracts or other agreements are funded in whole or at least 50% in part with funds made available under this Contract. Open and competitive bidding procedures require the Grantee to obtain a minimum of three arm's length bids from vendors capable of providing the goods and performing the services requested. Arm's length transactions occur when the parties to the transaction are not related to one another and each party is acting in its own self-interest. The Grantor may require the Grantee to submit proof of compliance with these procedures, and failure to provide proof to the satisfaction of the Grantor may result in termination of the Contract and repayment of all or a portion of the funds available under this Contract. Upon written request and for good cause shown, the Grantor may, at the

Grantor's sole discretion, permit the Grantee to use an alternative procedure for solicitation of bids not inconsistent with law.

## **ARTICLE XI RECORDS**

The Grantee, using accepted procedures, shall maintain at its principal office or place of business complete and accurate records and accounts including documents, correspondence and other evidence pertaining to costs and expenses of this Contract, and reflecting all matters and activities covered by this Contract.

At any time during normal business hours and as often as the Grantor deems necessary, the Grantee shall make available for inspection by the Grantor, the Commonwealth Auditor General, the Commonwealth Attorney General, or the Comptroller General of the United States, or their duly authorized representative, all of its records with respect to all matters covered by this Contract and will permit the Grantor to audit, examine and make copies of the records.

All required records must be maintained by the Grantee for a period of five (5) years from the date of final audit or close out of this Contract by the Grantor, except in those cases where unresolved audit questions may require maintaining some or all records for a longer period. In that event, records must be maintained until all pending matters are resolved.

## **ARTICLE XII PROGRESS REPORTS**

The Grantee and its subcontractors shall furnish to the Grantor progress reports in the form and quantity as the Grantor may from time to time require, including, but not limited to, status reports of the project, project account statements, certificates, approvals, proposed budgets, invoices, copies of all contracts executed and proposed, employment placements, follow-up reports and all other information relative to the Contract as may be requested. The Grantor or its representative shall have the right to make reasonable inspections to monitor the Grantee's performance under this Contract.

If the Grantor determines that the Grantee or its subcontractor(s) has not furnished the reports as required by the Grantor, the Grantor, by giving written notice to the Grantee, may suspend payments under this Contract until the required reports are submitted.

### **ARTICLE XIII ACKNOWLEDGMENT OF COMMONWEALTH ASSISTANCE**

Any publication concerning a project financed by the Grantor will acknowledge Commonwealth financial assistance as follows:

"This Project was financed *[in part]* by a grant  
from the Commonwealth of Pennsylvania,  
[insert name of Grantor]."

Signs acknowledging the Commonwealth financial assistance or administrative participation will be erected in the project area as soon as possible after the effective date of this Contract. Acknowledgment of Commonwealth financial assistance may be combined with acknowledgment of other funding sources on project signs or in project publications.

### **ARTICLE XIV CONTRACT AUDIT AND CLOSEOUT REQUIREMENTS**

This Contract is funded entirely with state funds. If the amount of the Contract is less than \$100,000.00 the Grantee is exempt from all audit requirements and should refer to the procedures issued by the Grantor for instructions on closeout of this Contract.

If the amount of the Contract is \$100,000.00 or more, a final audit of the entire Contract (Project Audit) is required by the Grantor within 180 days after the termination of project activities but no later than 180 days after the Contract termination date. This audit is the responsibility of the Grantee. Audits performed under the Single Audit Act of 1984 will not be accepted in lieu of a Project Audit required under this Contract.

The Project Audit must be performed by a certified public accountant. The Grantee shall secure a qualified auditor, however, the Grantor reserves the right of selection or prior approval of the independent auditor to perform the audit. The Project Audit must be a financial audit conducted in accordance with the provisions of the U.S. General Accounting Office's Government Auditing Standards, current revision, and contain all the requirements detailed in the Grantor's "Procedures for Closeout of Contracts." Unless otherwise authorized by the Grantor, the audit must include those funds received under this Contract as well as any required private match funds and encompass the entire Contract Activity Period. Other grant periods may also be specified at the discretion of the Grantor and the Grantor reserves the right to designate additional compliance factors for state financial assistance programs.

The Grantor shall determine any overpayment or underpayment and any additional auditing deemed necessary and inform the Grantee of the settlement amount.

If the final audit of the Contract, as accepted by the Grantor or any duly authorized representative, discloses that the full amount of the Contract was not required to complete

the project or that funds were improperly used, then the funds unused, improperly used or expended but not required to complete the project, must be repaid to the Grantor with interest unless otherwise directed in writing by the Grantor.

The Commonwealth reserves the right for state agencies or their authorized representative to perform additional audits of a financial or performance nature if deemed necessary. Any additional audit work must rely on work already performed by the Grantee's auditor, and the costs for any additional work performed by the state or federal agencies must be borne by those agencies at no additional expense to the Grantee.

All terms of this Contract will remain in effect and be binding upon the parties to this agreement until a final audit is submitted and accepted by the Grantor.

None of the above provisions under this article exempts the Grantee from maintaining records of state financial assistance programs or providing upon request, access to such records to the Grantor or its authorized representatives.

The submission of a Single Audit in accordance with the Single Audit Act and related Circulars does not exempt the Grantee from complying with all Project Audit and any closeout procedures as may be issued by the Grantor, including, but not limited to, the submission of a financial statement of the project after termination of project activities.

For additional information on audit and general closeout requirements, the Grantee should refer to the procedures for closeout of contracts issued by the Grantor.

#### **ARTICLE XV TEMPORARY SUSPENSION OF THE CONTRACT**

Upon written notice and at any time during the period covered under this Contract, the Grantor may suspend payments and request suspension of all or any part of the Contract activities. The Grantor may give notice to suspend for the following reasons:

- (a) Violations of laws and regulations, audit exceptions, misuse of funds, failure to submit required reports or when responsible public officials or private citizens make allegations of mismanagement, malfeasance or criminal activity.
- (b) When, in the opinion of the Grantor, the activities cannot be continued in a manner as to adequately fulfill the intent of statute or regulations due to act of God, strike or disaster.

During the term of suspension, the Grantor and Grantee shall retain and hold available all funds previously approved for application to the activities. During this period all such funds held by the Grantee must be placed in an interest bearing program expenditures account. The Grantee shall not expend any of the funds during the period that the Contract is suspended except pursuant to order of a court of competent jurisdiction. The Grantee shall have the right to cure any default or other circumstance that is the basis for suspension of this Contract within a reasonable period of time.

This Contract is also conditioned upon complete performance by the Grantee of past agreements or contracts between the Grantor and the Grantee. Complete performance includes the Grantee's timely submission of the required final audit of past agreements or contracts to the Grantor. If the Grantor determines that there has been incomplete performance of past agreements or contracts by the Grantee, the Grantor, by giving written notice to the Grantee, shall suspend payments under this Contract until the Grantee has fulfilled its obligations under past agreements or contracts to the satisfaction of the Grantor. When the Grantee has fulfilled its obligation under past agreements or contracts to the Grantor's satisfaction, the Grantor shall resume payments under this Contract.

#### **ARTICLE XVI TERMINATION OF THE CONTRACT**

The Grantor may terminate this Contract at any time for its convenience or for any other reason if it determines that termination is in its best interests, or is otherwise appropriate, by giving written notice to the Grantee of the termination and specifying the termination effective date. Termination pursuant to this section shall not be applicable to funds that the Grantee is legally or contractually obligated to pay as a result of project activities entered into prior to the date that it receives written notice of termination. All grant monies not legally or contractually obligated, plus accrued interest, must be returned to the Grantor on or before the effective date of termination and all project records must be made available to the Grantor.

#### **ARTICLE XVII ENTIRE AGREEMENT**

This Contract, when signed by all the parties to this agreement, constitutes the full and complete understanding and agreement of the parties of its express terms as provided above.

No provision of this Contract is construed in any manner so as to create any rights in third parties not party to this Contract. It is interpreted solely to define specific duties and responsibilities between the Grantor and the Grantee and does not provide any basis for claims of any other individual, partnership, corporation, organization or municipal entity.

#### **ARTICLE XVIII AMENDMENTS AND MODIFICATIONS**

A properly executed Contract amendment is required to change the termination date of this Contract, to change the Contract Activity Period, to amend the grant amount or to make major changes in the approved program scope, objectives or methods. An amendment must be executed if there is a significant change in the activities to be conducted under this Contract. Other revisions to the Project Description or Budget may be made upon written approval from the Grantor after prior written request of the Grantee; provided, the request is made by the Grantee and approved by the Grantor prior to the termination or expiration of the Contract.

## **ARTICLE XIX SEVERABILITY**

Should any section or any part of any section of this Contract be rendered void, invalid or unenforceable by any court of law, for any reason, the determination will not render void, invalid, or unenforceable any other section or part of any section of this Contract.

## **ARTICLE XX CONSTRUCTION**

All of the terms of this Contract are expressly intended to be construed as covenants as well as conditions. The parties intend this statement of their agreement to constitute the complete, exclusive, and fully integrated statement of their agreement. As such, it is the sole expression of their agreement, and they are not bound by any other agreements of whatsoever kind or nature. The parties also intend that this agreement may not be supplemented, explained, or interpreted by any evidence of trade usage or course of dealing. In entering this agreement, the parties did not rely upon oral or written statements or representations not contained within the document itself.

## **ARTICLE XXI NONWAIVER OF REMEDIES**

No delay or failure on the part of the Grantor in exercising any right, power or privilege shall affect the right, power or privilege; nor shall any single or partial exercise thereof or any abandonment, waiver, or discontinuance of steps to enforce the right, power or privilege preclude any other or further exercise thereof, or the exercise of any other right, power or privilege. The rights and remedies of the Grantor are cumulative and concurrent and not exclusive of any rights or remedies which it might otherwise have. The Grantor shall have the right at all times to enforce the provisions of this Contract in accordance with the terms contained in the Contract regardless of any conduct or custom on the part of the Grantor in refraining from so doing at any time. The failure of the Grantor at any time to enforce its rights under this Contract, is not construed as having modified, waived, or created a custom in any way or manner contrary to specific provisions of this Contract.

[Remainder of page left intentionally blank.]

The parties, through their authorized representatives, have properly executed this Contract on the date of the last Commonwealth signature below.

WITNESS:

REC FS LLC

Preapproved Form # 4-FA-4.0  
Office of Attorney General Date

Vendor Number **834588**

Grantee understands that if it knowingly makes a false statement in its application, the commitment letter, or the above-signed Contract, it may be subject to the penalties of 18 Pa.C.S. §4904, relating to unsworn falsification to authorities.

**Commonwealth of Pennsylvania  
Acting through the  
Department of Community and  
Economic Development**

[Signature Affixed Electronically – see last page]  
Secretary/Deputy Secretary Date

X By [Signature Affixed Electronically – see last page]

**Approved:**

X By [Signature Affixed Electronically – see last page]

I hereby certify that funds in the amount of **\$6,136,698** are available under Appropriations Symbol:

6055000001 2441099000 6600200 0000 - \$6,136,698

Program **GRANT**  
Contract # **C000094392**

**Approved as to Legality and Form**

Comptroller approved as to fiscal responsibility, budgetary appropriateness and availability of funds:

[Signature Affixed Electronically – see last page]  
Office of Chief Counsel Date

Preapproved Form # 4-FA-4.0  
Office of General Counsel Date

[Signature Affixed Electronically – see last page]  
Comptroller Date



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF COMMUNITY & ECONOMIC DEVELOPMENT

July 22, 2025

Andrew Notarfrancesco, Chairman of the Board  
REC FS LLC  
230 S. Sporting Hill Road, Suite 100  
Mechanicsburg, PA 17050

RE: Pennsylvania Strategic Investments To Enhance Sites (PA SITES) Program  
Grant \$6,136,698  
Frog Switch Redevelopment Project

Dear Chairman Notarfrancesco:

On behalf of Governor Shapiro, I am pleased to inform you that your request for a Pennsylvania Strategic Investments To Enhance Sites Program grant has been approved. On behalf of the Commonwealth of Pennsylvania, acting through the Department of Community and Economic Development ("Department"), I hereby transmit to REC FS LLC ("Applicant") an offer for grant assistance in the amount not to exceed SIX MILLION ONE HUNDRED THIRTY-SIX THOUSAND SIX HUNDRED NINETY-EIGHT DOLLARS (\$6,136,698) under the provisions of the Pennsylvania Strategic Investments To Enhance Sites Program. The Application has been approved based upon and in accordance with the terms and the representations made in the Application and any subsequent information provided by the Applicant.

The grant will be used for construction, demolition, environmental assessment and remediation, engineering, and administration costs associated with the redevelopment of the former Frog Switch & Manufacturing Company property ("Project") located in Carlisle Borough, Cumberland County, Pennsylvania. The grant may not be used for any other activities without first obtaining the written consent of the Department.

The following conditions shall apply to the grant offer:

1. The Applicant shall provide the Department with copies of all project-related invoices for purchase and/or contracts for acquisition and/or work to be paid for with PA SITES funds. The Applicant shall provide the Department with a narrative describing the method followed in selecting contractors or vendors for activities paid for with PA SITES funds. The Applicant shall provide the Department with copies of the public advertisement for bids, bid tabulations, and executed contracts for all Project-related improvements. All contracts must contain a certificate of insurance, performance and payment bonds, and the nondiscrimination/sexual harassment provision attached to this letter.
2. Prevailing wage requirements are generally applicable to projects using grant funds toward construction, demolition, reconstruction, alteration, repair work, renovations, build-out, and installation of machinery and equipment in excess of \$25,000. Any questions as to prevailing wage obligations and whether they apply to

Appendix A  
C000094392  
Page 1 of 5

your project should be directed to the Bureau of Labor Law Compliance at (717) 787-0606. Please note, certified payrolls will be required to be submitted as part of the reimbursement process. Please refer to Prevailing Wage Act information attached hereto

3. PA SITES funds must be applied to costs incurred on or before the expiration date of the grant agreement.
4. The Applicant shall enter into the PA SITES Program grant agreement and comply with all of the requirements of the program. The grant agreement includes nondiscrimination/sexual harassment, contractor integrity and similar clauses required of all contracts with the Commonwealth.
5. The Applicant shall provide the Department with satisfactory evidence that all taxes and other monies due and owing to the Commonwealth of Pennsylvania are paid current, unless any of said taxes or other payments are being contested, in which case, the Department may require that funds be escrowed to pay said taxes or other payments in the event of any adverse decision.
6. The Applicant shall obtain all other sources of funds for the Project prior to disbursement of grant funds. The Applicant shall provide a signed affidavit to affirming the amount of matching funds utilized for each disbursement request. Disbursement of grant funds may be withheld if the Applicant fails to demonstrate the investment of matching funds as presented in the Application. The Applicant shall furnish evidence of matching expenses at the request of the Department.
7. Once the Applicant has agreed to the terms of this commitment letter and the grant agreement, the Applicant may begin incurring costs associated with the Project as of the date of approval, which is May 6, 2025.
8. The Applicant shall comply with Pennsylvania Strategic Investments To Enhance Sites Program guidelines, which may be viewed at [www.dced.pa.gov](http://www.dced.pa.gov).
9. The Applicant is responsible for seeking competitive bids for all work conducted with the Grant funds. In addition, the Applicant shall comply with all applicable federal, state and local laws and regulations dealing with bidding and procurement, if applicable.
10. The Department reserves the right to approve or reject contracts between the Applicant and consultants or contractors for work that will be paid for with Grant funds.
11. The Applicant is responsible, where applicable, for obtaining all state, federal, and local permit approvals required for the Project. Copies of all permit approvals must be provided to the Department prior to disbursement of grant funds.
12. The Applicant may not make or authorize any substantial change in an approved Project without first obtaining the consent of the Department in writing.
13. The Applicant shall maintain full and accurate records with respect to the Project. The Department shall have free access to such records and to inspect all Project work, and other relative data and records. Upon request of the Department, the Applicant shall furnish all data, reports, contracts, documents, and other information relevant to the project as may be requested.

14. The Project must be completed prior to the expiration of the grant agreement. The Department will hold 10% of the awarded grant amount until receipt of a professional certification from a licensed PA engineer that the PA SITES project is 100% complete in accordance with the plans approved by the Department. In addition, the Applicant must provide a close-out report and final budget at project completion. Once the certification, close-out report, and final budget have been received and approved, the remaining 10% of the awarded grant amount can be disbursed.

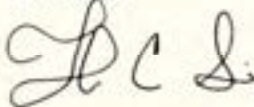
The Applicant shall promptly notify the Department of any events or changes in circumstances that may result in the inability of the Applicant to perform any or all of its obligations under the terms of this commitment letter and or grant agreement.

This commitment will expire forty-five (45) days from the date of this letter unless we have received your written acceptance by returning the original commitment letter along with the included grant agreement. Our receipt of the signed commitment letter and grant agreement will constitute your authorization to incur costs for reimbursement.

If you should have any questions regarding this grant, please contact the Center for Business Financing, Grants Office at (717) 787-6245.

I would like to thank you on behalf of the Shapiro Administration for investing in the Commonwealth of Pennsylvania and trust this grant will aid your efforts.

Sincerely,



Frederick C. Siger  
Secretary



## NONDISCRIMINATION/SEXUAL HARASSMENT CLAUSE

a. **Representations.** The Grantee represents that it is presently in compliance with and will remain in compliance with all applicable federal, state, and local laws, regulations, and policies relating to nondiscrimination and sexual harassment for the term of the agreement. The Grantee shall, upon request and within the time periods requested by the Commonwealth, furnish all necessary employment documents and records, including EEO-1 reports, and permit access to its books, records, and accounts by the Commonwealth for the purpose of ascertaining compliance with provisions of this Nondiscrimination/Sexual Harassment Clause.

b. **Nondiscrimination/Sexual Harassment Obligations.** The Grantee shall not:

i. in any manner discriminate in the hiring of any employee(s) for the performance of the activities required under this agreement or any subgrant agreement, contract, or subcontract, by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the Pennsylvania Human Relations Act ("PHRA") and applicable federal laws, against any citizen of this Commonwealth who is qualified and available to perform the work to which the employment relates.

ii. in any manner discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the PHRA and applicable federal laws, against or intimidate any of its employees.

iii. in any manner discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the PHRA and applicable federal laws, in the provision of services under this agreement or any subgrant agreement, contract, or subcontract.

iv. in any manner discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of PHRA and applicable federal laws, against any subgrantee, contractor, subcontractor, or supplier who is qualified to perform the work to which this agreement relates.

v. in any manner discriminate against employees by reason of participation in or decision to refrain from participating in labor activities protected under the Public Employee Relations Act, Pennsylvania Labor Relations Act, or National Labor Relations Act, as applicable, and to the extent determined by entities charged with the Acts' enforcement and shall comply with any provision of law establishing organizations as employees' exclusive representatives.

c. **Establishment of Grantee Policy.** The Grantee shall establish and maintain a written nondiscrimination and sexual harassment policy that complies with the applicable law and these Nondiscrimination/Sexual Harassment provisions and shall inform its employees in writing of the policy. The policy must contain a provision that states that sexual harassment will not be tolerated and employees who practice it will be disciplined. For the entire period of this agreement, the Grantee shall: (1) post its written nondiscrimination and sexual harassment policy or these Nondiscrimination/Sexual Harassment provisions conspicuously in easily accessible and well-lighted places customarily frequented by employees at or near where the grant activities are performed; or (2) provide electronic notice of the policy or this clause to its employees not less than annually.

d. **Notification of Violations.** The Grantee's obligations pursuant to these provisions are ongoing from the effective date and through the termination date of the agreement. Accordingly, the Grantee shall notify the Commonwealth if, at any time during the term of this agreement, it becomes aware of any actions or occurrences that would result in violation of these provisions.

e. **Cancellation or Termination of Agreement.** The Commonwealth may cancel or terminate this agreement and all money due or to become due under this agreement may be forfeited for a violation of the terms and conditions of these Nondiscrimination/Sexual Harassment provisions. In addition, the granting agency may proceed with debarment or suspension and may place the Grantee in the Contractor Responsibility File.

f. **Subgrant Agreements, Contracts, and Subcontracts.** The Grantee shall include these Nondiscrimination/Sexual Harassment provisions in its subgrant agreements, contracts, and subcontracts with all subgrantees, contractors, and subcontractors providing goods or services under this agreement. The incorporation of these provisions in the Grantor's subgrants, contracts, or subcontracts does not create privity of contract between the Commonwealth and any subgrantee, contractor, or subcontractor, and no third-party beneficiaries are created by those provisions. If the Grantee becomes aware of a subgrantee's, contractor's, or subcontractor's violation of these provisions, the Grantee shall use its best efforts to ensure the subgrantee's, contractor's, or subcontractor's compliance with these provisions.

## PREVAILING WAGE ACT

In the event that grant funds will be used for a public work project, the Prevailing Wage Act (PWA) may apply. The PWA requires that not less than the prevailing minimum wages be paid to all workmen employed on "public work" as defined in the PWA. Information on the PWA and the definition of "public work" may be found at [www.pa.gov/en/agencies/dli/resources/forms-and-documents/labor-law/prevailing-wage.html](http://www.pa.gov/en/agencies/dli/resources/forms-and-documents/labor-law/prevailing-wage.html).

The Act's definition of "public work" has been applied to projects undertaken by private entities, but receiving government assistance.

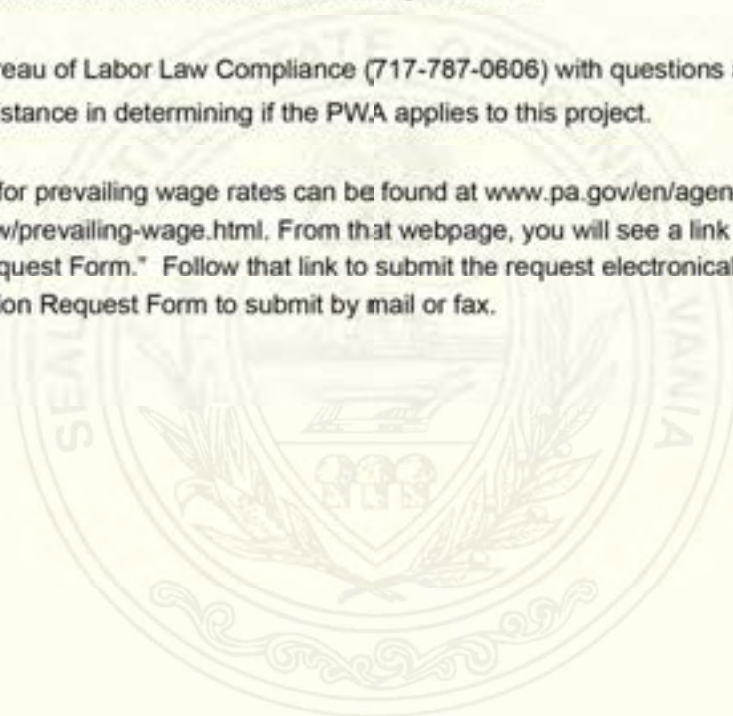
The PWA does not apply to the installation of equipment or machinery that is not a fixture, although any building construction/renovations to accommodate the equipment/machinery could be covered.

The PWA also does not apply to work performed by the project-owner's in-house employees, as opposed to work done by contractors or subcontractors.

The full PWA can be found at 43 P.S. sections 165-1 through 165-17.

Please contact L&I's Bureau of Labor Law Compliance (717-787-0606) with questions about the PWA and/or if you would like L&I's assistance in determining if the PWA applies to this project.

Information on applying for prevailing wage rates can be found at [www.pa.gov/en/agencies/dli/resources/forms-and-documents/labor-law/prevailing-wage.html](http://www.pa.gov/en/agencies/dli/resources/forms-and-documents/labor-law/prevailing-wage.html). From that webpage, you will see a link for "Prevailing Wage Rates Determination Request Form." Follow that link to submit the request electronically or print Prevailing Wage Rates Determination Request Form to submit by mail or fax.



**Special Conditions:**

NONE



Contract: C000094392 - Signature Log  
The effective date of this agreement is 08/13/2025 ("Effective Date")

	<b>Date</b>	<b>Name</b>	<b>Title</b>
Grantee	07/29/2025	Andrew Notarfrancesco	Chairman of the Board
Grantee	07/29/2025	Janet Anderson	Executive Director
Chief Counsel	07/29/2025	Black, Jaime	CWOPA Employee
Executive	07/29/2025	Hanna, Michael	CWOPA Employee
OGC		4-FA-1.0	
OAG		4-FA-1.0	
Comptroller	08/13/2025	John Orndorff	Comptroller

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**SECTION 011200 – PRIME CONTRACT PACKAGE DESCRIPTIONS****PART 1 - GENERAL****1.1 SUMMARY**

- A. This Project will be constructed under separate contracts as defined in this Section. The contract for this Project shall be:

- 1. Contract 01 – Environmental Remediation Contractor – Above Ground**
- 2. Contract 02 – Demolition Contractor - Above Ground**

- B. Unless the Agreement contains a more specific description of the Work of each Contract, requirements indicated on the Drawings and in Specifications Sections determine which contract includes a specific element of the Project.

C. Definitions:

1. Coordinate: The term “coordinate” means “to cooperate with related Prime Contractor(s) to furnish and install all connections between the Work of each Prime Contractor in correct sequence size and location to create a complete system ready for intended use.”
2. Verify: The term “verify” means “to measure, investigate, review, test, check the accuracy or correctness of and prove by demonstration, evidence, or testimony the location, size, dimension, and condition of an item.”
3. Furnish: The term “furnish” means “to supply and deliver to the Project site, ready for unloading, unpacking, assembly, installation, and similar operations.”
4. Install: The term “install” is used to describe operations at the Project site including the actual “unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, performing, coordinating, protecting, cleaning and similar activities.”
5. Provide: The term “provide” means “to furnish and install, complete, and ready for the intended use.”

**1.2 GENERAL REQUIREMENTS OF ALL PRIME CONTRACTORS**

- A. Contractor shall at all times observe and comply with all Federal, State and Local laws and regulations, bylaws, ordinances, and regulations in any manner affecting the conduct of the Work or applying to employees on the Project, as well as all safety precautions and orders or decrees which have been promulgated or enacted, or which may be promulgated or enacted, by legal bodies or tribunals having authority or jurisdiction over the work, materials, equipment or employees. Such observance and compliance shall be solely and without qualification the responsibility of the Prime Contractors without reliance on the Project Superintendent or direction by the Owner or their Representatives. The duty of enforcement of all said laws, ordinances, regulations, orders, or decrees lies with the body of agency promulgating them, not with the Owner or their Representatives.
- B. The General Conditions, Supplementary Conditions and Division 1 - General Requirements - shall apply to all Prime Contracts and Subcontracts for this Project. Each Prime Contract Package Description is to include all Work in accordance with the Contract Documents, except Work covered by other Prime Contract Package Descriptions.

Collectively, these Prime Construction Contracts include all materials, labor, superintendents, transportation, tools, equipment, and services for the Project as shown or implied on the drawings and specified herein, or as may be required or necessary for a complete and satisfactory job.

- C. If there is a conflict on a specific item between the Contract Documents and the Prime Contract Package Description as stated herein, the Prime Contract Package Description will govern; however, if an item is covered in the Contract Documents, but not reiterated in the Prime Contract Package Description, the Bidder will be responsible for that item of work. Each Contractor shall supervise his work, using his best skills and attention. He shall be solely responsible for construction means, methods, techniques, sequences, dimensions, and procedures and/or coordinating all portions of their Work, with all Work to be performed under separate contracts and/or other Bid Packages. Refer to the Supplemental General Conditions Article on Separate Contracts.
- D. Provide safety and protection of persons and property per OSHA, Local, State and Owner requirements, and shall provide all safety signage required by OSHA. Each Prime Contractor shall furnish the Construction Manager with a “project-specific” Health and Safety Plan (HASP) prior to start of work.
- E. The Contractor is to provide and maintain the Project Schedule for this contract as per **Section 013200 Construction Progress Documentation**.
- F. Unless otherwise indicated, the work described in this Section for each contract shall be complete systems and assemblies, including products, components, accessories, and installation required by the Contract Documents.
- G. Clean construction vehicle wheels in order to keep mud off paved surfaces.
- H. Dewatering shall be the responsibility of the Contractor.
- I. Protection for excavations shall become the sole responsibility of each trade contractor.
- J. This project **does not** contain separate technical specifications.
- K. This project contains documentation related to hazardous materials.

## PART 2 - SEPARATE CONTRACT DESCRIPTIONS

- A. **CONTRACT NO. 01 – Environmental Remediation Contractor – Above Ground**
  - 1. The work of this Prime Contract Package Description consists of the Work detailed by the following Specification Sections. The work is not restricted by division of Drawings or Specification. Unless otherwise specifically noted, all work to be performed shall consist of providing all labor, materials, equipment and whatever is necessary to complete the work in accordance with the Specifications and applicable Codes.
  - 2. DIVISION 0 - BIDDING AND CONTRACT REQUIREMENTS  
All Sections
  - 3. DIVISION 1 - GENERAL REQUIREMENTS

## All Sections

4. Narrative Description of **Contract No. 01 – Environmental Remediation Contractor – Above Ground**. The work of this Contract includes, but shall not be limited to the following items:
- a. This project is funded in part by a Commonwealth of Pennsylvania PA SITES grant and, as such, is subject to Pennsylvania Prevailing Wage Rates. The selected bidder shall comply with all requirements of this grant.
  - b. Bidders and offerors are encouraged to utilize and give consideration to contractor offering to utilize Small Diverse Businesses.
  - c. Removal and disposal of all Asbestos-containing materials (ACMs) in Buildings: Silo, 3, 5, 6, 13, 18, 20, 24, as noted in the Hazardous Building Materials Survey dated October 9, 2025, completed by Viva Environmental, Health, & Safety, LLC 2025.
    - 1) If other Asbestos or hazardous materials are found on site, shall be removed by a licensed hazardous materials contractor. Contractor shall notify Owner immediately if hazardous materials are encountered beyond what is defined in the Hazardous Building Materials Survey dated October 9, 2025, completed by Viva Environmental, Health, & Safety, LLC 2025.
  - d. Coordinate with Construction Manager that all utilities have been verified disconnected and permit obtained before demolishing and removing from site.
  - e. Remove and dispose of any hazardous material, debris, and rubbish requiring removal from the work area in an approved off-site landfill by an approved hauler.
    - 1) Hauler shall comply with all regulatory requirements.
    - 2) The contractor shall prepare all manifest documents as required prior to commencement of remediation.
  - f. The contractor is responsible for obtaining all local and state permits required for Hazardous materials removal & disposal.
  - g. The contractor shall protect all iron pins, monuments, and property corners during onsite activities. Any contractor disturbed pins, monuments, or property corners, testing wells, etc. shall be reset by a licensed land surveyor at the expense of the contractor.

- h. Contractors shall provide and maintain traffic control devices for protection of vehicles and pedestrians consisting of drums, barriers, signs, lights, fences, and uniformed traffic controllers, as required or ordered by the engineer, or required by the local governing authorities. Contractor shall maintain all traffic lanes and pedestrian walkways at all times unless written approval from the appropriate governing agency is granted.
  - i. The contractor shall restore any utility (existing / not to be removed) structure, pipe, utility, pavement, curbs, sidewalks, drainage structure, swale, or landscaped areas disturbed during demolition to their original condition or better to the satisfaction of the Owner.
  - j. The contractor shall indemnify and hold harmless the Owner, Construction Manager, Carlisle Borough, and Commonwealth of PA for any and all injuries and/or damages to personnel, equipment and/or existing facilities in the demolition and construction described in the specifications.
  - k. The burning of cleared material and debris shall **not** be allowed **unless** contractor gets written authorization from the local authorities and Owner.
  - l. The contractor will be responsible for initiating PA-One Call as required prior to demolition.
  - m. The contractor may not create any earth disturbances as part of this project.
  - n. **The contractor will be responsible to Notify PA Dept. of Environmental Protection of proposed remediation/demolition.**
  - o. The contractor will be responsible for providing dust and erosion & sedimentation controls in accordance with applicable regulations by Authorities Having Jurisdiction.
  - p. The contractor will be responsible for temporary services and facilities, as required.
  - q. The contractor will be responsible for maintaining existing property fencing and temporary fencing.
  - r. **The Contractor will be required to provide a Performance and Payment Bond for 100% of the issued contract value.**
5. Narrative Description of **Contract No. 02 –Demolition Contractor – Above Ground**. The work of this Contract includes, but shall not be limited to the following items:

- 
- a. This project is funded in part by a Commonwealth of Pennsylvania PA SITES grant and, as such, is subject to Pennsylvania Prevailing Wage Rates. The selected bidder shall comply with all requirements of this grant.
  - b. Bidders and offerors are encouraged to utilize and give consideration to contractor offering to utilize Small Divers Businesses.
  - c. To **verify** all Asbestos-containing materials (ACMs) noted in the Hazardous Building Materials Survey dated October 9, 2025, completed by Viva Environmental, Health, & Safety, LLC 2025 **have been removed**.
    - 1) If other Asbestos or hazardous materials are found on site, shall be removed by a licensed hazardous materials contractor. Contractor shall notify Owner immediately if hazardous materials are encountered beyond what is defined in the Hazardous Building Materials Survey dated October 9, 2025, completed by Viva Environmental, Health, & Safety, LLC 2025.
  - d. All Universal Waste, Demolition and proper reporting and disposal of any remaining universal waste in all Buildings to be Demolished in this contract.
  - e. Coordinate with Construction Manager that all utilities have been verified disconnected and permit obtained before demolishing and removing from site.
  - f. Remove and dispose of any demolition material, debris, and rubbish requiring removal from the work area in an approved off-site landfill by an approved hauler.
    - 1) Hauler shall comply with all regulatory requirements.
  - g. The contractor is responsible for obtaining all local and state permits required for demolition work and removal.
  - h. The contractor shall **not** remove floor slabs, basement walls and/or structures (at or below subgrade) so as to cause any earth disturbance.
  - i. After completion of this contract, any open areas shall be protected. Methods of protection to be acceptable by Owner.
  - j. Work consists of furnishing and installing Chain link fencing complete with all posts, braces, gates, and all other appurtenances. Chain link fence to be Galvanized ASTM A 392, 2-inch mesh and 9-gauge galvanized steel wire. Posts are to be Minimal 2" in diameter and at 10' intervals. Corner posts and end posts are to be embedded, braced and trussed in accordance with industry standards.
  - k. The contractor shall cut and plug or arrange for the appropriate utility company to cut and plug, all service piping as required, or as otherwise noted. The contractor

shall investigate the site prior to bidding to determine the extent of service piping to be removed, cut, or plugged.

- l. The contractor shall protect all iron pins, monuments, and property corners during demolition activities. Any contractor disturbing pins, monuments, or property corners, etc. shall be reset by a licensed land surveyor at the expense of the contractor.
- m. Contractor shall provide and maintain traffic control devices for protection of vehicles and pedestrians consisting of drums, barriers, signs, lights, fences, and uniformed traffic controllers, as required or ordered by the engineer, or required by the local governing authorities. Contractor shall maintain all traffic lanes and pedestrian walkways at all times unless written approval from the appropriate governing agency is granted.
- n. The contractor shall restore any utility structure, pipe, utility, pavement, curbs, sidewalks, drainage structure, swale, or landscaped areas disturbed during demolition to their original condition or better to the satisfaction of the Owner.
- o. Salvage is permitted.
- p. The contractor shall indemnify and hold harmless the Owner, Construction Manager, Carlisle Borough, and Commonwealth of PA for any and all injuries and/or damages to personnel, equipment and/or existing facilities in the demolition and construction described in the specifications.
- q. The contractor shall not commence demolition or utility disconnections until authorized to do so by the Owner, Demolition Permit is in hand, and all required Noticed completed.
- r. The burning of cleared material and debris shall not be allowed unless contractor gets written authorization from the local authorities and Owner.
- s. The contractor will be responsible for initiating PA-One Call as required prior to demolition.
- t. The contractor may not create any earth disturbances as part of this project.
- u. **The contractor will be responsible to Notify PA Dept. of Environmental Protection of proposed demolition.**
- v. The contractor will be responsible for providing dust and erosion & sedimentation controls in accordance with applicable regulations by Authorities Having Jurisdiction.

- w. The contractor will be responsible for temporary services and facilities for their work.
- x. The contractor will be responsible for maintaining existing property fencing and temporary fencing.
- y. The contractor will be responsible for removal of all remaining universal waste prior to demolition of any structures.
- z. The Contractor will be required to provide a Performance and Payment Bond for 100% of the issued contract value.**

END OF SECTION 011200

**SECTION 012100 – ALLOWANCES**

**PART 1 - GENERAL**

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
- B. Types of allowances include the following:
  - 1. Labor allowances.
  - 2. Lump sum allowances.

1.3 LABOR ALLOWANCES

- A. Allowance shall include cost to Contractor for provision of miscellaneous labor at the direction of the CM.
- B. Contractor's cost for mandated burden, overhead and profit, transportation, miscellaneous materials/equipment and similar costs related to the allowance shall be included in the cost of the allowance.
- C. At Project Closeout, credit unused amounts remaining in the allowance to Owner by Change Order.

1.4 LUMP SUM ALLOWANCES

- A. Dollar figure amounts provided are for the management of undetermined quantities in the project by the Owner. These allowances are an attempt to reduce both the contractor's and Owner's risk in the performing of and payment for the work. The contractors shall in no way interpret or misconstrue the dollar figures provided as a direct correlation of undefined quantity of material associated with the work.
- B. Allowance shall include cost to Contractor for provision of miscellaneous labor, materials and/or equipment at the direction of the CM.
- C. Contractor's cost for mandated burden, overhead and profit, transportation, miscellaneous materials/equipment and similar costs related to the allowance shall be included in the unit cost price for each allowance line item.
- D. At Project Closeout the contractor shall credit any unused amounts remaining in the allowance to Owner by Change Order.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALLOWANCES

- A. Lump Sum Allowance No 01-01: Contractor shall include an Allowance of \$5,000 for any additional testing that may be required for unseen suspect conditions or materials.

END OF SECTION 012100

**SECTION 012200 –UNIT PRICES**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. Unit Price No 01-01: Remove and dispose of Transite roof materials
- B. Unit Price No 01-02: Remove and dispose of Tar mastic
- C. Unit Price No 01-03: Remove and dispose of Window caulk
- D. Unit Price No 01-04: Remove and dispose of Window glazing
- E. Unit Price No 01-05: Remove and dispose of Floor tile
- F. Unit Price No 01-06: Remove and dispose of Roof flashing
- G. Unit Price No 01-07: Remove and dispose of Rope materials
- H. Unit Price No 01-08: Remove and dispose of Thermal system insulation
- I. Unit Price No 01-09: Remove and dispose of Transite ceiling materials
- J. Unit Price No 01-10: Remove and dispose of Hazardous Sand materials
- K. Unit Price No 02-01: Remove and dispose of Transformers 50 -499 ppm
- L. Unit Price No 02-02: Remove and dispose of Transformers 500+ ppm

**1.3 UNIT PRICING**

- A. The requested unit pricing is to be utilized on an as needed basis.
  - 1. The contractor must provide, to the Construction Manager’s satisfaction, documentation substantiating unit cost expenditures against the allowance including, but not limited to, daily reports, photographs, material tickets, trucking logs, etc.

**PART 2 - PRODUCTS (NOT USED)**

**PART 3 – EXECUTION (NOT USED)**

END OF SECTION 012200

**SECTION 012300 – ALTERNATES**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. Section includes administrative and procedural requirements for alternates.

**1.3 DEFINITIONS**

- A. Alternate: An amount proposed by the Bidder and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if the Owner decides to accept a corresponding change, either in the amount of construction to be completed or in the products, materials, equipment, systems or installation methods described in the Contract Documents.

**1.4 PROCEDURES**

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into the Project.
  - 1. Include as part of each alternate any and all miscellaneous devices, accessory objects and similar items incidental to or required for a complete installation, whether or not indicated as part of the alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status (accepted or rejected) of each alternate.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A schedule of alternates is included at the end of this Section. Specification sections referenced in the schedule contain requirements for materials necessary to achieve the work described under each alternate.

**PART 2 - PRODUCTS (NOT USED)**

**PART 3 - EXECUTION (NOT USED)**

3.1 SCHEDULE OF ALTERNATES

- A. Add Alternate No 01-01: Remove and dispose of 1,500 Tons of hazardous Sand
- B. Add Alternate No 01-02: Environmental remediation of Small Buildings Only (Silo, 3,6,13,18,20,24)
- C. Add Alternate No 01-02: Environmental remediation of Large Buildings Only (1,2,5)
- D. Add Alternate No 02-01: Environmental remediation of Small Buildings Only (Silo, 3,6,13,18,20,24)
- E. Add Alternate No 02-02: Environmental remediation of Large Buildings Only (1,2,5)

END OF SECTION 012300

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**SECTION 01 29 00 – PAYMENT PROCEDURES****PART 1 - GENERAL****1.1 RELATED DOCUMENTS**

Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Requirements:
  - 1. Section 012100 "Allowances" for procedural requirements governing the handling and processing of allowances.
  - 2. Section 012200 "Unit Prices" for procedural requirements governing the handling and processing of unit prices.
  - 3. Section 012300 "Alternates" for procedural requirements governing the implementation and processing of alternates.
  - 4. Section 013200 "Construction Progress Documentation" for administrative requirements governing the preparation and submittal of the Contractor's construction schedule.
  - 5. Section 013523 "Safety and Protection" for safety documents required prior to submission of Initial Application for Payment.
  - 6. Section 017700 "Closeout Procedures" for procedural requirements governing the implantation and processing of closeout items.

**1.3 DEFINITIONS**

Schedule of Values: A list of all the Prime Contractor's Work, including quantities and prices of items aggregating the contract price and subdividing the Work into component parts in sufficient detail to serve as the basis for determining progress during construction. Such prices shall include the amount of overhead and profit applicable to each item of Work.

**1.4 SCHEDULE OF VALUES**

- A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.
  - 1. Coordinate line items in the schedule of values with other required administrative forms and schedules, including the following:
    - a. Application for Payment forms with continuation sheets.
    - b. Submittal schedule.
    - c. Alternates and Allowances (if applicable).

Format and Content: Use Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.

1. Identification: Include the following Project identification on the schedule of values:
  - a. Project name.
  - b. Contractor's name and address.
  - c. Date of submittal.

Arrange schedule of values consistent with format of AIA Document G703 or equivalent.

3. Arrange the schedule of values in tabular form with separate columns to indicate the following for each item listed:
  - a. Description of the Work.
  - b. Name of subcontractor (if applicable).
  - c. Dollar value of the following, as a percentage of the Contract Sum to nearest one-tenth percent, adjusted to total 100%.

Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment, including but not limited to:

- a. Mobilization.
  - b. Temporary Facilities and Utilities.
  - c. Bonds and Insurances (if applicable).
  - d. Submittals.
  - e. Scheduling.
  - f. Construction Items
  - g. Closeout Items.
  - h. Demobilization
5. Round amounts to nearest whole dollar; total shall equal the Contract Sum.

Differentiate between items stored on-site and items stored off-site. If required, include evidence of insurance and photographic documentation.

Each item in the schedule of values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.

- C. Review and Approval: Contractor will submit Schedule of Values to the Construction Manager for approval within **15 days after the Notice to Proceed** date.

#### APPLICATIONS FOR PAYMENT

- A. Progress Applications for Payment: Administrative actions and submittals that must precede or coincide with submittal of Progress Applications for Payment include the following:
  1. CPM (full duration) Project Schedule, including updates.
  2. Submittals outstanding for work-in-place.

3. Redlining and updating of As-Built Drawings and Specifications (as determined adequate by the CM).
- B. Failure to provide any of the above-listed items with each monthly pay application will render the pay application ineligible.

Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments as certified by the Construction Manager and paid for by the Owner.

- D. Application for Payment Forms: Use AIA Document G702/CMa and AIA Document G703 or equivalents acceptable to the Construction Manager and Owner as form for Applications for Payment.
- E. Application Preparation: Complete every entry on form. Construction Manager will return incomplete applications without action.
1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
  2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work which has been completed, or which will be completed on or before the last day of the month in which the Application for Payment will be submitted.
  3. The cost of partially completed activities shall be determined by multiplying the value of the partially complete activity by the percentage the activity is complete.
  4. Include amounts of Change Orders issued before the last day of the construction period covered by application.
- F. Allowances: The Contractor shall submit evidence, including daily reports, certified payroll records, bills of sale, invoices, etc. to substantiate the invoice amount.
- G. Unit Price Items: The Contractor shall submit evidence, including diagrams, calculations, or survey data, to substantiate the quantities included in their Application for Payment.
- H. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored but not yet installed. Differentiate between items stored on-site and items stored off-site.
1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment for stored materials.
  2. Provide bills of sale or invoices that verify the amount requested. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
  3. Provide summary documentation for stored materials indicating the following:
    - a. Photographic documentation.
    - b. Value of materials previously stored and remaining stored as of date of previous Applications for Payment.
    - c. Value of previously stored materials put in place after date of previous Application for Payment and on or before date of current Application for Payment.
    - d. Value of materials stored since date of previous Application for Payment and remaining stored as of date of current Application for Payment.

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- I. Retainage: The Owner will withhold 10% retainage on the work invoiced. At 50% way through the project the Contractor may request a reduction in retainage to 5% pending approval by the Construction Manager.

Payment Application Times: **Submit electronically the draft Application for Payment to Construction Manager by the 25<sup>h</sup> day of each month.** The period covered by each Application for Payment is one month, ending on the last day of the month that the draft Application for Payment is submitted. Upon review and acceptance of the draft Application for Payment the Contractor shall submit the notarized final monthly application for payment and waiver to the Construction Manager, Project Manager for processing.

- K. Application for Payment Review and Acceptance Procedure:
1. The CM shall, within five (5) days after receipt of each draft Application for Payment, respond in writing with acceptance or rejection thereof. The draft Application for Payment will be first reviewed by the CM for verification of line items against the work in place as projected until the end of the month and to identify any outstanding items from Section 1.5.A and B above. Should there be any findings, the CM shall indicate the reasons for rejection. The CM's decision shall be final and binding upon the Contractor unless, within five (5) days after the date of any such decision, the Contractor delivers to the CM written notice of intention to appeal the determination or provides the noted missing information.
  2. If the draft Application for Payment is accepted, the Contractor shall, within three (3) days after receipt, submit a formal, signed, and notarized Application for Payment.
  3. If the draft Application for Payment is rejected, the Contractor shall, within three (3) days after receipt, make necessary modifications and re-submit the draft Application for Payment. The CM will re-initiate their review in accordance with Paragraph 1.5.I.1 of this Section.

Transmittal: Submit one signed and notarized copy of each Application for Payment to Construction Manager. Include the following mandatory attachments:

Payment Times: The date for each progress payment will be not greater than **sixty (60) days** after the date of approval (signature and dating of monthly notarized application for payment) of the Application for Payment by the Construction Manager.

## 1.6 INITIAL APPLICATION FOR PAYMENT

- A. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
1. Schedule of Values.
  2. Subcontract Directory.
  3. Required Safety Data Sheets (SDS).
  4. Safety Program
  5. Site Utilization Plan.
  6. Copies of Permits (as applicable).

1.7 APPLICATION FOR PAYMENT AT SUBSTANTIAL AND FINAL COMPLETION

- A. Application for Payment at Substantial Completion: After Construction Manager issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
  - 1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
  - 2. This application shall reflect Certificate(s) of Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
  
- B. Application for Payment at Final Completion: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:

Evidence of completion of Project closeout requirements.

- 2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
- 3. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
- 4. AIA Document G706A, "Contractor's Affidavit of Release of Liens."

Failure to Meet Final Completion Date: Should the Contractor fail to provide the necessary or required items by the final completion date, the Owner will seek remedies within the contract to resolve the open items in an expeditious manner as possible and hold the offending contractor(s) financially responsible.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012900

**SECTION 013100 – PROJECT MANAGEMENT AND COORDINATION****PART 1 - GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. Section includes administrative provisions for coordinating construction operations on the Project including, but not limited to, the following:
  - 1. General coordination procedures.
  - 2. Requests for Information (RFIs).
  - 3. Project meetings.
  - 4. Daily reports.
- B. Each contractor shall participate in coordination requirements. Certain areas of responsibility are assigned to a specific contractor.
- C. Related Requirements:
  - 1. Section 011200 "Prime Contract Package Descriptions" for a description of the division of work among separate contracts and responsibility for coordination activities not in this Section.
  - 2. Section 017700 "Closeout Procedures" for coordinating closeout of the Contract.

**1.3 DEFINITIONS**

- A. RFI: Request from Owner, CM, Designer or Contractor seeking information required by or clarification of the Contract Documents.

**1.4 INFORMATIONAL SUBMITTALS**

- A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
  - 1. Name, address and telephone number of entity performing a subcontract or supplying products.
- B. Key Personnel Names: Submit a list of key personnel assignments, including superintendent and other personnel in attendance at the Project site. Identify individuals and their duties and responsibilities; office and cellular telephone numbers; and e-mail addresses. Provide names and contact information for individuals assigned as alternates in the absence of individuals assigned to the Project.
  - 1. Post copies of the list in the Contract and CM field offices. Keep the list current at all times.

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## 1.5 GENERAL COORDINATION PROCEDURES

- A. Coordination: Each Contractor shall coordinate its construction operations with those of other Contractors and entities to ensure efficient and orderly installation of each part of the Work. Each Contractor shall coordinate its operations with operations included in different Sections that depend on each other for proper installation, connection, and operation.
1. Sequence construction operations as required to obtain the best results where installation of one part of the Work depends on installation of other components, by the same or by other Contractors, before or after its own installation.
  2. Coordinate installation of different components with other Contractors to ensure maximum performance and accessibility for required maintenance, service, and repair.
  3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and the activities of other Contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
1. Preparation of Project Schedule.
  2. Preparation of Schedule of Values.
  3. Installation and removal of temporary facilities and controls.
  4. Delivery and processing of submittals.
  5. Progress meetings.
  6. Pre-installation conferences.
  7. Project closeout activities.
  8. Startup and adjustment of systems.
- C. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.
1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. See other Sections for disposition of salvaged materials that are designated as the Owner's property.

## 1.6 REQUESTS FOR INFORMATION (RFIs)

- A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the format specified.
1. CM will return RFIs submitted by other entities controlled by the Contractor with no response.
  2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in the Contractor's work or the work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of the item needing information or interpretation and the following:
1. Project name.
  2. Project number.
  3. Date.
  4. Name of Contractor.
  5. Contract name and number.
  6. RFI number, numbered sequentially.

7. RFI subject.
  8. Specification Section number and title and related paragraphs, as appropriate.
  9. Drawing number and detail references, as appropriate.
  10. Field dimensions and conditions, as appropriate.
  11. Contractor's suggested resolution. If the Contractor's suggested resolution impacts the Contract Time or the Contract Sum, the Contractor shall state anticipated impacts in the RFI.
  12. Contractor's signature.
  13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation.
    - a. Include dimensions, thicknesses, structural grid references and details of affected materials, assemblies, and attachments.
- C. Designer's and Construction Manager's Action: Designer and CM will review each RFI, determine action required, and respond. Allow seven (7) days for response to each RFI. RFIs received by the CM after 1:00 PM will be considered as received the following working day.
1. The following Contractor-generated RFIs will be returned without action:
    - a. Requests for approval of submittals.
    - b. Requests for approval of substitutions.
    - c. Requests for approval of Contractor's means and methods.
    - d. Requests for coordination information already indicated in the Contract Documents.
    - e. Requests for adjustment in the Contract Time or the Contract Sum.
    - f. Requests for interpretation of the Designer's actions on submittals.
    - g. Incomplete or inaccurately prepared RFIs.
  2. Designer's action may include a request for additional information, in which case the Designer's time for response will date from time of receipt of additional information.
  3. Designer's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for the Contract to submit a Change Proposal according to the General Conditions.
    - a. If the Contractor believes the RFI response warrants a change to the Contract Time or the Contract Sum, notify the CM in writing within five (5) days of receipt of the RFI response.
  4. RFI Log: The CM shall prepare and maintain an RFI Log for the Project.
  5. On receipt of the Designer's and the CM's action, immediately distribute the RFI response to affected parties. Review response and notify CM within five (5) days if the Contractor disagrees with the response.
    - a. Identify related Minor Changes in the Work, Work Change Directives and Requests for Proposals, as appropriate.

## 1.7 PROJECT MEETINGS

- A. General: Schedule and conduct, with input from the CM, meetings and conferences at the Project site unless otherwise indicated.
1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify the Owner and the Designer of scheduled meeting dates and times.
  2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited parties.
  3. Minutes: Entity responsible for conducting the meeting shall record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including the Owner, CM and Designer, within five (5) days of the meeting.

- B. Kickoff Meeting: The CM will schedule and conduct a kickoff meeting before starting construction, at a time convenient to the Owner and Designer, but no later than five (5) days after execution of the Agreement.
1. Conduct the conference to review responsibilities and personnel assignments.
  2. Attendees: Authorized representatives of the Owner, CM, Designer, and their consultant(s); the Contractors and their superintendents; major subcontractors, suppliers and other concerned parties. Participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.
  3. Agenda: Discuss items of significance that could affect progress, including the following:
    - a. Pre-Bid Construction Schedule.
    - b. Phasing.
    - c. Critical work sequencing and long-lead items.
    - d. Designation of key personnel and their duties.
    - e. Lines of communications.
    - f. Procedures for processing field decisions and Change Orders.
    - g. Procedures for RFIs.
    - h. Procedures for testing and inspection.
    - i. Procedures for processing Applications for Payment.
    - j. Distribution of the Contract Documents.
    - k. Submittal procedures.
    - l. Preparation of record documents.
    - m. Use of the premises.
    - n. Work restrictions.
    - o. Working hours.
    - p. Owner's occupancy requirements.
    - q. Responsibility for temporary facilities and controls.
    - r. Procedures for disruptions and shutdowns.
    - s. Construction waste management.
    - t. Parking availability.
    - u. Office, work, and storage areas.
    - v. Equipment deliveries and priorities.
    - w. First aid.
    - x. Security.
    - y. Progress cleaning.
  4. Minutes: Entity responsible for conducting the meeting will record and distribute meeting minutes.
- C. Preinstallation Conferences: Each Contractor shall conduct preinstallation conferences as enumerated in the contract documents. Each Contractor shall attend the preinstallation conference at the Project site with all pertinent personnel as defined in the contract documents or as requested by the CM. The CM may, at their discretion and at no additional cost to the Owner, require a Contractor to conduct additional preinstallation conferences not identified in the Contract Documents.
1. Attendees: Installer and representatives of manufactures and/or fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or followed, shall attend the meeting. Advise the CM and Designer of scheduled meeting dates.
  2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration.
  3. Record significant discussions, agreements, and disagreements, including required corrective measures and actions.

4. Reporting: Distribute minutes of the meeting to each party present and to other parties requiring the information.
  5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at the earliest feasible date.
- D. Project Closeout Conference: The CM will schedule and conduct a project closeout conference, at a time convenient to the Owner and Designer, but no later than sixty (60) days prior to the scheduled date of Substantial Completion.
1. Conduct the conference to review requirements and responsibilities related to Project closeout.
  2. Attendees: Authorized representatives of the Owner, CM, Designer, and their consultant(s); the Contractors and their superintendents; major subcontractors, suppliers and other concerned parties. Participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.
  3. Agenda: Discuss items of significance that could affect or delay Project closeout, including the following:
    - a. Preparation of record documents, including as-built surveys of SWM facilities.
    - b. Procedures required prior to inspection for Substantial Completion and for final inspection for acceptance.
    - c. Procedures required prior to inspection(s) for Occupancy by the authority having jurisdiction.
    - d. Submittal of written warranties.
    - e. Requirements for preparing operations and maintenance data.
    - f. Requirements for delivery of material samples, attic stock and spare parts.
    - g. Requirements for demonstration and training.
    - h. Preparation of Contractor's punch list.
    - i. Procedures for processing Applications for Payment at Substantial Completion and Final Completion.
    - j. Submittal procedures.
    - k. Coordination of separate contracts.
    - l. Owner's partial occupancy requirements, if any.
    - m. Installation of Owner's furniture, fixtures, and equipment.
    - n. Responsibility for removing temporary facilities and controls.
    - o. Responsibility for transferring utility service(s).
  4. Minutes: Entity conducting the meeting will record and distribute meeting minutes.
- E. Progress Meetings: The CM will conduct progress meetings at bi-weekly intervals.
1. Called meetings and/or special meetings shall be as required by the progress of the Work.
  2. Location of the progress meetings: As designated by the CM.
  3. Attendees: In addition to representatives of the Owner, CM and Designer, each contractor, subcontractor, supplier, or other entity concerned with current progress or involved in planning, coordination, or performance of future activities. All participants at the meeting shall be familiar with the Project and authorized to conclude matters relating to the Work.
- F. Superintendent Meetings: The CM will schedule superintendent meetings on a weekly basis.
1. Called meetings and/or special meetings shall be as required by the progress of the Work.
  2. Location of the superintendent meetings: Contractor's office trailer or as designated by the CM.
  3. Attendance:

- a. Representative from all Contractors working on site or necessary for coordination of upcoming work.
- b. Subcontractor representatives as required by the CM or job conditions.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013100

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**SECTION 013200 – CONSTRUCTION PROGRESS DOCUMENTATION****PART 1 - GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:

1. Startup construction schedule.
2. Contractor's construction schedule.
3. Construction schedule updating reports.
4. Field Manpower reports.
5. Material location reports.
6. Site condition reports.
7. Special reports.

- B. Related Requirements:

1. Section 007200 "General Conditions" for submission and approval timelines for Start-up Construction Schedule and complete CPM Construction Schedule.
2. Section 011200 "Prime Contract Package Descriptions" for preparing a combined Contractor's construction schedule.
3. Section 013300 "Submittal Procedures" for submitting schedules and reports.
4. Section 017700 "Closeout Procedures" for preparation and submission of as-built Contractor's construction schedule.

**1.3 DEFINITIONS**

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.

1. Critical Activity: An activity on the critical path that must start and finish on the planned early start and finish times.
2. Predecessor Activity: An activity that precedes another activity in the network.
3. Successor Activity: An activity that follows another activity in the network.

- B. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.

- C. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- D. Event: The starting or ending point of an activity.
- E. Float: The measure of leeway in starting and completing an activity.
  - 1. Float time is not for the exclusive use or benefit of either Owner or Contractor but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.
  - 2. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the successor activity.
  - 3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.

#### 1.4 INFORMATIONAL SUBMITTALS

- A. Format for Submittals: Submit required submittals in the following format:
  - 1. Working electronic copy of schedule file in MS Project.
  - 2. PDF copy of MS Project schedule file in electronic format.
- B. Contractor's Construction Schedule (CPM Schedule): Complete project schedule, of size required to display entire schedule for entire construction period.
- C. CPM Reports: Concurrent with CPM Schedule, submit the updated MS Project file and each of the following reports. Format for each activity in reports shall contain activity number, activity description, original duration, remaining duration, early start date, early finish date, late start date, late finish date, and total float in calendar days.
  - 1. Activity Report: List of all activities sorted by activity number and then early start date, or actual start date if known.
  - 2. Logic Report: List of preceding and succeeding activities for all activities, sorted in ascending order by activity number and then early start date, or actual start date if known.
  - 3. Total Float Report: List of all activities sorted in ascending order of total float.

#### 1.5 QUALITY ASSURANCE

- A. Scheduling Consultant Qualifications: Contractor to submit the qualifications of the scheduling representative to the Construction Manager for acceptance within 7 days after the Notice to Proceed date. This is required before the CPM schedule will be accepted. The scheduling representative shall have at least three years of verifiable experience preparing and maintaining CPM project schedules on Projects of similar size and complexity.
- B. Prescheduling Conference: Construction Manager to conduct conference at Project site with all Prime Contractors to comply with requirements in **Section 013100 "Project Management and Coordination."** Review methods and procedures related to the preliminary construction schedule and Contractor's construction schedule, including, but not limited to, the following:

1. Review software limitations and content and format for reports.
2. Verify availability of qualified personnel needed to develop and update schedule.
3. Discuss constraints, including phasing work stages area separations interim milestones and partial Owner occupancy, as applicable.
4. Review delivery dates for Owner-furnished products.
5. Review schedule for work of Owner's separate contracts.
6. Review submittal requirements and procedures.
7. Review time required for review of submittals and resubmittals.
8. Review time required for fabrication of materials and delivery to site.
9. Review requirements for tests and inspections by independent testing and inspecting agencies.
10. Review time required for Project closeout and Owner startup procedures, including commissioning activities.
11. Review and finalize list of construction activities to be included in schedule.
12. Review procedures for updating schedule.

## 1.6 COORDINATION

- A. Coordinate CPM Schedule with the schedule of values, submittal schedule, progress reports, payment requests, and other required schedules and reports.
  1. Secure time commitments for performing critical elements of the Work from entities involved.
  2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

## PART 2 - PRODUCTS

### 2.1 CONTRACTOR'S CONSTRUCTION SCHEDULE (CPM)

- A. Time Frame: Extend schedule from date established for the Notice to Proceed to date of Substantial Completion.
- B. Work Breakdown Structure (WBS): Provide a WBS for each construction area identifying major portions of the work. Major portions of work may be as follows but not limited to:
  1. Phase, Area, Floor, Interior/Exterior of the Project, as well as the Procurement Process and Major Milestones.
  2. Procurement Process WBS should be comprised of the following long lead items only:
    - a. Prepare and Submit Shop Drawings/Product Data
    - b. Review and Approve Shop Drawings/Product Data
    - c. Fab and Deliver Material
  3. Major Milestones may comprise but are not limited to the following:
    - a. Notice to Proceed (NTP)
    - b. Mobilize to Site
    - c. Sitework Complete
    - d. Foundations Complete

- e. Structural Steel Complete
  - f. Dry-In
  - g. Mechanical Systems Complete
  - h. Electrical Systems Complete
  - i. Plumbing Systems Complete
  - j. Fire Suppression Systems Complete
  - k. Conveying Systems Complete
  - l. Required Substantial Completion Date
- C. Activities: Treat each story or separate area as a separate numbered activity for each main element of the Work. Comply with the following:
1. Activity Duration: Define activities so no activity is longer than twenty (20) working days unless specifically allowed by Construction Manager.
  2. Procurement Activities: Include procurement process activities in the corresponding WBS for long lead items and major items requiring a cycle of more than sixty (60) days as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
  3. Submittals Review Time: The reviews and comments by the Construction Manager and the Designer will be completed within twenty-one (21) days after submission to the respective party. Coordinate submittal review times in Contractor's construction schedule with submittal schedule.
  4. Startup and Testing Time: Include no fewer than fifteen (15) days for startup and testing.
  5. Substantial Completion: Indicate completion in advance of date established for Substantial Completion and allow time for Designer's and Construction Manager's administrative procedures necessary for certification of Substantial Completion.
  6. Punch List and Final Completion: Include not more than thirty (30) days for completion of punch list items and final completion.
- D. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule and show how the sequence of the Work is affected.
1. Phasing: Arrange list of activities on schedule by phase in the Work Breakdown Structure (WBS) as noted above.
  2. Work under More Than One Contract: Include a separate activity for each contract.
  3. Work by Owner: Include a separate activity for each portion of the Work performed by Owner.
  4. Products Ordered in Advance: Include a separate activity for each product. Delivery dates indicated stipulate the earliest possible delivery date.
  5. Owner-Furnished Products: Include a separate activity for each product. Delivery dates indicated stipulate the earliest possible delivery date.
  6. Work Restrictions: Show the effect of the following items on the schedule:
    - a. Coordination with existing construction.
    - b. Limitations of continued occupancies.
    - c. Uninterruptible services.
    - d. Partial occupancy before Substantial Completion.
    - e. Use of premises restrictions.
    - f. Provisions for future construction.
    - g. Seasonal variations.
    - h. Environmental control.

- E. Recovery Schedule: When periodic update indicates the Work is twenty (20) or more calendar days behind the current accepted schedule, Contractor shall submit a separate recovery schedule indicating means by which the Contractor(s) intend to regain compliance with the schedule. Indicate changes to working hours, working days, crew sizes, and equipment required to achieve compliance and date by which recovery will be accomplished.

## 2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE (CPM SCHEDULE)

- A. CPM Schedule: Contractor to prepare construction schedule using a time-scaled CPM network analysis diagram for the Work.
1. Develop and submit full CPM schedule to CM within thirty (30) days after the Notice to Proceed date to allow sufficient time for adjustments as needed so it can be accepted for use no later than forty-five (45) days after date established for the Notice to Proceed.
    - a. Failure to include any work item required for performance of this Contract shall not excuse Contractor from completing all work on or before applicable completion dates, regardless of Construction Manager's acceptance of the schedule.
  2. Establish procedures for monitoring and updating CPM schedule and for reporting progress. Coordinate procedures with progress meetings and payment request dates.
  3. Use "one workday" as the unit of time for individual activities. Indicate nonworking days and holidays incorporated into the schedule in order to coordinate with the Contract Time.
- B. CPM Schedule Preparation: Prime Contractor to prepare a list of all activities required to complete the Work. Using the startup network diagram, prepare a skeleton network to identify probable critical paths.
1. Activities, Construction Logic from Supportive Prime Contractors: As outlined in Specification Section 011200 "Prime Contractor Package Descriptions" all Prime Contractors not directly responsible for creating the full CPM Schedule must submit the activities, durations, and logic necessary in creating the full CPM Schedule to the Prime Contractor who is directly responsible for creating said schedule within fifteen (15) days after the Notice to Proceed date.
  2. Critical Path Activities: Identify critical path activities, including those for interim completion dates. Scheduled start and completion dates shall be consistent with Contract milestone dates.
- C. Contract Modifications: Include each proposed contract modification in the CPM schedule.
- D. Initial Issue of Schedule: Prepare initial network diagram from a sorted activity list indicating straight "early start-total float." Identify critical activities. Prepare tabulated reports showing the following:
1. Contractor or subcontractor and the Work or activity.
  2. Immediately preceding and succeeding activities.
  3. Early and late start dates.
  4. Early and late finish dates.
  5. Activity duration in workdays.
  6. Total float.

- E. Schedule Updating: Concurrent with revising schedule, prepare tabulated reports showing the following:
1. Identification of activities that have changed.
  2. Changes in early and late start dates.
  3. Changes in early and late finish dates.
  4. Changes in activity durations in workdays.
  5. Changes in the critical path.
  6. Changes in total float.
  7. Changes in the Contract Time.

### PART 3 - EXECUTION

#### 3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Meetings: Scheduling consultant shall attend all meetings related to schedule.
- B. Contractor's Construction Schedule Updating: At monthly intervals, Contractor will update schedule to reflect actual construction progress and activities and submit to the CM. Contractor will issue schedule not less than two days before every other regularly scheduled bi-weekly progress meeting.
1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
  2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
  3. As the Work progresses, indicate percent complete for each activity.
- C. Distribution: Prime Contractor to distribute copies of accepted schedule to Construction Manager, Designer, Owner, PennDOT, other Prime Contractors, subcontractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.

END OF SECTION 013200

**SECTION 013300 - SUBMITTAL PROCEDURES**

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and General Conditions of this Contract, including any General and or Supplementary Conditions as well as other Division 01 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, Mockups, Preinstallation Meeting Minutes, and other submittal Items.
- B. Related Requirements:
  - 1. Section 012900 "Payment Procedures" for submitting Applications for Payment and the schedule of values.
  - 2. Section 013200 "Construction Progress Documentation" for submitting schedules and reports, including Contractor's construction schedule.
  - 3. Section 017839 "Project Record Documents" for submitting record Drawings, record Specifications, and record Product Data.

## 1.3 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Designer's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information and physical samples that do not require Designer's responsive action. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."
- C. Portable Document Format (PDF): An open standard file format licensed by Adobe Systems used for representing documents in a device-independent and display resolution-independent fixed-layout document format.
- D. Procore: Procore is a construction management software that will be utilized for the submission, review, approval, and memorialization of submittals for this construction project.

## 1.5 INFORMATION SUBMITTALS

- A. Designer will review each submittal and will return it if it does not comply with requirements.

## 1.6 ACTION SUBMITTALS

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- A. Submittal Register: The Construction Manager will provide a register of submittals from the contract specifications and/or drawings to the Prime Contractors. The Prime Contractors will endeavor to provide all submittals in a timely fashion so as to not impact or delay the performance of work.
  - B. Designer will review each submittal, make marks to indicate corrections or revisions required, and return it. Designer will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.

#### 1.7 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

- A. Designer's Digital Data Files: Electronic digital data files of the Contract Drawings may be available upon request from Designer for Contractor's use in preparing submittals. Designer makes no representations as to the accuracy or completeness of digital data drawing files as they relate to the Contract Drawings. Contractor shall execute a data licensing agreement in the form of Agreement form acceptable to Owner and Designer.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
  - 1. Submit action submittals and informational submittals required by the same Specification Section under a single transmittal. Do not place various specification sections under a single transmittal.
  - 2. Designer and Construction Manager reserve the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- C. Processing Time: Allow twenty-one (21) calendar days submittal review, including time for resubmittals, as follows. Time for review shall commence on Construction Manager's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
  - 1. Resubmittal Review: Allow seven (7) calendar days for review of each resubmittal.
- D. Electronic Submittals: Electronic Submittals are required for this project and shall be submitted to recipients as designated by the Construction Manager.
  - 1. Assemble complete submittal package into a single file incorporating submittal requirements of a single Specification Section.
  - 2. Name file with Construction Manager's unique activity identifier as per the referenced Submittal Register. Should a submittal be required which is not identified in the Construction Manager's submittal register, notify the Construction Manager. The Construction Manager's submittal register is provided for reference purposes only. The Contractor is responsible for providing all required submittals, including those which may have been omitted from the Construction Manager's submittal register.
  - 3. Transmittal Cover Sheet for Electronic Submittals: Ensure the provision of transmittal cover sheet for all submittals. Permanently record Contractor's review and approval

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markings, including date of approval, on transmittal cover sheet. Submittals which do not include the Contractor's stamp of acceptance will be returned to the Contractor with no action taken.

4. Submittals shall clearly indicate the products to be used on the project. Submittals containing an entire catalog of products (or similar) that do not specifically indicate the product(s) to be used will be sent back to the Contractor for resubmission.
- E. Resubmittals: Make resubmittals in same form as initial submittal. Note date and content of revision in label or title block and clearly indicate extent of revision. Resubmit submittals until they are marked with approval notation from Designer's action stamp.
- F. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed. Attach label on unexposed side of Samples that includes the Specification Section, product name and name of manufacturer and unique identifier, if applicable. Samples are the property of the Owner unless otherwise designated.
  1. Samples shall be shipped and/or delivered to a location(s) designated by the Designer.
- G. Provide corresponding electronic submittal of Sample transmittal, digital image file illustrating Sample characteristics, and identification information for record.

## 2.2 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
  1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Designer.
- B. Delegated Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF electronic file, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
  1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

## PART 3 - EXECUTION

### 3.1 CONTRACTOR'S REVIEW

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections

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and field dimensions. Mark with approval stamp before submitting electronically to Designer and Construction Manager.

- B. Approval Stamp: Stamp each submittal with a uniform approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

### 3.2 DESIGNER'S AND CONSTRUCTION MANAGER'S ACTION

- A. Action Submittals: Action submittals will be reviewed, marked as to indicate corrections or revisions required, and returned.
- B. Informational Submittals: Informational submittals will be reviewed and returned if not in compliance with requirements.
- C. Submittals will be reviewed, marked as to indicate disposition, and returned promptly. Disposition may include the following:
  - 1. No Exceptions Taken: The Contractor is advised that the submission appears is in general conformance with the design concept and Contract Documents. Fabrication, installation, or erection may be undertaken. Final payment depends on that compliance. Submittals stamped as such do not authorize changes to the Contract price or time.
  - 2. Exceptions Taken as Noted: The Contractor is advised that the submission appears in general conformance with the design concept and Contract Documents as noted. Contractor shall comply with all notes or corrections indicated. No resubmittal is required. Any corrections or variations should be noted on record drawings and files. Final payment depends on that compliance. If for any reason the Contractor cannot comply with the noted corrections, fabrications shall not proceed, and the Contractor shall resubmit for review.
  - 3. Revise and Resubmit: The Contractor is advised that the submittal shall be revised and resubmitted. Any submittal marked "Revise and Resubmit" will not be permitted on the project site. Fabrication, installation nor erection shall be undertaken.
  - 4. Rejected: The Contractor is advised that the submission is rejected for non-conformance with the design concept and Contract Documents and that the Contractor shall make a new submittal. Any submittal marked "Rejected" will not be permitted on the project site. Fabrication, installation nor erection shall be undertaken.
  - 5. Submit Specific Item: The Contractor is advised that a portion of the submission is in general conformance with the design concept and Contract Documents, but another portion is not in conformance. A resubmittal is required only for that portion not in conformance. The Contractor may proceed with Work represented by that portion of the submission that is in general conformance with the design concept and Contract Documents if it is separate and distinct Work, but the Contractor may not proceed with any Work represented by that portion of the submittal that is not in conformance.

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- D. The review and approval of a submittal by the Designer is for conformance with the information given in the Contract Documents and with the design concept of the Project. Approval does not relieve the Contractor of the responsibility for compliance with Contract requirements or with statutory or regulatory requirements. The Contractor is responsible for dimensions, quantities, details, connections, fabrication, construction methods and coordination of trades required for satisfactory construction of all Work.
  
  - E. Partial and incomplete submittals prepared for a portion of the Work are unacceptable, will be considered non-responsive and will be returned to the Contractor without action. The Contractor shall assemble complete submittals that include all related and specified work within a specification section. If partial review consideration is required by the Contractor, the Contractor must advise the Construction Manager and receive approval from both the Construction Manager and Designer before submitting partial submittals.
  
  - F. Submittals not required by the Contract Documents may be returned by the Designer without action.

END OF SECTION 013300

**SECTION 013523 – SAFETY AND PROTECTION****PART 1 - GENERAL****1.1 SUMMARY**

- A. It is recognized that the safety of all personnel is the responsibility of all participants involved directly in the construction of this Project. It is the contractual obligation of each Contractor to adhere to all requirements of the Occupational Health and Safety Act (OSHA) as well as Local and State safety rules and regulations. The Contractor shall keep the job site free from safety and health hazards and ensure that its employees are competent and adequately trained in all safety and health aspects of the job in accordance with all Local, State and Federal regulations. Each Contractor is responsible for any safety requirements that are contractually those of any Contractor.
- B. Each **Prime Contractor** shall be designated as their own “**Lead Contractor**” with respect to jobsite safety for their work. Responsibilities and authority of the Lead Contractor shall be as follows:
1. This Contractor will be responsible to regularly inspect and maintain safe working conditions on the jobsite. Results of inspections will be documented.
  2. Where the work of one (1) Contractor places another Contractor’s workers in jeopardy, the Lead Contractor shall direct and coordinate the effort of the Contractors to ensure that jobsite safety is maintained.
  3. This Contractor will maintain a “competent person” as defined by the Occupational Safety and Health Administration (OSHA) on site at all times. This person shall be designated to make safety inspections and to serve as the designated representative in charge of safety.
  4. This Contractor shall develop and submit to all Prime Contractors and the Construction Manager a jobsite Emergency Preparedness and Response Plan within ten (10) days after the Notice to Proceed date. The Emergency Preparedness and Response Plan shall identify, at a minimum:
    - a. Local Police, Fire and EMS and contact information;
    - b. Emergency contacts for each Prime Contractor;
    - c. Evacuation and muster procedures and locations;
    - d. First Aid and AED locations, as applicable;
    - e. Spill Prevention and Response Plan; and
    - f. Emergency response considerations for specific threats, including but not limited to medical emergency, fire, natural disaster, severe storm events, confined space emergencies, bomb threats, etc.
  5. This Contractor may direct another Contractor to make corrections in the event of a safety violation. Failure of another Contractor to take prompt action (within 24 hours following written notice) to correct a safety violation will empower this Contractor to make the necessary corrections. The Owner will support the decisions and actions taken by the Lead Contractor to maintain jobsite safety and will promptly make payment to the Lead Contractor when corrective action has been taken on behalf of an offending Contractor and the Lead Contractor has provided appropriate documentation. The Owner, in turn, will recover the amount of expense from the offending Contractor via deduct change order.
  6. The individual Prime Contractors will maintain primary responsibility for the safety of their workers. The Lead Contractor will serve to identify areas of concern and will endeavor to accomplish required corrections through cooperation of other Prime

Contractors. In the event this effort is unsuccessful, the Lead Contractor will take action as defined above.

C. All Prime Contractors

1. Each Contractor shall provide a safety representative who is trained in First Aid and CPR.
2. Each Contractor to submit a site-specific Safety Program within ten (10) days of the Notice to Proceed date.
3. Each Contractor shall maintain a “competent person” as defined by the Occupational Safety and Health Administration (OSHA) on site at all times.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 INJURIES AND ACCIDENTS

- A. The Contractor shall require that all employees injured (no matter how slight) while working on this Project report immediately for First Aid Treatment. The Contractor shall maintain adequate First Aid facilities in the field.
- B. Each Contractor shall notify the Construction Manager of any personal injury that could require medical treatment of any employee or subcontracted employee at the project site. In addition, any damage to property arising in connection with the Contractor’s performance shall be reported to the Construction Manager within 24 hours after occurrence of such injury or damage. Within 48 hours of such occurrence, the Contractor shall furnish to the Construction Manager a complete written report of such injury or damage. Accident reports shall include specific actions taken by the Contractor to preclude recurrence of similar incidents.

3.2 REQUIRED SAFETY DATA

- A. Each Contractor shall provide the Construction Manager with the following data prior to the commencement of work at the Project site:
  1. Emergency care facility to be utilized, address and telephone number
  2. Insurance company and local agent, name, address, and telephone number;
  3. A Site-Specific Health and Safety Plan that addresses all of the hazards and employee exposures at the job site;
  4. Employees qualified in any type of First Aid (list employee and associated skill);
  5. Names of corporate and jobsite safety officers;

3.3 HOUSEKEEPING

- A. Indiscriminate accumulations of debris, waste or scrap in work areas will not be permitted. Areas will be designated for storage or disposal.
- B. All materials, tools and equipment must be stored in an orderly manner in designated areas.

### 3.4 PERSONAL PROTECTIVE EQUIPMENT

- A. Contractors must furnish their employees with the proper type of personal protective equipment as required by the operations being performed, including, but not necessarily limited to, the following:
1. Hard Hats must be furnished to all employees and worn at ALL TIMES when on this project, whether or not an overhead hazard exists. Protective head gear must meet the requirements of American National Standard Z89.1 – latest revision.
  2. Safety Glasses must be available at all times and must be worn when work activities dictate. Additional eye protection must be provided to meet specific job situations, including welding, grinding, burning, etc. Occupational eye and face protection must meet the requirements of American National Standard Z87.1 – latest revision.
  3. The Construction Manager requires that appropriate attire be worn at all times. Appropriate attire shall be as deemed necessary by the Construction Manager and in accordance with all applicable OSHA regulations. Sneakers, shorts, vulgar print, etc. will not be permitted.

### 3.5 FIRE PROTECTION

- A. When necessary, the Contractor must supply approved type fire extinguishers for emergency use within his own immediate areas of operation, including the Contractor's office, tool, and storage enclosures.

### 3.6 COOPERATION

- A. Any deviation from this course of action will be called to the attention of the Contractor for immediate correction. Conversely, the Contractor should call attention to any unsafe conditions or unsafe practice by other Contractors at the site.

### 3.7 INSTALLED SAFETY APPARATUS

- A. A contractor shall not remove any safety apparatus that is installed by another Contractor without prior approval from the installing Contractor and the Lead Contractor. Each Contractor is responsible for the re-installation of any safety apparatus installed by other Contractors if removed to facilitate the installation of their own work.

### 3.8 RADIOS

- A. The playing of radios or the wearing of portable radios or MP3 players is expressly prohibited.

### 3.9 Safety Data Sheets (SDS)

- A. Each Prime Contractor is responsible for creating and maintaining a full hazardous material inventory that includes all Safety Data Sheets for any products that will be used onsite during the project. Any material that carries with it a Safety Data Sheet must have the applicable Safety Data Sheet onsite prior to the material being utilized.

END OF SECTION 013523

**SECTION 014000 – QUALITY REQUIREMENTS****PART 1 - GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspection services are required to verify compliance with requirements specified or indicated. These services do not relieve the Contractor of responsibility for compliance with the Contract Documents.
  - 1. Specific quality assurance and quality control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
  - 2. Specified tests, inspections and related actions do not limit the Contractor's other quality assurance and quality control procedures that facilitate compliance with requirements of the Contract Documents.
  - 3. Requirements for the Contractor to provide quality assurance and quality control services required by the Owner, Designer, CM, or authorities having jurisdiction are not limited by the provisions of this Section.
  - 4. Specific test and inspection requirements are not specified in this Section.

**1.3 DEFINITIONS**

- A. Quality Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by the Designer or CM.
- C. Mockups: Full-size physical assemblies that are constructed on the project site. Mockups are constructed to verify selections made under sample submittals; to demonstrate aesthetic effects and, where indicated, qualities of materials and execution; to review coordination, testing or operation; to show interface between dissimilar materials; and to demonstrate compliance with specified installation tolerances. Mockups are NOT samples. Unless otherwise indicated, approved mockups establish the standard by which the Work will be judged.
  - 1. Laboratory Mockups: Full-size physical assemblies constructed at a testing facility to verify performance characteristics.
  - 2. Integrated Exterior Mockups: Mockups of the exterior envelope erected separately from the building but on the project side, consisting of multiple products, assemblies, and subassemblies.

3. Room Mockups: Mockups of typical interior spaces complete with wall, floor and ceiling finishes, doors, windows, millwork, casework, specialties, furnishings, equipment, and lighting.
  - D. Preconstruction Testing: Tests and inspections performed specifically for the Project before products and materials are incorporated into the Work to verify performance or compliance with specified criteria.
  - E. Product Testing: Tests and inspections are performed by an NRTL, an NVLAP or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction to establish product performance and compliance with specified requirements.
  - F. Source Quality Control Testing: Tests and inspections that are performed at the source, e.g., plant, mill, factory, or shop.
  - G. Field Quality Control Testing: Tests and inspections that are performed on the project site during installation of the Work and for completed Work.
  - H. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
  - I. Installer/Applicator/Erector: Contractor or another entity engaged by the Contractor as an employee, subcontractor, or sub-subcontractor to perform a particular construction operation including installation, erection, application and similar.
    1. Use of trade-specific terminology in referring to a trade or entity does not require that certain construction activities be performed by accredited or unionized individuals or that requirements apply exclusively to specific trade(s).
  - J. Experienced: When used with an entity or individual, “experienced” means having successfully completed a minimum of five (5) previous projects similar in nature, size, and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.
- 1.4 CONFLICTING REQUIREMENTS
- A. Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Request a written decision from the CM if conflicting requirements are different, but apparently equal, before proceeding.
  - B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to the CM for a decision before proceeding.

## 1.5 ACTION SUBMITTALS

- A. Shop Drawings: For integrated exterior mockups, provide plans, sections and elevations indicating materials and size of mockup construction.
  - 1. Indicate manufacturer and model number of individual components.
  - 2. Provide axonometric drawings for conditions difficult to illustrate in two dimensions.

## 1.6 INFORMATIONAL SUBMITTALS

- A. Testing Agency Qualifications: For testing agencies specified in “Quality Assurance” Article to demonstrate their capabilities and experience.
- B. Schedule of Tests and Inspections: Prepare in tabular form and include the following.
  - 1. Specification Section number and title.
  - 2. Entity responsible for performing tests and inspections.
  - 3. Description of tests and inspections.
  - 4. Identification of applicable standards.
  - 5. Identification of test and inspection methods.
  - 6. Number of tests and inspections required.
  - 7. Time schedule or time span for tests and inspections.
  - 8. Requirements for obtaining samples.
  - 9. Unique characteristics of each quality control service.

## 1.7 CONTRACTOR’S QUALITY CONTROL ITEMS

- A. Quality Control Personnel Qualifications: Engage qualified full-time personnel trained and experienced in managing and executing quality assurance and quality control procedures similar in nature and extent to those required for the Project.
- B. Submittal Procedure: Describe procedures for ensuring compliance with requirements through review and management of submittal process. Indicate qualifications of personnel responsible for submittal review.
- C. Testing and Inspection: In quality control plan, include a comprehensive schedule of Work requiring testing and inspection, including the following:
  - 1. Contractor-performed tests and inspections: include subcontractor-performed tests and inspections required by the Contract Documents.
  - 2. Owner-performed tests and inspections: Special Inspections required by authorities having jurisdiction and indicated on the “Statement of Special Inspections.” Include required tests and inspections and Contractor-elected tests and inspections.
- D. Continuous Inspection of Workmanship: Describe process for continuous inspection during construction to identify and correct deficiencies in workmanship in addition to testing and inspection specified. Indicate types of corrective actions to be required to bring work into compliance with standards of workmanship established by Contract requirements and approved mockups.
- E. Monitoring and Documentation: Maintain testing and inspection reports and a log of approved and rejected results. Include work the Designer has indicated as nonconforming or defective.

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Indicate corrective actions taken to bring nonconforming work into compliance with requirements. Comply with requirements of authorities having jurisdiction.

## 1.8 REPORTS AND DOCUMENTS

- A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:
1. Date of issue.
  2. Project title.
  3. Contract number and title.
  4. Name, address and telephone number of testing agency.
  5. Dates and locations of samples, tests, and inspections.
  6. Names of individuals taking samples or making tests and inspections.
  7. Description of the Work and the sampling, testing and/or inspection method.
  8. Identification of project and Specification Section.
  9. Complete test or inspection data.
  10. Test and inspection results and an interpretation of the results.
  11. Record of temperature and weather conditions at the time of sampling, testing and inspection.
  12. Comments or professional opinion on whether sampled, tested or inspection Work complies with the requirements of the Contract Documents.
  13. Name and signature of laboratory inspector.
  14. Recommendations for re-testing or re-inspection.
- B. Manufacturer's Technical Representative's Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:
1. Name, address and telephone number of technical representative issuing report.
  2. Statement on condition of substrates and their acceptability for installation of the product.
  3. Statement that products at the Project site comply with requirements.
  4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
  5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
  6. Statement whether conditions, products and installation will affect warranty provisions.
  7. Other required items indicated in individual Specification Sections.
- C. Factory-Authorized Service Representative's Reports: Prepare written information documenting manufacturer's factory-authorized service representative's test and inspections specified in other Sections. Include the following:
1. Name, address and telephone number of factory-authorized service representative issuing report.
  2. Statement that equipment complies with requirements.
  3. Results of operational and other tests and a statement of whether observed performance complies with requirements.
  4. Statement whether conditions, products and installation will affect warranty.
  5. Other required items indicated in individual Specification Sections.
- D. Permits, Licenses and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee

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payments, judgments, correspondence, records, and similar documents established for compliance with standards and regulations bearing on performance of the Work.

## 1.9 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar in material, design, and extent to those indicated for this Project.
- F. Specialists: Certain Specification Sections require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
  - 1. Requirements of authorities having jurisdiction shall supersede requirements for specialists.
- G. Testing Agency Qualifications: An NRTL, an NVLAP or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 329, and with additional qualifications specified in individual Sections; and, where required by authorities having jurisdiction, that is acceptable to authorities.
  - 1. NRTL: A nationally-recognized testing laboratory according to 29 CFR 1910.7.
  - 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- H. Manufacturer's Technical Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- I. Factory-Authorized Service Representative Qualifications: An authorized representative of the manufacturer who is trained and approved by the manufacturer to inspect installation of the manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

- J. Preconstruction Testing: Where testing agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods, comply with the following:
1. Contractor responsibilities include the following:
    - a. Provide test specimens representative of proposed products and construction.
    - b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
    - c. Provide sizes and configurations of test assemblies, mockups, and laboratory mockups to adequately demonstrate capability of products to comply with performance requirements.
    - d. Build site-assembled test assemblies and mockups using installers who will perform the same tasks for the Project.
    - e. Build laboratory mockups at testing facility using personnel, products and methods of construction indicated for the completed Work.
    - f. When testing is complete, remove test specimens, assemblies, and mockups; do not reuse products on the Project.
  2. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality assurance services to the Designer, through the CM, with copy to the Contractor. Interpret tests and inspections and state in each report whether tested and inspected Work complies with or deviates from the Contract Documents.
- K. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
1. Build mockups in location and of size indicated or, if not indicated, as directed by the Designer or CM.
  2. Notify Designer and CM seven days in advance of dates and times when mockups will be constructed.
  3. Employ supervisory personnel who will oversee mockup construction. Employ workers that will be employed during construction at the Project site.
  4. Demonstrate the proposed range of aesthetic effects and workmanship.
  5. Maintain mockups during construction in an undisturbed location as a standard for judging the completed Work.
  6. Demolish and remove mockups when directed unless otherwise indicated.
- L. Integrated Exterior Mockups: Constructed integrated exterior mockup according to accepted Shop Drawings. Coordinate installation of materials and products for which mockups are required in individual Specification Sections, along with supporting materials.

#### 1.10 QUALITY CONTROL

- A. Test and inspections which are not explicitly assigned to the Owner are the Contractor's responsibility. Perform additional quality control activities required to verify that the Work complies with requirements, whether specified or not.
1. Unless otherwise indicated, provide quality control services specified and those required by authorities having jurisdiction, whether specified or not.
  2. Where services are indicated as the Contractor's responsibility, engage a qualified testing agency to perform these quality control services.
    - a. Contractor shall not employ same entity engaged by the Owner unless agreed to in writing by the Owner.

3. Notify testing agencies at least twenty-four (24) hours in advance of time when Work that requires testing or inspection will be performed.
  4. Where quality control services are indicated at the Contractor's responsibility, submit a certified written report of each quality control service.
  5. Testing and inspection requested by the Contractor and not required by the Contract Documents are the Contractor's responsibility.
  6. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- B. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Section 014523 "Testing and Inspection Services."
- C. Manufacturer's Technical Services: Where indicated, engage a manufacturer's technical representative to observe and inspect the Work. Manufacturer's technical representative services include participation in pre-installation conferences, examination of substrates and conditions, verification of materials, observation of installer activities, inspection of completed portions of the Work and submittal of written reports.

## PART 2 - PRODUCTS (Not Used)

## PART 3 - EXECUTION (Not Used)

### 3.1 ACCEPTABLE TESTING AGENCIES

- A. Testing Agency credentials shall be submitted to the Designer and CM for approval.

### 3.2 TEST AND INSPECTION LOG

- A. Test and Inspection Log: Prepare a record of tests and inspections. Include the following:
1. Date test or inspection was conducted.
  2. Description of the Work tested or inspected.
  3. Date test or inspection results were transmitted to the CM.
- B. Maintain log at the Project site. Post changes and revisions as they occur. Provide access to test and inspection log for Designer and CM reference during normal working hours.

### 3.3 REPAIR AND PROTECTION

- A. General: On completion of testing, inspection, sampling and similar services, repair damaged construction and restore substrates and finishes.
1. Provide materials and comply with installation requirements specified in other Specification Sections or to match existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.

- B. Protect construction exposed by or for quality control service activities.
- C. Repair and protection are the responsibility of the Contractor, regardless of the assignment of responsibility for quality control services.

END OF SECTION 014000

## SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. The Contract Documents, including but not limited to, the Drawings and Individual Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.

## 1.3 USE CHARGES

- A. General: Connections to and removal of temporary facilities shall be included in the Contract Sum. Allow other entities to use temporary services and facilities without cost, including, but not limited to, the Owner, the Design Professionals, occupants of the Project, testing agencies, and authorities having jurisdiction.
- B. Sewer Service: NA
- C. Water Service: The Owner will pay for the water service usage fees.
- D. Gas/Propane Service: NA
- E. Electrical Power Service: The Owner will pay for electric power usage fees.

## 1.4 CONDITIONS OF USE

- A. Conditions of Use: Each Contractor shall keep temporary facilities clean and neat in appearance. Operate in a safe and efficient manner. Take necessary fire prevention measures. Do not overload facilities or permit them to interfere with progress. Do not allow hazardous or unsanitary conditions or public nuisances to develop or persist on the site. Report any unsafe conditions to the Construction Manager immediately.

## INFORMATIONAL SUBMITTALS

- A. Site Utilization Plan (See Attachments and Bid Package Descriptions) Each Prime to submit plan on how they plan to utilize the site for coordination with multiple prime contractors.

- B. Erosion and Sedimentation Control Plan: Contractors shall follow best practices related to erosion and sedimentation controls. **Contract Prime 01 and Contract Prime 02 are not to cause any earth disturbance.**

## 1.6 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations and requirements of authority having jurisdiction for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.
- C. Accessible Temporary Egress: Comply with applicable provisions in ADA-ABA Accessibility Guidelines and ANSI A117.1.

## 1.7 PROJECT CONDITIONS

- A. Temporary Use of Permanent Facilities: Engage installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before the Owner's acceptance, regardless of previously assigned responsibilities.

## PART 2 - PRODUCTS

### 2.1 TEMPORARY FACILITIES

- A. Field Offices
  - 1. Building #5 and Building #1 may be used for Temp office and storage until each of these are fully demolished. Please provide in your activity schedule.

### 2.2 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.
- B. First Aid Supplies: All Contractors shall comply with governing regulations.
- C. Labor Law Postings: Contractor is responsible for providing US Department of Labor, Labor Law, and OSHA postings at the jobsite.

## PART 3 - EXECUTION

## 3.1 INSTALLATION, GENERAL

- A. Locate facilities where they will serve the Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of complete permanent facilities.

## 3.2 TEMPORARY UTILITY INSTALLATION

- A. Temporary Service: The named Prime Contractor is to coordinate the installation of temporary service or connect to existing service.
  - 1. Arrange with utility company, the Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Sewers and Drainage: Each Prime Contractor is to provide temporary utilities to remove effluent lawfully.
  - 1. Connect temporary sewers to municipal system as directed by authorities having jurisdiction. Obtain all required permits.
- C. Water Service: Each Prime Contractor is to coordinate with the utility company and provide for the installation of the water service and distribution piping in sizes and pressures adequate for construction. Clean and maintain water service facilities in a condition acceptable to the Owner. At Substantial Completion, restore these facilities to condition existing before initial use. Obtain all required permits.

Sanitary Facilities: Each Prime Contractor is to provide temporary sanitary facilities for the use of their construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of facilities.

- E. Electric Power Service: Each Prime Contractor is responsible for connecting to the existing electric power service for this contract. Maintain equipment in a condition acceptable to the NEC. Obtain all required permits.

Lighting: Each Contractor is to provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.

- 1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.
- 2. Install lighting for the Project identification sign (if applicable).

### 3.3 SUPPORT FACILITIES INSTALLATION

- A. General: Maintain support facilities until Substantial Completion inspection date is scheduled. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to and only with prior authorization from the Owner.
- B. Temporary Use of Permanent Roads and Paved Areas: Locate temporary roads and paved areas in same location as permanent roads and paved areas. Each Prime Contractor shall construct and maintain temporary roads and paved areas adequate for construction operations. Extend temporary roads and paved areas, within construction limits indicated, as necessary for construction operations.
  - 1. Coordinate elevations of temporary roads and paved areas with permanent roads and paved areas.
  - 2. Prepare subgrade and install subbase and base for temporary roads and paved areas specified in the contract documents.
  - 3. Delay installation of final course of permanent hot-mix asphalt pavement until immediately before Substantial Completion unless otherwise noted in the documents. Repair hot-mix asphalt base-course pavement before installation of final course.
- C. Traffic Controls: Comply with requirements of authorities having jurisdiction.
  - 1. Protect existing site improvements to remain including curbs, pavement, and utilities.
  - 2. Maintain access for fire-fighting equipment and access to fire hydrants.
- D. Parking: Onsite parking will be limited, and the use of public parking will be required.
- E. Dewatering Facilities and Drains: Comply with the requirements of authorities having jurisdiction. The Sitework Contractor shall maintain the Project site, excavations, and construction free of water for this contract.
  - 1. Dispose of rainwater in a lawful manner that will not result in flooding the Project or adjoining properties nor endanger permanent Work or temporary facilities.
  - 2. Remove snow and ice as required to minimize accumulations.
- F. Waste Disposal Facilities: Each Prime Contractor provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with the requirements of authorities having jurisdiction.

### 3.4 SITE SECURITY AND PROTECTION FACILITIES

- A. Erosion and Sedimentation Control: Each Prime Contractor shall be party to the NPDES (National Pollutant Discharge Elimination Discharge System) co-permittee agreement and shall provide and maintain erosion and sedimentation controls for the project, including the concrete washout containment device.
  - 1. The Contractor shall conduct a pre-installation meeting with the Owner, Construction Manager, and County Conservation District not less than five (5) working days prior to

commencement of work. Document the results of this meeting and submit to the Construction Manager.

- B. Rock Construction Entrance: Each Prime Contractor shall maintain the rock construction entrance(s), temporary roads, and paved areas in accordance with the Contract Documents or as necessary for execution of the Work.
- C. Vegetation Control: Each Prime Contractor shall provide mowing and maintenance of lawns within the construction areas as required by the Specifications until the completion of his contract. This includes vegetation control throughout the entire site during construction.
- D. Drives and Aisles Maintenance: Each Prime Contractor shall provide sweeping, cleaning, and snow removal of all drives, parking lots, and roadways throughout the duration of the Project.
- E. Portable Chain-Link Fencing System:
  - 1. Provided by Each Prime Contractor.
  - 2. Relocation of fencing beyond what is shown on the Site Utilization will be the responsibility of each Prime Contractor for their work.
  - 3. Maintain security by limiting number of keys and/or Keypad code and restricting distribution to authorized personnel.
  - 4. As required by each Prime Contractor, install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each workday.
  - 5. Permanent fencing by Prime Contract 02
- F. Collection and Disposal of Waste: Each Prime Contractor shall provide dumpster(s) as required for the purpose of trash and demolition waste disposal for all Contractors. Hazardous materials shall not be placed in dumpsters. Do not hold materials more than seven (7) days during normal weather or three (3) days when temperatures are expected to rise above 80 degrees F. Handle hazardous, dangerous, or unsanitary water or materials separately from other waste by containerizing properly and disposing of in a lawful manner.
- G. Tree and Plant Protection: Each Prime Contractor is to install temporary fencing outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.

Barricades, Warning Signs, and Lights: Each Prime Contractor is to comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.

- I. Temporary Enclosures: Each Prime Contractor is to provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
  - 1. Where heating or cooling is needed and permanent enclosure is not complete, insulate.
- J. Fire Safety During Construction: Comply with all requirements identified herein as well as the more stringent requirements of the applicable codes (State Building and Fire Codes or City Building and Fire Codes).

1. No smoking: Smoking shall be prohibited throughout the project/construction site. “No Smoking” signs shall be conspicuously posted at all entrances and throughout the site.
2. The Contractor shall designate a Fire Prevention Program Superintendent/ Fire Safety Manager who shall be responsible for all fire safety efforts until completion and acceptance of the Work described in the Contract Documents that include but are not limited to the following:
  - a. Pre-Fire Plans. Develop in cooperation with the local Fire Chief and Fire Code Official. Any changes affecting the utilization of information contained in the plan shall result in notification to the local Fire Chief and Fire Code Official.
  - b. Training. Job site personnel shall be trained in fire safety practices and procedures and the proper use of fire protection equipment, including hand-held fire extinguishers, hose lines, fire alarm and sprinkler systems.
  - c. Fire Protection Devices. Fire protection and detection equipment shall be maintained and serviced.
  - d. Hot Work Operations. Welding, cutting, open torches, torch-applied roof system activities, and other hot work operations shall be conducted under a permit system. A fire watch and fire extinguishers shall be provided.
  - e. Impairment of Fire Protection Systems. Coordinate planned, emergency or accidental impairments of fire protection systems to include tagging of impaired systems and notification of Fire Department, Alarm Company, Building Owner/Operator, and Contractors.
  - f. Temporary Covering of Fire Protection Devices. Coverings placed on or over fire protection devices for protection from damage shall be immediately removed upon

END OF SECTION 015000

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**SECTION 017419 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL****PART 1 - GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. This Section includes administrative and procedural requirements for the following:
  - 1. Salvaging non-hazardous demolition and construction waste.
  - 2. Recycling non-hazardous demolition and construction waste.
  - 3. Disposing of nonhazardous demolition and construction waste.
  - 4. Disposing of hazardous demolition and construction waste.
    - a. As outlined in the Environmental Survey
- B. Related Sections include the following:
  - 1. Division 01 Section 011200 "Prime Contract Package Descriptions" for coordination of responsibilities for waste management.

**1.3 DEFINITIONS**

- A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.
- C. Disposal: Removal of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
- E. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.
- F. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

**1.4 PERFORMANCE REQUIREMENTS**

- A. Recycle Requirements: Where possible, recycle nonhazardous demolition waste including but not limited to the following materials: steel, aluminum, copper, brick, glass, plastic, fluorescent light bulbs.

**1.5 QUALITY ASSURANCE**

- A. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.

**1.6 WASTE MANAGEMENT PLAN**

- A. General: Develop plan consisting of waste identification.

- B. Waste Identification: Indicate anticipated types of demolition and construction waste generated by the Work.
- C. Waste Work Plan: List each type of waste and whether it will be salvaged, recycled, or disposed of in landfill or incinerator.
  - 1. Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses, and telephone numbers.
  - 2. Disposed Materials: Indicate how and where materials will be disposed of. Include name, address, and telephone number of each landfill and incinerator facility.

## PART 2 - PRODUCTS (Not Used)

## PART 3 - EXECUTION

### 3.1 PLAN IMPLEMENTATION

- A. General: Implement waste management plan as approved by Construction Manager. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.
  - 1. Comply with **Division 01 Section 015000 "Temporary Facilities and Controls"** for operation, termination, and removal requirements.
- B. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work occurring at Project site.
- C. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
  - 1. Designate and label specific areas on Project site necessary for separating materials that are to be salvaged, recycled, reused, donated, and sold.
  - 2. Comply with Division 01 Section 015000 "Temporary Facilities and Controls" for controlling dust and dirt, environmental protection, and noise control.

### 3.2 RECYCLING CONSTRUCTION WASTE, GENERAL

- A. General: Recycle paper and beverage containers used by on-site workers.
- B. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical.
  - 1. Provide appropriately marked containers or bins for controlling recyclable waste until they are removed from Project site. Include list of acceptable and unacceptable materials at each container and bin.
    - a. Inspect containers and bins for contamination and remove contaminated materials if found.
  - 2. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
  - 3. Stockpile materials away from construction area. Do not store within drip line of

remaining trees.

4. Store components off the ground and protect from the weather.
5. Remove recyclable waste off Owner's property and transport to recycling receiver or processor.

### 3.3 RECYCLING CONSTRUCTION WASTE

#### A. Packaging:

1. Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.
2. Pallets: As much as possible, require deliveries using pallets to remove pallets from Project site. For pallets that remain on-site, break down pallets into component wood pieces.
3. Crates: Break down crates into component wood pieces.

### 3.4 DISPOSAL OF WASTE

#### A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.

1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

#### B. Burning: Burning on site is prohibited.

#### C. Disposal: Legally transport and dispose of all waste materials off Owner's property. Contractor responsible for all fees, permits, etc. required to receive waste materials.

END OF SECTION 017419

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**SECTION 017700 – CLOSEOUT PROCEDURES****PART 1 - GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. Section includes administrative and procedural requirements for contract closeout including, but not limited to, the following:
  - 1. Substantial Completion procedures.
  - 2. Final Completion procedures.
  - 3. Warranties.
  - 4. Final cleaning.
  - 5. Repair of the Work.
  - 6. As-Built Surveys.
- B. Related Requirements:
  - 1. Section 007200 “General Conditions” for requirements at Substantial and Final Completion;
  - 2. Sections 015000 “Temporary Facilities and Controls” and 007213 “General Conditions” for waste disposal and progress cleaning of the Project site;
  - 3. Section 017839 “Project Record Documents” for submitting Record Drawings and miscellaneous Record Submittals.

**1.3 ACTION SUBMITTALS**

- A. Contractor’s Punchlist: Initial outstanding work submittal at Substantial Completion.
- B. Closeout Checklist: At a minimum of thirty (30) days prior to Substantial Completion, the Construction Manager will endeavor to provide each Prime Contractor with a list of outstanding Closeout Submittals as enumerated in Section 1.4 below.

**1.4 CLOSEOUT SUBMITTALS**

- A. Certificates of Release: From authorities having jurisdiction.
- B. Certificate of Insurance: For continuing coverage.
- C. AIA Document G706 Contractor Affidavit of Payment of Debts and Claims
- D. AIA Document G706A Contractor Affidavit of Release of Liens
- E. Confirmation of Completed Punchlist
- F. Final Application for Payment
- G. Record Drawings
- H. Operations and Maintenance Manuals
- I. Warranties
- J. Attic Stock

- K. Contractor Daily Reports
- L. Owner Demonstration and Training

#### 1.5 SUBSTANTIAL COMPLETION PROCEDURES

- A. Outstanding Items List: At a minimum of no less than thirty (30) days prior to the project's established Substantial Completion date, the Contractor shall provide a list of outstanding work to be completed.
- B. Punch List: Upon receipt of each Prime Contractor's Outstanding Items List the Construction Manager (CM), in conjunction with the Designer of Record (DOR) and Owner will schedule a time with the Prime Contractor to review their Open Items List on site. During this site review, the CM, DOR and or Owner may add to the Prime Contractor's Outstanding Item List, additional incomplete or non-conforming work items. This updated Outstanding Items List will become that Prime Contractor's official Punch List. The CM will then distribute the Punch List to the Prime Contractor for their use in completing these activities by the Final Completion date of the project.
- C. Substantial Completion Certificate: Each Prime Contractor shall request in writing to the Construction Manager that their portion of the project is substantially complete. Each Prime Contractor's written request is to be issued to the Construction Manager no later than the project substantial completion date. This letter shall bare witness that this Prime Contractor's portion of work is complete to the extent that beneficial use or occupancy by the Owner could occur. Upon receipt of this request, the Construction Manager, in conjunction with the Designer of Record and Owner, shall inspect the work to determine if the Prime Contractor's work is complete and sufficient to allow for beneficial use and occupancy of the facility.
  - 1. Contractual Items for Substantial Completion:
    - a. Final cleaning.
    - b. Testing and startup of systems and equipment.
    - c. Maintenance on permanent equipment used during construction.
    - d. Demonstration and Training
- D. Turnover Notifications: Each Prime Contractor shall complete prior to the date of Substantial Completion the following items:
  - 1. Advise the Owner of pending insurance changeover requirements.
  - 2. Advise the Owner's personnel of changeover in security provisions.
  - 3. Advise Owner of changeover in utilities.

#### 1.6 FINAL COMPLETION PROCEDURES

- A. Submittals prior to Final Completion: Submit the following on or before requesting final inspection for determining Final Completion:
  - 1. Final Application for Payment (as defined in **Specification Section 012900 Payment Procedures paragraph 1.7.B**)
  - 2. Executed Punch List.
  - 3. Removal of Temporary Facilities and Utilities, including but not limited to, construction trailers, laydown area, job boxes, etc. Provide the patching, repair and or painting as a result of their removal.

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1.7 SUBMITTAL OF PROJECT WARRANTIES AND OPERATION AND MAINTENANCE MANUALS

- A. Time of Submittal: Unless otherwise noted in the contract documents, all warranties shall be from the date of substantial completion.
- B. Operation and Maintenance Manuals and Warranty documents; into an orderly sequence based on the table of contents of the Project Manual.
  - 1. Electronic File: Assemble complete binders containing Operation and Maintenance Manuals, Warranties and Bonds into a single, indexed electronic PDF file with links enabling navigation to each item. Provide bookmarked table of contents at the beginning of the document.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
  - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of the Project:
    - a. Clean the Project site, yard, landscape development areas and grounds in areas disturbed by construction activities of rubbish, waste, litter, and other foreign substances.
    - b. Remove tools, construction equipment, machinery, and surplus material from the Project site.
    - c. Remove snow and ice to provide safe access to the Work.
    - d. Leave Project clean and ready for future work.
- C. Construction Waste Disposal: Comply with waste disposal requirements in Section 015000 "Temporary Facilities and Controls."

3.2 REPAIR OF THE WORK

- A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.
- B. Repair or remove and replace defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials and properly adjusting operating equipment. Where damaged or work items cannot be repaired or restored, provide

replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.

1. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that already show evidence of repair or restoration.
2. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.

END OF SECTION 017700

**SECTION 017839 – PROJECT RECORD DOCUMENTS****PART 1 - GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. Section includes administrative and procedural requirements for project record documents, including the following:
  - 1. Record Drawings.
  - 2. Miscellaneous record submittals.
- B. Related Requirements:
  - 1. Section 013300 “Submittal Procedures.”
  - 2. Section 017700 “Closeout Procedures” for general closeout procedures.

**1.3 CLOSEOUT SUBMITTALS**

- A. Record Drawings: Comply with the following:
  - 1. Number of Copies: Submit copies of record drawings as follows:
    - a. Submittal:
      - 1) All Prime Contractors shall coordinate efforts to maintain and submit, prior to final completion, one paper-copy set of marked-up record drawings.
      - 2) CM and Designer will indicate whether general scope of changes, additional information recorded and quality of drafting are acceptable.
    - b. Miscellaneous Record Submittals: See other Specification Sections for miscellaneous record-keeping requirements and submittals in connection with various construction activities. Submit one annotated PDF electronic file.

**PART 2 - PRODUCTS****2.1 RECORD DRAWINGS**

- A. Maintain one marked-up paper copy of the Contract Drawings, incorporating new and revised drawings as modifications are issued.
  - 1. Preparation: Mark record drawings to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is installer, subcontractor or similar, to provide information for preparation of corresponding marked-up record prints.
    - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
    - b. Accurately record information in an acceptable drawing technique.
    - c. Record data as soon as possible after obtaining it.

- d. Record and check the markup before enclosing concealed installations.
2. Content: Types of items requiring marking include, but are not limited to, the following:
  - a. Dimensional changes to Drawings.
  - b. Revisions to details shown on Drawings.
  - c. Depths of foundations below first floor.
  - d. Locations and depths of underground utilities.
  - e. Revisions to routing of piping and conduits.
  - f. Revisions to electrical circuitry.
  - g. Actual equipment locations.
  - h. Duct size and routing.
  - i. Locations of concealed internal utilities.
  - j. Changes made by Change Order or Work Change Directive.
  - k. Changes made following Designer's or CM's written orders.
  - l. Details not on the original Contract Drawings.
  - m. Field records for variable and concealed conditions.
  - n. Record information on the Work that is shown only schematically.
3. Mark the Contract Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.
4. Mark record drawings with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
5. Mark important additional information that was either shown schematically or omitted from original Drawings.
6. Note Construction Change Directive numbers, Change Order numbers and similar identification where applicable.

## 2.2 MISCELLANEOUS RECORD SUBMITTALS

- A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.
- B. Format: Submit miscellaneous record submittals directory organized by Specification Section number and title, electronically linked to each item of miscellaneous record submittals.

## PART 3 - EXECUTION

### 3.1 RECORDING AND MAINTENANCE

- A. Maintenance and Record Documents and Samples: Store record documents and Samples in the CM Field Office apart from the Contract Documents used for construction. Do not use project record documents for construction purposes. Maintain record documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to project record documents for Owner, Designer and CM reference.

END OF SECTION 017839

# ***Report: Hazardous Building Materials Survey – Asbestos, Lead, Universal Waste***

**Site:**

**Former Frog, Switch & Manufacturing Company  
600 East High Street  
Carlisle, PA 17013**

**Prepared For:**

**Jacob Klaybor  
Environmental Engineer  
Environmental Science and Engineering  
U.S. DOT Volpe National Transportation Systems Center  
220 Binney Street,  
Cambridge, MA 02142**

**Prepared By:**

*Michael Panepresso*

**Michael Panepresso  
Vice President of Operations  
Viva Environmental, Health, & Safety, LLC.  
2201 S. 3<sup>rd</sup> Street  
Philadelphia, PA 19148**

**Date(s) of Project:**

**September 15 to 18, 2025**

**Date of Report:**

**October 9, 2025**

**Project Number:**

**250640**

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- 1.0 Executive Summary**
- 2.0 Methodology**
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### **Attachments**

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- ◆ Copy of Laboratory Asbestos Analytical Reports with Chain of Custody Forms
- ◆ Annotated Site Plans with Asbestos Bulk Sample Locations
- ◆ May 2021 Asbestos Survey by Cumberland Analytical Laboratories, Inc (CALI).
- ◆ Universal Waste Inventory
- ◆ Lead-Based Paint - XRF Analyzer Results Spreadsheet
- ◆ XRF Analyzer Calibration Check Test Results
- ◆ Photographs of Suspect Materials Sampled for Asbestos

## 1.0 EXECUTIVE SUMMARY

Viva Environmental, Health, & Safety, LLC. (Viva EHS) was retained to perform a Hazardous Building Materials Survey consisting of an asbestos-containing materials inspection, a lead-based paint inspection, and a universal waste inspection of the building materials found within eight (8) buildings targeted for demolition at the former Frog, Switch & Manufacturing Company located at 600 E. High Street in Carlisle, PA 17013. The buildings surveyed included Building 1, 2, 3, 5, 13, 18, 20, and 24/27. A silo next to Building 1 - Foundry was also inspected.

Asbestos-containing materials (ACMs) identified included window caulking, window glazing, tar mastic, 9" x 9" floor tile, rope material, thermal system insulation, built-up and transite roofs, transite ceilings, and fire doors. With the exception of non-friable roofing materials that are removed in a non-friable manner, these ACMs must be abated by a licensed asbestos abatement contractor prior to demolition. Please refer to the Asbestos Inventory in the Attachments to this report for specific types, locations, and quantities of ACM identified. **No ACMs were identified in Buildings 13, 18, and 24/27.**

Lead-based paints were identified on components such as walls, stairs, windows, ceilings, doors, shelving, cabinets, handrails, machines, platforms, roof supports, concrete bollards, and catwalks. Any painted surface containing any concentration of lead should not be sanded, demolished, or disturbed without the proper engineering controls and work methods, as spelled out under OSHA's 29 CFR Part 1926.62 Lead Exposure in Construction, Interim Rule. Please refer to the Lead-Based Paint – XRF Analyzer Results Spreadsheet in the Attachments to this report for components testing positive for lead-based paint.

Please refer to the Universal Waste Inventory in the Attachments to this report for types and quantities of universal waste, such as light ballasts, refrigerants, mercury-containing devices (thermostats, switches), batteries, drums, etc., that were identified in the buildings to be demolished. These materials should be collected and transported to appropriate recycling facilities prior to demolition.

Analysis of ten (10) polychlorinated biphenyls (PCBs) samples collected from door and window caulk in the buildings to be demolished indicated no concentrations of PCBs were detected. PCB samples were analyzed by US EPA Method SW846 3540C/8082A. Analysis was performed by Mid-Atlantic Environmental Laboratories, Inc., located in New Castle, DE.

## 2.0 METHODOLOGY

Jared Whack, an EPA-certified and PA-licensed lead risk assessor, Sean Gallagher, and Dean Kolb, both EPA-certified and PA-licensed asbestos building inspectors with Viva EHS, conducted the inspection for the presence and condition of asbestos-containing materials, lead-based paints, and universal wastes from September 15 to 18, 2025.

Suspect building materials whose asbestos content was unknown were sampled to determine their asbestos content. Samples were collected in accordance with the EPA AHERA Regulations, 40 CFR 763. Within this regulation, the EPA classifies a material as "asbestos-containing" if it contains greater than one percent (>1%) asbestos by weight.

All work was conducted in accordance with Volpe Standard Operating Procedure *SOP-24 Hazardous Building Materials Survey*.

Bulk samples for asbestos were analyzed by Polarized Light Microscopy (PLM) in accordance with EPA Method 600/R-93/116 by Eckhart Environmental Services, an NVLAP-certified laboratory located in Media, PA.

To reduce the need for resampling, Viva EHS used historical asbestos bulk sampling data found in the CALI Asbestos Identification Survey Report conducted at the Site in May 2021. The CALI report can be found in the Attachments to this report.

Painted surfaces were analyzed for their lead content in a non-destructive manner using an X-ray Fluorescence Spectrometer (XRF) manufactured by SciApps, Inc., which was calibrated prior to and following the analysis of painted surfaces. XRF Analyzer Calibration Check Test Results are attached to this report.

The U.S. Department of Housing and Urban Development (HUD) considers 1.0 milligrams of lead per square centimeter of painted surface, or greater, to be lead-based paint ( $\geq 1.0 \text{ mg/c m}^2$ ).

A summary of the locations/components where XRF readings were collected is included in a spreadsheet attached to this report.

Within the spreadsheet, walls are labeled as “Wall 1”, “Wall 2”, “Wall 3”, or “Wall 4”. The wall containing the main entry door for a room is labeled as “Wall 1”. The walls are then labeled in a clockwise fashion as “Wall 2”, “Wall 3”, and “Wall 4”. For hallways, the front entrance side of the building is considered “Wall 1”.

An inspection for universal wastes was performed throughout the eight (8) buildings to be demolished. This inspection included the quantification of fluorescent light bulbs, mercury thermostats and switches, refrigerant sources, batteries, drums, above-ground petroleum product containers, ballasts, and electrical equipment that may contain PCB-laden oil.

Suspect door and window caulks, that may contain PCBs, were identified in the buildings to be demolished and sampled.

### **3.0 REGULATORY COMPLIANCE SUMMARY**

#### **Asbestos**

The purpose of the asbestos survey was to identify and document asbestos-containing materials (ACM) that would be impacted by the planned demolition. The EPA’s National Emission Standard for Hazardous Air Pollutants (NESHAP) regulation requires that buildings scheduled for renovation/demolition have an inspection identifying asbestos materials. OSHA’s Construction Standard for Asbestos (29 CFR 1926.1101) requires that building materials installed prior to 1981 be inspected for asbestos, or they must be classified as presumed asbestos-containing materials (ACM).

Several sampled materials listed below contain trace amounts (<1%) of asbestos. Although these

materials are not considered by the EPA to be asbestos-containing materials (ACM), OSHA considers materials with any asbestos content to be a concern. Accordingly, please share this report with construction management so that they can implement work practice controls in accordance with OSHA Construction Standard 1926.1101 and General Industry Standard, 1910.1001.

Viva Environmental, Health & Safety, LLC. Asbestos Survey (October 2025):

- DK091525-12 and -13 Plaster, 2<sup>nd</sup> Floor, Building 3 (Main Office)
- DK091825-01 and -02 Caulk A/W Door, Side Storage, Building 5

CALI Asbestos Survey (May 2021):

- L1428-46 and -47 Composite Drywall/Joint Compound (Machine Shop, Bldg. 1)
- L1428-71 and -72 Composite Drywall/Joint Compound (Main Office, Bldg. 3)

### **Lead-Based Paint**

A lead-based paint inspection is required for pre-1978 commercial, industrial, and federal property demolitions to protect workers, the public, and the environment from hazardous lead dust and debris.

The inspection identifies the presence of lead-based paint, which, when disturbed during demolition, can create dangerous lead-contaminated dust. This lead-based paint inspection allows for the use of lead-safe work practices to prevent exposure, protect the surrounding community, and ensure proper handling of lead-contaminated waste.

Prior to building demolition and waste disposal, a Toxicity Characteristic Leaching Procedure (TCLP) test of the waste is required to determine if it is hazardous waste. The waste debris is considered hazardous if the TCLP test shows a lead concentration of 5.0 milligrams per liter (or 5,000 parts per million) or greater, and then must be disposed of at a facility that accepts lead hazardous wastes.

### **Universal Waste and PCBs**

A thorough visual inspection of the buildings to be demolished is necessary to identify universal waste materials that may be hazardous to workers and the public and that may need to be disposed of at a recycling facility.

Caulking materials installed before 1977 must be sampled for polychlorinated biphenyls (PCBs) because they are toxic chemicals that can leach and off-gas into the environment. This PCB contamination poses a significant risk to human health, including carcinogenic, neurological, and developmental effects. During demolition, these materials can release concentrated amounts of PCBs into the air and dust, requiring proper regulation and disposal as PCB remediation waste to protect health and the environment.

## **4.0 RECOMMENDATIONS AND ESTIMATED COSTS FOR ABATEMENT**

Please refer to the Asbestos Inventory in the attachment to this report for the location, type, and

quantity of asbestos-containing materials identified. Viva EHS recommends that asbestos-containing materials identified in the Asbestos Inventory be removed by a PA-licensed asbestos abatement contractor prior to demolition.

Please note that contractors bidding on asbestos removal should confirm the location and quantity of asbestos-containing materials listed. Annotated Site Plans with Asbestos Bulk Sample Locations and Laboratory Analytical Reports with Chain of Custody Forms are attached to this report. The attached May 2021 Asbestos Survey Report by CALI also includes the Laboratory Analytical Results.

Please refer to the Lead-Based Paint – XRF Analyzer Results Spreadsheet in the attachments to this report for components testing positive for lead-based paint.

Any painted surface containing any concentration of lead should not be sanded, demolished, or disturbed without the proper engineering controls and work methods, as spelled out under OSHA’s 29 CFR Part 1926.62 Lead Exposure in Construction, Interim Rule. Improper disturbance of any paint with lead content can cause lead to become airborne. The emphasis on controlling lead dust derives from the conclusion that lead dust appears to be the primary route of exposure to lead, especially of low-level exposure. It is therefore important that occupants of the buildings and any contractors be made aware of the presence of lead-based paint and the potential health risks associated with the ingestion of lead-based paint or the associated dust that results from the damaging of the painted surfaces.

Occupants and/or contractors should also be made aware of the importance of not damaging the painted surfaces and creating loose and flaking paint or dust. If the painted surfaces are damaged, this should be reported to the proper building representative/maintenance personnel to properly correct the problem to prevent an increased exposure potential.

Prior to building demolition, universal wastes identified in the attached Universal Waste Inventory should be collected and transported to an appropriate recycling facility for processing.

#### **4.1 Estimated Cost for Abatement**

The cost estimate provided below is based on the estimated man-day cost and the number of man-days needed to complete the scope of work, taken from the Asbestos Inventory and provided below. Accessibility (i.e., the Silo runs 50 feet high and pipe insulation in the Foundry appears to be about 50 feet high), work hours (i.e., holiday or weekend work), prevailing wage requirements, and site-specific work area set-up requirements are all factors that may affect these costs. The estimate includes air monitoring costs.

#### **4.2 Scope of Work (Asbestos Abatement)**

- 20 LF of Window Caulk
- 140 LF of Window Glazing
- 30 LF of Tar Mastic (Silo)
- 96 SF of Floor Tile
- 15 LF of Rope Material

- 50 LF of Fire Doors (2)
- 1500 LF of Thermal System Insulation (TSI)
- 20 SF of Transite Ceiling
- 90,000 SF of Built-Up and Transite Roofing

#### **4.3 Total Estimated Cost and Timetable for Abatement and Air Monitoring Oversight**

Viva EHS has estimated a total cost of approximately **\$1,047,550** for the abatement and air monitoring oversight required to remove all ACM prior to demolition. We estimate that the timetable for this abatement is 8 weeks. Please note that \$990,000 of the \$1,047,550 total estimated cost is for the abatement of 90,000 sf of asbestos-containing roofing.

#### **4.4 Asbestos Roofing Materials at Frog, Switch & Manufacturing Company**

The non-friable, Category I, Built-Up Roofing Felt Materials (May 2021 Asbestos Survey) that tested positive for asbestos (Sample Numbers L1428-77, 78) at the Foundry – Building 1 are not expected to release significant amounts of asbestos fibers to the outside air during demolition and are not regulated by the EPA and the Pennsylvania Department of Labor and Industry (PADOLI).

However, if the Built-Up Roofing Felt Materials are subject to sanding, grinding, cutting, or abrading, they are subject to the EPA NESHAP and must be removed by a licensed asbestos removal contractor prior to demolition.

As long as the building materials being demolished (such as the substrate that supports the built-up asbestos roofing materials) are not recycled, the asbestos-containing Built-Up Roofing Felt Materials can be demolished in place and disposed of as construction waste. Viva EHS recommends that you get further guidance on this subject from the State, the EPA, and roofing contractors familiar with handling asbestos roofing.

#### **4.5 Asbestos Transite Roofing**

The non-friable, Category II, Transite Roofing Materials (May 2021 Asbestos Survey) that tested positive for asbestos at the Foundry, Building 1 (Sample Number L1428-42) and at the Main Office, Building 3 (Sample Number 70) are evaluated on a case-by-case basis by the EPA as to whether they are regulated by the EPA NESHAP and need to be removed prior to demolition.

Non-friable, Category II, materials like the Transite Roofing, that are crumbled, pulverized, or reduced to powder during removal or during demolition, are covered by the EPA NESHAP. Viva EHS recommends that you receive further guidance on how to proceed with handling the Transite Roofing from the State, the EPA, and roofing contractors familiar with handling asbestos roofing.

Viva EHS recommends that you retain a PA-licensed asbestos removal contractor to remove the Asbestos Transite Roofing from Building 1 (Foundry) and Building 3 (Main Office). Asbestos-cement (transite) has a greater potential to release asbestos fibers during removal than asbestos-containing built-up roofing felts.

**ATTACHMENTS**

## **Asbestos Inventory (Asbestos-Containing Material Quantities)**

**ASBESTOS INVENTORY**  
**Former Frog, Switch & Manufacturing Co.**  
**600 East High Street**  
**Carlisle, PA 17013**

The table below includes both ACMs identified during Viva EHS' 2025 hazardous building materials survey and those ACMs identified in the *Asbestos Identification Survey Report* from CALI (May 2021).

LOCATION	MATERIAL DESCRIPTION	QUANTITY
<b>Building 5 (Maintenance Building)</b> -Rear Storage	Window Caulk (Interior)	20 LF
<b>Building 13 (Human Resources)</b>	No Asbestos-Containing Materials Identified	
<b>Silo (Stand Alone)</b> -Exterior	Tar Mastic	30 LF
<b>Building 18 (Archives)</b>	No Asbestos-Containing Materials Identified and No Suspect Materials Observed	
<b>Building 20 (Pattern Storage)</b> -Interior	Window Glazing	32 LF
<b>Building 24/27 (Pattern Shop)</b>	No Asbestos-Containing Materials Identified	
<b>Building 3 (Main Office)</b> -Vault -Roof Perimeter -Second Floor -Roof	9" x 9" Brown Floor Tile Roof Flashing Window Glazing (Exterior) Transite*	96 SF 100 LF 108 LF See Building 1 (Foundry)

**ASBESTOS INVENTORY**  
**Former Frog, Switch & Manufacturing Co.**  
**600 East High Street**  
**Carlisle, PA 17013**

<b>Building 2 (Frog Shop)</b> -Old Boiler Room -Old Boiler Room -Throughout	Rope Material* Fire Door (Assumed) Thermal System Insulation (TSI)*	15 LF 20 SF 1500 LF
<b>Building 1 (Foundry Locker Room)</b> -Locker	Transite Ceiling	20 SF
<b>Building 1 (Foundry)</b> -Rear Shack -South Side Roof -North Roof -Center Roof	Fire Door (Assumed) Transite* Roof Coating* Roof Material*	30 SF 90,000 SF total includes Bldg. 3 Roof

**Notes**

\* These building materials were identified as asbestos-containing materials in the *Asbestos Identification Survey Report* from CALI (May 2021).

**Building 1 (Foundry)** – The *Asbestos Identification Survey Report* from CALI (May 2021) lists 2,000 sf of asbestos drywall/joint compound in the Machine Shop Bathroom which is part of the Foundry Building/Building 1. During Viva EHS’ inspection, the only drywall/joint compound observed was in the Foundry Locker Room. Viva EHS’ inspectors collected two (2) samples of drywall/joint compound (Samples DK091725-09A and -10A) and both samples tested negative for asbestos. Please note CALI’s 2021 survey included 3 samples of drywall/joint compound (Samples L1428-45, 46 and 47). One sample identified no asbestos and two samples identified trace (<1% chrysotile) amounts. The drywall/joint compound for Building 1 (Foundry) is not listed as an asbestos-containing material in the Asbestos Inventory.

**Building 3 (Main Office)** – The *Asbestos Identification Survey Report* from CALI (May 2021) lists the Entire Office Building Drywall/Compound (Quantity Unknown) as an asbestos-containing material. CALI’s survey included three (3) samples of drywall/joint compound (Samples L1428-71, 72 and 73). One sample identified no asbestos and two samples identified trace (<1%) amounts. Viva EHS’ inspectors collected two (2) samples of drywall/joint compound (Samples DK091525-04 and -05) and both samples tested negative for asbestos. The drywall/joint compound is not listed as asbestos-containing material in the Asbestos Inventory.

Quantities are approximated and are to be used for budget purposes only. Quantities should be confirmed by contractors before submitting a bid.

Additional suspect materials may be found above hard ceilings or behind hard walls.

**Copy of Laboratory Asbestos Analytical Reports with Chain of Custody Forms**



**Eckhart Environmental Services, LLC**

**Report Prepared For:**

**Viva Environmental, Health, & Safety, LLC  
Mr. Steven Vena  
2201 S 3rd Street  
Philadelphia, Pennsylvania 19148**

**Address of Project/Test Site:**

**DOT – Frog/Switch  
Foundry – Building 1  
(Project # 250640)**

RE:

Project #: L10368

Sent Via: [svena@vivaehs.com](mailto:svena@vivaehs.com), [info@vivaehs.com](mailto:info@vivaehs.com)

Date Collected: 9/16/2025

Date Received: 9/18/2025

Date of Analysis: 9/24/2025

Report Date: 9/24/2025

Analytical Testing:

Polarized Light Microscopy – Bulk Asbestos Testing

Approved By:

Kelly L. Eckhart, MPH  
Laboratory Director, Analytical Microscopist

Amendments:

Attached please find the results for the sample(s) submitted to Eckhart Environmental Services, LLC for asbestos bulk analysis. Sample analysis was performed by Polarized Light Microscopy in accordance with EPA Method 600/R-93/116 and EPA – “Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples.”

Sample results for identified asbestos fibrous materials are reported as a percent (1%) value based on visual area estimation under microscopic examination. Asbestos concentrations are reported as “trace” where limited individual asbestos fibers, or bundles, are identified but not on a consistent basis indicative of a homogenous material. Where requested, point count percentage results are also calculated and presented.

Please note that individual state and local jurisdictions typically establish or adopt specific sampling criteria and threshold values for asbestos sampling results. Federal regulations regarding asbestos are promulgated by both the EPA and OSHA. This report presents the analytical testing results of samples submitted and is not an interpretation in comparison to such criteria or values.

Additional information regarding asbestos can be found at:

<http://www.epa.gov/asbestos>

<http://www.osha.gov/SLTC/asbestos/index.html>

<http://www.atsdr.cdc.gov/asbestos>

<http://www.cdc.gov/niosh/topics/asbestos>

For inquiries of professional decision-making determinations regarding analytical results, contact the individual/firm whom collected the samples at the project site. In consideration of current customer services/restrictions, Eckhart Environmental Services, LLC’s Project Management staff may provide site-specific services and professional decision-making determinations under separate agreement and at an additional cost.

*ECKHART ENVIRONMENTAL SERVICES, LLC  
300 South Pennell Road, Bldg 400-Unit 1B  
Media PA 19063  
www.eckhartenvironmental.com  
Version 1.2, Revision Date: 4/11/2024*

**“The Gold Standard of Environmental Analytical and Testing Services”**

# Eckhart Environmental Services, LLC

## **Restrictions/Limitations:**

Laboratory results represent optical microscopic analytical work performed on samples submitted by the customer to Eckhart Environmental Services, LLC for analysis. All supplementary information regarding sample volume, location, activity, etc. was provided by the customer. Analytical results are unique to each project and must be evaluated by the individual whom collected the sample(s). Eckhart Environmental Services, LLC has no control of the sample collection process, sample placement, collection volume/area/size nor activity/conditions present at the collection site. Therefore, Eckhart Environmental Services, LLC shall have no liability with respect to decisions made, or actions taken, regarding reported results. Liability on the part of Eckhart Environmental Services, LLC is limited to the monetary value paid for this report.

# Eckhart Environmental Services, LLC

## ASBESTOS BULK SAMPLE ANALYSIS REPORT

**CLIENT:** VIVA ENVIRONMENTAL, HEALTH, & SAFETY, LLC  
PHILADELPHIA, PENNSYLVANIA

**EES PROJECT #:** L10368

**LOCATION:** DOT – FROG/SWITCH  
FOUNDRY – BUILDING 1  
(PROJECT# 250640)

**DATE RECEIVED:** 9/18/2025

**DATE ANALYZED:** 9/24/2025

SAMPLE NUMBER/ DESCRIPTION/LOCATION	ASBESTOS PRESENT	COLOR	% ASBESTOS AND TYPE	% OTHER MATERIALS
L10368-DK091625-06A: Cementitious Brick - HID# 2601 (Building 1 – Foundry)	No	Off-White	None Detected	100% Non-Fibrous
L10368-DK091625-07A: Cementitious Brick - HID# 2601 (Building 1 – Foundry)	No	Off-White	None Detected	100% Non-Fibrous
L10368-DK091625-08A: 12x12 Floor Tile - HID# 2601 (Building 1 – Foundry – Chemical Lab)	No	Yellow	None Detected*	100% Non-Fibrous
L10368-DK091625-08A(M): Mastic associated with 12x12 Floor Tile - HID# 2601 (Building 1 – Foundry – Chemical Lab)	No	Yellow	None Detected*	100% Non-Fibrous
L10368-DK091625-09A: 12x12 Floor Tile - HID# 2601 (Building 1 – Foundry – Chemical Lab)	No	Yellow	None Detected*	100% Non-Fibrous
L10368-DK091625-09A(M): Mastic associated with 12x12 Floor Tile - HID# 2601 (Building 1 – Foundry – Chemical Lab)	No	Yellow	None Detected*	100% Non-Fibrous
L10368-DK091625-10A: Foam Pipe Insulation - HID# 1600 (Building 1 – Foundry)	No	Yellow	None Detected*	100% Non-Fibrous
L10368-DK091625-11A: Foam Pipe Insulation - HID# 1600 (Building 1 – Foundry)	No	Yellow	None Detected*	100% Non-Fibrous
L10368-DK091625-12A: Vibration Dampner Cloth - HID# 2602 (Building 1 – Foundry – Near Dust Disposal)	No	Black	None Detected*	100% Non-Fibrous
L10368-DK091625-13A: Vibration Dampener Cloth - HID# 2602 (Building 1 – Foundry – Near Dust Disposal)	No	Black	None Detected*	100% Non-Fibrous
L10368-DK091625-14A: Vibration Dampener Cloth - HID# 2603 (Building 1 – Foundry – Chutes)	No	Brown	None Detected*	10% Synthetic 90% Non-Fibrous
L10368-DK091625-15A: Vibration Dampener Cloth - HID# 2603 (Building 1 – Foundry – Chutes)	No	Brown	None Detected*	10% Synthetic 90% Non-Fibrous
L10368-DK091625-16A: Caulk associated with Door - HID# 2604 (Building 1 – Foundry – Rear Shack)	No	White	None Detected*	100% Non-Fibrous
L10368-DK091625-17A: Caulk associated with Door - HID# 2604 (Building 1 – Foundry – Rear Shack)	No	White	None Detected*	100% Non-Fibrous
L10368-DK091625-18A: Roll up Door - HID# 2605 (Building 1 – Foundry)	No	Brown	None Detected	100% Cotton
L10368-DK091625-19A: Roll up Door - HID# 2605 (Building 1 – Foundry)	No	Brown	None Detected	100% Cotton
L10368-DK091625-20A: Ceiling Tile 2x4 - HID# 1700 (Building 1 – Foundry – Record Storage)	No	White/Tan	None Detected	35% Cellulose 35% Fibrous Glass 30% Non-Fibrous
L10368-DK091625-21A: Ceiling Tile 2x4 - HID# 1700 (Building 1 – Foundry – Record Storage)	No	White/Tan	None Detected	35% Cellulose 35% Fibrous Glass 30% Non-Fibrous
L10368-DK091625-22A: Floor Tile 12x12 - HID# 2000 (Building 1 – Foundry – Wood Panel Room)	No	White	None Detected*	100% Non-Fibrous

# Eckhart Environmental Services, LLC

SAMPLE NUMBER/ DESCRIPTION/LOCATION	ASBESTOS PRESENT	COLOR	% ASBESTOS AND TYPE	% OTHER MATERIALS
L10368-DK091625-22A: Glue associated with Floor Tile 12x12 - HID# 2000 (Building 1 – Foundry – Wood Panel Room)	No	Yellow	None Detected*	100% Non-Fibrous
L10368-DK091625-23A: Floor Tile 12x12 - HID# 2000 (Building 1 – Foundry – Wood Panel Room)	No	White	None Detected*	100% Non-Fibrous
L10368-DK091625-23A: Glue associated with Floor Tile 12x12 - HID# 2000 (Building 1 – Foundry – Wood Panel Room)	No	Yellow	None Detected*	100% Non-Fibrous
L10368-DK091625-24A: Caulk associated with Exterior Column - HID# 2607 (Building 1 – Foundry – Exterior)	No	White	None Detected*	100% Non-Fibrous
L10368-DK091625-25A: Caulk associated with Exterior Column - HID# 2607 (Building 1 – Foundry – Exterior)	No	White	None Detected*	100% Non-Fibrous
L10368-DK091625-26A: Caulk associated with Exterior Door - HID# 2608 (Building 1 – Foundry – Exterior)	No	White	None Detected*	100% Non-Fibrous
L10368-DK091625-27A: Caulk associated with Exterior Door - HID# 2608 (Building 1 – Foundry – Exterior)	No	White	None Detected*	100% Non-Fibrous

NVLAP LAB CODE# 600273-0

Analyzed By: Carl Josephson  
 Carl Josephson  
 Quality Manager  
 Analytical Microscopist

Reviewed/Authorized By: Kelly L. Eckhart  
 Kelly L. Eckhart, MPH  
 Laboratory Director  
 Analytical Microscopist

Note: The above results represent analytical work performed on samples collected by the customer and submitted to EES for analysis. All supplementary information regarding the samples (i.e., location, sample type, etc.) was provided by the customer.

The report refers specifically to samples tested, and as received, and shall not be reproduced, except in full, without the written approval of the laboratory. The US EPA defines asbestos containing materials as any material containing greater than 1% asbestos as determined by Polarized Light Microscopy in accordance with EPA Method 600/R-93/116 and EPA – “Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in in Bulk Insulation Samples”.

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

\*EES recommends that NOB materials (such as floor coverings, mastic, roofing products, vinyl materials, etc.) demonstrating negative results by PLM for asbestos be re-analyzed by TEM.

\*\*Sample not analyzed due to customer-requested positive stop.

For samples where no asbestos was detected, a minimum of three (3) slide mounts was examined.

The quantity of samples submitted to EES’s laboratory was determined by the customer. EPA AHERA Regulation 40 CFR 763.86 sampling requires samples to be collected by a certified inspector in a statistically random manner and in sufficient quantity to confirm negative results. The sample quantity for negative asbestos determination varies according to the amount of suspect ACM present as well as the material classification (surfacing material, thermal system insulation, or miscellaneous material). The customer is responsible for verification of EPA requirements for negative asbestos determination prior to utilization of EES’s laboratory findings.

END OF REPORT



**Eckhart Environmental Services, LLC**

**Report Prepared For:**

**Viva Environmental, Health, & Safety, LLC  
Mr. Steven Vena  
2201 S 3rd Street  
Philadelphia, Pennsylvania 19148**

**Address of Project/Test Site:**

**DOT – Frog/Switch  
Foundry – Building 1  
(Project # 250640)**

RE:

Project #: L10368

Sent Via: [svena@vivaehs.com](mailto:svena@vivaehs.com), [info@vivaehs.com](mailto:info@vivaehs.com)

Date Collected: 9/16/2025

Date Received: 9/18/2025

Date of Analysis: 9/24/2025

Report Date: 9/24/2025

Analytical Testing:

Polarized Light Microscopy - Dust Characterization Analyses

Approved By:

Kelly L. Eckhart, MPH  
Laboratory Director, Analytical Microscopist

Amendments:

Attached please find the results for the sample(s) submitted to Eckhart Environmental Services, LLC for Dust Characterization sample analyses. Sample dust characterization analysis of debris was performed utilizing Polarized Light Microscopy at 400X magnification. Results are reported qualitatively for common particulate materials such as cellulose, fibrous glass, synthetic, pollen & non-fibrous particulate.

Sample results for identified presumed materials are reported qualitatively as a Particulate Loading Scale of 1+ (“Trace”) to 5+ (“Extremely Heavy”) under microscopic examination. Particulate Loading Scale ranges from 1+ “Trace Loading”, 2+ “Light Loading”, 3+ “Moderate Loading”, 4+ “Heavy Loading” and 5+ “Extremely Heavy Loading.”

For inquiries of professional decision-making determinations regarding analytical results, contact the individual/firm whom collected the samples at the project site. In consideration of current customer services/restrictions, Eckhart Environmental Services, LLC’s Project Management staff may provide site-specific services and professional decision-making determinations under separate agreement and at an additional cost.

*ECKHART ENVIRONMENTAL SERVICES, LLC  
300 South Pennell Road, Bldg 400-Unit 1B  
Media PA 19063  
www.eckhartenvironmental.com  
Version 1.1, Revision Date: 6/9/2020*

***“The Gold Standard of Environmental Analytical and Testing Services”***

# Eckhart Environmental Services, LLC

## **Restrictions/Limitations:**

Laboratory results represent optical microscopic analytical work performed on samples submitted by the customer to Eckhart Environmental Services, LLC for analysis. All supplementary information regarding sample volume, location, activity, etc. was provided by the customer. Analytical results are unique to each project and must be evaluated by the individual whom collected the sample(s). Eckhart Environmental Services, LLC has no control of the sample collection process, sample placement, collection volume/area/size nor activity/conditions present at the collection site. Therefore, Eckhart Environmental Services, LLC shall have no liability with respect to decisions made, or actions taken, regarding reported results. Liability on the part of Eckhart Environmental Services, LLC is limited to the monetary value paid for this report.

# Eckhart Environmental Services, LLC

## DUST CHARACTERIZATION ANALYSES REPORT

**CLIENT:** VIVA ENVIRONMENTAL, HEALTH, & SAFETY, LLC  
PHILADELPHIA, PENNSYLVANIA

**EES PROJECT #:** L10368

**LOCATION:** DOT – FROG/SWITCH  
FOUNDRY – BUILDING 1  
(PROJECT# 250640)

**DATE RECEIVED:** 9/18/2025

**DATE ANALYZED:** 9/24/2025

SAMPLE NUMBER/ DESCRIPTION/LOCATION	PRESUMPTIVE MATERIALS	LOADING
L10368-DK091625-01A: Sand Debris - HID# 2600 (Building 1 – Foundry – Silo)	✓ Tan/Gray, Non-Fibrous	Heavy (5+)
L10368-DK091625-02A: Sand Debris - HID# 2600 (Building 1 – Foundry – West Rear)	✓ Tan/Gray, Non-Fibrous	Heavy (5+)
L10368-DK091625-03A: Sand Debris - HID# 2600 (Building 1 – Foundry – Middle Rear)	✓ Tan/Gray, Non-Fibrous	Heavy (5+)
L10368-DK091625-04A: Sand Debris - HID# 2600 (Building 1 – Foundry – East Rear [pit well])	✓ Tan/Gray, Non-Fibrous	Heavy (5+)
L10368-DK091625-05A: Sand Debris - HID# 2600 (Building 1 – Foundry – East Front)	✓ Tan/Gray, Non-Fibrous	Heavy (5+)
L10368-DK091625-28A: Sand Debris - HID# 2600 (Building 1 – Foundry – Western Front)	✓ Gray, Non-Fibrous	Heavy (5+)
L10368-DK091625-29A: Sand Debris - HID# 2600 (Building 1 – Foundry – Eastern Middle)	✓ Gray, Non-Fibrous	Heavy (5+)
L10368-DK091625-30A: Sand Debris - HID# 2600 (Building 1 – Foundry – Center Front)	✓ Gray, Non-Fibrous	Heavy (5+)
L10368-DK091625-31A: Sand Debris - HID# 2600 (Building 1 – Foundry – Rear Center Offices)	✓ Gray, Non-Fibrous	Heavy (5+)

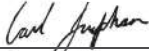
# Eckhart Environmental Services, LLC


## Notes/Comments:

Sample #L10368-DK091625-01, L10368-DK091625-02, L10368-DK091625-03, L10368-DK091625-04, L10368-DK091625-05, L10368-DK091625-28, L10368-DK091625-29, L10368-DK091625-30, L10368-DK091625-31— asbestos was not detected.

## Particulate Loading Scale:

1+ = Minimal "Trace"	4+ (>50% to 75%) "Heavy"
2+ (Up to 25%) "Light"	5+ (>75%) "Extremely Heavy"
3+ (>25% to 50%) "Moderate"	

Analyzed By:   
Carl Josephson  
Quality Manager  
Analytical Microscopist

Reviewed/Authorized By:   
Kelly L. Eckhart, MPH  
Laboratory Director  
Analytical Microscopist

Note: The above results represent analytical work performed on samples collected by the customer and submitted to EES for analysis. All supplementary information regarding the samples (i.e., location, sample type, etc.) was provided by the customer.

The report refers specifically to samples tested and shall not be reproduced, except in full, without the written approval of the laboratory. Sample analysis was performed by microscopic examination utilizing Polarized Light Microscopy at a magnification of 400X.

END OF REPORT

Due Next  
Thurs 3pm

L10368

Viva Environmental, Health, & Safety, LLC.  
Asbestos Bulk Sample Log & Chain of Custody

Client: DOT	Site Address: frog switch	Project#: 250640
Sample Date: 09/16/25	Inspector: SG/DK/JTW	Project Manager: SV
Turnaround Time: 1 week	FS Name-#/Work Area: Foundry - Building 1	Analysis: <u>PLM</u> TEM Other
Comments:		

Sample #	HID #	Material Description (Incl. Color)	Sample Location	Qty (SF/LF/EA)	Friable (Y/N)	Damage (SF/LF/EA)
0291625-01A	2600	Sand Debris	Building 1 - Foundry - Silo	110,000 SF	Y	N/A
-02A			" " - <del>Right</del> Rear			
-03A			" " - middle Rear			
-04A			" " - East Rear (pit well)			
-05A			" " - East front			
-06A	2601	Cementitious Brick	Building 1 - Foundry	1000 SF	N	
-07A						
-08A	2000	12x12 floor tile w/ mastic	Building 1 - Foundry - chemical Lab	160 SF	N	
-09A						
-10A	1600	Foam Pipe insulation	Building 1 Foundry	500 LF	Y	
-11A						
-12A	2602	Vibration Dampener Cloth	Build 1 Foundry - Near Dust Disposal	10 SF	N	
-13A						
-14A	2603		Building 1 Foundry - CHUTES	10 SF		
-15A						

6 Hour TAT Contact: (Name, Email, Phone)

Samples Collected by: (Print/Sign) Dean Korb  
 Transmitted to Lab by: (Print/Sign) Dean Korb  
 Received by: (Print/Sign) Kelly Feltner  
 Analyzed by: (Print/Sign) Kelly Feltner

At: \_\_\_\_\_  
 Date: 09/16/25  
 Date: 09/16/25  
 Date: 9/18/25 3pm  
 Date: \_\_\_\_\_

Viva Environmental, Health, & Safety, LLC.

Asbestos Bulk Sample Log & Chain of Custody

L10368

Client: Dot	Site Address: Frog / Switch	Project#: 250640
Sample Date: 09/16/25	Inspector: SG/DK/JTW	Project Manager: SU
Turnaround Time: 1 week	FS Name-#/Work Area: Foundry - Building 1	Analysis: <u>PLM</u> TEM Other
		Comments: N/S Refers to materials inspected BUT NOT sampled

Sample #	HID #	Material Description (Incl. Color)	Sample Location	Qty (SF/LF/EA)	Friable (Y/N)	Damage (SF/LF/EA)
01K091625-16A	2604	caulk A/W DOOR	Building 1 Foundry - Rear Shack	15 LF	No	N/A
-17A	↓	↓	↓	↓	↓	↓
-18A	2605	Roll up door	Building 1 Foundry	200 SF	↓	↓
-19A	↓	↓	↓	↓	↓	↓
NIS/	2606	Fire door	Building 1 Foundry - Rear Shack	30 SF	↓	↓
20A	1700	Coiling TIR 2x4	Building 1 - foundry - Record storage	500 SF	Yes	↓
-21A	↓	↓	↓	↓	↓	↓
-22A	2000	Floor tile 12x12 + Glue	Building 1 Foundry - wood Panel Room	170 SF	No	↓
-23A	↓	↓	↓	↓	↓	↓
-24A	2607	<del>exterior</del> <del>caulk</del> <del>A/W</del> <del>exterior</del> <del>column</del>	Building 1 Foundry - exterior	96 LF	No	↓
-25A	↓	↓	↓	↓	↓	↓
-26A	2608	caulk A/W exterior door	Building 1 Foundry exterior	40 LF	↓	↓
-27A	↓	↓	↓	↓	↓	↓
-28A	2600	sand- Debris	Building 1 Foundry - Western Front	110,000 SF	Yes	↓
-29A	↓	↓	" " - Eastern Middle	↓	↓	↓

6 Hour TAT Contact: (Name, Email, Phone)

Samples Collected by: (Print/Sign)

Transmitted to Lab by: (Print/Sign)

Received by: (Print/Sign)

Analyzed by: (Print/Sign)

Dean Korb  
 Dean Korb  
 Kelly Fekhorst  
 Kelly Fekhorst

At:

Date: 09/16/25  
 Date:  
 Date: 9/15/25 3pm  
 Date:

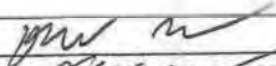
L10368

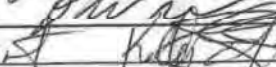
Viva Environmental, Health, & Safety, LLC.  
Asbestos Bulk Sample Log & Chain of Custody

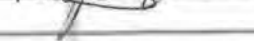
Client: <u>DGT</u>	Site Address: <u>Frog/switch</u>	Project#: <u>250640</u>
Sample Date: <u>09/16/25</u>	Inspector: <u>SG/DK   JTW</u>	Project Manager: <u>SV</u>
Turnaround Time: <u>1 week</u>	FS Name-#/Work Area: <u>FOUNDRY - Building 1</u>	Analysis: <u>PLM</u> TEM Other
Comments:		

Sample #	HID #	Material Description (Incl. Color)	Sample Location	Qty (SF/LE/EA)	Friable (Y/N)	Damage (SF/LE/EA)
<u>DGT1625-30A</u>	<u>2600</u>	<u>Sand Debris</u>	<u>Building 1 Foundry - Center Front</u>	<u>110,000</u>	<u>Yes</u>	<u>NA</u>
<u>-31A</u>	<u>1</u>	<u>1</u>	<u>" " - Rear Center Offices</u>	<u>1</u>	<u>1</u>	

6 Hour TAT Contact: (Name, Email, Phone) \_\_\_\_\_

Samples Collected by: (Print/Sign) Dean Kolb 

Transmitted to Lab by: (Print/Sign) Dean Kolb 

Received by: (Print/Sign) Kelly Feikhan 

Analyzed by: (Print/Sign) \_\_\_\_\_

At: \_\_\_\_\_

Date: 09/16/25

Date: 09/18/25

Date: 9/18/25 3pm

Date: \_\_\_\_\_



**Eckhart Environmental Services, LLC**

**Report Prepared For:**

Viva Environmental, Health, & Safety, LLC  
Mr. Steven Vena  
2201 S 3rd Street  
Philadelphia, Pennsylvania 19148

**Address of Project/Test Site:**

DOT – Frog/Switch  
Building 1 – Foundry Locker Room  
(Project # 250640)

RE:

Project #: L10362

Sent Via: [svena@vivaehs.com](mailto:svena@vivaehs.com), [info@vivaehs.com](mailto:info@vivaehs.com)

Date Collected: 9/17/2025

Date Received: 9/18/2025

Date of Analysis: 9/23/2025

Report Date: 9/24/2025

Analytical Testing:

Polarized Light Microscopy – Bulk Asbestos Testing

Approved By:

Kelly L. Eckhart, MPH  
Laboratory Director, Analytical Microscopist

Amendments:

Attached please find the results for the sample(s) submitted to Eckhart Environmental Services, LLC for asbestos bulk analysis. Sample analysis was performed by Polarized Light Microscopy in accordance with EPA Method 600/R-93/116 and EPA – “Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples.”

Sample results for identified asbestos fibrous materials are reported as a percent (1%) value based on visual area estimation under microscopic examination. Asbestos concentrations are reported as “trace” where limited individual asbestos fibers, or bundles, are identified but not on a consistent basis indicative of a homogenous material. Where requested, point count percentage results are also calculated and presented.

Please note that individual state and local jurisdictions typically establish or adopt specific sampling criteria and threshold values for asbestos sampling results. Federal regulations regarding asbestos are promulgated by both the EPA and OSHA. This report presents the analytical testing results of samples submitted and is not an interpretation in comparison to such criteria or values.

Additional information regarding asbestos can be found at:

<http://www.epa.gov/asbestos>

<http://www.osha.gov/SLTC/asbestos/index.html>

<http://www.atsdr.cdc.gov/asbestos>

<http://www.cdc.gov/niosh/topics/asbestos>

For inquiries of professional decision-making determinations regarding analytical results, contact the individual/firm whom collected the samples at the project site. In consideration of current customer services/restrictions, Eckhart Environmental Services, LLC’s Project Management staff may provide site-specific services and professional decision-making determinations under separate agreement and at an additional cost.

**ECKHART ENVIRONMENTAL SERVICES, LLC**  
300 South Pennell Road, Bldg 400-Unit 1B  
Media PA 19063  
[www.eckhartenvironmental.com](http://www.eckhartenvironmental.com)  
Version 1.2, Revision Date: 4/11/2024

**“The Gold Standard of Environmental Analytical and Testing Services”**

# Eckhart Environmental Services, LLC

## **Restrictions/Limitations:**

Laboratory results represent optical microscopic analytical work performed on samples submitted by the customer to Eckhart Environmental Services, LLC for analysis. All supplementary information regarding sample volume, location, activity, etc. was provided by the customer. Analytical results are unique to each project and must be evaluated by the individual whom collected the sample(s). Eckhart Environmental Services, LLC has no control of the sample collection process, sample placement, collection volume/area/size nor activity/conditions present at the collection site. Therefore, Eckhart Environmental Services, LLC shall have no liability with respect to decisions made, or actions taken, regarding reported results. Liability on the part of Eckhart Environmental Services, LLC is limited to the monetary value paid for this report.

# Eckhart Environmental Services, LLC

## ASBESTOS BULK SAMPLE ANALYSIS REPORT

**CLIENT:** VIVA ENVIRONMENTAL, HEALTH, & SAFETY, LLC  
PHILADELPHIA, PENNSYLVANIA

**EES PROJECT #:** L10362

**LOCATION:** DOT – FROG/SWITCH  
BUILDING 1 - FOUNDRY LOCKER ROOM  
(PROJECT# 250640)

**DATE RECEIVED:** 9/18/2025

**DATE ANALYZED:** 9/24/2025

SAMPLE NUMBER/ DESCRIPTION/LOCATION	ASBESTOS PRESENT	COLOR	% ASBESTOS AND TYPE	% OTHER MATERIALS
L10362-DK091725-01A: Paint associated with Wall (Blue) - HID# 2600 (Building 1 – Foundry – Locker Room)	No	Green/Blue	None Detected*	100% Non-Fibrous
L10362-DK091725-02A: Paint associated with Wall (Blue) - HID# 2600 (Building 1 – Foundry – Locker Room)	No	Green/Blue	None Detected*	100% Non-Fibrous
L10362-DK091725-03A: Paint associated with Wall (Blue) - HID# 2600 (Building 1 – Foundry – Locker Room)	No	Green/Blue	None Detected*	100% Non-Fibrous
L10362-DK091725-04A: Paint associated with Wall (Blue) - HID# 2600 (Building 1 – Foundry – Locker Room)	No	Green/Blue	None Detected*	100% Non-Fibrous
L10362-DK091725-05A: Paint associated with Wall (Blue) - HID# 2600 (Building 1 – Foundry – Locker Room)	No	Green/Blue	None Detected*	100% Non-Fibrous
L10362-DK091725-06A: Paint associated with Wall (Grey) - HID# 2601 (Building 1 – Foundry – Shower)	No	White/Gray	None Detected*	100% Non-Fibrous
L10362-DK091725-07A: Paint associated with Wall (Grey) - HID# 2601 (Building 1 – Foundry – Shower)	No	White/Gray	None Detected*	100% Non-Fibrous
L10362-DK091725-08A: Paint associated with Wall (Grey) - HID# 2601 (Building 1 – Foundry – Shower)	No	White/Gray	None Detected*	100% Non-Fibrous
L10362-DK091725-09A: Sheetrock - HID# 2100 (Building 1 – Foundry – Locker)	No	White/Tan	None Detected	5% Cellulose 95% Non-Fibrous
L10362-DK091725-09A: Joint Compound - HID# 2100 (Building 1 – Foundry – Locker)	No	Off-White	None Detected	100% Non-Fibrous
L10362-DK091725-10A: Sheetrock - HID# 2100 (Building 1 – Foundry – Locker)	No	White/Tan	None Detected	5% Cellulose 95% Non-Fibrous
L10362-DK091725-10A: Joint Compound - HID# 2100 (Building 1 – Foundry – Locker)	No	Off-White	None Detected	100% Non-Fibrous
L10362-DK091725-11A: Ceiling Tile 2x4 - HID# 1700 (Building 1 – Foundry – Locker)	No	White/Tan	None Detected	35% Cellulose 35% Fibrous Glass 30% Non-Fibrous
L10362-DK091725-12A: Ceiling Tile 2x4 - HID# 1700 (Building 1 – Foundry – Locker)	No	White/Tan	None Detected	35% Cellulose 35% Fibrous Glass 30% Non-Fibrous
L10362-DK091725-13A: Metal Ceiling Paint - HID# 2602 (Building 1 – Foundry – Locker)	No	Brown/White/ Green	None Detected*	100% Non-Fibrous
L10362-DK091725-14A: Metal Ceiling Paint - HID# 2602 (Building 1 – Foundry – Locker)	No	Brown/White/ Green	None Detected*	100% Non-Fibrous
L10362-DK091725-15A: Transite Ceiling - HID# 2300 (Building 1 – Foundry – Locker)	Yes	Gray	10% Chrysotile	90% Non-Fibrous
L10362-DK091725-16A: Transite Ceiling - HID# 2300 (Building 1 – Foundry – Locker)	Yes	Gray	10% Chrysotile	90% Non-Fibrous

NVLAP LAB CODE# 600273-0



**Viva Environmental, Health, & Safety, LLC.**

Asbestos Bulk Sample Log & Chain of Custody

Due Next Thurs 3pm

L10362

Client: DGT	Site Address: Frog/switch	Project#: 250640
Sample Date: 09/17/25	Inspector: SG/DK/JW	Project Manager: SU
Turnaround Time: 1 week	FS Name-#/Work Area: Building 1 - Foundry Locker Room	Comments: extension of foundry

Sample #	HID #	Material Description (Incl. Color)	Sample Location	Qty (SF/LF/EA)	Friable (Y/N)	Damage (SF/LF/EA)
DK091725-01A	2600	Paint A/w <del>DR</del> wall (Blue)	Building 1 - Foundry - Locker room	200 SF	Y	NA
-02A						
-03A						
-04A						
-05A						
-06A	2601	Paint A/w <del>DR</del> wall (Grey)	Building 1 Foundry - Shower	200 SF		
-07A						
-08A						
-09A	2100	Sheetrock / Joint compound	Building 1 Foundry - Locker	700 SF		
-10A						
-11A	1700	Ceiling tile 2x4	Building 1 Foundry - Locker	600 SF		
-12A						
-13A	2602	Metal <del>ceiling</del> <del>interior</del> <del>Paint</del> <del>Coating</del> <sup>DR</sup>	Building 1 Foundry - Locker	600 SF		
-14A						
-15A	2300	Transite ceiling	Building 1 Foundry - Locker	20 SF	N	

6 Hour TAT Contact: (Name, Email, Phone)

Samples Collected by: (Print/Sign) Dean Keith *[Signature]*

Transmitted to Lab by: (Print/Sign) Dean Keith *[Signature]*

Received by: (Print/Sign) Kelly Felton *[Signature]*

Analyzed by: (Print/Sign) \_\_\_\_\_

At: \_\_\_\_\_

Date: 09/17/25

Date: 09/19/25

Date: 9/18/25 3pm

Date: \_\_\_\_\_



L10362

**Viva Environmental, Health, & Safety, LLC.**  
Asbestos Bulk Sample Log & Chain of Custody

<b>Client:</b> DOT	<b>Site Address:</b> Frogswitch	<b>Project#:</b> 250640	
<b>Sample Date:</b> 09/17/25	<b>Inspector:</b> SG/DK/JTW	<b>Project Manager:</b> SU	<b>Analysis:</b> <u>PLM</u> TEM Other
<b>Turnaround Time:</b> 1 week	<b>FS Name-#/Work Area:</b> Building 1 - Foundry - Locker Room	<b>Comments:</b> Extension of Foundry	

Sample #	HID #	Material Description (Incl. Color)	Sample Location	Qty (SF/LF/EA)	Friable (Y/N)	Damage (SF/LF/EA)
DW091725-16A	2366	TRANSITE ceiling	Building 1 - foundry - lockers	20 SF	N	N/A

**6 Hour TAT Contact: (Name, Email, Phone)**

Samples Collected by: (Print/Sign) Dean Koib

Transmitted to Lab by: (Print/Sign) Dean Koib

Received by: (Print/Sign) Kelly Fisher

Analyzed by: (Print/Sign) \_\_\_\_\_

**At:** \_\_\_\_\_

**Date:** 09/17/25

**Date:** 09/18/25

**Date:** 9/18/25 3pm

**Date:** \_\_\_\_\_



**Eckhart Environmental Services, LLC**

**Report Prepared For:**

Viva Environmental, Health, & Safety, LLC  
Mr. Steven Vena  
2201 S 3rd Street  
Philadelphia, Pennsylvania 19148

**Address of Project/Test Site:**

DOT – Frog/Switch  
Silo - Stand Alone  
(Project # 250640)

RE:

Project #: L10363

Sent Via: [svena@vivaehs.com](mailto:svena@vivaehs.com), [info@vivaehs.com](mailto:info@vivaehs.com)

Date Collected: 9/17/2025

Date Received: 9/18/2025

Date of Analysis: 9/23/2025

Report Date: 9/24/2025

Analytical Testing:

Polarized Light Microscopy – Bulk Asbestos Testing

Approved By:

Kelly L. Eckhart, MPH  
Laboratory Director, Analytical Microscopist

Amendments:

Attached please find the results for the sample(s) submitted to Eckhart Environmental Services, LLC for asbestos bulk analysis. Sample analysis was performed by Polarized Light Microscopy in accordance with EPA Method 600/R-93/116 and EPA – “Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples.”

Sample results for identified asbestos fibrous materials are reported as a percent (1%) value based on visual area estimation under microscopic examination. Asbestos concentrations are reported as “trace” where limited individual asbestos fibers, or bundles, are identified but not on a consistent basis indicative of a homogenous material. Where requested, point count percentage results are also calculated and presented.

Please note that individual state and local jurisdictions typically establish or adopt specific sampling criteria and threshold values for asbestos sampling results. Federal regulations regarding asbestos are promulgated by both the EPA and OSHA. This report presents the analytical testing results of samples submitted and is not an interpretation in comparison to such criteria or values.

Additional information regarding asbestos can be found at:

<http://www.epa.gov/asbestos>

<http://www.osha.gov/SLTC/asbestos/index.html>

<http://www.atsdr.cdc.gov/asbestos>

<http://www.cdc.gov/niosh/topics/asbestos>

For inquiries of professional decision-making determinations regarding analytical results, contact the individual/firm whom collected the samples at the project site. In consideration of current customer services/restrictions, Eckhart Environmental Services, LLC’s Project Management staff may provide site-specific services and professional decision-making determinations under separate agreement and at an additional cost.

**ECKHART ENVIRONMENTAL SERVICES, LLC**  
300 South Pennell Road, Bldg 400-Unit 1B  
Media PA 19063  
[www.eckhartenvironmental.com](http://www.eckhartenvironmental.com)  
Version 1.2, Revision Date: 4/11/2024

**“The Gold Standard of Environmental Analytical and Testing Services”**

# Eckhart Environmental Services, LLC

## **Restrictions/Limitations:**

Laboratory results represent optical microscopic analytical work performed on samples submitted by the customer to Eckhart Environmental Services, LLC for analysis. All supplementary information regarding sample volume, location, activity, etc. was provided by the customer. Analytical results are unique to each project and must be evaluated by the individual whom collected the sample(s). Eckhart Environmental Services, LLC has no control of the sample collection process, sample placement, collection volume/area/size nor activity/conditions present at the collection site. Therefore, Eckhart Environmental Services, LLC shall have no liability with respect to decisions made, or actions taken, regarding reported results. Liability on the part of Eckhart Environmental Services, LLC is limited to the monetary value paid for this report.

# Eckhart Environmental Services, LLC

## ASBESTOS BULK SAMPLE ANALYSIS REPORT

**CLIENT:** VIVA ENVIRONMENTAL, HEALTH, & SAFETY, LLC  
PHILADELPHIA, PENNSYLVANIA

**EES PROJECT #:** L10363

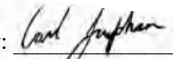
**LOCATION:** DOT – FROG/SWITCH  
SILO – STAND ALONE  
(PROJECT# 250640)


**DATE RECEIVED:** 9/18/2025

**DATE ANALYZED:** 9/23/2025

SAMPLE NUMBER/ DESCRIPTION/LOCATION	ASBESTOS PRESENT	COLOR	% ASBESTOS AND TYPE	% OTHER MATERIALS
L10363-01D: Tar Mastic - HID# 2600 (Silo Exterior)	Yes	Black	10% Chrysotile	90% Non-Fibrous
L10363-02D: Tar Mastic - HID# 2600 (Silo Exterior)	Yes	Black	10% Chrysotile	90% Non-Fibrous

NVLAP LAB CODE# 600273-0

Analyzed By:   
Carl Josephson  
Quality Manager  
Analytical Microscopist

Reviewed/Authorized By:   
Kelly L. Eckhart, MPH  
Laboratory Director  
Analytical Microscopist

Note: The above results represent analytical work performed on samples collected by the customer and submitted to EES for analysis. All supplementary information regarding the samples (i.e., location, sample type, etc.) was provided by the customer.

The report refers specifically to samples tested, and as received, and shall not be reproduced, except in full, without the written approval of the laboratory. The US EPA defines asbestos containing materials as any material containing greater than 1% asbestos as determined by Polarized Light Microscopy in accordance with EPA Method 600/R-93/116 and EPA – “Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in in Bulk Insulation Samples”.

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

\*EES recommends that NOB materials (such as floor coverings, mastic, roofing products, vinyl materials, etc.) demonstrating negative results by PLM for asbestos be re-analyzed by TEM.

\*\*Sample not analyzed due to customer-requested positive stop.

For samples where no asbestos was detected, a minimum of three (3) slide mounts was examined.

The quantity of samples submitted to EES’s laboratory was determined by the customer. EPA AHERA Regulation 40 CFR 763.86 sampling requires samples to be collected by a certified inspector in a statistically random manner and in sufficient quantity to confirm negative results. The sample quantity for negative asbestos determination varies according to the amount of suspect ACM present as well as the material classification (surfacing material, thermal system insulation, or miscellaneous material). The customer is responsible for verification of EPA requirements for negative asbestos determination prior to utilization of EES’s laboratory findings.

END OF REPORT

Due Next Thurs 3 pm

L 10363

Viva Environmental, Health, & Safety, LLC.

Asbestos Bulk Sample Log & Chain of Custody

Client: DOT	Site Address: frog / switch	Project#: 250640
Sample Date: 09/17/25	Inspector: DK/SB/JW	Project Manager: SU
Turnaround Time: 1 week	FS Name-#/Work Area: Silo - stand alone	Analysis: PLM TEM Other
		Comments: NO suspect materials/paint observed DK

Sample #	HID #	Material Description (Incl. Color)	Sample Location	Qty (SF/LF/EA)	Friable (Y/N)	Damage (SF/LF/EA)
-01D	2600	tar mastie	Silo - exterior	30LF	No	N/A
-02D	2600	tar mastie	↓	↓	↓	↓

6 Hour TAT Contact: (Name, Email, Phone)

Samples Collected by: (Print/Sign) Dean Kolb

Transmitted to Lab by: (Print/Sign) Dean Kolb

Received by: (Print/Sign) Kelly Feltner

Analyzed by: (Print/Sign) Kelly Feltner

At: \_\_\_\_\_

Date: 09/17/25

Date: 09/17/25

Date: 9/18/25 3pm

Date: \_\_\_\_\_



**Eckhart Environmental Services, LLC**

**Report Prepared For:**

**Viva Environmental, Health, & Safety, LLC  
Mr. Steven Vena  
2201 S 3rd Street  
Philadelphia, Pennsylvania 19148**

**Address of Project/Test Site:**

**DOT – Frog/Switch  
FROG – Building 2  
(Project # 250640)**

RE:

Project #: L10367

Sent Via: [svena@vivaehs.com](mailto:svena@vivaehs.com), [info@vivaehs.com](mailto:info@vivaehs.com)

Date Collected: 9/15/2025

Date Received: 9/18/2025

Date of Analysis: 9/24/2025

Report Date: 9/24/2025

Analytical Testing:

Polarized Light Microscopy – Bulk Asbestos Testing

Approved By:

Kelly L. Eckhart, MPH  
Laboratory Director, Analytical Microscopist

Amendments:

Attached please find the results for the sample(s) submitted to Eckhart Environmental Services, LLC for asbestos bulk analysis. Sample analysis was performed by Polarized Light Microscopy in accordance with EPA Method 600/R-93/116 and EPA – “Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples.”

Sample results for identified asbestos fibrous materials are reported as a percent (1%) value based on visual area estimation under microscopic examination. Asbestos concentrations are reported as “trace” where limited individual asbestos fibers, or bundles, are identified but not on a consistent basis indicative of a homogenous material. Where requested, point count percentage results are also calculated and presented.

Please note that individual state and local jurisdictions typically establish or adopt specific sampling criteria and threshold values for asbestos sampling results. Federal regulations regarding asbestos are promulgated by both the EPA and OSHA. This report presents the analytical testing results of samples submitted and is not an interpretation in comparison to such criteria or values.

Additional information regarding asbestos can be found at:

<http://www.epa.gov/asbestos>

<http://www.osha.gov/SLTC/asbestos/index.html>

<http://www.atsdr.cdc.gov/asbestos>

<http://www.cdc.gov/niosh/topics/asbestos>

For inquiries of professional decision-making determinations regarding analytical results, contact the individual/firm whom collected the samples at the project site. In consideration of current customer services/restrictions, Eckhart Environmental Services, LLC’s Project Management staff may provide site-specific services and professional decision-making determinations under separate agreement and at an additional cost.

*ECKHART ENVIRONMENTAL SERVICES, LLC  
300 South Pennell Road, Bldg 400-Unit 1B  
Media PA 19063  
www.eckhartenvironmental.com  
Version 1.2, Revision Date: 4/11/2024*

***“The Gold Standard of Environmental Analytical and Testing Services”***

# Eckhart Environmental Services, LLC

## **Restrictions/Limitations:**

Laboratory results represent optical microscopic analytical work performed on samples submitted by the customer to Eckhart Environmental Services, LLC for analysis. All supplementary information regarding sample volume, location, activity, etc. was provided by the customer. Analytical results are unique to each project and must be evaluated by the individual whom collected the sample(s). Eckhart Environmental Services, LLC has no control of the sample collection process, sample placement, collection volume/area/size nor activity/conditions present at the collection site. Therefore, Eckhart Environmental Services, LLC shall have no liability with respect to decisions made, or actions taken, regarding reported results. Liability on the part of Eckhart Environmental Services, LLC is limited to the monetary value paid for this report.

# Eckhart Environmental Services, LLC

## ASBESTOS BULK SAMPLE ANALYSIS REPORT

**CLIENT:** VIVA ENVIRONMENTAL, HEALTH, & SAFETY, LLC  
PHILADELPHIA, PENNSYLVANIA

**EES PROJECT #:** L10367

**LOCATION:** DOT – FROG/SWITCH  
FROG – BUILDING 2  
(PROJECT# 250640)

**DATE RECEIVED:** 9/18/2025

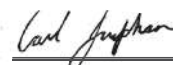
**DATE ANALYZED:** 9/24/2025


SAMPLE NUMBER/ DESCRIPTION/LOCATION	ASBESTOS PRESENT	COLOR	% ASBESTOS AND TYPE	% OTHER MATERIALS
L10367-DK091525-01A: Wire Wrapping - HID# 2600 (Frog Switch Boiler Room)	No	Black	None Detected*	10% Cellulose 90% Non-Fibrous
L10367-DK091525-02A: Wire Wrapping - HID# 2600 (Frog Switch Boiler Room)	No	Black	None Detected*	10% Cellulose 90% Non-Fibrous
L10367-DK091525-03A: White Boiler Packing - HID# 1600 (Frog Switch Boiler Room)	No	Tan	None Detected	75% Fibrous Glass 25% Non-Fibrous
L10367-DK091525-04A: White Boiler Packing - HID# 1600 (Frog Switch Boiler Room)	No	Tan	None Detected	75% Fibrous Glass 25% Non-Fibrous
L10367-DK091525-05A: White Boiler Packing - HID# 1600 (Frog Switch Boiler Room)	No	Tan	None Detected	75% Fibrous Glass 25% Non-Fibrous
L10367-DK091525-06A: Refractory Brick (Red) - HID# 2602 (Frog Switch Boiler Room)	No	Red	None Detected	100% Non-Fibrous
L10367-DK091525-07A: Refractory Brick (Red) - HID# 2602 (Frog Switch Boiler Room)	No	Red	None Detected	100% Non-Fibrous
L10367-DK091525-08A: Refractory Brick (Tan) - HID# 2603 (Frog Switch Boiler Room)	No	Light Tan	None Detected	100% Non-Fibrous
L10367-DK091525-09A: Refractory Brick (Tan) - HID# 2603 (Frog Switch Boiler Room)	No	Light Tan	None Detected	100% Non-Fibrous
L10367-DK091525-10A: Cementitious Mortar associated with Refractory Brick - HID# 2604 (Frog Switch Boiler Room)	No	Gray	None Detected	100% Non-Fibrous
L10367-DK091525-11A: Cementitious Mortar associated with Refractory Brick - HID# 2604 (Frog Switch Boiler Room)	No	Gray	None Detected	100% Non-Fibrous
L10367-DK091525-12A: Window Glazing - HID# 2606 (Frog - Exterior)	No	Gray	None Detected*	100% Non-Fibrous
L10367-DK091525-13A: Window Glazing - HID# 2606 (Frog - Exterior)	No	Gray	None Detected*	100% Non-Fibrous
L10367-DK091525-14A: Caulk associated with Window - HID# 2607 (Frog – Exterior)	No	White	None Detected*	100% Non-Fibrous
L10367-DK091525-15A: Caulk associated with Window - HID# 2607 (Frog – Exterior)	No	White	None Detected*	100% Non-Fibrous
L10367-DK091525-16A: Cementitious Paint (Wall) - HID# 2608 (Frog – Interior)	No	White	None Detected*	100% Non-Fibrous
L10367-DK091525-17A***: Cementitious Paint (Wall) - HID# 2608 (Frog – Interior)	***	***	***	***
L10367-DK091525-18A: Cementitious Paint (Wall) - HID# 2608 (Frog – Interior)	No	White	None Detected*	100% Non-Fibrous
L10367-DK091525-19A: Cementitious Paint (Wall) - HID# 2608 (Frog – Interior)	No	White	None Detected*	100% Non-Fibrous
L10367-DK091525-20A: Cementitious Paint (Wall) - HID# 2608 (Frog – Interior)	No	White	None Detected*	100% Non-Fibrous
L10367-DK091525-21A: Roll Down Door (Cloth) - HID# 2609 (Frog – Interior)	No	Brown	None Detected*	100% Synthetic
L10367-DK091525-22A: Roll Down Door (Cloth) - HID# 2609 (Frog – Interior)	No	Brown	None Detected*	100% Synthetic
L10367-DK091525-23A: Curtain Wall - HID# 2610 (Frog – Interior)	No	White	None Detected	100% Cotton
L10367-DK091525-24A: Curtain Wall - HID# 2610 (Frog – Interior)	No	White	None Detected	100% Cotton
L10367-DK091525-25A: Door Caulk - HID# 2611 (Frog – Switch; Exterior)	No	White	None Detected*	100% Non-Fibrous

# Eckhart Environmental Services, LLC

SAMPLE NUMBER/ DESCRIPTION/LOCATION	ASBESTOS PRESENT	COLOR	% ASBESTOS AND TYPE	% OTHER MATERIALS
L10367-DK091525-26A: Door Caulk - HID# 2611 (Frog – Switch; Exterior)	No	White	None Detected*	100% Non-Fibrous
L10367-DK091525-27A: Roof Membrane associated with A Frame Roof - HID# 2612 (Frog – Switch; Roof)	No	Black	None Detected*	100% Non-Fibrous
L10367-DK091525-27A: Roof Membrane associated with A Frame Roof - HID# 2612 (Frog – Switch; Roof); underlayment	No	Brown	None Detected	70% Cellulose 20% Fibrous Glass 10% Non-Fibrous
L10367-DK091525-27A: Roof Membrane associated with A Frame Roof - HID# 2612 (Frog – Switch; Roof); insulation	No	Yellow	None Detected*	100% Non-Fibrous
L10367-DK091525-28A: Roof Membrane associated with A Frame Roof - HID# 2612 (Frog – Switch; Roof)	No	Black	None Detected*	100% Non-Fibrous
L10367-DK091525-28A: Roof Membrane associated with A Frame Roof - HID# 2612 (Frog – Switch; Roof); underlayment	No	Brown	None Detected	70% Cellulose 20% Fibrous Glass 10% Non-Fibrous
L10367-DK091525-28A: Roof Membrane associated with A Frame Roof - HID# 2612 (Frog – Switch; Roof); insulation	No	Yellow	None Detected*	100% Non-Fibrous
L10367-DK091525-29A: 2x4 Dotted CT- HID# 1701 (Frog – Switch; Office)	No	White/Tan	None Detected	35% Cellulose 35% Fibrous Glass 30% Non-Fibrous
L10367-DK091525-30A: 2x4 Dotted CT- HID# 1701 (Frog – Switch; Office)	No	White/Tan	None Detected	35% Cellulose 35% Fibrous Glass 30% Non-Fibrous
L10367-DK091525-31A: 12x12 Brown Floor Tile - HID# 2001 (Frog – Switch; Office – 1 <sup>st</sup> Layer)	No	Gray	None Detected*	100% Non-Fibrous
L10367-DK091525-31A(M): Mastic associated with 12x12 Brown Floor Tile - HID# 2500 (Frog – Switch; Office – 1 <sup>st</sup> Layer)	No	Yellow	None Detected*	100% Non-Fibrous
L10367-DK091525-32A: 12x12 Brown Floor Tile - HID# 2001 (Frog – Switch; Office – 1 <sup>st</sup> Layer)	No	Gray	None Detected*	100% Non-Fibrous
L10367-DK091525-32A(M): Mastic associated with 12x12 Brown Floor Tile- HID# 2500 (Frog – Switch; Office – 1 <sup>st</sup> Layer)	No	Yellow	None Detected*	100% Non-Fibrous
L10367-DK091525-33A: 12x12 Tan Floor Tile with Tan Streaks - HID# 2002 (Frog – Switch; Office – 2 <sup>nd</sup> Layer)	No	Tan	None Detected*	100% Non-Fibrous
L10367-DK091525-33A(M): Mastic associated with 12x12 Tan Floor Tile with Tan Streaks - HID# 2501 (Frog – Switch; Office – 2 <sup>nd</sup> Layer)	No	Yellow	None Detected*	100% Non-Fibrous
L10367-DK091525-34A: 12x12 Tan Floor Tile with Tan Streaks - HID# 2002 (Frog – Switch; Office – 2 <sup>nd</sup> Layer)	No	Tan	None Detected*	100% Non-Fibrous
L10367-DK091525-34A(M): Mastic associated with 12x12 Tan Floor Tile with Tan Streaks - HID# 2501 (Frog – Switch; Office – 2 <sup>nd</sup> Layer)	No	Yellow	None Detected*	100% Non-Fibrous

NVLAP LAB CODE# 600273-0

Analyzed By:   
 Carl Josephson  
 Quality Manager  
 Analytical Microscopist

Reviewed/Authorized By:   
 Kelly L. Eckhart, MPH  
 Laboratory Director  
 Analytical Microscopist

## Eckhart Environmental Services, LLC

Note: The above results represent analytical work performed on samples collected by the customer and submitted to EES for analysis. All supplementary information regarding the samples (i.e., location, sample type, etc.) was provided by the customer.

The report refers specifically to samples tested, and as received, and shall not be reproduced, except in full, without the written approval of the laboratory. The US EPA defines asbestos containing materials as any material containing greater than 1% asbestos as determined by Polarized Light Microscopy in accordance with EPA Method 600/R-93/116 and EPA – “Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in in Bulk Insulation Samples”.

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

\*EES recommends that NOB materials (such as floor coverings, mastic, roofing products, vinyl materials, etc.) demonstrating negative results by PLM for asbestos be re-analyzed by TEM.

\*\*Sample not analyzed due to customer-requested positive stop.

\*\*\*Insufficient material.

For samples where no asbestos was detected, a minimum of three (3) slide mounts was examined.

The quantity of samples submitted to EES’s laboratory was determined by the customer. EPA AHERA Regulation 40 CFR 763.86 sampling requires samples to be collected by a certified inspector in a statistically random manner and in sufficient quantity to confirm negative results. The sample quantity for negative asbestos determination varies according to the amount of suspect ACM present as well as the material classification (surfacing material, thermal system insulation, or miscellaneous material). The customer is responsible for verification of EPA requirements for negative asbestos determination prior to utilization of EES’s laboratory findings.

END OF REPORT

Due Next Thurs 3pm

L10367

**Viva Environmental, Health, & Safety, LLC.**

Asbestos Bulk Sample Log & Chain of Custody

Client: <b>DOT</b>	Site Address: <b>Frog/switch</b>	Project#: <b>250640</b>
Sample Date: <b>09/15/25</b>	Inspector: <b>DK/SG/JTW</b>	Project Manager: <b>SU</b>
Turnaround Time: <b>1 week</b>	FS Name-#/Work Area: <b>FROG - Building 2</b>	Analysis: <b>PLM</b> TEM Other
		Comments: <b>NIS Refers to Not sampled material that was inspected</b>

Sample #	HID #	Material Description (Incl. Color)	Sample Location	Qty (SF/LF/EA)	Friable (Y/N)	Damage (SF/LF/EA)
DK091525-01A	2600	Wire wrapping	Frog Switch Boiler room	1 SF	N	N/A
-02A	L	L		L	L	
NIS	2601	Rope material		15 LF	N	
-03A	1600	White Boiler Packing		50 SF	Y	
04A	L	L		L	L	
-05A	L	L		L	L	
-06A	2602	Refractory Brick (Red)		30 SF	N	
-07A	L	L		L	L	
-08A	2603	Refractory Brick (Tan)		30 SF	L	
-09A	L	L		L	L	
-10A	2604	Cementitious Mortar AW Refractory Brick		20 SF	Y	
-11A	L	L		L	L	
NIS	2605	Firedoor - Boiler		20 SF	N	
-12A	2606	Window Glazing	Frog - exterior	3500 LF	Y	
-13A	L	L	L	L	L	L

6 Hour TAT Contact: (Name, Email, Phone)

Samples Collected by: (Print/Sign) Dean Kolb

Transmitted to Lab by: (Print/Sign) Dean Kolb

Received by: (Print/Sign) Kelly Fisher

Analyzed by: (Print/Sign) \_\_\_\_\_

At: \_\_\_\_\_

Date: 09/15/25

Date: 09/18/25

Date: 9/18/25 3pm

Date: \_\_\_\_\_

## Viva Environmental, Health, & Safety, LLC.

Asbestos Bulk Sample Log & Chain of Custody

L10367

Client: DOT	Site Address: Frog/switch	Project#: 250640
Sample Date: 09/15/25	Inspector: DK/SGL/JTW	Project Manager: SV
Turnaround Time: 1 week	FS Name-#/Work Area: Frog	Analysis: <u>PLM</u> TEM Other
		Comments: N/S Refers to NOT sampled material inspected

Sample #	HID #	Material Description (Incl. Color)	Sample Location	Qty (SF/LF/EA)	Friable (Y/N)	Damage (SF/LF/EA)
D091525-14A	2607	Caulk A/w window	Frog - Exterior	72 LF	Y	N/A
-15A	I	I	I	I	I	I
-16A	2608	Cementitious Paint (wall)	Frog - Interior	3500 SF	Y	I
-17A	I	I	I	I	I	I
-18A	I	I	I	I	I	I
-19A	I	I	I	I	I	I
-20A	I	I	I	I	I	I
N/S/	1601	TSI	I	1500 LF	Y	I
-21A	2609	Roll down Door (cloth)	I	200 SF	N	I
-22A	I	I	I	I	I	I
-23A	2610	Curtain wall	I	1000 SF	I	I
-24A	I	I	I	I	I	I
N/S	2000	12"x12" Floor tile	Frog - Interior - Lunch Room		N	I
N/S	1700	2x4 ceiling tile	I		Y	I

6 Hour TAT Contact: (Name, Email, Phone)

Samples Collected by: (Print/Sign)

Transmitted to Lab by: (Print/Sign)

Received by: (Print/Sign)

Analyzed by: (Print/Sign)

Dean Kolb  
 Kelly Falkner  
 Kelly Falkner

At:

Date:

Date:

Date:

Date:

09/15/25  
 09/16/25  
 9/18/25 3pm

**Viva Environmental, Health, & Safety, LLC.**

Asbestos Bulk Sample Log & Chain of Custody

10367

Client: <b>DUT</b>	Site Address: <b>Frog/Switch</b>	Project#: <b>250640</b>
Sample Date: <b>09/15/25</b>	Inspector: <b>DY/SG/JTW</b>	Project Manager: <b>SU</b>
Turnaround Time: <b>1 week</b>	FS Name-#/Work Area: <b>FROG</b>	Analysis: <b>PLM</b> TEM Other
Comments:		

Sample #	HID #	Material Description (Incl. Color)	Sample Location	Qty (SF/LF/EA)	Friable (Y/N)	Damage (SF/LF/EA)
- 25A	2611	Door (auk)	FROG SWITCH (Exterior)	12 LF/EA	Y	N/A
- 26A	↓	↓	(Exterior)	↓	↓	↓
- 27A	2612	Roof membrane A/in A frame roof	(Roof)	72,500 SF	N	N/A
- 28A	↓	↓	(Roof)	↓	↓	↓
- 29A	1701	2x4 dotted CT	(Office)	400 SF	Y	N/A
- 30A	1701	↓	(Office)	↓	↓	↓
- 31A	2001/2500	12x12 floor tile w/ tan streaks/mastic	(Office - 1st layer)	400 SF	N	↓
- 32A	↓	↓	(Office - 1st layer)	↓	↓	↓
- 33A	2002/2501	12x12 tan floor tile w/ tan streaks/mastic	(Office - 2nd layer)	↓	↓	↓
- 34A	↓	↓	(Office - 2nd layer)	↓	↓	↓

6 Hour TAT Contact: (Name, Email, Phone)

Samples Collected by: (Print/Sign)

Transmitted to Lab by: (Print/Sign)

Received by: (Print/Sign)

Analyzed by: (Print/Sign)

Dean Kolb  
 Dean Kolb  
 Kelly Eckhardt  
 Kelly Eckhardt

At:

Date: 09/15/25

Date: 9/15/25

Date: 9/18/25 3pm

Date:



**Eckhart Environmental Services, LLC**

**Report Prepared For:**

**Viva Environmental, Health, & Safety, LLC  
Mr. Steven Vena  
2201 S 3rd Street  
Philadelphia, Pennsylvania 19148**

**Address of Project/Test Site:**

**DOT – Frog/Switch  
Main Office  
(Project # 250640)**

RE:

Project #: L10366

Sent Via: [svena@vivaehs.com](mailto:svena@vivaehs.com), [info@vivaehs.com](mailto:info@vivaehs.com)

Date Collected: 9/15/2025

Date Received: 9/18/2025

Date of Analysis: 9/23/2025

Report Date: 9/24/2025

Analytical Testing:

Polarized Light Microscopy – Bulk Asbestos Testing

Approved By:

Kelly L. Eckhart, MPH  
Laboratory Director, Analytical Microscopist

Amendments:

Attached please find the results for the sample(s) submitted to Eckhart Environmental Services, LLC for asbestos bulk analysis. Sample analysis was performed by Polarized Light Microscopy in accordance with EPA Method 600/R-93/116 and EPA – “Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples.”

Sample results for identified asbestos fibrous materials are reported as a percent (1%) value based on visual area estimation under microscopic examination. Asbestos concentrations are reported as “trace” where limited individual asbestos fibers, or bundles, are identified but not on a consistent basis indicative of a homogenous material. Where requested, point count percentage results are also calculated and presented.

Please note that individual state and local jurisdictions typically establish or adopt specific sampling criteria and threshold values for asbestos sampling results. Federal regulations regarding asbestos are promulgated by both the EPA and OSHA. This report presents the analytical testing results of samples submitted and is not an interpretation in comparison to such criteria or values.

Additional information regarding asbestos can be found at:

<http://www.epa.gov/asbestos>

<http://www.osha.gov/SLTC/asbestos/index.html>

<http://www.atsdr.cdc.gov/asbestos>

<http://www.cdc.gov/niosh/topics/asbestos>

For inquiries of professional decision-making determinations regarding analytical results, contact the individual/firm whom collected the samples at the project site. In consideration of current customer services/restrictions, Eckhart Environmental Services, LLC’s Project Management staff may provide site-specific services and professional decision-making determinations under separate agreement and at an additional cost.

*ECKHART ENVIRONMENTAL SERVICES, LLC  
300 South Pennell Road, Bldg 400-Unit 1B  
Media PA 19063  
www.eckhartenvironmental.com  
Version 1.2, Revision Date: 4/11/2024*

**“The Gold Standard of Environmental Analytical and Testing Services”**

# Eckhart Environmental Services, LLC

## **Restrictions/Limitations:**

Laboratory results represent optical microscopic analytical work performed on samples submitted by the customer to Eckhart Environmental Services, LLC for analysis. All supplementary information regarding sample volume, location, activity, etc. was provided by the customer. Analytical results are unique to each project and must be evaluated by the individual whom collected the sample(s). Eckhart Environmental Services, LLC has no control of the sample collection process, sample placement, collection volume/area/size nor activity/conditions present at the collection site. Therefore, Eckhart Environmental Services, LLC shall have no liability with respect to decisions made, or actions taken, regarding reported results. Liability on the part of Eckhart Environmental Services, LLC is limited to the monetary value paid for this report.

# Eckhart Environmental Services, LLC

## ASBESTOS BULK SAMPLE ANALYSIS REPORT

**CLIENT:** VIVA ENVIRONMENTAL, HEALTH, & SAFETY, LLC  
PHILADELPHIA, PENNSYLVANIA

**EES PROJECT #:** L10366

**LOCATION:** DOT – FROG/SWITCH  
MAIN OFFICE  
(PROJECT# 250640)

**DATE RECEIVED:** 9/18/2025

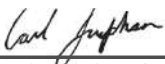
**DATE ANALYZED:** 9/23/2025


SAMPLE NUMBER/ DESCRIPTION/LOCATION	ASBESTOS PRESENT	COLOR	% ASBESTOS AND TYPE	% OTHER MATERIALS
L10366-DK091525-01: Plaster - HID# 1900 (Building 3 – Main Office; Wall); Finish Coat	No	White	None Detected	100% Non-Fibrous
L10366-DK091525-01: Plaster - HID# 1900 (Building 3 – Main Office; Wall); Scratch Coat	No	Gray	None Detected	1% Cellulose 99% Non-Fibrous
L10366-DK091525-02: Plaster - HID# 1900 (Building 3 – Main Office; Wall); Finish Coat	No	White	None Detected	100% Non-Fibrous
L10366-DK091525-02: Plaster - HID# 1900 (Building 3 – Main Office; Wall); Scratch Coat	No	Gray	None Detected	1% Cellulose 99% Non-Fibrous
L10366-DK091525-03: Plaster - HID# 1900 (Building 3 – Main Office; Wall); Finish Coat	No	White	None Detected	100% Non-Fibrous
L10366-DK091525-03: Plaster - HID# 1900 (Building 3 – Main Office; Wall); Scratch Coat	No	Gray	None Detected	1% Cellulose 99% Non-Fibrous
L10366-DK091525-04: Sheetrock - HID# 2100 (Building 3 – Main Office)	No	White	None Detected	8% Cellulose 92% Non-Fibrous
L10366-DK091525-04: Joint Compound - HID# 2100 (Building 3 – Main Office)	No	Tan	None Detected	30% Synthetic 70% Non-Fibrous
L10366-DK091525-05: Sheetrock - HID# 2100 (Building 3 – Main Office)	No	White	None Detected	8% Cellulose 92% Non-Fibrous
L10366-DK091525-05: Joint Compound - HID# 2100 (Building 3 – Main Office)	No	Tan	None Detected	30% Synthetic 70% Non-Fibrous
L10366-DK091525-06: Ceiling Tile 2'x4' - HID# 1700 (Building 3 – Main Office)	No	White	None Detected	60% Cellulose 20% Fibrous Glass 20% Non-Fibrous
L10366-DK091525-07: Ceiling Tile 2'x4' - HID# 1700 (Building 3 – Main Office)	No	White	None Detected	60% Cellulose 20% Fibrous Glass 20% Non-Fibrous
L10366-DK091525-08: Ceiling Tile 2x2 Textured - HID# 1701 (Building 3 – Main Office)	No	White	None Detected	30% Cellulose 50% Fibrous Glass 20% Non-Fibrous
L10366-DK091525-09: Ceiling Tile 2x2 Textured - HID# 1701 (Building 3 – Main Office)	No	White	None Detected	30% Cellulose 50% Fibrous Glass 20% Non-Fibrous
L10366-DK091525-10: Ceiling Tile 2x4 Textured - HID# 1702 (Building 3 – Main Office)	No	White	None Detected	60% Cellulose 20% Fibrous Glass 20% Non-Fibrous
L10366-DK091525-11: Ceiling Tile 2x4 Textured - HID# 1702 (Building 3 – Main Office)	No	White	None Detected	60% Cellulose 20% Fibrous Glass 20% Non-Fibrous
L10366-DK091525-12: Plaster (2 <sup>nd</sup> Floor) - HID# 1901 (Building 3 – Main Office); type 1	Yes	White	<1% Chrysotile	<1% Hair 99% Non-Fibrous
L10366-DK091525-12: Plaster (2 <sup>nd</sup> Floor) - HID# 1901 (Building 3 – Main Office); type 2	No	Gray	None Detected	100% Non-Fibrous
L10366-DK091525-13: Plaster (2 <sup>nd</sup> Floor) - HID# 1901 (Building 3 – Main Office); type 1	Yes	White	<1% Chrysotile	<1% Hair 99% Non-Fibrous
L10366-DK091525-13: Plaster (2 <sup>nd</sup> Floor) - HID# 1901 (Building 3 – Main Office); type 2	No	Gray	None Detected	100% Non-Fibrous
L10366-DK091525-14: Glue associated with Cove Base - HID# 2600 (Building 3 – Main Office)	No	Brown	None Detected*	100% Non-Fibrous
L10366-DK091525-15: Glue associated with Cove Base - HID# 2600 (Building 3 – Main Office)	No	Brown	None Detected*	100% Non-Fibrous

# Eckhart Environmental Services, LLC

SAMPLE NUMBER/ DESCRIPTION/LOCATION	ASBESTOS PRESENT	COLOR	% ASBESTOS AND TYPE	% OTHER MATERIALS
L10366-DK091525-16: Ceiling Tile 2x2 (Roughed) - HID# 1703 (Building 3 – Main Office)	No	White	None Detected	75% Cellulose 5% Fibrous Glass 20% Non-Fibrous
L10366-DK091525-17: Ceiling Tile 2x2 (Roughed) - HID# 1703 (Building 3 – Main Office)	No	White	None Detected	75% Cellulose 5% Fibrous Glass 20% Non-Fibrous
L10366-DK091525-18: Glue associated with Carpet - HID# 2601 (Building 3 – Main Office)	No	Brown	None Detected*	2% Cellulose 98% Non-Fibrous
L10366-DK091525-19: Glue associated with Carpet - HID# 2601 (Building 3 – Main Office)	No	Brown	None Detected*	2% Cellulose 98% Non-Fibrous
L10366-DK091525-20: Floor Tile 9"x9" (Vault) - HID# 2000 (Building 3 – Main Office)	Yes	Brown	8% Chrysotile	92% Non-Fibrous
L10366-DK091525-20(M): Mastic associated with Floor Tile 9"x9" (Vault) - HID# 2000 (Building 3 – Main Office)	No	Brown	None Detected*	2% Cellulose 98% Non-Fibrous
L10366-DK091525-21: Floor Tile 9"x9" (Vault) - HID# 2000 (Building 3 – Main Office)	Yes	Brown	8% Chrysotile	92% Non-Fibrous
L10366-DK091525-21(M): Mastic associated with Floor Tile 9"x9" (Vault) - HID# 2000 (Building 3 – Main Office)	No	Brown	None Detected*	2% Cellulose 98% Non-Fibrous
L10366-DK091525-22: Fire Door - HID# 2602 (Vault)	No	Gray	None Detected	100% Non-Fibrous
L10366-DK091525-23: Fire Door - HID# 2602 (Vault)	No	Gray	None Detected	100% Non-Fibrous
L10366-DK091525-24: Tar/Asphalt Shingle associated with A Frame Roof - HID# 2603 (Building 3 Main Office)	No	Black/Red	None Detected*	60% Cellulose 40% Non-Fibrous
L10366-DK091525-25: Tar/Asphalt Shingle associated with A Frame Roof - HID# 2603 (Building 3 Main Office)	No	Black/Red	None Detected*	60% Cellulose 40% Non-Fibrous
L10366-DK091525-26: Perimeter Roof Flashing - HID# 2604 (Roof)	Yes	Black	2% Chrysotile	98% Non-Fibrous
L10366-DK091525-27: Perimeter Roof Flashing - HID# 2604 (Roof)	Yes	Black	<1% Chrysotile	100% Non-Fibrous
L10366-DK091525-28: Window Glazing (2 <sup>nd</sup> Floor) - HID# 2605 (Building 3 Main Office Exterior)	Yes	Black/Tan	3% Chrysotile	2% Wollastonite 95% Non-Fibrous
L10366-DK091525-29: Window Glazing (2 <sup>nd</sup> Floor) - HID# 2605 (Building 3 Main Office Exterior)	Yes	Black/Tan	3% Chrysotile	2% Wollastonite 95% Non-Fibrous

NVLAP LAB CODE# 600273-0

Analyzed By:  SC  
 Carl Josephson/SC  
 Quality Manager  
 Analytical Microscopists

Reviewed/Authorized By:   
 Kelly L. Eckhart, MPH  
 Laboratory Director  
 Analytical Microscopist

Note: The above results represent analytical work performed on samples collected by the customer and submitted to EES for analysis. All supplementary information regarding the samples (i.e., location, sample type, etc.) was provided by the customer.

The report refers specifically to samples tested, and as received, and shall not be reproduced, except in full, without the written approval of the laboratory. The US EPA defines asbestos containing materials as any material containing greater than 1% asbestos as determined by Polarized Light Microscopy in accordance with EPA Method 600/R-93/116 and EPA – “Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in in Bulk Insulation Samples”.

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

## **Eckhart Environmental Services, LLC**

\*EES recommends that NOB materials (such as floor coverings, mastic, roofing products, vinyl materials, etc.) demonstrating negative results by PLM for asbestos be re-analyzed by TEM.

\*\*Sample not analyzed due to customer-requested positive stop.

For samples where no asbestos was detected, a minimum of three (3) slide mounts was examined.

The quantity of samples submitted to EES's laboratory was determined by the customer. EPA AHERA Regulation 40 CFR 763.86 sampling requires samples to be collected by a certified inspector in a statistically random manner and in sufficient quantity to confirm negative results. The sample quantity for negative asbestos determination varies according to the amount of suspect ACM present as well as the material classification (surfacing material, thermal system insulation, or miscellaneous material). The customer is responsible for verification of EPA requirements for negative asbestos determination prior to utilization of EES's laboratory findings.

END OF REPORT

Viva Environmental, Health, & Safety, LLC.

Asbestos Bulk Sample Log & Chain of Custody

Due Next Thing 3pm L 10366

Client: DOT	Site Address: frog/switch	Project#: 250640
Sample Date: 09/15/25	Inspector: DL/SB/JTW	Project Manager: SV
Turnaround Time: 1 week	FS Name-#/Work Area: Main Office	Analysis: <u>PLM</u> TEM Other
Comments:		

Sample #	HID #	Material Description (Incl. Color)	Sample Location	Qty (SF/LF/EA)	Friable (Y/N)	Damage (SF/LF/EA)	
N/S	1800	1'x1' SPLine Ceiling Tile + Mastic	Building 3 - main office	2000 SF	N	N/A	
DK091525-01	1900	Plaster (wall)	Building 3 - main office (wall)	3000 SF	Y		
-02	↓	↓	↓	↓	↓		
-03	↓	↓	↓	↓	↓		
-04	2100	SHEETROCK /JOINT compound	Building 3 - main office	7000 SF	Y		
-05	↓	↓	↓	↓	↓		
-06	1700	Ceiling tile 2'x4'		2500/2000 SF	N		
-07	↓	↓		↓	↓		↓
-08	1701	Ceiling tile 2x2 Textured		850 SF	Y		
-09	↓	↓		↓	↓		↓
-10	1702	Ceiling tile 2x4 textured		500 SF	Y		
-11	↓	↓		↓	↓		↓
-12	1901	Plaster (2nd floor)		750 SF	Y		
-13	↓	↓		↓	↓		↓
-14	2600	Glue a/w Cove Base		1300 SF	N		

6 Hour TAT Contact: (Name, Email, Phone)

Samples Collected by: (Print/Sign) Dean Kolb [Signature]  
 Transmitted to Lab by: (Print/Sign) Dean Kolb [Signature]  
 Received by: (Print/Sign) Kelly Eckhart [Signature]  
 Analyzed by: (Print/Sign) \_\_\_\_\_

At: \_\_\_\_\_  
 Date: 09/15/25  
 Date: 09/18/25  
 Date: 9/18/25 3pm  
 Date: \_\_\_\_\_

L10366

Client: DOT	Site Address: Frog/Switch	Project#: 250640
Sample Date: 09/15/25	Inspector: DK/SG/JTW	Project Manager: SV
Turnaround Time: 1 week	FS Name-#/Work Area: Main office	Analysis: <u>PLM</u> TEM Other
Comments:		

Sample #	HID #	Material Description (Incl. Color)	Sample Location	Qty (SF/LF/EA)	Friable (Y/N)	Damage (SF/LF/EA)
DK091525-05	2600	Glue A/W Cove base	Building 3 main office	1300 SF	N	N/A
-16	1703	Ceiling tile 2x2 (Rounded)		2200 SF	Y	
-17	↓	↓		↓	↓	
-18	2601	Glue A/W carpet		4000 SF	N	
-19	↓	↓		↓	↓	
-20	2000	Floor tile 9"x9" (Vault) + mastic		96 SF	N	
-21	↓	↓	↓	↓	↓	
-22	2602	Fire door	Vault	60 SF (3EA)	N	
-23	↓	↓	↓	↓	↓	
-24	2603	Tar/Asphalt single A/W roof	Building 3 main office	250 SF	N	
-25	↓	↓	↓	↓	↓	
-26	2604	Perimeter roof flashing	roof	100 LF	N	
-27	↓	↓	↓	↓	↓	↓
-28	2605	Window Glazing (2nd floor)	Building 3 main office exterior	108 LF	Y	
-29	↓	↓	↓	↓	↓	

6 Hour TAT Contact: (Name, Email, Phone)

Samples Collected by: (Print/Sign) Deon Webb

Transmitted to Lab by: (Print/Sign) Deon Webb

Received by: (Print/Sign) Kelly Eckhart

Analyzed by: (Print/Sign) Kelly Eckhart

At:

Date: 09/15/25

Date: 09/15/25

Date: 9/18/25 3pm

Date:



**Eckhart Environmental Services, LLC**

**Report Prepared For:**

**Viva Environmental, Health, & Safety, LLC  
Mr. Steven Vena  
2201 S 3rd Street  
Philadelphia, Pennsylvania 19148**

**Address of Project/Test Site:**

**DOT – Frog/Switch  
Building 5  
(Project # 250640)**

RE:

Project #: L10360

Sent Via: [svena@vivaehs.com](mailto:svena@vivaehs.com), [info@vivaehs.com](mailto:info@vivaehs.com)

Date Collected: 9/18/2025

Date Received: 9/18/2025

Date of Analysis: 9/23/2025

Report Date: 9/24/2025

Analytical Testing:

Polarized Light Microscopy – Bulk Asbestos Testing

Approved By:

Kelly L. Eckhart, MPH  
Laboratory Director, Analytical Microscopist

Amendments:

Attached please find the results for the sample(s) submitted to Eckhart Environmental Services, LLC for asbestos bulk analysis. Sample analysis was performed by Polarized Light Microscopy in accordance with EPA Method 600/R-93/116 and EPA – “Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples.”

Sample results for identified asbestos fibrous materials are reported as a percent (1%) value based on visual area estimation under microscopic examination. Asbestos concentrations are reported as “trace” where limited individual asbestos fibers, or bundles, are identified but not on a consistent basis indicative of a homogenous material. Where requested, point count percentage results are also calculated and presented.

Please note that individual state and local jurisdictions typically establish or adopt specific sampling criteria and threshold values for asbestos sampling results. Federal regulations regarding asbestos are promulgated by both the EPA and OSHA. This report presents the analytical testing results of samples submitted and is not an interpretation in comparison to such criteria or values.

Additional information regarding asbestos can be found at:

<http://www.epa.gov/asbestos>

<http://www.osha.gov/SLTC/asbestos/index.html>

<http://www.atsdr.cdc.gov/asbestos>

<http://www.cdc.gov/niosh/topics/asbestos>

For inquiries of professional decision-making determinations regarding analytical results, contact the individual/firm whom collected the samples at the project site. In consideration of current customer services/restrictions, Eckhart Environmental Services, LLC’s Project Management staff may provide site-specific services and professional decision-making determinations under separate agreement and at an additional cost.

***ECKHART ENVIRONMENTAL SERVICES, LLC**  
300 South Pennell Road, Bldg 400-Unit 1B  
Media PA 19063  
www.eckhartenvironmental.com  
Version 1.2, Revision Date: 4/11/2024*

***“The Gold Standard of Environmental Analytical and Testing Services”***

# Eckhart Environmental Services, LLC

## **Restrictions/Limitations:**

Laboratory results represent optical microscopic analytical work performed on samples submitted by the customer to Eckhart Environmental Services, LLC for analysis. All supplementary information regarding sample volume, location, activity, etc. was provided by the customer. Analytical results are unique to each project and must be evaluated by the individual whom collected the sample(s). Eckhart Environmental Services, LLC has no control of the sample collection process, sample placement, collection volume/area/size nor activity/conditions present at the collection site. Therefore, Eckhart Environmental Services, LLC shall have no liability with respect to decisions made, or actions taken, regarding reported results. Liability on the part of Eckhart Environmental Services, LLC is limited to the monetary value paid for this report.

# Eckhart Environmental Services, LLC

## ASBESTOS BULK SAMPLE ANALYSIS REPORT

CLIENT: VIVA ENVIRONMENTAL, HEALTH, & SAFETY, LLC  
PHILADELPHIA, PENNSYLVANIA

EES PROJECT #: L10360

LOCATION: DOT – FROG/SWITCH  
BUILDING 5  
(PROJECT# 250640)

DATE RECEIVED: 9/18/2025

DATE ANALYZED: 9/23/2025

SAMPLE NUMBER/ DESCRIPTION/LOCATION	ASBESTOS PRESENT	COLOR	% ASBESTOS AND TYPE	% OTHER MATERIALS
L10360-DK091825-01: Caulk associated with Door - HID# 2600 (Building 5 – Side Storage)	Yes	White/Tan/ Gray	<1% Chrysotile	100% Non-Fibrous
L10360-DK091825-02: Caulk associated with Door - HID# 2600 (Building 5 – Side Storage)	Yes	White/Tan/ Gray	<1% Chrysotile	100% Non-Fibrous
L10360-DK091825-03: Mortar associated with CMU - HID# 2601 (Building 5 – Side Storage)	No	Gray	None Detected	100% Non-Fibrous
L10360-DK091825-04: Mortar associated with CMU - HID# 2601 (Building 5 – Side Storage)	No	Gray	None Detected	100% Non-Fibrous
L10360-DK091825-05: Mortar Debris associated with Brick - HID# 2602 (Building 5 – Side Storage)	No	Gray	None Detected	100% Non-Fibrous
L10360-DK091825-06: Mortar Debris associated with Brick - HID# 2602 (Building 5 – Side Storage)	No	Gray	None Detected	100% Non-Fibrous
L10360-DK091825-07: Ceiling Tile 2x4 - HID# 1700 (Building 5 – Hallway to Rear Storage)	No	White/Gray	None Detected	25% Cellulose 2% Fibrous Glass 73% Non-Fibrous
L10360-DK091825-08: Ceiling Tile 2x4 - HID# 1700 (Building 5 – Hallway to Rear Storage)	No	White/Gray	None Detected	25% Cellulose 2% Fibrous Glass 73% Non-Fibrous
L10360-DK091825-09: Sheet Rock (No JC) - HID# 2100 (Building 5 – Hallway to Rear Storage)	No	Brown/ Light Gray	None Detected	10% Cellulose 90% Non-Fibrous
L10360-DK091825-10: Sheet Rock (No JC) - HID# 2100 (Building 5 – Hallway to Rear Storage)	No	Brown/ Light Gray	None Detected	10% Cellulose 90% Non-Fibrous
L10360-DK091825-11: Sheet Rock (No JC) - HID# 2100 (Building 5 – Hallway to Rear Storage)	No	Brown/ Light Gray	None Detected	10% Cellulose 90% Non-Fibrous
L10360-DK091825-12: Window Caulk - HID# 2603 (Building 5 – Rear Storage)	Yes	Dark Brown	8% Chrysotile	92% Non-Fibrous
L10360-DK091825-13: Window Caulk - HID# 2603 (Building 5 – Rear Storage)	Yes	Dark Brown	8% Chrysotile	92% Non-Fibrous
L10360-DK091825-14: Floor Tile 12x12 - HID# 2000 (Building 5 – Office)	No	Off-White	None Detected*	2% Cellulose 98% Non-Fibrous
L10360-DK091825-14(M): Mastic associated with Floor Tile 12x12 - HID# 2000 (Building 5 – Office)	No	Black/Yellow	None Detected*	100% Non-Fibrous
L10360-DK091825-15: Floor Tile 12x12 - HID# 2000 (Building 5 – Office)	No	Off-White	None Detected*	2% Cellulose 98% Non-Fibrous
L10360-DK091825-15(M): Mastic associated with Floor Tile 12x12 - HID# 2000 (Building 5 – Office)	No	Black/Yellow	None Detected*	100% Non-Fibrous
L10360-DK091825-16: Floor Tile 9x9 - HID# 2001 (Building 5 – Office)	No	Gray	None Detected*	100% Non-Fibrous
L10360-DK091825-16(M): Mastic associated with Floor Tile 9x9 - HID# 2001 (Building 5 – Office)	No	Black	None Detected*	100% Non-Fibrous
L10360-DK091825-16: Leveling Compound associated with Floor Tile 9x9 - HID# 2001 (Building 5 – Office)	No	Black	None Detected	2% Cellulose 98% Non-Fibrous
L10360-DK091825-17: Floor Tile 9x9 - HID# 2001 (Building 5 – Office)	No	Gray	None Detected*	100% Non-Fibrous



Due at  
Thurs  
3pm

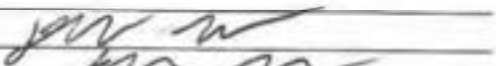
L10360


Viva Environmental, Health, & Safety, LLC.  
Asbestos Bulk Sample Log & Chain of Custody


Client: DOT	Site Address: Frog/switch	Project#: 250640
Sample Date: 09/18/25	Inspector: SB/DK/JTW	Project Manager: SV
Turnaround Time: 1 week	FS Name-/Work Area: Building 5	Analysis: <u>PLM</u> TEM Other
Comments:		


Sample #	HID #	Material Description (Incl. Color)	Sample Location	Qty (SF/LF/EA)	Friable (Y/N)	Damage (SF/LF/EA)
DK091825-01	2600	Caulk a/w Door	Building 5 - Side storage	15 LF	N	N/A
-02	↓	↓	↓	↓	↓	↓
-03	2601	Mortar A/W CMU	Build 5 - <del>warehouse</del> <sup>(AW)</sup> side storage	900 SF	N	↓
-04	↓	↓	↓	↓	↓	↓
-05	2602	Mortar <sup>REB'S</sup> A/W Brick	Building 5 - side storage	500 SF	N	↓
-06	↓	↓	↓	↓	↓	↓
-07	1700	Ceiling Tike 2x4	Building 5 - Hallway to Rear storage	200 SF	Y	↓
-08	↓	↓	↓	↓	↓	↓
-09	2100	Street Rock (NO IC)	Building 5 - Hallway to Rear storage	900 SF	Y	N/A
-10	↓	↓	↓	↓	↓	↓
-11	↓	↓	↓	↓	↓	↓
-12	2603	Window Glazing <sup>(PR)</sup> caulk	Building 5 - Rear storage	20 LF	N	↓
-13	↓	↓	↓	↓	↓	↓
-14	2000	Floor tile 12x12	Building 5 - Office	40 SF	N	N/A
-15	↓	↓	↓	↓	↓	↓

6 Hour TAT Contact: (Name, Email, Phone)

Samples Collected by: (Print/Sign) Deaw Kohl 

Transmitted to Lab by: (Print/Sign) Deaw Kohl 

Received by: (Print/Sign) Kelly Eckhart 

Analyzed by: (Print/Sign) 

At: \_\_\_\_\_  
 Date: 09/18/25  
 Date: 09/18/25  
 Date: 9/18/25 3pm  
 Date: \_\_\_\_\_





**Eckhart Environmental Services, LLC**

**Report Prepared For:**

Viva Environmental, Health, & Safety, LLC  
Mr. Steven Vena  
2201 S 3rd Street  
Philadelphia, Pennsylvania 19148

**Address of Project/Test Site:**

DOT – Frog/Switch  
Building 13 – Break Room  
(Project # 250640)

RE:

Project #: L10361

Sent Via: [svena@vivaehs.com](mailto:svena@vivaehs.com), [info@vivaehs.com](mailto:info@vivaehs.com)

Date Collected: 9/16/2025

Date Received: 9/18/2025

Date of Analysis: 9/23/2025

Report Date: 9/24/2025

Analytical Testing:

Polarized Light Microscopy – Bulk Asbestos Testing

Approved By:

Kelly L. Eckhart, MPH  
Laboratory Director, Analytical Microscopist

Amendments:

Attached please find the results for the sample(s) submitted to Eckhart Environmental Services, LLC for asbestos bulk analysis. Sample analysis was performed by Polarized Light Microscopy in accordance with EPA Method 600/R-93/116 and EPA – “Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples.”

Sample results for identified asbestos fibrous materials are reported as a percent (1%) value based on visual area estimation under microscopic examination. Asbestos concentrations are reported as “trace” where limited individual asbestos fibers, or bundles, are identified but not on a consistent basis indicative of a homogenous material. Where requested, point count percentage results are also calculated and presented.

Please note that individual state and local jurisdictions typically establish or adopt specific sampling criteria and threshold values for asbestos sampling results. Federal regulations regarding asbestos are promulgated by both the EPA and OSHA. This report presents the analytical testing results of samples submitted and is not an interpretation in comparison to such criteria or values.

Additional information regarding asbestos can be found at:

<http://www.epa.gov/asbestos>

<http://www.osha.gov/SLTC/asbestos/index.html>

<http://www.atsdr.cdc.gov/asbestos>

<http://www.cdc.gov/niosh/topics/asbestos>

For inquiries of professional decision-making determinations regarding analytical results, contact the individual/firm whom collected the samples at the project site. In consideration of current customer services/restrictions, Eckhart Environmental Services, LLC’s Project Management staff may provide site-specific services and professional decision-making determinations under separate agreement and at an additional cost.

**ECKHART ENVIRONMENTAL SERVICES, LLC**  
300 South Pennell Road, Bldg 400-Unit 1B  
Media PA 19063  
[www.eckhartenvironmental.com](http://www.eckhartenvironmental.com)  
Version 1.2, Revision Date: 4/11/2024

**“The Gold Standard of Environmental Analytical and Testing Services”**

# Eckhart Environmental Services, LLC

## **Restrictions/Limitations:**

Laboratory results represent optical microscopic analytical work performed on samples submitted by the customer to Eckhart Environmental Services, LLC for analysis. All supplementary information regarding sample volume, location, activity, etc. was provided by the customer. Analytical results are unique to each project and must be evaluated by the individual whom collected the sample(s). Eckhart Environmental Services, LLC has no control of the sample collection process, sample placement, collection volume/area/size nor activity/conditions present at the collection site. Therefore, Eckhart Environmental Services, LLC shall have no liability with respect to decisions made, or actions taken, regarding reported results. Liability on the part of Eckhart Environmental Services, LLC is limited to the monetary value paid for this report.

# Eckhart Environmental Services, LLC

## ASBESTOS BULK SAMPLE ANALYSIS REPORT

**CLIENT:** VIVA ENVIRONMENTAL, HEALTH, & SAFETY, LLC  
PHILADELPHIA, PENNSYLVANIA

**EES PROJECT #:** L10361

**LOCATION:** DOT – FROG/SWITCH  
BUILDING 13 – BREAK ROOM  
(PROJECT# 250640)

**DATE RECEIVED:** 9/18/2025


**DATE ANALYZED:** 9/23/2025

SAMPLE NUMBER/ DESCRIPTION/LOCATION	ASBESTOS PRESENT	COLOR	% ASBESTOS AND TYPE	% OTHER MATERIALS
L10361-DK091625-01: Glue associated with Cove Base - HID# 2600 (Building 13 – Break Room)	No	Brown	None Detected*	1% Cellulose 99% Non-Fibrous
L10361-DK091625-02: Glue associated with Cove Base - HID# 2600 (Building 13 – Break Room)	No	Brown	None Detected*	1% Cellulose 99% Non-Fibrous
L10361-DK091625-03: Glue associated with Carpet - HID# 2601 (Building 13 – Break Room)	No	Brown	None Detected*	100% Non-Fibrous
L10361-DK091625-04: Glue associated with Carpet - HID# 2601 (Building 13 – Break Room)	No	Brown	None Detected*	100% Non-Fibrous
L10361-DK091625-05: Ceiling Tile 2x4 - HID# 1700 (Building 13 – Break Room)	No	White	None Detected	60% Cellulose 20% Fibrous Glass 20% Non-Fibrous
L10361-DK091625-06: Ceiling Tile 2x4 - HID# 1700 (Building 13 – Break Room)	No	White	None Detected	60% Cellulose 20% Fibrous Glass 20% Non-Fibrous
L10361-DK091625-07: Floor Tile 9”x9”; Layer 1 - HID# 2000 (Building 13 – Break Room)	No	Gray	None Detected*	100% Non-Fibrous
L10361-DK091625-07: Glue associated with Floor Tile 9”x9”; Layer 1 - HID# 2000 (Building 13 – Break Room)	No	Brown/Tan	None Detected*	1% Cellulose 99% Non-Fibrous
L10361-DK091625-08: Floor Tile 9”x9”; Layer 1 - HID# 2000 (Building 13 – Break Room)	No	Gray	None Detected*	100% Non-Fibrous
L10361-DK091625-08: Glue associated with Floor Tile 9”x9”; Layer 1 - HID# 2000 (Building 13 – Break Room)	No	Brown/Tan	None Detected*	1% Cellulose 99% Non-Fibrous
L10361-DK091625-09: Floor Tile 12x12; Layer 2 - HID# 2001 (Building 13 – Break Room)	No	Gray	None Detected*	100% Non-Fibrous
L10361-DK091625-09(M): Mastic associated with Floor Tile 12x12; Layer 2 - HID# 2001 (Building 13 – Break Room)	No	Black/Brown	None Detected*	1% Cellulose 99% Non-Fibrous
L10361-DK091625-10: Floor Tile 12x12; Layer 2 - HID# 2001 (Building 13 – Break Room)	No	Gray	None Detected*	100% Non-Fibrous
L10361-DK091625-10(M): Mastic associated with Floor Tile 12x12; Layer 2 - HID# 2001 (Building 13 – Break Room)	No	Black/Brown	None Detected*	1% Cellulose 99% Non-Fibrous
L10361-DK091625-11: Floor Leveler - HID# 2602 (Building 13 – Break Room)	No	White	None Detected	100% Non-Fibrous
L10361-DK091625-12: Floor Leveler - HID# 2602 (Building 13 – Break Room)	No	White	None Detected	100% Non-Fibrous
L10361-DK091625-13: Window Glazing - HID# 2603 (Building 13 – Break Room)	No	Gray	None Detected*	1% Wollastonite 99% Non-Fibrous
L10361-DK091625-14: Window Glazing - HID# 2603 (Building 13 – Break Room)	No	Gray	None Detected*	1% Wollastonite 99% Non-Fibrous
L10361-DK091625-15: Caulk associated with Door - HID# 2604 (Building 13 – Break Room)	No	White	None Detected*	100% Non-Fibrous
L10361-DK091625-16: Caulk associated with Door - HID# 2604 (Building 13 – Break Room)	No	White	None Detected*	100% Non-Fibrous

NVLAP LAB CODE# 600273-0

# Eckhart Environmental Services, LLC

Analyzed By: SC  
Analytical Microscopist

Reviewed/Authorized By:   
Kelly L. Eckhart, MPH  
Laboratory Director  
Analytical Microscopist

Note: The above results represent analytical work performed on samples collected by the customer and submitted to EES for analysis. All supplementary information regarding the samples (i.e., location, sample type, etc.) was provided by the customer.

The report refers specifically to samples tested, and as received, and shall not be reproduced, except in full, without the written approval of the laboratory. The US EPA defines asbestos containing materials as any material containing greater than 1% asbestos as determined by Polarized Light Microscopy in accordance with EPA Method 600/R-93/116 and EPA – “Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in in Bulk Insulation Samples”.

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

\*EES recommends that NOB materials (such as floor coverings, mastic, roofing products, vinyl materials, etc.) demonstrating negative results by PLM for asbestos be re-analyzed by TEM.

\*\*Sample not analyzed due to customer-requested positive stop.

For samples where no asbestos was detected, a minimum of three (3) slide mounts was examined.

The quantity of samples submitted to EES’s laboratory was determined by the customer. EPA AHERA Regulation 40 CFR 763.86 sampling requires samples to be collected by a certified inspector in a statistically random manner and in sufficient quantity to confirm negative results. The sample quantity for negative asbestos determination varies according to the amount of suspect ACM present as well as the material classification (surfacing material, thermal system insulation, or miscellaneous material). The customer is responsible for verification of EPA requirements for negative asbestos determination prior to utilization of EES’s laboratory findings.

END OF REPORT

*Due 9/18/25 3pm*

40361

**Viva Environmental, Health, & Safety, LLC.**

Asbestos Bulk Sample Log & Chain of Custody

Client: <b>Dot</b>	Site Address: <b>Frog/Switch</b>	Project#: <b>250640</b>
Sample Date: <b>09/16/25</b>	Inspector: <b>SG + DK + JTW</b>	Project Manager: <b>SU</b>
Turnaround Time: <b>1 week</b>	FS Name-#/Work Area: <b>Building 13 - Break Room</b>	Analysis: <b>PLM</b> TEM Other
Comments:		

Sample #	HID #	Material Description (Incl. Color)	Sample Location	Qty (SF/LF/EA)	Friable (Y/N)	Damage (SF/LF/EA)
DH091625-01	2600	Glue A/W Cove Base	Building 13 - Break Room	75 SF	N	N/A
-02	↓	↓	↓	↓	↓	↓
-03	2601	Glue A/W Carpet	↓	600 SF	↓	↓
-04	↓	↓	↓	↓	↓	↓
-05	1700	Ceiling tile 2x4	↓	750 SF	Y	↓
-06	1700	↓	↓	↓	↓	↓
-07	2000	Floor tile 9"x9" + Glue (layer 1)	↓	450 SF	N	↓
-08	↓	↓	↓	↓	↓	↓
-09	2001	Floor tile 12x12 + MASTIC (layer 2)	↓	↓	↓	↓
-10	↓	↓	↓	↓	↓	↓
-11	2602	Floor leveler	↓	300 SF	Y	↓
-12	↓	↓	↓	↓	↓	↓
-13	2603	Window Glazing	↓	540 LF	N	↓
-14	↓	↓	↓	↓	↓	↓
-15	2604	Caulk A/W Door	↓	30 LF	N	↓

6 Hour TAT Contact: (Name, Email, Phone)

Samples Collected by: (Print/Sign)

Transmitted to Lab by: (Print/Sign)

Received by: (Print/Sign)

Analyzed by: (Print/Sign)

Dean Korb *[Signature]*  
 Dean Korb *[Signature]*  
 Kelly Felton *[Signature]*  
 Kelly Felton *[Signature]*

At: \_\_\_\_\_  
 Date: **09/16/25**  
 Date: **09/18/25**  
 Date: **9/18/25 3pm**  
 Date: \_\_\_\_\_

**Viva Environmental, Health, & Safety, LLC.**  
Asbestos Bulk Sample Log & Chain of Custody

L10361

Client: DOT	Site Address: Frog/Switch	Project#: 250640
Sample Date: 09/16/25	Inspector: SGT DK + JTW	Project Manager: SU
Turnaround Time: 1 week	FS Name-#/Work Area: Building 13 - Break Room	Analysis: <u>PLM</u> TEM Other
Comments:		

Sample #	HID #	Material Description (Incl. Color)	Sample Location	Qty (SF/LF/EA)	Friable (Y/N)	Damage (SF/LF/EA)
D12091625-16	2604	Caulk A/W DOOR	Building 13 Break Room	30 LF	N	N/A

6 Hour TAT Contact: (Name, Email, Phone) \_\_\_\_\_  
 Samples Collected by: (Print/Sign) DEAN KOLB \_\_\_\_\_  
 Transmitted to Lab by: (Print/Sign) DEAN KOLB \_\_\_\_\_  
 Received by: (Print/Sign) Kelly Feltner \_\_\_\_\_  
 Analyzed by: (Print/Sign) \_\_\_\_\_

At: \_\_\_\_\_  
 Date: 09/16/25 \_\_\_\_\_  
 Date: 09/18/25 \_\_\_\_\_  
 Date: 9/18/25 3pm \_\_\_\_\_  
 Date: \_\_\_\_\_



**Eckhart Environmental Services, LLC**

**Report Prepared For:**

Viva Environmental, Health, & Safety, LLC  
Mr. Steven Vena  
2201 S 3rd Street  
Philadelphia, Pennsylvania 19148

**Address of Project/Test Site:**

DOT – Frog/Switch  
Building 20  
(Project # 250640)

RE:

Project #: L10364

Sent Via: [svena@vivaehs.com](mailto:svena@vivaehs.com), [info@vivaehs.com](mailto:info@vivaehs.com)

Date Collected: 9/17/2025

Date Received: 9/18/2025

Date of Analysis: 9/23/2025

Report Date: 9/24/2025

Analytical Testing:

Polarized Light Microscopy – Bulk Asbestos Testing

Approved By:

Kelly L. Eckhart, MPH  
Laboratory Director, Analytical Microscopist

Amendments:

Attached please find the results for the sample(s) submitted to Eckhart Environmental Services, LLC for asbestos bulk analysis. Sample analysis was performed by Polarized Light Microscopy in accordance with EPA Method 600/R-93/116 and EPA – “Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples.”

Sample results for identified asbestos fibrous materials are reported as a percent (1%) value based on visual area estimation under microscopic examination. Asbestos concentrations are reported as “trace” where limited individual asbestos fibers, or bundles, are identified but not on a consistent basis indicative of a homogenous material. Where requested, point count percentage results are also calculated and presented.

Please note that individual state and local jurisdictions typically establish or adopt specific sampling criteria and threshold values for asbestos sampling results. Federal regulations regarding asbestos are promulgated by both the EPA and OSHA. This report presents the analytical testing results of samples submitted and is not an interpretation in comparison to such criteria or values.

Additional information regarding asbestos can be found at:

<http://www.epa.gov/asbestos>

<http://www.osha.gov/SLTC/asbestos/index.html>

<http://www.atsdr.cdc.gov/asbestos>

<http://www.cdc.gov/niosh/topics/asbestos>

For inquiries of professional decision-making determinations regarding analytical results, contact the individual/firm whom collected the samples at the project site. In consideration of current customer services/restrictions, Eckhart Environmental Services, LLC’s Project Management staff may provide site-specific services and professional decision-making determinations under separate agreement and at an additional cost.

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Media PA 19063  
[www.eckhartenvironmental.com](http://www.eckhartenvironmental.com)  
Version 1.2, Revision Date: 4/11/2024

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# Eckhart Environmental Services, LLC

## **Restrictions/Limitations:**

Laboratory results represent optical microscopic analytical work performed on samples submitted by the customer to Eckhart Environmental Services, LLC for analysis. All supplementary information regarding sample volume, location, activity, etc. was provided by the customer. Analytical results are unique to each project and must be evaluated by the individual whom collected the sample(s). Eckhart Environmental Services, LLC has no control of the sample collection process, sample placement, collection volume/area/size nor activity/conditions present at the collection site. Therefore, Eckhart Environmental Services, LLC shall have no liability with respect to decisions made, or actions taken, regarding reported results. Liability on the part of Eckhart Environmental Services, LLC is limited to the monetary value paid for this report.

# Eckhart Environmental Services, LLC

## ASBESTOS BULK SAMPLE ANALYSIS REPORT

**CLIENT:** VIVA ENVIRONMENTAL, HEALTH, & SAFETY, LLC  
PHILADELPHIA, PENNSYLVANIA

**EES PROJECT #:** L10364

**LOCATION:** DOT – FROG/SWITCH  
BUILDING 20  
(PROJECT# 250640)


**DATE RECEIVED:** 9/18/2025

**DATE ANALYZED:** 9/23/2025

SAMPLE NUMBER/ DESCRIPTION/LOCATION	ASBESTOS PRESENT	COLOR	% ASBESTOS AND TYPE	% OTHER MATERIALS
L10364-DK091725-01: Window Glazing - HID# 2600 (Building 20)	Yes	Gray	<1% Chrysotile	5% Talc 95% Non-Fibrous
L10364-DK091725-02: Window Glazing - HID# 2600 (Building 20)	Yes	Gray	10% Chrysotile	90% Non-Fibrous

NVLAP LAB CODE# 600273-0

Analyzed By:     RGS      
Analytical Microscopist

Reviewed/Authorized By:   
Kelly L. Eckhart, MPH  
Laboratory Director  
Analytical Microscopist

Note: The above results represent analytical work performed on samples collected by the customer and submitted to EES for analysis. All supplementary information regarding the samples (i.e., location, sample type, etc.) was provided by the customer.

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This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

\*EES recommends that NOB materials (such as floor coverings, mastic, roofing products, vinyl materials, etc.) demonstrating negative results by PLM for asbestos be re-analyzed by TEM.

\*\*Sample not analyzed due to customer-requested positive stop.

For samples where no asbestos was detected, a minimum of three (3) slide mounts was examined.

The quantity of samples submitted to EES’s laboratory was determined by the customer. EPA AHERA Regulation 40 CFR 763.86 sampling requires samples to be collected by a certified inspector in a statistically random manner and in sufficient quantity to confirm negative results. The sample quantity for negative asbestos determination varies according to the amount of suspect ACM present as well as the material classification (surfacing material, thermal system insulation, or miscellaneous material). The customer is responsible for verification of EPA requirements for negative asbestos determination prior to utilization of EES’s laboratory findings.

END OF REPORT

Asst  
Thurs 3pm

L/0364

Viva Environmental, Health, & Safety, LLC.

Asbestos Bulk Sample Log & Chain of Custody

Client: DOT	Site Address: Frog/switch	Project#: 250640
Sample Date: 09/17/25	Inspector: SG/DK/JTW	Project Manager: SU
Turnaround Time: 1 week	FS Name-#/Work Area: Building 20	Analysis: PLM <input checked="" type="radio"/> TEM Other
Comments:		

Sample #	HID #	Material Description (Incl. Color)	Sample Location	Qty (SF/LF/EA)	Friable (Y/N)	Damage (SF/LF/EA)
Dk091725-01	2600	Window glazing	Building 20	32 LF	Y	NA
-02	+	L	L	L	L	L

6 Hour TAT Contact: (Name, Email, Phone) \_\_\_\_\_  
 Samples Collected by: (Print/Sign) Dean Kolb  
 Transmitted to Lab by: (Print/Sign) Dean Kolb  
 Received by: (Print/Sign) Kelly Eckhart  
 Analyzed by: (Print/Sign) \_\_\_\_\_

At: \_\_\_\_\_  
 Date: 09/17/25  
 Date: 09/18/25  
 Date: 9/18/25 3pm  
 Date: \_\_\_\_\_



**Eckhart Environmental Services, LLC**

**Report Prepared For:**

Viva Environmental, Health, & Safety, LLC  
Mr. Steven Vena  
2201 S 3rd Street  
Philadelphia, Pennsylvania 19148

**Address of Project/Test Site:**

DOT – Frog/Switch  
Building – Pattern Shop  
(Project # 250640)

RE:

Project #: L10365

Sent Via: [svena@vivaehs.com](mailto:svena@vivaehs.com), [info@vivaehs.com](mailto:info@vivaehs.com)

Date Collected: 9/17/2025

Date Received: 9/18/2025

Date of Analysis: 9/23/2025

Report Date: 9/24/2025

Analytical Testing:

Polarized Light Microscopy – Bulk Asbestos Testing

Approved By:

Kelly L. Eckhart, MPH  
Laboratory Director, Analytical Microscopist

Amendments:

Attached please find the results for the sample(s) submitted to Eckhart Environmental Services, LLC for asbestos bulk analysis. Sample analysis was performed by Polarized Light Microscopy in accordance with EPA Method 600/R-93/116 and EPA – “Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples.”

Sample results for identified asbestos fibrous materials are reported as a percent (1%) value based on visual area estimation under microscopic examination. Asbestos concentrations are reported as “trace” where limited individual asbestos fibers, or bundles, are identified but not on a consistent basis indicative of a homogenous material. Where requested, point count percentage results are also calculated and presented.

Please note that individual state and local jurisdictions typically establish or adopt specific sampling criteria and threshold values for asbestos sampling results. Federal regulations regarding asbestos are promulgated by both the EPA and OSHA. This report presents the analytical testing results of samples submitted and is not an interpretation in comparison to such criteria or values.

Additional information regarding asbestos can be found at:

<http://www.epa.gov/asbestos>

<http://www.osha.gov/SLTC/asbestos/index.html>

<http://www.atsdr.cdc.gov/asbestos>

<http://www.cdc.gov/niosh/topics/asbestos>

For inquiries of professional decision-making determinations regarding analytical results, contact the individual/firm whom collected the samples at the project site. In consideration of current customer services/restrictions, Eckhart Environmental Services, LLC’s Project Management staff may provide site-specific services and professional decision-making determinations under separate agreement and at an additional cost.

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Version 1.2, Revision Date: 4/11/2024

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# Eckhart Environmental Services, LLC

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# Eckhart Environmental Services, LLC

## ASBESTOS BULK SAMPLE ANALYSIS REPORT

**CLIENT:** VIVA ENVIRONMENTAL, HEALTH, & SAFETY, LLC  
PHILADELPHIA, PENNSYLVANIA

**EES PROJECT #:** L10365

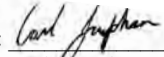
**LOCATION:** DOT – FROG/SWITCH  
BUILDING – PATTERN SHOP  
(PROJECT# 250640)


**DATE RECEIVED:** 9/18/2025

**DATE ANALYZED:** 9/23/2025

SAMPLE NUMBER/ DESCRIPTION/LOCATION	ASBESTOS PRESENT	COLOR	% ASBESTOS AND TYPE	% OTHER MATERIALS
L10365-DK091725-01C: Ceiling Tile – 2x4 - HID# 1700 (Pattern Shop Office)	No	White	None Detected	35% Cellulose 35% Fibrous Glass 30% Non-Fibrous
L10365-DK091725-02C: Ceiling Tile – 2x4 - HID# 1700 (Pattern Shop Office)	No	White	None Detected	35% Cellulose 35% Fibrous Glass 30% Non-Fibrous
L10365-DK091725-03C: Floor Tile 12x12 - HID# 2000 (Pattern Shop Office)	No	Yellow	None Detected*	100% Non-Fibrous
L10365-DK091725-03C(M): Mastic associated with Floor Tile 12x12 - HID# 2000 (Pattern Shop Office)	No	Yellow	None Detected*	100% Non-Fibrous
L10365-DK091725-04C: Floor Tile 12x12 - HID# 2000 (Pattern Shop Office)	No	Yellow	None Detected*	100% Non-Fibrous
L10365-DK091725-04C(M): Mastic associated with Floor Tile 12x12 - HID# 2000 (Pattern Shop Office)	No	Yellow	None Detected*	100% Non-Fibrous
L10365-DK091725-05C: Glue associated with Cove Base - HID# 2600 (Pattern Shop Office)	No	Yellow	None Detected*	100% Non-Fibrous
L10365-DK091725-06C: Glue associated with Cove Base - HID# 2600 (Pattern Shop Office)	No	Yellow	None Detected*	100% Non-Fibrous

NVLAP LAB CODE# 600273-0

Analyzed By:   
Carl Josephson  
Quality Manager  
Analytical Microscopist

Reviewed/Authorized By:   
Kelly L. Eckhart, MPH  
Laboratory Director  
Analytical Microscopist

Note: The above results represent analytical work performed on samples collected by the customer and submitted to EES for analysis. All supplementary information regarding the samples (i.e., location, sample type, etc.) was provided by the customer.

The report refers specifically to samples tested, and as received, and shall not be reproduced, except in full, without the written approval of the laboratory. The US EPA defines asbestos containing materials as any material containing greater than 1% asbestos as determined by Polarized Light Microscopy in accordance with EPA Method 600/R-93/116 and EPA – “Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in in Bulk Insulation Samples”.

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

\*EES recommends that NOB materials (such as floor coverings, mastic, roofing products, vinyl materials, etc.) demonstrating negative results by PLM for asbestos be re-analyzed by TEM.

\*\*Sample not analyzed due to customer-requested positive stop.

For samples where no asbestos was detected, a minimum of three (3) slide mounts was examined.

## **Eckhart Environmental Services, LLC**

The quantity of samples submitted to EES's laboratory was determined by the customer. EPA AHERA Regulation 40 CFR 763.86 sampling requires samples to be collected by a certified inspector in a statistically random manner and in sufficient quantity to confirm negative results. The sample quantity for negative asbestos determination varies according to the amount of suspect ACM present as well as the material classification (surfacing material, thermal system insulation, or miscellaneous material). The customer is responsible for verification of EPA requirements for negative asbestos determination prior to utilization of EES's laboratory findings.

END OF REPORT

*Due Next Thurs 3 pm*

*L10365*

**Viva Environmental, Health, & Safety, LLC.**  
Asbestos Bulk Sample Log & Chain of Custody

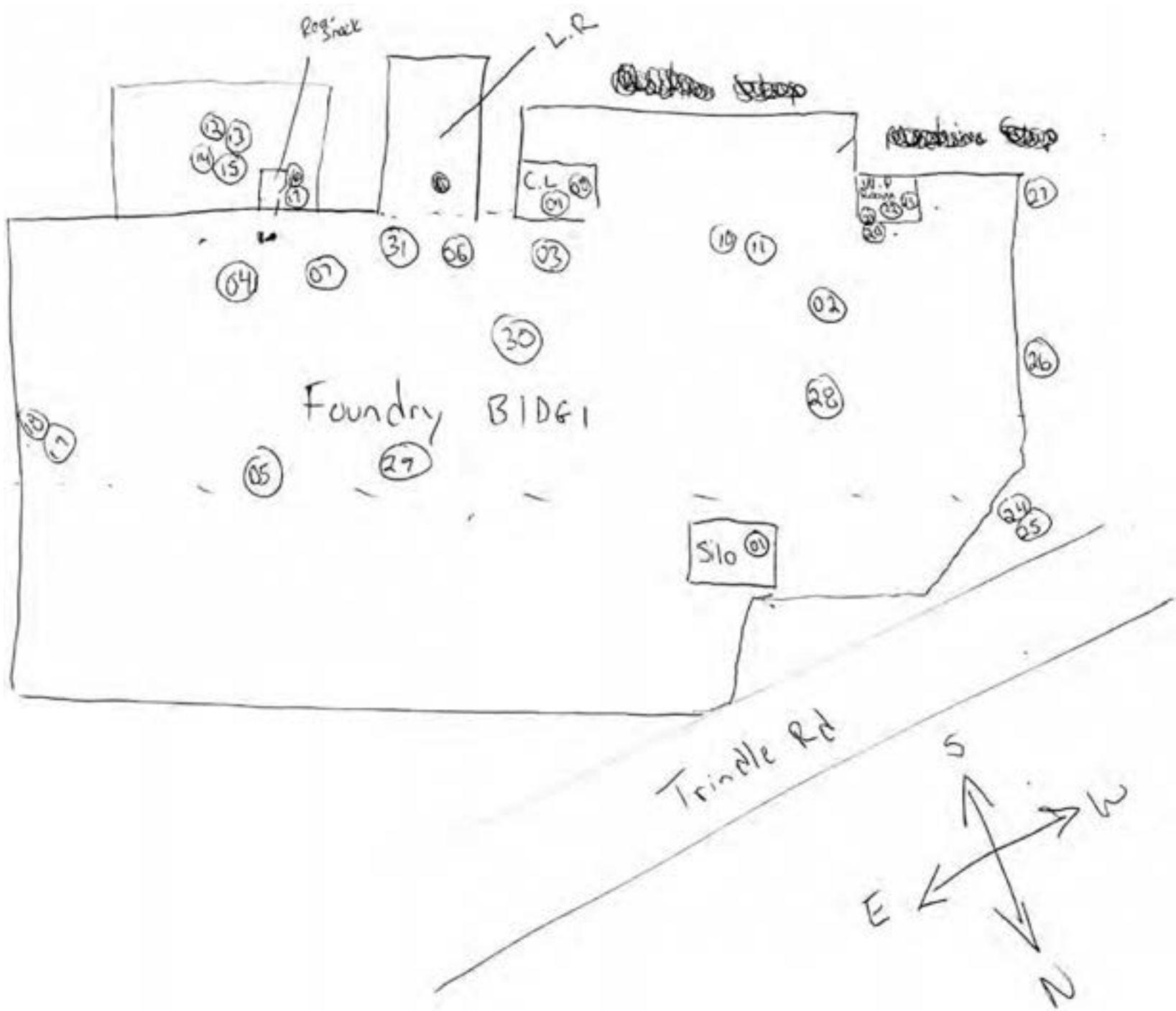
Client: <i>Dot</i>	Site Address: <i>Prog/Switch</i>	Project#: <i>250640</i>
Sample Date: <i>09/17/25</i>	Inspector: <i>SG/DK/JTW</i>	Project Manager: <i>SU</i>
Analysis: <u>PLM</u> TEM Other	Turnaround Time: <i>1 week</i>	FS Name-#/Work Area: <i>Building - Pattern Shop</i>
Comments:		

Sample #	HID #	Material Description (Incl. Color)	Sample Location	Qty (SF/LF/EA)	Friable (Y/N)	Damage (SF/LF/EA)
<i>DK091725-01E</i>	<i>1700</i>	<i>Cieling tile - 2x4</i>	<i>Pattern shop office</i>	<i>250 SF</i>	<i>Y</i>	<i>N/A</i>
<i>-02E</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>
<i>-03E</i>	<i>2000</i>	<i>Floor tile 12x12 w/ mastic</i>	<i>Pattern shop office</i>	<i>250 SF</i>	<i>N</i>	<i>↓</i>
<i>-04E</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>
<i>-05E</i>	<i>2600</i>	<i>Glue A/w Cove Base</i>	<i>Pattern shop office</i>	<i>30 SF</i>	<i>Y</i>	<i>↓</i>
<i>-06E</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>

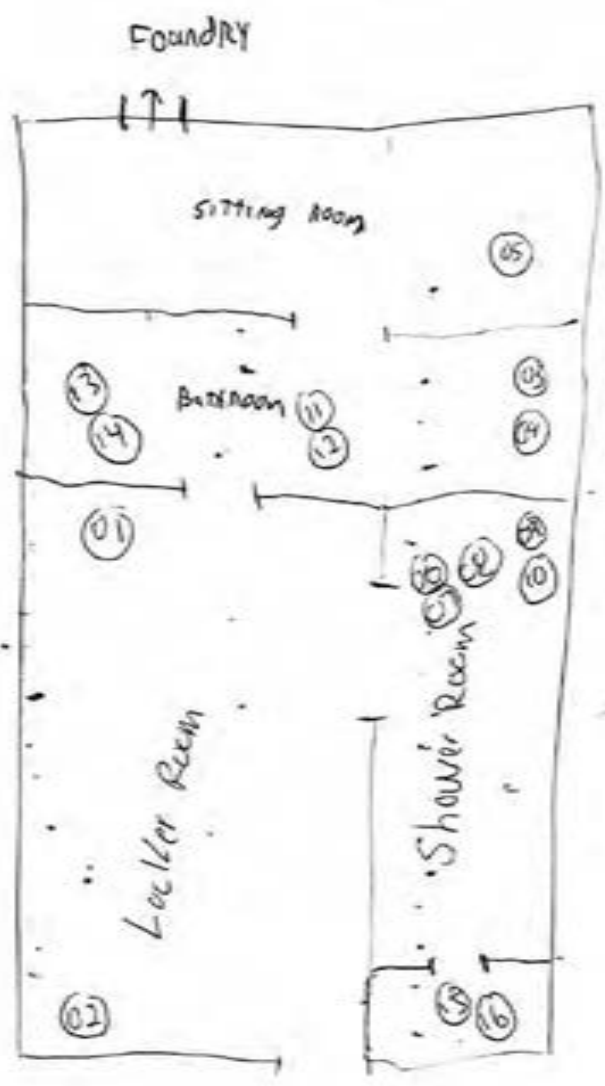
6 Hour TAT Contact: (Name, Email, Phone) \_\_\_\_\_  
 Samples Collected by: (Print/Sign) *Dean Kolb* \_\_\_\_\_  
 Transmitted to Lab by: (Print/Sign) *Deon Kolb* \_\_\_\_\_  
 Received by: (Print/Sign) *Kelly Fedor* \_\_\_\_\_  
 Analyzed by: (Print/Sign) \_\_\_\_\_

At: \_\_\_\_\_  
 Date: *09/17/25* \_\_\_\_\_  
 Date: *09/18/25* \_\_\_\_\_  
 Date: *9/18/25 3pm* \_\_\_\_\_  
 Date: \_\_\_\_\_

**Annotated Site Plans with Asbestos Bulk Sample Locations**

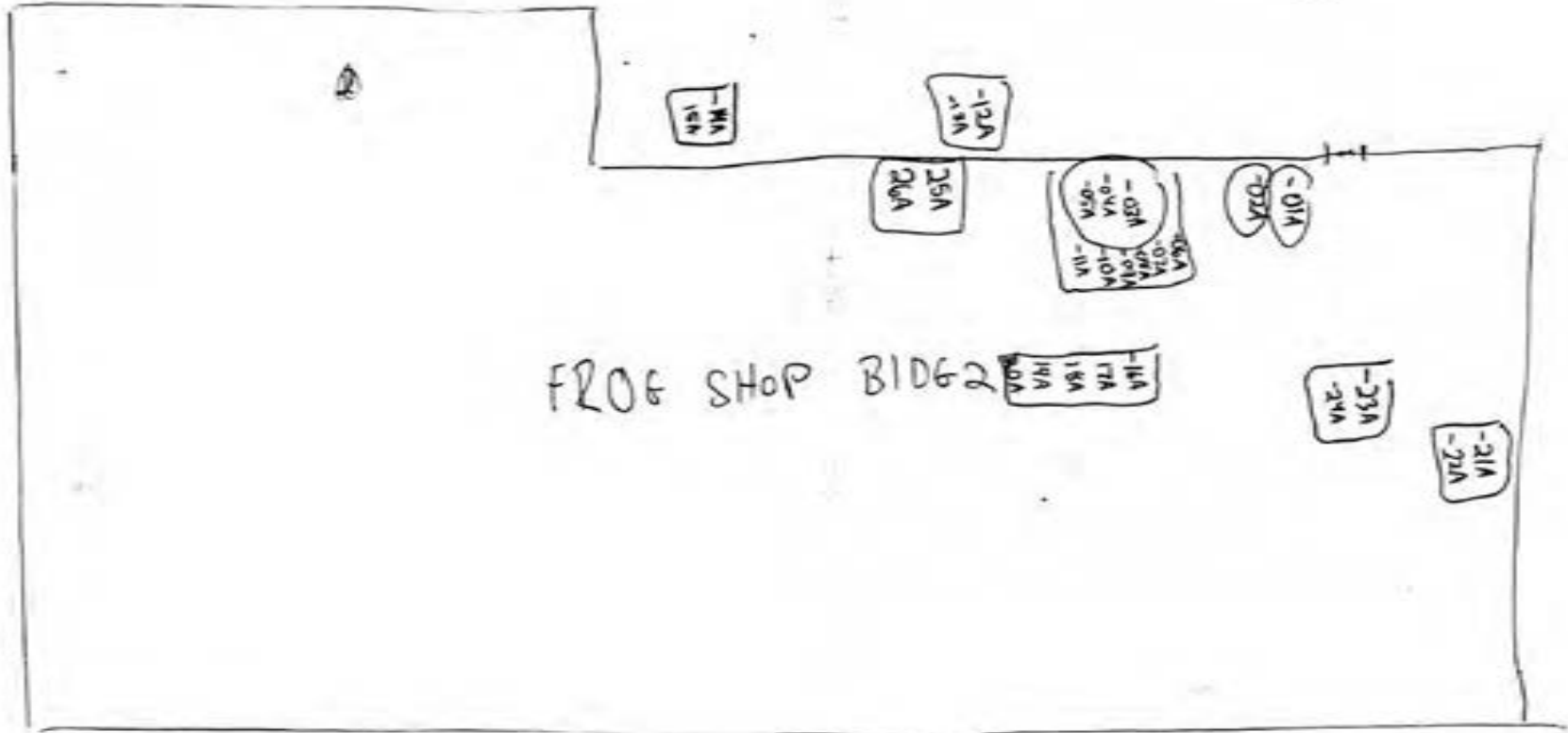


Bldg 1 (Locker Room)

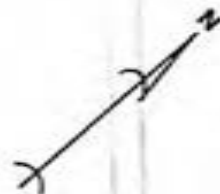


(27) (28)

West Lower Roof

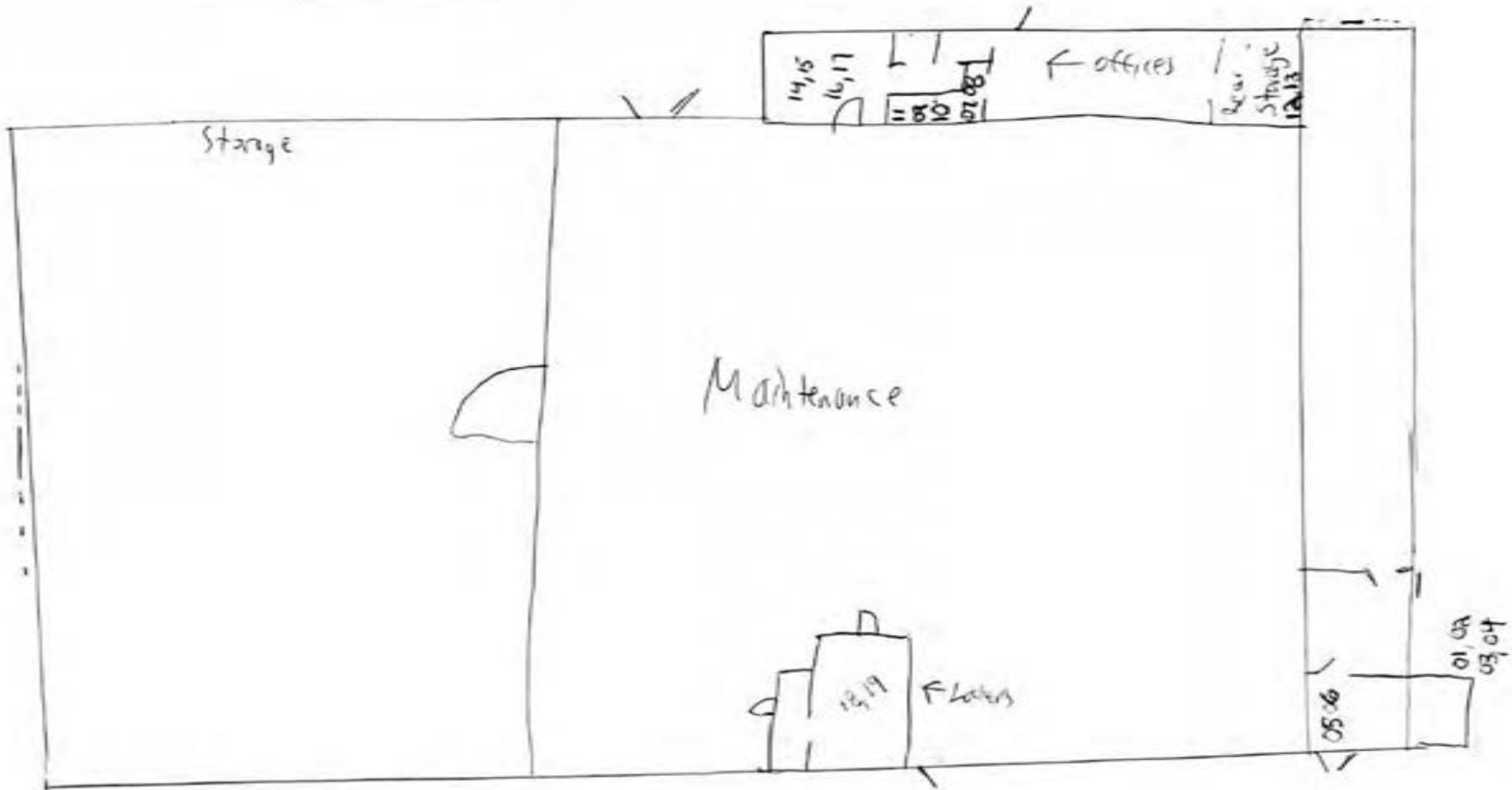


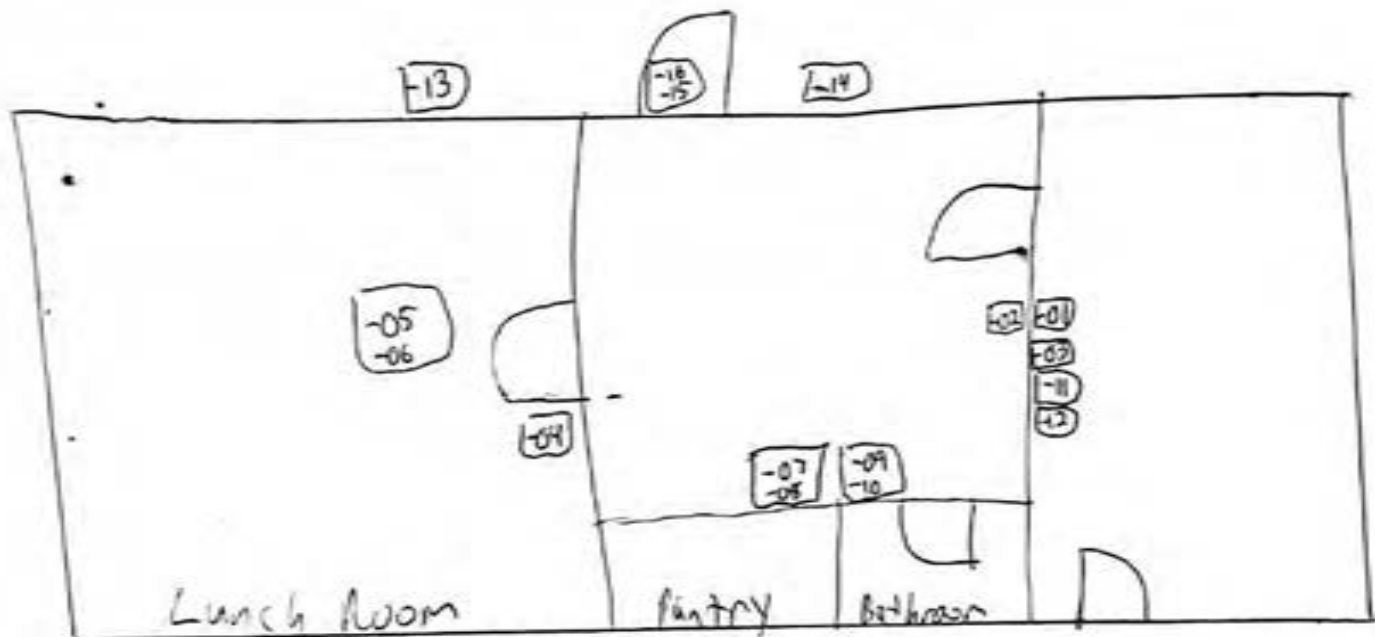
BUILDING NO. 3  
MAIN OFFICE



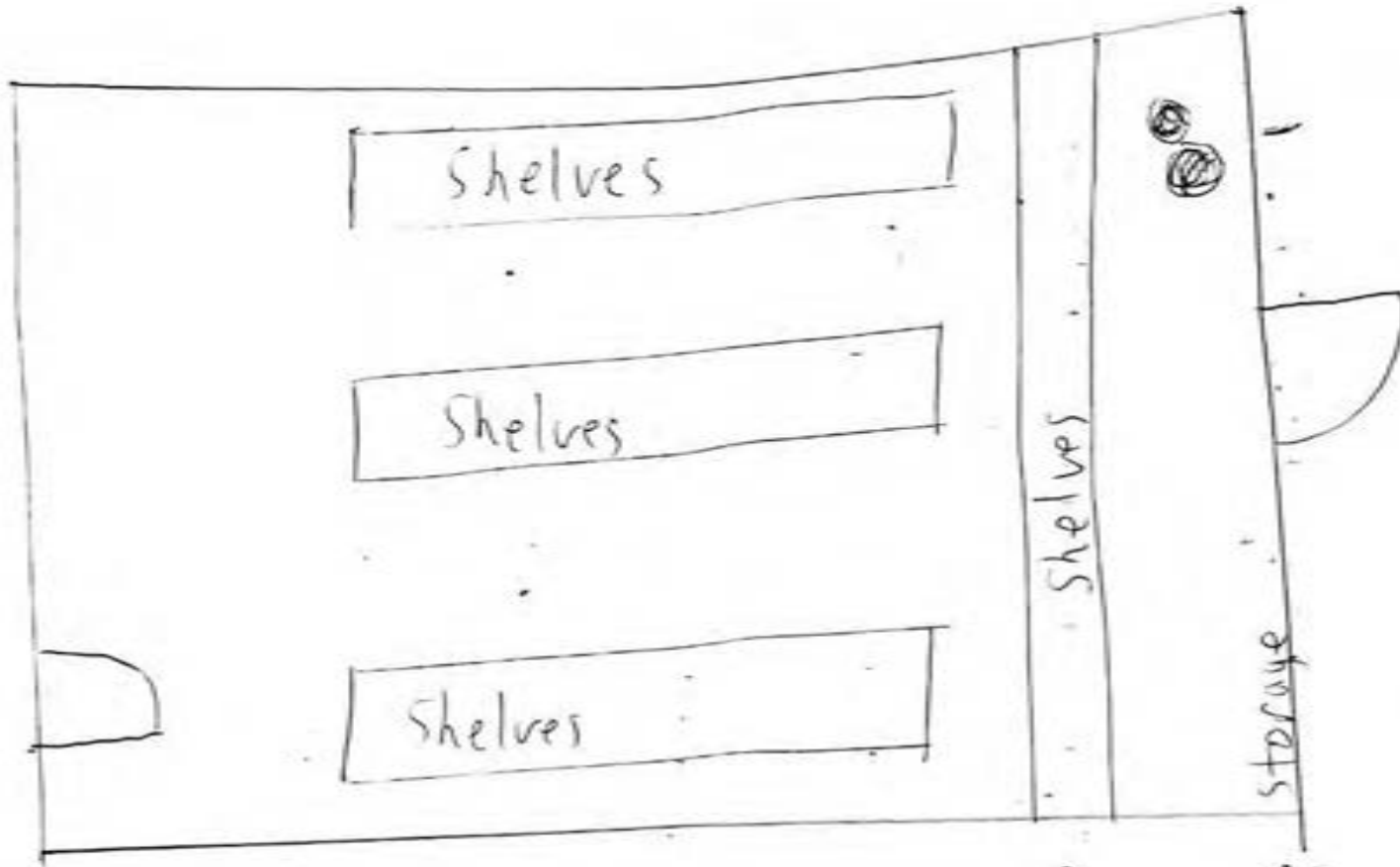
ASSEMBLY AREA: SOUTHWEST PARKING LOT

# Building 5 - Maintenance

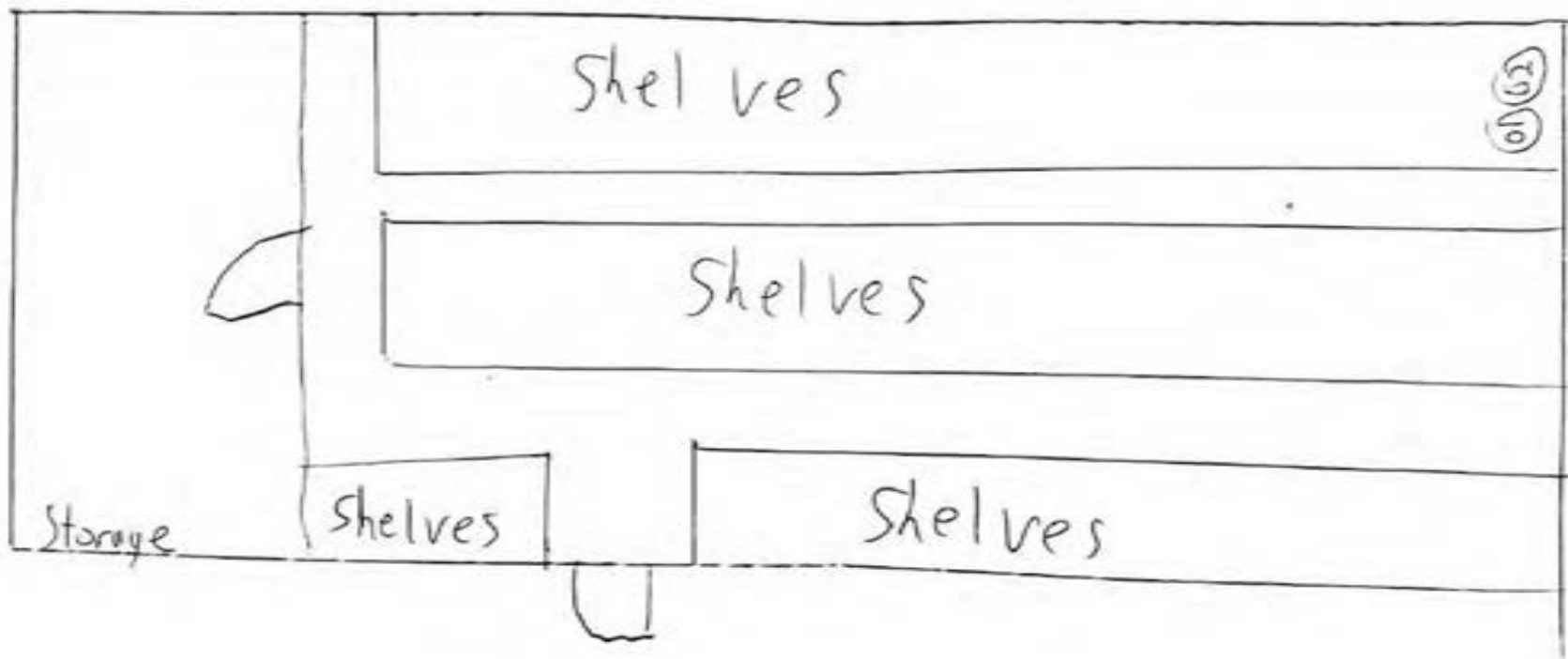




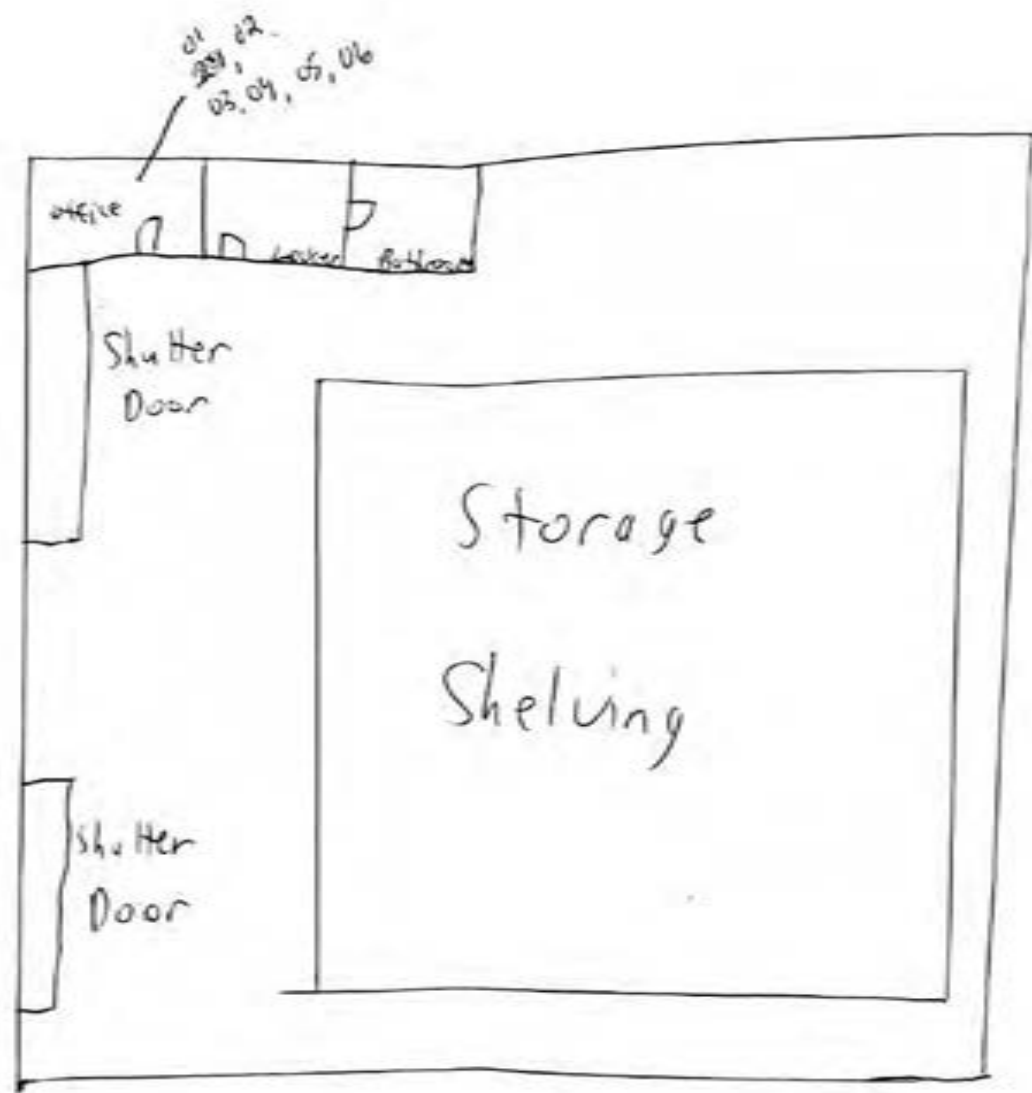
Building 13 - Break room



Building 18 - storage



Building - 20



Pattern Shop -

**May 2021 Asbestos Survey by Cumberland Analytical Laboratories, Inc (CALI).**

# ASBESTOS IDENTIFICATION SURVEY REPORT

**PROJECT LOCATION:**

Frog Switch  
600 East High Street  
Carlisle, Pennsylvania

**INSPECTION DATE:**

May 3, 2021 and May 7, 2021

**PREPARED FOR:**

Mr. Warren Bieger  
Mr. Daniel M. Gibbs  
Frog Switch  
600 East High Street  
Carlisle, Pennsylvania 17013

**CALI PROJECT NUMBER:**

21-1034-019

**INSPECTION REPORT DATE:**

May 18, 2021

**ASBESTOS IDENTIFICATION SURVEY PERFORMED BY:**



---

Andrew R. Spriggle, Pennsylvania Asbestos Inspector #032501  
Richard E. Roush, Pennsylvania Asbestos Building Inspector and Manager Planner  
and Lonnie R. Eslinger, Jr., Industrial Hygienist

---

**CUMBERLAND ANALYTICAL LABORATORIES, INC.**

125 Frytown Road  
Carlisle, Pennsylvania 17015

**Phone:** (717) 379-3782

**Fax:** (717) 776-6436

E-Mail: [rich.roush@c-analytical.com](mailto:rich.roush@c-analytical.com)    [www.cumberlandanalytical.com](http://www.cumberlandanalytical.com)

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## Executive Summary:

In May of 2021, Cumberland Analytical Laboratories, Inc. (CALI) was retained by Mr. Warren Bieger and Mr. Daniel M. Gibbs of Frog Switch to conduct an **Asbestos Identification Survey** at the Frog Switch Facility located at 600 East High Street in Carlisle, Pennsylvania to identify suspect Asbestos-Containing Materials (ACM) from within the structures. The entire facility was evaluated during the survey.

The U.S. Environmental Protection Agency (EPA) defines ACM as any material that contains greater than 1% asbestos by PLM analysis. All sampled materials which contained one or more of the following asbestos types above 1% by laboratory analysis would be defined as ACM: chrysotile, amosite, crocidolite, tremolite, anthophyllite, or actinolite.

The Occupational Safety and Health Administration (OSHA) defines ACM as any material that contains a detectable amount of asbestos. Therefore, materials that contain less than 1% asbestos would be regulated by OSHA under 29 CFR 1926.1101 (Construction) and 29 CFR 1910.1001 (General Industry). Any disturbance and/or removal of an ACM must be performed in accordance with the OSHA regulations by professionally trained and protected individuals using proper work practices and engineering controls.

The Scope of Work for this survey consisted of a visual inspection of all accessible areas within the select areas of the structures to identify suspect asbestos-containing materials. Bulk samples were collected as part of the survey to confirm or dismiss the presence of asbestos within the accessible suspected materials. During the sampling of suspect homogeneous materials from the structure a total of 111 homogeneous materials were analyzed. The results of the ACM survey performed have confirmed that **asbestos-containing materials were found from within the structure:**

- 15 Linear Feet of Rope Material in the Frog Shop Old Boiler Room.
- 2,000 Linear Feet of Thermal System Insulation in the Old Frog Shop
- 2,000 Ft.<sup>2</sup> of Asbestos Drywall Compound in the Machine Shop Bathroom
- 90,000 Ft.<sup>2</sup> of Roofing Material Foundry and Office Building Combine
- Entire Office Building Drywall Compound – No Quantity Known

Please review the Polarized Light Microscopy (PLM) Results Data Tables for additional sample information.

<b>Polarized Light Microscopy (PLM) Results Data Table:</b>				
<b>SAMPLE NUMBER/ DESCRIPTION/LOCATION</b>	<b>ASBESTOS PRESENT</b>	<b>COLOR</b>	<b>ASBESTOS TYPE</b>	<b>PERCENTAGE OTHER MATERIALS</b>
L1428-01: Rope Material (Frog Shop)	Yes	White	75% Chrysotile	25% Cellulose
L1428-02: Rope Material (Frog Shop)	Sample Not Analyzed - Stop Positive.			
L1428-03: Rope Material (Frog Shop)	Sample Not Analyzed - Stop Positive.			
L1428-04: Refractory Material (Frog Shop)	No	Red	None Detected	100% Non-Fibrous Materials
L1428-05: Refractory Material (Frog Shop)	No	Tan	None Detected	100% Non-Fibrous Materials
L1428-06: Refractory Material (Frog Shop)	No	Tan	None Detected	100% Non-Fibrous Materials
L1428-07: Refractory Material (Frog Shop)	No	Tan	None Detected	15% Fibrous Glass 85% Non-Fibrous Materials
L1428-08: TSI (Frog Shop)	Yes	White	10% Amosite	90% Non-Fibrous Materials
L1428-09: TSI (Frog Shop)	Sample Not Analyzed - Stop Positive.			
L1428-10: TSI (Frog Shop)	Sample Not Analyzed - Stop Positive.			
L1428-11: Beige Tile 12" x 12" (Frog Shop Lunch)	No	Beige	None Detected	100% Non-Fibrous Materials
L1428-11M: Mastic Associated with Beige Tile 12" x 12" (Frog Shop Lunch)	No	Yellow	None Detected	<1% Cellulose 99% Non-Fibrous Materials
L1428-12: Beige Tile 12" x 12" (Frog Shop Lunch)	No	Beige	None Detected	100% Non-Fibrous Materials
L1428-12M: Mastic Associated with Beige Tile 12" x 12" (Frog Shop Lunch)	No	Yellow	None Detected	<1% Cellulose 99% Non-Fibrous Materials
L1428-13: Beige Tile 12" x 12" (Frog Shop Lunch)	No	Beige	None Detected	100% Non-Fibrous Materials
L1428-13M: Mastic Associated with Beige Tile 12" x 12" (Frog Shop Lunch)	No	Yellow	None Detected	<1% Cellulose 99% Non-Fibrous Materials
L1428-14: Ceiling Tile (Frog Shop Lunch)	No	White/Tan	None Detected	60% Cellulose 10% Fibrous Glass 30% Non-Fibrous Materials
L1428-15: Ceiling Tile (Frog Shop Lunch)	No	White/Tan	None Detected	60% Cellulose 10% Fibrous Glass 30% Non-Fibrous Materials
L1428-16: Ceiling Tile (Frog Shop Lunch)	No	White/Tan	None Detected	60% Cellulose 10% Fibrous Glass 30% Non-Fibrous Materials
L1428-17: Exterior Parging (Frog Shop)	No	Gray	None Detected	100% Non-Fibrous Materials

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SAMPLE NUMBER/ DESCRIPTION/LOCATION	ASBESTOS PRESENT	COLOR	ASBESTOS TYPE	PERCENTAGE OTHER MATERIALS
L1428-18: Exterior Parging (Frog Shop)	No	Gray	None Detected	100% Non-Fibrous Materials
L1428-19: Exterior Parging (Frog Shop)	No	Gray	None Detected	100% Non-Fibrous Materials
L1428-20: 1 x 1 Ceiling Tile (Warehouse)	No	Tan	None Detected	95% Cellulose 5% Non-Fibrous Materials
L1428-21: 1 x 1 Ceiling Tile (Warehouse)	No	Tan	None Detected	95% Cellulose 5% Non-Fibrous Materials
L1428-22: 1 x 1 Ceiling Tile (Warehouse)	No	Tan	None Detected	95% Cellulose 5% Non-Fibrous Materials
L1428-23: Window Glazing (Old Machine Shop)	No	Gray	None Detected	100% Non-Fibrous Materials
L1428-24: Window Glazing (Old Machine Shop)	No	Gray	None Detected	100% Non-Fibrous Materials
L1428-25: South Lab (Foundry 12" x 12" on Wood)	No	Yellow	None Detected	100% Non-Fibrous Materials
L1428-25M: Mastic Associated with South Lab (Foundry 12" x 12" on Wood)	No	Yellow	None Detected	<1% Cellulose 99% Non-Fibrous Materials
L1428-26: South Lab (Foundry 12" x 12" on Wood)	No	Yellow	None Detected	100% Non-Fibrous Materials
L1428-26M: Mastic Associated with South Lab (Foundry 12" x 12" on Wood)	No	Yellow	None Detected	<1% Cellulose 99% Non-Fibrous Materials
L1428-27: South Lab (Foundry 12" x 12" on Wood)	No	Yellow	None Detected	100% Non-Fibrous Materials
L1428-27M: Mastic Associated with South Lab (Foundry 12" x 12" on Wood)	No	Yellow	None Detected	<1% Cellulose 99% Non-Fibrous Materials
L1428-28: Core Room Dry Wall Compound (Foundry); Drywall Only	No	White/Tan	None Detected	5% Cellulose <1% Fibrous Glass 94% Non-Fibrous Materials
L1428-29: Core Room Dry Wall Compound (Foundry); Joint Compound Only	No	White	None Detected	100% Non-Fibrous Materials
L1428-30: Spray on Ceiling (Foundry)	No	Black	None Detected	90% Cellulose <1% Fibrous Glass 10% Non-Fibrous Materials
L1428-31: Spray on Ceiling (Foundry)	No	Black	None Detected	90% Cellulose <1% Fibrous Glass 10% Non-Fibrous Materials
L1428-32: Spray on Ceiling (Foundry)	No	Black	None Detected	90% Cellulose <1% Fibrous Glass 10% Non-Fibrous Materials
L1428-33: Beige Floor Tile 12" x 12" (Foundry)	No	Gray	None Detected	100% Non-Fibrous Materials
L1428-33M: Mastic Associated with Beige Floor Tile 12" x 12" (Foundry)	No	Yellow	None Detected	<1% Cellulose 99% Non-Fibrous Materials
L1428-34: Beige Floor Tile 12" x 12" (Foundry)	No	Gray	None Detected	100% Non-Fibrous Materials

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SAMPLE NUMBER/ DESCRIPTION/LOCATION	ASBESTOS PRESENT	COLOR	ASBESTOS TYPE	PERCENTAGE OTHER MATERIALS
L1428-34M: Mastic Associated with Beige Floor Tile 12" x 12" (Foundry)	No	Yellow	None Detected	<1% Cellulose 99% Non-Fibrous Materials
L1428-35: Beige Floor Tile 12" x 12" (Foundry)	No	Gray	None Detected	100% Non-Fibrous Materials
L1428-35M: Mastic Associated with Beige Floor Tile 12" x 12" (Foundry)	No	Yellow	None Detected	<1% Cellulose 99% Non-Fibrous Materials
L1428-36: 2 x 4 Ceiling Tile (Foundry)	No	White/Tan	None Detected	35% Cellulose 35% Fibrous Glass 30% Non-Fibrous Materials
L1428-37: 2 x 4 Ceiling Tile (Foundry)	No	White/Tan	None Detected	35% Cellulose 35% Fibrous Glass 30% Non-Fibrous Materials
L1428-38: 2 x 4 Ceiling Tile (Foundry)	No	White/Tan	None Detected	35% Cellulose 35% Fibrous Glass 30% Non-Fibrous Materials
L1428-39: Drywall Compound (Foundry)	No	White/Tan	None Detected	5% Cellulose <1% Fibrous Glass 94% Non-Fibrous Materials
L1428-40: Drywall Compound (Foundry)	No	White/Tan	None Detected	5% Cellulose <1% Fibrous Glass 94% Non-Fibrous Materials
L1428-41: Drywall Compound (Foundry)	No	White/Tan	None Detected	5% Cellulose <1% Fibrous Glass 94% Non-Fibrous Materials
L1428-42: Transite South Side Roof (Foundry)	Yes	Gray	10% Chrysotile	90% Non-Fibrous Materials
L1428-43: Transite Roof South Side (Foundry)	Sample Not Analyzed - Stop Positive.			
L1428-44: Transite Roof South Side (Foundry)	Sample Not Analyzed - Stop Positive.			
L1428-45: Composite Drywall/Compound (Machine Shop); Drywall Only	No	White/Tan	None Detected	5% Cellulose 95% Non-Fibrous Materials
L1428-46: Composite Drywall/Compound (Machine Shop)	Yes	White/Tan	<1% Chrysotile	5% Cellulose 94% Non-Fibrous Materials
L1428-47: Composite Drywall/Compound (Machine Shop)	Yes	White/Tan	<1% Chrysotile	5% Cellulose 94% Non-Fibrous Materials
L1428-48: 12" x 12" Beige Floor Tile (Guard Shack)	No	Beige	None Detected	100% Non-Fibrous Materials
L1428-48M: Mastic Associated with 12" x 12" Beige Floor Tile (Guard Shack)	No	Yellow	None Detected	100% Non-Fibrous Materials
L1428-49: 12" x 12" Beige Floor Tile (Guard Shack)	No	Beige	None Detected	100% Non-Fibrous Materials
L1428-49M: Mastic Associated with 12" x 12" Beige Floor Tile (Guard Shack)	No	Yellow	None Detected	100% Non-Fibrous Materials
L1428-50: 12" x 12" Beige Floor Tile (Guard Shack)	No	Beige	None Detected	100% Non-Fibrous Materials

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<b>SAMPLE NUMBER/ DESCRIPTION/LOCATION</b>	<b>ASBESTOS PRESENT</b>	<b>COLOR</b>	<b>ASBESTOS TYPE</b>	<b>PERCENTAGE OTHER MATERIALS</b>
L1428-50M: Mastic Associated with 12" x 12" Beige Floor Tile (Guard Shack)	No	Yellow	None Detected	100% Non-Fibrous Materials
L1428-51: 2 x 4 Ceiling Tile (Guard Shack)	No	White/Tan	None Detected	35% Cellulose 35% Fibrous Glass 30% Non-Fibrous Materials
L1428-52: 2 x 4 Ceiling Tile (Guard Shack)	No	White/Tan	None Detected	35% Cellulose 35% Fibrous Glass 30% Non-Fibrous Materials
L1428-53: 2 x 4 Ceiling Tile (Guard Shack)	No	White/Tan	None Detected	35% Cellulose 35% Fibrous Glass 30% Non-Fibrous Materials
L1428-54: 12" x 12" Yellow (Guard Shack)	No	Yellow	None Detected	100% Non-Fibrous Materials
L1428-54M: Mastic Associated with 12" x 12" Yellow (Guard Shack)	No	Yellow	None Detected	100% Non-Fibrous Materials
L1428-55: 12" x 12" Yellow (Guard Shack)	No	Yellow	None Detected	100% Non-Fibrous Materials
L1428-55M: Mastic Associated with 12" x 12" Yellow (Guard Shack)	No	Yellow	None Detected	100% Non-Fibrous Materials
L1428-56: 12" x 12" Yellow (Guard Shack)	No	Yellow	None Detected	100% Non-Fibrous Materials
L1428-56M: Mastic Associated with 12" x 12" Yellow (Guard Shack)	No	Yellow	None Detected	100% Non-Fibrous Materials
L1428-57: Drywall/Compound Composite (Guard Shack)	No	White/Tan	None Detected	5% Cellulose 95% Non-Fibrous Materials
L1428-58: Drywall/Compound Composite (Guard Shack)	No	White/Tan	None Detected	5% Cellulose 95% Non-Fibrous Materials
L1428-59: Drywall/Compound Composite (Guard Shack)	No	White/Tan	None Detected	5% Cellulose 95% Non-Fibrous Materials
L1428-60: 2 x 4 Ceiling Tile (Guard Shack)	No	White/Tan	None Detected	20% Cellulose 40% Fibrous Glass 40% Non-Fibrous Materials
L1428-61: 2 x 4 Ceiling Tile (Guard Shack)	No	White/Tan	None Detected	20% Cellulose 40% Fibrous Glass 40% Non-Fibrous Materials
L1428-62: 2 x 4 Ceiling Tile (Guard Shack)	No	White/Tan	None Detected	20% Cellulose 40% Fibrous Glass 40% Non-Fibrous Materials
L1428-63: 1 x 1 Ceiling Tile (Main Office)	No	White/Gray	None Detected	<1% Cellulose 90% Fibrous Glass 9% Non-Fibrous Materials
L1428-63M: Mastic Associated with 1 x 1 Ceiling Tile (Main Office)	No	Brown	None Detected	<1% Cellulose <1% Fibrous Glass 99% Non-Fibrous Materials
L1428-64: 1 x 1 Ceiling Tile (Main Office)	No	White/Gray	None Detected	<1% Cellulose 90% Fibrous Glass 9% Non-Fibrous Materials

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L1428-64M: Mastic Associated with 1 x 1 Ceiling Tile (Main Office)	No	Brown	None Detected	<1% Cellulose <1% Fibrous Glass 99% Non-Fibrous Materials
L1428-65: 1 x 1 Ceiling Tile (Main Office)	No	White/Gray	None Detected	<1% Cellulose 90% Fibrous Glass 9% Non-Fibrous Materials
L1428-65M: Mastic Associated with 1 x 1 Ceiling Tile (Main Office)	No	Brown	None Detected	<1% Cellulose <1% Fibrous Glass 99% Non-Fibrous Materials
L1428-66: 12" x 12" Multi Color 1 <sup>st</sup> Floor (Main Office)	No	Tan	None Detected	100% Non-Fibrous Materials
L1428-66M: Mastic Associated with 12" x 12" Multi Color 1 <sup>st</sup> Floor (Main Office)	No	Brown	None Detected	100% Non-Fibrous Materials
L1428-67: 12" x 12" Multi Color 1 <sup>st</sup> Floor (Main Office)	No	Tan	None Detected	100% Non-Fibrous Materials
L1428-67M: Mastic Associated with 12" x 12" Multi Color 1 <sup>st</sup> Floor (Main Office)	No	Brown	None Detected	100% Non-Fibrous Materials
L1428-68: 12" x 12" Multi Color 1 <sup>st</sup> Floor (Main Office)	No	Tan	None Detected	100% Non-Fibrous Materials
L1428-68M: Mastic Associated with 12" x 12" Multi Color 1 <sup>st</sup> Floor (Main Office)	No	Brown	None Detected	100% Non-Fibrous Materials
L1428-69: Window Caulking (Main Office)	No	Tan	None Detected	100% Non-Fibrous Materials
L1428-70: Transite Roof (Main Office)	Yes	Gray	10% Chrysotile	90% Non-Fibrous Materials
L1428-71: Composite Drywall/Compound (Main Office)	Yes	White/Tan	<1% Chrysotile	5% Cellulose 94% Non-Fibrous Materials
L1428-72: Composite Drywall/Compound (Main Office)	Yes	White/Tan	<1% Chrysotile	5% Cellulose 94% Non-Fibrous Materials
L1428-73: Composite Drywall/Compound (Main Office); Wall Mix	No	White/Tan/ Gray	None Detected	100% Non-Fibrous Materials
L1428-74: Vault 12" x 12" (Main Office)	No	White	None Detected	100% Non-Fibrous Materials
L1428-74M: Mastic Associated with Vault 12" x 12" (Main Office)	No	Yellow	None Detected	100% Non-Fibrous Materials
L1428-74: Leveling Compound Associated with Vault 12" x 12" (Main Office)	No	Gray	None Detected	5% Cellulose 95% Non-Fibrous Materials
L1428-75: Vault 12" x 12" (Main Office)	No	White	None Detected	100% Non-Fibrous Materials
L1428-75M: Mastic Associated with Vault 12" x 12" (Main Office)	No	Yellow	None Detected	100% Non-Fibrous Materials
L1428-75: Leveling Compound Associated with Vault 12" x 12" (Main Office)	No	Gray	None Detected	5% Cellulose 95% Non-Fibrous Materials
L1428-76: Vault 12" x 12" (Main Office)	No	White	None Detected	100% Non-Fibrous Materials

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SAMPLE NUMBER/ DESCRIPTION/LOCATION	ASBESTOS PRESENT	COLOR	ASBESTOS TYPE	PERCENTAGE OTHER MATERIALS
L1428-76M: Mastic Associated with Vault 12" x 12" (Main Office)	No	Yellow	None Detected	100% Non-Fibrous Materials
L1428-76: Leveling Compound Associated with Vault 12" x 12" (Main Office)	No	Gray	None Detected	5% Cellulose 95% Non-Fibrous Materials
L1428-77: North Roof Coating (Foundry)	Yes	Gray	10% Chrysotile	90% Non-Fibrous Materials
L1428-78: Center Roof Material (Foundry)	Yes	Gray	20% Chrysotile	80% Non-Fibrous Materials
L1428-80: Linoleum (Break Room)	No	White/Gray	None Detected	10% Fibrous Glass 90% Non-Fibrous Materials
L1428-80M: Mastic Associated with Linoleum (Break Room)	No	Yellow	None Detected	100% Non-Fibrous Materials
L1428-81: Linoleum (Break Room)	No	White/Gray	None Detected	10% Fibrous Glass 90% Non-Fibrous Materials
L1428-81M: Mastic Associated with Linoleum (Break Room)	No	Yellow	None Detected	100% Non-Fibrous Materials
L1428-82: Linoleum (Break Room)	No	White/Gray	None Detected	10% Fibrous Glass 90% Non-Fibrous Materials
L1428-82M: Mastic Associated with Linoleum (Break Room)	No	Yellow	None Detected	100% Non-Fibrous Materials
L1428-83: 12" x 12" Flooring (Break Room)	No	White	None Detected	100% Non-Fibrous Materials
L1428-83M: Mastic Associated with 12" x 12" Flooring (Break Room)	No	Yellow	None Detected	100% Non-Fibrous Materials
L1428-84: 12" x 12" Flooring (Break Room)	No	White	None Detected	100% Non-Fibrous Materials
L1428-84M: Mastic Associated with 12" x 12" Flooring (Break Room)	No	Yellow	None Detected	100% Non-Fibrous Materials
L1428-85: 12" x 12" Flooring (Break Room)	No	White	None Detected	100% Non-Fibrous Materials
L1428-85M: Mastic Associated with 12" x 12" Flooring (Break Room)	No	Yellow	None Detected	100% Non-Fibrous Materials

- Please note that, while this survey was performed in a thorough manner to locate and sample all suspect materials, additional suspect materials or undocumented asbestos-containing materials may still be located within the building in such areas as inside wall, ceiling, and floor cavities, underground or buried locations, roofing, HVAC equipment, coated/wrapped electrical wire/conduits and other inaccessible location. These materials may not be observed until renovation/demolition activities are commenced.
- Any materials not listed or specifically identified as part of this survey must be positively identified to verify the existence or absence of asbestos prior to the start of future demolition or renovations.

## **Methods and Analysis – Asbestos PLM Bulk Sampling:**

### **Asbestos Sampling:**

All samples were collected by a Pennsylvania Licensed Certified Asbestos Building Inspector to ensure efficient scheduling, priority analysis, and thorough documentation and record keeping during the survey. Bulk samples were collected from accessible suspected ACM within the structure areas during the survey under EPA recommended procedures to minimize fiber release and performed in accordance with EPA 40 CFR Part 763 SubPart E. Core samples of each material were collected to its substrate by penetrating the materials outer covering. Duplicate samples of similar materials from adjacent locations were compared for uniformity of texture and color. All samples were placed in sealed containers and labeled with an identifying code. A chain of custody for each collected sample was documented throughout the sample collection process to ensure proper quality control.

### **Asbestos Sample Analysis:**

Bulk samples collected during this survey were packaged for proper shipment and delivered to Eckhart Environmental Services, LLC, an American Industrial Hygiene Association (AIHA) accredited laboratory located in Media, Pennsylvania. Samples were analyzed using Polarized Light Microscopy (PLM) with central stop dispersion staining techniques, using the EPA's "Method for the Determination of Asbestos in Bulk Building Materials" and Analytical Method EPA 600/R-93/116. The detection limit of this analytical method is one percent (1%) asbestos by weight.

Asbestos is present if the material analyzed is greater than one percent (>1%) by weight. This stipulation is outlined in the EPA Publication EPA 500/5-85-028, Section 2.2.2.2. Some building/structure materials may contain asbestos concentrations below the 1% by weight and can be documented via point counting or "trace" detection levels.

### **Asbestos Standards:**

Federal regulations promulgated by the Environmental Protection Agency prohibit the use of asbestos materials for fireproofing and insulation where the material contains more than one percent asbestos by weight. In general, the higher the percentage of asbestos, the more fibers that can be released and cause contamination to the structure environment. However, substantial fiber release can occur in damaged or deteriorating materials even where asbestos content is low.

The condition of the ACM and its potential for disturbance (fiber release) may be used to determine if corrective measures should be taken. Evidence of water damage, physical damage, and the presence of broken or crumbled materials on the floor are signs that fiber release has occurred, is occurring or may occur in the future.

Health experts agree that exposure to airborne asbestos, regardless of concentrations, involves a health risk. Persons exposed to asbestos have an increased risk of developing asbestosis, lung cancer and mesothelioma.

The EPA currently recognizes four abatement methodologies to control exposure to airborne asbestos fibers. Specifically, these are removal, encapsulation, enclosure, operations, and maintenance. Properly conducted and supervised removal of asbestos material is the only method, which entirely eliminates asbestos exposure.

The current EPA recommended "clean air" asbestos limit for clearance testing during an asbestos abatement project is 0.01 Fibers per cubic centimeter (F/cc) by Phase Contrast Microscopy (PCM). This level is also recognized as a "clean" level for background air levels in occupied buildings/structures.

If the purpose of this inspection was for documentation of asbestos-containing materials prior to structure renovation/demolition, please consult the appropriate local, state, and other relevant governmental regulatory agencies to ensure that proper procedures for notifications, abatement (if required), and material disposal and hauling are adhered to always. Please note that the abatement contractor may require adequate sources of water and electricity during removal activities.

Since the purpose of this inspection, as described to CALI, was for the determination of Asbestos-Containing Materials prior to renovation activities, please consult the appropriate local, state, and other relevant governmental regulatory agencies to ensure that proper procedures for notifications, abatement (if required), and material disposal and hauling are adhered to always.

### **Conclusion/Recommendations:**

Proper precautions should be taken when performing work in and around the identified asbestos materials and other materials you may encounter as suspect asbestos. This is especially Important and required when working in an occupied structure. Any potential renovation/demolition plans should include proper procedures for treatment of this asbestos material, as deemed necessary.

### **Disclaimer:**

This survey only contains sample results from physical bulk samples collected during this inspection. Any other suspect asbestos materials identified within this structure that conflict with this report's findings should be sampled by a licensed building inspector prior to their removal to ensure no materials are misidentified as non-asbestos.

The Scope of Work of this survey was performed in such a manner to access all suspect materials. Select removal of flooring was performed to attempt to access any additional suspect material. With any structure of this general age and size, additional asbestos-containing materials may still be located within previously un-accessible locations. These areas include, but are not limited to, locations such as within wall and ceiling cavities, in unidentified pipe chases, within underground locations or buried materials, under flooring and/or sub-flooring, or in additional original roofing materials.

Also note that the HVAC systems and their internal buildings, including boiler units, water heaters, air conditioning and ventilation system, etc., were not disassembled and inspected due to the safety concerns of the technician performing the survey, as utilities were in service at the time of inspection.

While the results and information of these analyses are considered to be reliable, CALI assumes no responsibility for the accuracy of the results.

Data and other information in this report are only valid for the prevailing conditions identified during this investigation and will be kept confidential. Any information contained in this report will not be released to third parties without the expressed written consent of the client except where required by law.

The conclusions expressed within this report are intended to advise the client of the potential regulated environmental hazards within the subject property. It is the responsibility of the client to comply with current regulations relating to the hazards identified in this report. The burden for financial or health consequences for action or lack of action taken by the client or the client's agent is the responsibility of the client.

## **Universal Waste Inventory**

**UNIVERSAL WASTE INVENTORY**  
**Former Frog, Switch & Manufacturing Co.**  
**600 East High Street**  
**Carlisle, PA 17013**  
**October 8, 2025**

<b>Building - Location</b>	<b>Universal Waste</b>	<b>Quantity</b>	
<b>Frog Shop – Building 2</b>	Hydraulic Oil	1 - 5-gallon bucket 1 - 1-gallon bucket	
	Fluorescent Light Bulbs	1,300 Linear Feet (LF)	
	Light Ballasts*	100 Each (EA)	
	Window Air Conditioning Units	5 EA	
	Refrigerators	6 EA	
	Fire Extinguishers	12 EA	
	Unknown Solvent	1 - 55-gallon drum	
	– In Pits below Machines	Unknown Oily Liquid	Unknown Quantity in Pits
		Waste Oil Drums	6 -55-gallon drums
		Unknown Liquid	1 – 5-gallon slop bucket
		Mercury Thermometer	1 EA
	<b>Building 13</b>	Old Smoke Detectors	2 EA
Fluorescent Light Bulbs		80 LF	
Light Ballasts*		10	
<b>Foundry – Building 1</b>	Fire Extinguishers	10 EA	
	Fluorescent Light Bulbs	272 LF	
	Light Ballasts*	36	
	Unknown Corrosives	8 – 5-gallon buckets	
	Oxygen Cylinders	2 EA	
	Fuel Gas Canisters	2 EA	
	Refrigerators	2 EA	
	Avon Dry Parting Agent	1 – 500lb Drum	
	Window Air Conditioning Units	3 EA	
		Oil	6 – 300-gallon drums
		Oil	4 – 50-gallon drums
		Cast Clean Binder	1 – 1,000-gallon tank
		Kerosene	2 – 1-gallon containers
	- Chemistry Lab	Hydrogen Chloride	10 Liters
	- Chemistry Lab	Ethylene	3 Liters
	- Locker Rooms	Fluorescent Light Bulbs	112 LF

**UNIVERSAL WASTE INVENTORY**  
**Former Frog, Switch & Manufacturing Co.**  
**600 East High Street**  
**Carlisle, PA 17013**  
**October 8, 2025**

<b>Pattern Shop – Building 24/27</b>	Fire Extinguishers	4 EA
	Fluorescent Light Bulbs	360 LF
	Light Ballasts*	18 EA
	Window Air Conditioning Units	2 EA
<b>Building 20 – In Nearby Shack</b>	Acetone ( May be empty )	5 – 55-gallon drums
<b>Building 3 – Office</b>	Fire Extinguishers - 4	4 EA
	Old Smoke Detectors	12 EA
	Window Air Conditioning Units	3 EA
	Thermostat Mercury Bulb	1 EA
<b>Building 5</b>	Oil	1 – 300-gallon container 15 1-gallon buckets 20 55-gallon drums (staining below)
	Gas Canisters	11 EA
	Fire Extinguishers	3 EA
	Diesel Oil	1 – 100-gallon drum
	Roof Sealer	5 1-gallon buckets
	Dayglo Fluorescent Pigment	3 – 55lb bags
	Corrosive Waste	1 – 2-gallon container
	Window Air Conditioning Units	5 EA
	Fluorescent Light Bulbs	128 LF
	Light Ballasts*	10 EA
	Battery Acid	1 – 1 quart bottle

**Lead-Based Paint - XRF Analyzer Results Spreadsheet**

DOT - Frog, Switch, and Mfg - Lead-Based Paint Assessment

Lead-Based Paint - XRF Analyzer Results							
<b>Client:</b>	Department of Transportation						
<b>Project Site:</b>	Former Frog, Switch, Manufacturing, & Co., 600 East High Street, Carlisle, PA						
<b>Viva EHS Project #:</b>	250640						
<b>Inspection Dates:</b>	9/15/25 - 9/18/2025						
<b>Risk Assessor's Name and License #:</b>	Jared Whack - 060470						
Building	Space	Component	Substrate	Paint Color	XRF Reading	XRF Positive/ Negative	Comments
Main Office (#3)	Archive Vault W1	W1	CMU	White	0	Negative	
Main Office (#3)	Archive Vault W2	W2	CMU	White	0	Negative	
Main Office (#3)	Archive Vault W3	W3	CMU	White	0	Negative	
Main Office (#3)	Archive Vault W4	W4	CMU	White	0	Negative	
Main Office (#3)	Archive Vault Ceiling	Ceiling	Concrete	White	0	Negative	
Main Office (#3)	Archive Vault Door	Door	Metal	Grey	0.12	Negative	
Main Office (#3)	Archive Vault	Door Frame	Metal	Brown	0.06	Negative	
Main Office (#3)	Archive Vault	Door Frame	Metal	Grey	0.09	Negative	
Main Office (#3)	Hallways	W2	Sheetrock	Blue	0.11	Negative	
Main Office (#3)	Hallways	W4	Sheetrock	Blue	1.4	Positive	
Main Office (#3)	Hallways	Vault Door	Metal	Blue	0.06	Negative	
Main Office (#3)	Hallways	Vault Door Frame	Metal	Blue	0.13	Negative	
Main Office (#3)	Conference Room	W1	Sheetrock	Beige	0.13	Negative	
Main Office (#3)	Conference Room	W2	Sheetrock	Beige	0.24	Negative	
Main Office (#3)	Conference Room	W3	Sheetrock	Beige	0	Negative	
Main Office (#3)	Conference Room	W4	Sheetrock	Beige	0.17	Negative	
Main Office (#3)	Conference Room	Window Sill	Wood	Brown	0.18	Negative	
Main Office (#3)	Conference Room	Door Frame	Wood	Brown	0	Negative	
Main Office (#3)	Meeting Room	W1	Sheetrock	Beige	0	Negative	
Main Office (#3)	Meeting Room	W2	Sheetrock	Beige	0	Negative	
Main Office (#3)	Meeting Room	W3	Sheetrock	Beige	0	Negative	
Main Office (#3)	Meeting Room	W4	Sheetrock	Beige	0	Negative	
Main Office (#3)	Meeting Room	Window Sill	Wood	Brown	0	Negative	
Main Office (#3)	Meeting Room	Door Frame	Wood	Brown	0	Negative	
Main Office (#3)	Reception and Rear Office	Window Sill	Wood	White	0.15	Negative	
Main Office (#3)	Reception and Rear Office	Window Casing	Wood	White	0.39	Negative	
Main Office (#3)	Reception and Rear Office	Door	Wood	White	0.32	Negative	
Main Office (#3)	Reception and Rear Office	Door Casing	Wood	White	0.24	Negative	
Main Office (#3)	HR Vault	W1	Plaster	Light Green	0.04	Negative	
Main Office (#3)	HR Vault	W2	Plaster	Light Green	0.05	Negative	
Main Office (#3)	HR Vault	W3	Plaster	Light Green	0.06	Negative	
Main Office (#3)	HR Vault	W4	Plaster	Light Green	0.03	Negative	
Main Office (#3)	HR Vault	Door	Metal	Brown	0.08	Negative	
Main Office (#3)	HR Vault	Door Casing	Metal	Brown	0.09	Negative	

DOT - Frog, Switch, and Mfg - Lead-Based Paint Assessment

Lead-Based Paint - XRF Analyzer Results							
<b>Client:</b>	Department of Transportation						
<b>Project Site:</b>	Former Frog, Switch, Manufacturing, & Co., 600 East High Street, Carlisle, PA						
<b>Viva EHS Project #:</b>	250640						
<b>Inspection Dates:</b>	9/15/25 - 9/18/2025						
<b>Risk Assessor's Name and License #:</b>	Jared Whack - 060470						
Building	Space	Component	Substrate	Paint Color	XRF Reading	XRF Positive/ Negative	Comments
Main Office (#3)	Copy Room	W1	Sheetrock	Gray	0	Negative	
Main Office (#3)	Copy Room	W2	Sheetrock	Gray	0	Negative	
Main Office (#3)	Copy Room	W3	Wood Panel	Unpainted	N/A	N/A	
Main Office (#3)	Copy Room	W4	Sheetrock	Gray	0	Negative	
Main Office (#3)	Copy Room	Door Casing	Door	Tan	0	Negative	
Main Office (#3)	Electrical Room	W1	Sheetrock	White	0	Negative	
Main Office (#3)	Electrical Room	W2	Sheetrock	White	0	Negative	
Main Office (#3)	Electrical Room	W3	Sheetrock	White	0	Negative	
Main Office (#3)	Electrical Room	W4	Sheetrock	White	0	Negative	
Main Office (#3)	Electrical Room	Door Casing	Wood	Brown	0	Negative	
Main Office (#3)	Electrical Room	Conduit	Metal	White	0.18	Negative	
Main Office (#3)	Women's Restroom	Door Casing	Wood	Brown	0	Negative	
Main Office (#3)	Break Room	Door Casing	Wood	Blue	0.21	Negative	
Main Office (#3)	Break Room	Door	Wood	Blue	0.01	Negative	
Main Office (#3)	Janitors Closet	W3	Plaster	Green	0.19	Negative	
Main Office (#3)	Janitors Closet	Door Casing	Wood	Blue	0.51	Negative	
Main Office (#3)	Janitors Closet	Door	Wood	Blue	0.37	Negative	
Main Office (#3)	Office 1	W1	Sheetrock	Beige	0.55	Negative	
Main Office (#3)	Office 1	W2	Sheetrock	Beige	0.53	Negative	
Main Office (#3)	Office 1	W3	Sheetrock	Beige	0	Negative	
Main Office (#3)	Office 1	W4	Sheetrock	Beige	0	Negative	
Main Office (#3)	Office 1	Window Sill	Wood	Beige	0	Negative	
Main Office (#3)	Office 1	Door Frame	Wood	Beige	0	Negative	
Main Office (#3)	Office 2	W1	Sheetrock	Beige	0	Negative	
Main Office (#3)	Office 2	W2	Sheetrock	Beige	0	Negative	
Main Office (#3)	Office 2	W3	Sheetrock	Beige	0	Negative	
Main Office (#3)	Office 2	W4	Sheetrock	Beige	0.35	Negative	
Main Office (#3)	Office 2	Window Sill	Wood	Beige	0	Negative	
Main Office (#3)	Office 2	Door Frame	Wood	Beige	0	Negative	
Main Office (#3)	Office 3	W1	Sheetrock	Beige	0	Negative	
Main Office (#3)	Office 3	W2	Sheetrock	Beige	0.32	Negative	
Main Office (#3)	Office 3	W3	Sheetrock	Beige	0.39	Negative	
Main Office (#3)	Office 3	W4	Sheetrock	Beige	0.34	Negative	
Main Office (#3)	Office 3	Window Sill	Wood	Beige	0	Negative	

DOT - Frog, Switch, and Mfg - Lead-Based Paint Assessment

Lead-Based Paint - XRF Analyzer Results							
<b>Client:</b>	Department of Transportation						
<b>Project Site:</b>	Former Frog, Switch, Manufacturing, & Co., 600 East High Street, Carlisle, PA						
<b>Viva EHS Project #:</b>	250640						
<b>Inspection Dates:</b>	9/15/25 - 9/18/2025						
<b>Risk Assessor's Name and License #:</b>	Jared Whack - 060470						
Building	Space	Component	Substrate	Paint Color	XRF Reading	XRF Positive/ Negative	Comments
Main Office (#3)	Office 3	Door Frame	Wood	Beige	0	Negative	
Main Office (#3)	Office 4	Window Sill	Wood	Beige	0	Negative	
Main Office (#3)	Office 4	Door Frame	Wood	Beige	0	Negative	
Main Office (#3)	Multi-Room Office	W1	Sheetrock	Beige	0	Negative	
Main Office (#3)	Multi-Room Office	W2	Sheetrock	Beige	0	Negative	
Main Office (#3)	Multi-Room Office	W3	Sheetrock	Beige	0	Negative	
Main Office (#3)	Multi-Room Office	W4	Sheetrock	Beige	0	Negative	
Main Office (#3)	Multi-Room Office	Window Casing	Wood	Beige	0	Negative	
Main Office (#3)	Multi-Room Office	Door Frame	Wood	Beige	0	Negative	
Main Office (#3)	Multi-Room Office	W1	Sheetrock	Tan	0.03	Negative	
Main Office (#3)	Multi-Room Office	W2	Sheetrock	Tan	0.1	Negative	
Main Office (#3)	Multi-Room Office	W3	Sheetrock	Tan	0.42	Negative	
Main Office (#3)	Multi-Room Office	W4	Sheetrock	Tan	0.36	Negative	
Main Office (#3)	Directors Office Suite	Window Sill	Wood	Blue	0	Negative	
Main Office (#3)	Directors Office Suite	Baseboard	Wood	Blue	0	Negative	
Main Office (#3)	Sitting Room	Door	Wood	Blue	0.13	Negative	
Main Office (#3)	Sitting Room	Door Casing	Wood	Blue	0.3	Negative	
Main Office (#3)	Sitting Room	Window Sill	Wood	Blue	0.15	Negative	
Main Office (#3)	Sitting Room	Window Casing	Wood	Blue	0.59	Negative	
Main Office (#3)	File Room off Sitting Room	Door	Metal	Gray	0.04	Negative	
Main Office (#3)	File Room off Sitting Room	Door Casing	Wood	Gray	0	Negative	
Main Office (#3)	File Room off Sitting Room	Window Sill	Wood	Tan	0	Negative	
Main Office (#3)	Presidents Room	Door	Wood	Brown	0	Negative	
Main Office (#3)	Presidents Room	Door Casing	Wood	Brown	0	Negative	
Main Office (#3)	Presidents Room	Window Sill	Wood	Brown	0.12	Negative	
Main Office (#3)	Presidents Room	Window Casing	Wood	Brown	0.32	Negative	
Main Office (#3)	Presidents Room Office	W2	Plaster	Beige	0.8	Negative	
Main Office (#3)	Presidents Room Office	W3	Plaster	Beige	0.43	Negative	
Main Office (#3)	Presidents Room Office	W4	Plaster	Beige	0.96	Negative	
Main Office (#3)	Presidents Room Office	Door	Wood	Brown	0.26	Negative	
Main Office (#3)	Presidents Room Office	Door Casing	Wood	Brown	0.2	Negative	
Main Office (#3)	Presidents Room Office	Window Sill	Wood	Brown	0.33	Negative	
Main Office (#3)	Presidents Room Office	Window Casing	Wood	Brown	0.22	Negative	
Main Office (#3)	Stairs	Railing	Blue	Metal	6.36	Positive	

DOT - Frog, Switch, and Mfg - Lead-Based Paint Assessment

Lead-Based Paint - XRF Analyzer Results							
<b>Client:</b>	Department of Transportation						
<b>Project Site:</b>	Former Frog, Switch, Manufacturing, & Co., 600 East High Street, Carlisle, PA						
<b>Viva EHS Project #:</b>	250640						
<b>Inspection Dates:</b>	9/15/25 - 9/18/2025						
<b>Risk Assessor's Name and License #:</b>	Jared Whack - 060470						
Building	Space	Component	Substrate	Paint Color	XRF Reading	XRF Positive/ Negative	Comments
Main Office (#3)	Stairs	Stair Riser	Blue	Metal	4.4	Positive	
Main Office (#3)	Stairs	Landing	Blue	Metal	3.23	Positive	
Main Office (#3)	Stairs	Wall	Blue	Plaster	0.46	Negative	
Main Office (#3)	Stairs	Door Casing	Blue	Wood	0	Negative	
Main Office (#3)	Stairs	Door	Blue	Wood	0	Negative	
Main Office (#3)	Stairs	Stair Tread	Tan	Metal	3.38	Positive	
Main Office (#3)	Stairs	Stair Riser	Tan	Metal	8.16	Positive	
Main Office (#3)	Stairs	Landing	Tan	Metal	10	Positive	
Main Office (#3)	Stairs	W2	White	Plaster	0.63	Negative	
Main Office (#3)	Stairs	W4	White	Plaster	0.44	Negative	
Main Office (#3)	2nd Floor Office and Landing	W1	White	Plaster	0.99	Negative	
Main Office (#3)	2nd Floor Office and Landing	W2	White	Plaster	0.94	Negative	
Main Office (#3)	2nd Floor Office and Landing	W3	White	Plaster	1.22	Positive	
Main Office (#3)	2nd Floor Office and Landing	W4	White	Plaster	1.16	Positive	
Main Office (#3)	2nd Floor Office and Landing	Door	Reddish Brown	Wood	0.36	Negative	
Main Office (#3)	2nd Floor Office and Landing	Door Casing	Reddish Brown	Wood	0.34	Negative	
Main Office (#3)	2nd Floor Office and Landing	Window Sill	Reddish Brown	Wood	0.51	Negative	
Main Office (#3)	2nd Floor Office and Landing	Window Casing	Reddish Brown	Wood	0.73	Negative	
Main Office (#3)	2nd Floor Office and Landing	Window Sill	White	Wood	0.2	Negative	
Main Office (#3)	2nd Floor Office and Landing	Window Casing	White	Wood	1.47	Positive	
Main Office (#3)	2nd Floor Office and Landing	Window Casing	White	Wood	1.47	Positive	
Main Office (#3)	2nd Floor Office and Landing	Tin Ceiling	White	Metal	4.08	Positive	
Main Office (#3)	2nd Floor Office and Landing	Tin Ceiling	Reddish Brown	Metal	3.4	Positive	
Main Office (#3)	2nd Floor Office and Landing	Crown Moulding	Reddish Brown	Wood	2.2	Positive	
Main Office (#3)	Exterior	W1	Off-white	Stucco	1.77	Positive	
Main Office (#3)	Exterior	W2	Off-white	Stucco	1.22	Positive	
Main Office (#3)	Exterior	W3	Off-white	Stucco	0.48	Negative	
Main Office (#3)	Exterior	W4	Off-white	Stucco	0.14	Negative	
Main Office (#3)	Exterior	Door	Reddish Brown	Wood	7.74	Positive	
Main Office (#3)	Exterior	Door Casing	Reddish Brown	Wood	0.27	Negative	
Main Office (#3)	Exterior	Window Sill	Reddish Brown	Wood	1.05	Positive	
Main Office (#3)	Exterior	Window Casing	Reddish Brown	Wood	0.17	Negative	
Main Office (#3)	Exterior	Railing	Off-White	Metal	0.79	Negative	
Main Office (#3)	Exterior	Balcony Ceiling	Off-White	Stucco	0.88	Negative	

DOT - Frog, Switch, and Mfg - Lead-Based Paint Assessment

Lead-Based Paint - XRF Analyzer Results							
<b>Client:</b>	Department of Transportation						
<b>Project Site:</b>	Former Frog, Switch, Manufacturing, & Co., 600 East High Street, Carlisle, PA						
<b>Viva EHS Project #:</b>	250640						
<b>Inspection Dates:</b>	9/15/25 - 9/18/2025						
<b>Risk Assessor's Name and License #:</b>	Jared Whack - 060470						
Building	Space	Component	Substrate	Paint Color	XRF Reading	XRF Positive/ Negative	Comments
Building 18	Exterior	Door	Red	Wood	0.14	Negative	
Building 18	Exterior	Door Casing	Red	Wood	0.18	Negative	
Building 18	Exterior	Window Sash	Red	Metal	0.1	Negative	
Building 18	Exterior	Window Casing	Red	Wood	0.1	Negative	
Building 18	Interior	Door	Red	Wood	0.03	Negative	
Building 18	Interior	Door Casing	Red	Wood	0.03	Negative	
Building 18	Rear Storage Closet	Door	Red	Wood	0	Negative	
Building 18	Rear Storage Closet	Door Frame	Red	Wood	0	Negative	
Building 18	Rear Storage Closet	W3	Red	Wood	0.13	Negative	
Building 18	Rear Storage Closet	Window Casing	Red	Wood	0.02	Negative	
Building 18	Rear Storage Closet	Shelving post	Red	Wood	3.3	Positive	
Building 18	Rear Storage Closet	Shelving	Red	Wood	3.42	Positive	
Building 18	Rear Storage Closet	Storage cabinet	Red	Wood	8.82	Positive	
Building 18	Rear Storage Closet	Door	Red	Wood	0.01	Negative	
Building 18	Rear Storage Closet	Door Frame	Red	Wood	0.03	Negative	
Frog Shop - Building 2	Exterior	Column	Red	Metal	0.14	Negative	
Frog Shop - Building 2	Exterior	Duct/Downspout	Red	Concrete	0.81	Negative	
Frog Shop - Building 2	Exterior	Window Sash	Red	Metal	0.14	Negative	
Frog Shop - Building 2	Exterior	Door	Red	Metal	0	Negative	
Frog Shop - Building 2	Exterior	Door Casing	Beige	Metal	0.14	Negative	
Frog Shop - Building 2	Exterior	Vaulted Window Sill	Red	Metal	0.1	Negative	
Frog Shop - Building 2	Exterior	Louvre	Red	Metal	0.06	Negative	
Frog Shop - Building 2	Storage Room	Door	Beige	Metal	0	Negative	
Frog Shop - Building 2	Storage Room	Door Casing	Beige	Metal	0	Negative	
Frog Shop - Building 2	Storage Room	Door	White	Wood	0.18	Negative	
Frog Shop - Building 2	Storage Room	Door Casing	Red	Metal	0.31	Negative	
Frog Shop - Building 2	Boiler Room	Boiler	Black	Metal	0.14	Negative	
Frog Shop - Building 2	Boiler Room	Catwalk	Black	Metal	0.09	Negative	
Frog Shop - Building 2	Time Card Entryway	Door	Brown	Wood	0.25	Negative	
Frog Shop - Building 2	Time Card Entryway	Door Casing	Brown	Wood	0.1	Negative	
Frog Shop - Building 2	Time Card Entryway	Door	Blue	Wood	0.16	Negative	
Frog Shop - Building 2	Time Card Entryway	Door Casing	Blue	Wood	0.18	Negative	

DOT - Frog, Switch, and Mfg - Lead-Based Paint Assessment

Lead-Based Paint - XRF Analyzer Results							
<b>Client:</b>	Department of Transportation						
<b>Project Site:</b>	Former Frog, Switch, Manufacturing, & Co., 600 East High Street, Carlisle, PA						
<b>Viva EHS Project #:</b>	250640						
<b>Inspection Dates:</b>	9/15/25 - 9/18/2025						
<b>Risk Assessor's Name and License #:</b>	Jared Whack - 060470						
Building	Space	Component	Substrate	Paint Color	XRF Reading	XRF Positive/ Negative	Comments
Frog Shop - Building 2	Time Card Entryway	W2	Tan	Concrete	0	Negative	
Frog Shop - Building 2	Time Card Entryway	W3	White	Concrete	0.13	Negative	
Frog Shop - Building 2	Time Card Entryway	W4	White	Wood	4.86	Positive	
Frog Shop - Building 2	Time Card Entryway	Entry Framing	White	Metal	0	Negative	
Frog Shop - Building 2	Locker Room	W1	Blue	Wood	0	Negative	
Frog Shop - Building 2	Locker Room	W2	Blue	Concrete	0	Negative	
Frog Shop - Building 2	Locker Room	W3	Blue	Concrete	0.23	Negative	
Frog Shop - Building 2	Locker Room	W4	Blue	Concrete	0.56	Negative	
Frog Shop - Building 2	Locker Room	Floor	Blue	Concrete	0	Negative	
Frog Shop - Building 2	Locker Room	Stalls	Blue	Wood	0.05	Negative	
Frog Shop - Building 2	Locker Room	Door	Blue	Wood	0.19	Negative	
Frog Shop - Building 2	Locker Room	Door Casing	Blue	Wood	0.07	Negative	
Frog Shop - Building 2	Frog Shop	W1	Concrete	Beige	0	Negative	
Frog Shop - Building 2	Frog Shop	Column	Metal	Beige	1.57	Positive	
Frog Shop - Building 2	Frog Shop	Handrail	Metal	Yellow	1.63	Positive	
Frog Shop - Building 2	Frog Shop	Column	Metal	Yellow	0.1	Negative	
Frog Shop - Building 2	Frog Shop	Column	Metal	Brown	0	Negative	
Frog Shop - Building 2	Frog Shop	Window Sash	Wood	White	0	Negative	
Frog Shop - Building 2	Frog Shop	Window Casing	Wood	White	0	Negative	
Frog Shop - Building 2	Frog Shop	W2	Wood	White	0	Negative	
Frog Shop - Building 2	Frog Shop	Machine #1	Metal	White	4.4	Positive	
Frog Shop - Building 2	Frog Shop	Machine #1 Crane	Metal	Yellow	0.6	Negative	
Frog Shop - Building 2	Frog Shop	Machine #2	Metal	White	4.4	Positive	
Frog Shop - Building 2	Frog Shop	Elevated Platform	Metal	Yellow	2.85	Positive	
Frog Shop - Building 2	Frog Shop	Elevated Platform	Wood	Yellow	3.25	Positive	
Frog Shop - Building 2	Frog Shop	W3	Concrete	Beige	0	Negative	
Frog Shop - Building 2	Frog Shop	W3	Concrete	Blue	0	Negative	
Frog Shop - Building 2	Frog Shop	Column	Metal	Blue	0	Negative	
Frog Shop - Building 2	Frog Shop	Door	Metal	Blue	0	Negative	
Frog Shop - Building 2	Frog Shop	Door Casing	Metal	Blue	0	Negative	
Frog Shop - Building 2	Frog Shop	W4	Concrete	Beige	0	Negative	
Frog Shop - Building 2	Frog Shop	Machine #33	Metal	Green	0	Negative	
Frog Shop - Building 2	Frog Shop	Machine #34	Metal	Green	0.14	Negative	
Frog Shop - Building 2	Frog Shop	Machine #15	Metal	White	7.7	Positive	

DOT - Frog, Switch, and Mfg - Lead-Based Paint Assessment

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<b>Viva EHS Project #:</b>	250640						
<b>Inspection Dates:</b>	9/15/25 - 9/18/2025						
<b>Risk Assessor's Name and License #:</b>	Jared Whack - 060470						
Building	Space	Component	Substrate	Paint Color	XRF Reading	XRF Positive/ Negative	Comments
Frog Shop - Building 2	Frog Shop	Machine #14	Metal	White	0.13	Negative	
Frog Shop - Building 2	Frog Shop	Door	Wood	Brown	0.34	Negative	
Frog Shop - Building 2	Frog Shop	Door Casing	Wood	White	0.24	Negative	
Frog Shop - Building 2	Frog Shop	Machine #31	Metal	Silver	2.63	Positive	
Frog Shop - Building 2	Frog Shop	Machine #32	Metal	Silver	0.26	Negative	
Frog Shop - Building 2	Frog Shop	Machine #10	Metal	White	0	Negative	
Frog Shop - Building 2	Frog Shop	Machine #7	Metal	White	0.01	Negative	
Frog Shop - Building 2	Frog Shop	Machine #5	Metal	White	1.5	Positive	
Frog Shop - Building 2	Frog Shop	Machine #3	Metal	Green	4.3	Positive	
Frog Shop - Building 2	Frog Shop	Machine #6	Metal	Silver	0.15	Negative	
Frog Shop - Building 2	Frog Shop	Machine #4	Metal	Beige	0.37	Negative	
Frog Shop - Building 2	Frog Shop	Column	Wood	Orange	1.08	Positive	
Break Room Building (#13)	Entrance	Door	Wood	Brown	0.08	Negative	
Break Room Building (#13)	Entrance	Door Frame	Wood	Brown	0.14	Negative	
Break Room Building (#13)	Entrance	Window	Metal	Brown	0.01	Negative	
Break Room Building (#13)	Entrance	window Frame	Wood	Brown	0.01	Negative	
Break Room Building (#13)	Exterior	Door	Wood	Red	0.59	Negative	
Break Room Building (#13)	Exterior	Door Frame	Wood	Red	1.45	Positive	
Break Room Building (#13)	Exterior	Window	Metal	Brown	0.45	Negative	
Break Room Building (#13)	Exterior	Downspout	Metal	Brown	0	Negative	
Break Room Building (#13)	Bathroom	Door Frame	Wood	Brown	0.08	Negative	
Break Room Building (#13)	Bathroom	Window	Metal	Brown	0.01	Negative	
Break Room Building (#13)	Pantry	Door	Wood	Brown	0	Negative	
Break Room Building (#13)	Pantry	Door Frame	Wood	Brown	0	Negative	
Break Room Building (#13)	Pantry	W2	Wood	White	0	Negative	
Break Room Building (#13)	Pantry	W3	CMU	White	0	Negative	
Break Room Building (#13)	Pantry	W4	CMU	White	0	Negative	
Break Room Building (#13)	Pantry	Shelving	Wood	White	0	Negative	
Break Room Building (#13)	Kitchen	Door	Metal	Brown	0	Negative	
Break Room Building (#13)	Kitchen	Door Frame	Wood	Brown	0	Negative	
Break Room Building (#13)	Kitchen	Window	Metal	Brown	0.02	Negative	
Break Room Building (#13)	Kitchen	Door window Frame	Wood	White	0	Negative	
Break Room Building (#13)	Lunch Room	Window	Metal	Brown	0.06	Negative	

DOT - Frog, Switch, and Mfg - Lead-Based Paint Assessment

Lead-Based Paint - XRF Analyzer Results							
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<b>Viva EHS Project #:</b>	250640						
<b>Inspection Dates:</b>	9/15/25 - 9/18/2025						
<b>Risk Assessor's Name and License #:</b>	Jared Whack - 060470						
Building	Space	Component	Substrate	Paint Color	XRF Reading	XRF Positive/ Negative	Comments
Break Room Building (#13)	Lunch Room	Window Sill	Concrete	Brown	0.07	Negative	
Break Room Building (#13)	Lunch Room	Door FRame	Wood	Brown	0.11	Negative	
Foundry Silo FS (#1)	Free Standing Silo	Pipe	Metal	Blue	0.18	Negative	
Foundry Silo FS (#1)	Free Standing Silo	Silo awning	Metal	Blue	0.2	Negative	
Foundry (#1)	Foundry Large Storage near Silo	W1	CMU	White	0	Negative	
Foundry (#1)	Foundry Large Storage near Silo	W2	CMU	White	0	Negative	
Foundry (#1)	Foundry Large Storage near Silo	W3	CMU	White	0	Negative	
Foundry (#1)	Foundry Large Storage near Silo	W4	CMU	White	0	Negative	
Foundry (#1)	Foundry Large Storage near Silo	W4	CMU	REd	0	Negative	
Foundry (#1)	Foundry Large Storage near Silo	Door	Metal	Grey	0	Negative	
Foundry (#1)	Foundry Large Storage near Silo	Door Frame	Metal	Grey	0	Negative	
Foundry (#1)	Foundry Large Storage near Silo	Door Frame	Metal	Yellow	0.71	Negative	
Foundry (#1)	Foundry Large Storage near Silo	Beam	Metal	White	0	Negative	
Foundry (#1)	Foundry Large Storage near Silo	Silo	Concrete	White	0	Negative	
Foundry (#1)	Foundry Small Storage near silo	W1	CMU	Blue	0	Negative	
Foundry (#1)	Foundry Small Storage near silo	W1	CMU	White	0	Negative	
Foundry (#1)	Foundry Small Storage near silo	W2	CMU	Blue	0	Negative	
Foundry (#1)	Foundry Small Storage near silo	W2	CMU	White	0	Negative	
Foundry (#1)	Foundry Small Storage near silo	W2	CMU	Red	0	Negative	
Foundry (#1)	Foundry Small Storage near silo	W3	CMU	Blue	0	Negative	
Foundry (#1)	Foundry Small Storage near silo	W3	CMU	White	0	Negative	
Foundry (#1)	Foundry Small Storage near silo	W4	CMU	Blue	0	Negative	
Foundry (#1)	Foundry Small Storage near silo	W4	CMU	White	0	Negative	
Foundry (#1)	Foundry Small Storage near silo	Door	Metal	Blue	0	Negative	
Foundry (#1)	Foundry Small Storage near silo	Door Frame	Metal	Blue	0	Negative	
Foundry (#1)	Foundry Small Storage near silo	Door	Wood	Blue	0.01	Negative	
Foundry (#1)	Foundry Small Storage near silo	Door Frame	Wood	Blue	0.02	Negative	
Foundry (#1)	Foundry Main area	W1	CMU	White	0	Negative	
Foundry (#1)	Foundry Main area	W2	CMU	White	0	Negative	
Foundry (#1)	Foundry Main area	W2	CMU	Blue	0	Negative	
Foundry (#1)	Foundry Main area	W3	Wood	Blue	0	Negative	
Foundry (#1)	Foundry Main area	W3	CMU	White	0	Negative	
Foundry (#1)	Foundry Main area	W3	Metal	White	0.02	Negative	

DOT - Frog, Switch, and Mfg - Lead-Based Paint Assessment

Lead-Based Paint - XRF Analyzer Results							
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<b>Viva EHS Project #:</b>	250640						
<b>Inspection Dates:</b>	9/15/25 - 9/18/2025						
<b>Risk Assessor's Name and License #:</b>	Jared Whack - 060470						
Building	Space	Component	Substrate	Paint Color	XRF Reading	XRF Positive/ Negative	Comments
Foundry (#1)	Foundry Main area	W3	Metal	Blue	0	Negative	
Foundry (#1)	Foundry Main area	W4	CMU	White	0	Negative	
Foundry (#1)	Foundry Main area	Column	Metal	Brown	0	Negative	
Foundry (#1)	Foundry Main area	Column	Metal	White	0	Negative	
Foundry (#1)	Foundry Main area	Column	Metal	Yellow	1.09	Positive	
Foundry (#1)	Foundry Main area	Stairs	Wood	Blue	0	Negative	
Foundry (#1)	Foundry Main area	Door Frame	Wood	Blue	0	Negative	
Foundry (#1)	Foundry Main area	Barrier	Metal	Yellow	0	Negative	
Foundry (#1)	Foundry Main area	Door Frame	Wood	White	0	Negative	
Foundry (#1)	Foundry Main area	Column	Metal	Blue	0	Negative	
Foundry (#1)	Foundry Main area	Stair Runner	Metal	Yellow	1.62	Positive	
Foundry (#1)	Foundry Main area	Stair Banister	Metal	Yellow	0.77	Negative	
Foundry (#1)	Foundry Main area	Stair Tread	Metal	Yellow	0.39	Negative	
Foundry (#1)	Foundry Main area	Slag Cart Bin 1	Metal	White	0	Negative	
Foundry (#1)	Foundry Main area	Slag Cart Bin 2	Metal	White	0	Negative	
Foundry (#1)	Foundry Main area	Slag bin area step	Concrete	Yellow	0	Negative	
Foundry (#1)	Foundry Main area	Pipe	Metal	Yellow	0	Negative	
Foundry (#1)	Foundry Main area	Door frame	Metal	Yellow	0.89	Negative	
Foundry (#1)	Foundry Main area	Slag bin ladder	Metal	Yellow	0.78	Negative	
Foundry (#1)	Slag Cart breaker office	W1	CMU	Red	0	Negative	
Foundry (#1)	Slag Cart breaker office	W1	CMU	Blue	0	Negative	
Foundry (#1)	Slag Cart breaker office	W1	CMU	White	0	Negative	
Foundry (#1)	Slag Cart breaker office	W2	CMU	Red	0	Negative	
Foundry (#1)	Slag Cart breaker office	W2	CMU	Blue	0	Negative	
Foundry (#1)	Slag Cart breaker office	W2	CMU	White	0	Negative	
Foundry (#1)	Slag Cart breaker office	W3	CMU	Red	0	Negative	
Foundry (#1)	Slag Cart breaker office	W3	CMU	Blue	0	Negative	
Foundry (#1)	Slag Cart breaker office	W3	CMU	White	0	Negative	
Foundry (#1)	Slag Cart breaker office	W4	CMU	Red	0	Negative	
Foundry (#1)	Slag Cart breaker office	W4	CMU	Blue	0	Negative	
Foundry (#1)	Slag Cart breaker office	W4	CMU	White	0	Negative	
Foundry (#1)	Slag Cart breaker office	Door Frame	Metal	Blue	0	Negative	
Foundry (#1)	Slag Cart breaker office	Door	Metal	Grey	0	Negative	
Foundry (#1)	Slag Cart breaker office	Window Frame	Wood	Red	0	Negative	

DOT - Frog, Switch, and Mfg - Lead-Based Paint Assessment

Lead-Based Paint - XRF Analyzer Results							
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<b>Viva EHS Project #:</b>	<b>250640</b>						
<b>Inspection Dates:</b>	<b>9/15/25 - 9/18/2025</b>						
<b>Risk Assessor's Name and License #:</b>	<b>Jared Whack - 060470</b>						
<b>Building</b>	<b>Space</b>	<b>Component</b>	<b>Substrate</b>	<b>Paint Color</b>	<b>XRF Reading</b>	<b>XRF Positive/ Negative</b>	<b>Comments</b>
Foundry (#1)	Slag Cart breaker office	Ceiling	Metal	Brown	0.02	Negative	
Foundry (#1)	Foundry Breaker Room	W1	CMU	Red	0	Negative	
Foundry (#1)	Foundry Breaker Room	W1	CMU	White	0	Negative	
Foundry (#1)	Foundry Breaker Room	W1	CMU	Blue	0	Negative	
Foundry (#1)	Foundry Breaker Room	W2	CMU	Red	0	Negative	
Foundry (#1)	Foundry Breaker Room	W2	CMU	White	0	Negative	
Foundry (#1)	Foundry Breaker Room	W2	CMU	Blue	0	Negative	
Foundry (#1)	Foundry Breaker Room	W3	CMU	Red	0	Negative	
Foundry (#1)	Foundry Breaker Room	W3	CMU	White	0	Negative	
Foundry (#1)	Foundry Breaker Room	W3	CMU	Blue	0	Negative	
Foundry (#1)	Foundry Breaker Room	W4	CMU	Red	0	Negative	
Foundry (#1)	Foundry Breaker Room	W4	CMU	White	0	Negative	
Foundry (#1)	Foundry Breaker Room	W4	CMU	Blue	0	Negative	
Foundry (#1)	Foundry Breaker Room	Door Casing	Metal	Blue	0	Negative	
Foundry (#1)	Foundry Breaker Room	Ceiling	Wood	White	0	Negative	
Foundry (#1)	Office	Door Casing	Metal	Grey	0	Negative	
Foundry (#1)	Small tank area	Small pressure tank	Metal	White	0	Negative	
Foundry (#1)	Large Storage area Near Men's Bathroom	W1	CMU	White	0	Negative	
Foundry (#1)	Large Storage area Near Men's Bathroom	W2	CMU	White	0	Negative	
Foundry (#1)	Large Storage area Near Men's Bathroom	W3	CMU	White	0	Negative	
Foundry (#1)	Large Storage area Near Men's Bathroom	W4	CMU	White	0	Negative	
Foundry (#1)	Large Storage area Near Men's Bathroom	Column	Metal	White	0	Negative	
Foundry (#1)	Large Storage area Near Men's Bathroom	Parking Pylon Concrete	Concrete	Yellow	0	Negative	
Foundry (#1)	Large Storage area Near Men's Bathroom	Column	Metal	Brown	0.32	Negative	
Foundry (#1)	Men's Bathroom	W1	CMU	Blue	0	Negative	
Foundry (#1)	Men's Bathroom	W2	CMU	Blue	0	Negative	
Foundry (#1)	Men's Bathroom	W3	CMU	Blue	0	Negative	
Foundry (#1)	Men's Bathroom	W4	CMU	Blue	0	Negative	
Foundry (#1)	Men's Bathroom	Floor	Concrete	Grey	0	Negative	

DOT - Frog, Switch, and Mfg - Lead-Based Paint Assessment

Lead-Based Paint - XRF Analyzer Results							
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<b>Project Site:</b>	<b>Former Frog, Switch, Manufacturing, &amp; Co., 600 East High Street, Carlisle, PA</b>						
<b>Viva EHS Project #:</b>	<b>250640</b>						
<b>Inspection Dates:</b>	<b>9/15/25 - 9/18/2025</b>						
<b>Risk Assessor's Name and License #:</b>	<b>Jared Whack - 060470</b>						
Building	Space	Component	Substrate	Paint Color	XRF Reading	XRF Positive/ Negative	Comments
Foundry (#1)	Men's Bathroom	Stall Divider	Metal	Blue	0	Negative	
Foundry (#1)	Men's Bathroom	Shower Divider	CMU	Blue	0	Negative	
Foundry (#1)	Men's Bathroom	Column	Metal	Blue	0	Negative	
Foundry (#1)	Men's Bathroom	Door	Metal	Blue	0	Negative	
Foundry (#1)	Men's Bathroom	Door Casing	Metal	Blue	0	Negative	
Foundry (#1)	Men's Bathroom	Corrugated Ceiling	Metal	Brown	1.46	Positive	
Foundry (#1)	Men's Bathroom	Window Casing	Wood	Blue	0	Negative	
Foundry (#1)	Men's Bathroom Locker	W1	CMU	Blue	0	Negative	
Foundry (#1)	Men's Bathroom Locker	W2	CMU	Blue	0	Negative	
Foundry (#1)	Men's Bathroom Locker	W3	CMU	Blue	0	Negative	
Foundry (#1)	Men's Bathroom Locker	W4	CMU	Blue	0	Negative	
Foundry (#1)	Men's Bathroom Locker	Floor	Concrete	Grey	0	Negative	
Foundry (#1)	Men's Bathroom Locker	Bench	Wood	Blue	0	Negative	
Foundry (#1)	Men's Bathroom Locker	Ceiling	Drywall	White	0	Negative	
Foundry (#1)	Men's Bathroom Locker	Door	Metal	Blue	0	Negative	
Foundry (#1)	Men's Bathroom Locker	Door Casing	Metal	Blue	0	Negative	
Foundry (#1)	Men's Bathroom Locker	Saloon Doors	Wood	Blue	0	Negative	
Foundry (#1)	Men's Bathroom Locker Showers	W1	CMU	Grey	0	Negative	
Foundry (#1)	Men's Bathroom Locker Showers	W2	CMU	Grey	0	Negative	
Foundry (#1)	Men's Bathroom Locker Showers	W3	CMU	Grey	0	Negative	
Foundry (#1)	Men's Bathroom Locker Showers	W4	CMU	Grey	0	Negative	
Foundry (#1)	Men's Bathroom Locker Showers	Ceiling	Drywall	White	0	Negative	
Foundry (#1)	Men's Bathroom Locker Showers	Floor	Concrete	Grey	0	Negative	
Foundry (#1)	Men's Bathroom Locker Showers	Pipe	Metal	Grey	0	Negative	
Foundry (#1)	Men's Bathroom Locker Showers	Bench	Wood	Blue	0	Negative	
Foundry (#1)	Men's Bathroom Locker Showers	Shower Lip	Concrete	Grey	0	Negative	
Foundry (#1)	Dust Shoot exterior area	Circulator	Metal	White	0	Negative	
Foundry (#1)	Dust Shoot exterior area	Column	Metal	White	0	Negative	
Foundry (#1)	Dust Shoot exterior area	Shed	Metal	White	0	Negative	
Foundry (#1)	Dust Shoot exterior area	Door Casing	Metal	Blue	0	Negative	
Foundry (#1)	Dust Shoot exterior area	Door	Metal	White	0	Negative	
Foundry (#1)	Dust Shoot exterior area	Shoot	Metal	Blue	0	Negative	
Foundry (#1)	Large storage area generator room	W1	CMU	White	0	Negative	
Foundry (#1)	Large storage area generator room	W2	CMU	White	0	Negative	

DOT - Frog, Switch, and Mfg - Lead-Based Paint Assessment

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<b>Viva EHS Project #:</b>	250640						
<b>Inspection Dates:</b>	9/15/25 - 9/18/2025						
<b>Risk Assessor's Name and License #:</b>	Jared Whack - 060470						
Building	Space	Component	Substrate	Paint Color	XRF Reading	XRF Positive/ Negative	Comments
Foundry (#1)	Large storage area generator room	W3	CMU	White	0	Negative	
Foundry (#1)	Large storage area generator room	W4	CMU	White	0	Negative	
Foundry (#1)	Large storage area generator room	Door Frame	Metal	White	0	Negative	
Foundry (#1)	Large storage area generator room	Ladder	Metal	Yellow	0	Negative	
Foundry (#1)	Record Storage Archive	W1	CMU	White	0	Negative	
Foundry (#1)	Record Storage Archive	W2	CMU	White	0	Negative	
Foundry (#1)	Record Storage Archive	W3	CMU	White	0	Negative	
Foundry (#1)	Record Storage Archive	W4	CMU	White	0	Negative	
Foundry (#1)	Record Storage Archive	Door Frame	Metal	White	0	Negative	
Foundry (#1)	Record Storage Archive	Door	Metal	White	0	Negative	
Foundry (#1)	Record Storage Storage room	W2	CMU	White	0	Negative	
Foundry (#1)	Record Storage Storage room	W3	CMU	White	0	Negative	
Foundry (#1)	Record Storage Storage room	W4	CMU	White	0	Negative	
Foundry (#1)	Record Storage Hallway	W2	CMU	White	0	Negative	
Foundry (#1)	Record Storage Hallway	W4	CMU	White	0	Negative	
Building 20	Building 20	Door	Wood	White	1.49	Positive	
Building 20	Building 20	Strut	Wood	White	1.11	Positive	
Building 20	Building 20	Roof Support	Wood	White	1.39	Positive	
Building 24/27 Pattern shop	Main area	Bollard	Concrete	Yellow	4.72	Positive	
Building 24/27 Pattern shop	Main area	Support Column	Metal	Brown	0	Negative	
Building 24/27 Pattern shop	Main area	Column	Metal	Brown	0.17	Negative	
Building 24/27 Pattern shop	Main area	Door Casing	Metal	Black	0.29	Negative	
Building 24/27 Pattern shop	Main area	Door	Metal	Grey	0.02	Negative	
Building 24/27 Pattern shop	Main area	Door	Metal	Black	0.02	Negative	
Building 24/27 Pattern shop	Main area	Door Casing	Metal	White	0	Negative	
Building 24/27 Pattern shop	Main area	W2	CMU	White	0	Negative	
Building 24/27 Pattern shop	Main area	Door	Metal	White	0	Negative	
Building 24/27 Pattern shop	Mens bathroom	Door	Metal	Blue	0	Negative	
Building 24/27 Pattern shop	Mens bathroom	Door Casing	Metal	Blue	0	Negative	
Building 24/27 Pattern shop	Mens bathroom	W1	CMU	Blue	0	Negative	
Building 24/27 Pattern shop	Mens bathroom	W2	CMU	Blue	0	Negative	
Building 24/27 Pattern shop	Mens bathroom	W3	CMU	Blue	0	Negative	

DOT - Frog, Switch, and Mfg - Lead-Based Paint Assessment

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<b>Inspection Dates:</b>	9/15/25 - 9/18/2025						
<b>Risk Assessor's Name and License #:</b>	Jared Whack - 060470						
Building	Space	Component	Substrate	Paint Color	XRF Reading	XRF Positive/ Negative	Comments
Building 24/27 Pattern shop	Mens bathroom	W3	Concrete	Blue	0	Negative	
Building 24/27 Pattern shop	Mens bathroom	W4	CMU	Blue	0	Negative	
Building 24/27 Pattern shop	Mens bathroom	Floor	Concrete	Blue	0	Negative	
Building 24/27 Pattern shop	Office	Door Casing	Metal	Brown	0	Negative	
Building 24/27 Pattern shop	Office	Door	Metal	Brown	0	Negative	
Building 24/27 Pattern shop	Office	W1	CMU	Tan	0	Negative	
Building 24/27 Pattern shop	Office	W2	CMU	Tan	0	Negative	
Building 24/27 Pattern shop	Office	W3	Drywall	Tan	0	Negative	
Building 24/27 Pattern shop	Office	W4	Drywall	Tan	0	Negative	
Building 5 Maintenance Shop Outdoor Storage	Building 5 Maintenance Shop Outdoor Storage	Shutter Door Casing	Wood	White	0	Negative	
Building 5 Maintenance Shop Outdoor Storage	Building 5 Maintenance Shop Outdoor Storage	Shutter Door	Metal	White	0	Negative	
Building 5 Maintenance Shop Outdoor Storage	Building 5 Maintenance Shop Outdoor Storage	Support Column	Metal	Brown	0	Negative	
Building 5 Maintenance Shop Outdoor Storage	Building 5 Maintenance Shop Outdoor Storage	Support Column	Metal	Yellow	1.45	Positive	
Building 5 Maintenance Shop	Exterior	Wall	CMU	White	0	Negative	
Building 5 Maintenance Shop	Exterior	Door	Wood	Green	0	Negative	
Building 5 Maintenance Shop	Exterior	Door Frame	Wood	Green	0.07	Negative	
Building 5 Maintenance Shop	Exterior	Wall	CMU	Yellow	0.15	Negative	
Building 5 Maintenance Shop	Exterior	Garage Sliding Door	Wood	Green	1.17	Positive	
Building 5 Maintenance Shop	Building 5 Maintenance Shop	Garage Door frame	Metal	Yellow	0.08	Negative	
Building 5 Maintenance Shop	Building 5 Maintenance Shop	Oil Tank	Metal	Red	0	Negative	
Building 5 Maintenance Shop	Building 5 Maintenance Shop	Oil Tank Stand	Metal	Red	0	Negative	
Building 5 Maintenance Shop	Building 5 Maintenance Shop	W1	Metal	White	0.03	Negative	
Building 5 Maintenance Shop	Building 5 Maintenance Shop	W1	Brick	White	0.08	Negative	
Building 5 Maintenance Shop	Building 5 Maintenance Shop	W2	CMU	White	0	Negative	
Building 5 Maintenance Shop	Building 5 Maintenance Shop	W2	CMU	Brown	0	Negative	
Building 5 Maintenance Shop	Building 5 Maintenance Shop	W2	Brick	White	0	Negative	
Building 5 Maintenance Shop	Building 5 Maintenance Shop	W3	Wood	White	0	Negative	
Building 5 Maintenance Shop	Building 5 Maintenance Shop	W4	Brick	White	0	Negative	
Building 5 Maintenance Shop	Building 5 Maintenance Shop	W4	CMU	White	0	Negative	
Building 5 Maintenance Shop	Building 5 Maintenance Shop	Support column	Metal	Yellow	2.98	Positive	

DOT - Frog, Switch, and Mfg - Lead-Based Paint Assessment

Lead-Based Paint - XRF Analyzer Results							
<b>Client:</b>	Department of Transportation						
<b>Project Site:</b>	Former Frog, Switch, Manufacturing, & Co., 600 East High Street, Carlisle, PA						
<b>Viva EHS Project #:</b>	250640						
<b>Inspection Dates:</b>	9/15/25 - 9/18/2025						
<b>Risk Assessor's Name and License #:</b>	Jared Whack - 060470						
Building	Space	Component	Substrate	Paint Color	XRF Reading	XRF Positive/ Negative	Comments
Building 5 Maintenance Shop	Building 5 Maintenance Shop	Conduit Pipe	Metal	White	0.07	Negative	
Building 5 Maintenance Shop	Building 5 Maintenance Shop	Storage rack	Metal	White	0.01	Negative	
Building 5 Maintenance Shop	Office	Door	Metal	Grey	0	Negative	
Building 5 Maintenance Shop	Office	Door Frame	Metal	Grey	0	Negative	
Building 5 Maintenance Shop	Building 5 Maintenance Shop	Panel	Wood	White	0	Negative	
Building 5 Maintenance Shop	Building 5 Maintenance Shop	Column Base	Concrete	Grey	0	Negative	
Building 5 Maintenance Shop	Building 5 Maintenance Shop	Door Frame	Metal	Orange	0	Negative	
Building 5 Maintenance Shop	Building 5 Maintenance Shop	Door Frame	Metal	Yellow	0	Negative	
Building 5 Maintenance Shop	Building 5 Maintenance Shop	Catwalk Column	Metal	Yellow	0.67	Negative	
Building 5 Maintenance Shop	Building 5 Maintenance Shop	Catwalk Bannister	Metal	Yellow	0.79	Negative	
Building 5 Maintenance Shop	Building 5 Maintenance Shop	Catwalk	Metal	Yellow	1.26	Positive	
Building 5 Maintenance Shop	Building 5 Maintenance Shop	Catwalk	Metal	Yellow	0	Negative	
Building 5 Maintenance Shop	Building 5 Storage Hallway	W3	Drywall	White	0	Negative	
Building 5 Maintenance Shop	Building 5 Storage Hallway	W3	Drywall	Brown	0	Negative	
Building 5 Maintenance Shop	Building 5 Storage Hallway	W4	Drywall	White	0	Negative	
Building 5 Maintenance Shop	Building 5 Storage Hallway	W4	Drywall	Brown	0	Negative	
Building 5 Maintenance Shop	Building 5 Storage Hallway	Door Frame	Wood	Brown	0	Negative	
Building 5 Maintenance Shop	Building 5 Storage Hallway	Door	Wood	Brown	0	Negative	
Building 5 Maintenance Shop	Building 5 Storage Hallway	Door Frame	Metal	Grey	0	Negative	
Building 5 Maintenance Shop	Building 5 Storage Hallway	Door	Metal	Grey	0	Negative	
Building 5 Maintenance Shop	Building 5 Storage	W1	CMU	Red	0	Negative	
Building 5 Maintenance Shop	Building 5 Storage	W3	CMU	Red	0	Negative	
Building 5 Maintenance Shop	Building 5 Storage	W4	Brick	Brown	0	Negative	
Building 5 Maintenance Shop	Building 5 Storage	Door Frame	Wood	Silver	0	Negative	
Building 5 Maintenance Shop	Building 5 Storage	Door	Wood	Silver	0	Negative	
Building 5 Maintenance Shop	Building 5 Storage	Floor	Concrete	White	0	Negative	
Building 5 Maintenance Shop	Locker Room	W1	Drywall	White	0	Negative	
Building 5 Maintenance Shop	Locker Room	W2	Drywall	White	0	Negative	
Building 5 Maintenance Shop	Locker Room	W3	Brick	White	0	Negative	
Building 5 Maintenance Shop	Locker Room	W4	Drywall	White	0	Negative	
Building 5 Maintenance Shop	Locker Room	Support Column	Metal	Grey	6.46	Positive	
Building 5 Maintenance Shop	Locker Room	Support Column Base	Concrete	Grey	0	Negative	
Building 5 Maintenance Shop	Locker Room	Locker Cabinet	Wood	Blue	0	Negative	
Building 5 Maintenance Shop	Locker Room	Locker Cabinet	Metal	Blue	0	Negative	

DOT - Frog, Switch, and Mfg - Lead-Based Paint Assessment

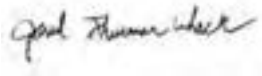
Lead-Based Paint - XRF Analyzer Results							
<b>Client:</b>	<b>Department of Transportation</b>						
<b>Project Site:</b>	<b>Former Frog, Switch, Manufacturing, &amp; Co., 600 East High Street, Carlisle, PA</b>						
<b>Viva EHS Project #:</b>	<b>250640</b>						
<b>Inspection Dates:</b>	<b>9/15/25 - 9/18/2025</b>						
<b>Risk Assessor's Name and License #:</b>	<b>Jared Whack - 060470</b>						
<b>Building</b>	<b>Space</b>	<b>Component</b>	<b>Substrate</b>	<b>Paint Color</b>	<b>XRF Reading</b>	<b>XRF Positive/ Negative</b>	<b>Comments</b>
Building 5 Maintenance Shop	Locker Room	Bench	Wood	White	0.02	Negative	
Building 5 Maintenance Shop	Locker Room	Door Frame	Metal	White	0	Negative	
Building 5 Maintenance Shop	Locker Room Bathroom	Door Frame	Wood	White	0	Negative	
Building 5 Maintenance Shop	Locker Room Bathroom	Door	Wood	Grey	0	Negative	
Building 5 Maintenance Shop	Locker Room Bathroom	W1	Drywall	White	0	Negative	
Building 5 Maintenance Shop	Locker Room Bathroom	W2	Drywall	White	0	Negative	
Building 5 Maintenance Shop	Locker Room Bathroom	W3	Drywall	White	0	Negative	
Building 5 Maintenance Shop	Locker Room Bathroom	W4	Drywall	White	0	Negative	
Building 5 Maintenance Shop	Locker Room Bathroom	Stall Divider	Wood	White	0	Negative	
Building 5 Maintenance Shop	Locker Room Bathroom	Ceiling	Drywall	White	0	Negative	
Building 5 Maintenance Shop	Safety Office	Door	Wood	White	0	Negative	
Building 5 Maintenance Shop	Safety Office	Door Frame	Wood	White	0	Negative	
Building 5 Maintenance Shop	Safety Office	Door	Wood	Brown	0	Negative	
Building 5 Maintenance Shop	Safety Office	Door Frame	Wood	Brown	0	Negative	
Building 5 Maintenance Shop	Safety Office	Ceiling	Wood	White	0	Negative	
Building 5 Maintenance Shop	Safety Office	Ceiling Lattice	Wood	White	0	Negative	
Building 5 Maintenance Shop	Safety Office	Pipe	Metal	White	0	Negative	
Building 5 Maintenance Shop	Safety Office	Baseboard	Wood	Brown	0	Negative	

## **XRF Analyzer Calibration Check Test Results**



EHS

### Calibration Check Test Form

<b>Client:</b>	United States Department of Transportation
<b>Address:</b>	Former Frog, Switch & Manufacturing Company, 600 East High Street, Carlisle, PA 17013
<b>Date:</b>	09/15/2025
<b>Project Number:</b>	250640
<b>XRF Serial #:</b>	01331
<b>Inspector:</b>	Jared Thurman Whack
<b>Inspector Signature:</b>	

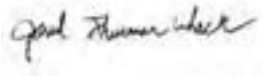
Lead Paint Standards Surface Lead mg/cm <sup>2</sup>	Start of Job 1 <sup>st</sup> Calibration Check of the Shift		2 <sup>nd</sup> Calibration Check of the Shift		3 <sup>rd</sup> Calibration Check of the Shift		4 <sup>th</sup> Calibration Check of the Shift	
	Reading #	Result	Reading #	Result	Reading #	Result	Reading #	Result
1.00 ± 0.2	1	0.83	-	1.23	-	1.32	-	-
1.00 ± 0.2	2	1.27	-	1.32	-	1.29	-	-
1.00 ± 0.2	3	1.11	-	0.93	-	1.02	-	-

Note: At least three (3) calibration samples should be taken before and after the inspection has been completed. In addition, three (3) calibration samples should be taken at four (4) hour intervals.



EHS

### Calibration Check Test Form

<b>Client:</b>	United States Department of Transportation
<b>Address:</b>	Former Frog, Switch & Manufacturing Company, 600 East High Street, Carlisle, PA 17013
<b>Date:</b>	09/16/2025
<b>Project Number:</b>	250640
<b>XRF Serial #:</b>	01331
<b>Inspector:</b>	Jared Thurman Whack
<b>Inspector Signature:</b>	

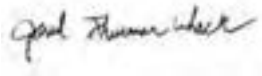
Lead Paint Standards Surface Lead mg/cm <sup>2</sup>	Start of Job 1 <sup>st</sup> Calibration Check of the Shift		2 <sup>nd</sup> Calibration Check of the Shift		3 <sup>rd</sup> Calibration Check of the Shift		4 <sup>th</sup> Calibration Check of the Shift	
	Reading #	Result	Reading #	Result	Reading #	Result	Reading #	Result
1.00 ± 0.2	1	1.06	-	1.14	-	1.14	-	-
1.00 ± 0.2	2	1.08	-	1.14	-	1.13	-	-
1.00 ± 0.2	3	1.07	-	1.17	-	1.17	-	-

Note: At least three (3) calibration samples should be taken before and after the inspection has been completed. In addition, three (3) calibration samples should be taken at four (4) hour intervals.



EHS

### Calibration Check Test Form

<b>Client:</b>	United States Department of Transportation
<b>Address:</b>	Former Frog, Switch & Manufacturing Company, 600 East High Street, Carlisle, PA 17013
<b>Date:</b>	09/17/2025
<b>Project Number:</b>	250640
<b>XRF Serial #:</b>	01331
<b>Inspector:</b>	Jared Thurman Whack
<b>Inspector Signature:</b>	

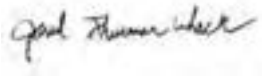
Lead Paint Standards Surface Lead mg/cm <sup>2</sup>	Start of Job 1 <sup>st</sup> Calibration Check of the Shift		2 <sup>nd</sup> Calibration Check of the Shift		3 <sup>rd</sup> Calibration Check of the Shift		4 <sup>th</sup> Calibration Check of the Shift	
	Reading #	Result	Reading #	Result	Reading #	Result	Reading #	Result
1.00 ± 0.2	1	0.81	-	1.08	-	1.18	-	-
1.00 ± 0.2	2	1.06	-	1.09	-	1.18	-	-
1.00 ± 0.2	3	1.09	-	1.09	-	1.18	-	-

Note: At least three (3) calibration samples should be taken before and after the inspection has been completed. In addition, three (3) calibration samples should be taken at four (4) hour intervals.



EHS

### Calibration Check Test Form

<b>Client:</b>	United States Department of Transportation
<b>Address:</b>	Former Frog, Switch & Manufacturing Company, 600 East High Street, Carlisle, PA 17013
<b>Date:</b>	09/18/2025
<b>Project Number:</b>	250640
<b>XRF Serial #:</b>	01331
<b>Inspector:</b>	Jared Thurman Whack
<b>Inspector Signature:</b>	

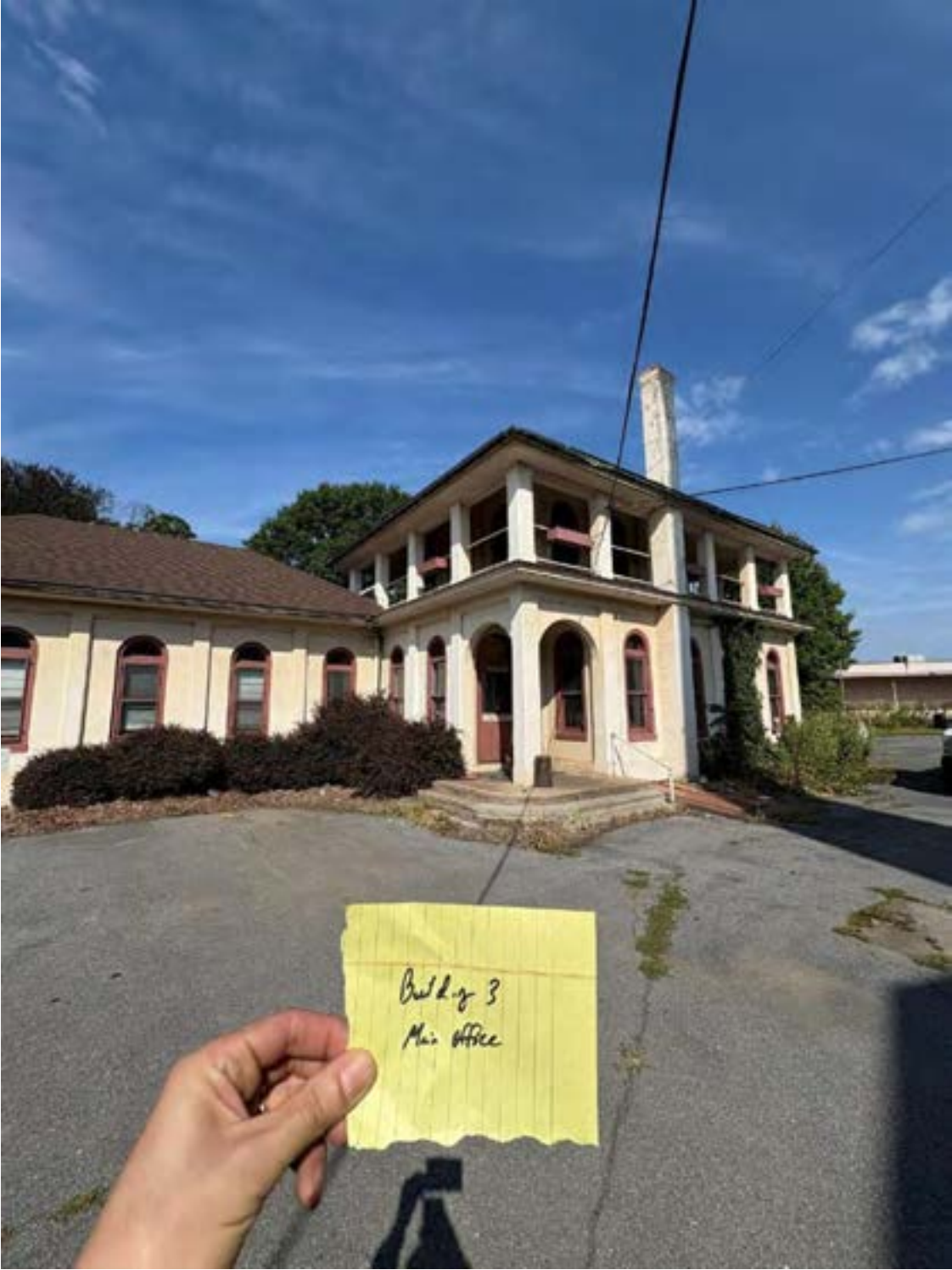
Lead Paint Standards Surface Lead mg/cm <sup>2</sup>	Start of Job 1 <sup>st</sup> Calibration Check of the Shift		2 <sup>nd</sup> Calibration Check of the Shift		3 <sup>rd</sup> Calibration Check of the Shift		4 <sup>th</sup> Calibration Check of the Shift	
	Reading #	Result	Reading #	Result	Reading #	Result	Reading #	Result
1.00 ± 0.2	1	1.17	-	1.06	-	0.47	-	-
1.00 ± 0.2	2	0.89	-	1.06	-	1.15	-	-
1.00 ± 0.2	3	0.96	-	1.09	-	0.98	-	-

Note: At least three (3) calibration samples should be taken before and after the inspection has been completed. In addition, three (3) calibration samples should be taken at four (4) hour intervals.

**Photographs of Suspect Materials Sampled for Asbestos**

**PHOTOGRAPHS**

**Building 3 – Main Office**





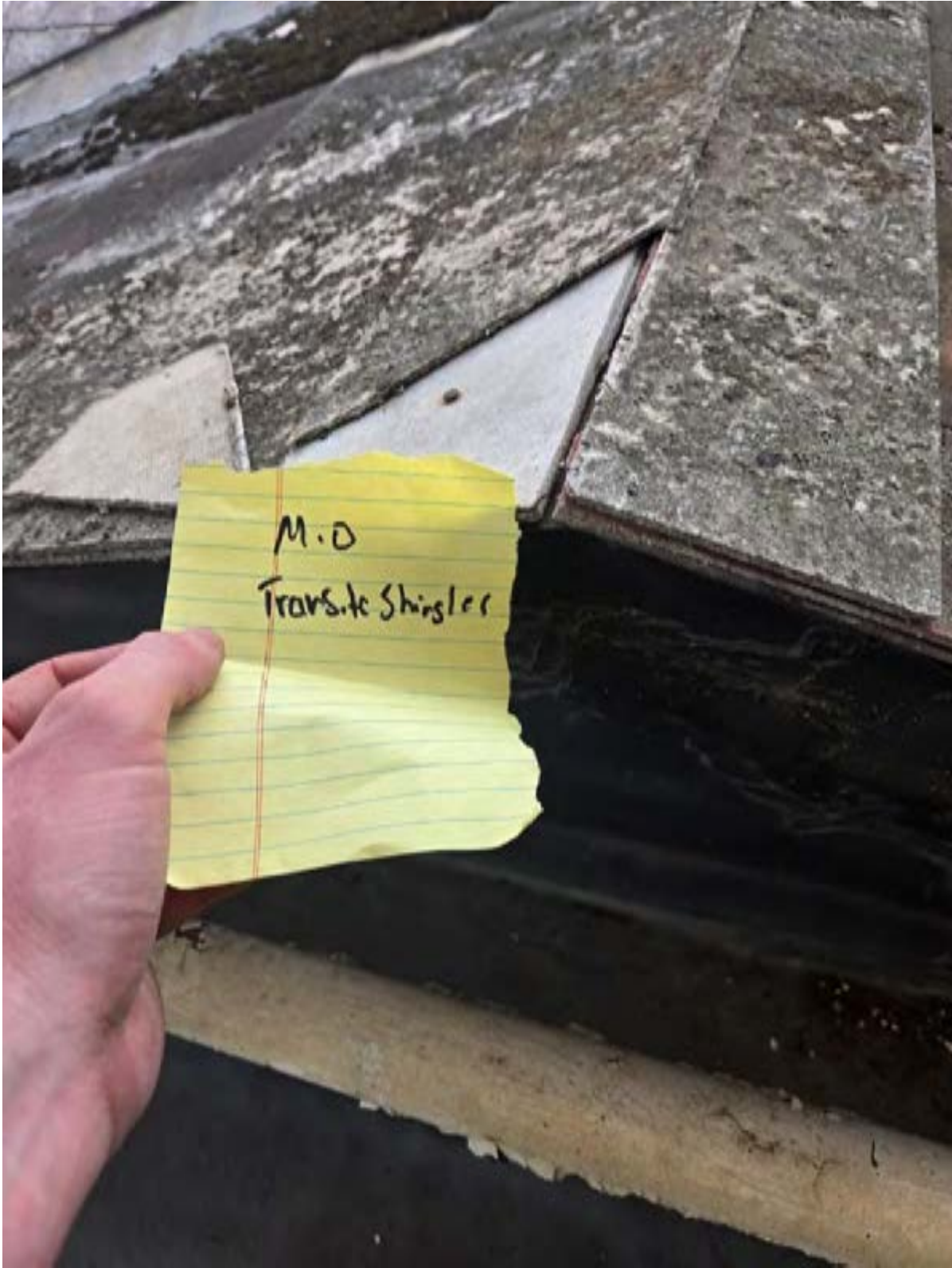


**Building 3 – Leveling Compound**

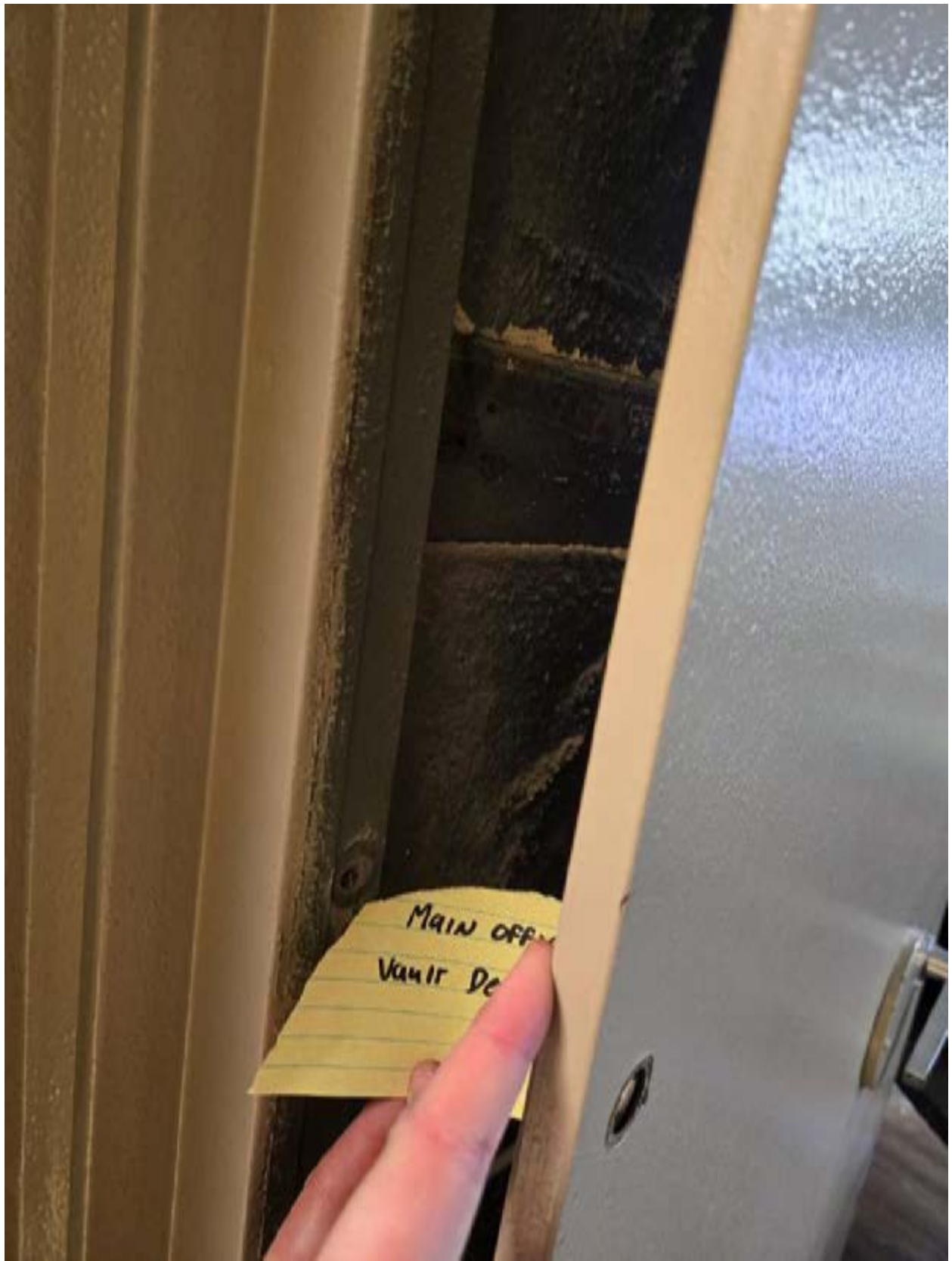
Identified as an asbestos-containing material.



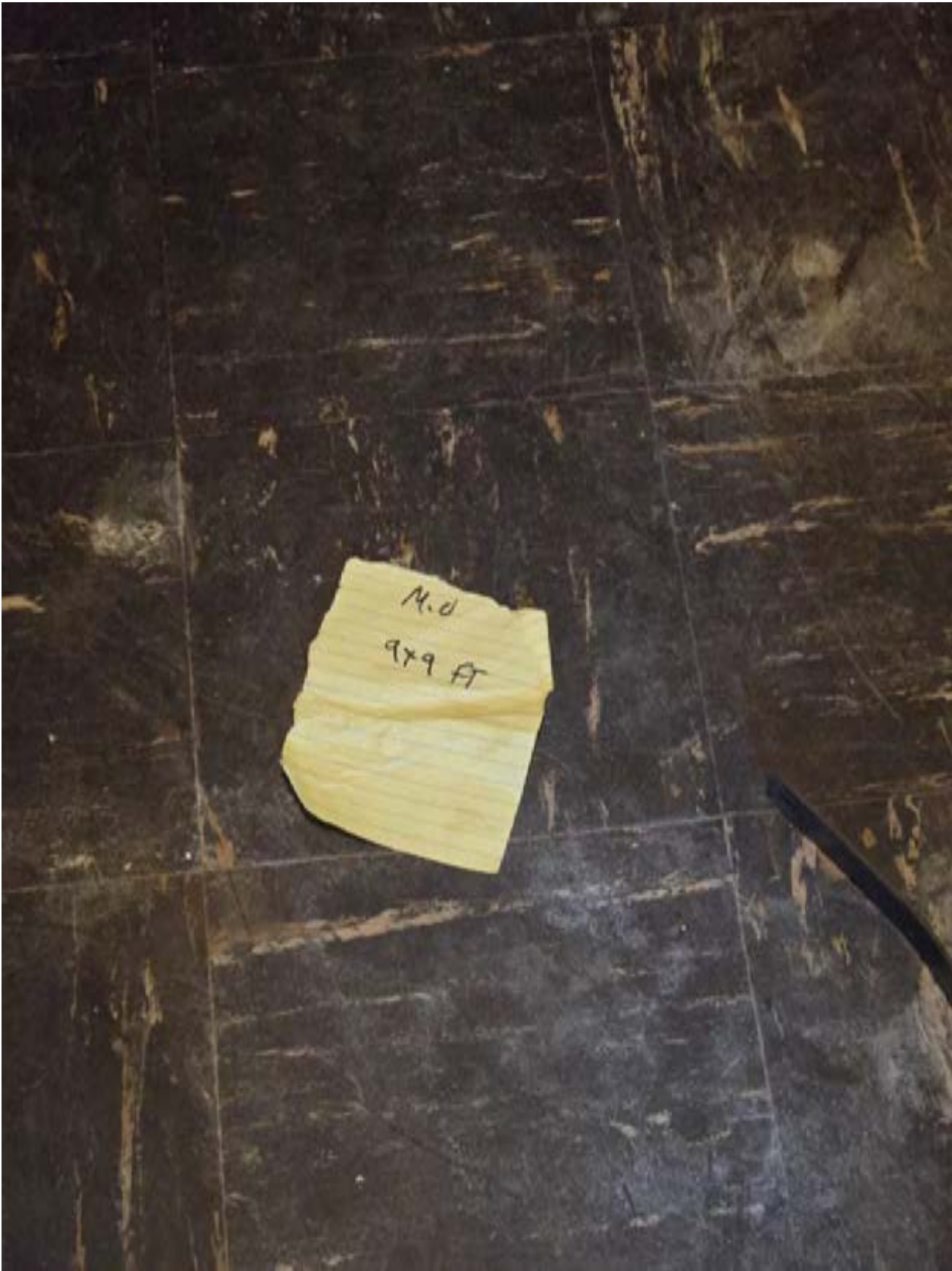
**Identified as an asbestos-containing material.**



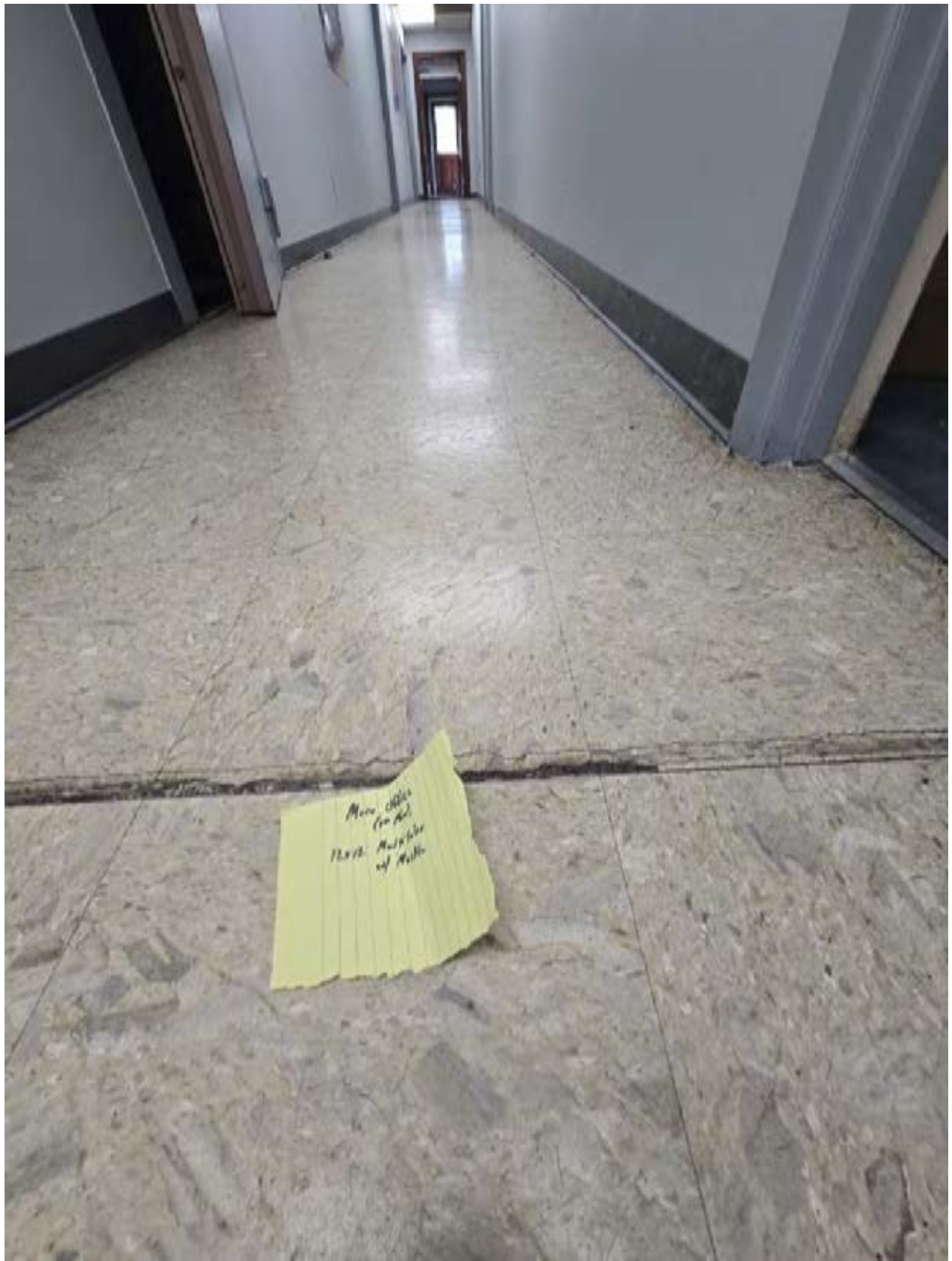




**Identified as an asbestos-containing material.**







More Office (on floor)  
1201A  
1201B



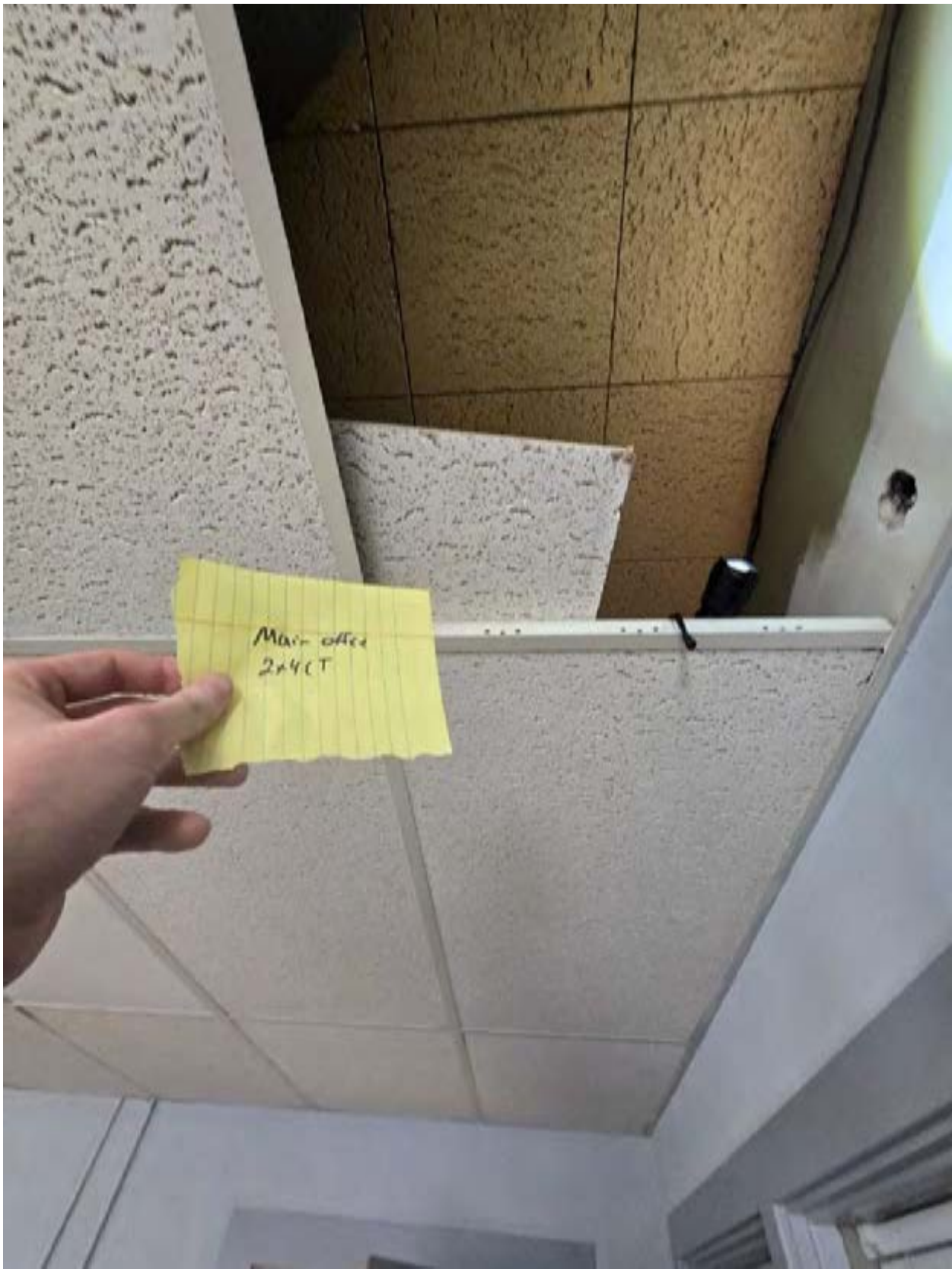


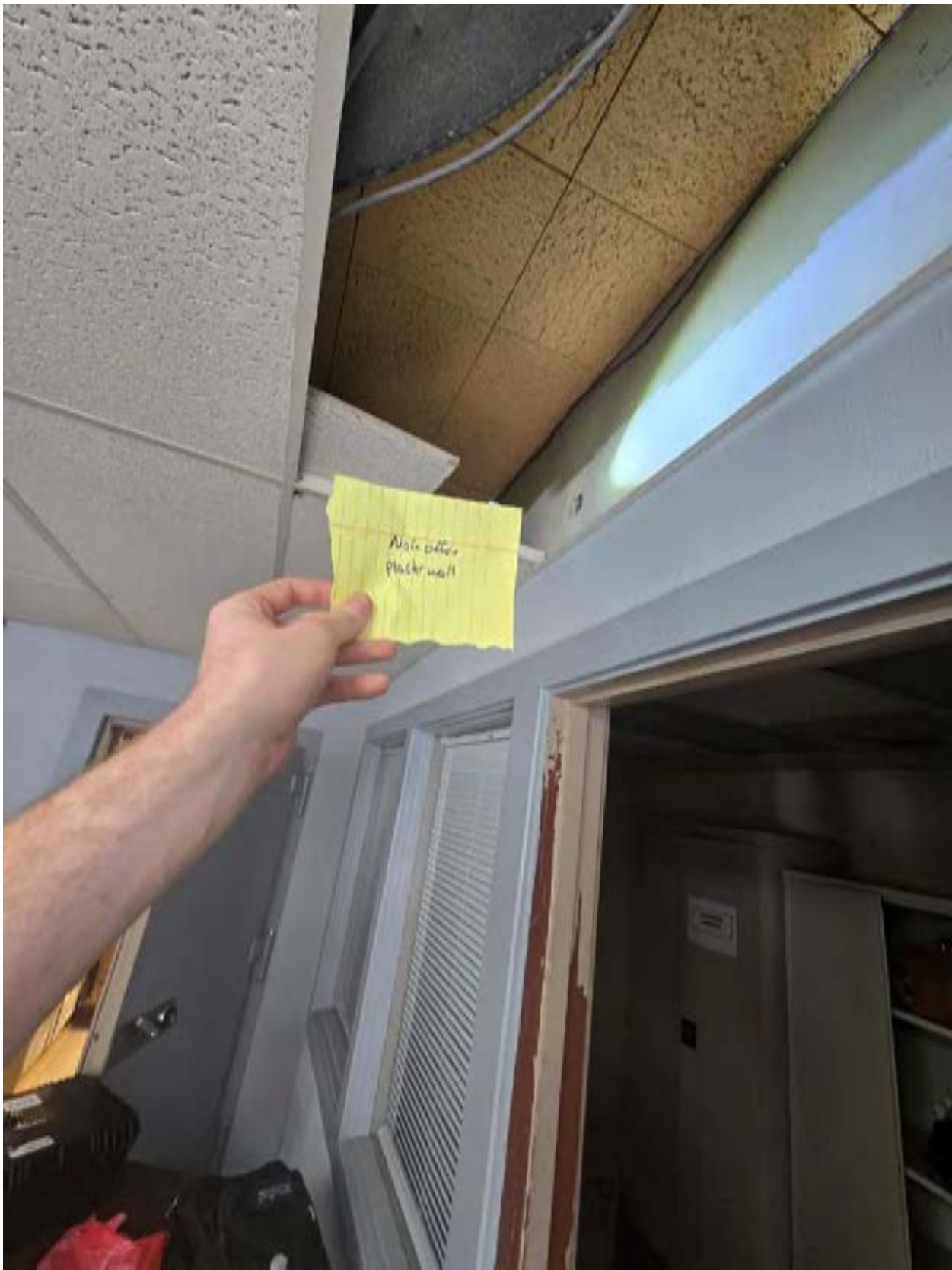
n.o

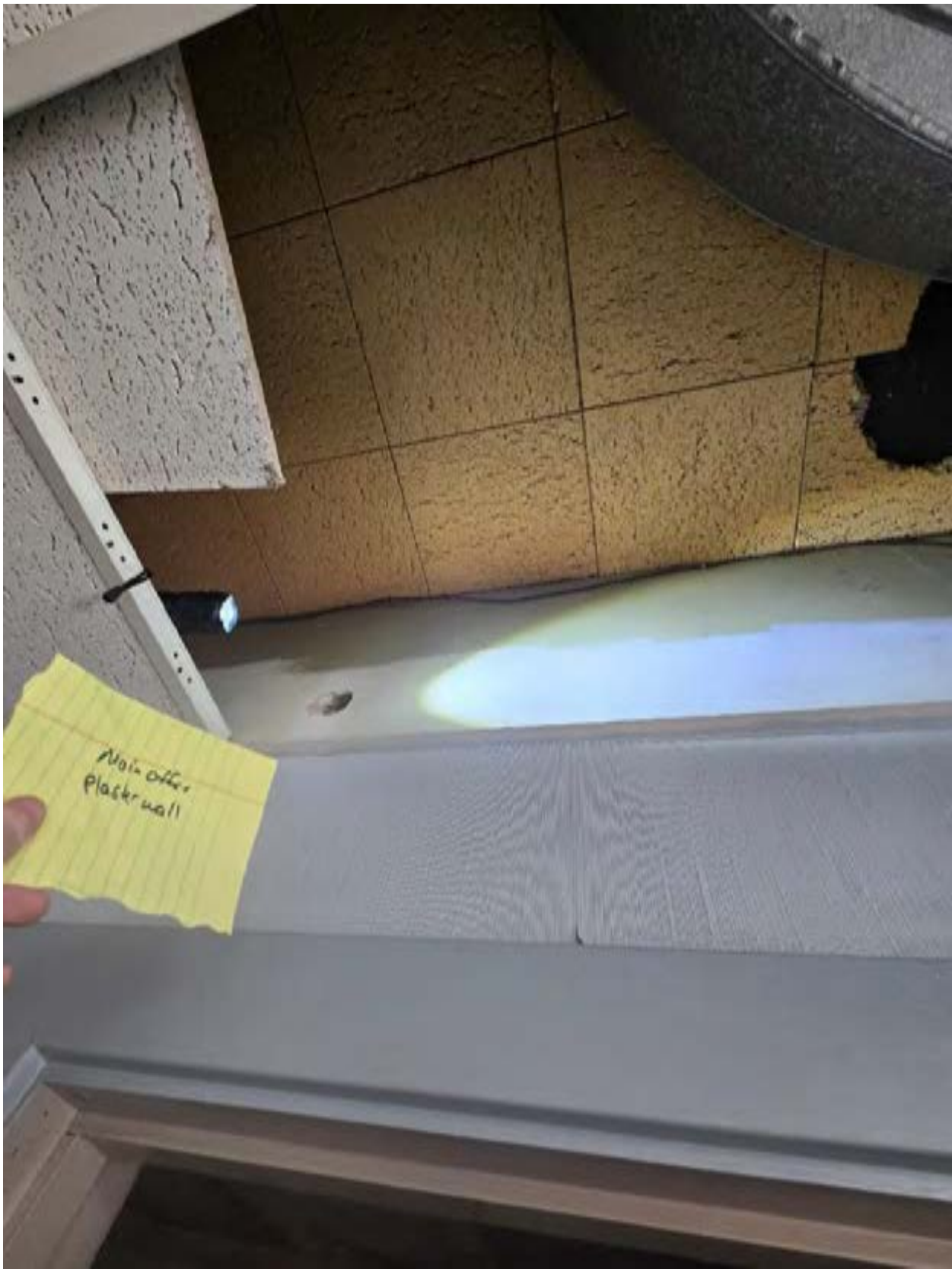
2x4 height

2x4 height















**Identified as an asbestos-containing material.**



Building 3 - Window glazing.

**Building 2 – Frog Shop**







frog door caulk

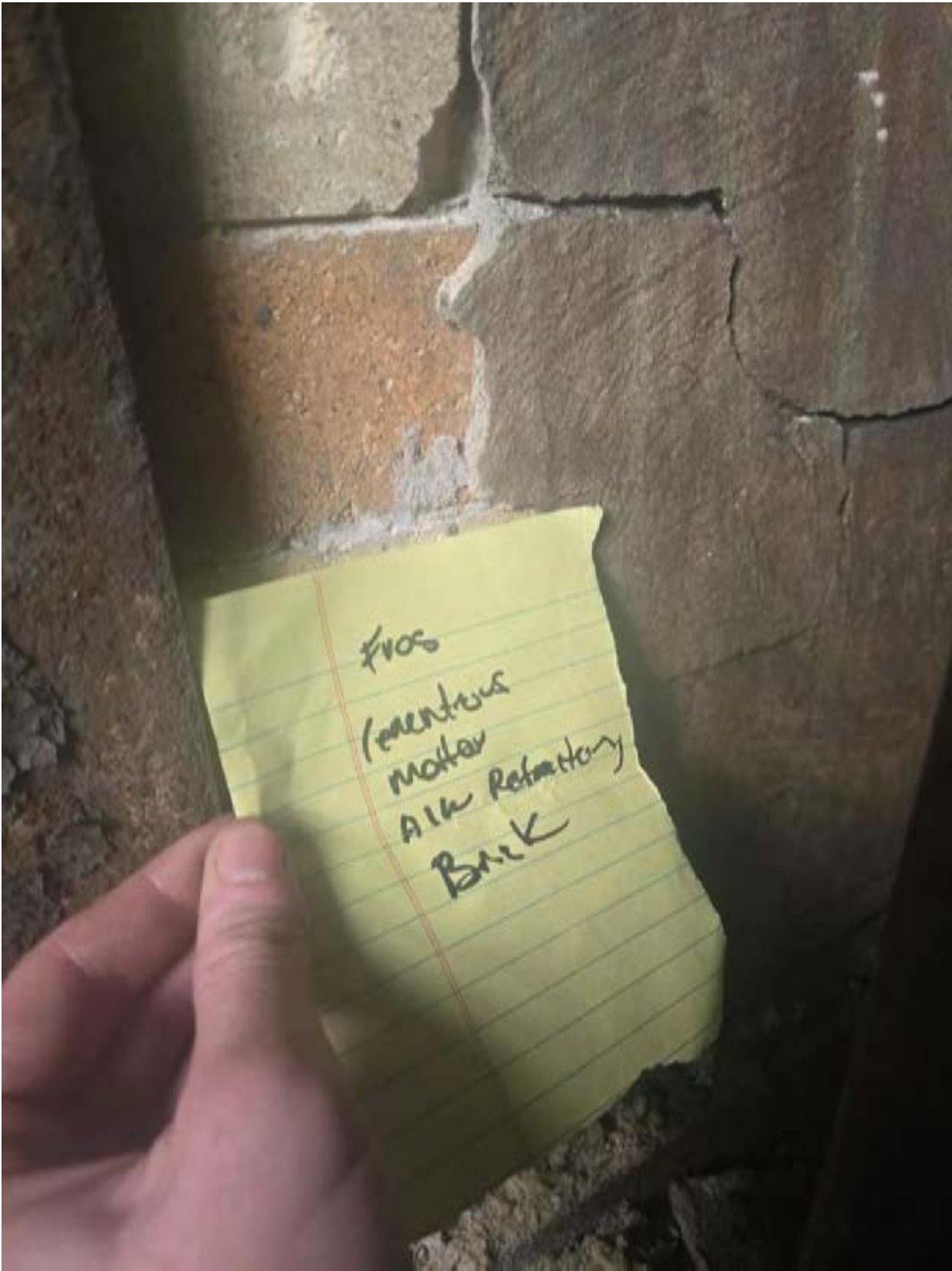


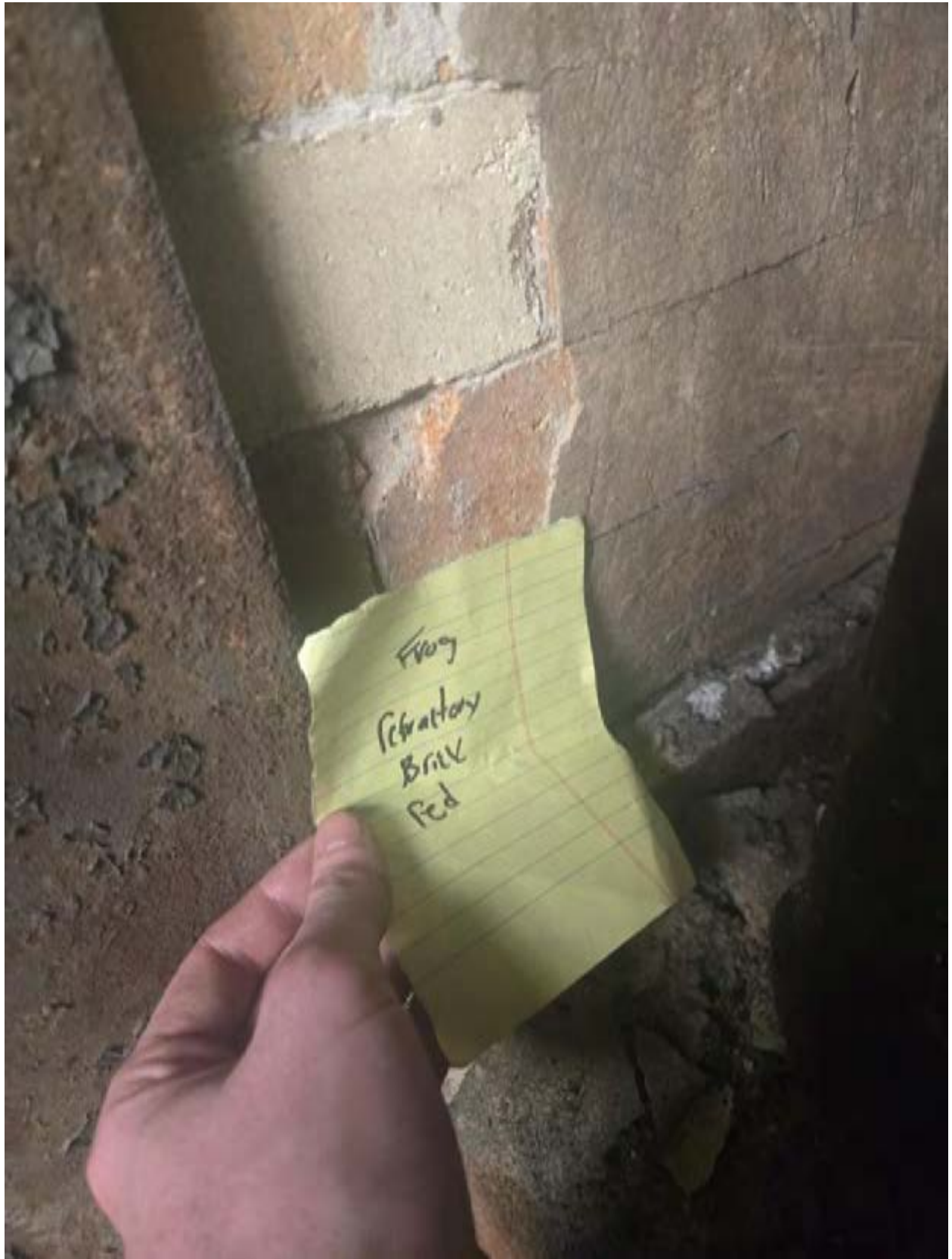
frog (roof membrane a/w A  
frame roof)

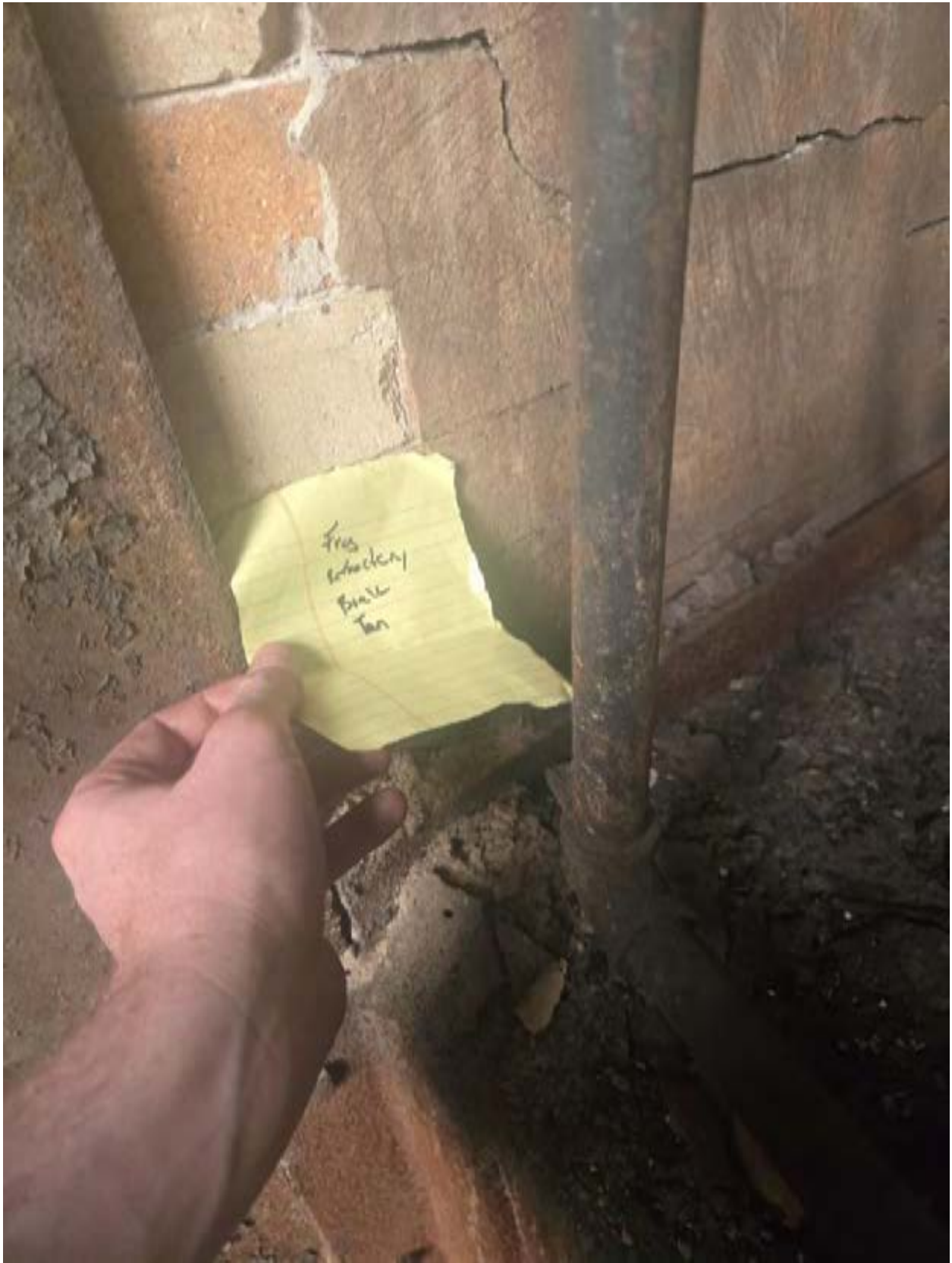


Identified as an asbestos-containing material.

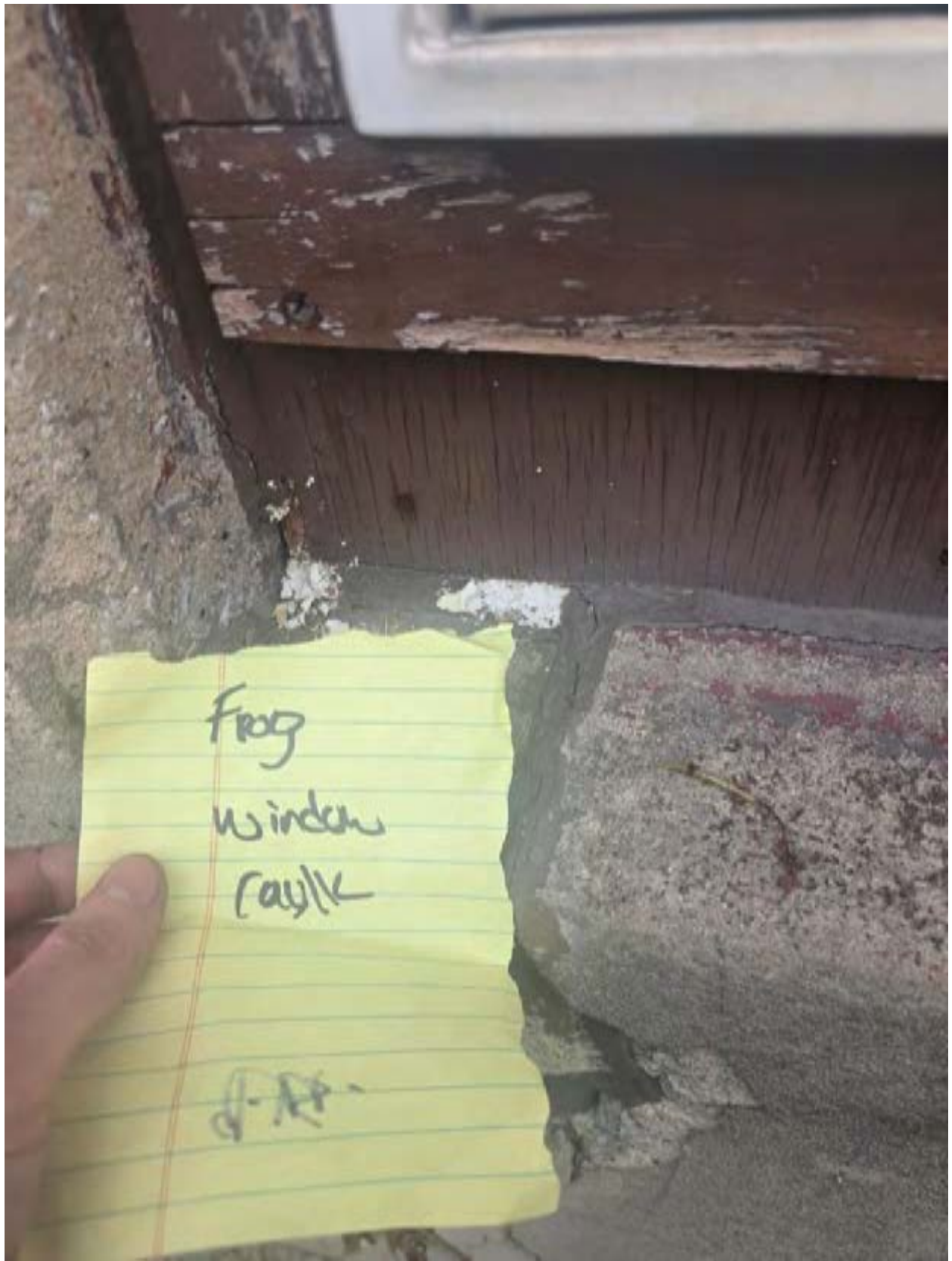






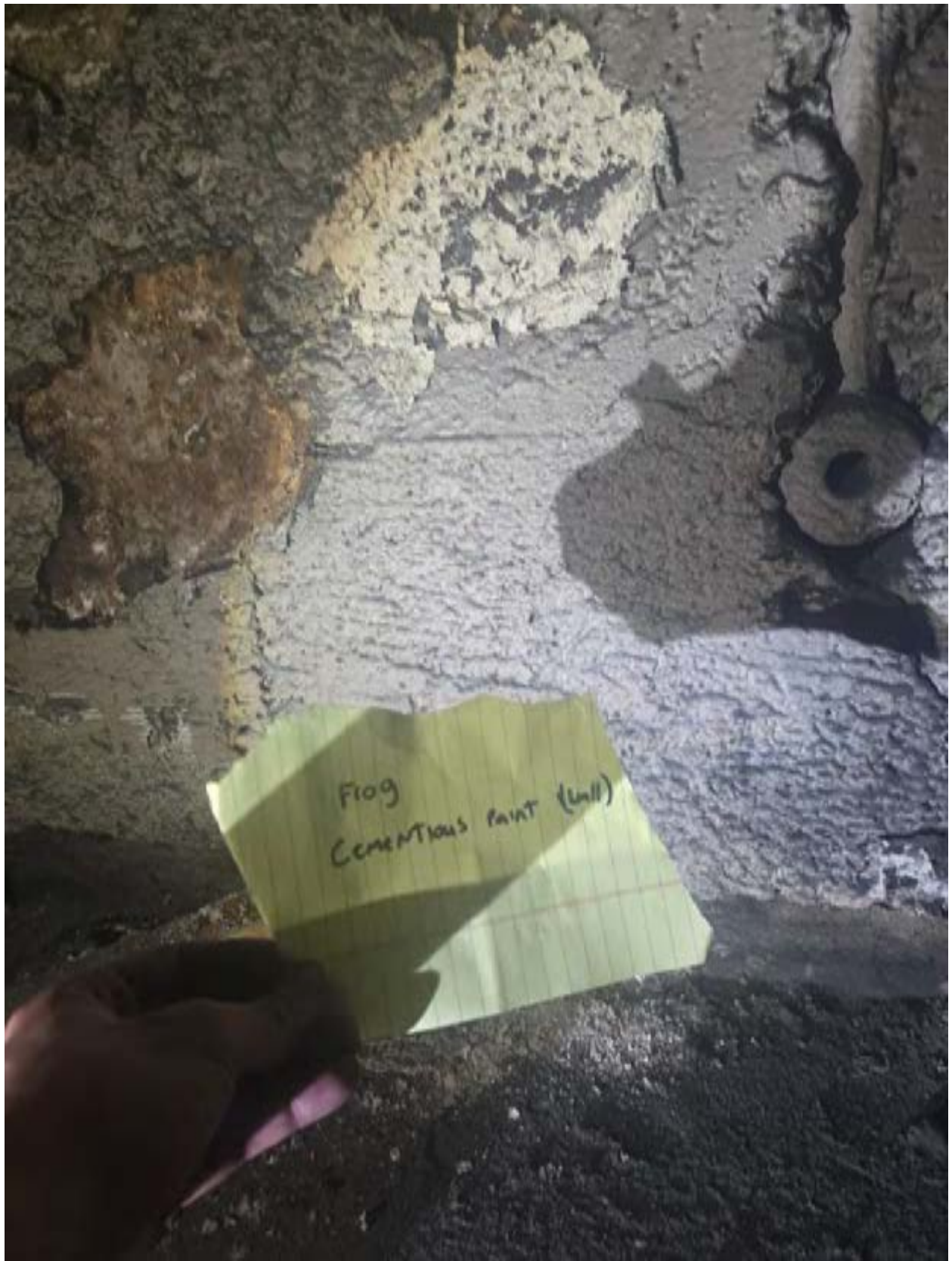






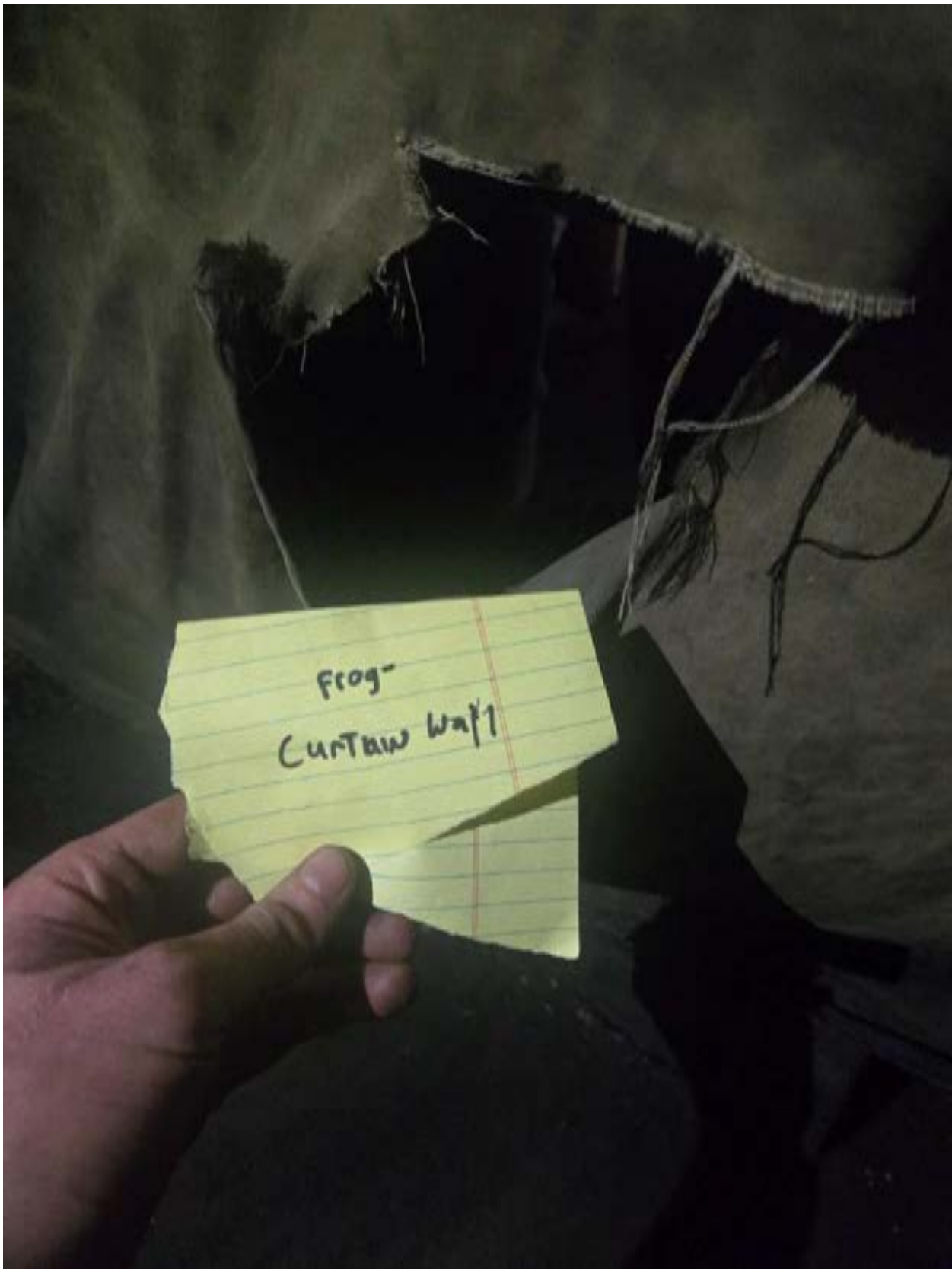


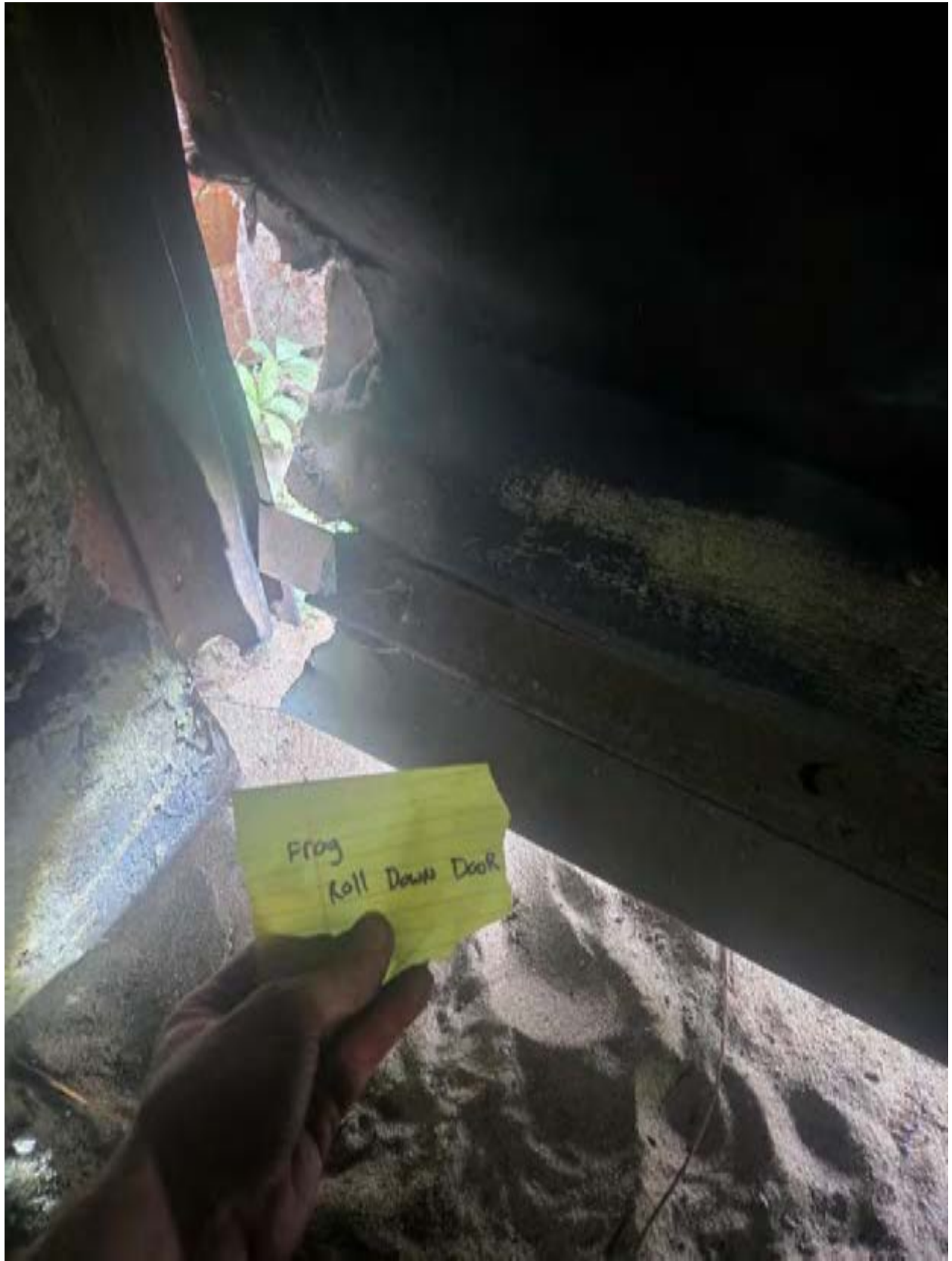
frog (caulk A/W A/C )



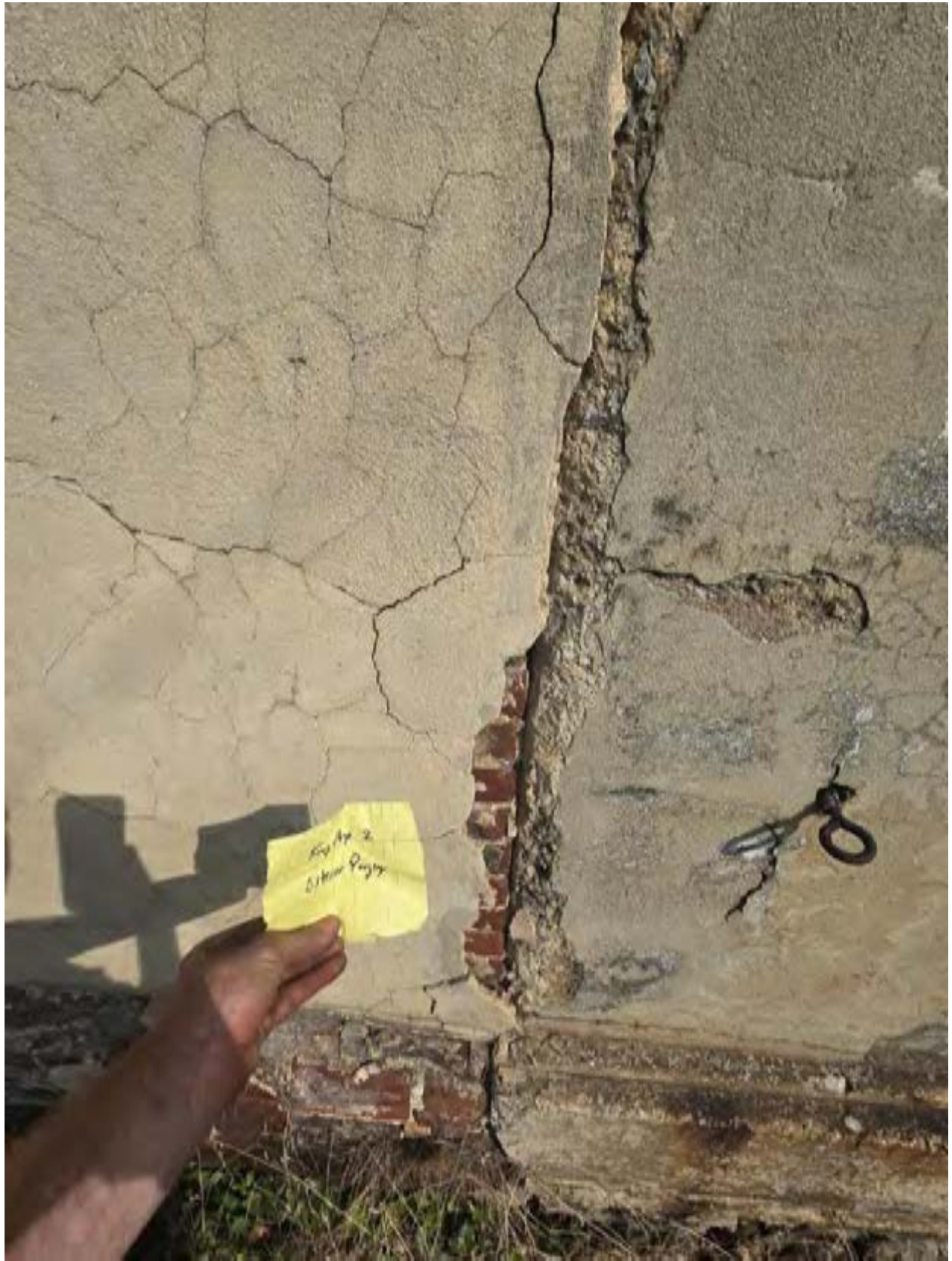
**Identified as an asbestos-containing material.**

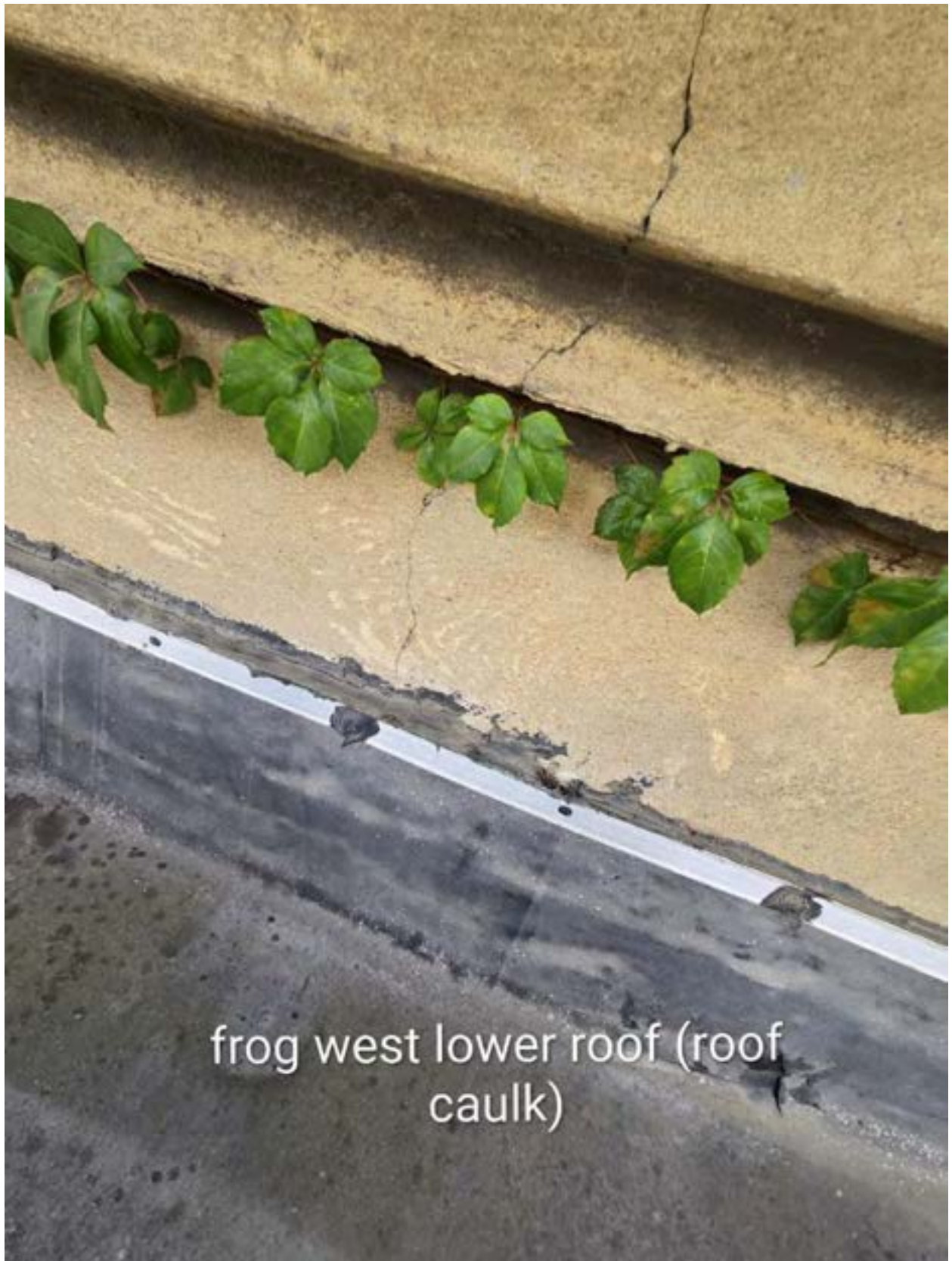












frog west lower roof (roof  
caulk)

**Building 1 – Foundry**







bldg 1 (foam pipe insulation)



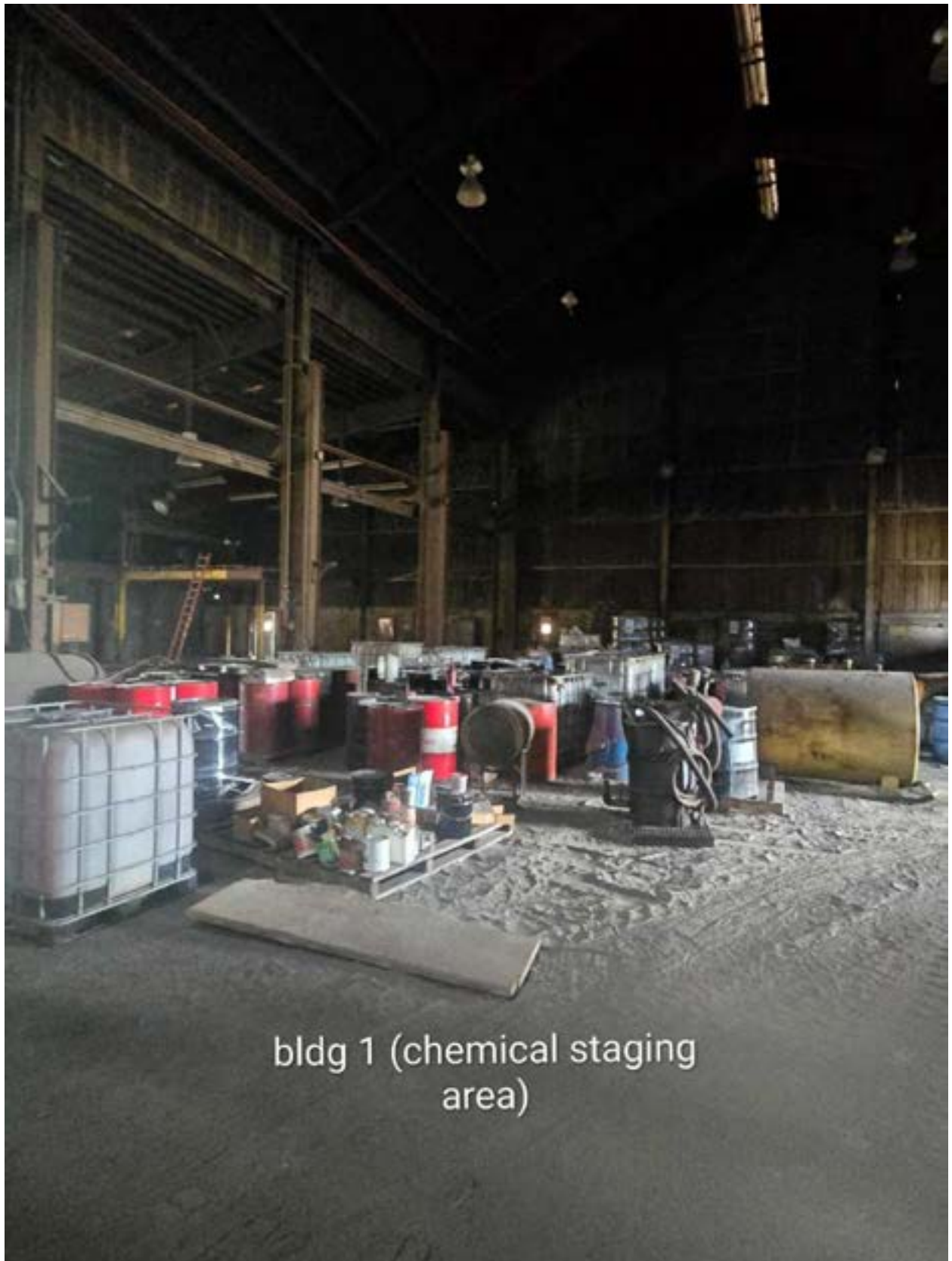
bldg 1 (vibration cloth)



bldg 1 (vibration cloth)



bldg 1 (roll down door)



bldg 1 (chemical staging area)



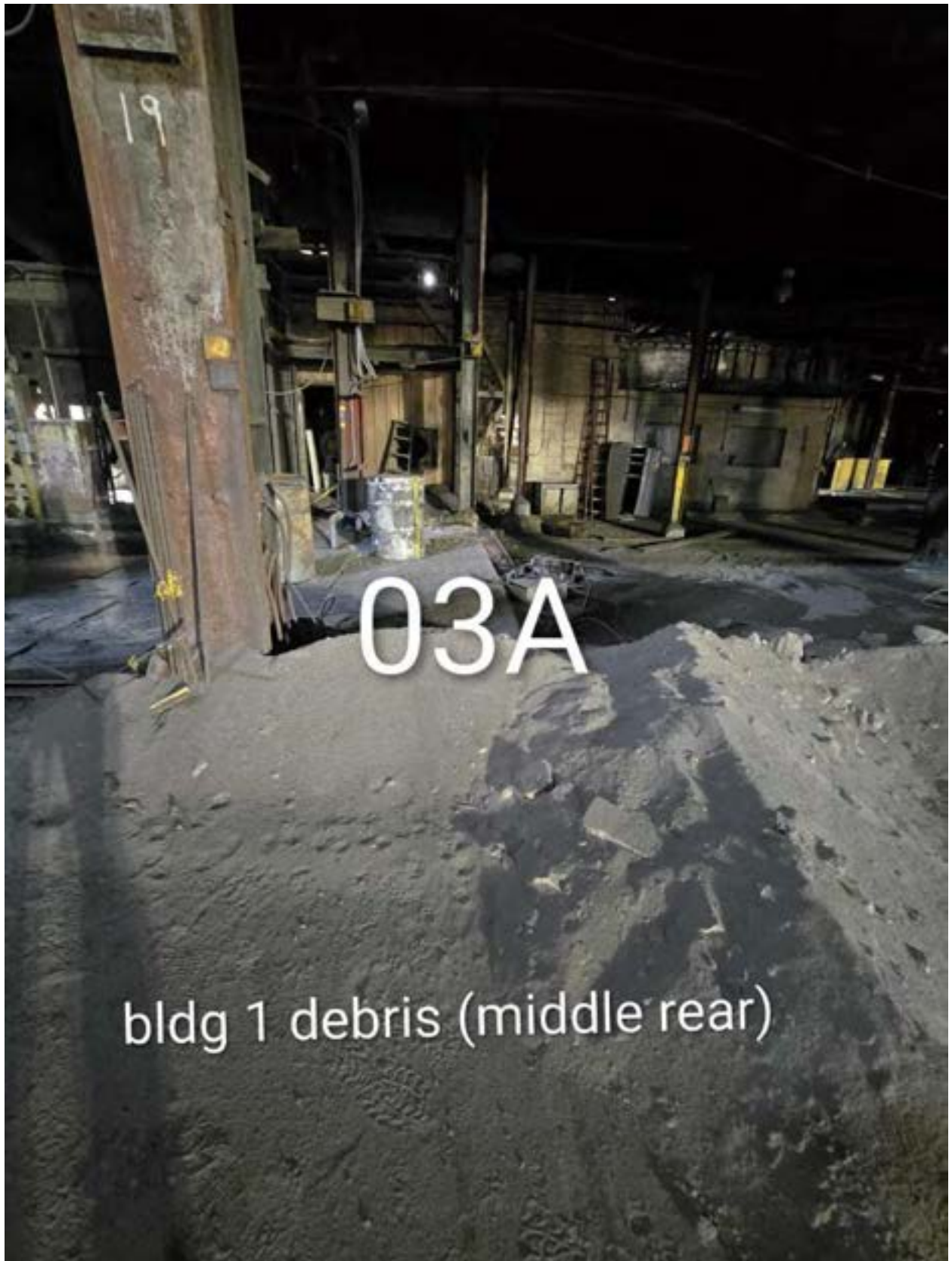
bldg 1 (12x12 FT / Glue )



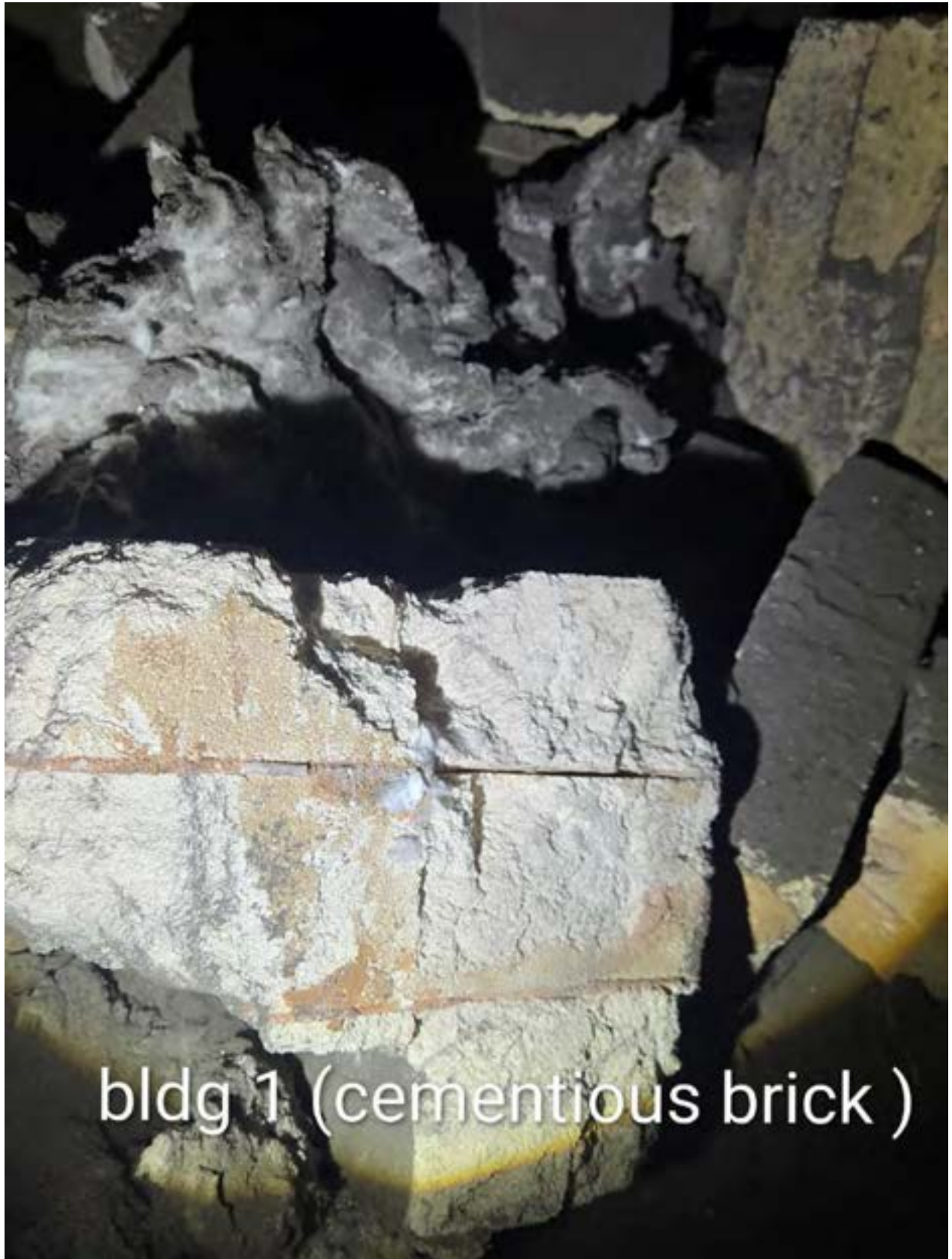
bldg 1 (door caulk exterior)



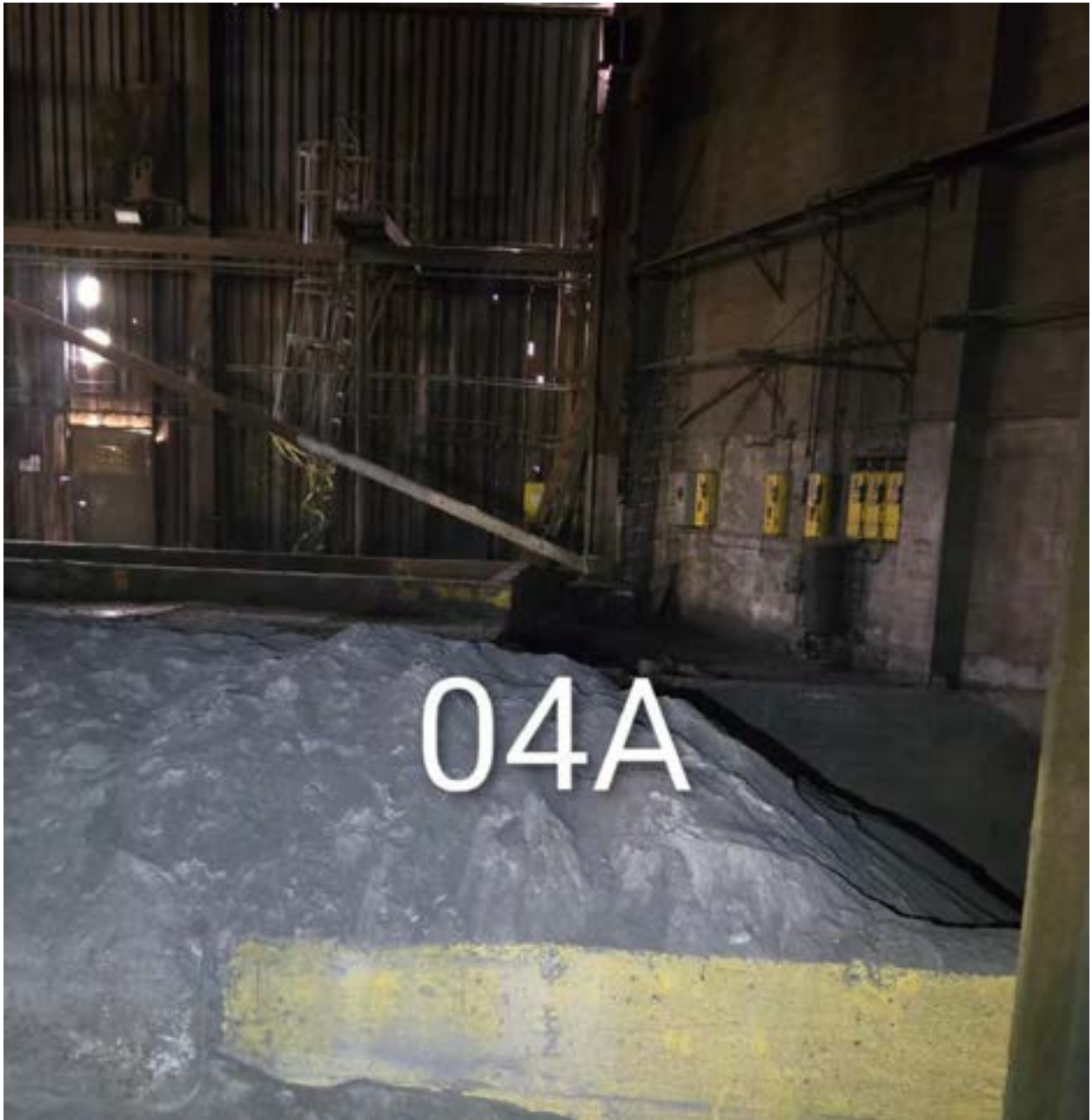
bldg 1 (caulk a/w column)



bldg 1 debris (middle rear)



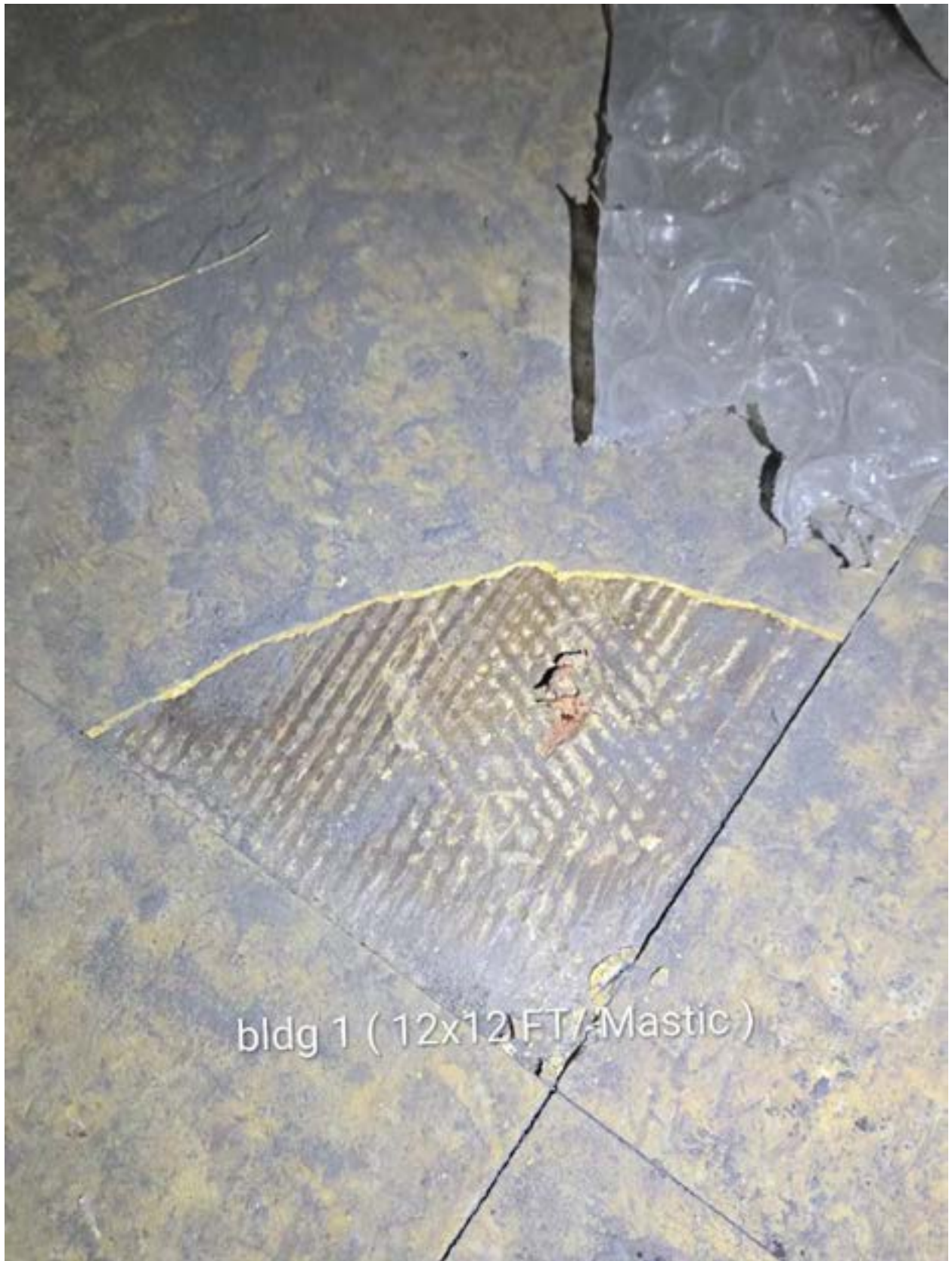
bldg 1 (cementitious brick)







bldg 1 (Cementitious brick)





bldg 1 (door caulk)

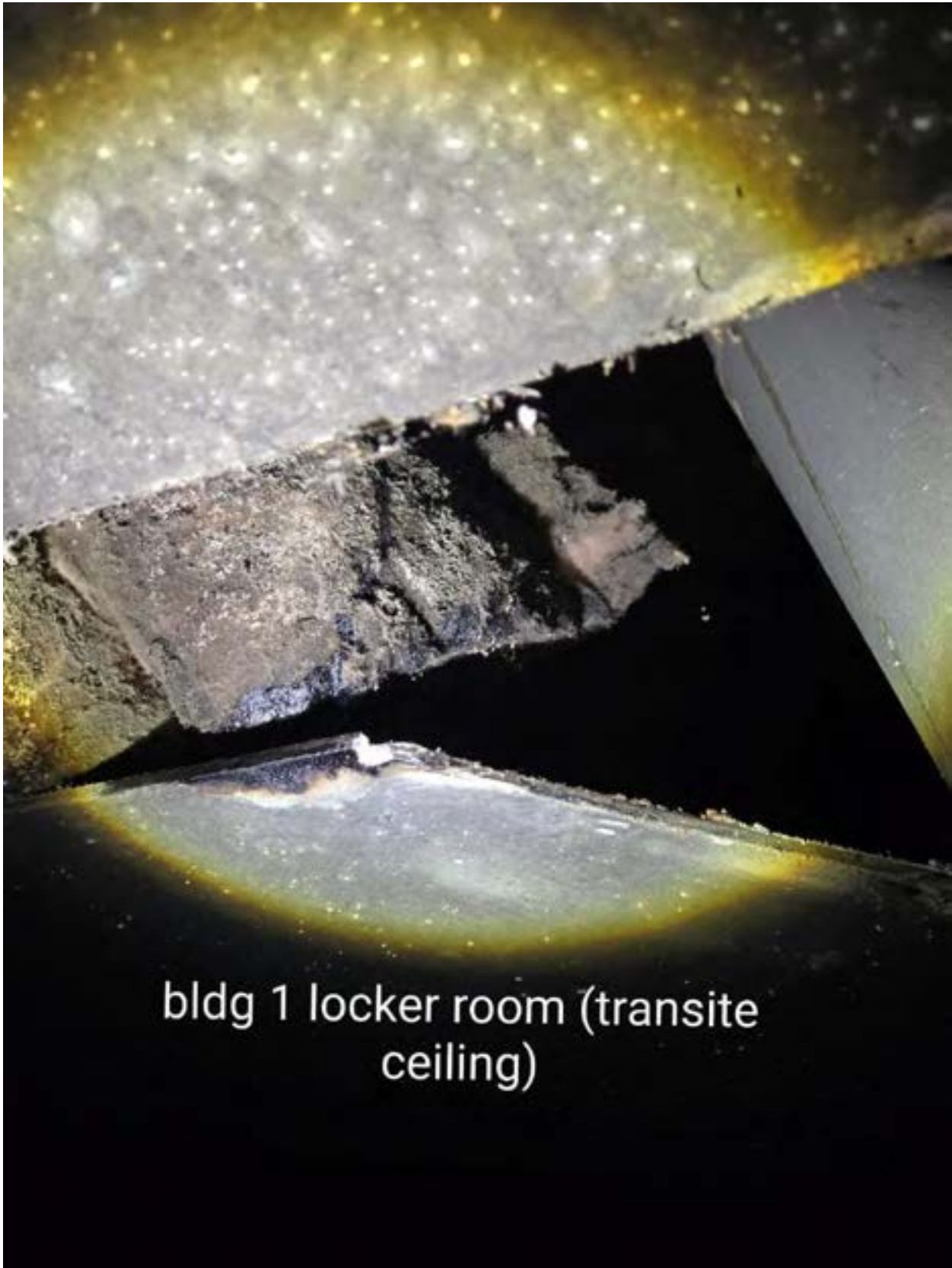




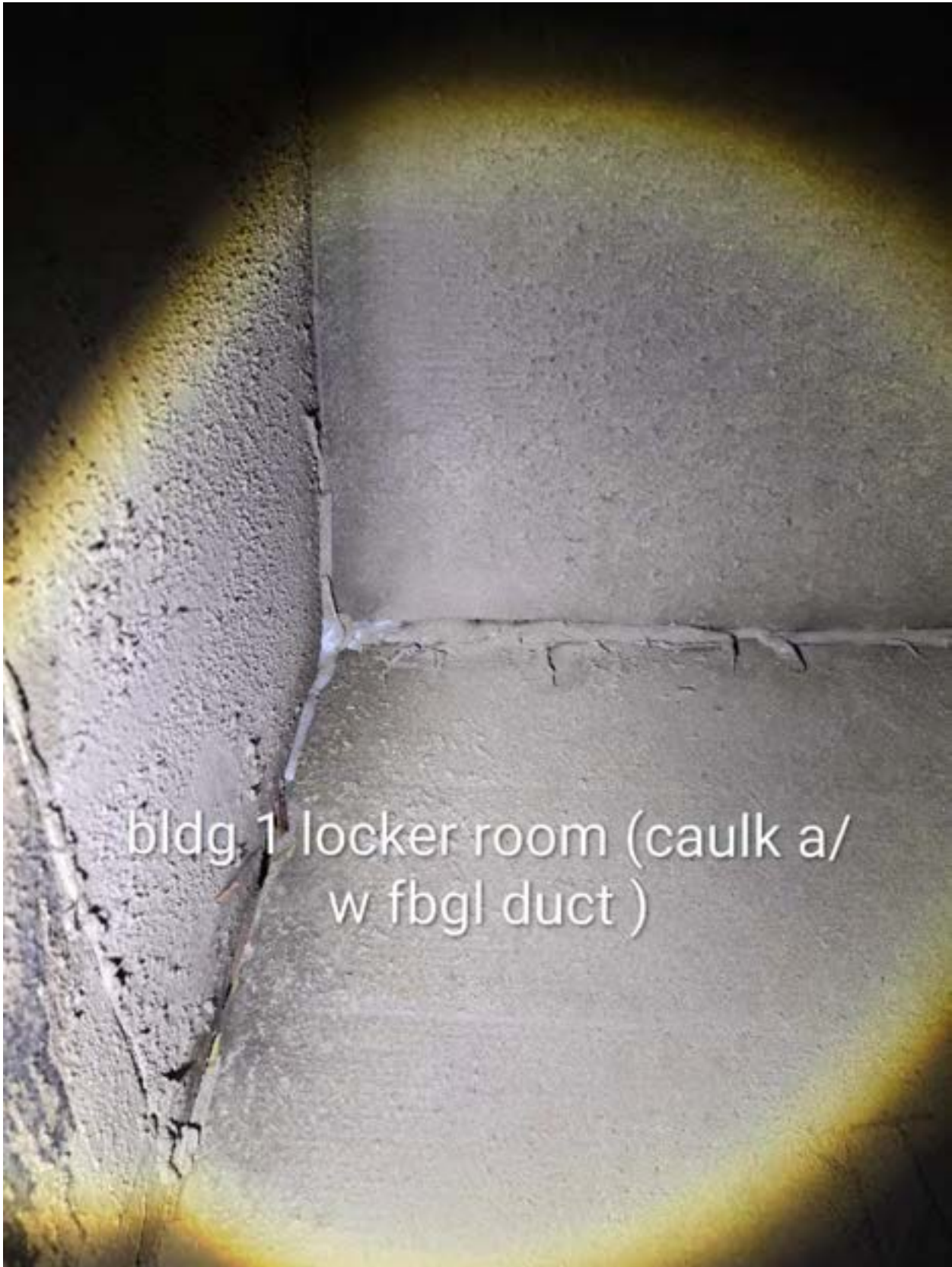
**Building 1 – Foundry Locker Rooms**



Identified as an asbestos-containing material.

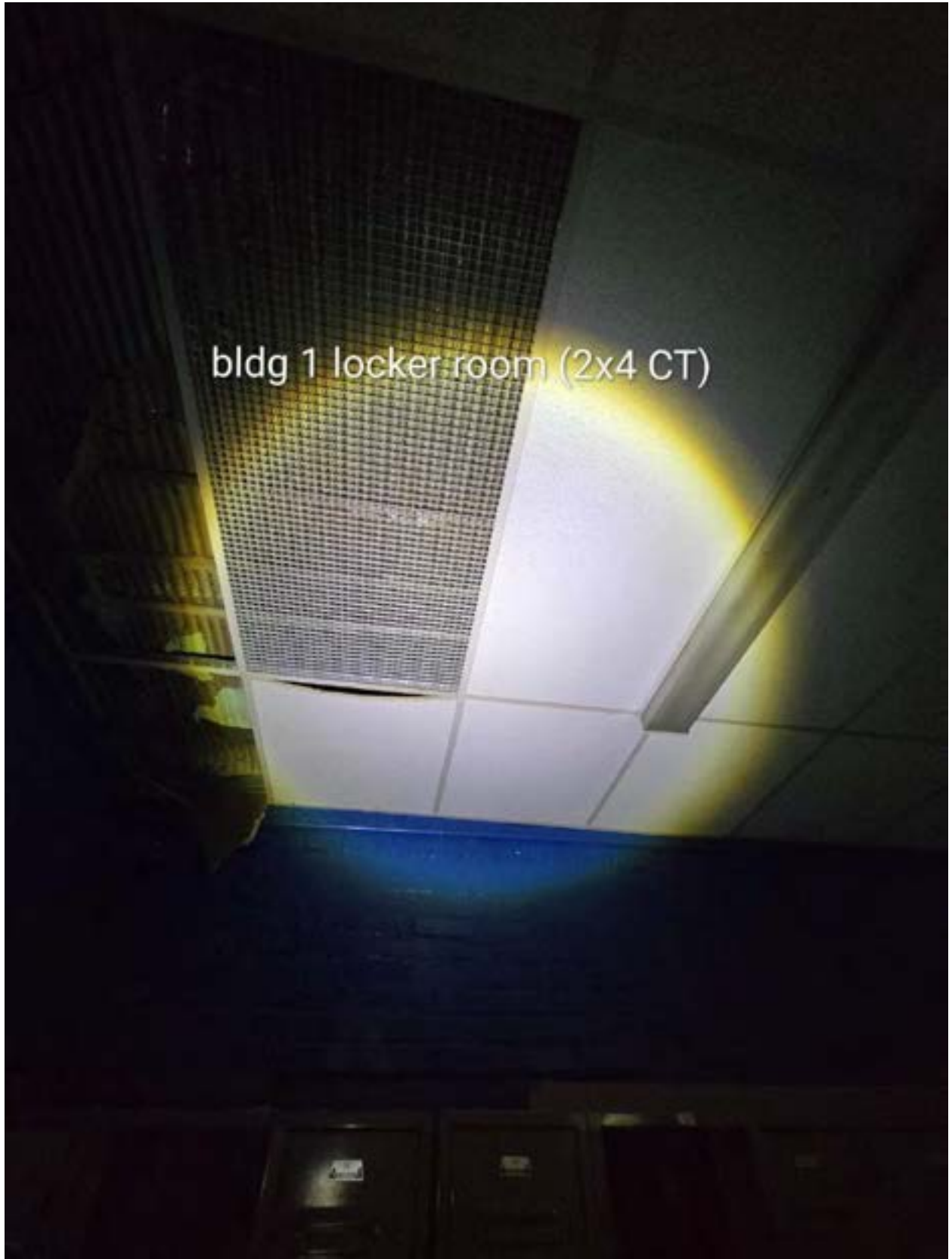


bldg 1 locker room (transite ceiling)

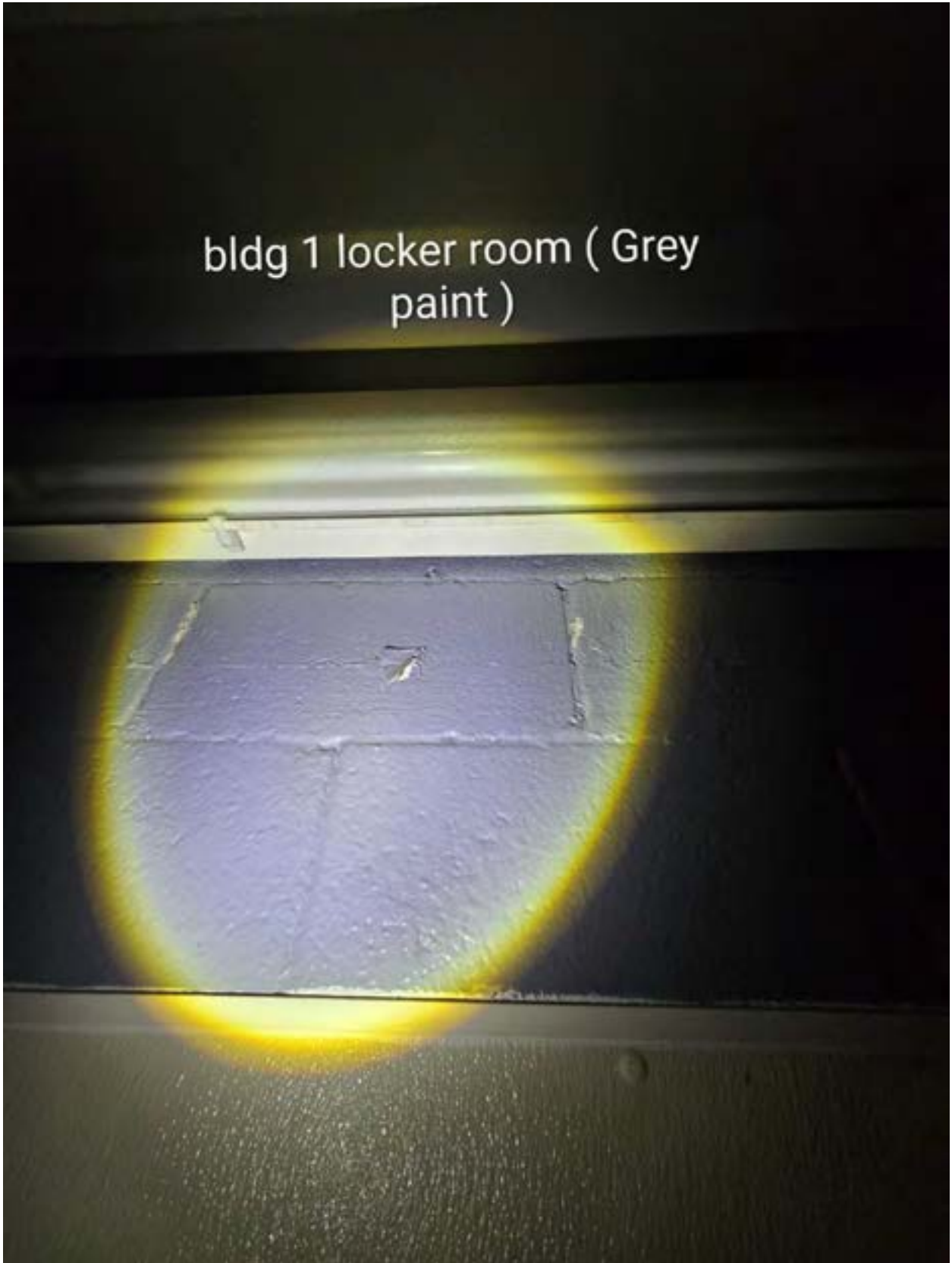




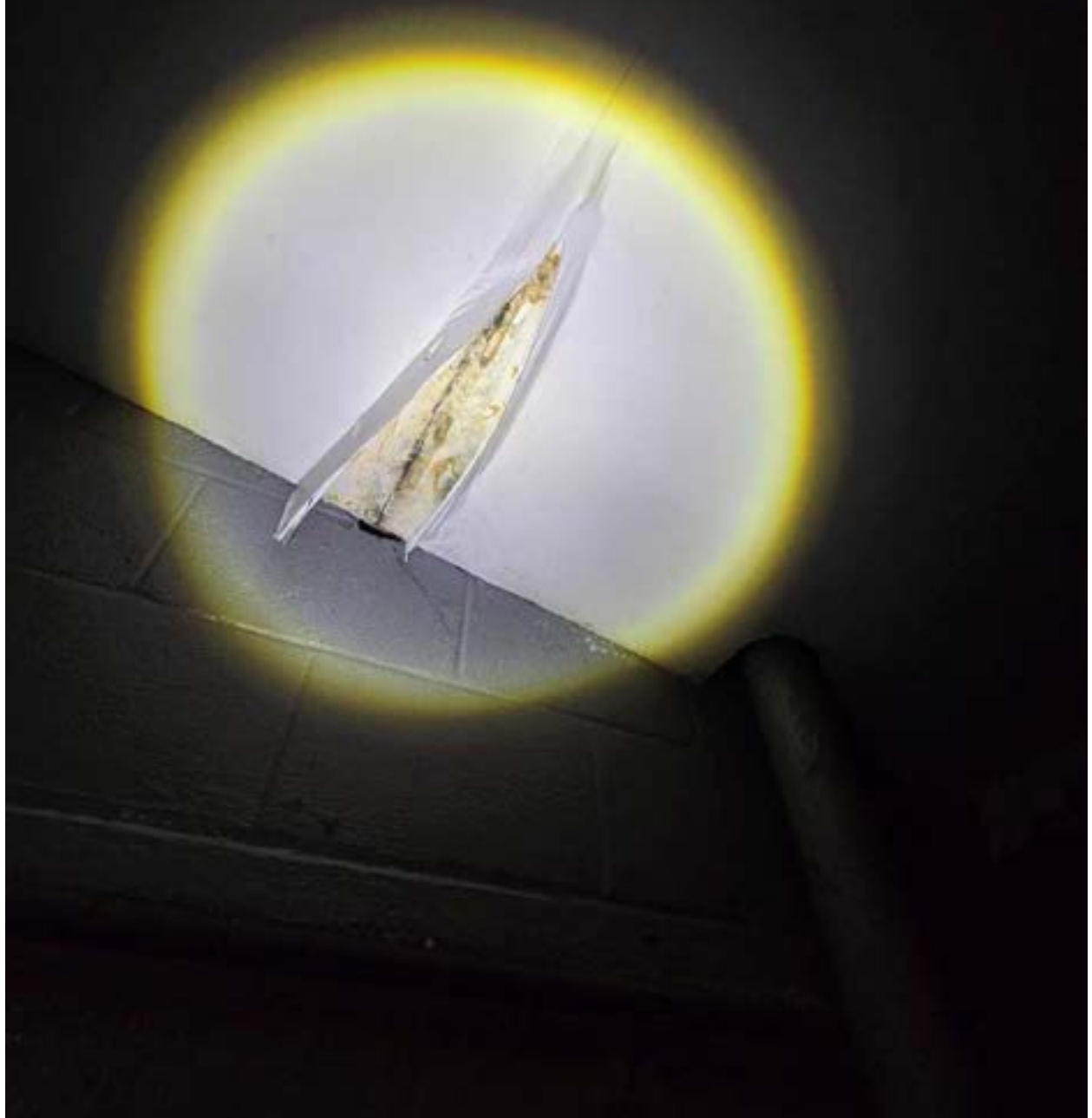
bldg 1 locker room (paint a/  
w corrugated ceiling)



bldg 1 locker room ( Grey  
paint )



bldg 1 locker room (sheet/  
jc)

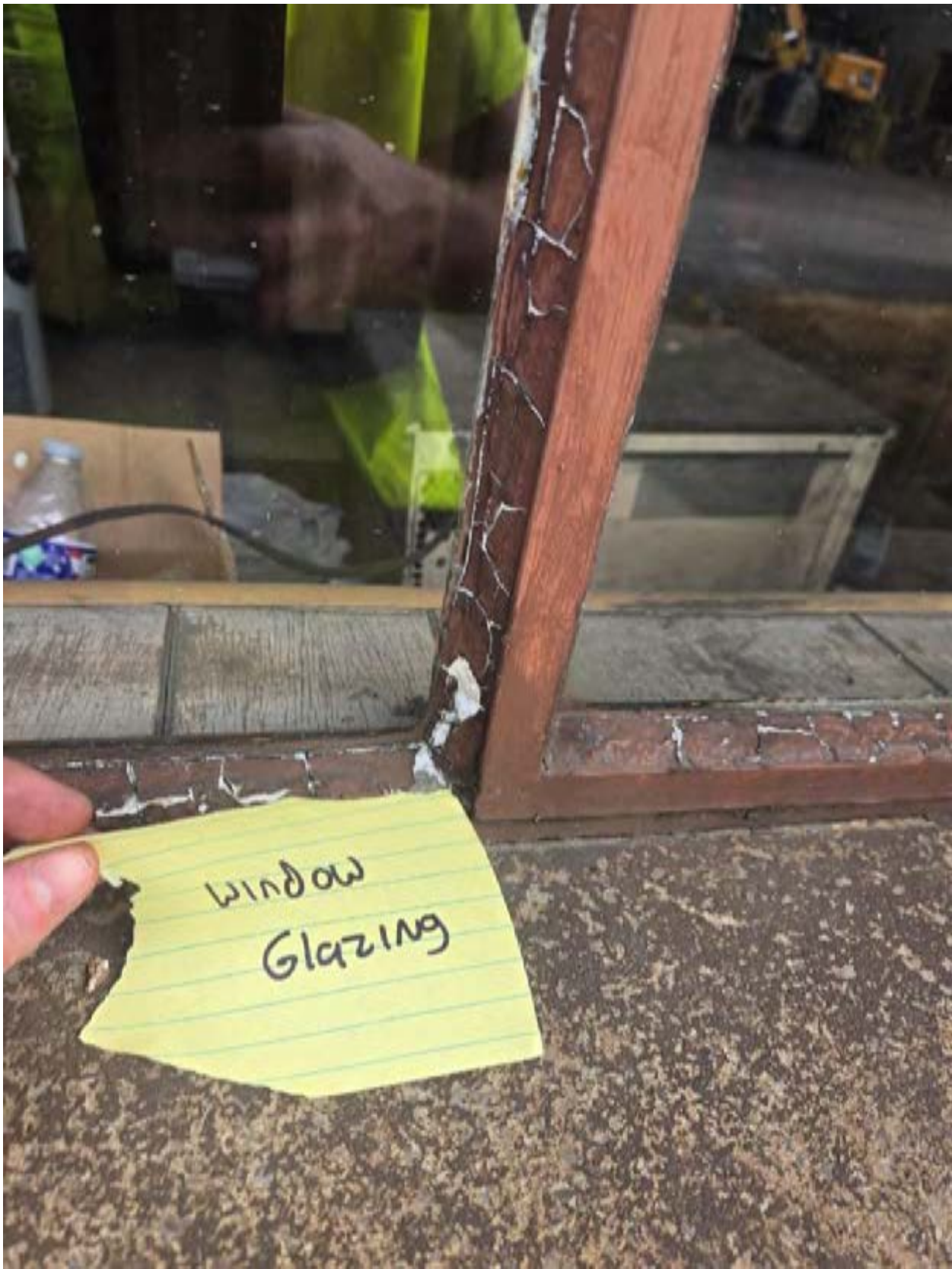


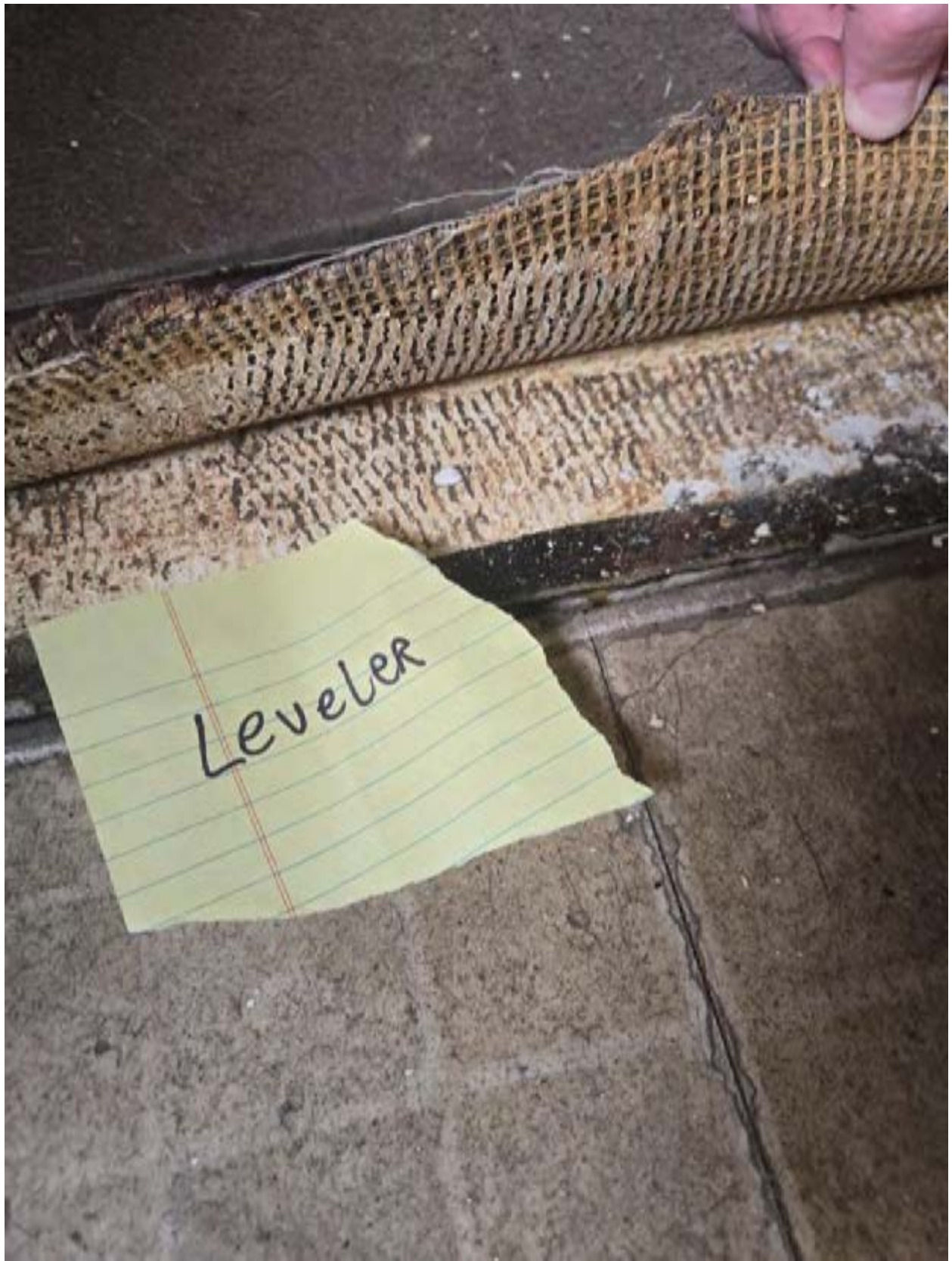


**Building 13 – Break Room**

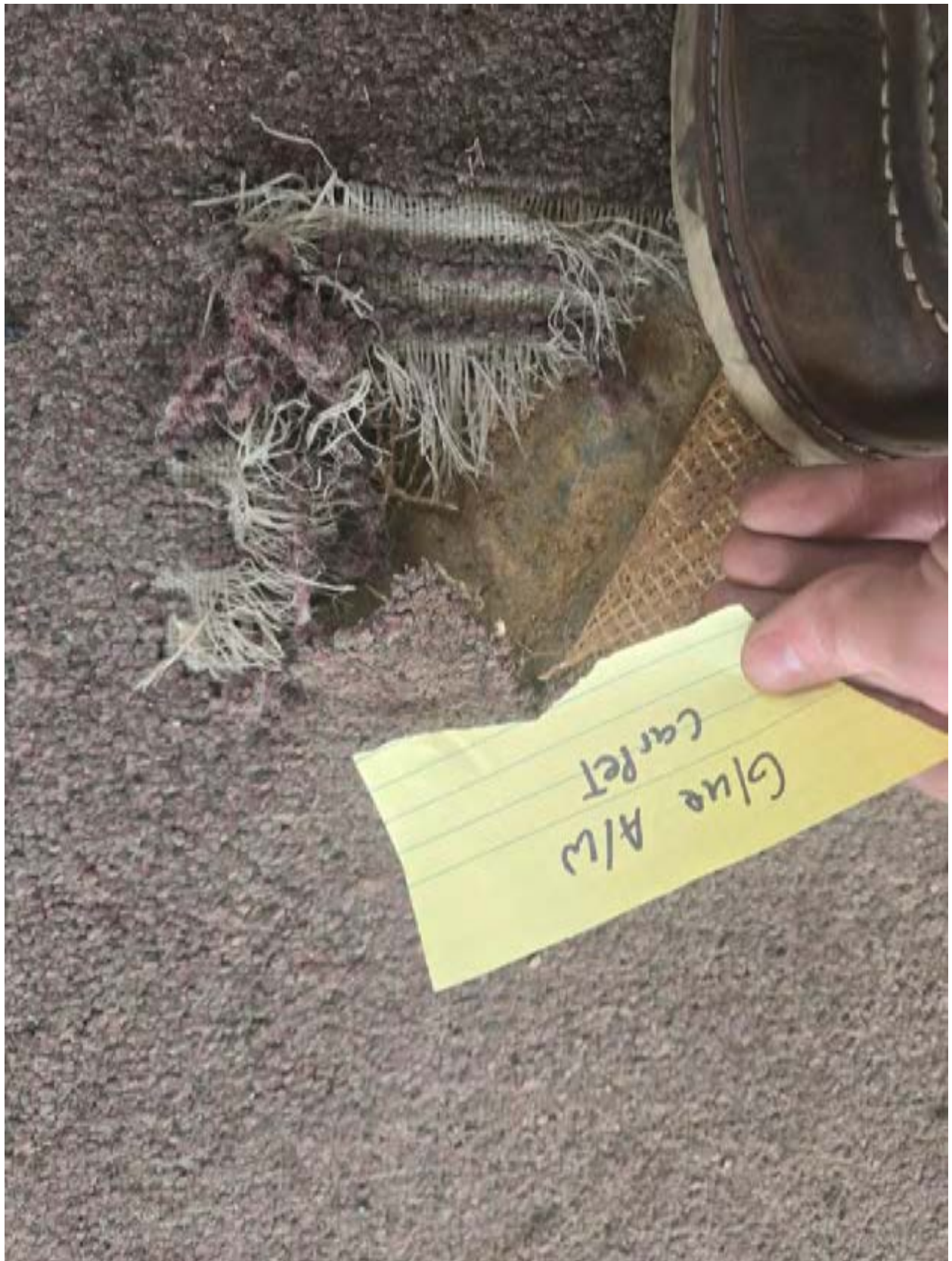


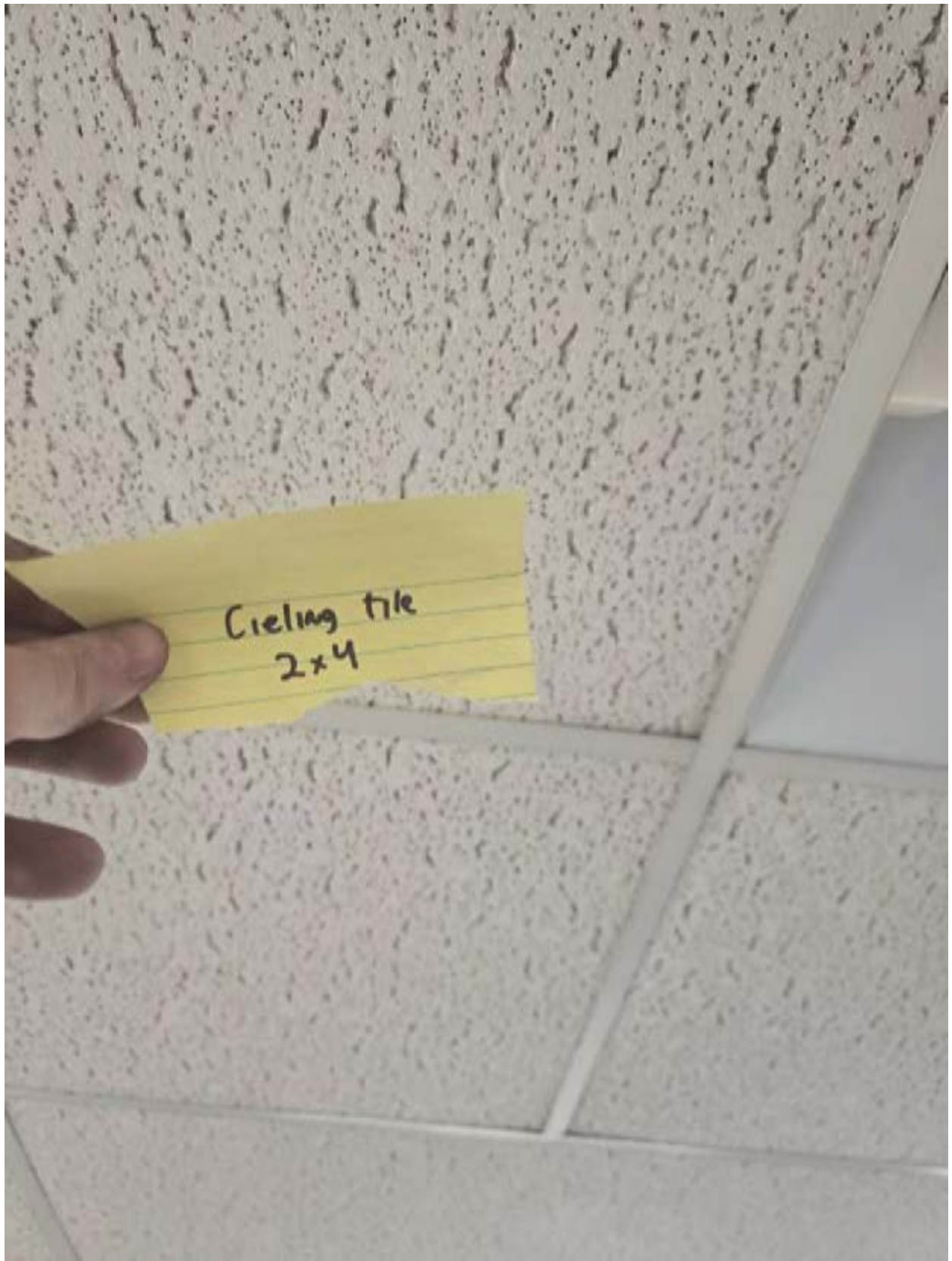














**Building 20**



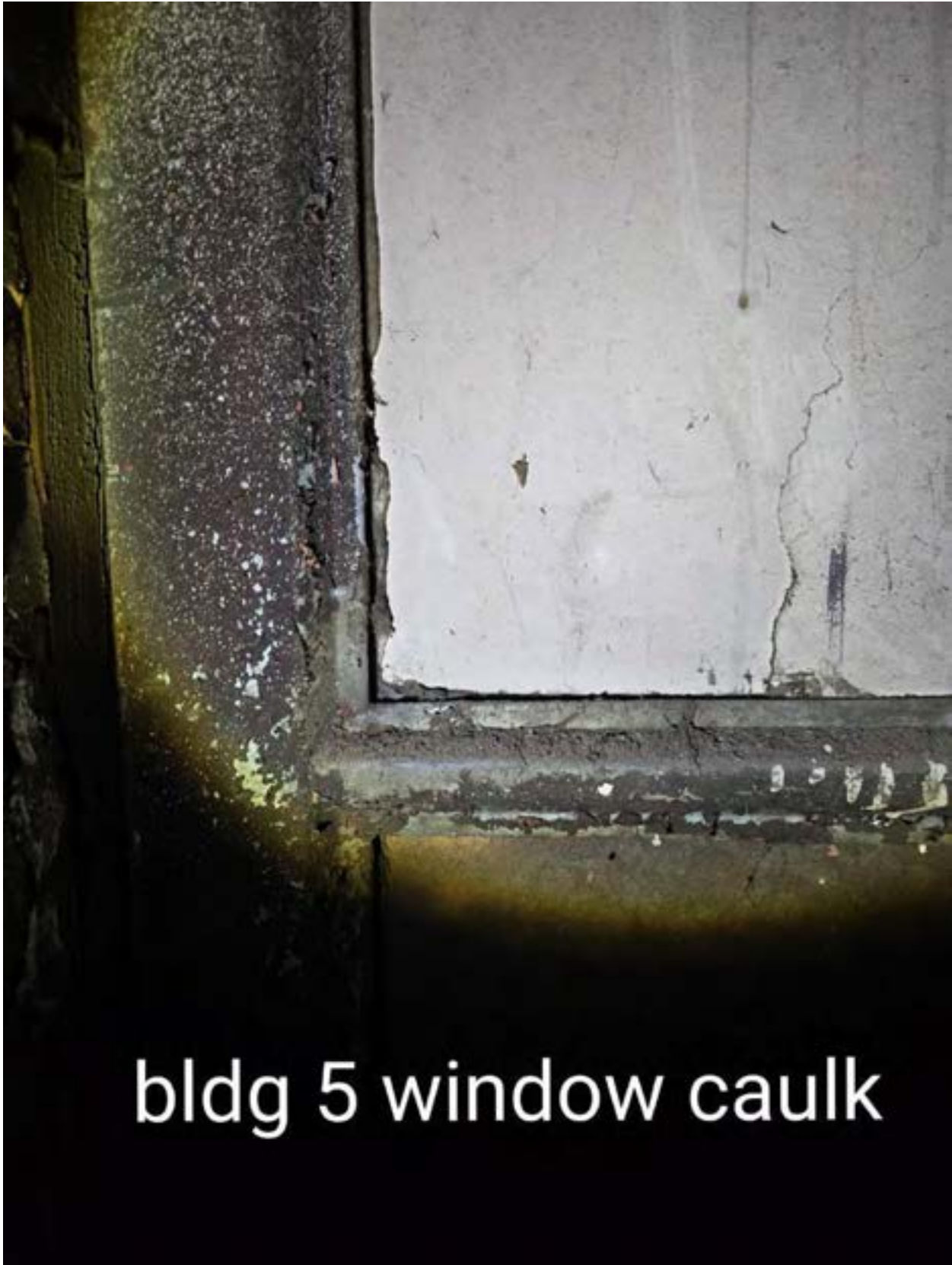
**Identified as an asbestos-containing material.**



**Building 5**



**Identified as an asbestos-containing material.**



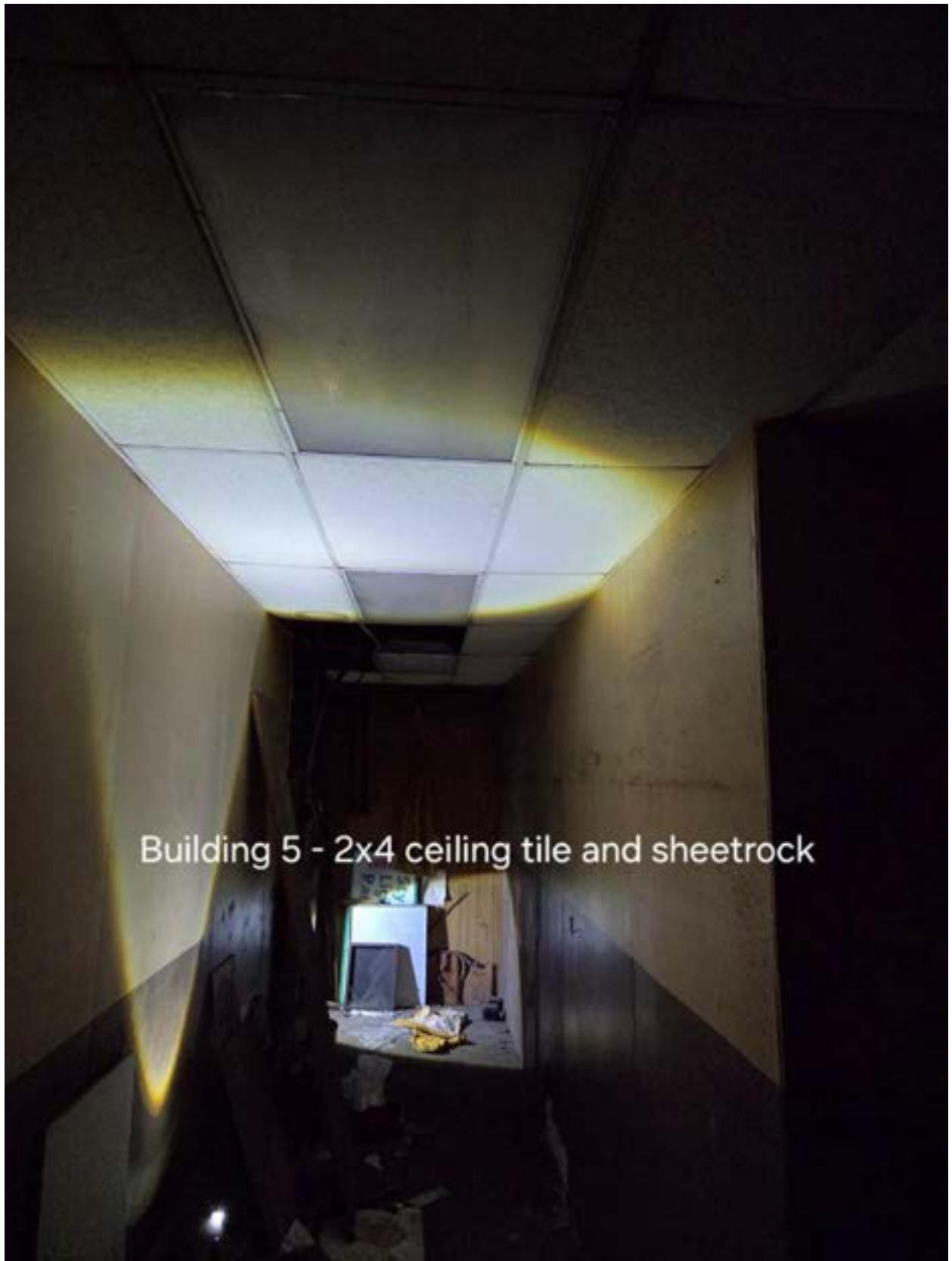
**bldg 5 window caulk**



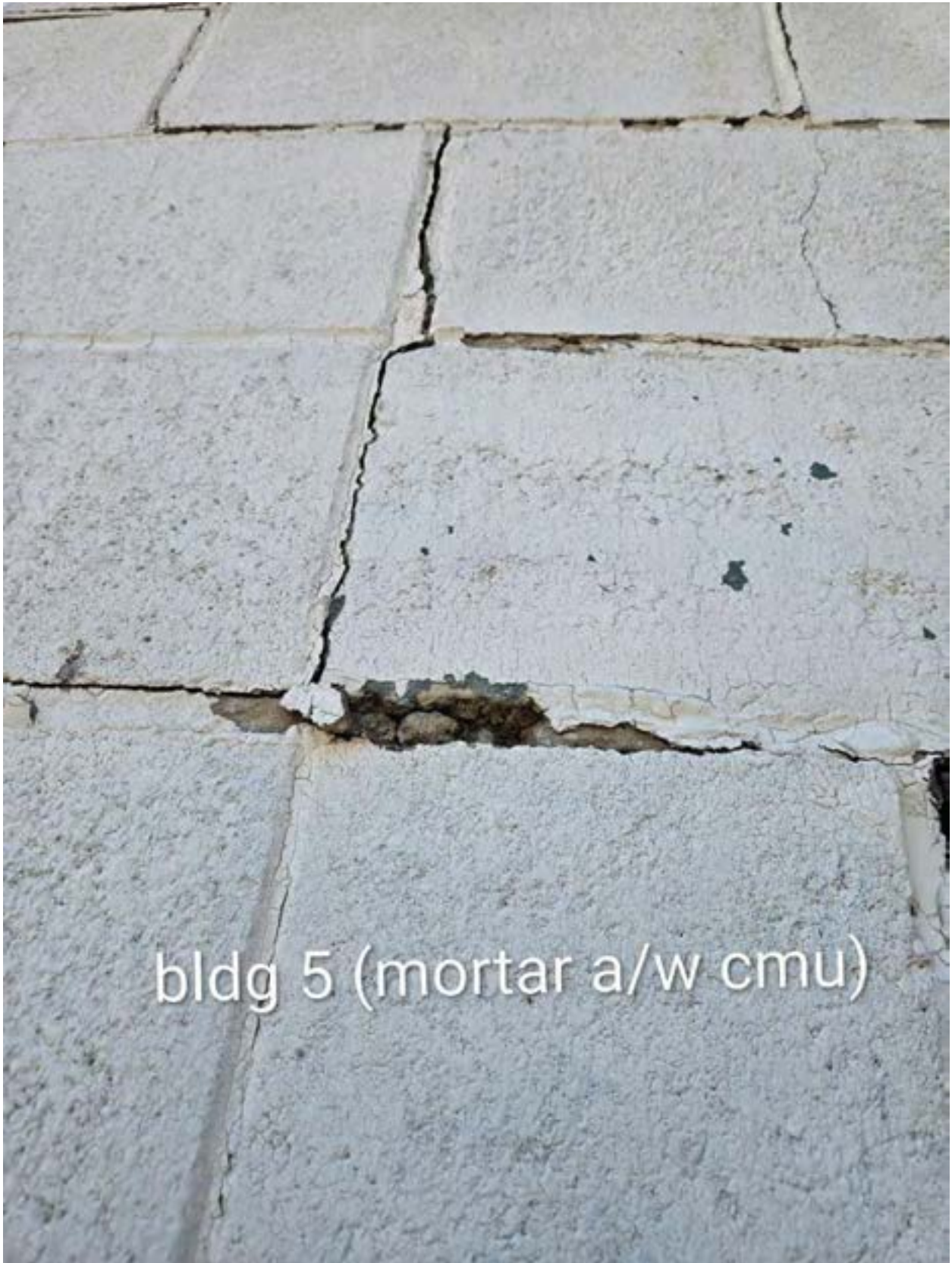
bldg 5( 12x12 FT/ 9x9 FT &  
Mastic )



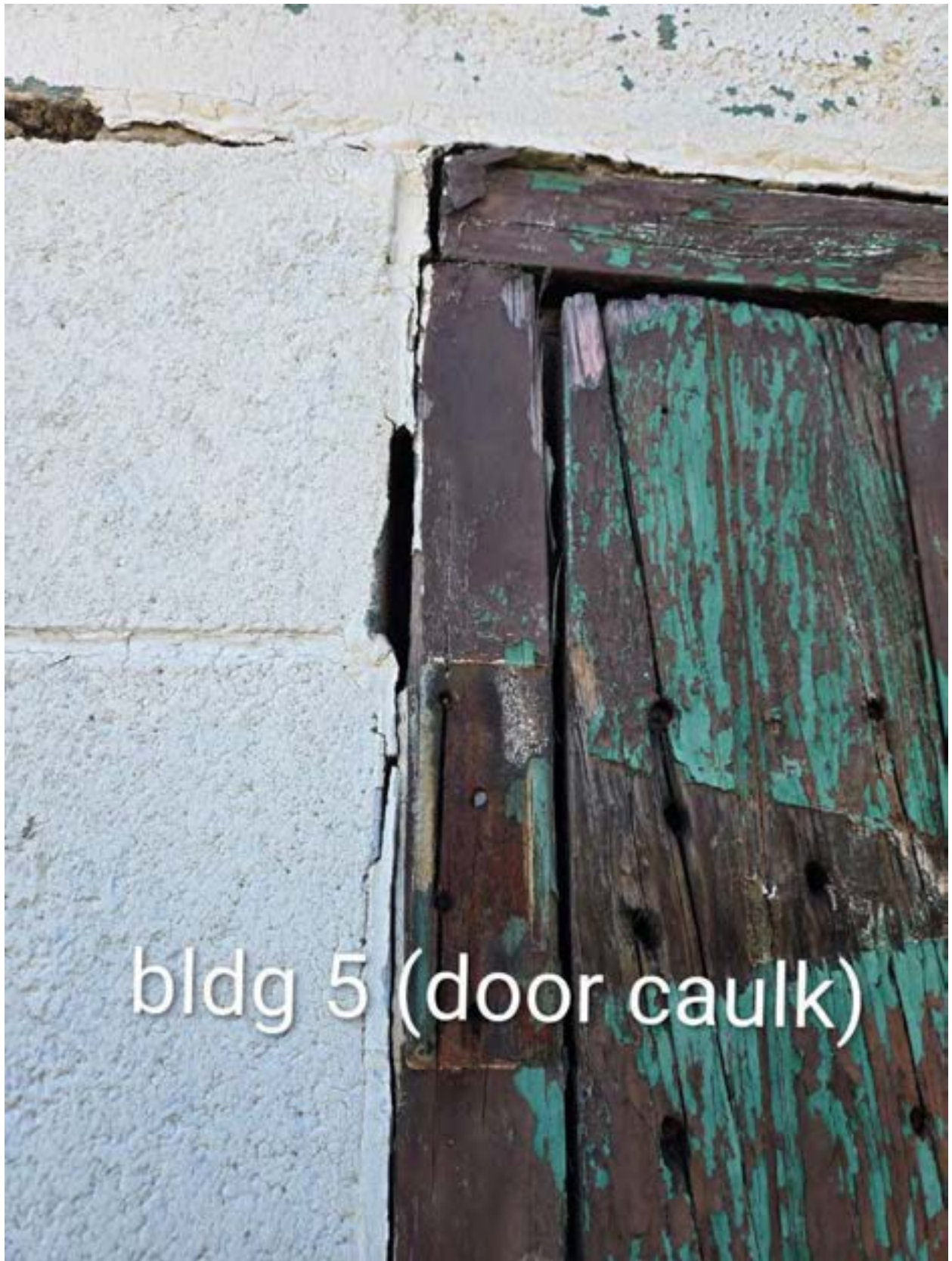
Building 5 - rear storage window with caulking



Building 5 - 2x4 ceiling tile and sheetrock



bldg 5 (mortar a/w cmu)



bldg 5 (door caulk)

**Pattern Shop – Building 24/27**





pattern shop (12x12 FT a/w  
mastic )



Pattern shop (2x4 CT)



pattern shop (glue a/w cove  
base)

**Building 18 (No Suspect Asbestos-Containing Materials Identified or Sampled)**



**Silo**



Frog/Switch - Standalone Silo (previously connected)

**Identified as an asbestos-containing material.**



Silo - Tar Mastic

## 1. NONDISCRIMINATION/SEXUAL HARASSMENT

- a. **Representations.** The Grantee represents that it is presently in compliance with and will remain in compliance with all applicable federal, state, and local laws, regulations, and policies relating to nondiscrimination and sexual harassment for the term of the agreement. The Grantee shall, upon request and within the time periods requested by the Commonwealth, furnish all necessary employment documents and records, including EEO-1 reports, and permit access to its books, records, and accounts by the Commonwealth for the purpose of ascertaining compliance with provisions of this Nondiscrimination/Sexual Harassment Clause.
- b. **Nondiscrimination/Sexual Harassment Obligations.** The Grantee shall not:
  - i. in any manner discriminate in the hiring of any employee(s) for the performance of the activities required under this agreement or any subgrant agreement, contract, or subcontract, by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the Pennsylvania Human Relations Act (“PHRA”) and applicable federal laws, against any citizen of this Commonwealth who is qualified and available to perform the work to which the employment relates.
  - ii. in any manner discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the PHRA and applicable federal laws, against or intimidate any of its employees.
  - iii. in any manner discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the PHRA and applicable federal laws, in the provision of services under this agreement or any subgrant agreement, contract, or subcontract.
  - iv. in any manner discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of PHRA and applicable federal laws, against any subgrantee, contractor, subcontractor, or supplier who is qualified to perform the work to which this agreement relates.
  - v. in any manner discriminate against employees by reason of participation in or decision to refrain from participating in labor activities protected under the Public Employee Relations Act, Pennsylvania Labor Relations Act, or National Labor Relations Act, as applicable, and to the extent determined by entities charged with the Acts’ enforcement and shall comply with any provision of law establishing organizations as employees’ exclusive representatives.
- c. **Establishment of Grantee Policy.** The Grantee shall establish and maintain a written nondiscrimination and sexual harassment policy that complies with the applicable law and these Nondiscrimination/Sexual Harassment provisions and shall inform its employees in writing of the policy. The policy must contain a provision that states that sexual harassment will not be tolerated and employees who practice it will be disciplined. For the entire period of this agreement, the Grantee shall: (1) post its written nondiscrimination and sexual harassment policy or these Nondiscrimination/Sexual Harassment provisions conspicuously in easily accessible and well-lighted places

customarily frequented by employees at or near where the grant activities are performed; or (2) provide electronic notice of the policy or this clause to its employees not less than annually.

- d. **Notification of Violations.** The Grantee's obligations pursuant to these provisions are ongoing from the effective date and through the termination date of the agreement. Accordingly, the Grantee shall notify the Commonwealth if, at any time during the term of this agreement, it becomes aware of any actions or occurrences that would result in violation of these provisions.
  
- e. **Cancellation or Termination of Agreement.** The Commonwealth may cancel or terminate this agreement and all money due or to become due under this agreement may be forfeited for a violation of the terms and conditions of these Nondiscrimination/Sexual Harassment provisions. In addition, the granting agency may proceed with debarment or suspension and may place the Grantee in the Contractor Responsibility File.
  
- f. **Subgrant Agreements, Contracts, and Subcontracts.** The Grantee shall include these Nondiscrimination/Sexual Harassment provisions in its subgrant agreements, contracts, and subcontracts with all subgrantees, contractors, and subcontractors providing goods or services under this agreement. The incorporation of these provisions in the Grantor's subgrants, contracts, or subcontracts does not create privity of contract between the Commonwealth and any subgrantee, contractor, or subcontractor, and no third-party beneficiaries are created by those provisions. If the Grantee becomes aware of a subgrantee's, contractor's, or subcontractor's violation of these provisions, the Grantee shall use its best efforts to ensure the subgrantee's, contractor's, or subcontractor's compliance with these provisions.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print

\_\_\_\_\_  
Company Name



600 East High Street • Carlisle, PA 17013 • (717) 243-2454 • Fax (717) 243-4798 • www.frogswitch.com

## Equipment Removal & Environmental Schedule 1/23/26

The Frog, Switch & Manufacturing Company  
 600 East High Street  
 Cumberland County | Carlisle Borough  
 Carlisle, PA 17013  
 USEPA ID Number: PAD003007960  
 SIC: 3325 – Manufacturing – Steel Foundries  
 NAICS: 331110 – Iron & Steel Mills Ferroalloy Manufacturing  
 Latitude: 40 deg. 12 min, 04.32 sec N | Longitude: -77 deg. 10 min, 36.67 sec W  
 Elevation (Ft): 450  
 Contact: Daniel M. Gibbs: Director: Facility Operations; E.H.S.; Maintenance;  
 Security 717-226-9023 (24 Hours)

### Equipment Removal Plan

Action	Contractor or Buyer	Status	Proposed Deadline
Remove all drum waste	Frog, Switch	Open	1/31/26
Act 101 report to Borough for 2025	REC		3/1/2026
1 piece of scrap to be removed yet	Frog, Switch		1/31/26
Submit Final LQG Haz Waste Report	REC		3/1/2026
Submit EPA 8700-12 for to EPA	REC		3/1/2026
Tier II	REC		3/1/2026
Form R	REC		3/1/2026

### Transformers:

Pattern Shop	Remaining
Frog Shop Inside	Remaining
Main Plant Transformer, Substation	Remaining



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Main Arc Furnace Transformer, Substation	Remaining
Frog Shop 220V POT	Remaining
Frog Shop 220V POT	Remaining
Frog Shop 220V POT	Remaining

**Frog Shop:**

The transformers will remain in the frog shop, did not have enough time to get them removed, once the power quote is approved for Abel, we will have no power in the frog shop and the pattern shop will be off as well.

The scrap contractor is removing his items, but can be done within a few weeks, or whenever a deadline is given.

**Facility:**

Wood/patterns to destroy are remaining onsite to go with the demo of the facility. Drums are being removed we are having delays in getting them taken, but Frog, switch has already committed to removing them.

**Daniel M. Gibbs;**<sup>1</sup>RCHS, <sup>2</sup>RAI, <sup>3</sup>SSHO, <sup>4</sup>RSO, <sup>5</sup>RSM, <sup>6</sup>RHST-Q, <sup>7</sup>RHSM-Q, <sup>8</sup>RCHM, <sup>9</sup>CSA, <sup>10</sup>PSO

**Director: Facility Operations; E.H.S.; Maintenance; Security**

<sup>1</sup> Registered Chemical Hygiene Specialist	<sup>6</sup> Registered Safety Technician - Occupational
<sup>2</sup> Registered Accident Investigator	<sup>7</sup> Registered Safety Manager - Occupational
<sup>3</sup> Registered Site Safety Health Officer	<sup>8</sup> Registered Chemical Hygiene Manager
<sup>4</sup> Registered Safety Officer	<sup>9</sup> Certified Safety Auditor



600 East High Street • Carlisle, PA 17013 • (717) 243-2454 • Fax (717) 243-4798 • [www.frogswitch.com](http://www.frogswitch.com)

<sup>5</sup> Registered Safety Manager

<sup>10</sup> Pandemic Safety Officer



# Construction Specification 91—Chain Link Fence

## **1. Scope**

The work consists of furnishing and installing chain link fencing complete with all posts, braces, gates, and all other appurtenances.

## **2. Material**

The material for the chain link fence shall be as follows:

### **Galvanized**

Chain link fence fabric shall conform to the requirements of ASTM A 392, 2-inch mesh and 9-gauge galvanized steel wire. Zinc coating shall be class 2.

Posts and fence framework shall conform to the requirements of ASTM F 1043 Group 1A, for Heavy Industrial Fence. Coatings shall be a type A galvanized coating for internal and external surfaces. Steel pipe posts shall conform to the requirements of ASTM F 1043 and F 1083.

Fence fittings shall conform to the requirements of ASTM F 626. Fittings shall be galvanized steel. Wire ties and clips shall be 9-gauge.

Gates, gateposts, and gate accessories shall conform to the requirements of ASTM F 900. Coating shall be the same as selected for adjoining fence and framework.

Barbed wire shall be 12.5 gauge and shall conform to the requirements of ASTM A 121, chain link fence grade.

### **Galvanized and PVC coated**

Chain link fence fabric shall conform to the requirements of ASTM F 668 for class 2a or 2b, 2-inch mesh, and 9-gauge galvanized steel wire. The fabric shall have a polymer top coating of the color specified in section 6.

Posts and fence framework shall conform to the requirements of ASTM F 1043 Group 1A, for Heavy Industrial Fence. Coatings shall be a type A galvanized coating for internal and external surfaces and covered with a polymer top coating of color as specified in section 6.

Fence fittings shall conform to the requirements of ASTM F 626. Fittings shall be galvanized steel with a polymer top coating of color as specified in section 6.

Any damage to the coating shall be repaired in accordance with the manufacturer's recommendations, or the damaged fencing material shall be replaced. The contractor shall provide the engineer a copy of the manufacturer's recommended repair procedure and materials before correcting damaged coatings.

## **3. Installing fence posts**

Unless otherwise specified, line posts shall be placed at intervals of 10 feet measured from center to center of adjacent posts. In determining the post spacing, measurement is made parallel with the ground surface.

Posts shall be set in concrete backfill in the manner shown on the drawings.

Posts set in the tops of concrete walls shall be grouted into preformed holes to a depth of 12 inches.

All corner posts, end posts, gateposts, and pull posts shall be embedded, braced, and trussed as shown on the drawings or in accordance with appropriate industry practice if not otherwise shown or specified.

#### **4. Installing wire fabric**

Fencing fabric shall not be stretched until at least 4 days after the posts are grouted into walls or 7 days after the posts are set in the concrete backfill.

Fencing fabric shall be installed on the side of the posts designated on the drawings.

The fabric shall be stretched taut and securely fastened, by means of tie clips, to the posts at intervals not exceeding 15 inches and to the top rails or tension wires at intervals not exceeding 2 feet. Care shall be taken to equalize the fabric tension on each side of each post.

Barbed wire shall be installed as shown on the drawings and shall be pulled taut and fastened to each post or arm with the tie wires or metal tie clips.

#### **5. Measurement and payment**

**Method 1**—The length of fence is measured to the nearest 0.1 foot along the fence, including gates. Payment is made at the contract unit price for the specified height of fence. Such payment constitutes full compensation for all labor, material, equipment, and all other items necessary and incidental to the completion of the work.

**Method 2**—The length of fence is measured to the nearest 0.1 foot along the fence, excluding gate openings. Payment is made at the contract unit price for the specified height of fence. The number of each size and type of gate installed is determined. Payment is made at the contract unit price for that type and size of gate. Such payment constitutes full compensation for all labor, material, equipment, and all other items necessary and incidental to the completion of the work.


**All methods**—The following provisions apply to all methods of measurement and payment. Compensation for any item of work described in the contract, but not listed in the bid schedule, is included in the payment for the item of work to which it is made subsidiary. Such items and the items to which they are made subsidiary are identified in section 6 of this specification.

#### **6. Items of work and construction details**

## WEEKLY PAYROLL CERTIFICATION FOR PUBLIC WORKS PROJECTS

Contractor or  Subcontractor (Please check one)

**ALL INFORMATION MUST BE COMPLETED**

CONTRACTOR  ADDRESS	SUBCONTRACTOR  ADDRESS	 <b>DEPARTMENT OF LABOR &amp; INDUSTRY</b> <small>COMMONWEALTH OF PENNSYLVANIA</small> BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGE DIVISION 7TH & FORSTER STREETS HARRISBURG, PA 17120 1-800-932-0665
PAYROLL NUMBER	WEEK ENDING DATE	

EMPLOYEE NAME	APPR. RATE (%)	WORK CLASSIFICATION	DAY AND DATE							S-TIME 0-TIME	BASE HOURLY RATE	TOTAL FRINGE BENEFITS (C=Cash) (FB=Contributions)*	TOTAL DEDUCTIONS	GROSS PAY FOR PREVAILING RATE JOB(S)	CHECK #
			HOURS WORKED EACH DAY												

\*SEE REVERSE SIDE

PAGE NUMBER \_\_\_\_\_ OF \_\_\_\_\_

**THE NOTARIZATION MUST BE COMPLETED ON FIRST AND LAST SUBMISSIONS ONLY. ALL OTHER INFORMATION MUST BE COMPLETED WEEKLY.**

\*FRINGE BENEFITS EXPLANATION (FB): Bona fide benefits contribution, except those required by Federal or State Law (unemployment tax, workers' compensation, income taxes, etc.)

Please specify the type of benefits provided and contributions per hour:

- 1) Medical or hospital care \_\_\_\_\_
- 2) Pension or retirement \_\_\_\_\_
- 3) Life insurance \_\_\_\_\_
- 4) Disability \_\_\_\_\_
- 5) Vacation, holiday \_\_\_\_\_
- 6) Other (please specify) \_\_\_\_\_

**CERTIFIED STATEMENT OF COMPLIANCE**

1. The undersigned, having executed a contract with \_\_\_\_\_  
(AWARDING AGENCY, CONTRACTOR OR SUBCONTRACTOR)

\_\_\_\_\_ for the construction of the above-identified project, acknowledges that:

- (a) The prevailing wage requirements and the predetermined rates are included in the aforesaid contract.
- (b) Correction of any infractions of the aforesaid conditions is the contractor's or subcontractor's responsibility.
- (c) It is the contractor's responsibility to include the Prevailing Wage requirements and the predetermined rates in any subcontract or lower tier subcontract for this project.

2. The undersigned certifies that:

- (a) Neither he nor his firm, nor any firm, corporation or partnership in which he or his firm has an interest is debarred by the Secretary of Labor and Industry pursuant to Section 11(e) of the PA Prevailing Wage Act, Act of August 15, 1961, P.L. 987 as amended, 43 P.S. § 165-11(e).
- (b) No part of this contract has been or will be subcontracted to any subcontractor if such subcontractor or any firm, corporation or partnership in which such subcontractor has an interest is debarred pursuant to the aforementioned statute.

3. The undersigned certifies that:

(a) the legal name and the business address of the contractor or subcontractor are: \_\_\_\_\_  
 \_\_\_\_\_

(b) The undersigned is:  a single proprietorship  a corporation organized in the state of \_\_\_\_\_  
 a partnership  other organization (describe) \_\_\_\_\_

(c) The name, title and address of the owner, partners or officers of the contractor/subcontractor are:

NAME	TITLE	ADDRESS

The willful falsification of any of the above statements may subject the contractor to civil or criminal prosecution, provided in the PA Prevailing Wage Act of August 15, 1961, P.L. 987, as amended, August 9, 1963, 43 P.S. § 165.1 through 165.17.

\_\_\_\_\_  
 (DATE)

\_\_\_\_\_  
 (SIGNATURE)

\_\_\_\_\_  
 (TITLE)

\_\_\_\_\_  
 SEAL

Taken, sworn and subscribed before me this \_\_\_\_\_ Day  
 of \_\_\_\_\_ A.D., \_\_\_\_\_

Transformer Description	Serial #	Status	Primary Voltage	Primary Windings	Secondary Voltage	Secondary Windings	KVA	Brand	Weight with Oil	Oil Weight	Frog Switch #	SD Myers #	Primary Support	Est. Life Remaining	Location	Oil Gallons
Frog Shop Inside	G12803-1		12470	DELTA	480	WYE	25000	Pioneer	15695	5493.25	FS/TC #12	9018	Frog Shop	1	Frog Shop	475
Pattern Shop	796002393		12470	DELTA	480	WYE	225	Square D	3600	1260	FS/TC #13	9022	Pattern Shop	1	Pattern Shop	168
Pot Frog Shop																
Pot Frog Shop																
Pot Frog Shop																

Transformer #	Description	Manufacturer	Mfg Date	Serial #	KVA Rating
9018	Frog Shop Inside Building #2	Pioneer	10/1/2003	G12803-1	25,000
Impedance					
High Voltage	Low Voltage	Weight #	%	Gallons of Oil	Insulation
12,470	480	15,695	5.17	475	65C

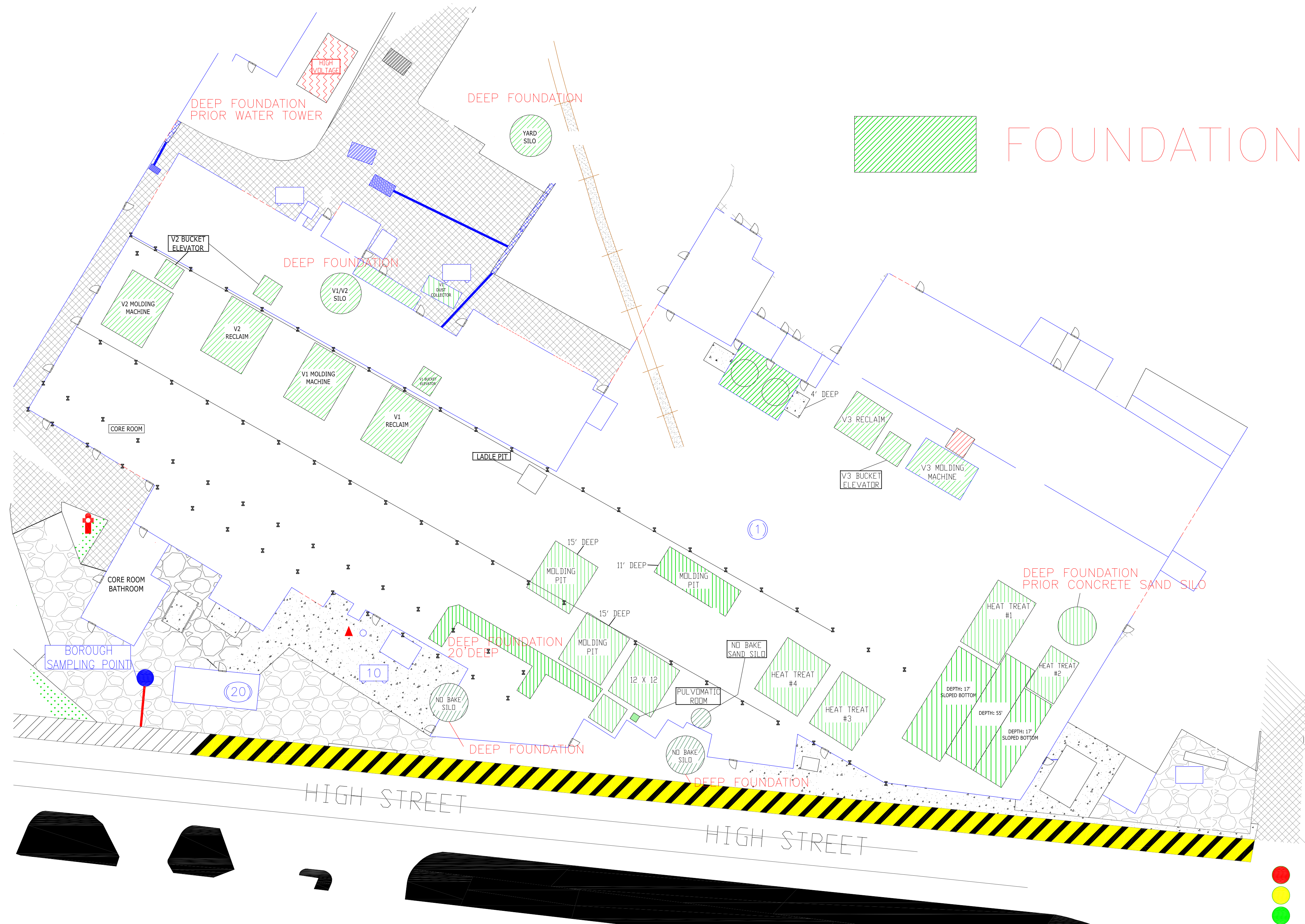
Transformer #	Description	Manufacturer	Mfg Date	Serial #	KVA Rating
9022	Pattern Shop	Square D		796002393	225
Impedance					
High Voltage	Low Voltage	Weight #	%	Gallons of Oil	Insulation
12,470	480	3,600	2.80	168	85C

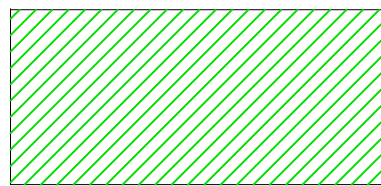
Transformer #	Description	Manufacturer	Mfg Date	Serial #	KVA Rating
9114	Frog Shop 240 Bank	RTE		721011345	250
Impedance					
High Voltage	Low Voltage	Weight #	%	Gallons of Oil	Insulation
7,200	120	2,230	4.00	58	85C
Furan	Life Left				
6/22/2017	100%				
8/8/2018	100%				

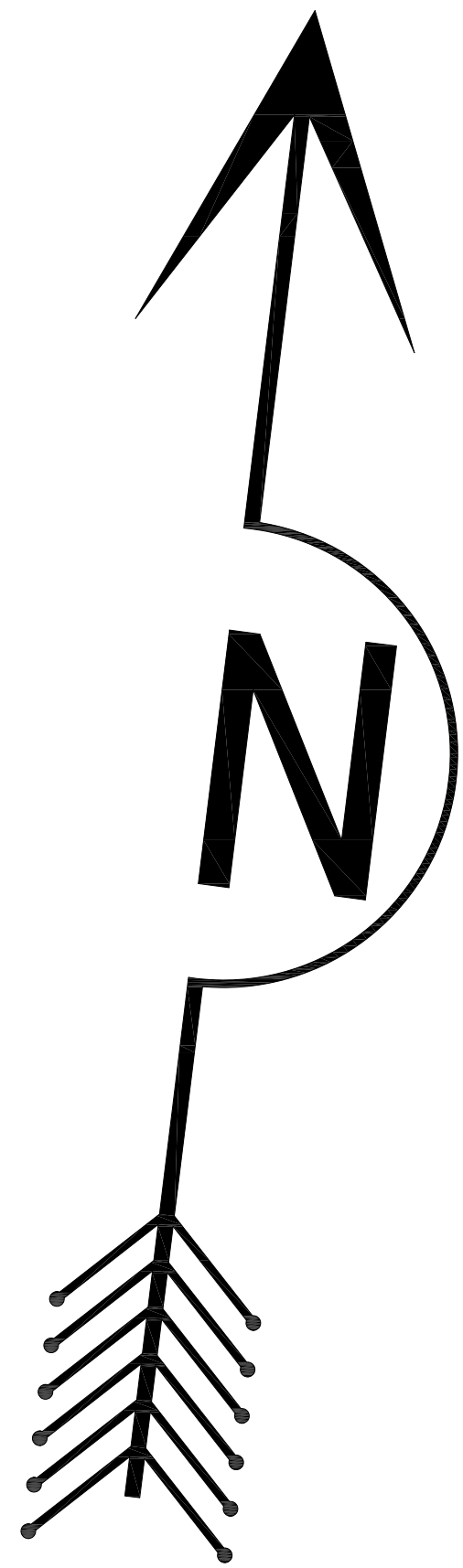
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Impedance					
High Voltage	Low Voltage	Weight #	%	Gallons of Oil	Insulation
7,200	120	2,230	4.00	58	
Furan	Life Left				
6/22/2017	100%				
8/8/2018	100%				

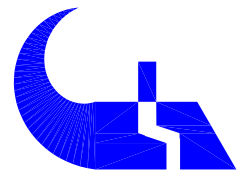

Transformer #	Description	Manufacturer	Mfg Date	Serial #	KVA Rating
9116	Frog Shop 240 Bank	RTE		701080228	250
Impedance					
High Voltage	Low Voltage	Weight #	%	Gallons of Oil	Insulation
7,200	120	2,100	4.30	48	65C
Furan	Life Left				
6/22/2017	100%				
8/8/2018	100%				

# PROPERTY OF THE FROG, SWITCH AND MFG. CO.



 FOUNDATION

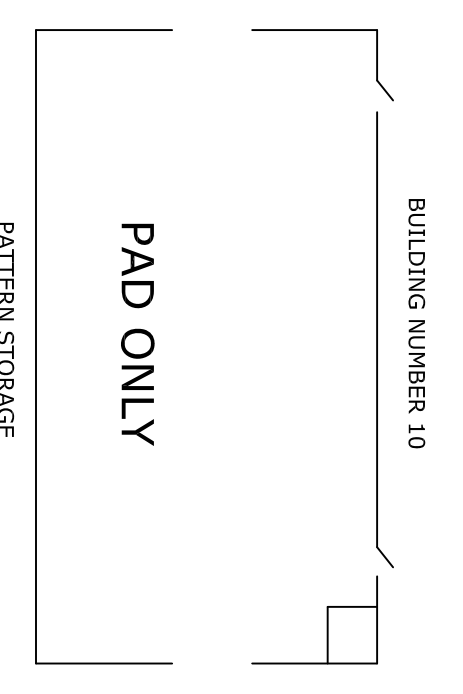
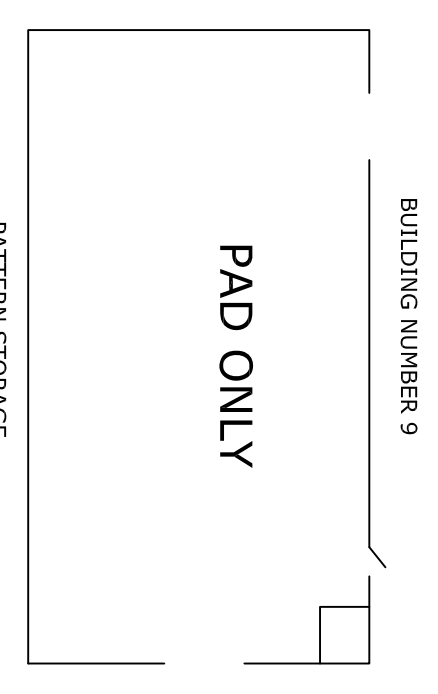
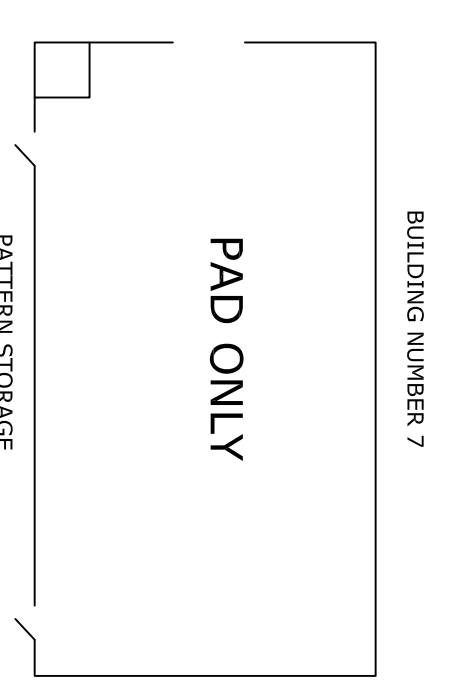
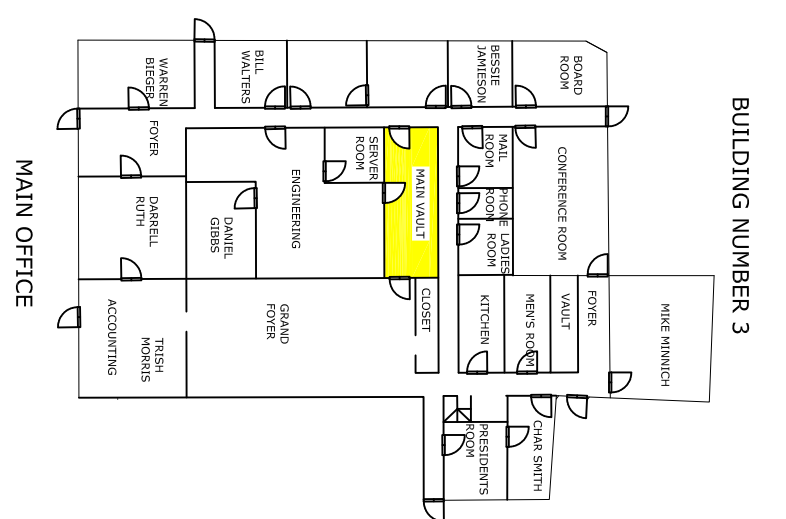
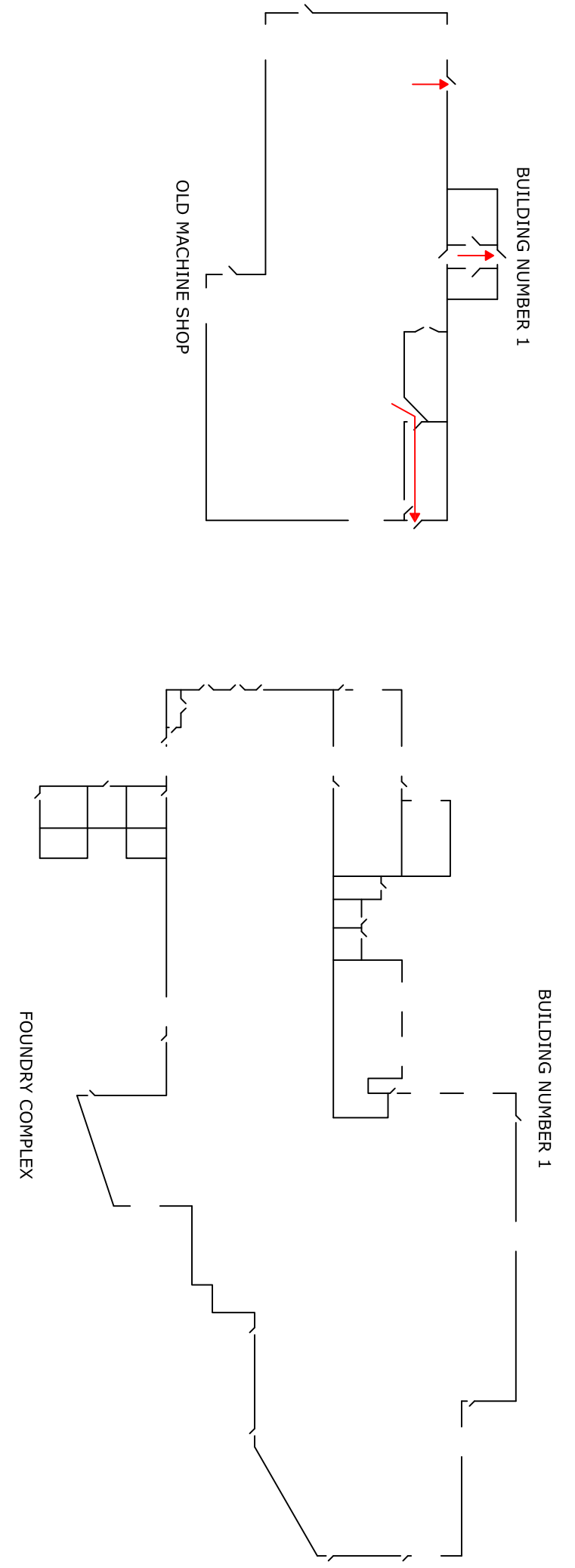
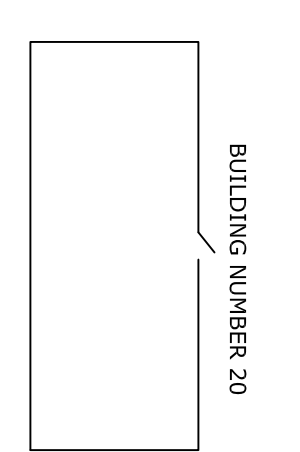
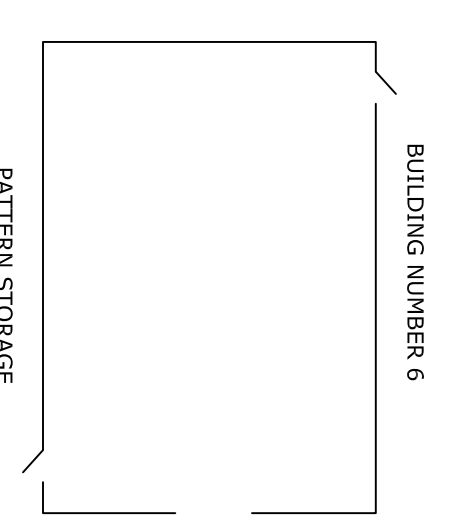
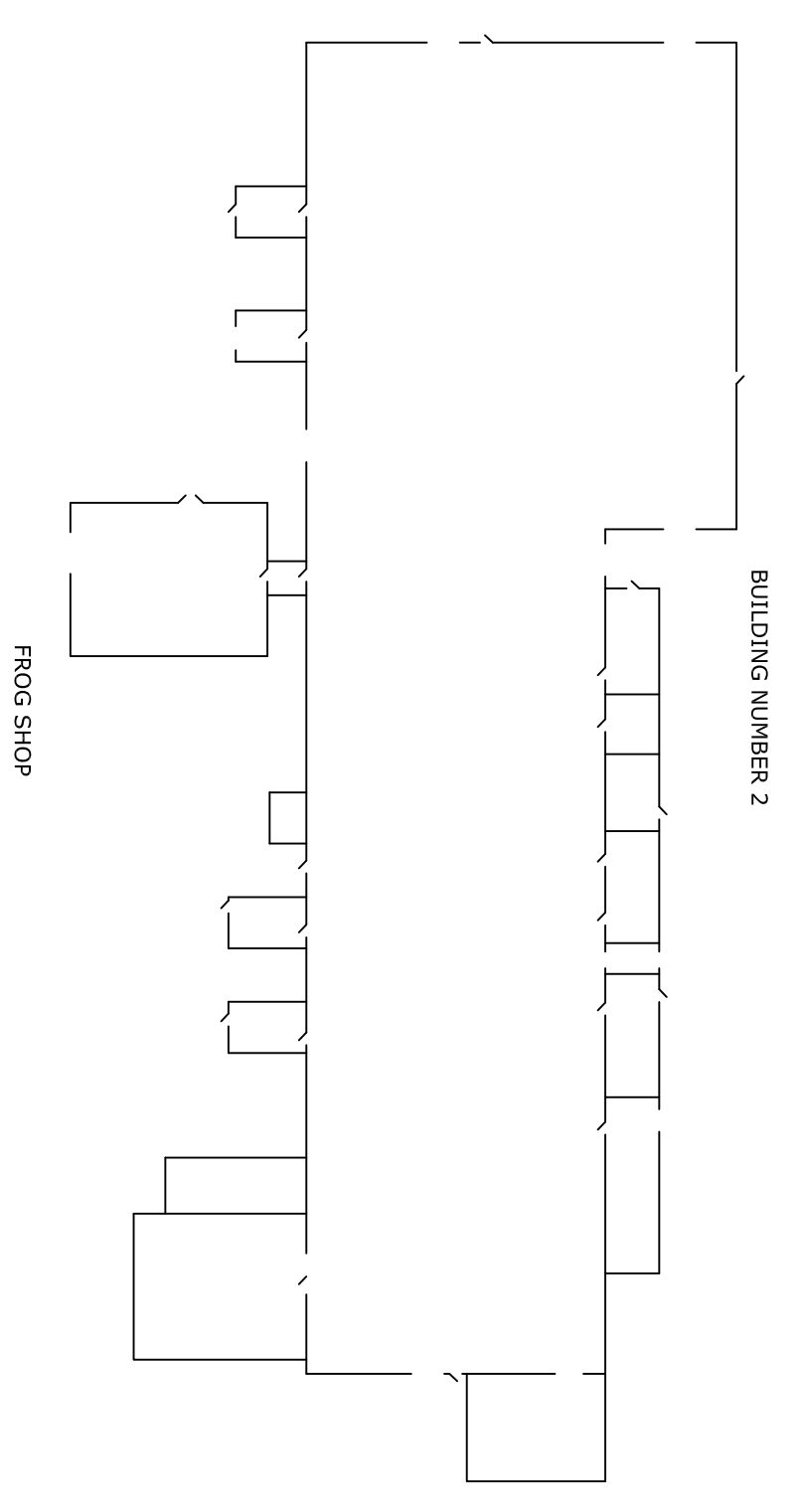
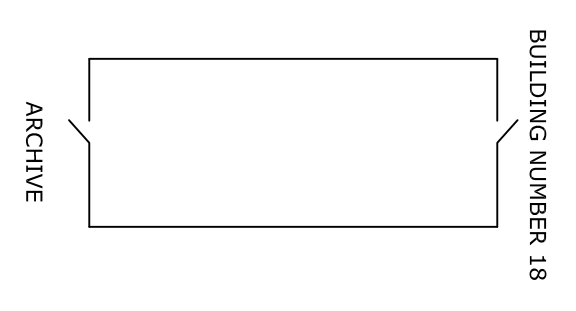
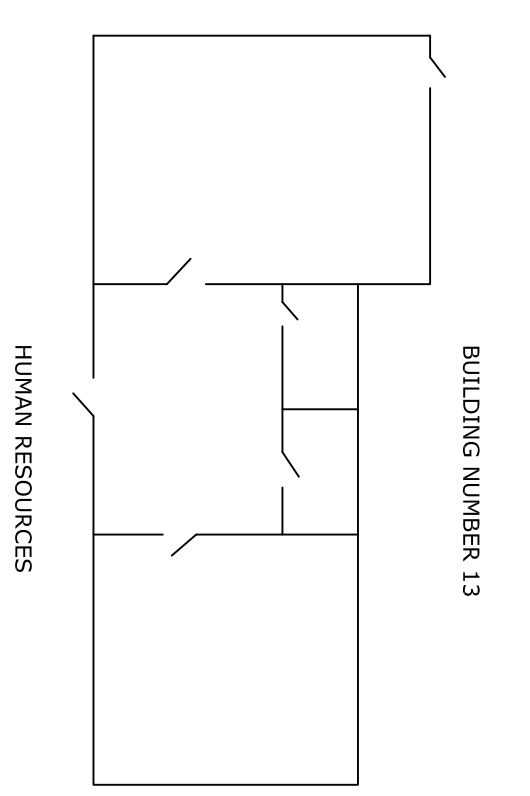
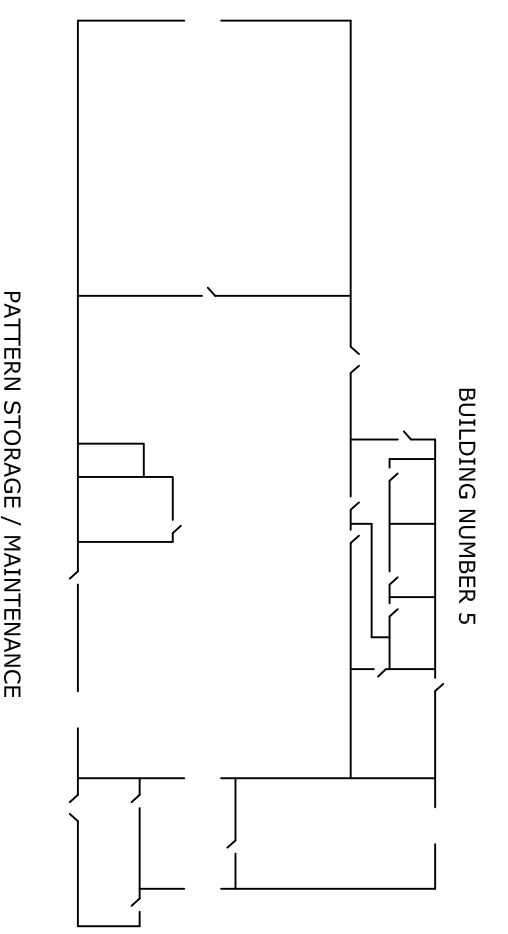
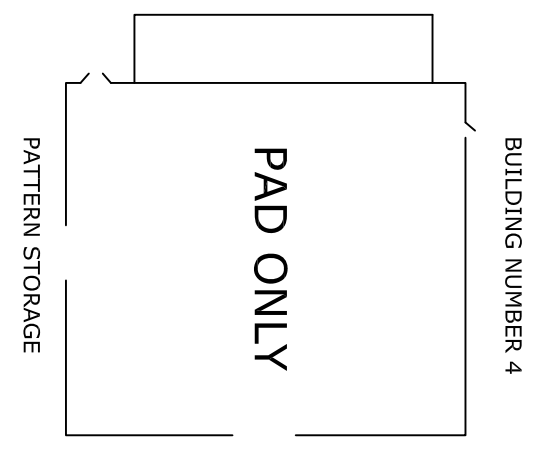
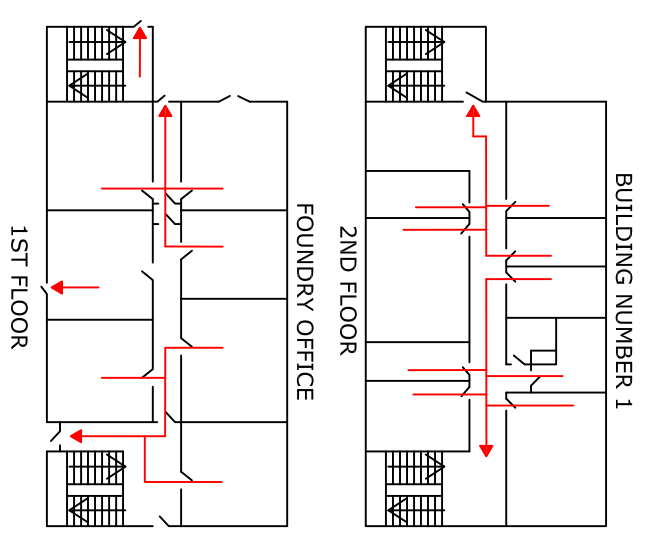
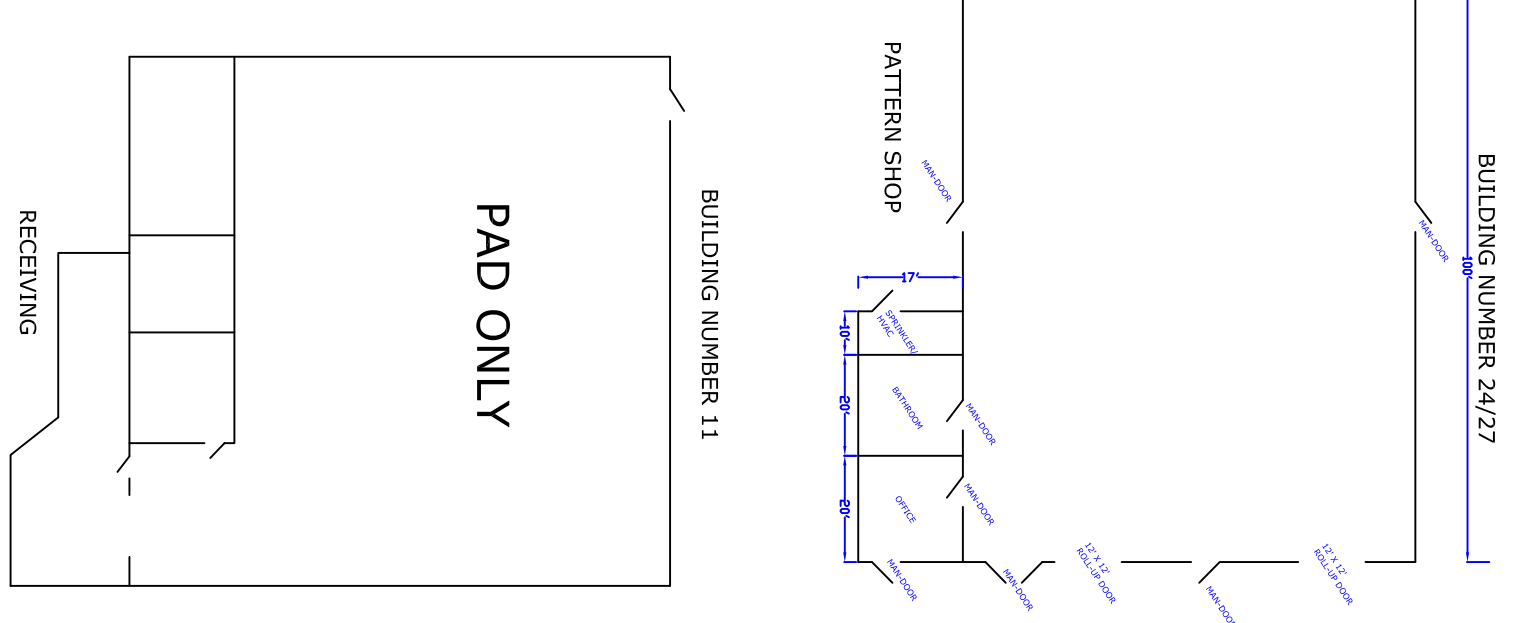
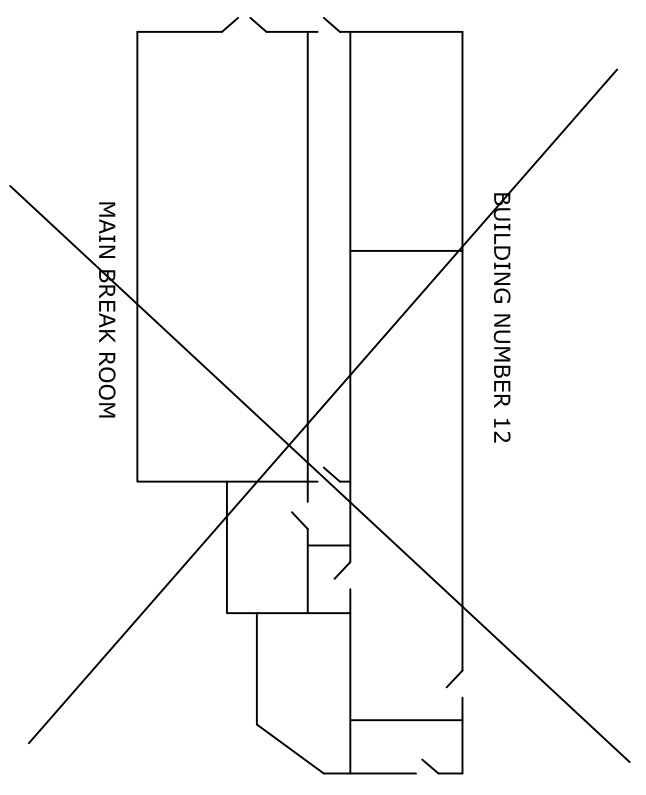


<p><b>THE FROG, SWITCH AND MFG. CO.</b>          600 E. HIGH ST. CARLISLE, PA 17013          PHONE: 717.243.2454 FAX: 717.243.1385 WEB: WWW.FROGSWITCH.COM</p>		<p>MANGANESE STEEL          INDIAN M®          SUPER 24®          WEARWOLF®</p> 
<p><b>FOUNDRY FOUNDATIONS</b>          LATITUDE: 40°-12'-1.93"N          LONGITUDE: 77°-10'-39.82"W</p>		
<p>DRAWN: </p>	<p>SCALE: NONE</p>	<p>DWG. NO. FF2226</p>
<p>CHK'D:</p>	<p>DATE: 08.11.23</p>	
<p>APP'D:</p>	<p>DATA FROM:          OVERALLSITEPLAN.DWG</p>	
<p>REV.</p>		





SQUARE FOOTAGE (#)	
1	118,270 SQ. FT.   FOUNDRY COMPLEX
2	100,948 SQ. FT.   FROG SHOP
3	8,783 SQ. FT.   MAIN OFFICE
4	9,872 SQ. FT.   PATTERN STORAGE (ONG BUILDING)
5	12,109 SQ. FT.   MAINTENANCE/PATTERN STORAGE
6	2,400 SQ. FT.   PATTERN STORAGE
7	6,174 SQ. FT.   PATTERN STORAGE
8	6,170 SQ. FT.   PATTERN STORAGE
9	6,141 SQ. FT.   PATTERN STORAGE
10	6,102 SQ. FT.   PATTERN STORAGE
11	10,095 SQ. FT.   RECEIVING
12	978 SQ. FT.   HUMAN RESOURCES
13	903 SQ. FT.   ARCHIVES
14	778 SQ. FT.   PATTERN STORAGE
15	8996 SQ. FT.   PATTERN SHOP



EXISTING

<b>THE FROG, SWITCH AND MFG. CO.</b> 600 E. HIGH ST. CARLISLE, PA 17013 PHONE: 717.243.2454 FAX: 717.243.1385 WEB: WWW.FROGSWITCH.COM		<b>BUILDING LAYOUTS</b> LATITUDE: 40°-12'-1.93"N LONGITUDE: 77°-10'-39.82"W	
DRAWN: DATE: 08.11.23 CHK'D: DATA FROM: APP'D:	SCALE: NONE DWG. NO. <b>BL2226</b>	REV.	

	SQUARE FOOTAGE (#)		
①	118,270 SQ. FT.	FOUNDRY COMPLEX	TO BE REMOVED IN THIS PERMIT REQUEST
②	100,948 SQ. FT.	FROG SHOP	TO BE REMOVED IN THIS PERMIT REQUEST
③	8,783 SQ. FT.	MAIN OFFICE	TO BE REMOVED IN THIS PERMIT REQUEST
⑤	12,109 SQ. FT.	MAINTENANCE/PATTERN STORAGE	TO BE REMOVED IN THIS PERMIT REQUEST
⑥	2,400 SQ. FT.	PATTERN STORAGE	TO BE REMOVED IN THIS PERMIT REQUEST
⑬	978 SQ. FT.	HUMAN RESOURCES	TO BE REMOVED IN THIS PERMIT REQUEST
⑱	903 SQ. FT.	ARCHIVES	TO BE REMOVED IN THIS PERMIT REQUEST
⑳	778 SQ. FT.	PATTERN STORAGE	TO BE REMOVED IN THIS PERMIT REQUEST
㉔	8996 SQ. FT.	PATTERN SHOP	TO BE REMOVED IN THIS PERMIT REQUEST



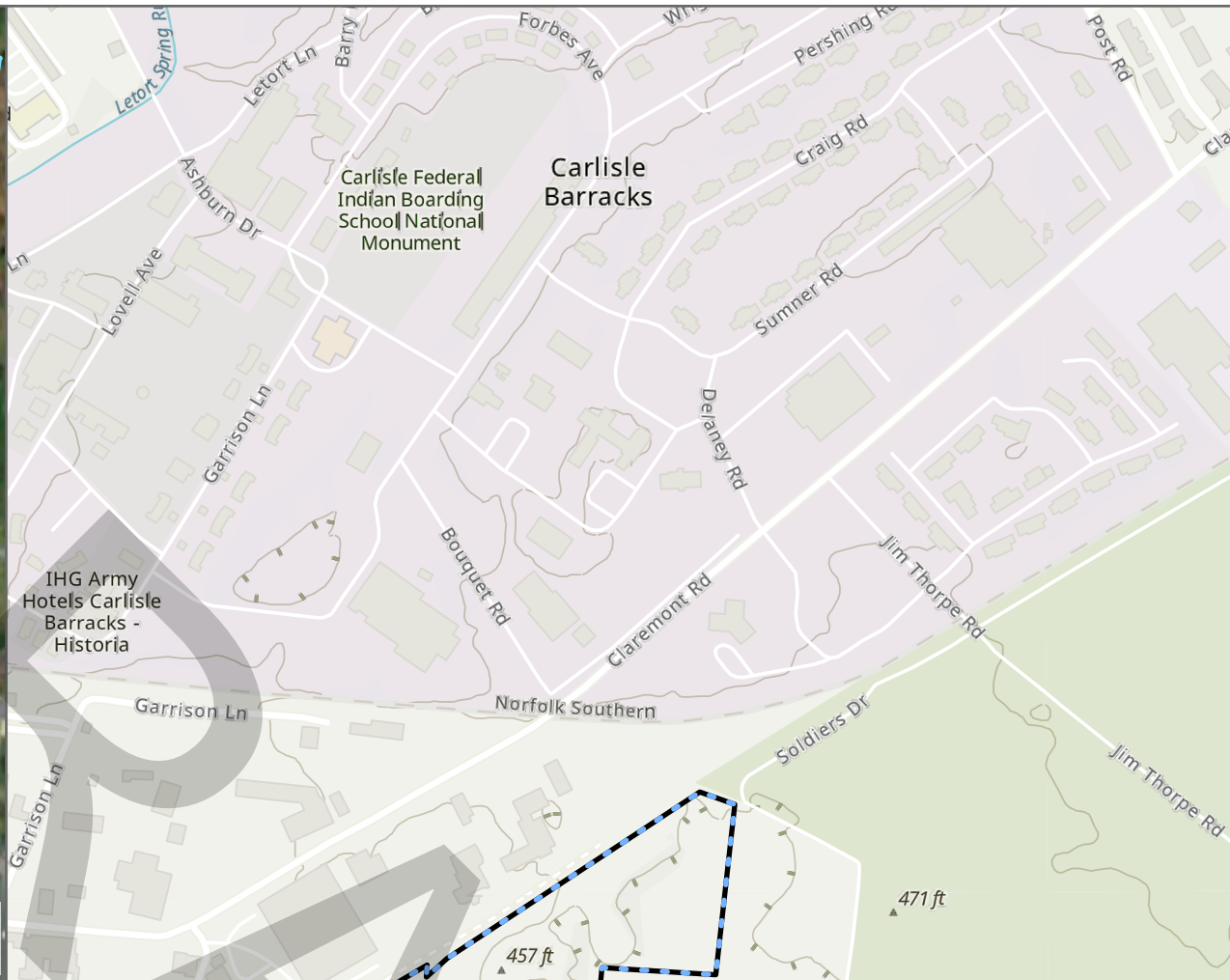
REC-FS, LLC. C/O S.R. DUFFIE  
 FORMER FROG, SWITCH AND MFG. CO.  
 600 EAST HIGH STREET

DEMOITION PLAN PHASE 1  
 LATITUDE: 40°-12'-1.93"N  
 LONGITUDE: 77°-10'-39.82"W

DRAWN:	SCALE: NONE	DWG. No. DPP1122625	REV.
CHK'D:	DATE: 12.26.25		
APP'D:	DATA FROM: OVERALLSITEPLAN.DWG		

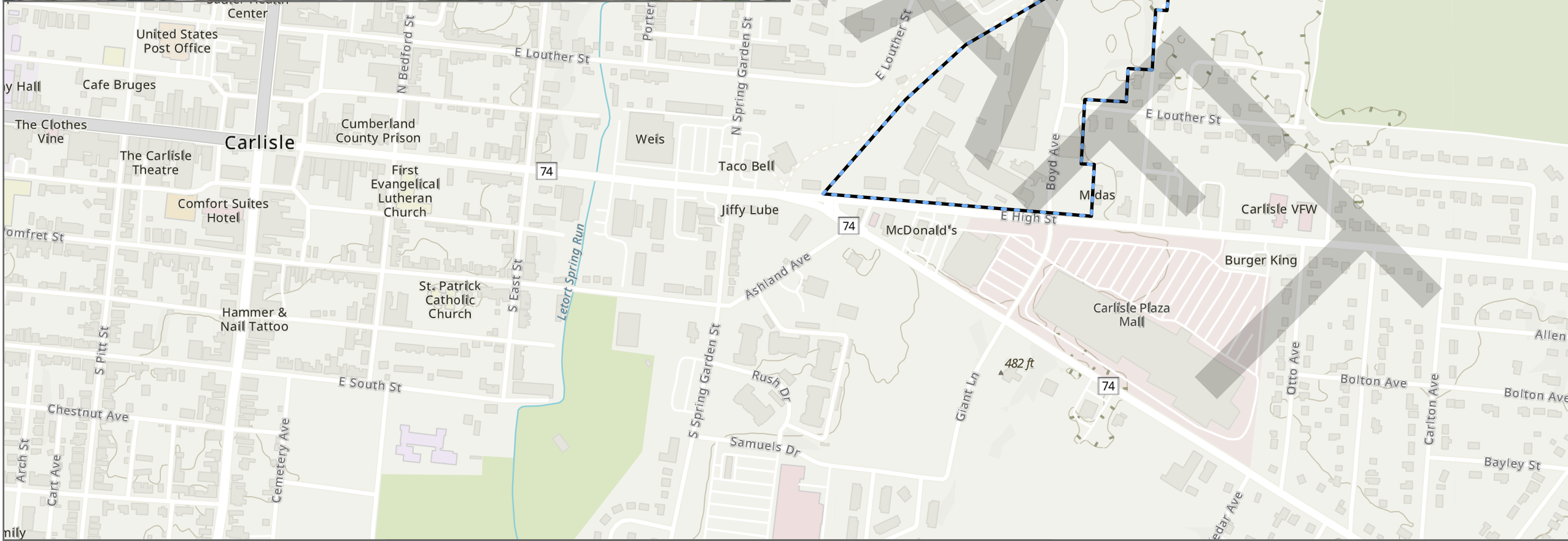
EXISTING

MANGANESE STEEL  
 INDIAN M®  
 SUPER 24®  
 WEARWOLF®



**Legend**

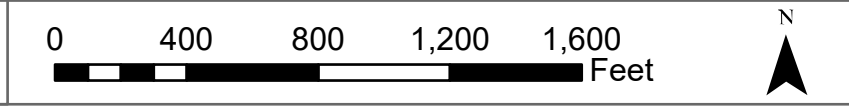
- Property Boundary (approx.)
- Tax Parcels
- Site Location



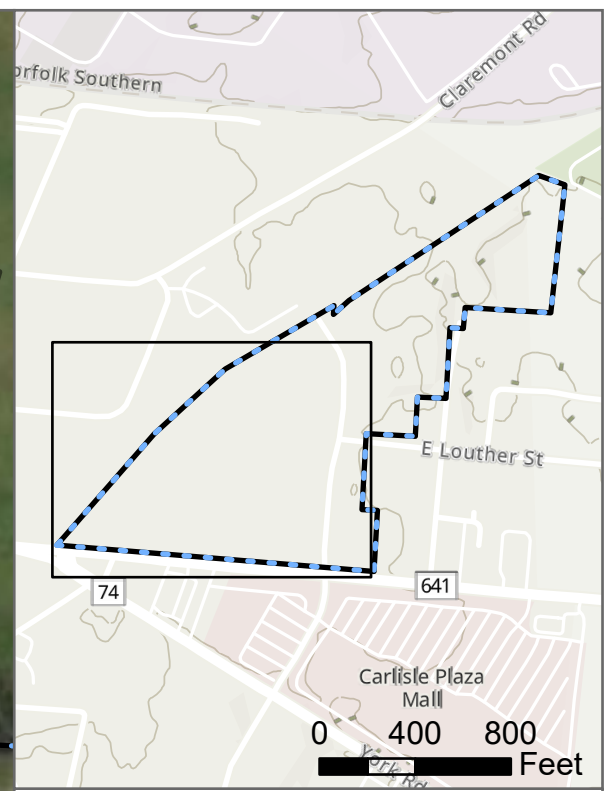
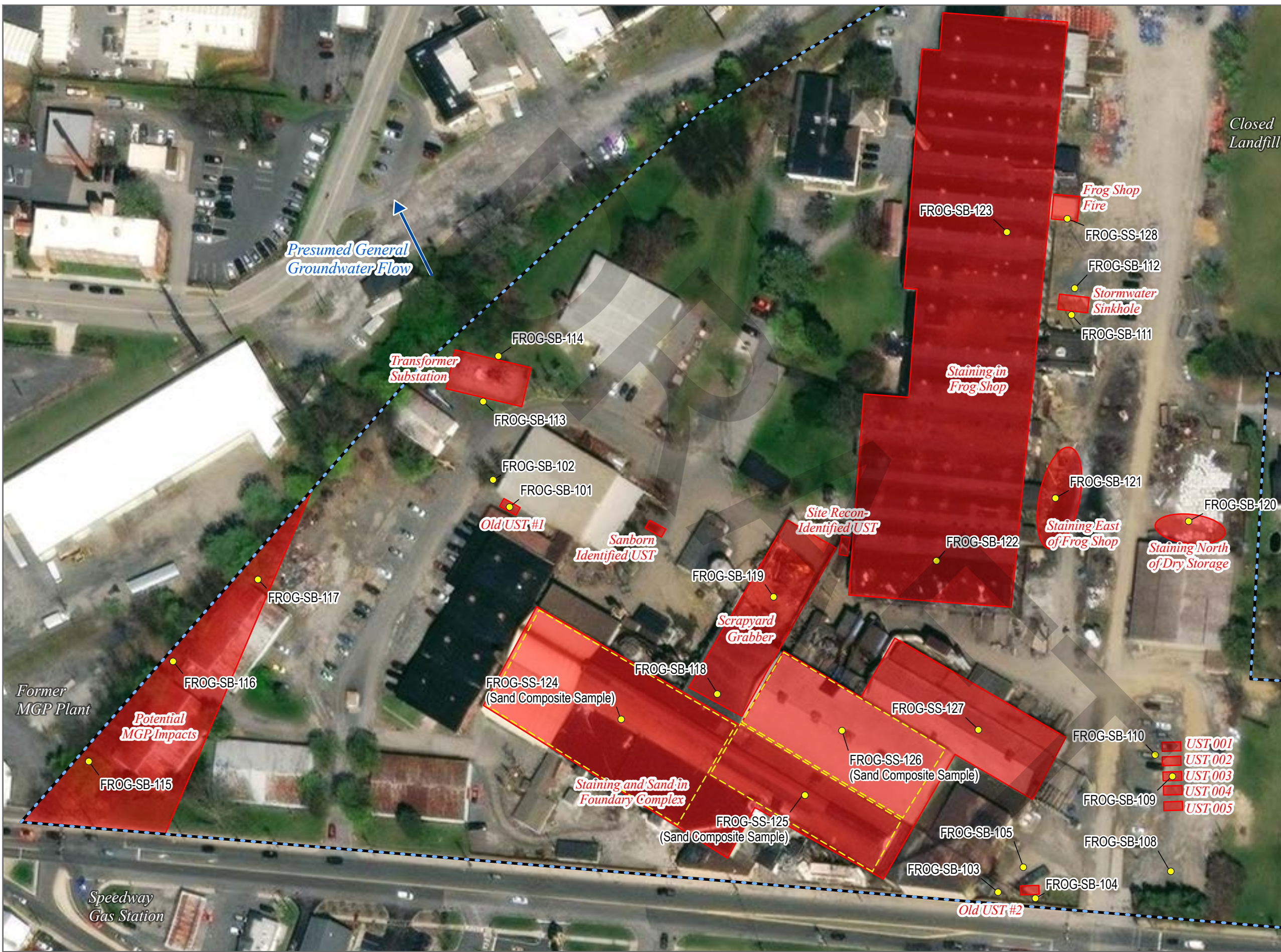
**Figure 1**  
**Site Location**  
 Interim Phase II ESA Report  
 Frog, Switch & Manufacturing Company  
 600 East High Street, Carlisle, PA

Spatial Reference:  
 NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet  
 Lower Right: 2131686.33E 314773.84N ftUS

Sources: Vantor, data.pa.gov, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Esri, USGS



U.S. Department of Transportation  
 Volpe National Transportation Systems Center  
 December 2025



- Legend**
- Soil Sample
  - ▭ Foundry Sand Composite Sample Area
  - ▭ Recognized Environmental Condition
  - ▭ Property Boundary (approx.)

- Notes:**
- 1) Soil samples collected in October 2025.
  - 2) Recognized Environmental Conditions shown as described in the Phase I ESA Report plus the July 2025 fire at the Frog Shop.
  - 3) Sample locations have not been professionally surveyed and were mapped based on aerial imagery features. Locations will be professionally surveyed following groundwater monitoring well construction.

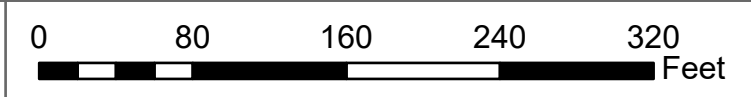
- ▭ UST 001
- ▭ UST 002
- UST 003
- ▭ UST 004
- ▭ UST 005



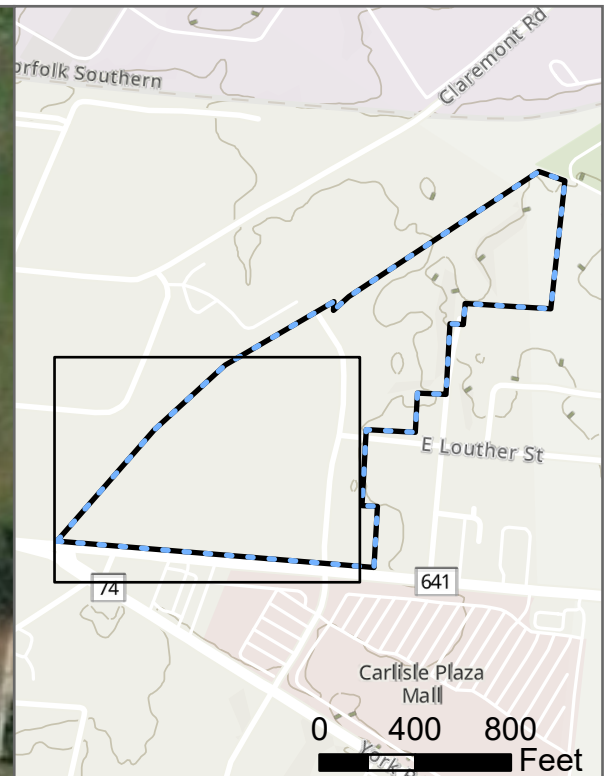
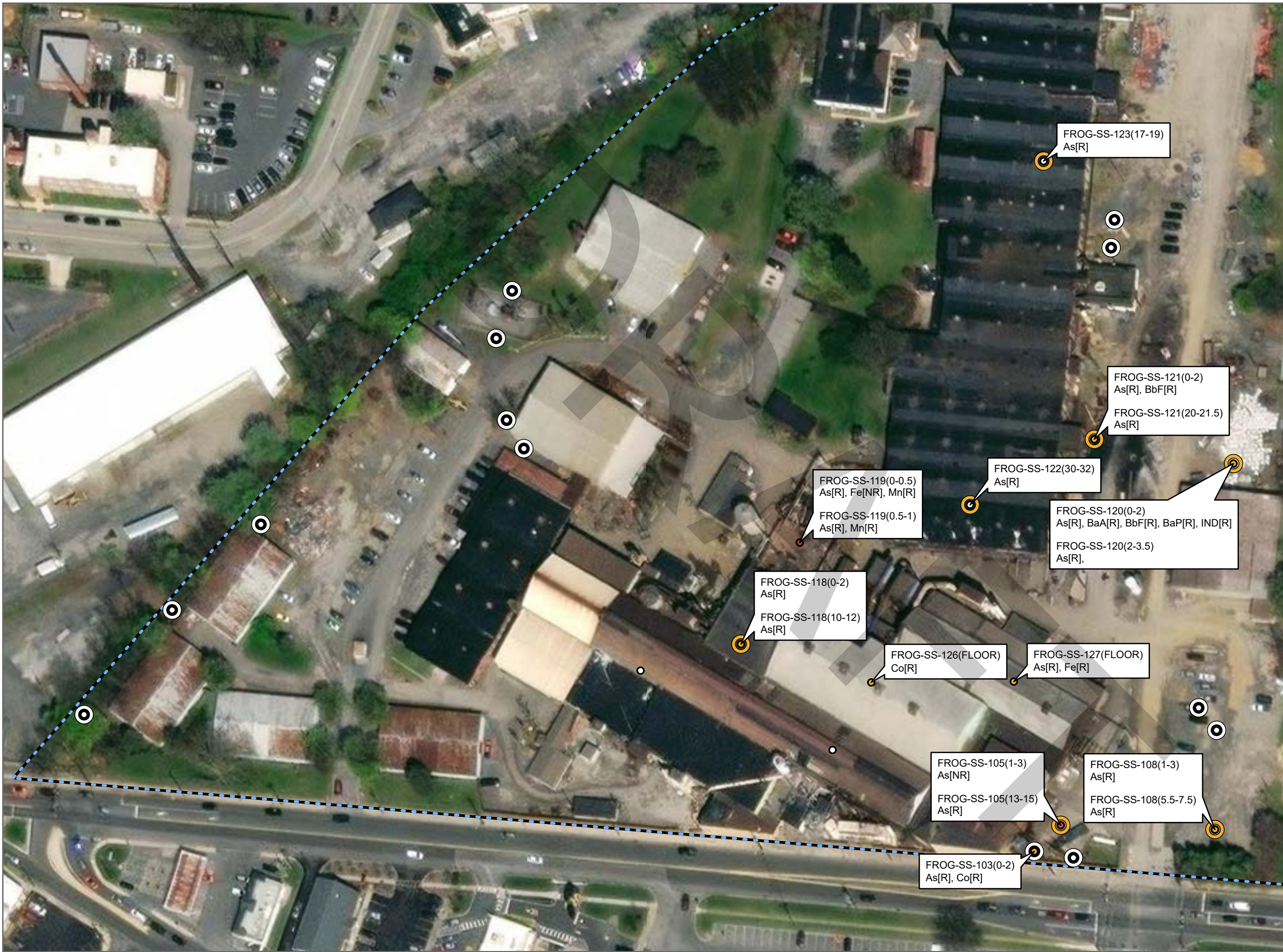
**Figure 2**  
Soil Sample Locations  
Interim Phase II ESA Report  
Frog, Switch & Manufacturing Company  
600 East High Street, Carlisle, PA

Spatial Reference:  
NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet  
Upper Left: 2127941.36E 317338.47N ftUS

Sources: Microsoft, Vantor, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



U.S. Department of Transportation  
Volpe National Transportation Systems Center  
December 2025



- Legend**
- Soil Samples**
- No Direct Contact MSC Exceedances
  - Exceeds a Residential Direct Contact MSC
  - Exceeds a Non-Residential Direct Contact MSC
  - Surficial Sample
  - Subsurface Sample
  - Property Boundary (approx.)

**Notes:**

1) Soil samples compared to PADEP direct contact numeric values for residential [R] and non-residential [NR] soil. Analytes that exceed an MSC are listed in callout boxes.

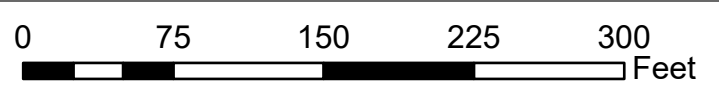
**Abbreviations:**  
 arsenic (As), cobalt (Co), iron (Fe), manganese (Mn), benzo(a)anthracene (BaA), benzo(b)fluoranthene (BbF), benzo(a)pyrene (BaP), indeno(1,2,3-cd)pyrene (IND)



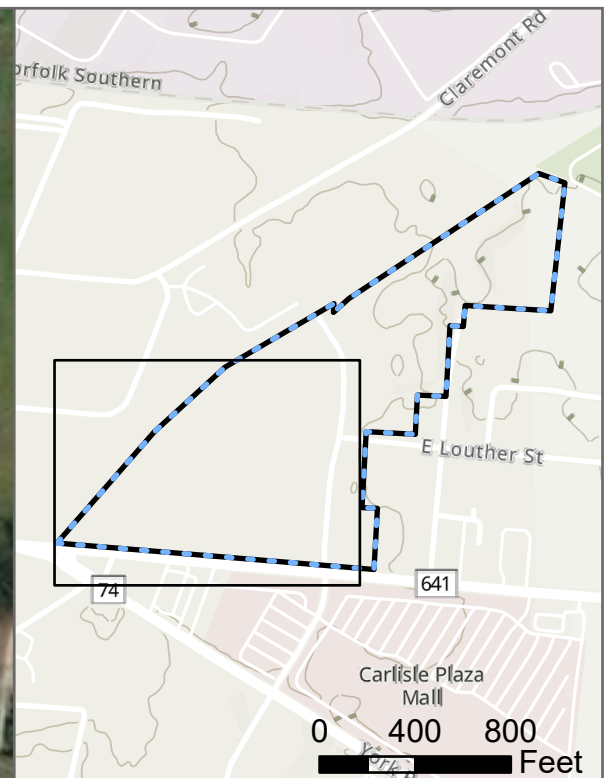
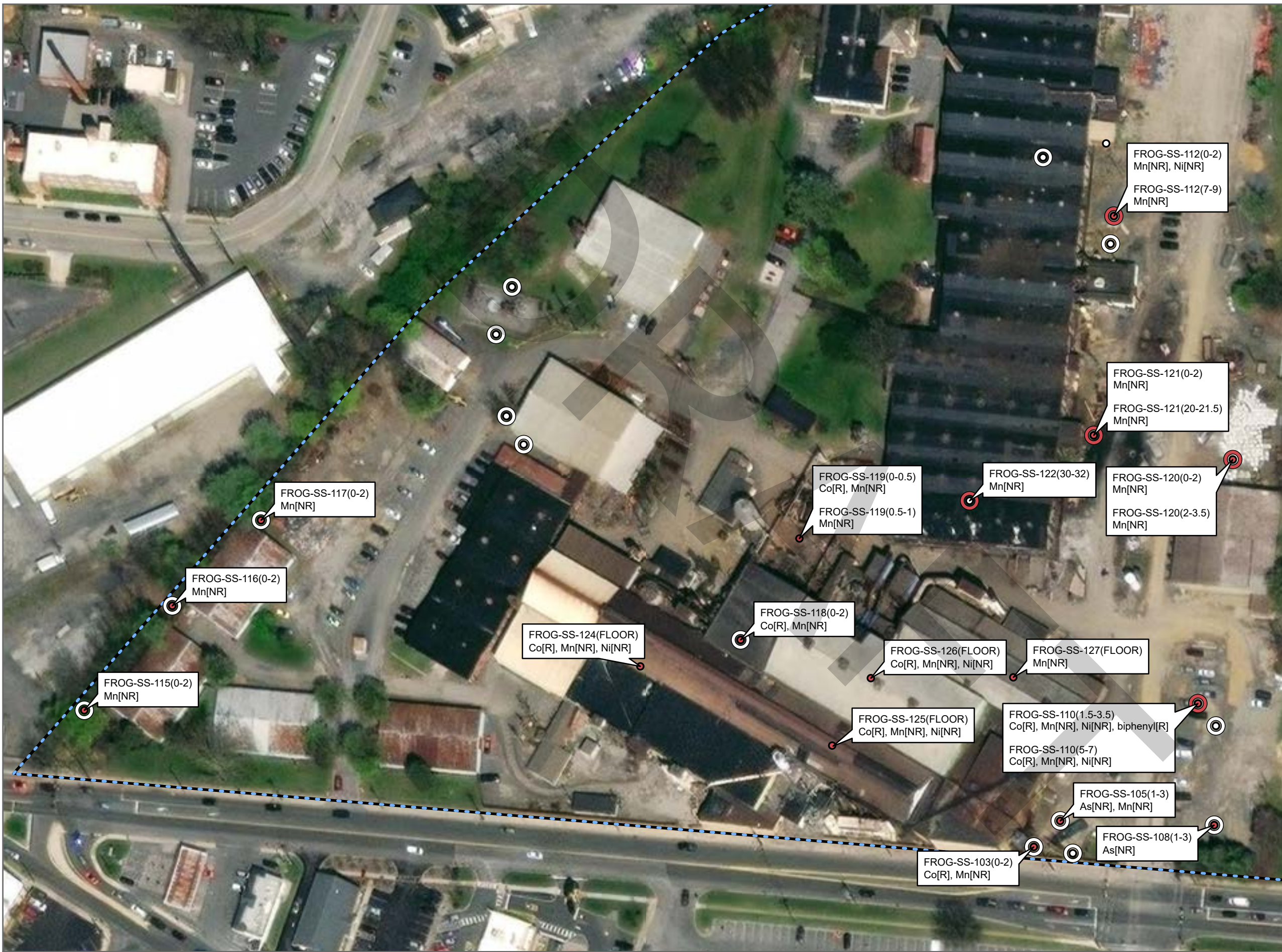
**Figure 3**  
 Direct Contact MSC Soil Exceedances  
 Interim Phase II ESA Report  
 Frog, Switch & Manufacturing Company  
 600 East High Street, Carlisle, PA

Spatial Reference:  
 NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet  
 Upper Left: 2127949.87E 317259.63N ftUS

Sources: Microsoft, Vantor, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



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 Volpe National Transportation Systems Center  
 December 2025



**Legend**


**Soil Samples**

- No Used Aquifer Soil to Groundwater MSC Exceedances
- Exceeds a Residential Used Aquifer Soil to Groundwater MSC
- Exceeds a Non-Residential Used Aquifer Soil to Groundwater MSC
- Surficial Sample
- Subsurface Sample
- Property Boundary (approx.)

**Notes:**

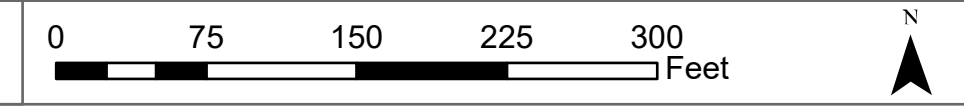
1) Soil samples compared to PADEP residential [R] and non-residential [NR] used aquifer soil-to-groundwater numeric values. Analytes that exceed an MSC are listed in callout boxes.

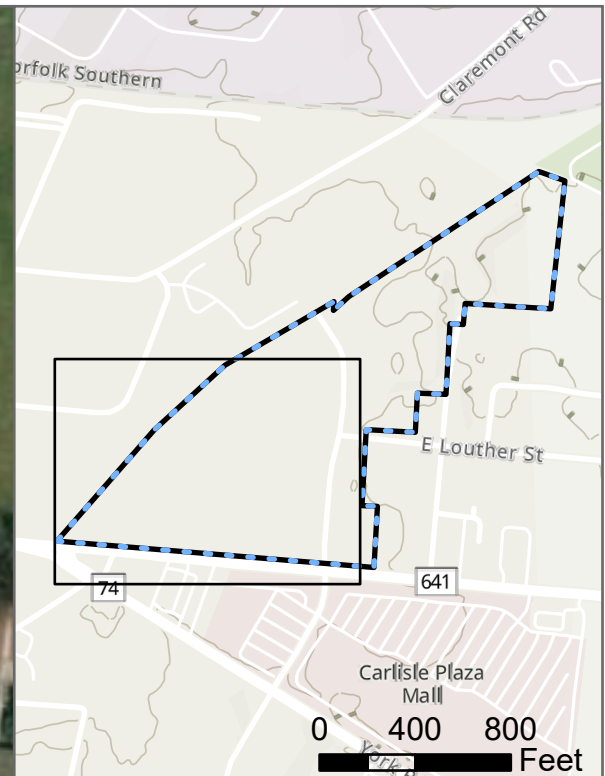
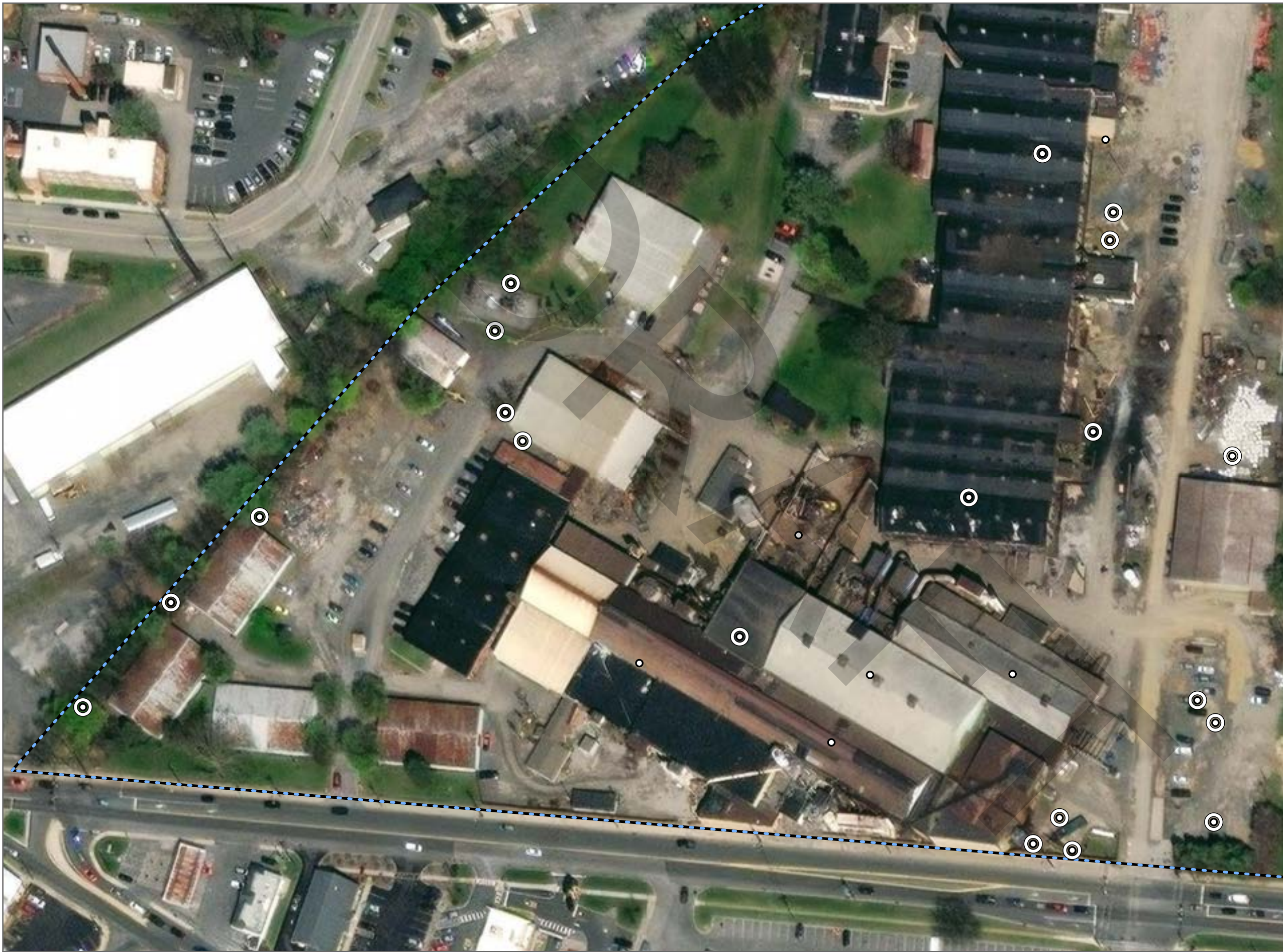
**Abbreviations:**  
arsenic (As), cobalt (Co), manganese (Mn)

U.S. Department of Transportation  
  
**Figure 4**  
 Used Aquifer Soil-to-Groundwater MSC  
 Soil Exceedances  
 Interim Phase II ESA Report  
 Frog, Switch & Manufacturing Company  
 600 East High Street, Carlisle, PA  
 U.S. Department of Transportation  
 Volpe National Transportation Systems Center  
 December 2025

Spatial Reference:  
 NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet  
 Upper Left: 2127949.62E 317255.09N ftUS

Sources: Vantor, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community





- Legend**
- Soil Samples**
- No Nonuse Aquifer Soil to Groundwater MSC Exceedances
  - Exceeds a Residential Nonuse Aquifer Soil to Groundwater MSC
  - Exceeds a Non-Residential Nonuse Aquifer Soil to Groundwater MSC
  - Surficial Sample
  - Subsurface Sample
  - - - Property Boundary (approx.)

**Notes:**

1) Soil samples compared to PADEP residential [R] and non-residential [NR] nonuse aquifer soil-to-groundwater numeric values. No analytes in any sample exceeded these MSCs.



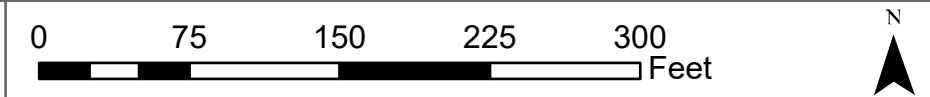
**Figure 5**  
 Nonuse Aquifer Soil-to-Groundwater MSC  
 Soil Exceedances

Interim Phase II ESA Report  
 Frog, Switch & Manufacturing Company  
 600 East High Street, Carlisle, PA

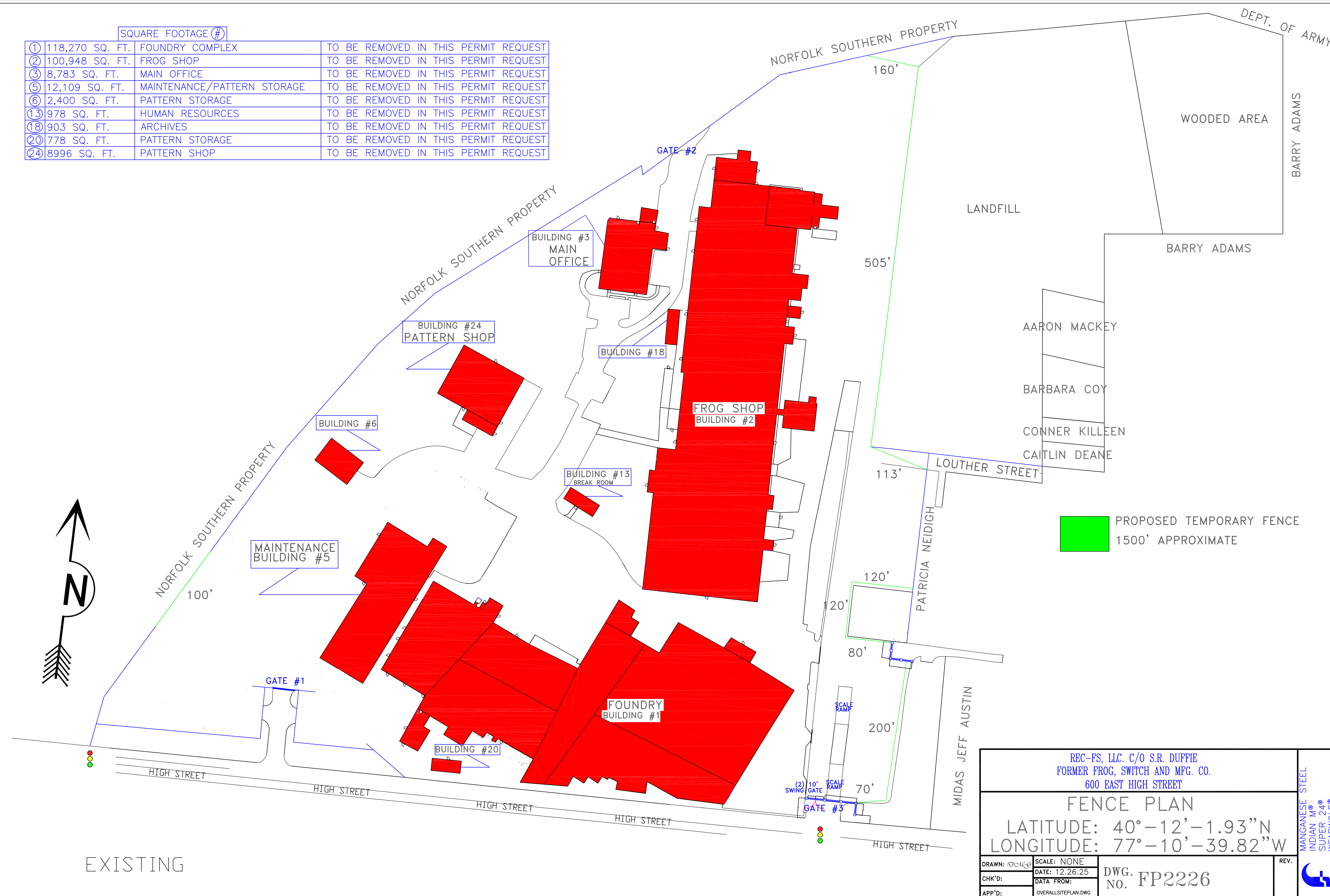
U.S. Department of Transportation  
 Volpe National Transportation Systems Center  
 December 2025

Spatial Reference:  
 NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet  
 Upper Left: 2127951.07E 317252.19N ftUS

Sources: Vantor, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



	SQUARE FOOTAGE (#)		
①	118,270 SQ. FT.	FOUNDRY COMPLEX	TO BE REMOVED IN THIS PERMIT REQUEST
②	100,948 SQ. FT.	FROG SHOP	TO BE REMOVED IN THIS PERMIT REQUEST
③	8,783 SQ. FT.	MAIN OFFICE	TO BE REMOVED IN THIS PERMIT REQUEST
⑤	12,109 SQ. FT.	MAINTENANCE/PATTERN STORAGE	TO BE REMOVED IN THIS PERMIT REQUEST
⑥	2,400 SQ. FT.	PATTERN STORAGE	TO BE REMOVED IN THIS PERMIT REQUEST
⑬	978 SQ. FT.	HUMAN RESOURCES	TO BE REMOVED IN THIS PERMIT REQUEST
⑱	903 SQ. FT.	ARCHIVES	TO BE REMOVED IN THIS PERMIT REQUEST
⑳	778 SQ. FT.	PATTERN STORAGE	TO BE REMOVED IN THIS PERMIT REQUEST
㉔	8996 SQ. FT.	PATTERN SHOP	TO BE REMOVED IN THIS PERMIT REQUEST



REC-FS, LLC. C/O S.R. DUFFIE FORMER FROG, SWITCH AND MFG. CO. 600 EAST HIGH STREET		MANGANESE STEEL INDIAN M® SUPER 24® WEARWOLF®
<b>FENCE PLAN</b> LATITUDE: 40°-12'-1.93"N LONGITUDE: 77°-10'-39.82"W		
DRAWN:	SCALE: NONE	DWG. NO. FP2226
CHK'D:	DATE: 12.26.25	
APP'D:	DATA FROM: OVERALLSITEPLAN.DWG	

EXISTING

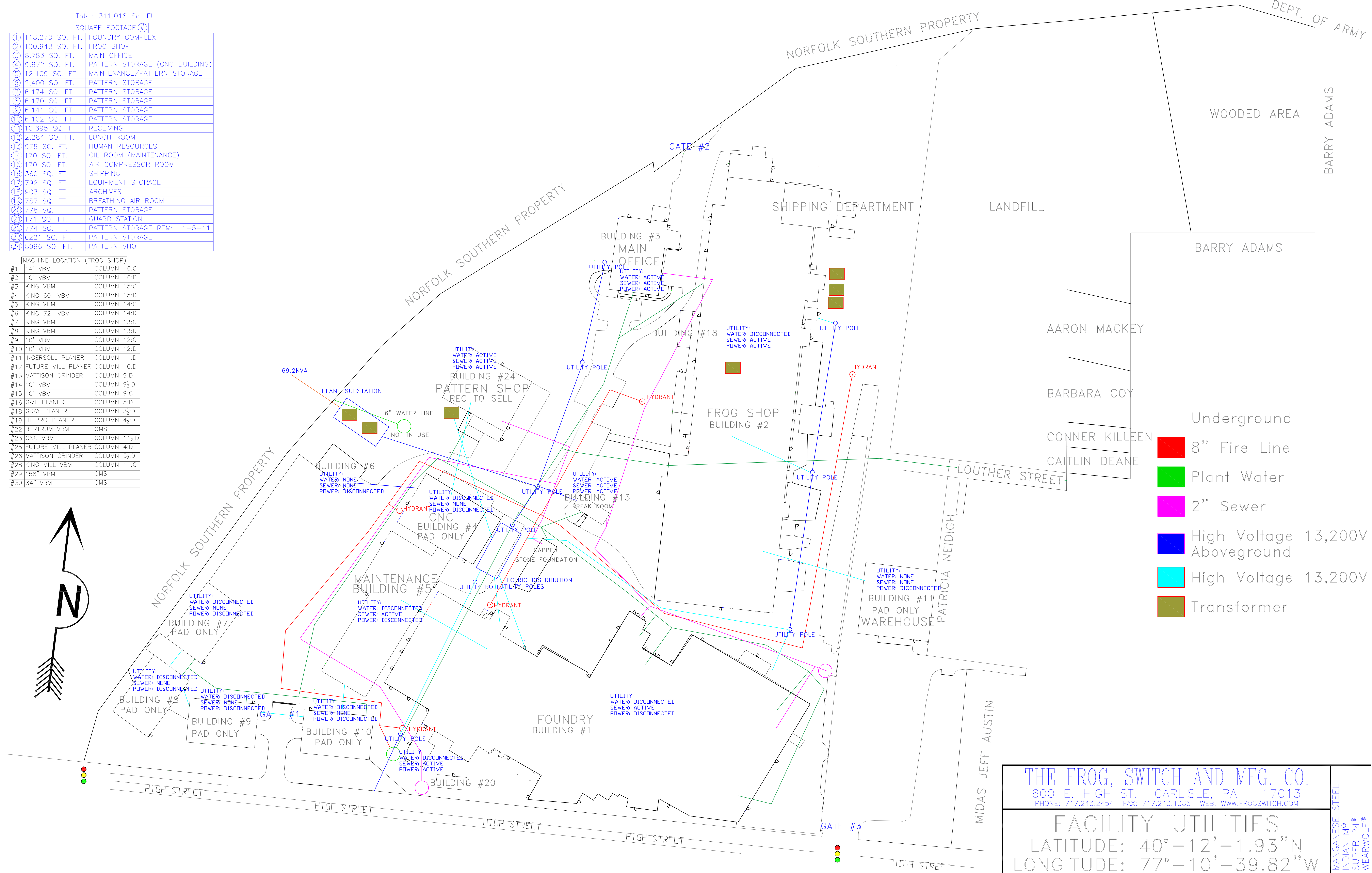
Total: 311,018 Sq. Ft

SQUARE FOOTAGE (#)

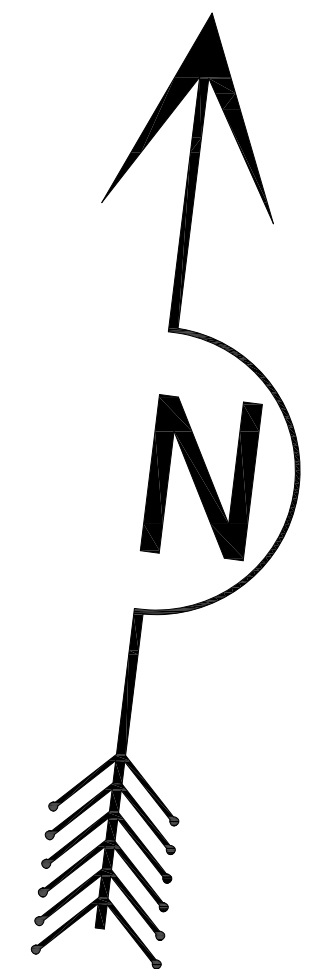
①	118,270 SQ. FT.	FOUNDRY COMPLEX
②	100,948 SQ. FT.	FROG SHOP
③	8,783 SQ. FT.	MAIN OFFICE
④	9,872 SQ. FT.	PATTERN STORAGE (CNC BUILDING)
⑤	12,109 SQ. FT.	MAINTENANCE/PATTERN STORAGE
⑥	2,400 SQ. FT.	PATTERN STORAGE
⑦	6,174 SQ. FT.	PATTERN STORAGE
⑧	6,170 SQ. FT.	PATTERN STORAGE
⑨	6,141 SQ. FT.	PATTERN STORAGE
⑩	6,102 SQ. FT.	PATTERN STORAGE
⑪	10,695 SQ. FT.	RECEIVING
⑫	2,284 SQ. FT.	LUNCH ROOM
⑬	978 SQ. FT.	HUMAN RESOURCES
⑭	170 SQ. FT.	OIL ROOM (MAINTENANCE)
⑮	170 SQ. FT.	AIR COMPRESSOR ROOM
⑯	360 SQ. FT.	SHIPPING
⑰	792 SQ. FT.	EQUIPMENT STORAGE
⑱	903 SQ. FT.	ARCHIVES
⑲	757 SQ. FT.	BREATHING AIR ROOM
⑳	778 SQ. FT.	PATTERN STORAGE
㉑	171 SQ. FT.	GUARD STATION
㉒	774 SQ. FT.	PATTERN STORAGE REM: 11-5-11
㉓	6221 SQ. FT.	PATTERN STORAGE
㉔	8996 SQ. FT.	PATTERN SHOP

MACHINE LOCATION (FROG SHOP)

#1	14' VBM	COLUMN 16:C
#2	10' VBM	COLUMN 16:D
#3	KING VBM	COLUMN 15:C
#4	KING 60" VBM	COLUMN 15:D
#5	KING VBM	COLUMN 14:C
#6	KING 72" VBM	COLUMN 14:D
#7	KING VBM	COLUMN 13:C
#8	KING VBM	COLUMN 13:D
#9	10' VBM	COLUMN 12:C
#10	10' VBM	COLUMN 12:D
#11	INGERSOLL PLANER	COLUMN 11:D
#12	FUTURE MILL PLANER	COLUMN 10:D
#13	MATTISON GRINDER	COLUMN 9:D
#14	10' VBM	COLUMN 9:D
#15	10' VBM	COLUMN 9:C
#16	G&L PLANER	COLUMN 5:D
#18	GRAY PLANER	COLUMN 3:D
#19	HI PRO PLANER	COLUMN 4:D
#22	BERTRUM VBM	OMS
#23	CNC VBM	COLUMN 11:D
#25	FUTURE MILL PLANER	COLUMN 4:D
#26	MATTISON GRINDER	COLUMN 5:D
#28	KING MILL VBM	COLUMN 11:C
#29	158" VBM	OMS
#30	84" VBM	OMS



- Underground
- 8" Fire Line
- Plant Water
- 2" Sewer
- High Voltage 13,200V Aboveground
- High Voltage 13,200V
- Transformer



EXISTING

**THE FROG, SWITCH AND MFG. CO.**  
 600 E. HIGH ST. CARLISLE, PA 17013  
 PHONE: 717.243.2454 FAX: 717.243.1385 WEB: WWW.FROGSWITCH.COM

**FACILITY UTILITIES**  
 LATITUDE: 40°-12'-1.93"N  
 LONGITUDE: 77°-10'-39.82"W

DRAWN:	SCALE: NONE	DATE: 08.11.23	REV.
CHK'D:	DATA FROM:	DWG. NO. FSU121625	
APP'D:	OVERALLSITEPLAN.DWG		

MANGANESE STEEL  
 INDIAN M®  
 SUPER 24®  
 WEARWOLF®